Ministry of Finance
Financial Policy Department

Macroeconomic Forecast

Czech Republic

July 2013

Macroeconomic Forecast of the Czech Republic
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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:

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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:

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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
EC..... European Commission
ECB ..... European Central Bank
EFSF ..... European Financial Stability Facility
EMU..... Economic and Monetary Union
ESI..... Economic Sentiment Indicator
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
rev. ..... revisions
SITC..... Standard International Trade Classification
VAT ..... value added tax

Basic Terms:

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

Symbols Used in Tables:

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

Cut-off Date for Data Sources:

The forecast was made on the basis of data known as of **1 July 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 April 2013 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

According to the CZSO's current data, GDP recorded a significant QoQ fall of 1.3% in Q1 2013, which was the sixth QoQ decline in a row. However, the published data can be considered to be a generally very negative surprise. Even though the depth of this decrease was partially influenced by one-off factors (by stockpiling cigarette tax stamps in Q4 2012 or by unfavourable weather), it is obvious that the economy is not in good condition.

Even though we envisage gradual economic recovery for H2 2013, GDP should decrease by 1.5% this year, primarily due to the deep slump in Q1 2013. In terms of uses of GDP, the main factor behind this decline should be gross fixed capital formation. For 2014, we forecast the economy to grow by 0.8%.

Despite the 1 p.p. increase in both VAT rates, effective from 1 January 2013, average inflation rate should reach only 1.6% this year. In 2014, growth of consumer prices could further slow to 1.4%. In both years, the YoY inflation rate should fluctuate within the tolerance band of the CNB's inflation target.

Employment, which increased by 0.4% last year, could further grow by 0.5% this year. This somewhat paradoxical development results from a rise in the number of part-time jobs and a decline in the ratio of total hours worked to employment. For 2014, we are forecasting a slight decrease in employment of 0.2%. Unemployment rate should increase from last year's 7.0% to 7.5%, and there could also be its slight YoY increase in 2014. Growth of total wage bill could reach 0.7% this year and 2.1% in 2014. In both years, the wage bill growth rate is expected to slightly exceed the dynamics of nominal GDP.

As a percentage of GDP, the current account deficit could stagnate at a level slightly exceeding 2% and should thus remain at a sustainable level.

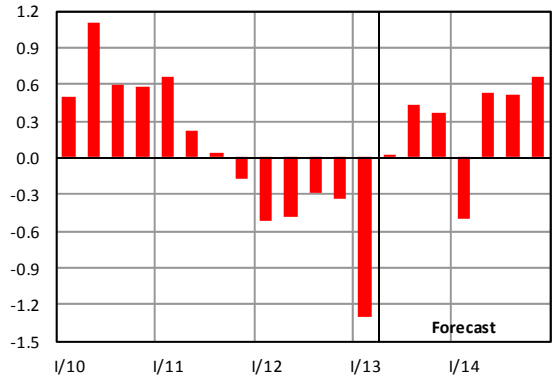
Forecast risks are tilted to the downside. In addition to further development in the euro zone, there is also the risk of low confidence in the Czech economy.

Table: **Main Macroeconomic Indicators**

		2010	2011	2012	2013	2014	2012	2013	2014
					Current forecast		*Previous forecast*		
Gross domestic product	*growth in %, const.pr.*	**2.5**	**1.8**	**-1.2**	**-1.5**	**0.8**	-1.3	0.0	1.2
Consumption of households	*growth in %, const.pr.*	**0.9**	**0.5**	**-2.7**	**-0.8**	**0.4**	-3.5	-1.2	1.0
Consumption of government	*growth in %, const.pr.*	**0.2**	**-2.7**	**-1.2**	**0.5**	**-0.9**	-1.0	-0.2	-1.7
Gross fixed capital formation	*growth in %, const.pr.*	**1.0**	**0.4**	**-2.7**	**-4.3**	**-0.6**	-1.7	-0.4	0.9
Cont. of foreign trade to GDP growth	*p.p., const.pr.*	**0.6**	**1.9**	**1.4**	**0.2**	**0.5**	1.5	0.4	0.3
GDP deflator	*growth in %*	**-1.6**	**-0.9**	**1.4**	**0.6**	**0.9**	1.4	0.4	0.9
Average inflation rate	*%*	**1.5**	**1.9**	**3.3**	**1.6**	**1.4**	3.3	2.1	1.7
Employment *(LFS)*	*growth in %*	**-1.0**	**0.4**	**0.4**	**0.5**	**-0.2**	0.4	-0.2	0.0
Unemployment rate *(LFS)*	*average in %*	**7.3**	**6.7**	**7.0**	**7.5**	**7.6**	7.0	7.6	7.7
Wage bill *(domestic concept)*	*growth in %, curr.pr.*	**0.8**	**2.2**	**1.5**	**0.7**	**2.1**	2.0	1.4	2.7
Current account / GDP	*%*	**-3.9**	**-2.7**	**-2.5**	**-2.3**	**-2.4**	-2.4	-2.3	-2.3
Assumptions:									
Exchange rate CZK/EUR		**25.3**	**24.6**	**25.1**	**25.8**	**25.8**	25.1	25.4	25.2
Long-term interest rates	*% p.a.*	**3.7**	**3.7**	**2.8**	**2.0**	**2.2**	2.8	2.2	2.3
Crude oil Brent	*USD/barrel*	**80**	**111**	**112**	**106**	**101**	112	108	102
GDP in Eurozone (EA-12)	*growth in %, const.pr.*	**2.0**	**1.5**	**-0.6**	**-0.5**	**1.0**	-0.6	-0.4	0.6

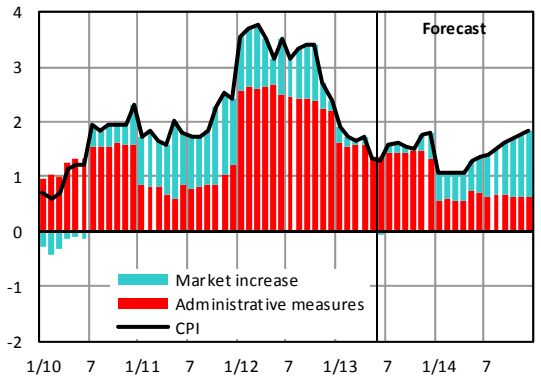
Gradual economic recovery expected

real GDP, QoQ growth in %, seasonally adjusted



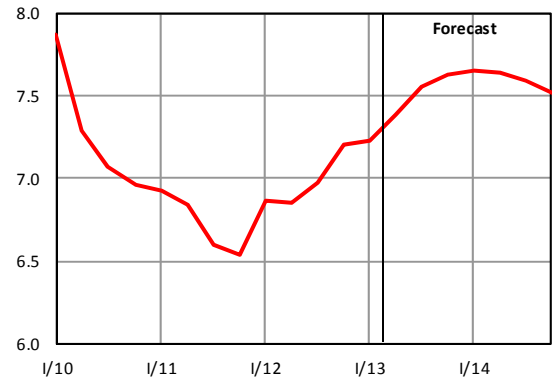
Inflation rate close to the CNB inflation target

decomposition of YoY growth in consumer prices, percentage points



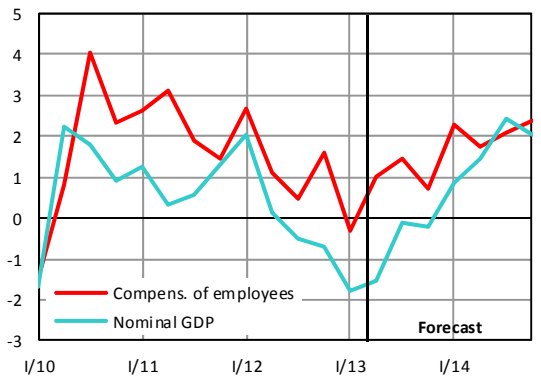
Unemployment culminating at the beginning of 2014

unemployment rate (LFS), in %, seasonally adjusted



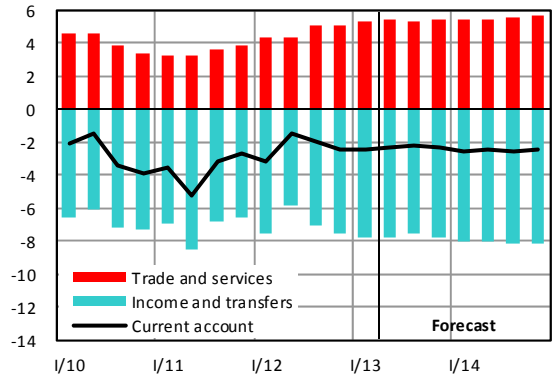
Rising share of compensation of employees on GDP

compensation of employees and nominal GDP, growth in %



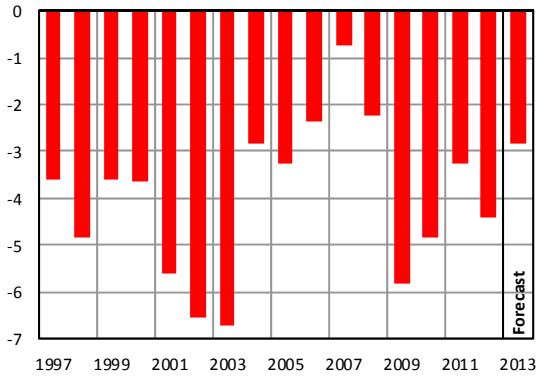
Low current account deficit

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



Government sector deficit below 3% of GDP in 2013

general government balance, in % of GDP



Risks to the Forecast

The central scenario of this Macroeconomic Forecast envisages a YoY decline in real GDP of 1.5% in 2013. After the shocking QoQ fall of 1.3% in Q1 2013, we assume the economy stagnated in Q2 2013 and expect there will be a slight recovery in the forecast horizon. **The risks of such development are still slightly tilted to the downside**.

The assumptions of the central scenario **regarding the external environment** have changed only slightly. Of the risks involved in these assumptions, we stress in particular the economic ones.

The most important **economic risk** related to the external environment is, in our view, the threat of the recession being experienced in the south of the euro zone spilling over to the countries of the Czech Republic's main trading partners. According to the data for Q1 2013, it seems that Germany and Austria, unlike France, have narrowly escaped recession; however, growth in Slovakia and Poland has decelerated sharply.

Future development is extraordinarily unclear. For now, the widely expected recovery for H2 2013 (see e.g. the Spring Forecast of the EC) is supported by business cycle indicators only partially. Therefore, we assume that negative risks slightly exceed the positive ones.

Even though the Czech economy's direct exposure to the problem states in the southern part of the euro zone, except for Italy, is very small (see Box C.1), one cannot, on the grounds of the economies' deep mutual interconnectedness, abstract from their still worsening economic situation. Greece is in depression, while recession in Cyprus, Portugal, Italy and Spain is further deepening. Pronounced downturn of these economies, accompanied by unemployment growth and negligible prospects for any imminent improvement in economic situation, exacerbates **political and social risks**.

Despite austere fiscal policy, these countries have not managed to bring their **government sector debt** down. According to the European Commission's Spring Forecast, gross government sector debt in Greece is expected to increase from 157% to 175% of GDP by the end of this year, in Italy from 127% to 131% of GDP, in Cyprus from 86% to 110% of GDP and in Spain from 84% to 91% of GDP. Only in Portugal is it expected to stagnate at 123% of GDP.

In spite of this data, however, we do not consider **short-term risks related to the debt crisis in the euro zone especially serious**. Relative calm on financial markets is supported by the ECB (owing to its promise of conditional interventions on government bond markets) and by the launch of the ESM. In the long run, however, much will depend on whether the increase in government sector debt is halted and whether the banking sector problems in some countries are resolved. Unfortunately, an escalation of tension on financial markets caused by an unpredictable negative event cannot still be excluded.

As far as internal risks are concerned, the central scenario of the forecast assumes a decline in domestic demand in 2013, with a very slight recovery in 2014. **Internal economic risks also remain tilted to the downside**.

Confidence in future economic development remains very low, though the June business cycle survey results imply the chance of improvement among consumers, and to a lesser extent in industry.

However, "hard" data tend to confirm consumers' cautious behaviour. The situation is also similar for the business sector, which is putting off many investment decisions for this reason. The confidence factor is probably the main explanation for the "freeze" in domestic demand in the Czech economy.

The economic impact of the June 2013 **floods** should not be significant; however, a decrease in net national wealth in the amount of the damage caused cannot be denied. On the supply side, production outages in Q2 2013 were probably negligible since few production capacities were damaged by the floods. However, flood damage repairs could in H2 2013 bring a positive demand impulse in the maximum amount of 0.2% of GDP.

A new negative risk is the risk resulting from the current political instability.

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

In line with the previous forecast, the outlook remains varied and subject to considerable uncertainty. In the second half of this year, we expect a slight speedup in global economic growth. Its further strengthening, supported by accommodative monetary policies and an improvement in the situation on financial markets, should occur in 2014.

While the US recovery, which should accelerate next year thanks to rising private consumption, continues, economic growth in the EU is still restricted by the effects of the debt crisis, the burden of fiscal consolidation and the situation on credit markets. Thanks to fiscal and monetary stimuli and growth of prices on stock markets, the expected growth occurred in Japan after the fall in H2 2012. Its stability, however, depends on confidence in fiscal sustainability. The large developing economies are contributing positively to global growth. However, their outlook is differentiated as well. While maintaining China's high growth rate depends on its successful reorientation towards domestic consumption, growth in other countries is often hindered by structural problems.

USA

The US economy continues in recovery that should further strengthen in the next year, in particular thanks to an improvement in the labour market situation. The economy grew by 0.4% QoQ in Q1 2013 (*versus 0.5%*), in 2012 GDP increased by 2.2%. In the course of the year, growth was driven especially by household consumption, partially also by foreign investments.

Fiscal consolidation initiated in Q1 2013 does not contribute to growth positively, though the across-the--board spending cuts (the so-called sequestration), which resulted in uncertainty regarding the economic outlook, have so far had only a temporary impact on consumer confidence. Since April, therefore, consumer confidence has again been on the rise. In H1 2013, a slowdown in private investment growth was recorded due to expiring tax relief deadlines. However, we expect this slowdown to be also temporary. Tax hikes related to the public finance consolidation are offset by growth in the prices of real estate and other assets, which has a positive impact on household wealth. A favourable situation can still be observed on stock markets – the Dow Jones index is hovering above 14,000 points, thus achieving the record-breaking levels of 2007.

The economy remains supported by accommodative monetary policy of the Fed, which has now left interest rates unchanged (at "zero") for 3 full years. With the improving outlook, the discussion of the timing of exit from the quantitative easing programme is again becoming very relevant. Its premature termination could put the economic recovery at risk; on the other hand, any late reaction could result in considerable costs in the form of non-optimal capital allocation. The expansive monetary policy is facilitated by the persistently low inflation rate, as a consequence of the considerable decrease in energy prices; moreover, capacity surplus mitigates the pressure on future growth of prices and wages.

On the labour market, however, the situation has yet to improve. The unemployment rate has gone down over the last 12 months by 0.5 p.p. (in May it was 7.6%). However, such a decline was partially caused by part of the unemployed becoming non-active. On the other hand, authorities are registering a growth in the number of new jobs. Moreover, the number of notices of termination filed by employees is also increasing, as their prospects on the labour market improve.

We have slightly decreased the growth estimate for 2013 to 2.0% (*versus 2.1%*), though we still assume that growth will speed up in H2 2013. In 2014, GDP could increase by 2.9% (*versus 3.0%*). However, it is necessary to reach an agreement on the medium-term fiscal consolidation plan and to solve the unsustainable development of social expenses.

EU

In the euro zone, the decline in economic output continues. In Q1 2013, GDP of the EA12 decreased by 0.3% QoQ (*versus stagnation*), which represented a YoY drop of 1.2% (*versus 0.8%*). On a QoQ basis it was already the sixth consecutive fall in economic output.

Although the situation in individual EA12 countries differs considerably, the general cause of the ongoing recession seems to be the impact of sustained fiscal consolidation, weak consumer confidence and unfavourable conditions on credit markets. In many cases, growth is hindered by economies' structural problems and their low level of competitiveness. Poor

prospects lead to the postponement of consumption and investment of the private sector that would contribute to recovery.

The ECB is still trying to support economic recovery by keeping its interest rates low. However, it appears that even extremely accommodative monetary policy can't fully compensate for the impacts of massive fiscal consolidation. It might be necessary to take additional steps for improving the transmission of measures to the real economy.

Internal divergence in the euro zone can be fittingly illustrated by the unemployment rate, which in May 2013 rose to 12.1% in the EA12 (up by 0.9 p.p. YoY) and to 10.9% in the EU27 (up by 0.5 p.p. YoY). The highest unemployment was in Spain (26.9%), Greece (26.8%, in March), followed by Portugal (17.6%) and Cyprus (16.3%). In contrast, the unemployment rate in Germany decreased to 5.3%, confirming favourable development on the German labour market. On a YoY basis, the unemployment rate increased in 17 EU27 Member States and decreased in 10 EU27 Member States. High unemployment rates in the euro zone have unfavourable implications for household consumption, which considerably complicates government efforts to consolidate public finances.

Economic situation in the euro zone is expected to get better only slightly in H2 2013, when the pace of consolidation ought to slow down and private demand should strengthen due to an improvement in consumer sentiment and continuing stabilization in the banking sector. The short-term outlook for the euro zone is still associated with a high degree of uncertainty. We assume that GDP of the EA12 will decrease by 0.5% (*versus 0.4%*) this year and we expect to see it grow by 1.0% (*versus 0.6%*) in 2014.

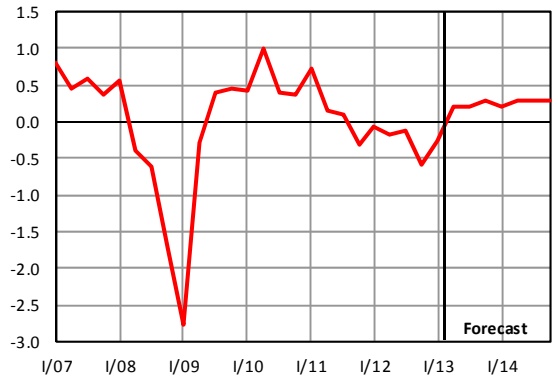
We expect relatively favourable development in **Germany**. In Q1 2013, GDP increased by 0.1% QoQ (*versus 0.2%*). At the beginning of the year, exports recorded weak performance, construction slowed due to persisting wintry weather and industrial production stagnated. Nonetheless, expectations of firms indicate that the dip was only temporary. The Ifo index, which in June rose by 0.2 points to 105.9, implies that the business sector has positive expectations for H2 2013. Consumer confidence index increased by 0.3 points on the previous month to 6.8, which was the seventh consecutive increase in a row, and reached the highest level since September 2007.

After the recent fall, domestic investment is also stabilizing, in particular in the renewal of company equipment and facilities. Capacity-creating investments will probably come only in the medium-term horizon. Low interest rates, rising wages and a favourable situation on the labour market should further positively influence the real estate market and private demand.

Expected improvement in the situation abroad and the high competitiveness of German companies indicate that growth could further accelerate during this year and in 2014. The development in the banking sector, where many institutions are going through the process of deleveraging, will be crucial. As the government's infrastructure investment decisions will be important, results of the autumn parliamentary elections will also be significant. We expect GDP to grow by 0.4% (*versus 0.5%*) this year, while for 2014 we forecast growth of 1.7% (*versus 1.6%*).

The situation in **France** is less favourable. In Q1 2013, GDP decreased by 0.2% QoQ (*versus stagnation*). The economy stagnated for the whole of 2012. Low consumer confidence, growing unemployment rate and the impacts of fiscal consolidation are among the main obstacles to the recovery of private consumption. Low confidence among entrepreneurs and structural problems are reflected in a decrease in investment by the residents and non-residents. This year, GDP could decline by a negligible 0.1% (*versus growth of 0.1%*), while in 2014 the economy could increase by 0.9% (*versus 1.0%*).

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



In **Poland**, economic growth slowed down markedly in 2012, with GDP growing by 1.9%. This development was caused by weak domestic demand, in particular private consumption, which is negatively influenced by a decrease in real wages and consumer confidence and a growth in the unemployment rate (it stood at 10.7% in May, which represented a YoY increase of 0.7 pp). As in other countries, continuing fiscal consolidation has a major impact on consumption and investment of the government sector. In its efforts to support growth, the

central bank again decreased the reference rate to a historical minimum of 2.75%; however, we do not expect this measure to have any major impact. We are reducing the growth estimate for 2013 to 1.1% (*versus 1.5%*) and for 2014 we are forecasting growth of 2.2% (*versus 2.4%*).

Slovakia continues to be strongly dependent on the external environment. Economic growth slowed down again, last year to 2.0%. For 2013, we expect a growth of exports in connection with a slight improvement in the situation of trading partners and with the opening of new production facilities in the previous year. However, domestic demand is restricted by fiscal consolidation and the labour market situation (jobless rate increased to 14.2% in May, which was up 0.4 p.p. YoY). We are reducing the growth estimate for 2013 to 1.1% (*versus 1.3%*), while in 2014 economic growth could accelerate to 2.5% (*versus 3.0%*).

Table A.1.1: **Comparison of GDP Forecasts**
up-to-date GDP forecasts of selected institutions, growth rates in %

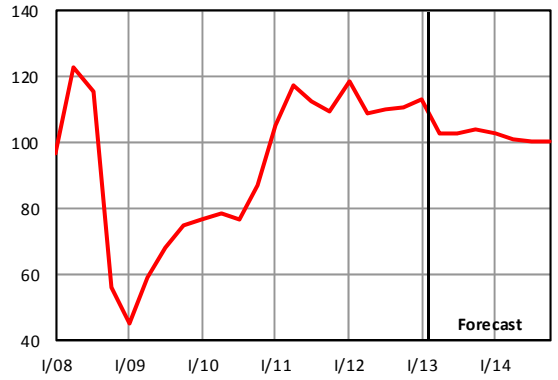
	2013				2014			
	MoF	EC	OECD	IMF	**MoF**	EC	OECD	IMF
EA12	**-0.5**	-0.4	-0.6	-0.3	**1.0**	1.2	1.1	1.1
Germany	**0.4**	0.4	0.4	0.6	**1.7**	1.8	1.9	1.5
Poland	**1.1**	1.1	0.9	1.3	**2.2**	2.2	2.2	2.2
Slovakia	**1.1**	1.0	0.8	1.4	**2.5**	2.8	2.0	2.7

Commodity prices

In 2012, the average daily price of Brent crude oil was 112 USD/barrel, historically the highest average price of crude oil (based on whole-year averages). Behind the high price of crude oil there was especially a rise in marginal costs of extraction and production outages resulting from geopolitical events in the Middle East and Africa. Due to overly optimistic expectations for global growth, the price of Brent crude oil averaged 112.9 USD/barrel in Q1 2013 (*versus 112 USD*). At the end of the quarter, however, the outlook for global growth and the demand for crude oil were revised and the market recorded a price correction.

We estimate that the price per barrel averaged 103 USD (*versus 109 USD*) in Q2. For the whole 2013 we predict that the price of crude oil will be 106 USD/barrel (*versus 108 USD*). The slight YoY decrease in price should be caused in particular by a slowdown in growth of the global demand for crude oil and a considerable increase in production capacities. This relates in particular to the USA, where investment in infrastructure is aimed at a more efficient use of the production of US deposits. The decrease in the price of Brent crude is also influenced by substituting imports into the USA and Canada with American crude oil as the extraction in North America expands. We expect that this slow decrease in the crude oil price will also continue in 2014, when the average price could reach USD 101/barrel (*versus 102 USD*). In addition to the aforementioned factors, excess of supply over demand should continue to play a role.

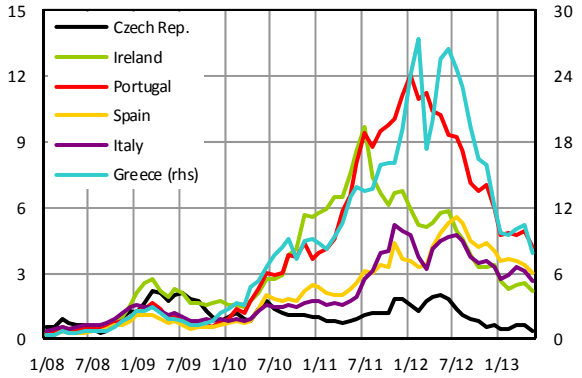
Graph A.1.2: **Dollar Prices of Brent Crude Oil**
in USD per barrel



Debt crisis in the euro zone

The period since issuing the last Macroeconomic Forecast has not witnessed any important events that would have a significant impact – either positive or negative – on the course of the debt crisis in the euro zone.

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



During May and June, the prices of a number of assets (e.g. government bonds, shares) tended to decrease. In the case of government bonds, however, the increase in yields was not restricted only to the problem countries on the euro zone periphery, but it also affected safe American and German government bonds. In the middle of June, the bearish mood on the market was boosted by comments from Mr Bernanke, the Fed Governor, who indicated the possibility of tapering the quantitative easing during the second half of this year. At the end of the month, however, the

situation on the market calmed slightly and the prices of assets started to rise once again.

As far as the euro zone periphery countries (Greece, Ireland, Portugal, Spain and Italy) are concerned, the relatively favourable (in particular compared to the previous year) situation on government bond markets stands in sharp contrast to development in the real economy. All these countries are in recession (according to current data, Ireland entered recession in Q3 2012) while suffering from high unemployment rates, with youth joblessness reaching extremely high levels. In Greece, Spain and Italy, high unemployment in the age group 15–24 has been prevalent for a long time. This fact, however, does not limit the extent of the problem as such or the importance of the negative effects that the current labour market situation will have on the long-term growth potential of these economies.

According to available indicators, economic situation in Cyprus is also quickly deteriorating. With respect to the size of the Cypriot economy, which only makes up 0.2% of GDP of the euro zone, and the minimal reaction of financial markets to the problems related to the negotiations over conditions of the bailout programme, which were experienced in March, the impact (either direct or indirect) of developments in Cyprus on the situation of other states of the EA (except for Greece) or the EU should be minimal.

Despite the relatively calm situation on financial markets, the risk that the debt crisis in the euro zone would escalate cannot be neglected entirely, especially since economic situation in the euro zone periphery countries continues to be very unfavourable. In addition, Q1 2013 GDP data highlights the risk of the recession spilling over from the euro zone periphery to its core. Should this risk materialise, the Czech Republic, as a small open economy with very strong business links to the EA countries, would experience a decrease in foreign demand for its exports, which would likely have knock-on effects on investment activity and household final consumption expenditure. However, highly resilient financial sector (see the Report on Financial Stability 2012/2013 published by the CNB on 18 June) and credible fiscal policy, reflected in low yields on government bonds, remain advantages for the Czech Republic.

Table A.1.2: **Real Gross Domestic Product** – yearly
growth in %, seasonally unadjusted data

	2005	2006	2007	2008	2009	2010	2011	2012	2013 *Forecast*	2014 *Forecast*
USA	3.1	2.7	1.9	-0.3	-3.1	2.4	1.8	2.2	2.0	2.9
China	11.3	12.7	14.2	9.6	9.2	10.4	9.1	7.9	7.9	8.1
EU27	2.2	3.4	3.2	0.4	-4.5	2.1	1.6	-0.4	-0.3	1.2
EA12	1.7	3.2	2.9	0.3	-4.4	2.0	1.5	-0.6	-0.5	1.0
Germany	0.7	3.7	3.3	1.1	-5.1	4.2	3.0	0.7	0.4	1.7
France	1.8	2.5	2.3	-0.1	-3.1	1.7	2.0	0.0	-0.1	0.9
United Kingdom	3.2	2.8	3.4	-0.8	-5.2	1.7	1.1	0.2	0.6	1.5
Austria	2.4	3.7	3.7	1.4	-3.8	2.1	2.7	0.8	0.6	1.6
Hungary	4.0	3.9	0.1	0.9	-6.8	1.3	1.6	-1.7	0.4	1.2
Poland	3.6	6.2	6.8	5.1	1.6	3.9	4.5	1.9	1.1	2.2
Slovakia	6.7	8.3	10.5	5.8	-4.9	4.4	3.2	2.0	1.1	2.5
Czech Republic	6.8	7.0	5.7	3.1	-4.5	2.5	1.8	-1.2	-1.5	0.8

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

YoY growth in %, seasonally unadjusted data

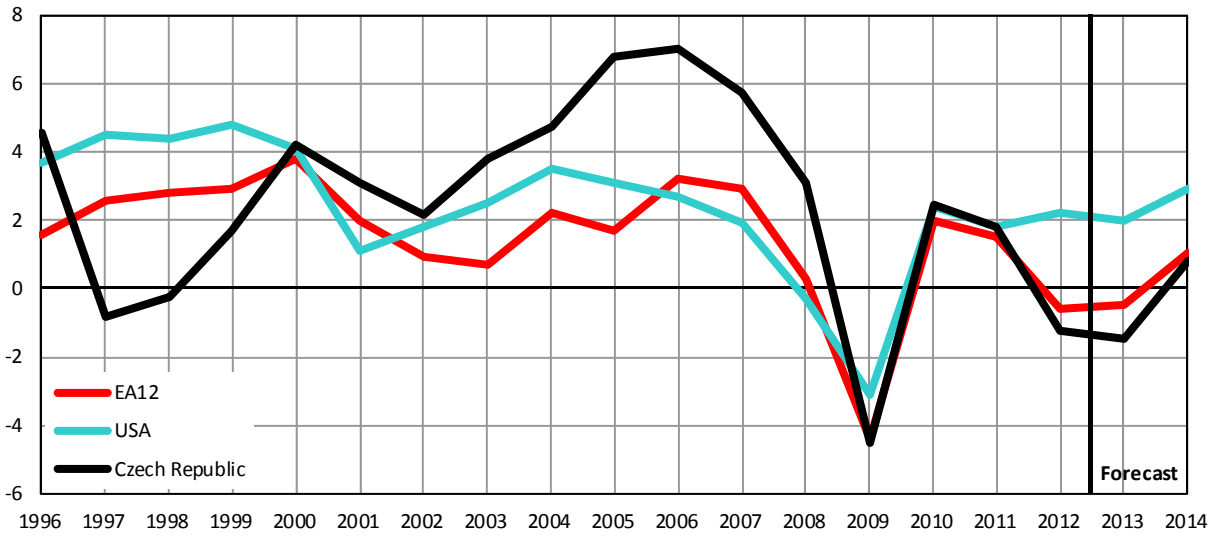


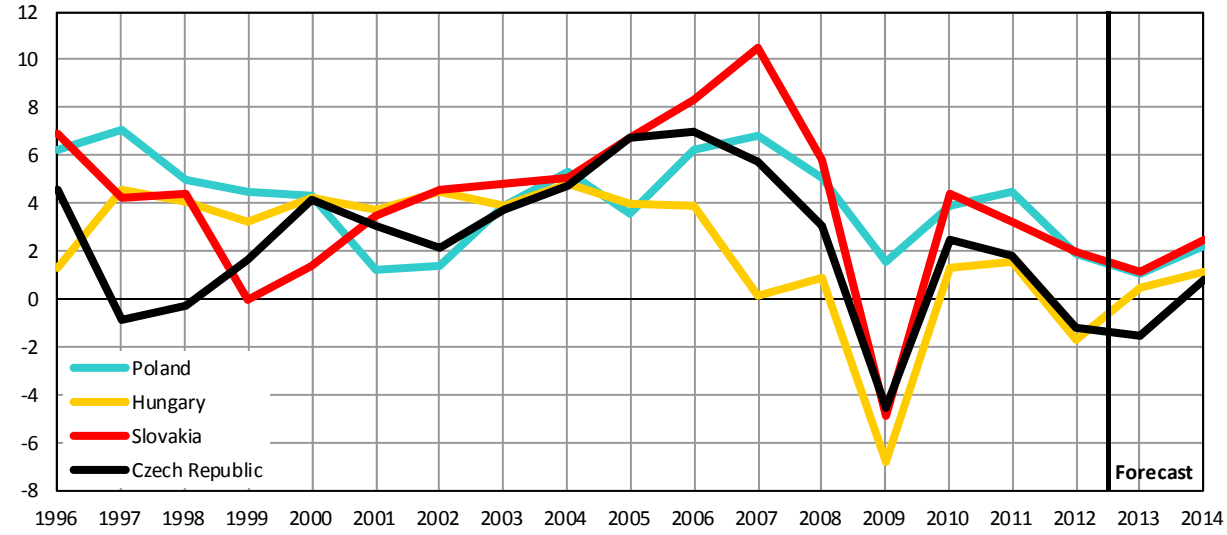
Table A.1.3: **Real Gross Domestic Product** – quarterly

growth in %, seasonally adjusted data

		2012				2013			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
USA	*QoQ*	**0.5**	**0.3**	**0.8**	**0.1**	**0.4**	**0.6**	**0.7**	**0.8**
	YoY	2.4	2.1	2.6	1.7	1.6	1.9	1.8	2.6
China	*QoQ*	**1.6**	**1.9**	**2.1**	**2.0**	**1.6**	**1.9**	**2.0**	**2.0**
	YoY	8.3	7.8	7.6	7.9	7.8	7.8	7.7	7.7
EU27	*QoQ*	**0.0**	**-0.2**	**0.0**	**-0.5**	**-0.1**	**0.1**	**0.1**	**0.2**
	YoY	0.1	-0.3	-0.4	-0.7	-0.7	-0.5	-0.4	0.3
EA12	*QoQ*	**-0.1**	**-0.2**	**-0.1**	**-0.6**	**-0.3**	**0.2**	**0.2**	**0.3**
	YoY	-0.1	-0.5	-0.7	-0.9	-1.2	-0.8	-0.5	0.4
Germany	*QoQ*	**0.6**	**0.2**	**0.2**	**-0.7**	**0.1**	**0.4**	**0.6**	**0.5**
	YoY	1.3	1.0	0.9	0.3	-0.3	0.0	0.4	1.6
France	*QoQ*	**0.0**	**-0.2**	**0.1**	**-0.2**	**-0.2**	**0.1**	**0.2**	**0.2**
	YoY	0.3	0.1	0.0	-0.3	-0.4	-0.1	0.0	0.3
United Kingdom	*QoQ*	**0.0**	**-0.5**	**0.7**	**-0.2**	**0.3**	**0.1**	**0.2**	**0.2**
	YoY	0.6	0.0	0.1	0.0	0.3	0.9	0.3	0.8
Austria	*QoQ*	**0.5**	**0.1**	**0.0**	**-0.1**	**0.0**	**0.3**	**0.6**	**0.5**
	YoY	1.1	0.9	0.9	0.5	0.0	0.2	0.7	1.4
Hungary	*QoQ*	**-1.4**	**-0.6**	**0.0**	**-0.4**	**0.7**	**0.1**	**0.1**	**0.1**
	YoY	-1.3	-1.7	-1.8	-2.4	-0.3	0.4	0.6	1.0
Poland	*QoQ*	**0.3**	**0.1**	**0.3**	**0.0**	**0.1**	**0.5**	**0.5**	**0.6**
	YoY	3.5	2.2	1.7	0.7	0.5	0.9	1.2	1.7
Slovakia	*QoQ*	**0.4**	**0.3**	**0.2**	**0.1**	**0.2**	**0.4**	**0.5**	**0.4**
	YoY	2.9	2.3	1.9	1.0	0.8	1.0	1.2	1.6
Czech Republic	*QoQ*	**-0.5**	**-0.5**	**-0.3**	**-0.3**	**-1.3**	**0.0**	**0.4**	**0.4**
	YoY	-0.4	-1.1	-1.4	-1.6	-2.4	-1.9	-1.2	-0.5

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

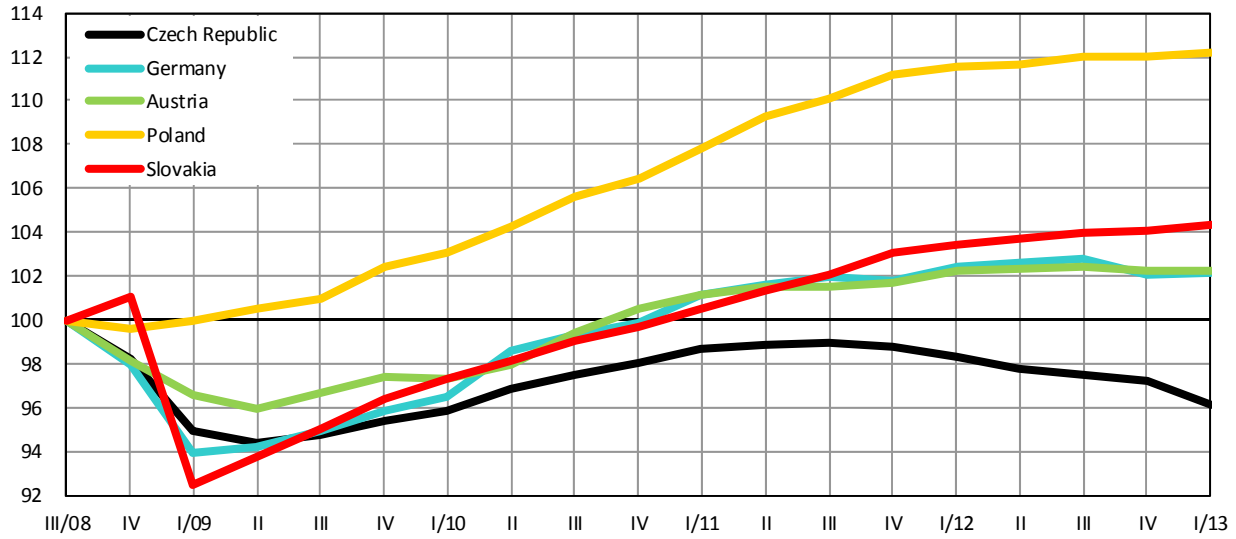


Table A.1.4: **Prices of Commodities** – yearly

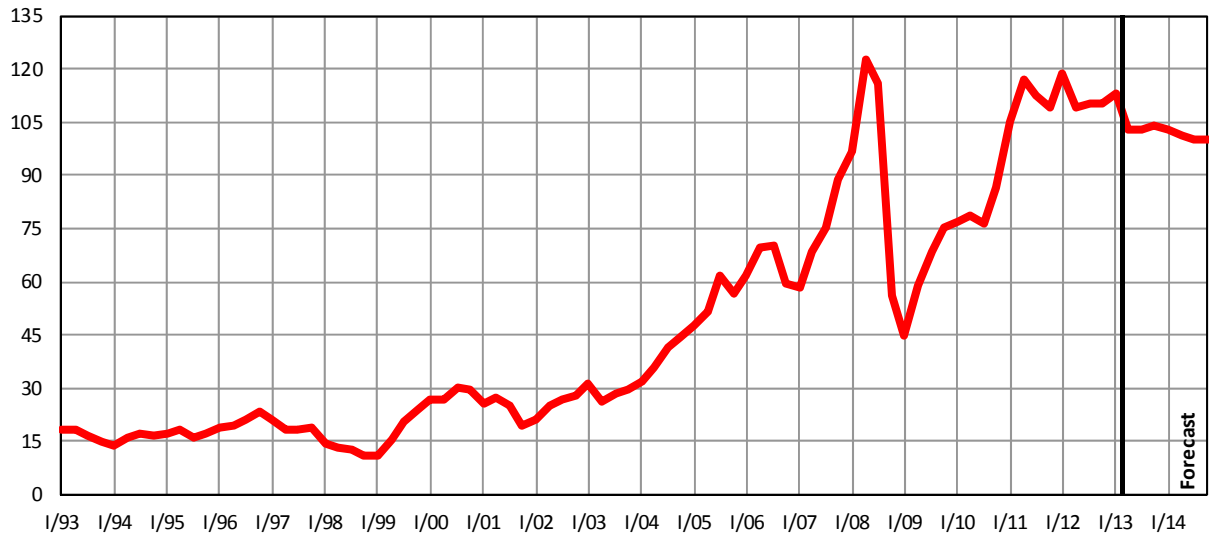
spot prices

		2005	2006	2007	2008	2009	2010	2011	2012	2013 Forecast	2014 Forecast
Crude oil Brent	*USD/barrel*	**54.4**	**65.4**	**72.7**	**97.7**	**61.9**	**79.6**	**111.0**	**112.0**	**106**	**101**
	growth in %	42.0	20.1	11.2	34.4	-36.7	28.7	39.3	0.9	-5.6	-4.5
Crude oil Brent index *(in CZK)*	*2005=100*	**100.0**	**113.3**	**113.3**	**127.9**	**90.5**	**116.7**	**150.6**	**168.2**	**160**	**154**
	growth in %	32.4	13.3	-0.1	12.9	-29.3	29.0	29.0	11.7	-4.8	-3.9
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	**.**	**.**

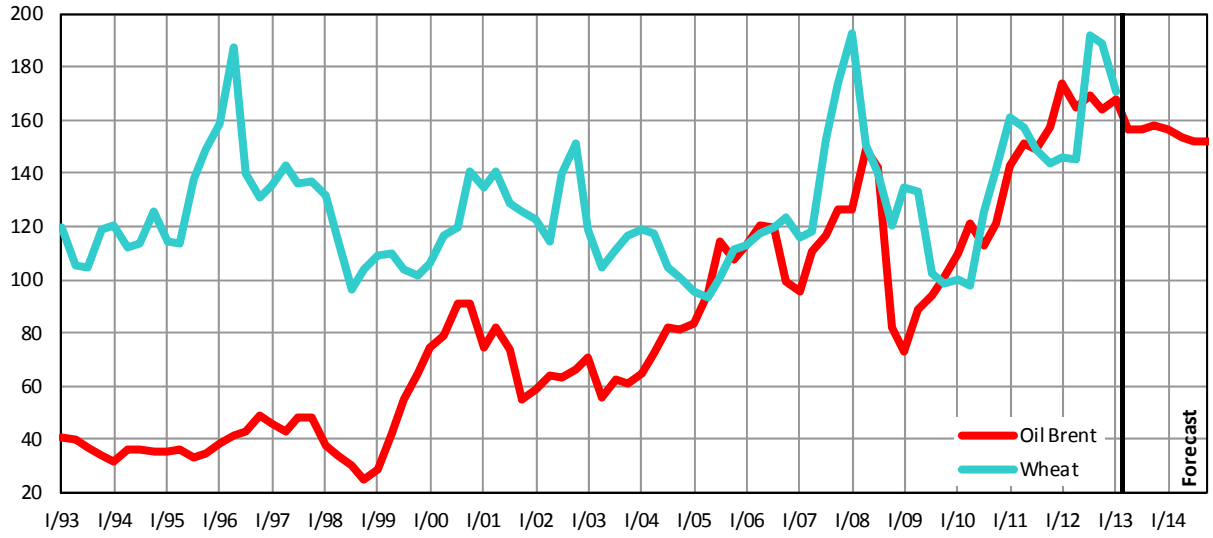
Table A.1.5: **Prices of Commodities** – quarterly
spot prices

		2012				2013			
		Q1	Q2	Q3	Q4	Q1	Q2 Estimate	Q3 Forecast	Q4 Forecast
Crude oil Brent	*USD/barrel*	**118.5**	**108.9**	**110.0**	**110.4**	**112.9**	**103**	**103**	**104**
	growth in %	13.0	-7.0	-2.2	1.0	-4.7	-5.4	-6.4	-5.8
Crude oil Brent index *(in CZK)*	*2005=100*	**173.6**	**164.5**	**169.0**	**164.1**	**167.4**	**157**	**157**	**158**
	growth in %	21.3	8.6	13.6	4.4	-3.6	-4.7	-7.3	-3.6
Wheat price	*USD/t*	**278.8**	**269.0**	**349.5**	**355.7**	**321.4**	.	.	.
	growth in %	-15.6	-20.6	10.7	27.2	15.3	.	.	.
Wheat price index *(in CZK)*	*2005=100*	**146.1**	**145.3**	**192.0**	**189.1**	**170.5**	.	.	.
	growth in %	-9.4	-7.4	28.7	31.5	16.7	.	.	.

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

Last year, the government sector balance ended up in deficit amounting to 4.4% of GDP. Compared to 2011, this was a marked deterioration; however, the result was influenced by two one-off measures (financial compensation to churches and non-refunded EU fund inflows) totalling CZK 71 billion. Had it been adjusted for these measures, the deficit would be 0.8 p.p. lower than in the previous year. In structural terms, the improvement in balance is slightly more pronounced, due to the considerably higher negative output gap in 2012. This development was supported by a number of discretionary changes (e.g. a hike in the reduced VAT rate by 4 pp) and austerity policy across sub-sectors and transactions. Last but not least, a drop in investment expenditure, which was partially caused by reduction in expenditure on projects co-financed by the EU (the impact on the balance only in the amount of national financing) and by a decline in nationally financed investment in the case of local budgets, also contributed to the result.

We expect the government sector deficit to decrease to 2.8% of GDP this year (compared to the last year's deficit adjusted for the aforementioned one-offs, it would mean a deterioration of 0.3 pp). A number of discretionary measures has a positive impact on the government sector balance, e.g. the increase in both VAT rates, changes in direct taxes and modification of the pension adjustment formula. Further deepening of the output gap (see Chapter B.1), on the other hand, has a negative impact on the balance, as it increases its cyclical component. Structural balance should improve by 0.4 p.p., while cyclically adjusted primary balance should be roughly zero.

Compared to the last Macroeconomic Forecast, the current macroeconomic scenario is considerably worse. Nonetheless, the April forecast for 2013 tax revenues was extremely conservative. Moreover, a change in GDP forecast does not have much important impact on the estimate of the revenue side of the government sector. The estimate for the current year draws on cash performance data of the state budget and other microeconomic data, which usually provide a better guide for forecasting the current year than macroeconomic tax bases.

Nevertheless, we have reduced our estimate of the 2013 tax revenues and social security contributions. On the other hand, a positive budget reserve can be seen in estimates of the impact of introducing the pension savings pillar, since the current loss in terms of funds in the public system is, contrary to expectations, fractional (until the end of June only just under 75,000 persons opted out from the public pillar). Basically, these two effects compensate for each other.

On the expenditure side, it is possible to expect somewhat greater pressure on the social system, in particular cash social assistance benefits. However, the original forecast envisaged a certain reserve which should cover the greater number of expected claims. Pension insurance benefits have been more or less developing in line with the original forecast from the Convergence Programme of the Czech Republic.

Current estimates for other revenue and expenditure items have not changed in essence from the estimates made in April. A gradual increase in investment expenditure is forecast, the growth of which will be partially financed from the EU funds.

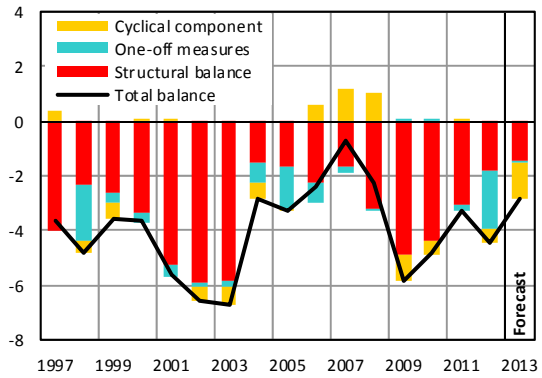
At present, the risks of estimating the general government sector balance can be seen at several levels. Upside risks include additional income from the sale of emission allowances, which the forecast still does not take into account. Currently, the amount is estimated at approximately CZK 2 billion, but considering the marked price volatility and problems on the European allowances markets the result can only be predicted with great difficulty. Another upside risk is a possible sale of LTE licences to mobile operators. The sale is estimated to bring in 8–14 CZK billion; however, it is not completely clear whether the auction will take place by the end of this year.

On the other hand, there are negative risks as well. Should economic problems deepen, tax revenues could deteriorate. Another problem is a further correction of that part of the EU funds that should have originally been refunded. This year, however, it is expected to be considerably lower (approximately CZK 4 billion). Last year the corrections were related to large operational programmes, but money is mostly drawn again. The last risk is the extent of flood damage. At present, funds released from the state budget and state funds are primarily reallocations on the expenditure side.

General government debt-to-GDP ratio should increase only by 0.2 p.p., especially as a result of the reversal of the MoF's provision based on the revised financing strategy and state debt management in H2 2013.

Considering the ongoing work on the state budget and the drafting of budgets for state funds, as well as their medium-term outlooks, we are only publishing the forecast for 2013.

Graph A.2.1: **Decomposition of the government balance**
in % of GDP



Graph A.2.2: **Government Debt**
in % of GDP

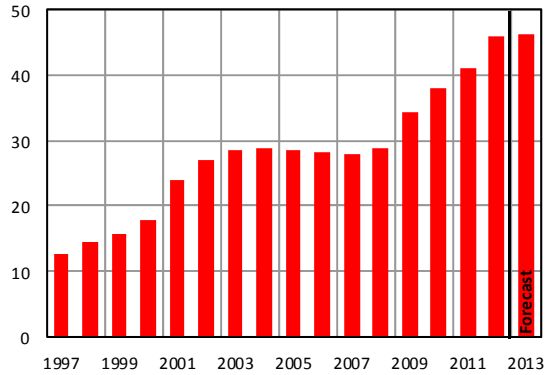


Table A.2.1: **Net Lending/Borrowing and Debt**

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
										Prelim.	*Forecast*
General government balance [1]	*% GDP*	**-2.8**	**-3.2**	**-2.4**	**-0.7**	**-2.2**	**-5.8**	**-4.8**	**-3.3**	**-4.4**	**-2.8**
Cyclical balance	*% GDP*	**-0.6**	**-0.1**	**0.6**	**1.2**	**1.0**	**-1.0**	**-0.4**	**0.0**	**-0.5**	**-1.3**
Cyclically adjusted balance	*% GDP*	**-2.2**	**-3.2**	**-3.0**	**-1.9**	**-3.3**	**-4.8**	**-4.4**	**-3.3**	**-3.9**	**-1.5**
One-off measures	*% GDP*	**-0.7**	**-1.5**	**-0.7**	**-0.3**	**-0.1**	**0.0**	**0.0**	**-0.2**	**-2.1**	**-0.1**
Structural balance	*% GDP*	**-1.5**	**-1.6**	**-2.3**	**-1.6**	**-3.2**	**-4.9**	**-4.4**	**-3.1**	**-1.8**	**-1.5**
Fiscal effort [2]	*percent. points*	**4.3**	**-0.1**	**-0.6**	**0.6**	**-1.5**	**-1.7**	**0.5**	**1.3**	**1.3**	**0.4**
Interest expenditure	*% GDP*	**1.1**	**1.1**	**1.1**	**1.1**	**1.0**	**1.3**	**1.3**	**1.4**	**1.5**	**1.5**
Primary balance	*% GDP*	**-1.8**	**-2.2**	**-1.3**	**0.4**	**-1.2**	**-4.5**	**-3.5**	**-1.9**	**-2.9**	**-1.3**
Cyclically adjusted primary balance	*% GDP*	**-1.2**	**-2.1**	**-1.9**	**-0.8**	**-2.2**	**-3.6**	**-3.0**	**-1.9**	**-2.4**	**0.0**
	% GDP	**28.9**	**28.4**	**28.3**	**27.9**	**28.7**	**34.2**	**37.9**	**41.0**	**45.9**	**46.2**
Change in debt-to-GDP ratio	*percent. points*	**0.4**	**-0.5**	**-0.1**	**-0.3**	**0.8**	**5.5**	**3.7**	**3.1**	**4.9**	**0.2**

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] *General government net lending (+)/borrowing (–) including interest derivatives.*

[2] *Change in structural balance.*

A.3 Monetary Policy and the Financial Sector

Monetary policy

The primary monetary policy instrument is the limit interest rate for **2W (two-week) repo operations**, which has been at a historic and technical low of 0.05% since November 2012. Given the economic outlook and development, we can expect it to remain at this level. At the end of Q2 2013, the **interest-rate spread** between the Czech Republic and the EMU deepened to –0.45 p.p., due to the cut in the ECB base rate, while relative to the US it remains at –0.20 to 0.05 pp.

Financial sector and interest rates

In Q2 2013, the **3M PRIBOR** interbank market rate averaged 0.5% (*consistent with the forecast*), where it should stay for the rest of the year. For the whole of this year, 3M PRIBOR should therefore average 0.5% (*unchanged*), just like in 2014 (*versus 0.6%*).

Uncertainty on the interbank market, measured by the spread between 2W or 3M PRIBOR and the 2W repo rate, remains stable between 0.40 and 0.45 pp.

From their currently extremely low levels, long-term interest rates should be increasing only very slightly during the following period. We expect that **yields to maturity of 10-year government bonds** will average 2.0% (*versus 2.2%*) this year and 2.2% (*versus 2.3%*) in 2014. Considering the fact that the Czech Republic's rating is at a good investment level (Standard & Poor´s AA–, Moody's A1, Fitch Ratings A+) with stable outlook, it is possible to expect further successful auctions of government bonds.

In April the CNB conducted another examination of credit terms and bank standards. The survey concluded that in Q1 2013, banks did not change credit standards for loans to non-financial corporations and consumer loans, while they relaxed those for housing loans. For Q2 2013, further tightening of credit standards for consumer loans and loans to firms had been expected, with a further relaxation of standards for housing loans.

The last stress tests of the banking sector, the results of which were published in the Report on Financial Stability 2012/2013 in June, highlighted Czech banks' continuing high resilience to even very negative and highly unlikely shocks.

In Q1 2013, interest rates on loans to non-financial corporations decreased QoQ by 0.1 p.p. to 3.3%, while interest rates on household loans fell by 0.1 p.p. to 6.2%. Rates on household deposits dropped by 0.1 p.p. to 1.1%, while rates on deposits of non-financial corporations stagnated at 0.5%. The slowdown in the growth rate of household indebtedness continues. Growth in total loans to households is driven exclusively by housing loans, while the volume of consumer loans is stagnating. Coupled with lower but still ongoing increase in deposits, the continuing slowdown in the growth of loans to non-financial corporations may imply mitigated investment activity.

The situation concerning non-performing loans (NPLs) remains stabilized. In Q1 2013 their share stood at 5.2% for households (up 0.2 p.p. YoY) and 7.4% for non-financial corporations (down 0.7 p.p. YoY). Given the unfavourable macroeconomic developments, we can assess this positively. On the other hand, it is necessary to bear in mind that the dynamics of NPLs lags behind economic development.

At the end of June 2013, the Prague Stock Exchange's PX index fell below 900 points, i.e. a comparable value against the same period of 2012.

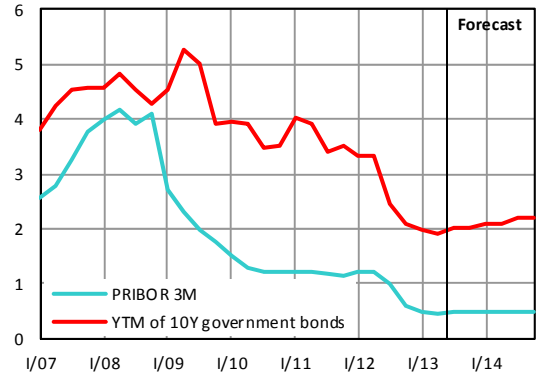
Table A.3.1: **Interest Rates, Deposits and Loans** – yearly

		2005	2006	2007	2008	2009	2010	2011	2012	2013 Forecast	2014 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	0.5
YTM of 10Y government bonds	*in % p.a.*	3.51	3.78	4.28	4.55	4.67	3.71	3.71	2.80	2.0	2.2
Households – MFI (*CR, unless stated otherwise*)											
– interest rates on loans	*in % p.a.*	7.53	6.93	6.63	6.81	7.00	7.00	6.83	6.46	.	.
– loans	*growth in %*	32.6	32.1	31.7	28.9	16.3	8.7	6.5	4.9	.	.
– loans without housing loans	*growth in %*	28.6	28.3	27.3	25.3	19.1	8.3	6.8	1.4	.	.
– deposits	*growth in %*	5.2	7.3	10.6	9.4	10.5	5.4	5.0	4.7	.	.
– share of non-performing loans	*in %*	4.2	3.7	3.2	3.0	3.7	4.8	5.3	5.2	.	.
– loans to deposits ratio	*in %*	33	40	48	57	60	61	62	65	.	.
– loans to deposits ratio (Eurozone)	*in %*	94	99	99	94	89	90	90	87	.	.
Non-financial firms – MFI (*CR, unless stated otherwise*)											
– interest rates on loans	*in % p.a.*	4.27	4.29	4.85	5.59	4.58	4.10	3.93	3.69	.	.
– loans	*growth in %*	10.3	13.9	16.7	17.5	0.2	-6.5	3.3	2.5	.	.
– deposits	*growth in %*	4.5	10.9	13.2	5.3	-1.7	4.8	0.9	8.2	.	.
– share of non-performing loans	*in %*	5.7	4.5	3.8	3.6	6.2	8.6	8.5	7.7	.	.
– loans to deposits ratio	*in %*	113	117	120	134	137	123	126	122	.	.
– loans to deposits ratio (Eurozone)	*in %*	290	292	296	315	315	294	286	273	.	.

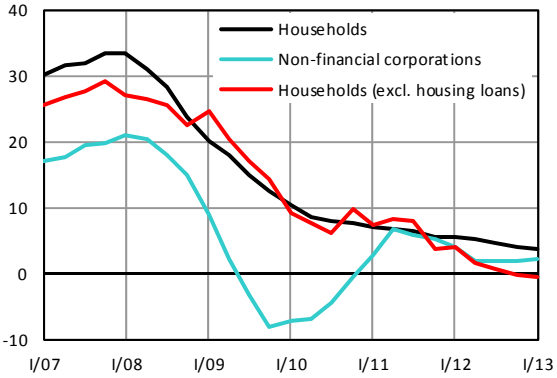
Table A.3.2: **Interest Rates, Deposits and Loans** – quarterly

		2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3 Forecast	2013 Q4 Forecast
Repo 2W rate CNB (*end of period*)	*in % p.a.*	0.75	0.50	0.50	0.05	0.05	0.05	.	.
Main refinancing rate ECB (*end of period*)	*in % p.a.*	1.00	1.00	0.75	0.75	0.75	0.50	.	.
Federal funds rate (*end of period*)	*in % p.a.*	0.25	0.25	0.25	0.25	0.25	0.25	.	.
PRIBOR 3M	*in % p.a.*	1.20	1.23	0.98	0.59	0.50	0.46	0.5	0.5
YTM of 10Y government bonds	*in % p.a.*	3.34	3.31	2.46	2.09	1.98	1.9	2.0	2.0
Households – MFI (*CR, unless stated otherwise*)									
– interest rates on loans	*in % p.a.*	6.59	6.51	6.42	6.31	6.21	.	.	.
– loans	*growth in %*	5.6	5.1	4.5	4.1	3.7	.	.	.
– loans without housing loans	*growth in %*	3.9	1.5	0.6	-0.3	-0.4	.	.	.
– deposits	*growth in %*	5.5	4.4	4.2	4.4	4.1	.	.	.
– share of non-performing loans	*in %*	5.0	5.2	5.2	5.2	5.2	.	.	.
– loans to deposits ratio	*in %*	64	64	65	65	64	.	.	.
– loans to deposits ratio (Eurozone)	*in %*	88	88	87	86	85	.	.	.
Non-financial firms – MFI (*CR, unless stated otherwise*)									
– interest rates on loans	*in % p.a.*	3.87	3.86	3.67	3.37	3.27	.	.	.
– loans	*growth in %*	4.1	1.9	2.0	1.9	2.3	.	.	.
– deposits	*growth in %*	7.8	11.6	8.3	5.2	4.8	.	.	.
– share of non-performing loans	*in %*	8.1	7.9	7.6	7.5	7.4	.	.	.
– loans to deposits ratio	*in %*	125	120	124	118	122	.	.	.
– loans to deposits ratio (Eurozone)	*in %*	282	280	274	257	257	.	.	.

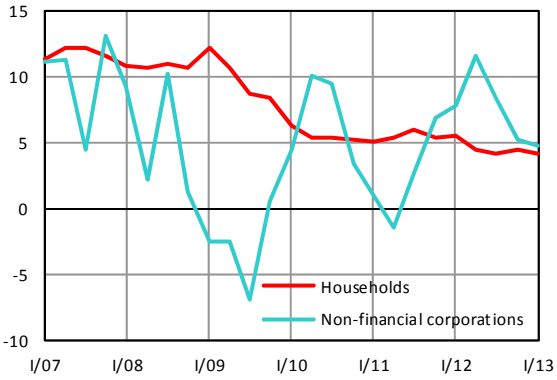
Graph A.3.1: **Interest Rates**
in % p.a.



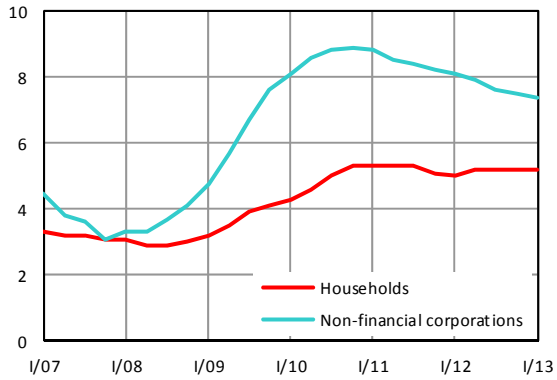
Graph A.3.2: **Loans**
YoY growth in %



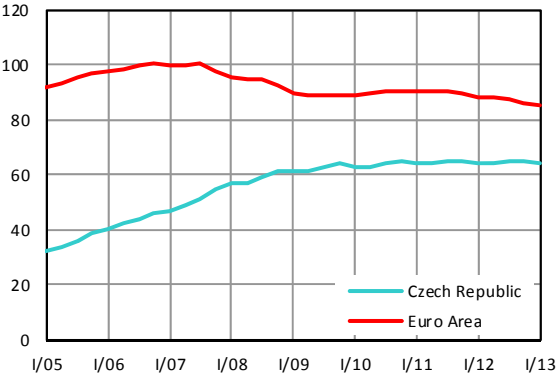
Graph A.3.3: **Deposits**
YoY growth in %



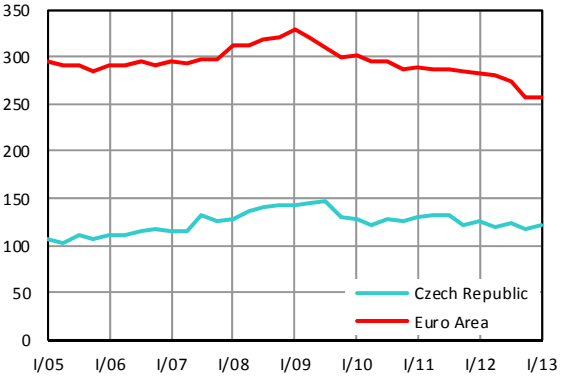
Graph A.3.4: **Non-performing Loans**
ratio of non-performing to total loans, in %



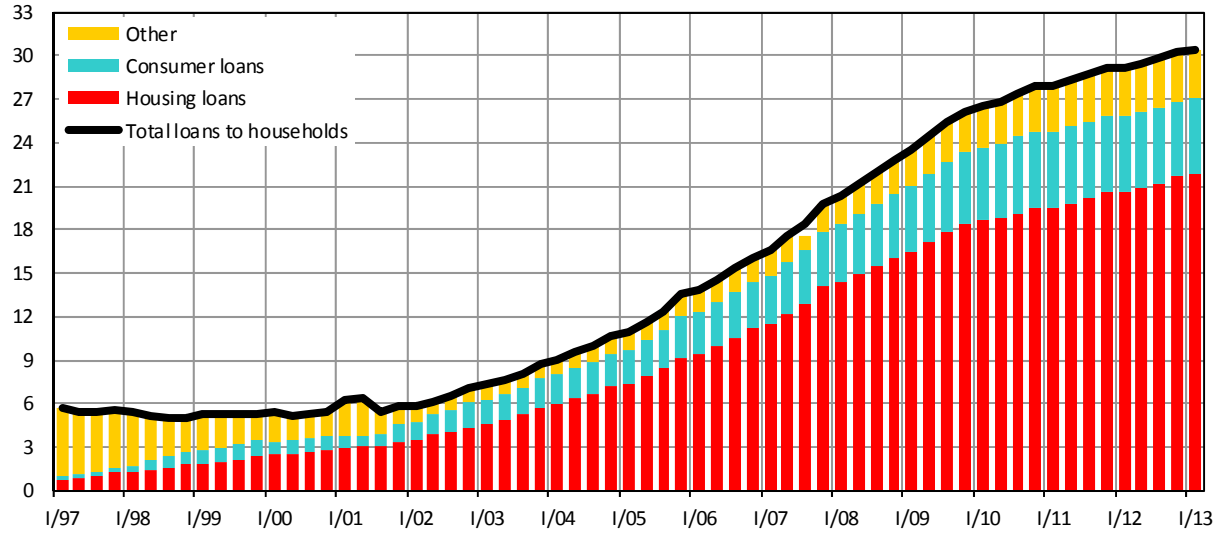
Graph A.3.5: **Loans to Deposits Ratio** – Households
in %



Graph A.3.6: **Loans to Deposits Ratio** – Firms
in %



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



A.4 Exchange Rates

Weak growth of the Czech economy and a negative interest-rate differential towards the EMU resulted in the long-term appreciation of the CZK/EUR exchange rate coming to a halt in 2011. Having weakened in 2012 (on average by 2.2% YoY), the koruna depreciated further by 2.1% in H1 2013. Verbal interventions from the CNB aimed at easing monetary conditions also contributed to this development.

Considering the absence of appreciation pressures on the CZK/EUR exchange rate, we have decided to accept a technical assumption that the exchange rate remains stable at the level prevailing on average in H1 2013 (25.8 CZK/EUR) in both the forecast and the outlook horizon. If the debt crisis in the euro zone escalates, however, considerable movement in either direction cannot be excluded.

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

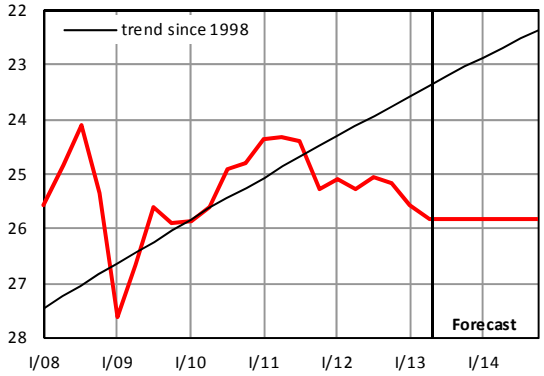


Table A.4.1: **Exchange Rates** – yearly

		2007	2008	2009	2010	2011	2012	2013 Forecast	2014 Forecast	2015 Outlook	2016 Outlook
Nominal exchange rates:											
CZK / EUR	*average*	**27.76**	**24.96**	**26.45**	**25.29**	**24.59**	**25.14**	**25.8**	**25.8**	**25.8**	**25.8**
	appreciation in %	2.1	11.3	-5.6	4.6	2.8	-2.2	-2.4	-0.3	0.0	0.0
CZK / USD	*average*	**20.31**	**17.06**	**19.06**	**19.11**	**17.69**	**19.59**	**19.7**	**19.9**	**19.9**	**19.9**
	appreciation in %	11.3	19.0	-10.5	-0.3	8.0	-9.7	-0.8	-0.6	0.0	0.0
NEER	*average of 2010=100*	**90.6**	**101.2**	**98.0**	**100.0**	**103.1**	**99.5**	**98**	**97**	**97**	**97**
	appreciation in %	2.7	11.7	-3.2	2.1	3.1	-3.5	-1.9	-0.3	0.0	0.0
Real exchange rate to EA12[1)]	*average of 2010=100*	**92.0**	**102.5**	**97.9**	**100.0**	**100.7**	**98.6**	**96**	**94**	**94**	**93**
	appreciation in %	3.1	11.3	-4.4	2.1	0.7	-2.1	-3.1	-1.2	-0.6	-0.8
REER	*average of 2010=100*	**88.7**	**102.2**	**98.1**	**100.0**	**102.4**	**100.1**	**.**	**.**	**.**	**.**
(Eurostat, CPI deflated, 36 countries)	*appreciation in %*	2.9	15.1	-4.0	2.0	2.4	-2.3	.	.	.	.

[1)] *Deflated by GDP deflators.*

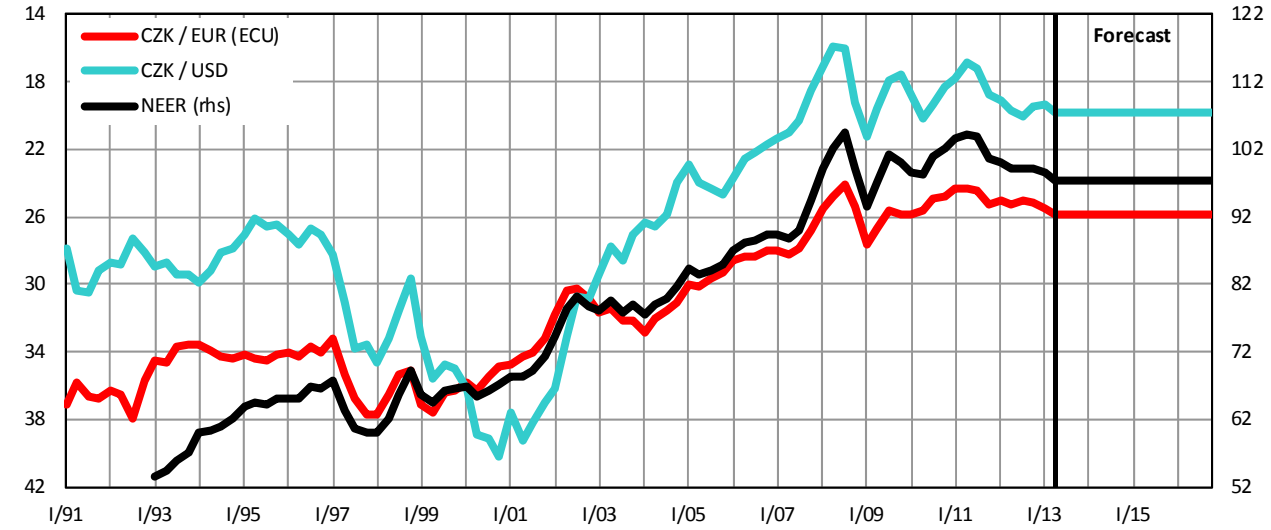
Table A.4.2: **Exchange Rates** – quarterly

		2012				2013			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
Nominal exchange rates:									
CZK / EUR	*average*	**25.08**	**25.26**	**25.07**	**25.17**	**25.57**	**25.8**	**25.8**	**25.8**
	appreciation in %	-2.8	-3.7	-2.7	0.4	-1.9	-2.2	-3.0	-2.6
CZK / USD	*average*	**19.14**	**19.73**	**20.07**	**19.42**	**19.37**	**19.9**	**19.9**	**19.9**
	appreciation in %	-6.9	-14.3	-13.9	-3.3	-1.2	-0.7	1.0	-2.3
NEER	*average of 2010=100*	**100.2**	**99.2**	**99.3**	**99.2**	**98.4**	**97**	**97**	**97**
	appreciation in %	-3.2	-4.8	-4.5	-1.3	-1.7	-2.0	-2.0	-2.0
Real exchange rate to EA12 [1)]	*average of 2010=100*	**98.5**	**98.3**	**98.7**	**98.8**	**96.4**	**95**	**95**	**96**
	appreciation in %	-2.0	-3.2	-2.8	-0.2	-2.2	-3.1	-4.0	-3.2
REER	*average of 2010=100*	**101.4**	**99.9**	**99.7**	**99.3**	**.**	**.**	**.**	**.**
(Eurostat, CPI deflated, 36 countries)	*appreciation in %*	-1.7	-3.3	-3.5	-0.5	.	.	.	.

[1)] *Deflated by GDP deflators.*

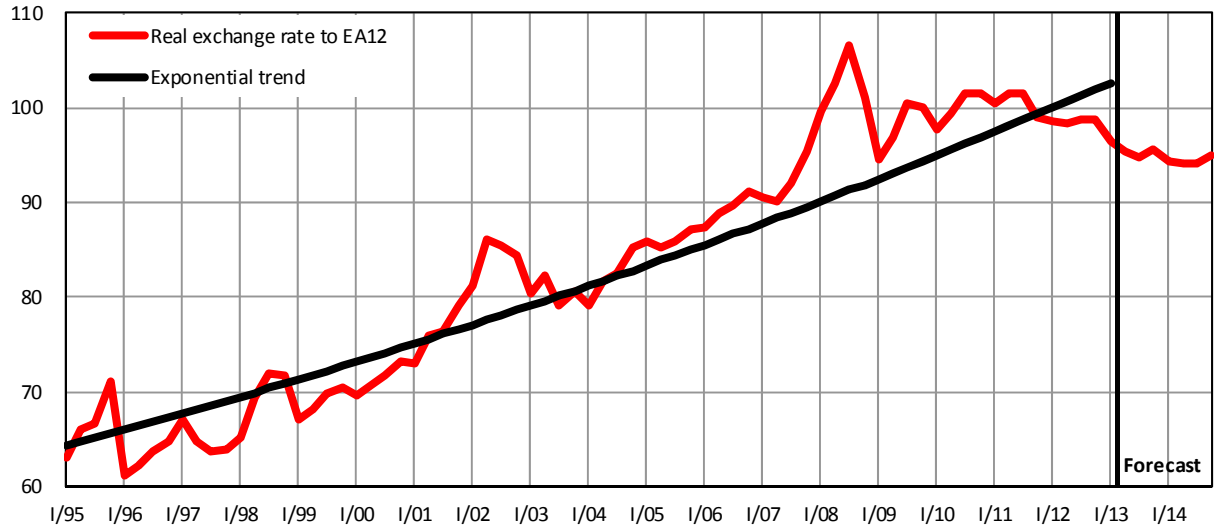
Graph A.4.2: **Nominal Exchange Rates**

quarterly average, average 2010=100 (rhs)



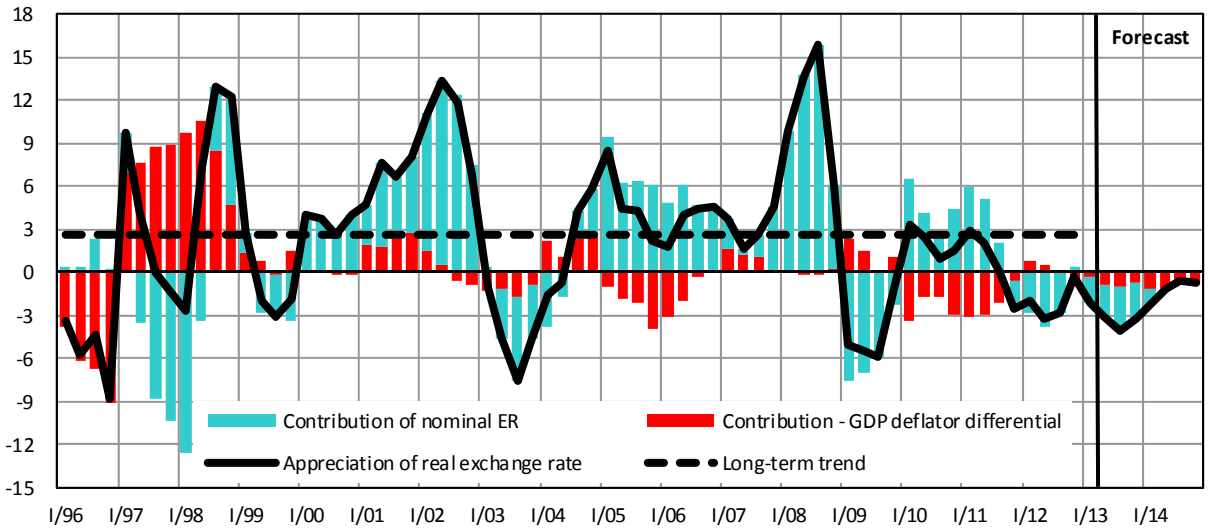
Graph A.4.3: **Real Exchange Rate to EA12**

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

Business environment

On 1 July 2013, an **amendment to the Commercial Code** came into effect which should result in improving payment morale and reducing company cross default. Although the basic maturity period of invoices has been set at 30 days, this time-limit can be extended upon agreement up to 60 days. In the case of goods or services delivered to a public contractor, the extension up to 60 days is maximal, and must be justified by the nature of the obligation. For other business relations, the time-limit can also be extended over 60 days unless it is grossly unfair towards the creditor. Further, the amendment defines the rate of default interest in the amount of at least eight percentage points above the CNB's reference rate.

On 18 July 2013, the President signed an **amendment to the Act on Export Insurance and Financing with State Aid**. According to the amendment, the aim of which is to support exports, commercial banks will be allowed to grant loans to Czech exporters with interest rates fixed throughout the period of their use and repayment. If the interest rate on the interbank market increases during this period, the difference will be paid by the state to the bank. If the interest rate decreases, the difference will be returned by the banks to the state. The loan rate will be fixed based on the CIRR rate published by the OECD, which is considered to be the minimal rate that is not representing prohibited public support to private entities.

Taxes

Due to a comprehensive change in private law, on 17 April 2013 the government passed a bill on **a change in tax laws in connection with private substantive law recodification**. The act introduces a number of terminological and factual changes, as well as necessary changes in connection with establishing the Single Collection Point, the full launch of which is expected on 1 January 2015.

Major changes include the exemption of dividends and all shares in profit for natural and legal entities paid out between local payers and payers from the EU countries, Switzerland, Norway and Iceland, and extending the time-limit for the exemption of income of natural entities from the sale of securities from 6 months to 3 years, while an annual limit of CZK 100,000 will be introduced for the exemption of income from the sale of securities that are not part of a business property.

The limit for the exemption of income from occasional activities or the occasional lease of movable assets will be increased from CZK 20,000 to CZK 30,000. Income not subject to public insurance premiums (agreements on work performance) will form a separate taxable amount collected by withdrawal at a special rate, while the limit of monthly income will be increased from CZK 5,000 to CZK 10,000.

The maximum limit for the deduction of gifts for public benefit purposes will be increased to 15% for natural entities and unified at 10% for legal entities. Deduction from the tax base will also be allowed for the

acquisition of research and development results from research organizations. In order to support exports, the possibilities for including the value of outstanding receivables in tax costs will be extended, up to the amount of received insurance payments. The act is scheduled to come into effect from 1 January 2014.

In connection with the comprehensive change in private law, on 17 April 2013 the government also passed the **bill on immovable acquisition tax** that should result in reducing the administrative burden of tax payers and the state. The act cancels the Act on Inheritance Tax, Gift Tax and Real Estate Transfer Tax, while preserving the taxation of paid real estate transfers in the form of taxation of the acquisition of immovable property. In contrast to the current legislation, the person of tax payer will be unified into the person of the acquirer, while the institute of guarantor for the purposes of this tax will be cancelled. The act will also decrease the number of cases in which submission of an expert opinion is obligatory according to valuation regulations on the ascertained prices of immovables, and will generally restrict the amount of written materials payers will be obliged to attach to their tax returns. The act should come into effect from 1 January 2014.

Financial markets

On 19 July 2013, the President signed an **amendment to the Act on Investment Companies and Investment Funds**. This should help make conducting business activities on the Czech capital market more attractive. The main changes include extending the group of admissible legal forms for investment funds, and introducing separate regulation of the manager's and administrator's duties. The manager will perform its own portfolio management and related risk management, while the administrator deals only with administrative activities related to investment fund management.

On 30 June 2013, the **Act on Increasing Transparency of Joint-Stock Companies** came into effect, restricting anonymous ownership of bearer shares. This Act imposes on joint-stock companies with bearer certificated shares the obligation to choose from various means of transforming bearer certificated shares, i.e. physical custody at banks, book entry with the central banker or changing to registered shares. For the purposes of paying out dividends, shareholders holding registered certificated shares will be obliged to open an account with a banking institution, not only to verify the identification of shareholders carried out by the company, but also to monitor the flow of dividends and other monetary payments credited to the given shareholder.

The **amendment to the Act on Savings and Loan Cooperatives** passed by the government on 29 May 2013 tightens up the conditions for cooperative savings banks. From 2017, the balance sheet total will be limited to CZK 5 billion for cooperative savings banks. Upon reaching this total cooperative savings banks are either transformed into banks or will be able to continue their activities but without the possibility of any further growth. The amendment also increases the contributions of savings banks in their risk funds and the Deposit Insurance Fund. The amendment is scheduled to come into effect from 1 January 2014.

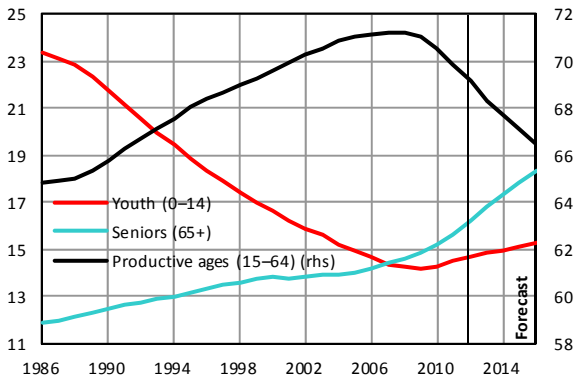
Labour Market

On 31 May 2013, the President of the Czech Republic signed an **amendment to the Employment Act,** which should contribute to liberalizing fixed-term employment contracts. In the case of serious operational reasons or because of the special nature of the work (culture or seasonality in agriculture and construction), the amendment will allow repeated fixed-term employment without any limitation, i.e. the period of 3 years will not have to be met from the termination of the previous fixed-term employment relationship. For persons older than 18 years, the amendment also shortens the entitlement to rest between shifts from 12 to 11 hours. The amendment will come into effect on 1 August 2013.

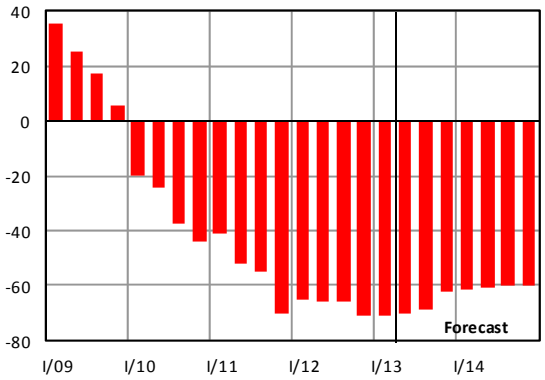
A.6 Demographic Trends

At the beginning of April 2013, 10,513 million people lived in the Czech Republic. Compared to the beginning of the year, the number of inhabitants decreased by three thousand, and this was thus the first recorded decrease since Q1 2004 (the decrease in the number of inhabitants in 2011 was attributable to the census difference). The decrease was caused by a combination of negative natural increase (amid YoY decline in the birth rate) and zero net migration. The ongoing economic recession is clearly markedly reducing the attractiveness of the Czech Republic as a target country for migrants.

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



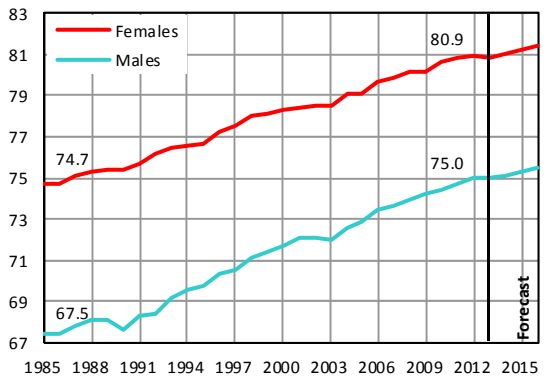
Graph A.6.2: **Czech Population Aged 15–64**
YoY increases of quarterly averages, in thousands



In terms of age structure, the share of the population aged 15-64 has been sharply decreasing since 2008 and is likely to decline further (see Graph A.6.1). Persons born at the end of the 1990s, when the birth rate was very low, are exceeding the lower age limit of this group, while the population-strong generation born after the WWII is gradually being classified as senior citizens. In absolute terms, the working-age population is decreasing by nearly 70 thousand people a year (see Graph A.6.2), or by 1.0% in relative terms. Economic impacts of this situation are described in more detail in Chapter B.1.

In contrast, the structural proportion of persons over 64 years in the total population reached 16.2% at the beginning of 2012, and according to the low variant of the CZSO's Demographic Projection, this should increase to more than 20% by 2020. Both the number and the share of seniors in the population are significantly rising due to the demographic structure and further continuation of the intensive process of increasing life expectancy.

Graph A.6.3: **Life Expectancy**
in years



In Q1 2013, as in 2012, the recorded number of old-age pensioners stagnated. However, we assume that this was a one-off occurrence compensating for the unprecedented increase in 2011 (see Graph A.6.5), when potential future pensioners optimized the opportunity to retire during a period when rules for determining pension payments were changed.

The number of pensioners with reduced pensions after early retirement continues to rise, while the number of pensioners entitled to full pension has been decreasing YoY since Q2 2012.

Table A.6.1: **Demography**

in thousands of persons

	2007	2008	2009	2010	2011	2012	2013 Forecast	2014 Forecast	2015 Outlook	2016 Outlook
Population (January 1)	**10 287**	**10 381**	**10 468**	**10 507**	**10 487**	**10 505**	**10 516**	**10 524**	**10 532**	**10 539**
growth in %	0.4	0.9	0.8	0.4	-0.2	0.2	0.1	0.1	0.1	0.1
Age structure (January 1):										
(0–14)	**1 480**	**1 477**	**1 480**	**1 494**	**1 522**	**1 541**	**1 560**	**1 576**	**1 592**	**1 608**
growth in %	-1.5	-0.2	0.2	1.0	1.8	1.3	1.2	1.0	1.0	1.0
(15–64)	**7 325**	**7 391**	**7 431**	**7 414**	**7 328**	**7 263**	**7 188**	**7 126**	**7 066**	**7 001**
growth in %	0.4	0.9	0.5	-0.2	-1.2	-0.9	-1.0	-0.9	-0.8	-0.9
(65 and more)	**1 482**	**1 513**	**1 556**	**1 599**	**1 637**	**1 701**	**1 768**	**1 821**	**1 874**	**1 929**
growth in %	1.8	2.1	2.9	2.7	2.4	3.9	3.9	3.0	2.9	3.0
Old-age pensioners (January 1)[1)]	**2 024**	**2 061**	**2 102**	**2 147**	**2260**	**2340**	**2341**	**2 351**	**2 383**	**2 409**
growth in %	2.0	1.8	2.0	2.1	.	3.5	0.1	0.4	1.3	1.1
Old-age dependency ratios (January 1, in %):										
Demographic[2)]	**20.2**	**20.5**	**20.9**	**21.6**	**22.3**	**23.4**	**24.6**	**25.6**	**26.5**	**27.6**
Under current legislation[3)]	**35.8**	**35.9**	**36.1**	**36.6**	**37.4**	**37.8**	**38.3**	**38.6**	**39.2**	**39.8**
Effective[4)]	**41.6**	**41.5**	**41.8**	**43.6**	**45.9**	**47.9**	**47.6**	**47.8**	**48.4**	**49.0**
Fertility rate	**1.438**	**1.497**	**1.492**	**1.493**	**1.427**	**1.45**	**1.49**	**1.50**	**1.50**	**1.51**
Population increase	**94**	**86**	**39**	**-20**	**19**	**11**	**8**	**9**	**6**	**4**
Natural increase	**10**	**15**	**11**	**10**	**2**	**0**	**1**	**-1**	**-4**	**-6**
Live births	**115**	**120**	**118**	**117**	**109**	**109**	**110**	**108**	**106**	**104**
Deaths	**105**	**105**	**107**	**107**	**107**	**108**	**109**	**109**	**110**	**110**
Net migration	**84**	**72**	**28**	**16**	**17**	**10**	**7**	**10**	**10**	**10**
Immigration	**104**	**78**	**40**	**31**	**23**	**30**	**.**	**.**	**.**	**.**
Emigration	**21**	**6**	**12**	**15**	**6**	**20**	**.**	**.**	**.**	**.**
Census difference	**x**	**x**	**x**	**-46**	**x**	**x**	**x**	**x**	**x**	**x**

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

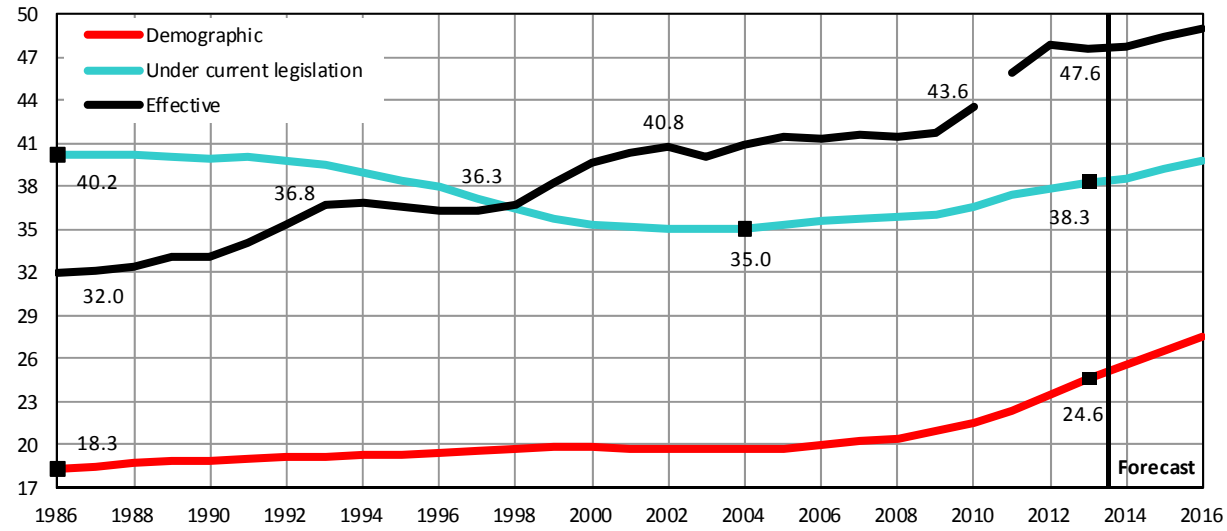
[2)] *Demographic dependency: ratio of people in senior ages (65 and more) to people in productive age (15–64).*

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

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

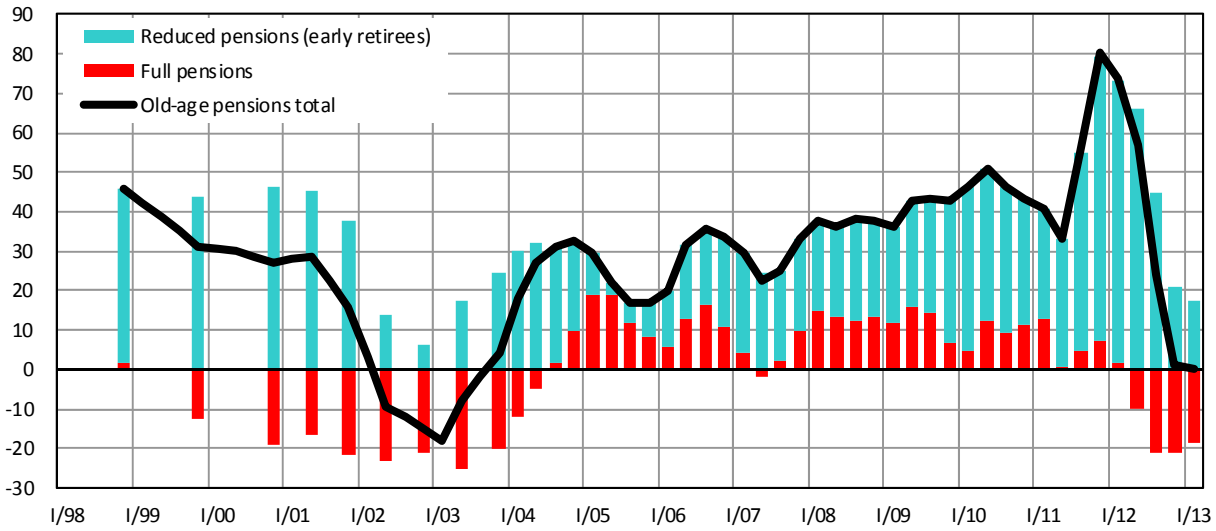
Graph A.6.4: **Dependency Ratios**

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

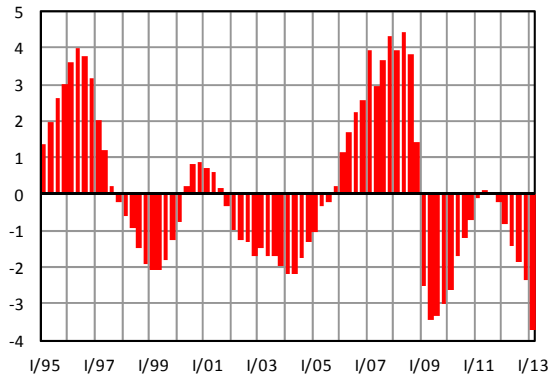
Sources of tables and graphs: CNB, CZSO, EC, Eurostat, own calculations

B.1 Position within the Economic Cycle

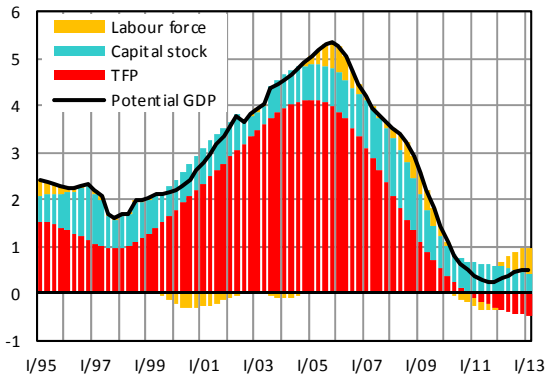
Potential product, specified on the basis of a calculation by means of the Cobb–Douglas production function, indicates the level of GDP to be achieved with average utilisation of production factors. Growth of the potential product expresses possibilities for long-term sustainable growth of the economy without giving rise to imbalances. It can be broken down into contributions of the labour force, capital stock, and total factor productivity. The output gap identifies the cyclical position of the economy and expresses the relationship between GDP and potential product. 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 of deepening of the negative output gap from a slowdown in potential product growth. The results of these calculations display high instability and should be treated with caution.

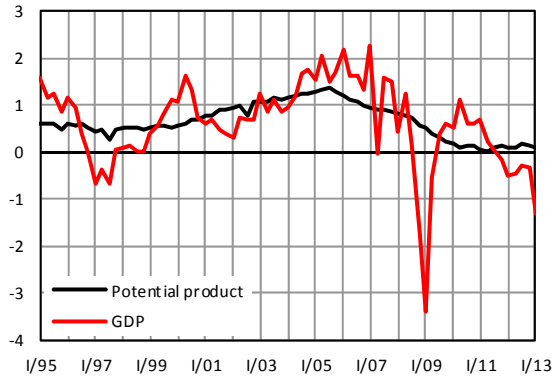
Graph B.1.1: **Output Gap**
in % of potential GDP



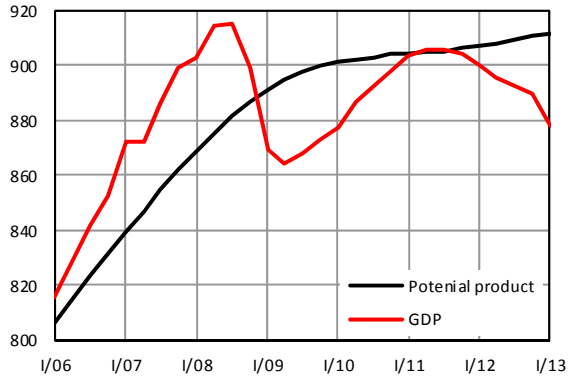
Graph B.1.2: **Potential Product Growth**
in %, contributions in percentage points



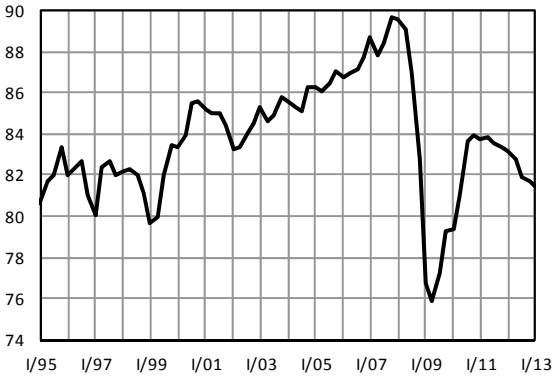
Graph B.1.3: **Potential Product and GDP**
QoQ growth in %



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



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



Graph B.1.6: **Total Factor Productivity**
YoY growth in %

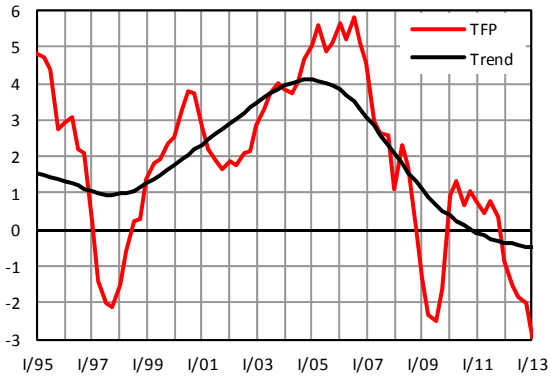


Table B.1: **Output Gap and Potential Product**

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013 Q1
Output gap	*per cent*	**-1.8**	**-0.3**	**1.9**	**3.7**	**3.4**	**-3.1**	**-1.6**	**-0.1**	**-1.6**	**-3.7**
Potential product	*growth in %*	**4.7**	**5.2**	**4.9**	**3.9**	**3.2**	**2.0**	**0.7**	**0.3**	**0.4**	**0.5**
Contributions:											
– Trend TFP	*perc. points*	**4.0**	**4.1**	**3.6**	**2.7**	**1.7**	**0.8**	**0.2**	**-0.2**	**-0.4**	**-0.5**
– Fixed assets	*perc. points*	**0.7**	**0.8**	**0.9**	**1.1**	**1.2**	**0.8**	**0.6**	**0.6**	**0.5**	**0.4**
– Participation rate	*perc. points*	**-0.2**	**0.2**	**0.2**	**-0.2**	**0.0**	**0.3**	**0.2**	**0.3**	**0.8**	**1.1**
– Demography [1)]	*perc. points*	**0.2**	**0.2**	**0.2**	**0.3**	**0.4**	**0.1**	**-0.2**	**-0.4**	**-0.5**	**-0.5**

[1)] *Contribution of growth of working-age population (15–64 years)*

The so-called great recession at the turn of 2008 and 2009 plunged the Czech economy into a large negative **output gap**. This gap was closed in Q2 2011 thanks to slight recovery after the end of the great recession. Nonetheless, the onset of another recession at the end of 2011 caused it to widen once again to –3.7% in Q1 2013. Due to the deep decline in GDP in Q1 2013, economic potential utilization is even lower than in Q2 2009 when the so-called great recession bottomed out.

Due to long periods of recessions or sluggish economic growth, YoY growth rate of the **potential product** has been around 0.5% since 2010, our calculations show. However, these estimates might in our opinion underestimate the "reality".

The most seriously affected component of potential product is **total factor productivity** (TFP). In Q1 2013, TFP was 4.6% lower than at the peak of the cycle in Q3 2008, decreasing in QoQ terms since Q2 2011. Its trend component, derived from the Hodrick-Prescott filter, has been decreasing since mid-2010, which is reflected in the considerably negative contribution of TFP to potential product growth. The fact that labour, as a production factor, enters the calculation in the form of the number of employed persons (which has been growing in spite of the long-lasting recession) and not in the form of the number of hours worked (which has been falling dramatically – see Chapter C.3) may play a certain role here.

Lasting drop in investment activity has led to a decline in contribution of **capital stock** from 1.2 p.p. in 2008 to 0.4 p.p. in Q1 2013.

Labour supply is affected by declining working-age population, which results from the population ageing process and from zero migration balance. In Q1 2013, demographic development slowed potential product growth by 0.5 pp.

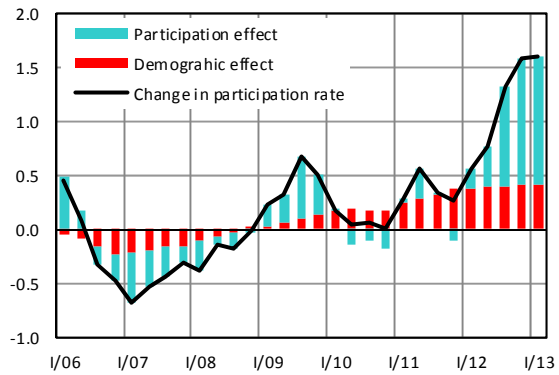
Nevertheless, not only is the size of the labour force nondecreasing, it is even growing at a dramatic pace; in Q1 2013 by 1.4% YoY. The negative impact of the decline in working-age population on labour supply is compensated by a sharp increase in **participation rate** (ratio of the labour force to the population aged 15–64 years).

Effects within the age structure of the labour force are reflected here, with structural shares of the age groups with high or growing participation increasing (the demographic effect in Graph B.1.7[1]). We also see the increased motivation to work under difficult economic conditions supported by postponement of the retirement age (the participation effect). With a contribution of 1.1 p.p., the participation rate remained the most important factor of potential product growth in Q1 2013.

Therefore, recommendations from some international organizations that the Czech Republic adopts measures for increasing participation, for example by increasing the retirement age at even higher pace, may not be justified.

Graph B.1.7: **Participation rate**

The ratio of the labour force to population aged 15–64, YoY change ind participation and contributions in p.p.

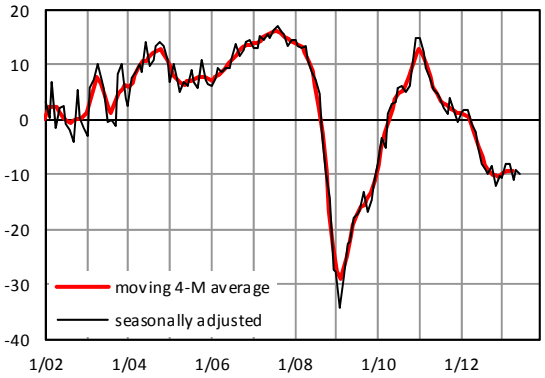


[1] *Decomposition methodology is described in the Macroeconomic Forecast – January 2013, Box C.3)*

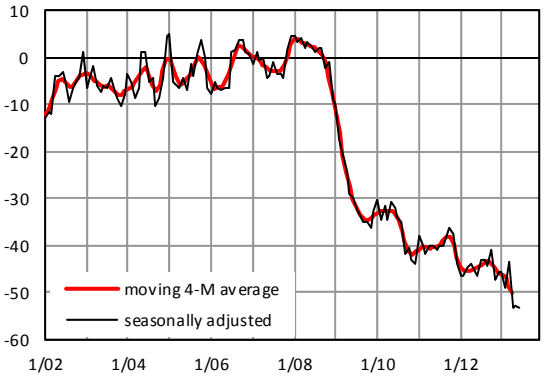
B.2 Business Cycle Indicators

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.[2]

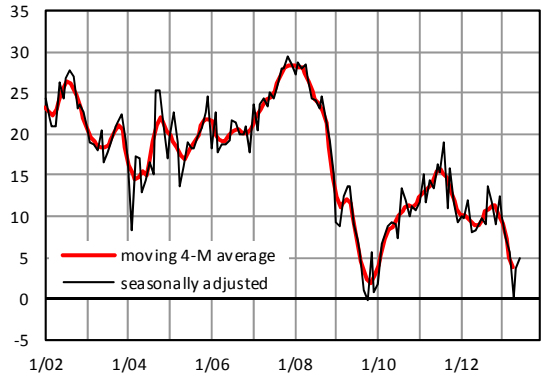
Graph B.2.1: **Industrial Confidence Indicator**



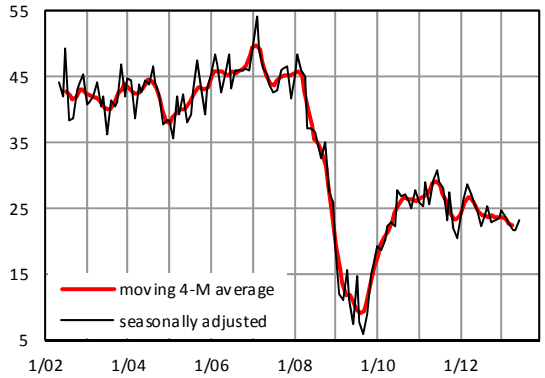
Graph B.2.2: **Construction Confidence Indicator**



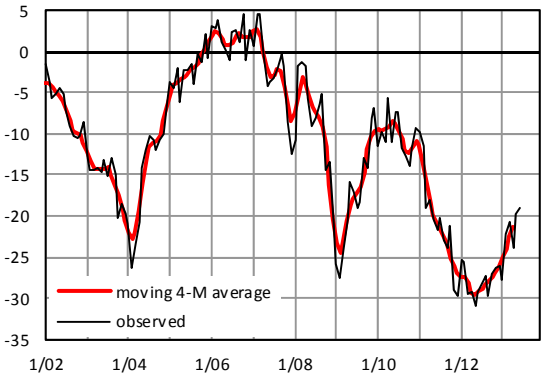
Graph B.2.3: **Retail Trade Confidence Indicator**



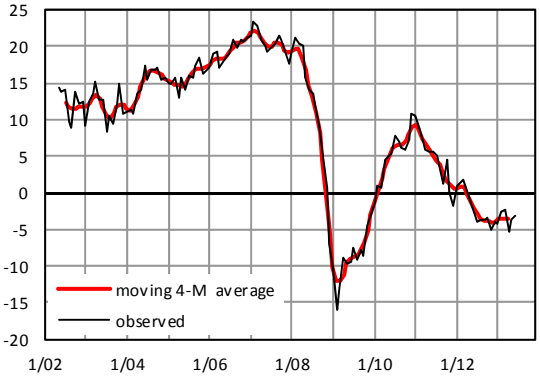
Graph B.2.4: **Selected Services Confidence Indicator**



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



Graph B.2.6: **Aggregate Confidence Indicator**



[2] *For the business cycle research methodology, see CZSO: http://www.czso.cz/eng/redakce.nsf/i/business_cycle_surveys.*

On average, indicators in industry, construction, trade and selected sectors of services saw a slight deterioration in H1 2013, compared with Q4 2012.

In **industry**, overall negative assessment persists. On a QoQ basis, the indicator improved slightly in Q1 2013, while in the following quarter it decreased. Assessment of foreign demand has deteriorated in connection with generally worse than expected situation in the EU27. On the other hand, assessment of the economic situation and outlook for total demand and for the number of employees within the 3-month horizon has been slightly improving.

The indicator for **construction** continued to decline, with respondents' assessments being predominantly pessimistic. However, the 3-month outlook for total demand, which in the case of this sector enters the construction of the leading indicator, saw a QoQ improvement in both Q1 2013 and Q2 2013.

In the case of the indicator for **trade**, reactions of the respondents were in the majority positive, though the indicator witnessed a QoQ decline in both Q1 2013 and Q2 2013. The QoQ deterioration in the 3-month outlook for employment in Q1 2013 was more or less compensated by its resuming growth in the following quarter, but the assessment of the economic situation deteriorated in both quarters.

Compared to Q4 2012, the indicator for selected sectors of **services** decreased very slightly in H1 2013, even though positive responses were still predominant among the respondents. The 3-month outlook for employment improved negligibly in both Q1 2013 and Q2 2013.

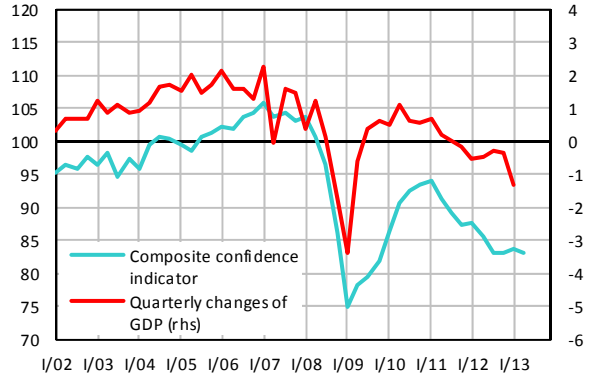
Consumer confidence was still very low, although in H1 2013 the indicator's value has been consistently improving.

The **composite confidence indicator** witnessed a slight QoQ increase in Q1 2013. In Q2 2013, however, it returned back to its Q4 2012 level (Graph B.2.6).

Although the relationship between the values of the composite confidence indicator and the QoQ changes in real gross domestic product is not very close (without any lag the correlation between these two time series is approximately 60%), it does enable us to utilize at least the fact that the composite indicator is published in advance of quarterly national accounts. In Graph B.2.7 we present only a qualitative graphic appraisal. It is clear that for Q2 2013 the composite confidence indicator signalled a QoQ drop in GDP.

Graph B.2.7: **Composite confidence indicator and QoQ GDP growth**

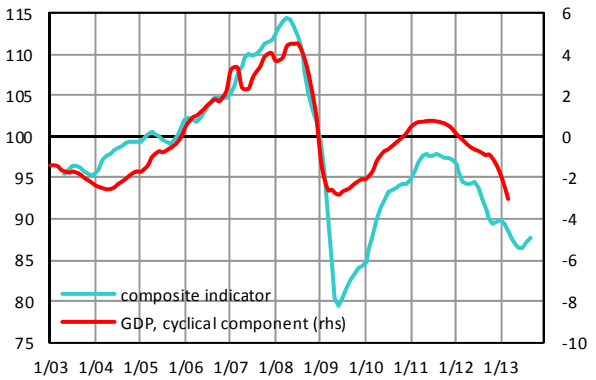
2005=100 (lhs), QoQ GDP growth in % (rhs)



For Q1 2013, the **composite leading indicator** correctly signalled a decrease in the relative cyclical component of GDP, although the published QoQ decline in GDP in Q1 2013 now appears quantitatively to be too strong. For Q2 2013, the indicator further signalled a drop in the relative cyclical component of GDP. Considering the fact that in the short term trend dynamics can be regarded as constant, the conclusion for the QoQ dynamics of GDP in Q2 2013 is approximately in line with observations resulting from comparing QoQ changes in GDP to the composite confidence indicator, i.e. a QoQ drop in GDP. However, in Q3 2013 the relative cyclical component of GDP should grow slightly, which, considering the nearly zero growth rate of trend GDP, can be interpreted as a sign of slight QoQ growth of GDP.

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

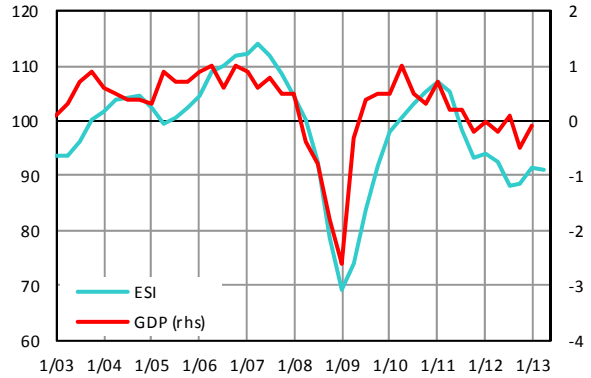
In Q2 2013, the composite confidence indicator for the EU27, published by the EC, recorded a slight decrease. Strongly negative sentiment is prevalent in all components of the indicator. Compared to Q1 2013, the assessment in industry, services, trade and construction deteriorated slightly; on the other hand, consumer confidence improved. When estimating GDP, the determining factor is not the actual ESI level itself, it is rather the tendency which the composite indicator shows. For Q2 2013, the composite indicator signals QoQ stagnation in GDP in the EU27, which is in line with our forecast.

In Q2 2013, the composite confidence indicator declined after its previous growth in Germany, France and Slovakia, thus considerably reducing overall optimism. In Italy, the indicator continued its growth trend, although the growth rate was gradually slowing down. In June, ESI increased slightly in Germany, but the manufacturing PMI (Purchasing Managers Index) dashed hopes for any breakthrough, as it fell from 49.4 in May to 48.6.

For Q3 2013, the composite leading indicator signals stabilization of the negative relative cyclical component of GDP both in the EU as a whole and in Germany. Considering the stable short-run dynamics of potential product, supported by the European Commission's estimate of the output gap for 2013, the halt in closing the negative output gap can be explained by a very slow return to economic growth in mid-2013.

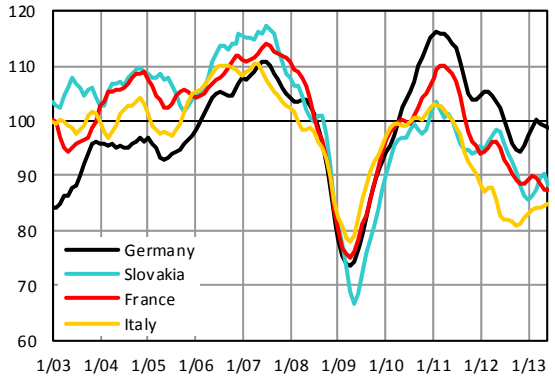
Graph B.3.1: **Composite confidence indicator and GDP growth in EU27**

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



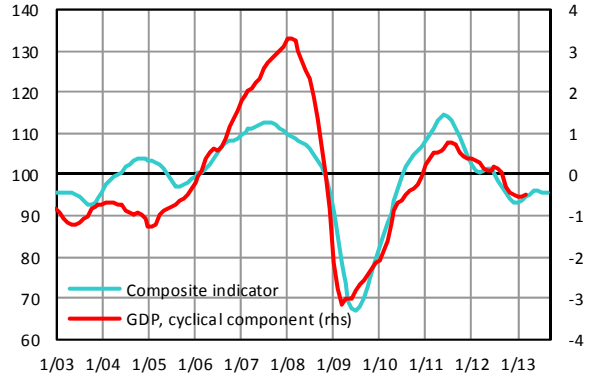
Graph B.3.2: **Composite confidence indicator, selected trading partner countries**

3-month moving averages



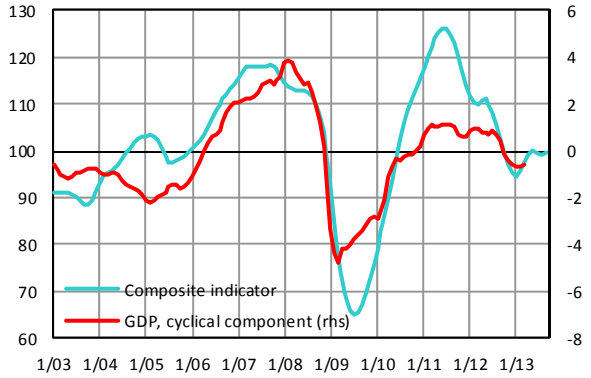
Graph B.3.3: **EU – composite leading indicator**

monthly data, 2005=100, cyclical component in % of trend GDP



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

In Q1 2013, seasonally adjusted real GDP[3] fell by a surprising 1.3% (*versus stagnation*) QoQ, with the economy having remained in recession since Q4 2011. In a YoY comparison, economic output decreased by 3.0% (*versus 1.9%*).

Together with the publication of the quarterly national accounts for Q1 2013, significant revisions to the previous data, on which the April Forecast was based, were made. Basic overview of the changes in selected components of uses of GDP is presented in Table C.1.1. The table makes it clear that according to the original data, QoQ declines in GDP were slowing down in H2 2012. The revised data, however, make such an interpretation difficult to defend. YoY changes in GDP were revised only minimally, although considerable adjustments to certain GDP components were made. The dynamics of real household consumption was revised significantly upwards, while gross fixed capital formation was revised downwards. Export and import growth in Q4 2012 also changed considerably.

The recession led also to a decline in gross value added. In Q1 2013, it fell by 2.6% YoY in real terms, which corresponded to a QoQ decrease of 0.4% (based on seasonally adjusted data). A considerably deeper QoQ decline in GDP can be interpreted as a result of a significant drop in the balance of net taxes as – just like at the beginning of 2012 – stockpiling cigarette tax stamps preceded a hike in excise tax rates.

Both final consumption expenditure and gross capital formation as well as foreign trade contributed to a YoY decrease in real GDP in Q1 2013. In final consumption expenditure, household consumption decreased by 0.8% (*versus 1.7%*), while government consumption increased by 1.1% (*versus a decrease of 0.1%*). Both a decrease in gross fixed capital formation by 5.6% (*versus 2.4%*) and a YoY slump in inventories and valuables (in 2005 prices) of CZK 23 billion (*versus CZK 17 billion)* contributed to a decline in gross capital formation by 11.9% (*versus 6.1%*).

In Q1 2013, exports also decreased by 4.6% (*versus growth of 0.8%*) and imports by 4.7% (*versus growth of 0.4%*) in real terms.

Table C.1.1: **Revision of real GDP and its components**
YoY growth rates in % (unless stated otherwise), differences in p.p.

	2012			
	Q1	Q2	Q3	Q4
Gross domestic product				
QoQ growth rates in %, seasonally adjusted				
June 2013	-0.5	-0.5	-0.3	-0.3
March 2013	-0.5	-0.6	-0.4	-0.2
Difference	**0.0**	**0.1**	**0.2**	**-0.2**
Gross domestic product				
June 2013	-0.1	-1.7	-1.7	-1.3
March 2013	-0.1	-1.8	-1.8	-1.4
Difference	**0.0**	**0.0**	**0.1**	**0.1**
Private consumption expenditure				
June 2013	-1.7	-2.9	-2.7	-3.2
March 2013	-2.6	-3.7	-3.9	-3.9
Difference	**0.9**	**0.7**	**1.2**	**0.8**
Government consumption exp.				
June 2013	-2.6	-2.2	-0.9	0.6
March 2013	-2.2	-2.0	-0.4	0.5
Difference	**-0.4**	**-0.2**	**-0.5**	**0.1**
Gross fixed capital formation				
June 2013	0.1	-1.0	-3.9	-5.4
March 2013	1.5	-0.1	-3.4	-4.1
Difference	**-1.3**	**-0.9**	**-0.5**	**-1.3**
Exports of goods and services				
June 2013	7.3	2.3	3.4	3.1
March 2013	7.4	2.4	3.6	2.2
Difference	**-0.1**	**-0.1**	**-0.1**	**0.9**
Imports of goods and services				
June 2013	4.8	1.7	-0.5	3.1
March 2013	4.8	1.7	-0.6	1.7
Difference	**0.0**	**0.0**	**0.2**	**1.4**

Seasonally adjusted household consumption increased by 1.7% QoQ in Q1 2013. This was caused, with respect to its structure, in particular by strong YoY growth of expenditures on durable goods. In light of the fact that this part of total consumption is highly volatile, it is difficult to interpret the aforementioned development as a convincing sign of improvement.

An essentially negligible QoQ real increase in the same period could also be observed for gross fixed capital formation. Here, however, there was simultaneously further YoY real decline in all key types of investment. In addition, it is necessary to point out the fact that

[3] *Unless stated otherwise, data presented in the text are not adjusted seasonally or for work days.*

QoQ relative changes in real household consumption and gross fixed capital formation show considerable instability *ex post* as a result of revisions.

After revising the data of the annual national accounts published on 30 April 2013, the view of household savings behaviour has changed. As such it has a critical effect in interpreting the development of household consumption. Until the aforementioned revision of the annual accounts data, very strong increases in the gross household savings rate were observed in recent years, which made it possible to interpret real declines in household consumption largely as postponement of current consumption (a lower marginal rate of time preferences or a higher rate of aversion towards risk), or as limitation of consumption as a consequence of repayment of debts accumulated in the past (with respect to the importance of national accounting categories, both can lead to an increase in savings). However, after the revision we observe an increase in the gross savings rate from 9.5% in 2008 to 11.4% in 2009, then a subsequent decline to 10.9% (*versus a small increase to 11.5%*) and 10.0% (*versus 9.8%*) in 2010 and 2011 respectively, and essentially a slight increase to 11.2% in 2012[4]. Any explanation of the decline in household consumption in 2012 and very weak growth in 2011 as a consequence of the savings rate development is harder to support following the data revision, and thus the direct negative impact of higher income restriction of households in the aforementioned years is emphasized.

Foreign trade contributed negatively to GDP growth despite improvement in the terms of trade. Real gross domestic income (RGDI) in Q1 2013 therefore decreased relatively less than GDP, specifically by 2.2% (*versus 2.1%*).

In nominal terms, GDP fell by 1.8% (*versus 1.5%*) in Q1 2013.

Considering the GDP income structure, compensation of employees decreased by 0.3% (*versus growth of 0.9%*) in Q1 2013, with the total wage bill decreasing identically by 0.3% (*versus growth of 0.9%*). At the same time, the gross operating surplus fell by 3.4% (*versus 4.8%*). The development of nominal wages starts to follow (gradually and with a delay) the negative development of productivity corresponding in general terms with the development of the economic cycle, so does the dynamics of gross operating surplus. The aforementioned declines in compensation of employees and gross operating surplus represent at the same time a decrease in resources for consumption and investment.

GDP forecast

The forecast for GDP and its expenditure components is influenced by risk factors similar to those in the April Forecast. The majority of changes results from revisions of the data from the national accounts and the surprisingly negative development of the economy in Q1 2013.

We assume that the sharp QoQ decline in real GDP in Q1 2013 was largely unique and we estimate QoQ stagnation of GDP in Q2 2013. For the whole of 2013, we forecast a decrease in real GDP by 1.5% (*versus stagnation*). As in the April Forecast, we expect the economy to start recovering slowly in H2 2013. In 2014, we forecast GDP growth of 0.8% (*versus 1.2%*). With respect to the structure of expenditure of GDP, the dominant change in the forecast for 2013 is a significant decrease in the contribution of gross domestic expenditure to GDP growth. Within this framework, the primary change was a decrease in the contribution to gross capital formation, which was caused both by the aforementioned data revision and further by the development of gross fixed capital formation and the change in inventories and valuables in Q1 2013. The positive contribution of the foreign trade balance was reduced only slightly.

The decrease in household consumption in 2012 was based on the negative development of real disposable income of households, which declined by 1.3%, and on a slight increase in the gross savings rate. We expect that both factors will also take effect in 2013 and we forecast a decline in household consumption of 0.8% (*versus 1.2%*). At the same time, we expect growth of the gross savings rate to 11.8%. In 2014, we forecast a growth in household consumption of 0.4% (*versus 1.0%*). The decrease in forecast growth is based on the lower expected growth of real disposable income and a relatively higher YoY increase in the savings rate compared to the April Forecast. Contrary to 2012, household consumption in 2013 and 2014 will be supported by significantly lower growth of consumer prices. However, this growth will be accompanied, particularly in 2013, by only negligible growth of nominal disposable income.

We expect government consumption to grow by 0.5% (*versus a decrease of 0.2%*) in 2013 and to decline by 0.9% (*versus 1.7%*) in 2014.

We understand the development of gross fixed capital formation as a result of weak domestic demand and

[4] *The savings rate for Q1 to Q3 2012 was decreased by revision by 1.0 p.p.*

low dynamics of internal resources for financing investment projects. This is discernable from the development of gross operating surplus, and the low contribution of government investment in relation to the already mentioned fiscal consolidation. In 2013, we forecast a decrease in real gross capital formation of 5.7% (*versus growth of 0.9%*), with a decline in gross fixed capital formation of 4.3% (*versus 0.4%*). The current forecast in this respect responds particularly to the data revision and dramatic reduction in change in inventories in Q1 2013. For 2014 we forecast an increase in gross capital formation by 1.3% (*versus 2.9%*), with a decline in gross fixed capital formation by 0.6% (*versus growth of 0.9%*).

In 2013, the negative contribution of gross domestic expenditure to GDP growth will essentially be mitigated by the minimal positive contribution of foreign trade. We predict a decrease in real exports in 2013 of 1.1% (*versus growth of 1.3%*) and in imports of 1.4% (*versus growth of 0.9%*).

In 2014, GDP growth should be driven by a positive balance of foreign trade. We expect real exports to grow by 2.9% (*versus 3.7%*) and imports by 2.4% (*versus 3.5%*).

In 2013, nominal GDP will probably decrease by 0.9% (*versus growth of 0.4%*). In 2014, we forecast nominal GDP growth of 1.7% (*versus 2.1%*).

Box C.1: **Direct impact of the euro zone problem countries on the Czech economy**

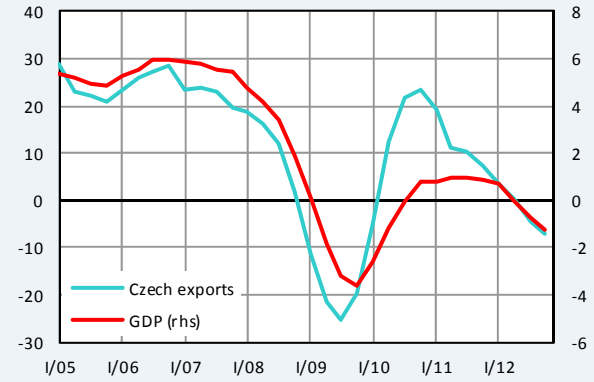
The Czech economy can doubtlessly be characterized as a very open economy (see Graph C.1.8). When looking at the territorial structure of our foreign trade, the considerable concentration of exports of goods to the EU or the EA countries is clear. Foreign trade would therefore be one of the channels through which any possible escalation of the debt crisis in the euro zone could influence economic development in the Czech Republic. This box only focuses on the possible direct impact of distressed states of the euro zone (Greece, Portugal, Ireland, Italy, Spain, Cyprus and Slovenia) on the Czech economy.

The share of Czech goods exports in the methodology of cross-border statistics to the aforementioned countries in the total volume of goods exports has been gradually rising since 2000, reaching its peak between Q2 2007 and Q1 2008, when it fluctuated at 9.2%. Since achieving the local maximum (8.7%) in Q2 2010, however, this share has been decreasing constantly to 6.7% in Q1 2013. More than half (3.5 pp) of this share is made up of exports to Italy, which is the seventh biggest export partner of the Czech Republic. The share of exports to Spain in total exports during Q1 2013 was 2.0%, and only 1.2% related to exports to the remaining aforementioned states. Thus a decrease in total Czech exports in direct consequence of a drop in demand in mentiond countries for Czech exports by 1% should not exceed *ceteris paribus* 0.07%.However, the direct impact on GDP would be, thanks to the highly import demanding character of Czech exports, approximately at half that level.

Czech exports of goods to selected countries and nominal GDP of those states

Graph 1: **YoY growth rate**

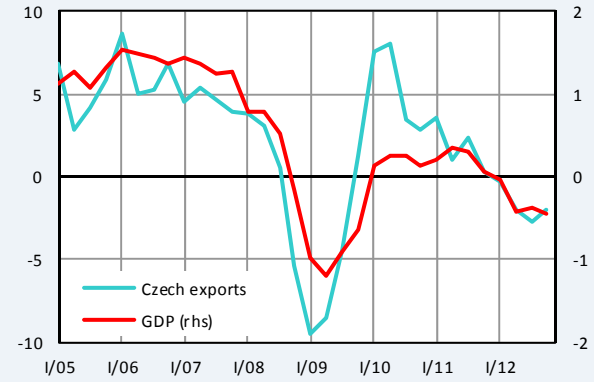
in %



Source: CZSO, Eurostat

Graph 2: **QoQ growth rate**

in %



Source: CZSO, Eurostat

Moving correlations between the growth of Czech exports of goods to selected economies and growth of their nominal GDP increased considerably in the period of a decline in both values in 2009. The strongest and most stable relationship has been achieved with the Italian economy for reasons of its geographical proximity and relatively strong business connections. In Graphs 1 and 2, we only present the qualitative relationship for YoY and QoQ growth. In last quarters, a decline in Czech exports to the aforementioned states as a consequence of the recession in distressed countries of the euro zone is evident. Nevertheless, Czech companies are coping with this fall in foreign demand by searching out new markets. Therefore, the recession in the peripheral countries of the euro zone need not directly affect the Czech economy in full. In conclusion, it must be noted that any indirect effects which would influence the performance of other countries of the EU with which the Czech economy is closely interconnected, and the growth of risks on the financial markets, would be much stronger.

C.2 Prices

Consumer prices

The YoY growth of consumer prices, which in May 2013 decelerated to 1.3% (*versus 2.0%*), was exclusively caused by administrative measures, of which 0.8 p.p. reflects the impact of a hike in both VAT rates by 1 p.p. effective from 1 January 2013, 0.5 p.p. reflects the impact of changes in regulated prices, while the remaining part reflects primarily the impact of a rise in the excise tax on cigarettes. Price development can be assessed as considerably mitigated, corresponding to the long-lasting recession.

The groups of regulated and market prices contributed to a quite significant May deviation in the recorded YoY inflation from the April Forecast. In the group of regulated prices, there was an unexpected MoM decrease in the prices of natural gas for households (by 6.2% with a contribution of approximately –0.2 pp). In the group of market prices, telephonic and telefax services unexpectedly became much cheaper MoM (by 3.6% with a contribution estimated at –0.1 pp). Both these prices declines have much to do with intensifying competition in the respective sectors.

With respect to the contribution of individual divisions of the consumer basket to YoY inflation in May, food and non-alcoholic beverages (0.7 pp) contributed the most while also showing the highest YoY dynamics (4.9%) of all divisions of the consumer basket.

In spite of an increase in both VAT rates, **the year 2013** should only show slight inflation. The deeply negative output gap can be identified as the main anti-inflation factor.

This year, inflation will be driven by administrative measures (see Graph C.2.2), which include the impact of changes in indirect taxes and changes in prices classified by the CZSO as regulated. An increase in the excise tax on cigarettes, which has so far been reflected in CPI only negligibly, should contribute 0.1 p.p. mainly at the turn of Q2 and Q3 2013. The contribution of administrative measures to a YoY increase in consumer prices in December 2013 should reach 1.3 p.p. (*versus 1.5 p.p.*).

We expect the **average inflation rate in 2013** to reach 1.6% (*versus 2.1%*) with a YoY increase of 1.8% (*versus 2.2%*) in December. The decrease in the forecast especially reflects the surprising slowdown of YoY inflation in May. The impact of considerably weaker than expected economic activity in Q1 2013 on the inflation forecast is mitigated by a lower decrease in household expenditure on final consumption than that expected in the April Macroeconomic Forecast.

In 2014, growth of consumer prices should be swayed by administrative measures to a considerably lesser extent compared to this year. In the sphere of indirect taxes, we only envisage a further increase in the consumer tax on cigarettes, the impact of which on CPI should be 0.1 pp.

In 2014, inflation should be very moderate in spite of the current extremely relaxed monetary policy in connection with the singularly slow recovery of the Czech economy. Nonetheless, it should no longer be mitigated by the strengthening of the Czech koruna (see Table A.4.1). In YoY terms, it should be in the lower half of the tolerance band of the CNB's inflation target during the whole of 2014 (see Graph C.2.1). We estimate **an average inflation rate in 2014** of 1.4% (*versus 1.7%*) and YoY growth in December of 1.8% (*versus 1.9%*).

Deflators

Gross domestic expenditure deflator, a comprehensive indicator of domestic inflation, grew by 0.4% (*versus 0.5%*) YoY in Q1 2013.

We expect the gross domestic expenditure deflator to rise by 0.6% (*versus 0.7%*) in 2013. For 2014 we forecast growth of 1.1% (*versus 1.2%*).

The **implicit GDP deflator** in Q1 2013 grew YoY by 1.3% (*versus 0.4%*). One substantial variance between the forecast and reality was caused by a surprising improvement (growth) of the terms of trade by 1.0% (*versus a worsening of 0.3%*).

We forecast the GDP deflator to grow by 0.6% (*versus 0.4%*) in 2013 and by 0.9% *(unchanged)* in 2014. We consider the increase in the terms of trade that occurred in Q1 2013 to have been largely exceptional, and we are changing our forecast of their development only minimally.

C.3 Labour Market

The lengthy recession is having a rather paradoxical influence on the labour market. As one would expect, the number of unemployed persons is growing (although not strikingly) and the YoY decrease in average wages and the wage bill in Q1 2013 cannot be explained just by transferring the payment of one-off bonuses to Q4 2012 for the purpose of tax "optimization". On the other hand, employment continues to grow even after 6 quarters of recession. This has been made possible by a decrease in the ratio of total hours worked to employment and an increase in the share of part-time jobs. The labour market is proving to be very flexible in recession.

Employment

According to the Labour Force Survey (LFS), **employment** grew by 1.0% (*versus 0.2%*) YoY in Q1 2013, in particular thanks to an increase in the tertiary sector. However, the secondary sector continued to decline, which was mainly the fault of the processing industry.

The number of employees increased considerably by 2.0% (*versus 0.1%*), most probably due to an increase in occasional employment (both formal and informal) since the increase in working hours did not correspond to such a high rise in the number of employees. However, we cannot exclude the preference of respondents, many of whom in actual fact work in the black economy, for declaring themselves in the category "employees", since corporate statistics continued to show a decline in the number of persons in an employment relationship. One portion of the decline in the number of self-employed persons can also be explained by the real termination of their business activities as a consequence of the recession. The unfavourable economic conditions are shown in the continuing decrease in the number of employers (now since mid-2011).

We assume that the current high number of persons declaring "employee" status in surveys does not correspond to the economic situation, and that the possibilities for maintaining current employment alongside the rationalization of permanent employment and necessary efforts towards a growth in productivity will gradually cease to exist.

Bearing in mind the delayed impact of the recession, in 2013 we expect, after taking the result of Q1 2013 into account, an increase in employment of 0.5% (*versus a decrease of 0.2%*). In 2014, we already expect a slight YoY decline in employment of 0.2% (*versus stagnation*).

Since the beginning of 2010, **the proportion of employment in the population aged 15–64** has been showing stable and strong growth, regardless of economic output. In Q1 2013, it increased YoY by 1.3 p.p. to 68.0% (*versus 67.4%*). It seems almost unbelievable that in a period of lengthy and relatively deep recession this has been the highest YoY increase at any time since the LFS was launched in 1993. Increased employment was manifest most in persons over 45 years of age, in particular in the 60-64 year-old age group.

The **economic activity rate** (aged 15–64) grew YoY by 1.6 p.p. to 72.3% in Q1 2013. This is a consequence of the growing motivation of households to compensate by formal and informal economic activities for an actual (or expected) decrease in disposable income.

A change in the demographic structure has also contributed considerably to an increase in the participation rate (see Graph B.1.7). This development should also continue in the following years.

Unemployment

The tendency towards unemployment growth was confirmed by seasonally adjusted registered unemployment in H1 2013 (the Presidential amnesty and subsequent registration of released prisoners at labour offices also impacted on the January increase). An increase in registered unemployment since the beginning of the year has been caused by a combination of an increasing number of newly registered persons and a decreasing number of persons who have found jobs independently (seasonally adjusted in MoM terms). In spite of this, considering the length and depth of the recession, the increase in unemployment cannot be considered critical.

According to LFS, the **unemployment rate** (aged 15+) reached 7.4 (*versus 7.8%*) in Q1 2013. The lower increase in unemployment in this concept was caused by the more frequent gainful involvement of persons outside employment relationships.

As a consequence of the lower than expected increase in the number of unemployed persons in Q1 2013, we forecast an increase in the unemployment rate (LFS) to 7.5% (*versus 7.6%*) in 2013 and to 7.6% (*versus 7.7%*) in 2014, when the seasonally adjusted unemployment rate should reach its maximum.

Wages

Wage development in Q1 2013 was influenced, both in terms of the wage bill (national accounts) and the average wage, in particular by the greater than expected extent of paid bonus transfers to Q4 2012. This transfer was caused by the efforts of high-income earners to avoid the so-called solidarity tax, i.e. income taxation introduced since 2013 effective above the ceilings of social security and health care contributions.

In Q1 2013, the **average** nominal **wage** (business statistics, full-time equivalent) decreased YoY, for the first time since the beginning of survey, by 0.4% (*versus growth of 1.7%*). A higher than expected volume of paid out bonuses was combined with a more severe policy of austerity in the private sector as a consequence of the deteriorating economic situation. This policy can be evidenced by the low increase in the average wage in the processing industry (0.8%). Those industries with the highest volume of one-off bonuses saw a considerable decrease in the average wage in Q1 2013. One example is the banking and insurance industry, where the average wage increased YoY by 23.2% in Q4 2012, nonetheless saw a YoY decline of 11.1% in Q1 2013.

As a consequence of these discretionary changes, in combination with the deteriorated economic situation, we are reducing the estimate of YoY growth of nominal wages in 2013 to 0.8% (*versus 1.8%*).

In Q1 2013, **payroll** (national accounts, domestic concept) also decreased YoY, specifically by 0.3% *(versus growth of 0.9%),* while the effects of tax optimization also became evident here. However, a more significant decrease was prevented by the continuing increase in the number of employees. For reasons similar to those for average wages, we expect only a slight increase in the wage bill of 0.7% (*versus 1.4%*). In 2014, we already estimate growth of the wage bill of 2.1% (*versus 2.7%*), especially thanks to the expected more favourable situation in the private sector. In contrast, the wage bill in the government sector should continue to remain more or less constant in 2014.

C.4 External Relations

(balance of payments methodology)

In Q1 2013, the external imbalance, expressed as a ratio of the current account balance to GDP, reached –2.5% (*versus –2.4%*) in annual terms, thus improving by 0.6 p.p. YoY. The trade balance improved by 1.1 p.p. and the balance of transfers by 0.2 pp; on the other hand, the balance of the service surplus decreased by 0.2 p.p. and the deficit in the income balance increased by 0.4 p.p.

After a weak rise in the export markets[5] in 2012 (by 0.8%), they fell by 0.9% in Q1 2013. Stagnation or decline in the economies of main trading partners of the Czech Republic was also reflected in decrement of foreign trade. We expect a gradual recovery and return to growth in export markets to start at the end of 2013 at the earliest. This year export markets could decrease by 1.3% (*versus 0.1%*), in 2014, however, we expect a slight recovery of the world economy accompanied by a growth of export markets of 2.2% (*versus 2.6%*). Export performance growth, which indicates a change in the proportion of the volume of Czech goods on foreign markets, should slow down to 0.1% (*versus 1.0%*) this year. However, in the following year growth could gently accelerate to 0.8% (*versus 0.9%*).

The deterioration of the external environment together with weak domestic demand in the last two years has been reflected in the slowdown in the growth of foreign trade; export and import volumes started to decline in Q1 2013. Over the remainder of 2013, we expect a gradual return to very slow growth in the foreign trade volume. We estimate that the trade balance surplus will reach 4.0% of GDP (*versus 4.1%*) in 2013 and 4.1% of GDP (*versus 4.3%*) in 2014.

The deficit in the fuel balance (SITC 3) reached –4.8% (*versus –4.9%*) of GDP in annual terms for Q1 2013. Considering the crude oil price situation, we assume that in the course of 2013 and 2014 the prices of fuels will fall and the deficit on the fuels balance will decrease, reaching perhaps 4.7% (*versus 4.8%*) of GDP in 2013 and 4.4% (*versus 4.3%*) of GDP in 2014.

The increase in the purchase of services from abroad has exceeded their sales for more than two years (in annual totals), thus the balance of the service surplus has been decreasing for most of this period. Since the end of 2012, the lagging of exports behind imports has slowed, brought about when the surplus in the balance of so-called other services increased significantly with a strong growth of income and expenditure. The balance of transportation services has basically stagnated, only the balance of tourism showed any

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

small growth of surplus. The total surplus in the services balance in Q1 2013 dropped in annual terms by 0.2 p.p. to 1.4% of GDP (*versus 1.3%*). This year, the surplus in the services balance could stay at 1.4% of GDP (*versus 1.1%*), while in 2014 it could increase slightly to 1.5% of GDP (*versus 0.9%*).

The deficit in the income balance, which includes the reinvested and repatriated earnings of foreign investors, deepened in Q1 2013 in annual terms by 0.4 p.p. YoY and reached 7.9% of GDP (*versus 7.6%*). There was a considerable increase in the outflow of investment income in the form of dividends paid out to foreign owners of domestic direct investments. On the other hand, the balance of compensation of employees improved, though this has a considerably lower impact on overall income balance. We expect that the deficit in the income balance will continue to grow and will reach 8.2% of GDP in 2013 (*versus 7.7%*) and 8.3% of GDP (*versus 7.8%*) in 2014.

Under the given circumstances, we assume that there will be improvement in the current account balance in 2013 to –2.3% of GDP (*unchanged*); we expect to see a current account deficit of 2.4% of GDP (*versus 2.3%*) in 2014. Current account deficit at this level poses no risk in terms of macroeconomic imbalances.

C.5 International Comparisons

Comparisons for the period up to and including 2012 are based on Eurostat statistics. Since 2013, 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 2012 was CZK 18.03/PPS compared to the EU27, or CZK 17.31/EUR compared to the EA12.

In 2009, as a result of the economic crisis the absolute level of GDP per capita adjusted by **current purchasing power parity** declined in all monitored countries, with the exception of Poland. While most states have gradually recovered from the crisis, in Greece the absolute economic level is continuing to fall for the fifth year in a row. A slight decrease also occurred in Portugal in 2011 and 2012. In addition to the decrease in the absolute level, the relative economic level vis-à-vis the EA12 countries also declined in both aforementioned countries and Slovenia. The biggest decline was observed in Greece, where the total decrease in 2009–2012 has reached 16 p.p. In contrast, the economic level is increasing most quickly, compared to the average of the EA12 countries, in the Baltic States. However, in 2013 and 2014 the speed of real convergence is expected to slow down slightly.

In the Czech Republic, the economic level of GDP per capita adjusted by current purchasing power parity was approximately 20,200 PPS in 2012, corresponding to 73% of the EA12 level. Since 2010, the Czech Republic has either been experiencing stagnation or a very moderate decrease in its relative economic level. This period succeeded the period of convergence during 2000–2007, when the country's relative economic level vis-à-vis the EA12 countries increased by 13 p.p. In 2013, as a result of economic decline, the relative economic level of the Czech Republic could decrease by 1 p.p. to 72% of the EA12 average, and it could also remain at this level in 2014.

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 approximately EUR 14,500 in 2012, i.e. half the level of the EA12. Because of the expected slight depreciation of the koruna, in 2013 we are forecasting a slight decrease in both absolute and relative levels.

When comparing price levels, the **comparative price level of GDP** in the Czech Republic decreased by 1 p.p. in 2012, thus reaching 69% of the EA12 average. The expected slight decrease in the comparative price level by a further 2 p.p. in 2013 should help maintain the 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**

		June 2013			July 2013
		min.	*max.*	*consensus*	*MoF forecast*
Gross domestic product (2013)	*growth in %, const.pr.*	**-1.0**	**0.7**	**-0.4**	**-1.5**
Gross domestic product (2014)	*growth in %, const.pr.*	**1.3**	**2.8**	**1.7**	**0.8**
Average inflation rate (2013)	*%*	**1.5**	**2.3**	**1.8**	**1.6**
Average inflation rate (2014)	*%*	**1.3**	**2.0**	**1.7**	**1.4**
Average monthly wage (2013)	*growth in %*	**0.5**	**2.1**	**1.2**	**0.8**
Average monthly wage (2014)	*growth in %*	**2.3**	**3.3**	**2.9**	**2.3**
Current account / GDP (2013)	*%*	**-3.0**	**-1.2**	**-2.1**	**-2.3**
Current account / GDP (2014)	*%*	**-2.9**	**-0.5**	**-1.8**	**-2.4**

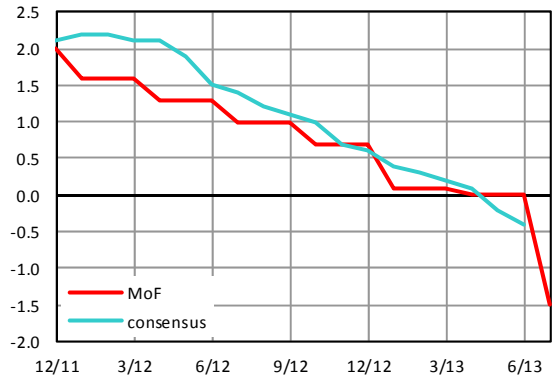
Forecasts of the monitored institutions predict on average a decrease in GDP in 2013 by 0.4%. Nevertheless, they are already envisaging economic growth of 1.7% in 2014. In 2013, a significant variance between the MoF's forecast and that of the average of forecasts is given by the fact that some included forecasts were published prior to publication of the quarterly national accounts for Q1 2013. In any case, the MoF's forecast can be considered conservative.

Consumer price growth is expected to slow down slightly. In 2013 and 2014, the monitored institutions expect an inflation rate of 1.8% or 1.7%, respectively. The forecast of the MoF is in line with these estimates.

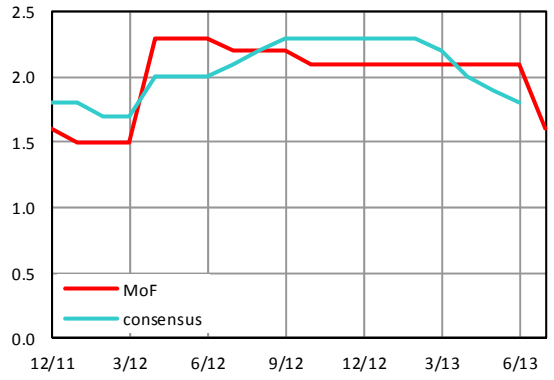
According to the forecasts of the monitored institutions, the average wage should increase by 1.2% this year and by 2.9% in 2014. The MoF's forecast is more conservative; the lower increase in the average wage is down to the expected worse economic output.

According to the opinion of the monitored institutions, the current account deficit of the balance of payments should be around 2% of GDP in 2013 and 2014. Also according to the MoF's forecast, the current account deficit of the balance of payments should remain at a sustainable level, posing no risk in terms of macroeconomic imbalances.

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



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



E Evaluation of the MoF's forecast history

The first experimental publication summarizing the past and expected future development of basic economic indicators was published by the MoF in November 1995. The basis was thereby established for a regular publication which has gradually become a source of knowledge for the wider economically literate public in the Czech Republic and abroad.

Sources of tables and graphs: MoF, European Commission, OECD, IMF, MoF's calculations.

Basic terms

The success rate of macroeconomic forecasts is usually evaluated by means of several basic statistics – the average forecasting error, the mean absolute error and Theil's inequality coefficient.

Average forecasting error (AFE) indicates the deviations of forecasts. Positive AFE values indicate systematic or overwhelming overvaluation of forecasts, negative AFE values indicate systematic or overwhelming undervaluation of forecasts. AFE is defined using the following relation:

$AFE = \frac{\sum_{t=1}^{T}(F_t - A_t)}{T}$, where A_t is the real value over time t, F_t is the forecast for the period t and T is the number of observations.

Mean absolute error (MAE) expresses the average absolute error of the forecast compared to reality. MAE is defined as:

$$MAE = \frac{\sum_{t=1}^{T}|F_t - A_t|}{T}$$

Theil's inequality coefficient (TIE) is used for evaluating the success rate of forecasts. The coefficient is defined as the proportion of the mean quadratic variations of analyzed forecasts and naive forecasts:

$$TIE = \frac{\sum_{t=1}^{T}(F_t - A_t)^2}{\sum_{t=1}^{T}(A_{t-1} - A_t)^2}$$

If Theil's coefficient equals 0, the forecast is identical to reality. Any values of the coefficient higher than 1 show that the results of forecasting activities are worse than a naive forecast. When interpreting the results, it is necessary to take into account the fact that this indicator greatly "penalizes" an isolated considerably worse result compared to the naive forecast, and conversely, it awards a considerable "bonus" in the event of well-estimated sudden reversals in the development of forecast quantities.

The naive forecast is a mechanically drawn up forecast where the value of the given indicator for the year of t+1 equals a changed, estimated or forecast value of this indicator for the year t.

The forecast horizon is understood as the time from publishing the forecast until the end of the forecast period. For any horizons above 15 and up to 24 months, it concerns evaluating an outlook (created by means of extrapolation techniques) whose forecasting information is very limited for understandable reasons.

All statistics were calculated against the **first estimates published by the CZSO or CNB**, since it is not possible to estimate the extent of changes in past development through subsequent revisions of time series which cannot usually be divided into components of factual specification of the given ratio and methodological change.

E.1 Comparison of results of MoF's forecasts with forecasts of international institutions

The MoF's forecasts were compared with macroeconomic forecasts of the OECD, the European Commission and the International Monetary Fund for 2001–2012 in the horizons corresponding to their mainly half-yearly publishing cycle. The results show that the **forecast success rate of all institutions does not differ much in essence.** The best results are mostly achieved by forecasts from the MoF and OECD. The MoF's forecasts are the most precise, especially in terms of nominal GDP growth, GDP deflator growth and average inflation rate.

Table E.1.1: **Forecats of Real GDP Growth**
average forecasting error and mean absolute error in percentage points

	Average Forecasting Error				Mean Absolute Error				Theil's Inequality Coefficient			
	MoF	EC	OECD	IMF	MoF	EC	OECD	IMF	MoF	EC	OECD	IMF
27 months	0.98	1.13	1.18	-	2.49	2.57	2.62	-	1.06	0.99	1.11	-
21 months	0.63	0.95	1.05	0.69	2.34	2.47	2.44	2.45	0.88	0.93	0.83	0.89
15 months	0.42	0.55	0.61	0.53	2.00	2.05	1.79	2.16	0.57	0.56	0.45	0.62
9 months	0.03	-0.03	-0.10	-0.26	1.09	1.03	0.75	0.99	0.15	0.14	0.08	0.12
3 months	-0.06	-0.17	-0.02	-0.28	0.51	0.43	0.47	0.63	0.04	0.04	0.04	0.07

Table E.1.2: **Forecasts of Nominal GDP Growth**
average forecasting error and mean absolute error in percentage points

	Average Forecasting Error			Mean Absolute Error			Theil's Inequality Coefficient		
	MoF	EC	OECD	MoF	EC	OECD	MoF	EC	OECD
27 months	1.98	2.49	2.09	3.36	3.64	3.17	1.18	1.08	0.99
21 months	1.33	2.05	2.20	2.76	2.94	2.82	0.85	1.03	0.67
15 months	0.83	1.36	1.58	2.53	2.67	2.53	0.60	0.63	0.71
9 months	0.24	0.36	0.91	1.78	1.77	1.96	0.32	0.41	0.51
3 months	0.08	0.14	0.11	0.67	1.39	0.78	0.06	0.29	0.08

Table E.1.3: **Forecasts of GDP Deflator Growth**
average forecasting error and mean absolute error in percentage points

	Average Forecasting Error			Mean Absolute Error			Theil's Inequality Coefficient		
	MoF	EC	OECD	MoF	EC	OECD	MoF	EC	OECD
27 months	0.93	1.13	0.82	1.47	1.45	1.02	1.56	0.97	0.84
21 months	0.67	1.03	1.09	1.37	1.43	1.15	0.56	0.78	0.33
15 months	0.35	0.86	0.90	1.28	1.39	1.32	0.40	0.65	0.55
9 months	0.21	0.50	0.98	1.21	1.32	1.53	0.33	0.63	0.66
3 months	0.11	0.32	0.11	0.44	1.14	0.51	0.05	0.44	0.06

Table E.1.4: **Forecasts of Private Consumption Growth**
average forecasting error and mean absolute error in percentage points

	Average Forecasting Error			Mean Absolute Error			Theil's Inequality Coefficient		
	MoF	EC	OECD	MoF	EC	OECD	MoF	EC	OECD
27 months	0.85	2.19	1.51	2.52	2.81	2.37	1.32	1.37	1.27
21 months	0.42	1.45	0.93	2.05	2.33	2.05	1.28	1.45	1.50
15 months	0.19	1.11	0.50	1.76	1.93	1.75	0.81	0.91	0.73
9 months	0.06	0.39	-0.13	1.19	1.21	0.94	0.50	0.48	0.29
3 months	0.21	0.32	0.30	0.61	0.62	0.75	0.11	0.11	0.13

Table E.1.5: **Forecasts of Average Inflation Rate**
average forecasting error and mean absolute error in percentage points

	Average Forecasting Error			Mean Absolute Error			Theil's Inequality Coefficient		
	MoF	OECD	IMF	MoF	OECD	IMF	MoF	OECD	IMF
27 months	0.52	0.38	-	1.35	1.35	-	0.78	0.78	-
21 months	0.41	0.51	0.53	1.11	1.30	1.38	0.48	0.51	0.62
15 months	0.47	0.53	0.54	0.95	0.94	1.20	0.33	0.29	0.40
9 months	0.07	0.45	0.37	0.39	0.59	0.51	0.06	0.11	0.11
3 months	0.02	0.12	0.17	0.13	0.19	0.33	0.01	0.01	0.03

Table E.1.6: **Forecasts of Average Unemployment Rate** (LFS)
average forecasting error and mean absolute error in percentage points

	Average Forecasting Error			Mean Absolute Error			Theil's Inequality Coefficient		
	MoF	EC	OECD	MoF	EC	OECD	MoF	EC	OECD
27 months	0.35	0.28	0.23	1.33	1.30	1.26	0.90	0.89	0.81
21 months	0.65	0.49	0.67	1.31	1.21	1.27	1.21	0.83	1.04
15 months	0.28	0.28	0.28	0.75	0.70	0.80	0.76	0.71	0.62
9 months	0.29	0.31	0.42	0.45	0.47	0.44	0.31	0.31	0.35
3 months	0.01	0.18	0.07	0.10	0.18	0.15	0.02	0.08	0.03

Table E.1.7: **Forecasts of Current Account Balance to GDP Ratio**
average forecasting error and mean absolute error in percentage points

	Average Forecasting Error			Mean Absolute Error			Theil's Inequality Coefficient		
	MoF	OECD	IMF	MoF	OECD	IMF	MoF	OECD	IMF
27 months	3.70	0.25	-	3.70	1.63	-	2.75	0.91	-
21 months	0.40	0.55	-0.06	1.47	1.65	1.01	0.86	1.41	0.76
15 months	0.31	0.36	0.23	1.59	1.89	1.26	1.32	1.48	1.09
9 months	0.00	0.48	0.04	1.45	1.33	1.08	1.18	1.09	0.67
3 months	0.28	0.22	0.19	0.72	1.02	0.93	0.35	0.62	0.59

Note: As far as consumer prices are concerned, the EC forecasts HICP, which cannot be compared with the national CPI. In the forecasts of the EC, current account balance to GDP ratio is defined in national accounts terms. The IMF forecasts include only the forecasts for real GDP growth, inflation rate and the current account balance to GDP ratio.

E.2 Evaluation of the MoF's forecasts

Today, an 18-year history of regular quarterly forecasts provides a high-quality source with which to evaluate their success rate. This can help forecast users get an idea of how precisely the MoF is able to identify the future development of basic macroeconomic indicators across various time horizons.

At the same time it is necessary to realize that during the evaluated period some major changes have occurred in the Czech economy, which was gradually changing from a volatile transition economy to a more or less stabilized market economy in the EU. Since 2008, the Czech economy has been affected by the global recession and the consequences of the subsequent debt crisis in the euro zone, which have manifest themselves in a repeated increase in volatility of macroeconomic indicators. Therefore, we have divided the period 1995–2012 into three six-year periods of identical length (1995–2000, 2001–2006 and 2007–2012)[6] in order also to be able to evaluate the success rate of forecasts over time.

All macroeconomic forecasts are inherently conditioned by adopted assumptions regarding the development of exogenous factors, of which some, for example natural disasters, the development of financial markets, including commodity prices or changes in the political environment outside and inside the Czech Republic, are inherently unpredictable. Other assumptions, for example the impact of structural policy measures, can only be quantified with great difficulty. Another important source of uncertainty is revisions of databases for past periods, concerning in

[6] *Some analyzed indicators have not been included in the Macroeconomic Forecast since the start of publication.*

particular those most important indicators of the national accounting system (GDP and its components).

Last but not least, it is necessary to point out the fact that at a time of economic turbulence and financial crises the forecasting of future economic development is considerably more difficult than in a period of stable economic growth.

Identifying the impacts of those factors emanating externally and which are completely beyond the control of the forecasting team is, however, difficult (if not impossible) and therefore in accordance with literature (see p. 46) we have abstracted away from these facts.

Real GDP Growth

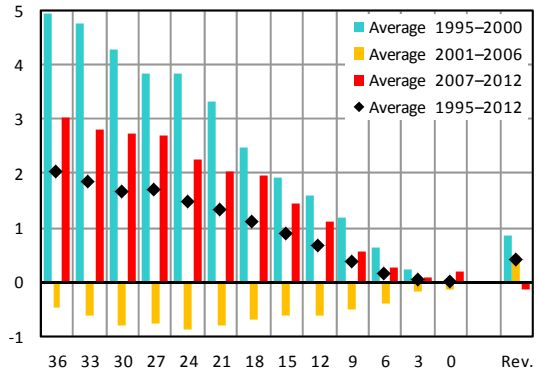
In 1995–2000 and 2007–2012 the MoF's forecasts overvalued real GDP growth, with forecasts widest of the mark in 1998, 2009 and 2012, when the Czech Republic was in recession. Conversely, in 2001–2006 when the Czech Republic was going through a period of relatively strong and stable economic growth, GDP growth was slightly undervalued, although this undervaluation did not exceed –0.9 p.p.

In accordance with results published in the literature and based on the experience of forecasters, it has been proved very difficult, even impossible, to identify the onset of a recession in time. In the first and third monitored periods, the mean absolute error exceeded in the horizon over 18 months the limit of 3 p.p., which was caused in particular by the failure to identify recessions in 1998, 2009 and 2012. In the successful period of 2001–2006, the mean absolute error fluctuated below 1.7 p.p. throughout the horizon.

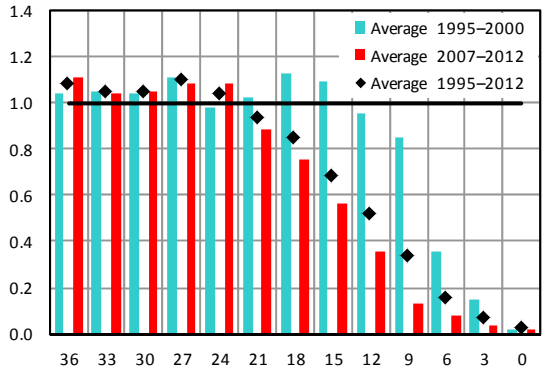
In connection with the so-called great recession at the turn of 2008 and 2009, it is necessary to emphasize, however, that the decline in the domestic economy was caused exclusively by unfavourable development in the external environment. Comparison with the forecasts of other institutions at that time confirms how difficult it was to predict future development.

Theil's coefficient in the forecast horizon beyond 24 months exceeds 1 on average. However, this gradually decreases with a shortening horizon. The analysis proves that the recognizability of future development in an 18-month horizon exceeds only slightly the possibilities of the naive forecast. It is in this very horizon that the macroeconomic framework of the draft state budget is usually drawn up. This knowledge can also be related to many of the following indicators.

Graph E.2.1: **Average Forecasting Error**
in p.p.,forecast horizon in months on the horizontal axis



Graph E.2.2: **Theil's Coefficient**
forecast horizon in months on the horizontal axis



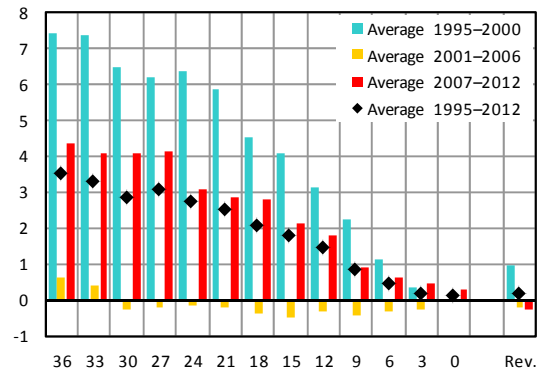
Nominal GDP Growth

From the perspective of the budget process, the most important macroeconomic indicator is nominal GDP. It is used as the denominator of important ratios (e.g. the government sector's balance or debt as a ratio to GDP) and budget revenue forecasts are derived from the size of its components.

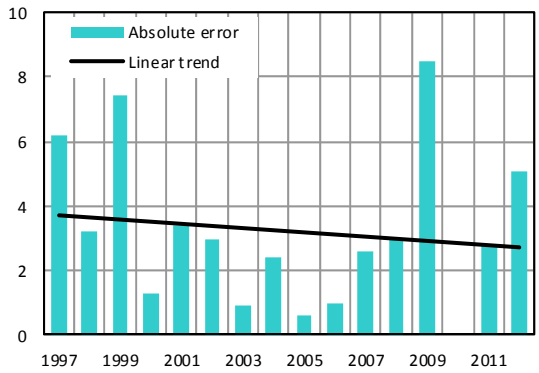
As in the case of real GDP growth, nominal GDP growth was overvalued by forecasts in the first and third periods, although the overvaluation in 2007–2012 was likewise considerably lower. Undervaluation of nominal GDP growth in 2001–2006 was only minimal.

In the 18-month horizon representing the starting point for drafting the state budget, the mean absolute error for the whole period reached approximately 3 p.p., although it shows a decreasing tendency. Its high values in 1997, 2009 and 2012 were recorded for periods of economic recession, the year 1999 relates to a period of disinflation. The average value of Theil's coefficient in the forecast horizon up to 27 months is lower than 1, while it reaches its lowest values in 2001–2006.

Graph E.2.3: **Average Forecasting Error**
in p.p.,forecast horizon in months on the horizontal axis



Graph E.2.4: **MAE in the 18-Month Horizon**
in p.p., the forecasted year on the horizontal axis



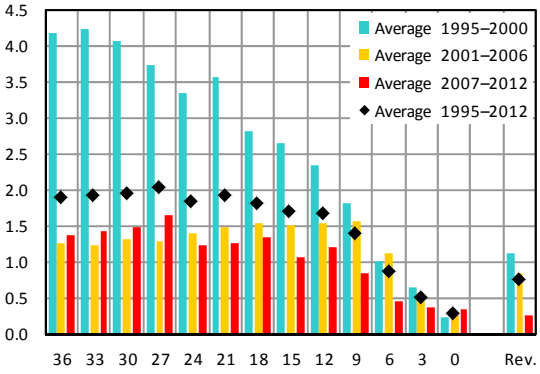
GDP Deflator Growth

GDP deflator growth was overvalued in every single monitored period; nevertheless, the average mean error against the actual facts did not exceed 1.5 p.p. throughout the horizon.

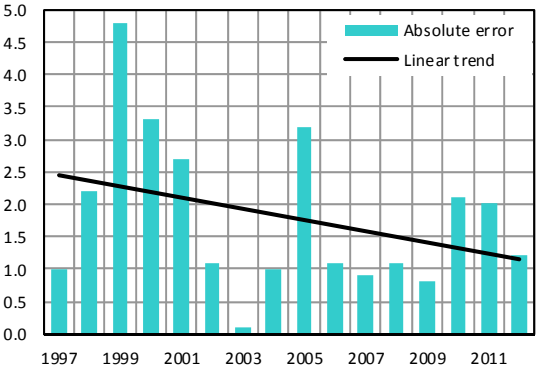
The average mean absolute error did not exceed 2 p.p., and reached its highest values in 1995–2000. The decreasing trend is also confirmed by the graph showing absolute error in the 18-month horizon. The error for 1999 relates to the period of disinflation, when GDP deflator growth decreased from 10.7% in 1998 to 2.4% in 1999. Although a decrease was expected and identified correctly in time, its extent exceeded all expectations.

The average Theil's coefficient did not exceed the value of 1.0 throughout the horizon. In the horizon up to 21 months its values decreased gradually in individual periods, thereby highlighting the improvement of forecasts.

Graph E.2.5: **Mean Absolute Error**
in p.p.,forecast horizon in months on the horizontal axis



Graph E.2.6: **MAE in the 18-Month Horizon**
in p.p., the forecasted year on the horizontal axis



Real Private Consumption Growth

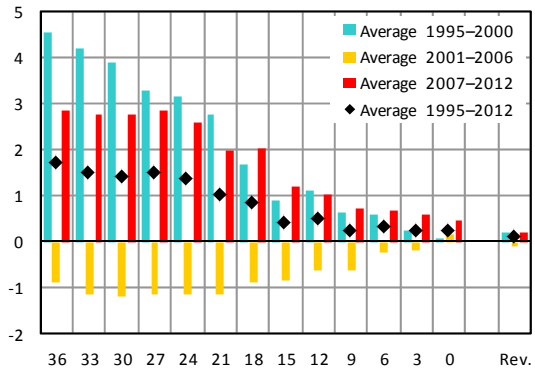
While in the first and third monitored periods growth in household consumption was overvalued, in the second period forecasts were slightly tilted to the downside.

The mean absolute error in individual periods reaches approximately the same values as in case of forecasts of real GDP growth. In the horizon of 2–3 years, it is approximately 3 p.p. on average, whereupon it gradually decreases and drops below 1.5 p.p. within a short period of up to one year.

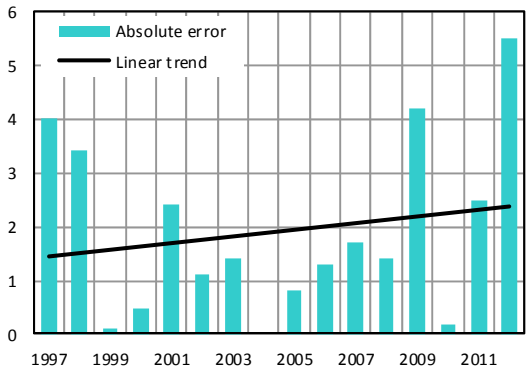
The absolute error in the 18-month horizon shows an increasing tendency. However, this result is strongly influenced by the imprecise estimate of household consumption in 2012. The extremely low level of consumer confidence in future economic development, together with the implementation of the government's austerity measures, led to cautious behaviour on the part of consumers and to an increase in the rate of savings as a precaution against any further worsening of the economic situation. Thus the decrease in household consumption by 3.5% in 2012 exceeded all expectations. After all, in 2009 during the recession household consumption had even increased by 0.2%!

The average value of Theil's coefficient fluctuated below 1.0 in the horizon up to 18 months. However, in 2007-2012 the coefficient reached considerably higher values than in the other two periods, which was caused in particular by imprecise estimates in 2009 and 2012.

Graph E.2.7: **Average Forecasting Error**
in p.p.,forecast horizon in months on the horizontal axis



Graph E.2.8: **MAE in the 18-Month Horizon**
in p.p., the forecasted year on the horizontal axis



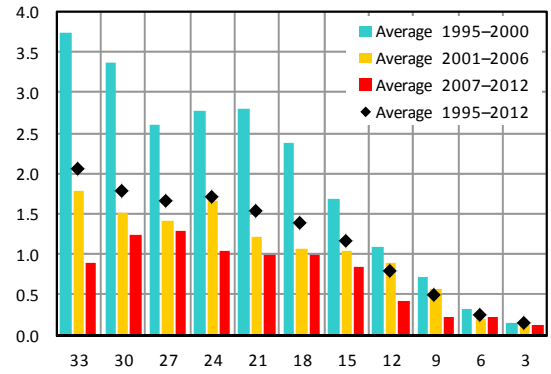
Average Inflation Rate

Forecasts of inflation in the Macroeconomic Forecast were precise in most cases, since in the horizon up to 30 months the average forecasting error did not exceed 1 p.p. for the whole monitored period. In 1995–2000 and 2001–2006, forecasts slightly overvalued the average inflation rate, while in the second period the overvaluation was higher. Conversely, in 2007–2012 the average mean error achieved negative values, although it did not fall below –0.5 p.p. in any of the horizons.

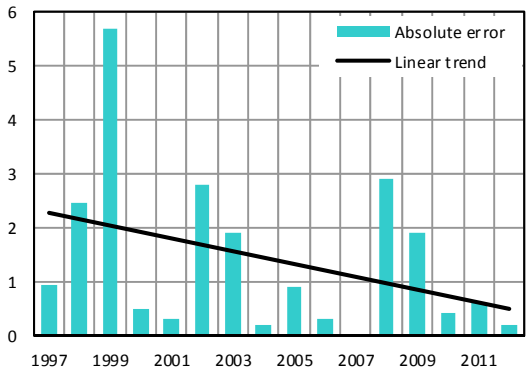
In the horizon up to 30 months, the mean absolute error did not exceed 2 p.p. In the budget horizon of 18 months the mean absolute error has a decreasing tendency. The error for 1999 relates to a period of severe disinflation, when the average inflation rate fell from 10.7% in 1998 to 2.1% in 1999. Although this tendency was identified correctly, its extent exceeded all expectations. The fact that in the budget horizon of 18 months the absolute error did not exceed 1.0 p.p. in 10 out of the 16 monitored years is testimony to the precision of inflation forecasting.

Theil's inequality coefficient for all monitored periods did not exceed 0.85 in the whole time horizon and was 0.15 in the short 1-year period.

Graph E.2.9: **Mean Absolute Error**
in p.p.,forecast horizon in months on the horizontal axis



Graph E.2.10: **MAE in the 18-Month Horizon**
in p.p., the forecasted year on the horizontal axis



Average Unemployment Rate (LFS)

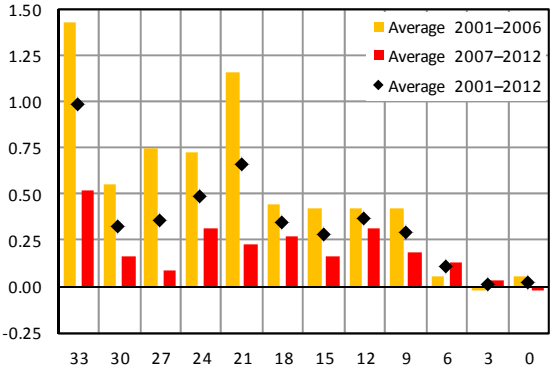
The unemployment rate according to LFS has only been forecast since 2000, so any comparison of the quality of forecasts over time was possible only for the periods of 2001–2006 and 2007–2012.

The forecasts systematically overvalued the unemployment rate, still the average mean error did not exceed 1.0 p.p. in any time horizon. In 2007–2012, the overvaluation compared to the previous period was considerably lower: the average mean forecasting error did not exceed 0.55 p.p. in any horizon.

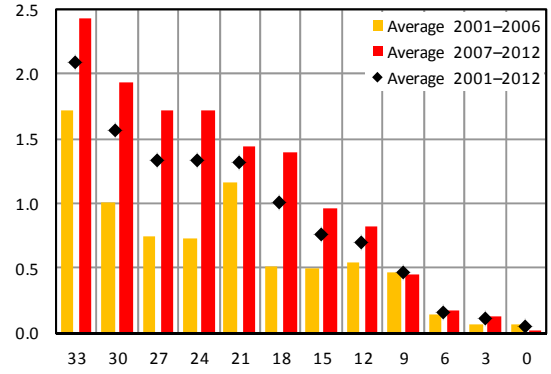
The average mean absolute error showed a gradually decreasing tendency. Nonetheless, in 2007–2012 it reached higher values due to the difficultly in forecasting at a time of economic instability compared to the previous period. In the 18-month budget horizon, the mean absolute error has an increasing tendency with respect to imprecise estimates in 2009 and 2007. In 2009, the unemployment rate was undervalued when as a result of the economic recession it increased by 2.3 p.p. compared to the previous year. On the other hand, in 2007 the unemployment rate was overvalued, since strong economic growth resulted in its decrease down to 4.4%. Data for 2004 are missing due to a change in methodology.

These imprecise estimates are also reflected in the higher average value of Theil's coefficient, which exceeds the value of 1.0 in the horizon of 33, 21 and 18 months.

Graph E.2.11: **Average Forecasting Error**
in p.p.,forecast horizon in months on the horizontal axis



Graph E.2.12: **Mean Absolute Error**
in p.p.,forecast horizon in months on the horizontal axis

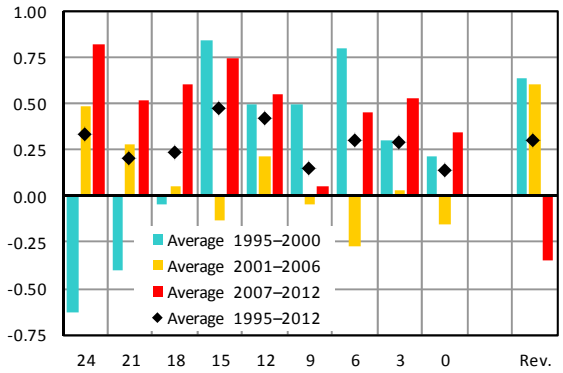


Current Account Balance to GDP Ratio

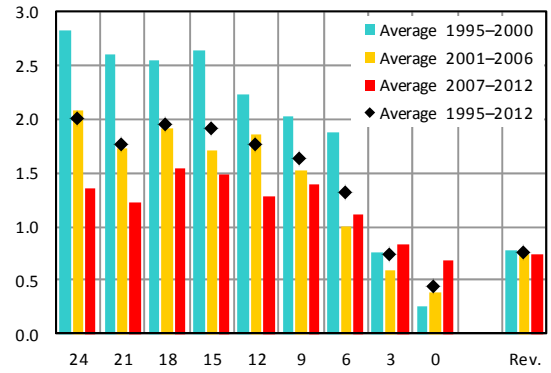
During the monitored period, the forecasts overvalued the ratio of the current account balance to GDP. However, the average forecasting error did not exceed 0.5 p.p. on average. The average mean absolute error was between 1 and 2 p.p. in the horizon of 6–24 months, while it was usually the lowest in the third monitored period. Absolute error in the 18-month horizon has a decreasing character.

Except for the horizon of 15 months, the average for Theil's coefficient was lower than 1. However, it reached its lowest values in the first period, while in 2007–2012 it was even higher than 1 in the horizon of 6–18 months. This phenomenon can largely be attributed to a change in the system of revisions. While revisions were previously ongoing, now they occur only once a year. Consequently, the period in which the forecast is based on subsequently revised data is extended.

Graph E.2.13: **Average Forecasting Error**
in p.p.,forecast horizon in months on the horizontal axis



Graph E.2.14: **Mean Absolute Error**
in p.p.,forecast horizon in months on the horizontal axis



Conclusion

Assessment of the history of the MoF's Macroeconomic Forecasts has showed that they are fully comparable to the forecasts of renowned international institutions, and in a number of cases even surpass them. The MoF usually publishes its forecasts earlier than the other institutions included in this comparison.

Based on the conducted analysis it is possible to say that for most macroeconomic indicators forecasts contain valid data in a horizon of approximately up to 18 months. In longer horizons, however, the objective is geared more towards determining the expected trends of economic development.

As far as the development of forecast precision over time is concerned, it is apparent that forecast precision increased in the second and third monitored periods (2001–2006, 2007–2012) compared to the first period (1995–2000). In this context, however, it must be pointed out that forecasting future economic development is considerably more difficult at a time of economic crisis and recession than in a period of stable economic growth. This fact was the main reason for several imprecise forecasts in 2007–2012.

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Novotný, F., Raková, M.: Assessment of Consensus Forecasts Accuracy: The Czech National Bank Perspective. Prague, Czech National Bank, 2010, [retrieved on July 1, 2013], <http://www.cnb.cz/miranda2/export/sites/www.cnb.cz/en/research/research_publications/cnb_wp/download/cnbwp_2010_14.pdf>.

E.3 Tables

Table E.3.1: **Forecats of Real GDP Growth**

average forecasting error and mean absolute error in percentage points

	Average Forecasting Error				Mean Absolute Error				TIE
	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012
36 months	2.01	4.93	-0.48	3.03	2.98	4.93	1.15	3.83	1.08
33 months	1.83	4.77	-0.60	2.80	2.87	4.77	1.23	3.57	1.05
30 months	1.63	4.27	-0.80	2.75	2.90	4.27	1.53	3.58	1.04
27 months	1.69	3.83	-0.77	2.72	2.88	4.03	1.50	3.48	1.09
24 months	1.48	3.83	-0.87	2.25	2.70	3.98	1.47	3.08	1.04
21 months	1.30	3.33	-0.80	2.05	2.75	3.98	1.63	3.05	0.93
18 months	1.09	2.48	-0.70	1.95	2.63	3.53	1.53	3.12	0.85
15 months	0.86	1.92	-0.62	1.45	2.18	2.60	1.35	2.65	0.69
12 months	0.64	1.60	-0.62	1.10	1.77	2.24	1.22	1.93	0.51
9 months	0.37	1.20	-0.50	0.55	1.38	2.08	0.97	1.22	0.33
6 months	0.14	0.62	-0.38	0.25	0.90	1.26	0.75	0.75	0.15
3 months	0.04	0.23	-0.18	0.07	0.59	0.77	0.45	0.57	0.07
0 month	0.01	-0.02	-0.15	0.18	0.33	0.28	0.38	0.32	0.02
Revisions	**0.40**	**0.86**	**0.49**	**-0.14**	**0.79**	**1.47**	**0.66**	**0.25**	**x**

Table E.3.2: **Forecasts of Nominal GDP Growth**

average forecasting error and mean absolute error in percentage points

	Average Forecasting Error				Mean Absolute Error				TIE
	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012
36 months	3.48	7.43	0.62	4.37	4.03	7.43	1.02	5.33	1.04
33 months	3.26	7.37	0.40	4.07	3.97	7.37	1.20	5.03	1.06
30 months	2.82	6.47	-0.27	4.08	3.94	6.47	1.50	5.12	1.04
27 months	3.03	6.20	-0.18	4.13	4.07	6.20	1.55	5.17	0.96
24 months	2.69	6.38	-0.15	3.07	3.71	6.38	1.58	4.07	0.97
21 months	2.46	5.88	-0.22	2.87	3.54	5.88	1.78	3.73	0.91
18 months	2.04	4.53	-0.38	2.80	3.21	4.53	1.88	3.67	0.86
15 months	1.79	4.10	-0.50	2.15	2.99	4.10	1.87	3.18	0.75
12 months	1.43	3.12	-0.33	1.78	2.49	3.12	1.83	2.62	0.59
9 months	0.83	2.24	-0.42	0.90	1.94	2.32	1.98	1.57	0.36
6 months	0.45	1.14	-0.30	0.62	1.13	1.22	1.27	0.92	0.15
3 months	0.18	0.37	-0.27	0.43	0.83	1.17	0.50	0.83	0.07
0 month	0.08	0.00	-0.07	0.32	0.36	0.33	0.30	0.45	0.01
Revisions	**0.15**	**0.95**	**-0.22**	**-0.29**	**0.87**	**1.45**	**0.82**	**0.34**	**x**

Table E.3.3: **Forecasts of GDP Deflator Growth**

average forecasting error and mean absolute error in percentage points

	Average Forecasting Error				Mean Absolute Error				TIE
	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012
36 months	1.32	2.03	1.05	1.22	1.88	4.17	1.26	1.37	0.85
33 months	1.25	2.10	0.93	1.15	1.91	4.23	1.23	1.42	0.92
30 months	1.06	1.80	0.53	1.22	1.93	4.07	1.30	1.48	0.83
27 months	1.19	1.98	0.55	1.32	2.03	3.73	1.28	1.65	0.81
24 months	1.14	2.15	0.73	0.88	1.82	3.35	1.40	1.22	0.77
21 months	1.04	2.18	0.58	0.75	1.92	3.58	1.48	1.25	0.71
18 months	0.84	1.73	0.30	0.78	1.79	2.83	1.53	1.35	0.57
15 months	0.81	1.90	0.10	0.60	1.69	2.66	1.50	1.07	0.45
12 months	0.69	1.26	0.30	0.60	1.65	2.34	1.53	1.20	0.36
9 months	0.40	0.86	0.07	0.35	1.39	1.82	1.57	0.85	0.26
6 months	0.28	0.42	0.08	0.35	0.85	1.02	1.12	0.45	0.11
3 months	0.09	0.07	-0.12	0.33	0.51	0.63	0.52	0.37	0.03
0 month	0.05	-0.02	0.04	0.12	0.28	0.22	0.26	0.35	0.01
Revisions	**-0.29**	**0.00**	**-0.70**	**-0.16**	**0.73**	**1.12**	**0.83**	**0.25**	**x**

Table E.3.4: **Forecasts of Private Consumption Growth**

average forecasting error and mean absolute error in percentage points

	Average Forecasting Error				Mean Absolute Error				TIE
	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012
36 months	1.69	4.53	-0.90	2.85	2.79	4.53	1.20	3.52	1.01
33 months	1.49	4.20	-1.15	2.77	2.79	4.20	1.45	3.43	1.09
30 months	1.41	3.90	-1.18	2.77	2.81	3.90	1.65	3.43	1.11
27 months	1.46	3.30	-1.13	2.83	2.71	3.30	1.53	3.50	1.21
24 months	1.34	3.18	-1.13	2.58	2.54	3.18	1.43	3.22	1.17
21 months	1.01	2.78	-1.13	1.97	2.23	2.78	1.47	2.63	1.11
18 months	0.84	1.70	-0.90	2.02	1.91	2.00	1.17	2.58	0.88
15 months	0.41	0.92	-0.83	1.22	1.75	1.72	1.23	2.28	0.58
12 months	0.48	1.12	-0.60	1.02	1.36	1.28	0.97	1.82	0.46
9 months	0.24	0.66	-0.62	0.73	1.15	1.06	1.05	1.33	0.35
6 months	0.32	0.60	-0.25	0.67	0.81	0.72	0.68	1.00	0.18
3 months	0.22	0.25	-0.20	0.62	0.64	0.72	0.57	0.65	0.11
0 month	0.23	0.07	0.15	0.48	0.42	0.40	0.38	0.48	0.05
Revisions	**0.11**	**0.21**	**-0.09**	**0.23**	**0.72**	**0.96**	**0.51**	**0.69**	**x**

Table E.3.5: **Forecasts of Average Inflation Rate**

average forecasting error and mean absolute error in percentage points

	Average Forecasting Error				Mean Absolute Error				TIE
	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012
33 months	1.09	1.11	1.78	-0.30	2.05	3.74	1.78	0.90	0.83
30 months	0.56	0.81	1.38	-0.40	1.77	3.37	1.51	1.23	0.68
27 months	0.52	0.55	1.42	-0.38	1.66	2.59	1.42	1.28	0.60
24 months	0.77	1.22	1.67	-0.42	1.71	2.77	1.67	1.05	0.64
21 months	0.59	1.15	1.12	-0.30	1.53	2.79	1.22	1.00	0.46
18 months	0.44	0.70	0.80	-0.10	1.37	2.39	1.06	1.00	0.40
15 months	0.54	0.73	0.98	-0.05	1.17	1.68	1.05	0.85	0.37
12 months	0.37	0.39	0.73	-0.02	0.79	1.10	0.90	0.42	0.14
9 months	0.09	0.13	0.27	-0.12	0.49	0.72	0.56	0.22	0.05
6 months	0.03	-0.07	0.17	-0.03	0.25	0.33	0.20	0.23	0.01
3 months	0.04	0.06	0.13	-0.08	0.13	0.14	0.13	0.12	0.00

Table E.3.6: **Forecasts of Average Unemployment Rate** (LFS)

average forecasting error and mean absolute error in percentage points

	Average Forecasting Error			Mean Absolute Error			TIE
	2001–2012	2001–2006	2007–2012	2001–2012	2001–2006	2007–2012	2001–2012
33 months	0.98	1.43	0.53	2.08	1.73	2.43	1.36
30 months	0.32	0.55	0.17	1.56	1.00	1.93	0.98
27 months	0.35	0.75	0.08	1.33	0.75	1.72	0.90
24 months	0.48	0.73	0.32	1.32	0.73	1.72	0.85
21 months	0.65	1.16	0.23	1.31	1.16	1.43	1.21
18 months	0.35	0.44	0.27	1.00	0.52	1.40	1.06
15 months	0.28	0.42	0.17	0.75	0.50	0.97	0.76
12 months	0.36	0.42	0.32	0.69	0.54	0.82	0.68
9 months	0.29	0.42	0.18	0.45	0.46	0.45	0.31
6 months	0.10	0.06	0.13	0.15	0.14	0.17	0.05
3 months	0.01	-0.02	0.03	0.10	0.06	0.13	0.02
0 month	0.02	0.06	-0.02	0.04	0.06	0.02	0.01

Table E.3.7: **Forecasts of Current Account Balance to GDP Ratio**

average forecasting error and mean absolute error in percentage points

	Average Forecasting Error				Mean Absolute Error				TIE
	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012	1995–2000	2001–2006	2007–2012	1995–2012
24 months	0.33	-0.63	0.48	0.82	1.99	2.83	2.08	1.35	0.85
21 months	0.20	-0.40	0.28	0.52	1.75	2.60	1.72	1.22	0.81
18 months	0.23	-0.05	0.05	0.60	1.93	2.55	1.92	1.53	0.91
15 months	0.46	0.84	-0.13	0.75	1.90	2.64	1.70	1.48	1.04
12 months	0.42	0.50	0.22	0.55	1.76	2.22	1.85	1.28	0.86
9 months	0.15	0.50	-0.05	0.05	1.62	2.02	1.52	1.38	0.74
6 months	0.30	0.80	-0.27	0.45	1.30	1.88	1.00	1.12	0.55
3 months	0.29	0.30	0.03	0.53	0.73	0.77	0.60	0.83	0.18
0 month	0.14	0.22	-0.15	0.35	0.44	0.25	0.38	0.68	0.05
Revisions	**0.30**	**0.64**	**0.60**	**-0.35**	**0.75**	**0.78**	**0.73**	**0.74**	**x**

Tables and Graphs:

C.1 Economic Output

Sources: CZSO, MoF estimates

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

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
							Prelim.	Forecast	Forecast	Outlook	Outlook
Gross domestic product	*bill. CZK 2005*	3526	3635	3471	3557	3622	3577	3524	3553	3631	3724
	growth in %	**5.7**	**3.1**	**-4.5**	**2.5**	**1.8**	**-1.2**	**-1.5**	**0.8**	**2.2**	**2.6**
Private consumption exp.[1)]	*bill. CZK 2005*	1673	1720	1724	1740	1749	1702	1689	1696	1732	1775
	growth in %	**4.2**	**2.8**	**0.2**	**0.9**	**0.5**	**-2.7**	**-0.8**	**0.4**	**2.1**	**2.5**
Government consumption exp.	*bill. CZK 2005*	666	674	701	703	684	676	679	673	670	671
	growth in %	**0.4**	**1.2**	**4.0**	**0.2**	**-2.7**	**-1.2**	**0.5**	**-0.9**	**-0.4**	**0.2**
Gross capital formation	*bill. CZK 2005*	1051	1071	855	901	908	871	821	832	862	890
	growth in %	**15.5**	**1.9**	**-20.2**	**5.4**	**0.8**	**-4.1**	**-5.7**	**1.3**	**3.6**	**3.3**
– Gross fixed capital formation	*bill. CZK 2005*	964	1004	893	902	905	880	842	838	859	886
	growth in %	**13.2**	**4.1**	**-11.0**	**1.0**	**0.4**	**-2.7**	**-4.3**	**-0.6**	**2.6**	**3.1**
– Change in stocks and valuables	*bill. CZK 2005*	87	68	-38	-1	3	-9	-21	-6	2	4
Exports of goods and services	*bill. CZK 2005*	2541	2642	2354	2717	2977	3096	3062	3152	3296	3463
	growth in %	**11.2**	**4.0**	**-10.9**	**15.4**	**9.5**	**4.0**	**-1.1**	**2.9**	**4.6**	**5.1**
Imports of goods and services	*bill. CZK 2005*	2402	2467	2169	2503	2678	2739	2701	2767	2888	3027
	growth in %	**12.8**	**2.7**	**-12.1**	**15.4**	**7.0**	**2.3**	**-1.4**	**2.4**	**4.4**	**4.8**
Gross domestic exp.	*bill. CZK 2005*	3390	3465	3288	3351	3347	3256	3199	3210	3271	3342
	growth in %	**6.6**	**2.2**	**-5.1**	**1.9**	**-0.1**	**-2.7**	**-1.7**	**0.3**	**1.9**	**2.2**
Methodological discrepancy[2)]	*bill. CZK 2005*	-3	-6	7	-1	-18	-29	-27	-33	-40	-48
Real gross domestic income	*bill. CZK 2005*	3488	3562	3441	3482	3504	3449	3398	3417	3493	3587
	growth in %	**6.3**	**2.1**	**-3.4**	**1.2**	**0.6**	**-1.6**	**-1.5**	**0.6**	**2.2**	**2.7**
Contribution to GDP growth[3)]											
– Gross domestic expenditure	*percent. points*	**6.4**	**2.2**	**-5.0**	**1.8**	**-0.1**	**-2.6**	**-1.6**	**0.3**	**1.8**	**2.0**
– consumption	*percent. points*	**2.1**	**1.6**	**0.9**	**0.5**	**-0.3**	**-1.6**	**-0.3**	**0.0**	**1.0**	**1.3**
– household expenditure	*percent. points*	**2.1**	**1.4**	**0.1**	**0.5**	**0.3**	**-1.3**	**-0.4**	**0.2**	**1.1**	**1.3**
– government expenditure	*percent. points*	**0.1**	**0.2**	**0.8**	**0.1**	**-0.6**	**-0.2**	**0.1**	**-0.2**	**-0.1**	**0.0**
– gross capital formation	*percent. points*	**4.3**	**0.6**	**-5.9**	**1.3**	**0.2**	**-1.0**	**-1.4**	**0.3**	**0.8**	**0.7**
– gross fixed capital formation	*percent. points*	**3.4**	**1.1**	**-3.0**	**0.3**	**0.1**	**-0.7**	**-1.0**	**-0.1**	**0.6**	**0.7**
– change in stocks	*percent. points*	**0.9**	**-0.5**	**-2.9**	**1.0**	**0.1**	**-0.4**	**-0.3**	**0.4**	**0.2**	**0.0**
– Foreign balance	*percent. points*	**-0.7**	**0.9**	**0.5**	**0.6**	**1.9**	**1.4**	**0.2**	**0.5**	**0.4**	**0.5**
– external balance of goods	*percent. points*	**-1.1**	**0.5**	**0.5**	**0.6**	**2.1**	**1.8**	**0.0**	**0.4**	**0.4**	**0.4**
– external balance of services	*percent. points*	**0.4**	**0.4**	**0.0**	**0.1**	**-0.2**	**-0.4**	**0.1**	**0.1**	**0.0**	**0.1**

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

Table C.1.3: **Real GDP by Type of Expenditure** – quarterly
chained volumes, reference year 2005

		2012				2013			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Prelim.	*Prelim.*	*Prelim.*	*Prelim.*	*Prelim.*	*Estimate*	*Forecast*	*Forecast*
Gross domestic product	*bill. CZK 2005*	852	900	901	924	827	883	898	916
	growth in %	**-0.1**	**-1.7**	**-1.7**	**-1.3**	**-3.0**	**-1.9**	**-0.3**	**-0.8**
	growth in % [1]	**-0.4**	**-1.1**	**-1.4**	**-1.6**	**-2.4**	**-1.9**	**-1.2**	**-0.5**
	quart.growth in % [1]	**-0.5**	**-0.5**	**-0.3**	**-0.3**	**-1.3**	**0.0**	**0.4**	**0.4**
Private consumption exp. [2]	*bill. CZK 2005*	409	424	429	441	406	420	426	438
	growth in %	**-1.7**	**-2.9**	**-2.7**	**-3.2**	**-0.8**	**-0.9**	**-0.7**	**-0.7**
Government consumption exp.	*bill. CZK 2005*	158	165	164	189	159	166	165	189
	growth in %	**-2.6**	**-2.2**	**-0.9**	**0.6**	**1.1**	**0.3**	**0.3**	**0.3**
Gross capital formation	*bill. CZK 2005*	187	227	228	229	165	209	228	219
	growth in %	**-3.9**	**-1.5**	**-10.6**	**0.2**	**-11.9**	**-7.7**	**-0.1**	**-4.5**
– Gross fixed capital formation	*bill. CZK 2005*	200	219	222	239	189	208	214	232
	growth in %	**0.1**	**-1.0**	**-3.9**	**-5.4**	**-5.6**	**-5.2**	**-3.9**	**-2.8**
– Change in stocks and valuables	*bill. CZK 2005*	-12	7	6	-10	-23	1	14	-14
Exports of goods and services	*bill. CZK 2005*	786	776	752	783	750	773	750	790
	growth in %	**7.3**	**2.3**	**3.4**	**3.1**	**-4.6**	**-0.3**	**-0.3**	**0.9**
Imports of goods and services	*bill. CZK 2005*	677	682	666	713	646	677	665	714
	growth in %	**4.8**	**1.7**	**-0.5**	**3.1**	**-4.7**	**-0.8**	**-0.2**	**0.1**
Methodological discrepancy [3]	*bill. CZK 2005*	-10	-8	-7	-4	-7	-8	-7	-5
Real gross domestic income	*bill. CZK 2005*	819	868	868	894	802	851	863	882
	growth in %	**-0.3**	**-2.0**	**-2.2**	**-1.7**	**-2.2**	**-1.9**	**-0.7**	**-1.3**

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

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

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
							Prelim.	*Forecast*	*Forecast*	*Outlook*	*Outlook*
Gross domestic product	*bill. CZK*	**3663**	**3848**	**3759**	**3791**	**3823**	**3830**	**3796**	**3861**	**4002**	**4152**
	growth in %	9.2	5.1	-2.3	0.8	0.9	0.2	-0.9	1.7	3.6	3.7
Private consumption [1)]	*bill. CZK*	**1748**	**1883**	**1902**	**1917**	**1935**	**1927**	**1931**	**1962**	**2042**	**2117**
	growth in %	7.3	7.8	1.0	0.8	1.0	-0.4	0.2	1.6	4.1	3.7
Government consumption	*bill. CZK*	**726**	**759**	**809**	**807**	**793**	**795**	**804**	**805**	**813**	**824**
	growth in %	4.6	4.6	6.6	-0.2	-1.8	0.4	1.1	0.1	1.0	1.3
Gross capital formation	*bill. CZK*	**1092**	**1114**	**896**	**940**	**937**	**903**	**847**	**867**	**901**	**938**
	growth in %	17.6	2.0	-19.5	4.8	-0.3	-3.6	-6.2	2.4	3.9	4.1
– Gross fixed capital formation	*bill. CZK*	**990**	**1031**	**926**	**931**	**923**	**902**	**865**	**865**	**895**	**929**
	growth in %	15.0	4.2	-10.2	0.5	-0.9	-2.2	-4.1	0.1	3.5	3.8
– Change in stocks and valuables	*bill. CZK*	**102**	**83**	**-30**	**9**	**14**	**1**	**-18**	**2**	**6**	**9**
External balance	*bill. CZK*	**97**	**92**	**152**	**127**	**159**	**205**	**214**	**227**	**245**	**273**
– Exports of goods and services	*bill. CZK*	**2498**	**2480**	**2216**	**2524**	**2787**	**2989**	**3005**	**3128**	**3294**	**3483**
	growth in %	11.3	-0.7	-10.7	13.9	10.4	7.2	0.6	4.1	5.3	5.7
– Imports of goods and services	*bill. CZK*	**2401**	**2388**	**2064**	**2397**	**2628**	**2784**	**2791**	**2902**	**3049**	**3210**
	growth in %	12.0	-0.5	-13.6	16.1	9.6	5.9	0.3	3.9	5.1	5.3
Gross national income	*bill. CZK*	**3401**	**3668**	**3508**	**3506**	**3566**	**3559**	**3500**	**3555**	**3667**	**3788**
	growth in %	6.9	7.8	-4.3	-0.1	1.7	-0.2	-1.7	1.6	3.2	3.3
Primary income balance	*bill. CZK*	**-261**	**-180**	**-251**	**-285**	**-258**	**-271**	**-296**	**-307**	**-335**	**-363**

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

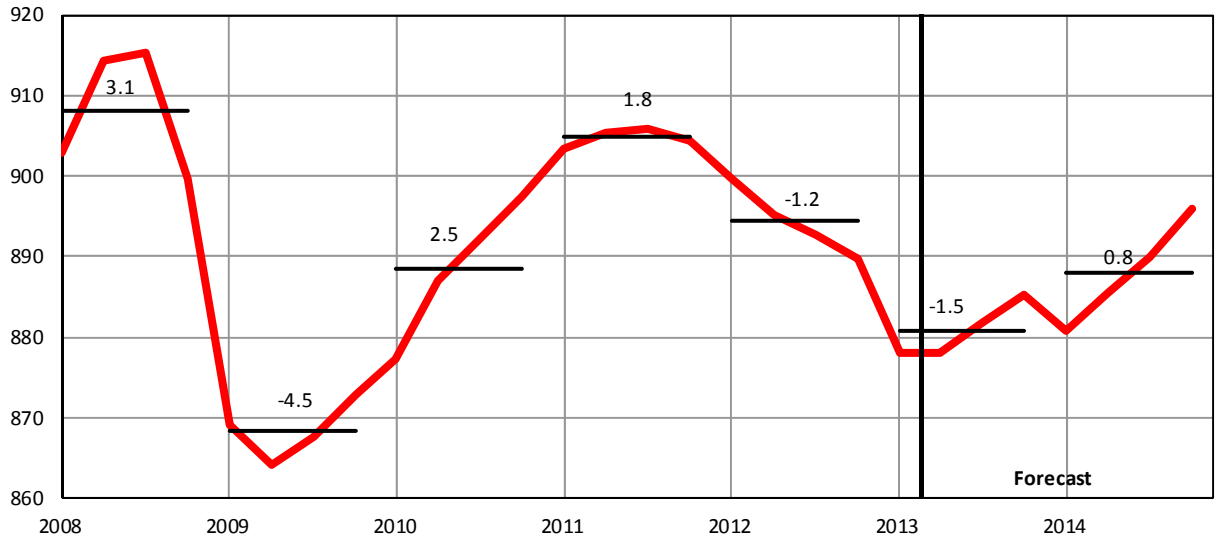
Table C.1.5: **Nominal GDP by Type of Expenditure** – quarterly

		2012				2013			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
		Prelim.	*Prelim.*	*Prelim.*	*Prelim.*	*Prelim.*	*Estimate*	*Forecast*	*Forecast*
Gross domestic product	*bill. CZK*	**905**	**964**	**964**	**997**	**889**	**949**	**963**	**995**
	growth in %	2.0	0.1	-0.5	-0.7	-1.8	-1.5	-0.1	-0.2
Private consumption [1)]	*bill. CZK*	**462**	**480**	**487**	**498**	**463**	**480**	**488**	**501**
	growth in %	1.1	-0.5	-0.6	-1.5	0.2	-0.1	0.3	0.5
Government consumption	*bill. CZK*	**182**	**193**	**192**	**228**	**183**	**195**	**195**	**231**
	growth in %	0.0	-0.3	0.7	0.9	0.8	1.1	1.2	1.3
Gross capital formation	*bill. CZK*	**194**	**236**	**237**	**237**	**171**	**215**	**234**	**227**
	growth in %	-3.2	-0.4	-10.4	0.3	-11.9	-8.9	-1.0	-4.1
– Gross fixed capital formation	*bill. CZK*	**204**	**225**	**228**	**244**	**193**	**213**	**220**	**238**
	growth in %	0.5	0.1	-3.1	-5.5	-5.4	-5.2	-3.6	-2.6
– Change in stocks and valuables	*bill. CZK*	**-11**	**11**	**9**	**-8**	**-23**	**1**	**15**	**-11**
External balance	*bill. CZK*	**68**	**55**	**49**	**34**	**73**	**60**	**46**	**36**
– Exports of goods and services	*bill. CZK*	**755**	**752**	**726**	**755**	**729**	**762**	**737**	**777**
	growth in %	11.6	6.7	7.1	3.8	-3.5	1.4	1.5	2.8
– Imports of goods and services	*bill. CZK*	**688**	**697**	**678**	**722**	**657**	**703**	**691**	**741**
	growth in %	9.3	6.5	3.7	4.4	-4.5	0.8	2.0	2.7

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

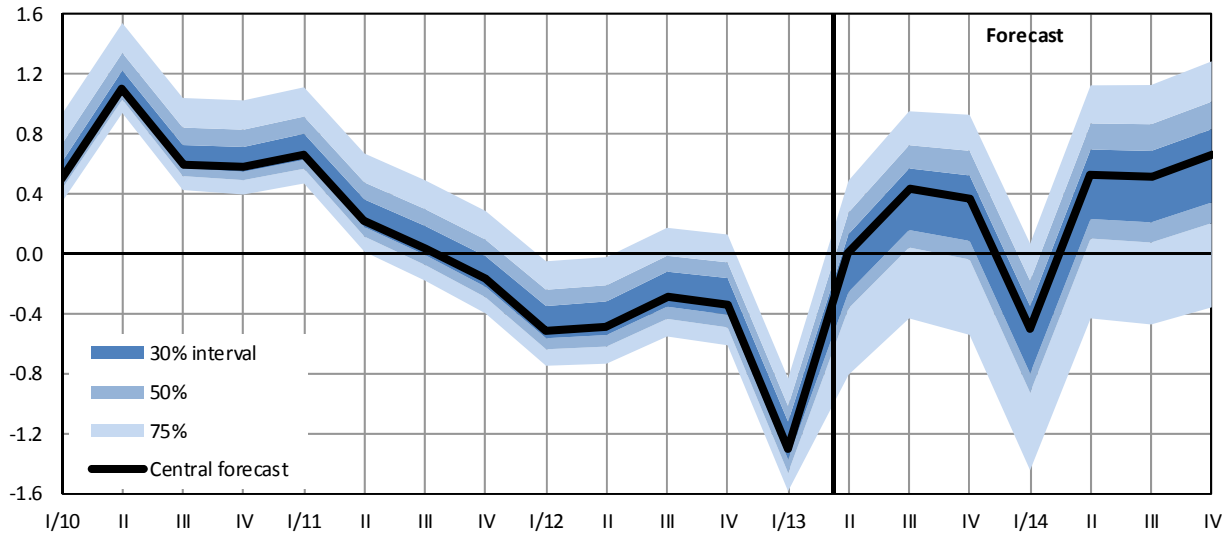
Graph C.1.1: **Gross Domestic Product** (*real*)

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



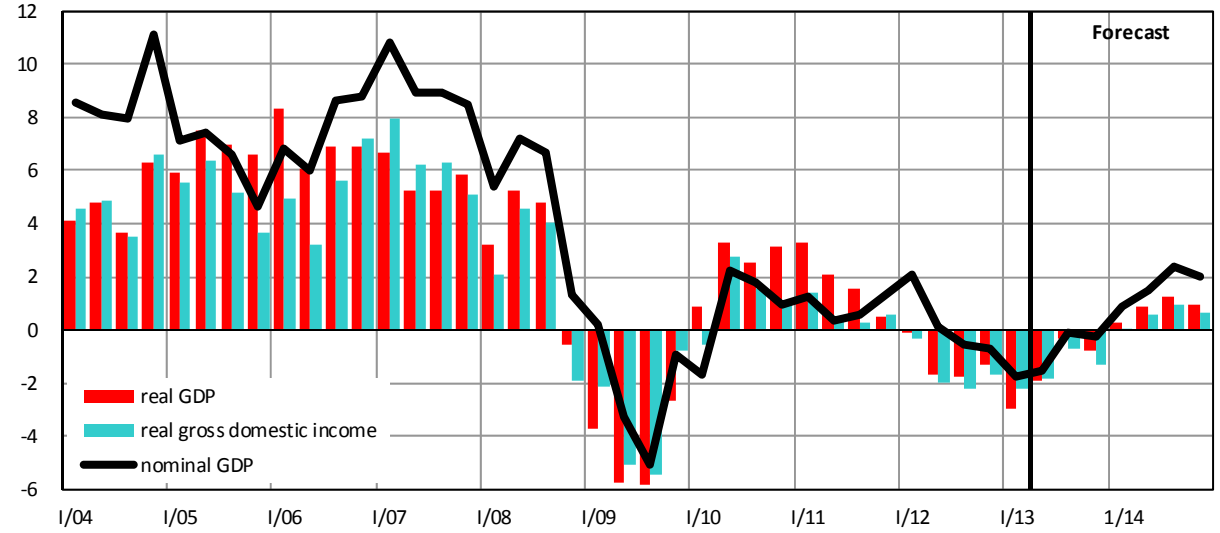
Graph C.1.2: **Gross Domestic Product** (*real*)

QoQ growth rate, in %, seasonally adjusted

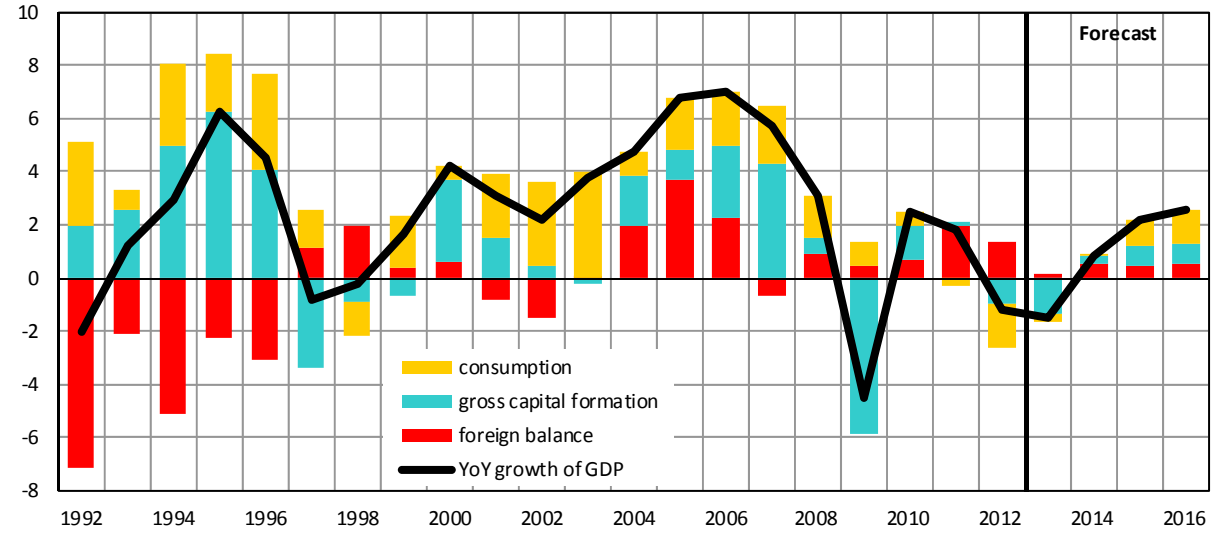


Graph C.1.3: **Gross Domestic Product and Real Gross Domestic Income**

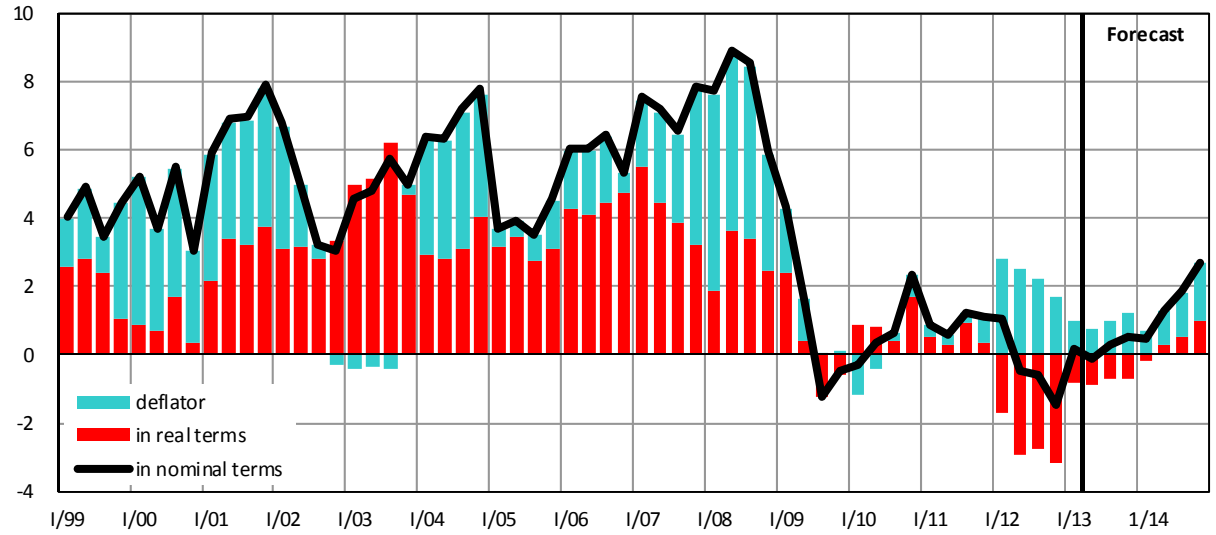
YoY growth rate, in %



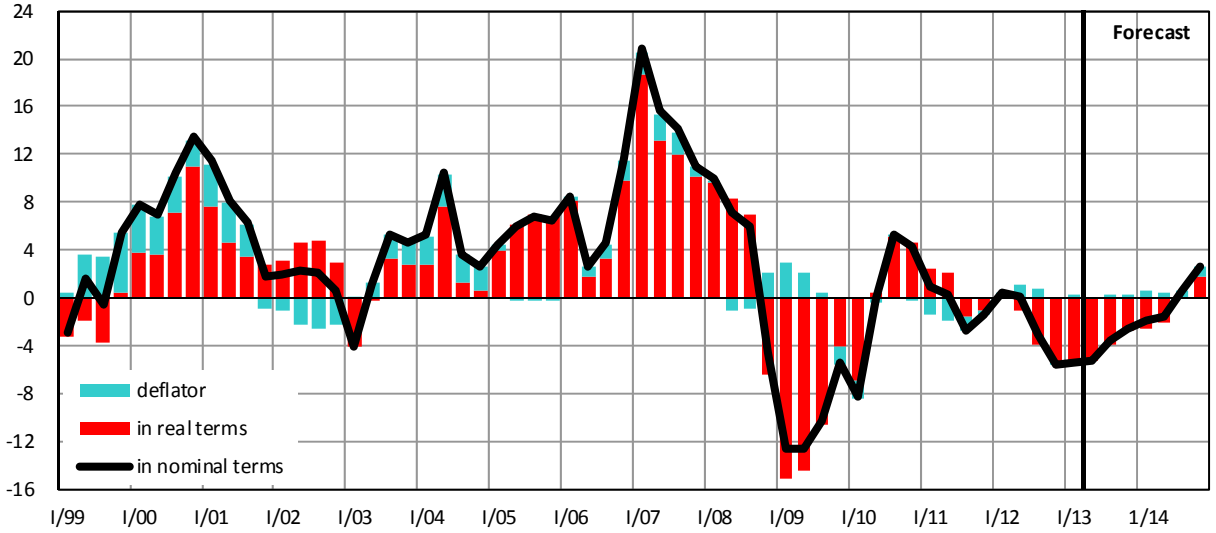
Graph C.1.4: **Gross Domestic Product** – *contributions to YoY growth*
in constant prices, decomposition of the YoY growth, in percentage points



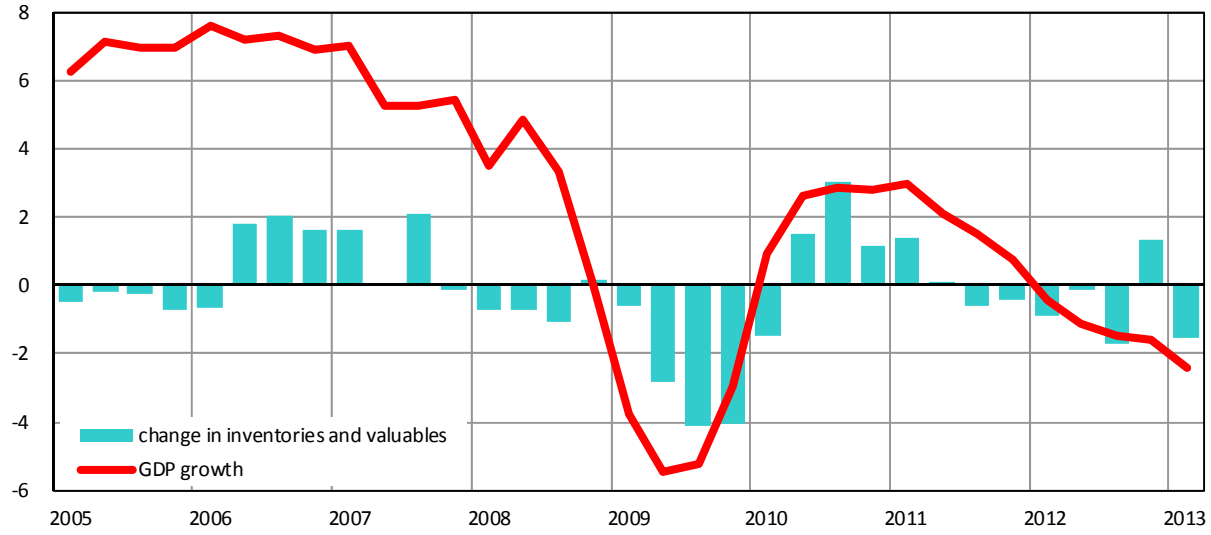
Graph C.1.5: **Private Consumption** (*incl. NPISH*)
YoY growth rate, in %



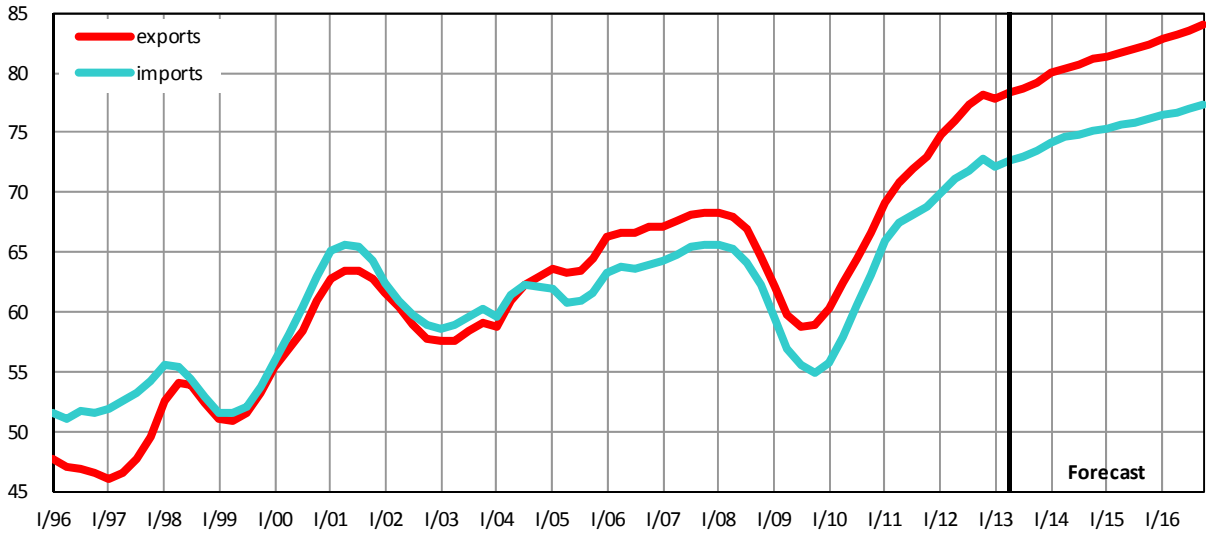
Graph C.1.6: **Gross Fixed Capital Formation**
YoY growth rate, in %



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 %

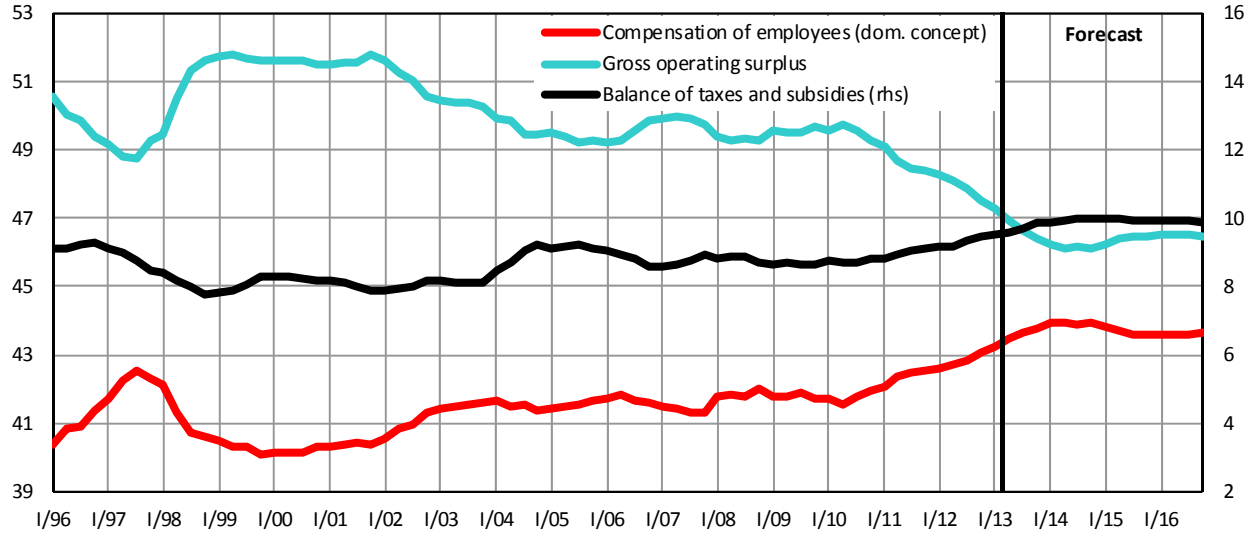


Table C.1.6: **GDP by Type of Income** – yearly

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
							Preliminary	*Forecast*	*Forecast*	*Outlook*	*Outlook*
GDP	*bill. CZK*	**3663**	**3848**	**3759**	**3791**	**3823**	**3830**	**3796**	**3861**	**4002**	**4152**
	growth in %	9.2	5.1	-2.3	0.8	0.9	0.2	-0.9	1.7	3.6	3.7
Balance of taxes and subsidies	*bill. CZK*	**327**	**335**	**325**	**334**	**349**	**362**	**374**	**385**	**398**	**410**
	growth in %	13.9	2.5	-3.1	2.8	4.3	3.9	3.1	3.2	3.2	3.2
– Taxes on production and imports	*bill. CZK*	**407**	**419**	**425**	**434**	**457**	**472**	**482**	**495**	**508**	**522**
	growth in %	12.0	2.9	1.4	2.1	5.3	3.2	2.2	2.7	2.7	2.7
– Subsidies on production	*bill. CZK*	**80**	**84**	**100**	**100**	**108**	**109**	**108**	**109**	**110**	**112**
	growth in %	4.8	4.4	19.5	-0.4	8.6	1.1	-0.9	1.0	1.0	1.0
Compensation of employees	*bill. CZK*	**1513**	**1617**	**1567**	**1590**	**1626**	**1650**	**1661**	**1697**	**1745**	**1813**
	growth in %	8.6	6.8	-3.0	1.4	2.2	1.5	0.7	2.1	2.8	3.9
– Wages and salaries	*bill. CZK*	**1140**	**1226**	**1201**	**1210**	**1237**	**1255**	**1264**	**1291**	**1345**	**1397**
	growth in %	8.3	7.5	-2.1	0.8	2.2	1.5	0.7	2.1	4.2	3.8
– Social security contributions	*bill. CZK*	**373**	**390**	**367**	**380**	**389**	**394**	**397**	**406**	**400**	**416**
	growth in %	9.4	4.7	-6.1	3.7	2.4	1.4	0.7	2.1	-1.4	4.1
Gross operating surplus	*bill. CZK*	**1822**	**1896**	**1866**	**1867**	**1849**	**1819**	**1761**	**1779**	**1860**	**1929**
	growth in %	9.0	4.1	-1.6	0.0	-0.9	-1.6	-3.1	1.0	4.5	3.7
– Consumption of capital	*bill. CZK*	**644**	**680**	**710**	**720**	**731**	**751**	**766**	**783**	**807**	**831**
	growth in %	6.8	5.6	4.4	1.4	1.6	2.8	2.0	2.2	3.0	3.0
– Net operating surplus	*bill. CZK*	**1178**	**1216**	**1156**	**1147**	**1118**	**1067**	**995**	**996**	**1053**	**1098**
	growth in %	10.3	3.2	-4.9	-0.8	-2.5	-4.5	-6.8	0.1	5.7	4.2

Table C.1.7: **GDP by Type of Income** – quarterly

		2012				2013			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
		Prelim.	*Prelim.*	*Prelim.*	*Prelim.*	*Prelim.*	*Estimate*	*Forecast*	*Forecast*
GDP	*bill. CZK*	**905**	**964**	**964**	**997**	**889**	**949**	**963**	**995**
	growth in %	2.0	0.1	-0.5	-0.7	-1.8	-1.5	-0.1	-0.2
Balance of taxes and subsidies	*bill. CZK*	**80**	**94**	**102**	**87**	**80**	**96**	**107**	**92**
	growth in %	3.8	1.4	4.9	5.5	-0.3	2.2	4.5	5.5
Compensation of employees	*bill. CZK*	**399**	**407**	**404**	**439**	**397**	**411**	**410**	**442**
	growth in %	2.7	1.1	0.5	1.6	-0.3	1.0	1.4	0.7
– Wages and salaries	*bill. CZK*	**301**	**309**	**308**	**337**	**300**	**312**	**312**	**340**
	growth in %	2.4	1.0	0.5	2.1	-0.3	1.0	1.4	0.7
– Social security contributions	*bill. CZK*	**97**	**99**	**97**	**102**	**97**	**100**	**98**	**103**
	growth in %	3.5	1.5	0.6	0.1	-0.4	1.0	1.4	0.7
Gross operating surplus	*bill. CZK*	**427**	**463**	**458**	**471**	**412**	**442**	**446**	**461**
	growth in %	1.1	-1.0	-2.5	-3.8	-3.4	-4.5	-2.5	-2.1

C.2 Prices

Sources: CZSO, Eurostat, MoF estimates

Table C.2.1: **Prices** – yearly

		2007	2008	2009	2010	2011	2012	2013 Forecast	2014 Forecast	2015 Outlook	2016 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	125.7	128.1	129.5
	growth in %	**2.8**	**6.3**	**1.0**	**1.5**	**1.9**	**3.3**	**2.1**	**1.7**	**1.9**	**1.1**
December	*average 2005=100*	107.9	111.8	112.9	115.5	118.3	121.1	123.8	126.1	128.6	130.3
	growth in %	**5.4**	**3.6**	**1.0**	**2.3**	**2.4**	**2.4**	**2.2**	**1.9**	**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**	**1.5**	**0.9**	**0.8**	**-0.1**
market increase	*percentage points*	**3.3**	**-0.7**	**0.0**	**0.7**	**1.2**	**0.1**	**0.7**	**1.0**	**1.2**	**1.4**
HICP	*average 2005=100*	105.1	111.7	112.4	113.7	116.2	120.3	122.8	124.8	127.2	128.6
	growth in %	**3.0**	**6.3**	**0.6**	**1.2**	**2.1**	**3.5**	**2.1**	**1.7**	**1.9**	**1.1**
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	107.4	107.9	108.8	110.4	111.5
	growth in %	**3.3**	**1.9**	**2.3**	**-1.4**	**-0.8**	**1.4**	**0.4**	**0.9**	**1.4**	**1.1**
Domestic final use	*average 2005=100*	105.2	108.4	109.7	109.6	110.0	111.8	112.6	113.9	115.6	116.7
	growth in %	**2.8**	**3.1**	**1.2**	**-0.1**	**0.3**	**1.7**	**0.7**	**1.2**	**1.4**	**1.0**
Consumption of households	*average 2005=100*	104.5	109.5	110.3	110.6	111.2	113.7	115.1	116.5	118.5	119.8
	growth in %	**2.9**	**4.8**	**0.8**	**0.3**	**0.5**	**2.3**	**1.2**	**1.2**	**1.8**	**1.1**
Consumption of government	*average 2005=100*	108.9	112.6	115.4	114.6	115.5	117.2	118.8	120.3	121.8	122.9
	growth in %	**4.1**	**3.4**	**2.5**	**-0.7**	**0.7**	**1.5**	**1.4**	**1.2**	**1.3**	**0.9**
Fixed capital formation	*average 2005=100*	102.7	102.8	103.7	103.5	102.6	103.2	103.3	103.9	104.6	105.3
	growth in %	**1.6**	**0.1**	**1.0**	**-0.3**	**-0.9**	**0.6**	**0.2**	**0.6**	**0.6**	**0.7**
Exports of goods and services	*average 2005=100*	98.3	93.9	94.1	92.9	93.7	96.5	97.7	97.7	98.4	99.0
	growth in %	**0.1**	**-4.5**	**0.3**	**-1.3**	**0.9**	**3.0**	**1.2**	**0.0**	**0.7**	**0.6**
Imports of goods and services	*average 2005=100*	99.9	96.8	95.2	95.8	98.2	101.7	103.5	103.8	104.5	105.0
	growth in %	**-0.7**	**-3.1**	**-1.7**	**0.7**	**2.5**	**3.6**	**1.7**	**0.3**	**0.7**	**0.5**
Terms of trade	*average 2005=100*	98.4	97.0	98.9	96.9	95.4	94.8	94.4	94.2	94.2	94.3
	growth in %	**0.8**	**-1.4**	**2.0**	**-2.0**	**-1.6**	**-0.5**	**-0.4**	**-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

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

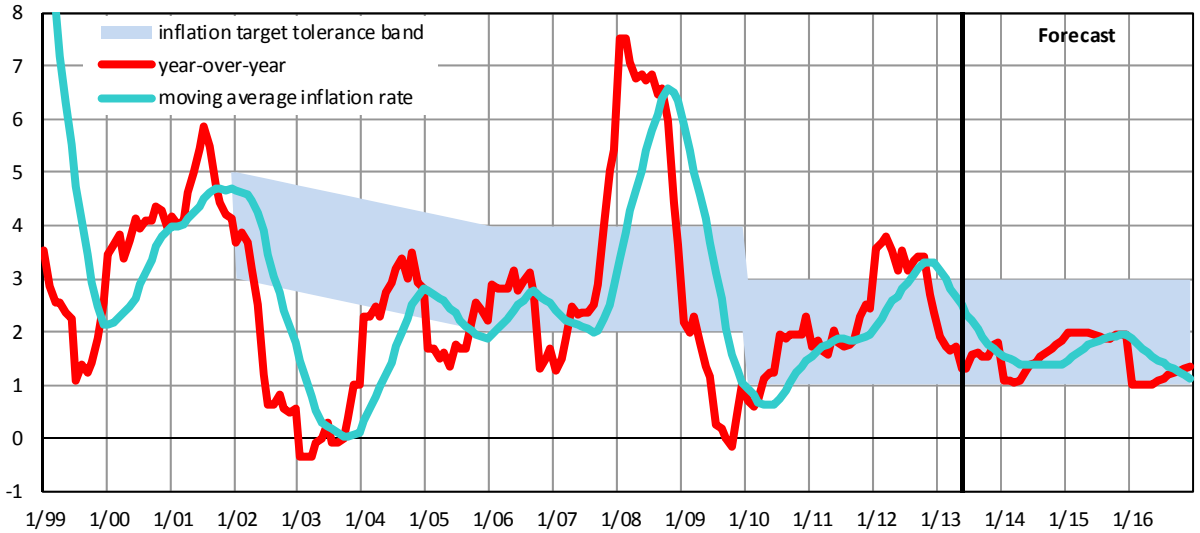
Table C.2.2: **Prices** – quarterly

		2012				2013			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
Consumer Price Index	*average 2005=100*	120.7	121.1	121.1	121.1	122.8	122.9	123.1	123.2
	growth in %	**3.7**	**3.4**	**3.3**	**2.8**	**1.8**	**1.4**	**1.6**	**1.7**
– of which contribution of									
administrative measures [1)]	*percentage points*	**2.6**	**2.6**	**2.4**	**2.3**	**1.6**	**1.4**	**1.4**	**1.4**
market increase	*percentage points*	**1.1**	**0.8**	**0.9**	**0.5**	**0.2**	**0.0**	**0.1**	**0.3**
HICP	*average 2005=100*	119.9	120.4	120.4	120.4	121.9	122.1	122.2	122.4
	growth in %	**4.0**	**3.8**	**3.4**	**2.9**	**1.7**	**1.4**	**1.5**	**1.6**
Offering prices of flats	*average 2005=100*	143.7	146.1	144.9	145.7	145.3	.	.	.
	growth in %	**-2.4**	**1.2**	**1.0**	**2.5**	**1.1**	**.**	**.**	**.**
Deflators									
GDP	*average 2005=100*	106.2	107.1	107.1	107.9	107.5	107.5	107.3	108.5
	growth in %	**2.1**	**1.9**	**1.2**	**0.6**	**1.3**	**0.4**	**0.2**	**0.6**
Domestic final use	*average 2005=100*	110.7	111.4	111.3	111.9	111.2	111.7	111.9	113.0
	growth in %	**2.3**	**2.1**	**1.6**	**1.0**	**0.4**	**0.3**	**0.5**	**1.0**
Consumption of households	*average 2005=100*	113.0	113.5	113.3	113.0	114.1	114.3	114.5	114.4
	growth in %	**2.8**	**2.5**	**2.2**	**1.7**	**1.0**	**0.8**	**1.0**	**1.2**
Consumption of government	*average 2005=100*	115.2	117.0	117.1	121.0	114.9	118.0	118.2	122.2
	growth in %	**2.7**	**1.9**	**1.6**	**0.3**	**-0.3**	**0.8**	**0.9**	**1.0**
Fixed capital formation	*average 2005=100*	102.4	102.7	102.5	102.3	102.6	102.7	102.8	102.5
	growth in %	**0.4**	**1.1**	**0.8**	**-0.1**	**0.2**	**0.0**	**0.3**	**0.2**
Exports of goods and services	*average 2005=100*	96.1	96.9	96.6	96.5	97.3	98.6	98.3	98.3
	growth in %	**4.0**	**4.3**	**3.6**	**0.7**	**1.2**	**1.7**	**1.7**	**1.9**
Imports of goods and services	*average 2005=100*	101.5	102.1	101.7	101.2	101.7	103.8	104.0	103.8
	growth in %	**4.3**	**4.7**	**4.2**	**1.3**	**0.2**	**1.7**	**2.2**	**2.5**
Terms of trade	*average 2005=100*	94.6	94.9	94.9	95.4	95.6	95.0	94.5	94.8
	growth in %	**-0.3**	**-0.4**	**-0.6**	**-0.5**	**1.0**	**0.1**	**-0.5**	**-0.6**

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

Graph C.2.1: **Consumer Prices**

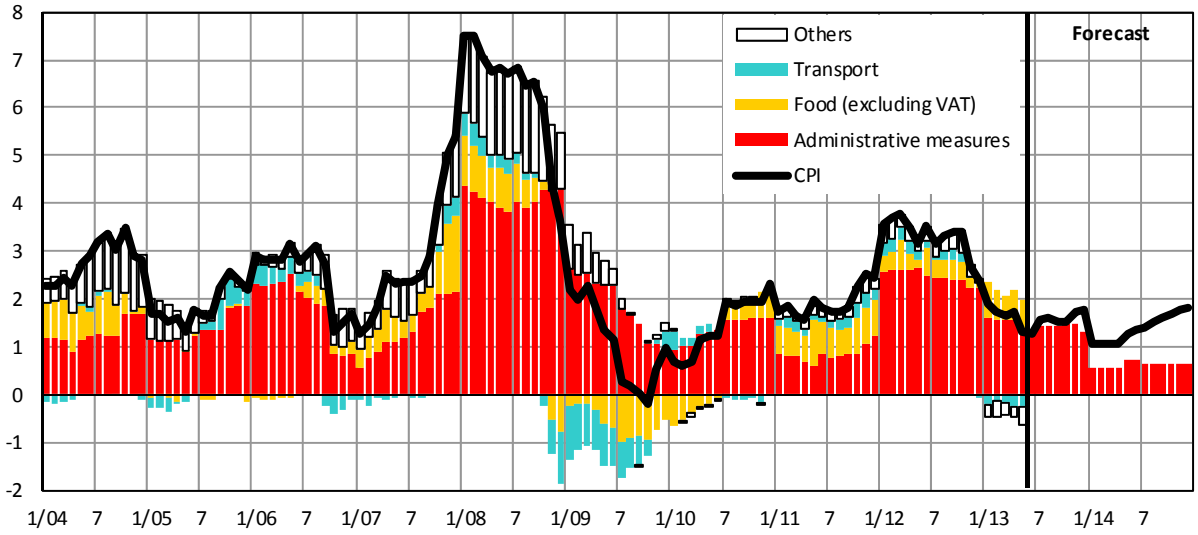
YoY growth rate, in %



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

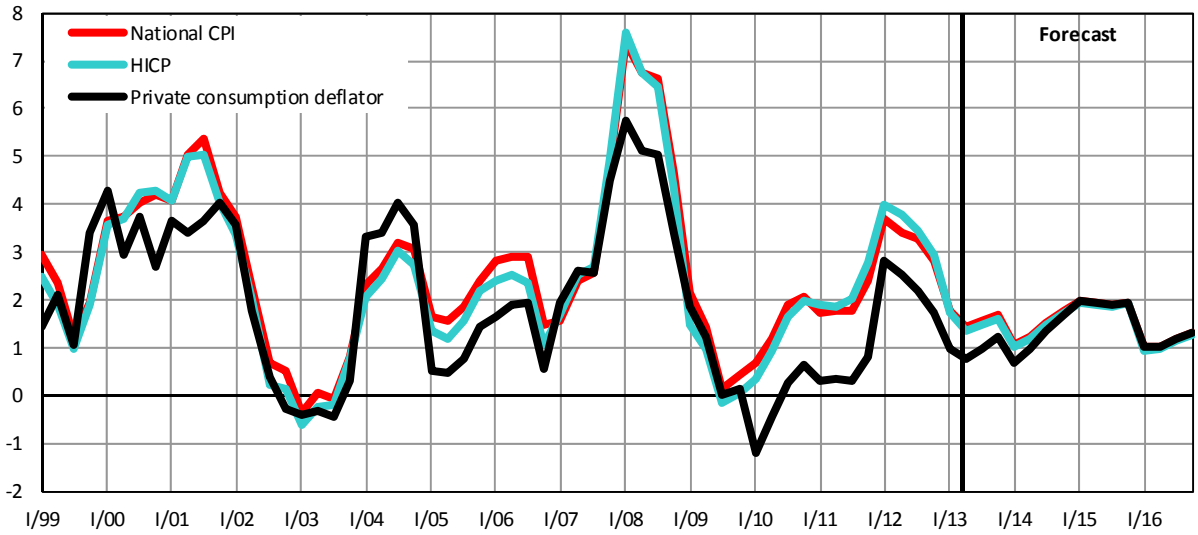
Graph C.2.2: **Consumer Prices**

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**

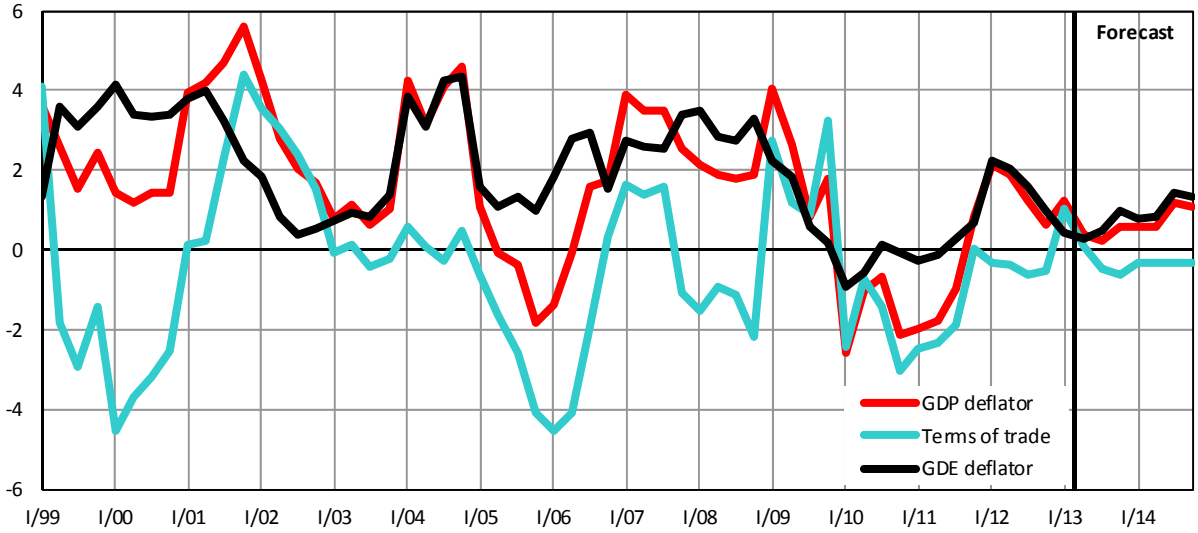
YoY increases, in %



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

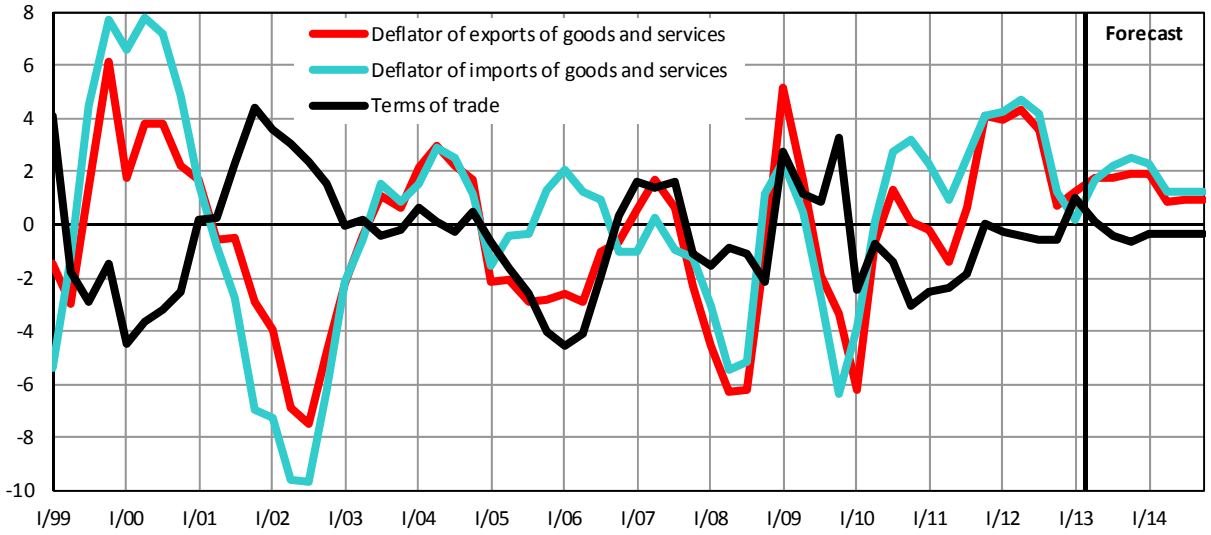
Graph C.2.4: **GDP Deflator**

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



Graph C.2.5: **Terms of Trade**

YoY increases, in %



C.3 Labour Market

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 Forecast	2014 Forecast	2015 Outlook	2016 Outlook
Labour Force Survey											
Employment	*av. in thous.persons*	**4922**	**5002**	**4934**	**4885**	**4872**	**4890**	**4913**	**4905**	**4908**	**4911**
	growth in %	1.9	1.6	-1.4	-1.0	0.4	0.4	0.5	-0.2	0.1	0.1
– employees	*av. in thous.persons*	**4125**	**4196**	**4107**	**4019**	**3993**	**3990**	**4020**	**4012**	**4014**	**4015**
	growth in %	1.9	1.7	-2.1	-2.1	0.0	-0.1	0.8	-0.2	0.0	0.0
– enterpreneurs and	*av. in thous.persons*	**797**	**807**	**827**	**866**	**880**	**901**	**893**	**893**	**894**	**896**
self-employed	*growth in %*	2.2	1.2	2.5	4.7	2.0	2.4	-0.8	0.0	0.2	0.1
Unemployment	*av. in thous.persons*	**276**	**230**	**352**	**384**	**351**	**367**	**396**	**404**	**382**	**345**
Unemployment rate	*average in per cent*	**5.3**	**4.4**	**6.7**	**7.3**	**6.7**	**7.0**	**7.5**	**7.6**	**7.2**	**6.6**
Labour force	*av. in thous.persons*	**5198**	**5232**	**5286**	**5269**	**5223**	**5257**	**5309**	**5309**	**5290**	**5256**
	growth in %	0.0	0.7	1.0	-0.3	-0.2	0.7	1.0	0.0	-0.4	-0.6
Population aged 15–64	*av. in thous.persons*	**7347**	**7410**	**7431**	**7399**	**7295**	**7229**	**7160**	**7100**	**7037**	**6972**
	growth in %	0.5	0.9	0.3	-0.4	-0.7	-0.9	-0.9	-0.8	-0.9	-0.9
Employment/Pop. 15–64	*average in per cent*	**67.0**	**67.5**	**66.4**	**66.0**	**66.8**	**67.6**	**68.6**	**69.1**	**69.8**	**70.4**
Employment rate 15–64[1)]	*average in per cent*	**66.1**	**66.6**	**65.4**	**65.0**	**65.7**	**66.5**	**67.4**	**67.8**	**68.5**	**69.1**
Labour force/Pop. 15–64	*average in per cent*	**70.8**	**70.6**	**71.1**	**71.2**	**71.6**	**72.7**	**74.1**	**74.8**	**75.2**	**75.4**
Participation rate 15–64[2)]	*average in per cent*	**69.8**	**69.7**	**70.1**	**70.2**	**70.5**	**71.6**	**72.9**	**73.5**	**73.9**	**74.0**
SNA											
Employment (domestic concept	*av. in thous.persons*	**5086**	**5204**	**5111**	**5059**	**5057**	**5077**	**5105**	**5097**	**5100**	**5103**
	growth in %	2.1	2.3	-1.8	-1.0	0.0	0.4	0.5	-0.1	0.1	0.1
Hours worked	*bill. hours*	**9.12**	**9.37**	**9.09**	**9.16**	**9.16**	**9.06**	**8.87**	**8.88**	**8.87**	**8.85**
	growth in %	1.3	2.7	-3.0	0.8	0.0	-1.1	-2.1	0.1	-0.1	-0.2
Hours worked / employment	*hours*	**1793**	**1800**	**1778**	**1811**	**1811**	**1784**	**1737**	**1742**	**1739**	**1734**
	growth in %	-0.8	0.4	-1.2	1.8	0.0	-1.5	-2.6	0.3	-0.2	-0.3
Registered unemployment											
Unemployment	*av. in thous.persons*	**392.8**	**324.6**	**465.6**	**528.7**	**507.8**	**504.7**	**563**	**579**	**543**	**486**

[1)] *The indicator does not include employment over 64 years.*
[2)] *The indicator does not include labour force over 64 years.*

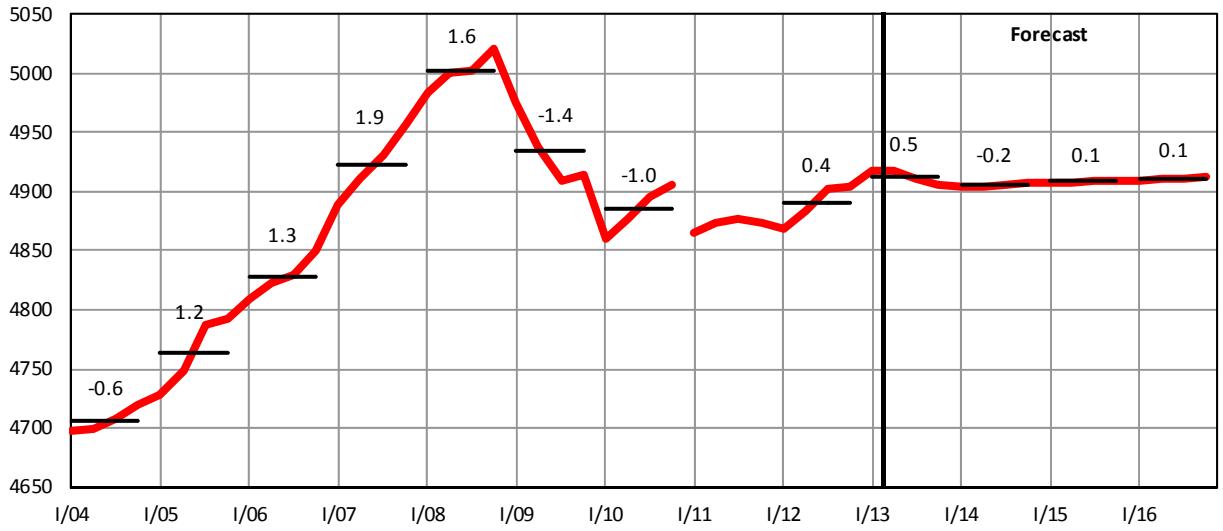
Table C.3.2: **Employment** – quarterly

		2012				2013			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
Labour Force Survey									
Employment	*av. in thous. persons*	**4835**	**4888**	**4921**	**4917**	**4884**	**4922**	**4930**	**4918**
	YoY growth in %	0.1	0.2	0.5	0.6	1.0	0.7	0.2	0.0
	QoQ growth in %	-0.1	0.3	0.4	0.1	0.3	0.0	-0.1	-0.1
– employees	*av. in thous. persons*	**3937**	**3980**	**4027**	**4014**	**4015**	**4012**	**4039**	**4015**
	growth in %	-0.6	-0.6	0.3	0.6	2.0	0.8	0.3	0.0
– entrepreneurs and	*av. in thous. persons*	**898**	**908**	**894**	**902**	**869**	**910**	**892**	**903**
self-employed	*growth in %*	3.1	4.3	1.4	0.8	-3.2	0.2	-0.3	0.0
Unemployment	*av. in thous.persons*	**369**	**351**	**368**	**380**	**393**	**384**	**402**	**404**
Unemployment rate	*average in per cent*	**7.1**	**6.7**	**7.0**	**7.2**	**7.4**	**7.2**	**7.5**	**7.6**
Labour force	*av. in thous. persons*	**5204**	**5239**	**5288**	**5296**	**5277**	**5305**	**5332**	**5322**
	growth in %	0.0	0.2	1.0	1.4	1.4	1.3	0.8	0.5
Population aged 15–64	*av. in thous. persons*	**7255**	**7238**	**7222**	**7200**	**7184**	**7168**	**7153**	**7137**
	growth in %	-0.9	-0.9	-0.9	-1.0	-1.0	-1.0	-1.0	-0.9
Employment/Pop. 15–64	*average in per cent*	**66.6**	**67.5**	**68.1**	**68.3**	**68.0**	**68.7**	**68.9**	**68.9**
	increase over a year	0.6	0.8	1.0	1.1	1.3	1.1	0.8	0.6
Employment rate 15–64 [1)]	*average in per cent*	**65.6**	**66.5**	**67.1**	**67.0**	**66.8**	**67.4**	**67.7**	**67.7**
	increase over a year	0.6	0.8	0.9	0.9	1.2	0.9	0.6	0.6
Labour force/Pop. 15–64	*average in per cent*	**71.7**	**72.4**	**73.2**	**73.6**	**73.5**	**74.0**	**74.5**	**74.6**
	increase over a year	0.6	0.8	1.4	1.8	1.7	1.6	1.3	1.0
Participation rate 15–64 [2)]	*average in per cent*	**70.7**	**71.3**	**72.1**	**72.3**	**72.3**	**72.7**	**73.3**	**73.3**
	increase over a year	0.6	0.8	1.3	1.6	1.6	1.4	1.1	1.0
SNA									
Employment (domestic concept)	*av. in thous. persons*	**5010**	**5069**	**5117**	**5114**	**5064**	**5107**	**5130**	**5118**
	growth in %	0.0	0.3	0.5	0.8	1.1	0.8	0.3	0.1
Hours worked	*bill. hours*	**2.37**	**2.34**	**2.05**	**2.28**	**2.26**	**2.32**	**2.03**	**2.26**
	growth in %	-0.4	-2.5	-2.6	1.1	-4.9	-1.1	-1.0	-1.1
Hours worked / employment	*hours*	**474**	**463**	**401**	**447**	**446**	**454**	**396**	**442**
	growth in %	-0.5	-2.7	-3.1	0.3	-5.9	-1.9	-1.3	-1.2
Registered unemployment									
Unemployment	*av. in thous. persons*	**531**	**494**	**486**	**508**	**582**	**559**	**549**	**561**

[1)] *The indicator does not include employment over 64 years.*
[2)] *The indicator does not include labour force over 64 years.*

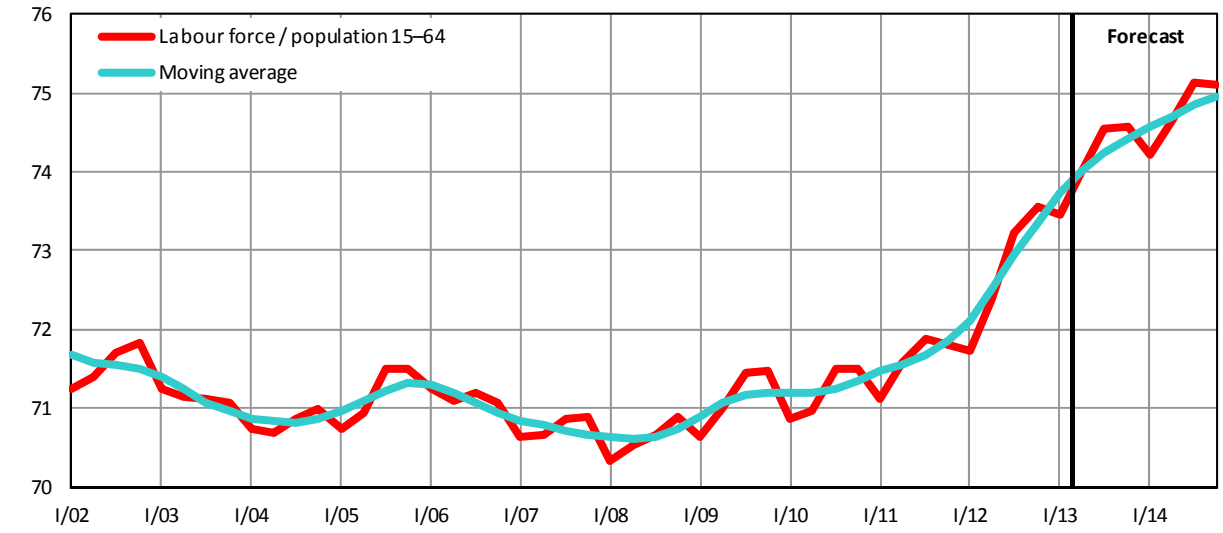
Graph C.3.1: **Employment** (LFS)

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



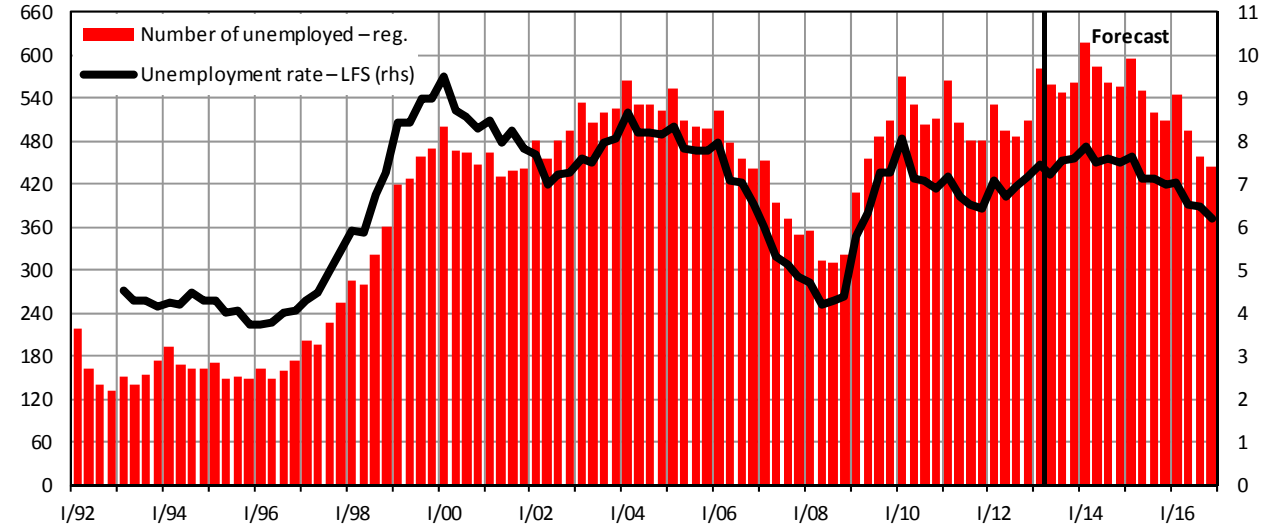
Graph C.3.2: **Ratio of Labour Force to Population Aged 15–64**

in %



Graph C.3.3: **Unemployment**

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



Graph C.3.4: **Economic Output and Unemployment**

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

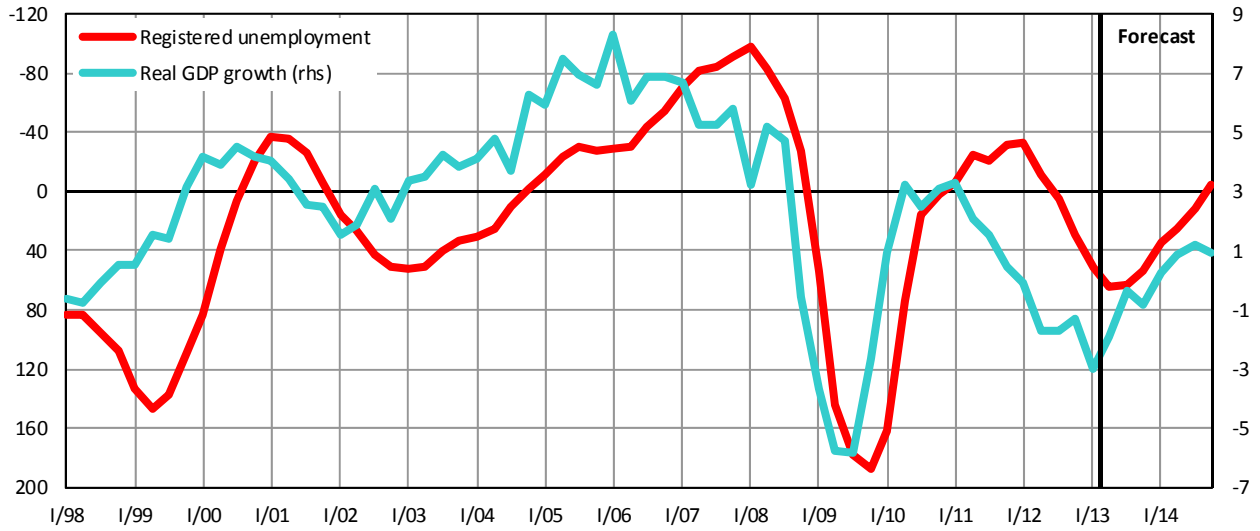


Table C.3.3: **Labour Market** – analytical indicators

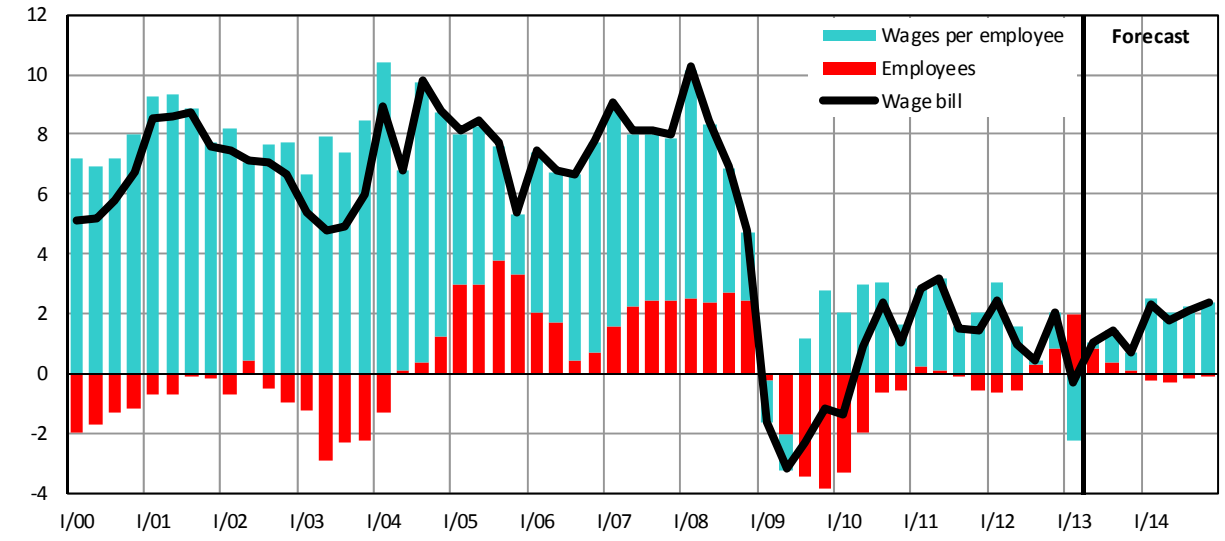
		2005	2006	2007	2008	2009	2010	2011	2012	2013 Forecast	2014 Forecast
Compensation per employee											
– nominal	*growth in %*	**3.8**	**6.0**	**6.3**	**4.2**	**-0.6**	**3.1**	**2.3**	**1.5**	**-0.1**	**2.3**
– real	*growth in %*	**1.9**	**3.4**	**3.3**	**-2.0**	**-1.7**	**1.6**	**0.4**	**-1.8**	**-1.7**	**0.9**
Wage bill	*growth in %*	**7.3**	**7.2**	**8.3**	**7.5**	**-2.1**	**0.8**	**2.2**	**1.5**	**0.7**	**2.1**
Average monthly wage [1]											
– nominal	*CZK*	18 336	19 536	20 947	22 592	23 353	23 858	24 452	25 100	25 300	25 900
	growth in %	**5.0**	**6.5**	**7.2**	**7.9**	**3.4**	**2.2**	**2.5**	**2.7**	**0.8**	**2.3**
– real	*CZK 2005*	18 336	19 053	19 865	20 147	20 610	20 753	20 866	20 700	20 600	20 800
	growth in %	**3.1**	**3.9**	**4.3**	**1.4**	**2.3**	**0.7**	**0.5**	**-0.6**	**-0.8**	**0.9**
Labour productivity	*growth in %*	**4.6**	**5.6**	**3.5**	**0.8**	**-2.8**	**3.5**	**1.9**	**-1.6**	**-2.0**	**1.0**
Unit labour costs [2]	*growth in %*	**-0.7**	**0.4**	**2.6**	**3.4**	**2.2**	**-0.4**	**0.5**	**3.2**	**2.0**	**1.3**
Compensations of employees / GDP	*%*	**41.7**	**41.6**	**41.3**	**42.0**	**41.7**	**41.9**	**42.5**	**43.1**	**43.8**	**43.9**

[1] *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.3.5: **Wage Bill** – nominal, domestic concept

YoY growth rate, in %



Graph C.3.6: **Average Nominal Wage**

YoY growth rate, in %

Graph C.3.7: **Gross Savings Rate of Households**

in % of disposable income

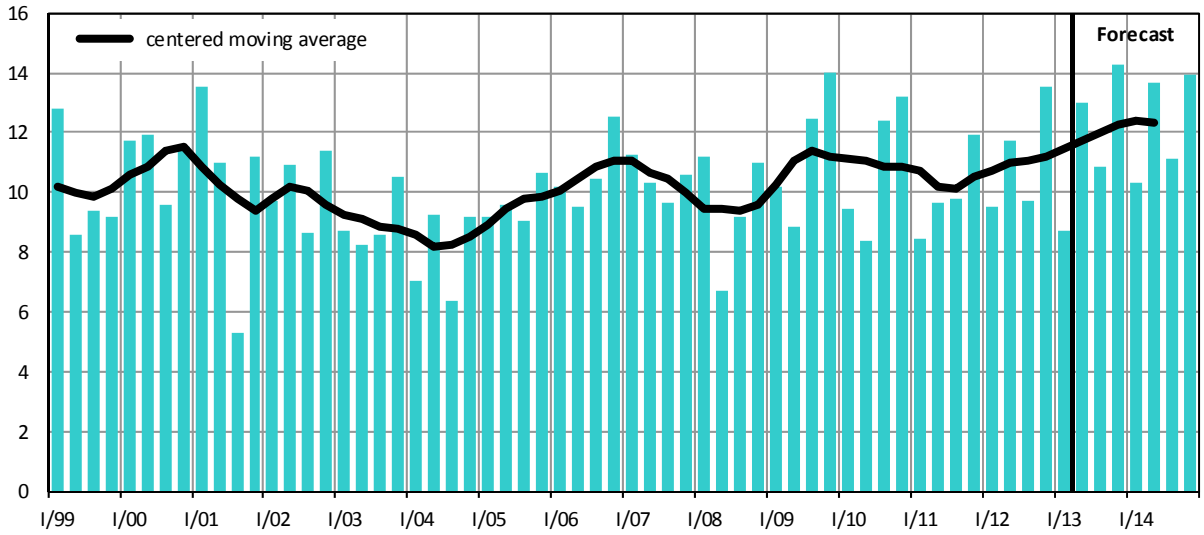


Table C.3.4: **Income and Expenditures of Households** – yearly
SNA methodology – national concept

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
									Preliminary	*Forecast*	*Forecast*
Current income											
Compensation of employees	*bill.CZK*	**1302**	**1397**	**1510**	**1597**	**1557**	**1589**	**1627**	**1654**	**1664**	**1699**
	growth in %	6.5	7.3	8.1	5.8	-2.5	2.1	2.4	1.7	0.6	2.1
Gross operating surplus	*bill.CZK*	**515**	**538**	**570**	**587**	**616**	**608**	**584**	**573**	**569**	**573**
and mixed income	*growth in %*	1.3	4.4	6.0	3.0	5.0	-1.4	-4.0	-1.7	-0.8	0.8
Property income received	*bill.CZK*	**135**	**150**	**155**	**167**	**155**	**151**	**154**	**153**	**153**	**158**
	growth in %	13.0	11.5	3.1	8.2	-7.3	-2.8	2.3	-0.6	0.0	3.0
Social benefits not-in-kind	*bill.CZK*	**386**	**422**	**471**	**495**	**536**	**542**	**552**	**567**	**582**	**596**
	growth in %	5.1	9.1	11.6	5.1	8.4	1.1	1.9	2.7	2.7	2.3
Other current transfers received	*bill.CZK*	**104**	**113**	**122**	**137**	**137**	**135**	**134**	**139**	**145**	**151**
	growth in %	4.5	8.9	7.8	11.8	0.5	-1.8	-0.8	3.9	4.4	4.0
Current expenditure											
Property income paid	*bill.CZK*	**19**	**21**	**26**	**30**	**18**	**22**	**20**	**20**	**19**	**19**
	growth in %	-6.6	10.6	26.5	12.8	-38.1	18.3	-5.6	-3.7	-3.6	0.0
Curr. taxes on income and property	*bill.CZK*	**144**	**144**	**160**	**146**	**141**	**137**	**148**	**151**	**154**	**158**
	growth in %	1.7	0.4	11.0	-8.6	-3.7	-2.7	7.8	2.1	2.1	2.1
Social contributions	*bill.CZK*	**515**	**564**	**618**	**638**	**605**	**622**	**638**	**650**	**661**	**676**
	growth in %	6.5	9.6	9.5	3.4	-5.3	2.8	2.7	1.8	1.7	2.2
Other current transfers paid	*bill.CZK*	**109**	**119**	**132**	**143**	**140**	**140**	**142**	**145**	**149**	**152**
	growth in %	4.7	9.4	11.0	8.3	-2.1	0.0	1.1	2.2	3.0	2.0
Gross disposable income	*bill.CZK*	**1657**	**1771**	**1891**	**2025**	**2097**	**2104**	**2102**	**2122**	**2130**	**2172**
	growth in %	5.6	6.9	6.8	7.1	3.5	0.3	-0.1	0.9	0.4	2.0
Final consumption	*bill.CZK*	**1516**	**1604**	**1720**	**1857**	**1874**	**1889**	**1908**	**1899**	**1903**	**1934**
	growth in %	3.8	5.9	7.2	8.0	1.0	0.8	1.0	-0.4	0.2	1.6
Change in share in pension funds	*bill.CZK*	**19**	**23**	**26**	**24**	**17**	**15**	**16**	**15**	**25**	**29**
Gross savings	*bill.CZK*	**160**	**190**	**197**	**193**	**240**	**230**	**210**	**237**	**252**	**268**
Capital transfers											
(income (-) / expenditure (+))	*bill.CZK*	**-31**	**-31**	**-36**	**-29**	**-28**	**-33**	**-29**	**-24**	**-19**	**-19**
Gross capital formation	*bill.CZK*	**158**	**178**	**203**	**209**	**201**	**218**	**190**	**184**	**175**	**168**
	growth in %	13.2	12.4	14.2	3.0	-3.8	8.6	-13.0	-3.2	-4.9	-4.0
Change in financial assets and liab.	*bill.CZK*	**34**	**43**	**30**	**12**	**66**	**44**	**49**	**76**	**96**	**119**
Real disposable income	*growth in %*	**4.7**	**5.3**	**3.7**	**2.2**	**2.7**	**0.5**	**-0.5**	**-1.3**	**-0.6**	**0.8**
Gross savings rate	*%*	**9.7**	**10.7**	**10.4**	**9.5**	**11.4**	**10.9**	**10.0**	**11.2**	**11.8**	**12.3**

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 Forecast	2014 Forecast
Balance of goods and services	*bill.CZK*	86	108	106	100	161	129	149	196	206	218
– balance of trade [1)]	*bill.CZK*	49	59	47	26	87	54	90	146	152	159
– of which mineral fuels (SITC 3) [2)]	*bill.CZK*	-111	-139	-124	-167	-107	-138	-177	-188	-177	-168
– balance of services	*bill.CZK*	38	49	59	74	74	75	58	50	54	59
Balance of income	*bill.CZK*	-128	-165	-255	-175	-250	-285	-256	-289	-310	-321
– compensation of employees	*bill.CZK*	4	3	-4	-19	-11	-1	1	5	3	3
– investment income	*bill.CZK*	-132	-168	-251	-156	-239	-284	-257	-294	-313	-323
Balance of transfers	*bill.CZK*	11	-11	-8	-6	-1	9	3	-1	16	8
Current account	*bill.CZK*	-31	-67	-157	-81	-89	-147	-104	-94	-89	-94
Capital account	*bill.CZK*	6	10	22	27	51	33	15	52	53	55
Financial account	*bill.CZK*	160	100	125	92	143	174	59	122	.	.
– foreign direct investments	*bill.CZK*	280	90	179	36	38	95	47	181	.	.
– portfolio investments	*bill.CZK*	-81	-27	-57	-9	159	150	6	43	.	.
– other investments	*bill.CZK*	-38	36	3	65	-53	-71	7	-102	.	.
Change in reserves	*bill.CZK*	93	2	16	40	61	41	-17	80	.	.
International investment position	*bill.CZK*	-837	-1084	-1418	-1545	-1728	-1830	-1818	-1904	.	.
Gross external debt	*bill.CZK*	1144	1196	1377	1630	1639	1767	1877	1941	2026	2057
Balance of goods and services / GDP	*per cent*	2.8	3.2	2.9	2.6	4.3	3.4	3.9	5.1	5.4	5.7
Current account / GDP	*per cent*	-1.0	-2.0	-4.3	-2.1	-2.4	-3.9	-2.7	-2.5	-2.3	-2.4
Financial account / GDP	*per cent*	5.1	3.0	3.4	2.4	3.8	4.6	1.6	3.2	.	.
IIP / GDP	*per cent*	-26.9	-32.3	-38.7	-40.2	-46.0	-48.3	-47.5	-49.7	.	.
Gross external debt / GDP [3)]	*per cent*	36.7	35.7	37.6	42.3	43.6	46.6	49.1	50.7	53	53

[1)] *Imports – fob*
[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

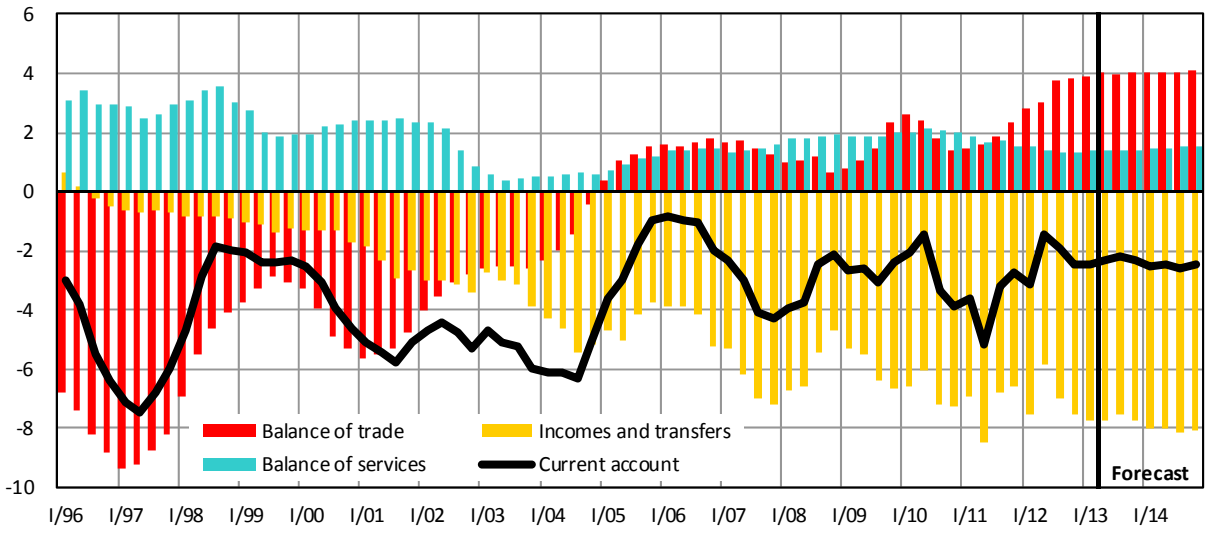
		2012				2013			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
Balance of goods and services	*bill.CZK*	169	168	194	196	202	206	204	206
– balance of trade [1)]	*bill.CZK*	109	116	143	146	149	153	150	152
– of which mineral fuels (SITC 3) [2)]	*bill.CZK*	-182	-180	-183	-188	-184	-183	-180	-177
– balance of services	*bill.CZK*	60	53	50	50	53	53	53	54
Balance of income	*bill.CZK*	-289	-216	-258	-289	-303	-305	-308	-310
– compensation of employees	*bill.CZK*	2	3	5	5	5	4	3	3
– investment income	*bill.CZK*	-291	-219	-263	-294	-307	-309	-311	-313
Balance of transfers	*bill.CZK*	1	-9	-11	-1	7	11	22	16
Current account	*bill.CZK*	-120	-56	-75	-94	-94	-88	-82	-89
Capital account	*bill.CZK*	15	15	18	52	52	52	53	53
Financial account	*bill.CZK*	126	31	81	122	108	.	.	.
– foreign direct investments	*bill.CZK*	86	86	165	181	179	.	.	.
– portfolio investments	*bill.CZK*	71	57	86	43	36	.	.	.
– other investments	*bill.CZK*	-31	-112	-171	-102	-107	.	.	.
Change in reserves	*bill.CZK*	42	4	16	80	54	.	.	.
International investment position	*bill.CZK*	-1889	-1893	-1933	-1904	-1887	.	.	.
Gross external debt	*bill.CZK*	1918	1928	1889	1941	1984	1999	2028	2026

[1)] *Imports – fob*

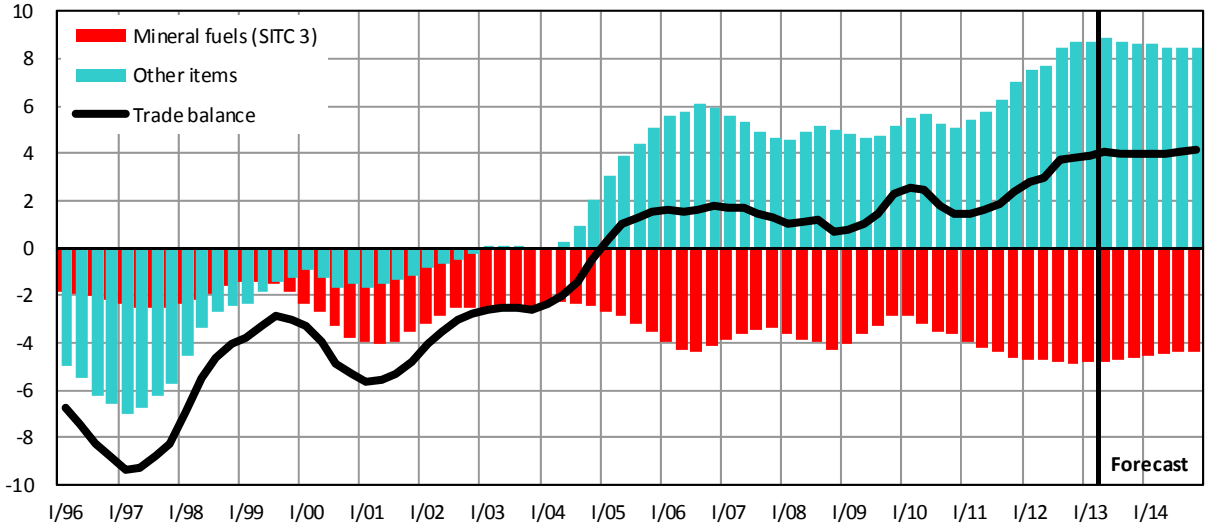
[2)] *Imports – cif*

Graph C.4.1: **Current Account**

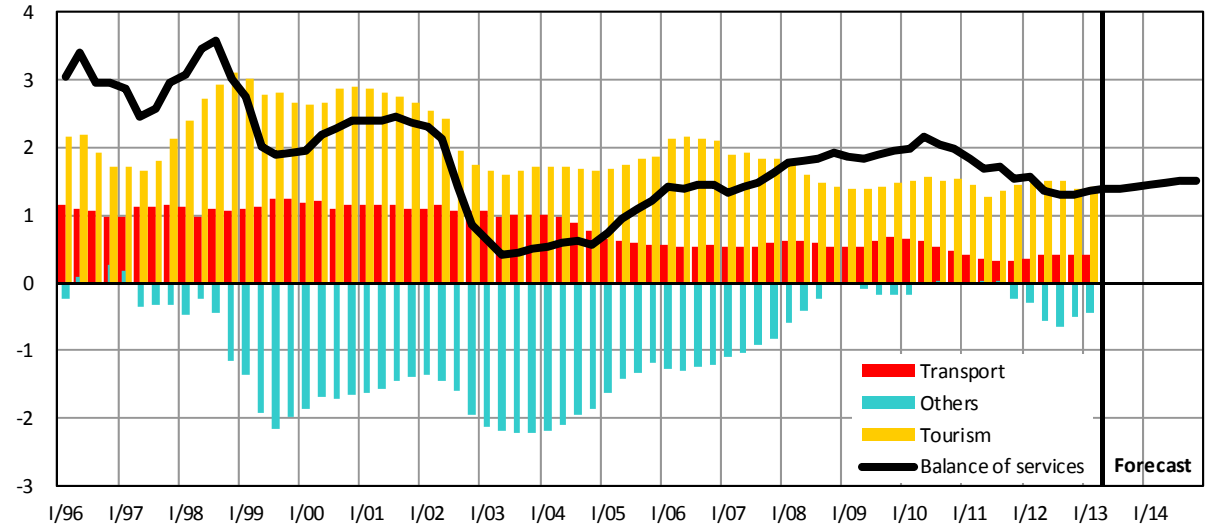
moving sums of the latest 4 quarters, in % of GDP, trade and service balances in BoP definitions



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

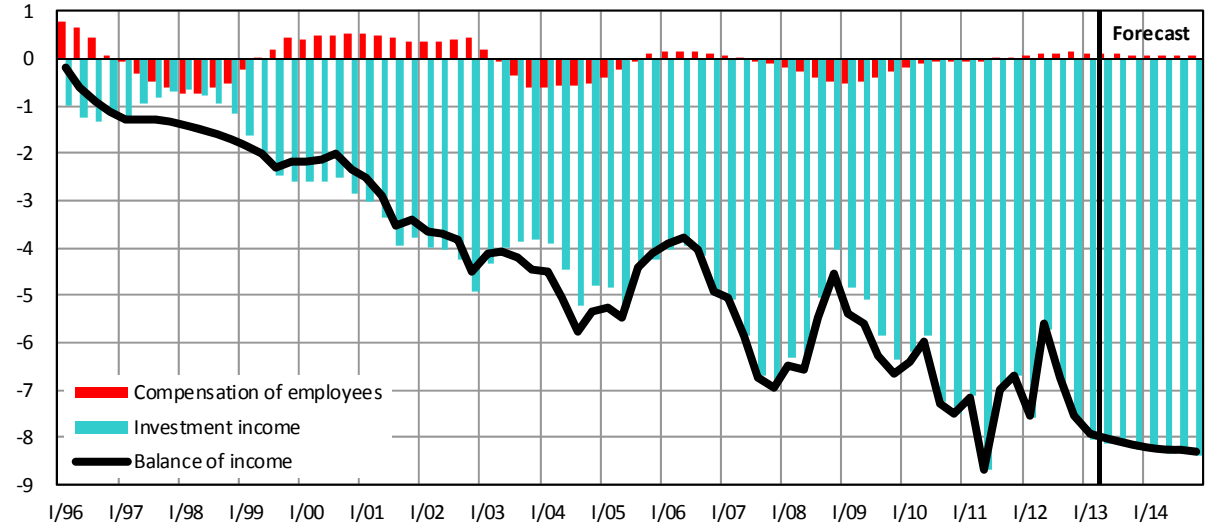


Table C.4.3: **Decomposition of Exports of Goods** – yearly

		2005	2006	2007	2008	2009	2010	2011	2012	2013 Forecast	2014 Forecast
GDP [1]	*average of 2005=100*	100.0	104.3	108.9	110.5	106.0	109.6	112.6	113.5	114	115
	growth in %	**2.2**	**4.3**	**4.4**	**1.5**	**-4.1**	**3.4**	**2.8**	**0.8**	**0.3**	**1.4**
Import intensity [2]	*average of 2005=100*	100.0	107.8	110.1	110.0	103.0	111.1	115.8	115.8	114	115
	growth in %	**5.7**	**7.8**	**2.1**	**-0.1**	**-6.3**	**7.8**	**4.3**	**0.0**	**-1.5**	**0.7**
Export markets [3]	*average of 2005=100*	100.0	112.5	119.9	121.5	109.2	121.7	130.4	131.5	130	133
	growth in %	**8.0**	**12.5**	**6.6**	**1.3**	**-10.2**	**11.5**	**7.2**	**0.8**	**-1.3**	**2.2**
Export performance	*average of 2005=100*	100.0	101.3	105.9	107.6	105.6	110.2	113.7	117.7	118	119
	growth in %	**2.5**	**1.3**	**4.5**	**1.6**	**-1.8**	**4.3**	**3.2**	**3.5**	**0.1**	**0.8**
Real exports	*average of 2005=100*	100.0	114.0	126.9	130.7	115.3	134.2	148.3	154.8	153	157
	growth in %	**10.7**	**14.0**	**11.4**	**3.0**	**-11.8**	**16.4**	**10.6**	**4.3**	**-1.2**	**3.0**
1 / NEER	*average of 2005=100*	100.0	95.4	93.0	83.2	86.0	84.2	81.7	84.6	86	87
	growth in %	**-5.6**	**-4.6**	**-2.6**	**-10.5**	**3.4**	**-2.2**	**-2.9**	**3.6**	**2.0**	**0.3**
Prices on foreign markets	*average of 2005=100*	100.0	103.1	106.1	112.8	108.8	109.5	113.8	113.3	113	114
	growth in %	**3.1**	**3.1**	**2.9**	**6.3**	**-3.6**	**0.7**	**4.0**	**-0.4**	**-0.3**	**0.9**
Exports deflator	*average of 2005=100*	100.0	98.4	98.6	93.8	93.6	92.1	93.0	95.9	98	99
	growth in %	**-2.6**	**-1.6**	**0.2**	**-4.9**	**-0.3**	**-1.5**	**0.9**	**3.1**	**1.7**	**1.2**
Nominal exports	*average of 2005=100*	100.0	112.2	125.1	122.7	107.7	123.7	138.0	148.5	149	155
	growth in %	**7.7**	**12.2**	**11.6**	**-2.0**	**-12.2**	**14.8**	**11.6**	**7.6**	**0.4**	**4.2**

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

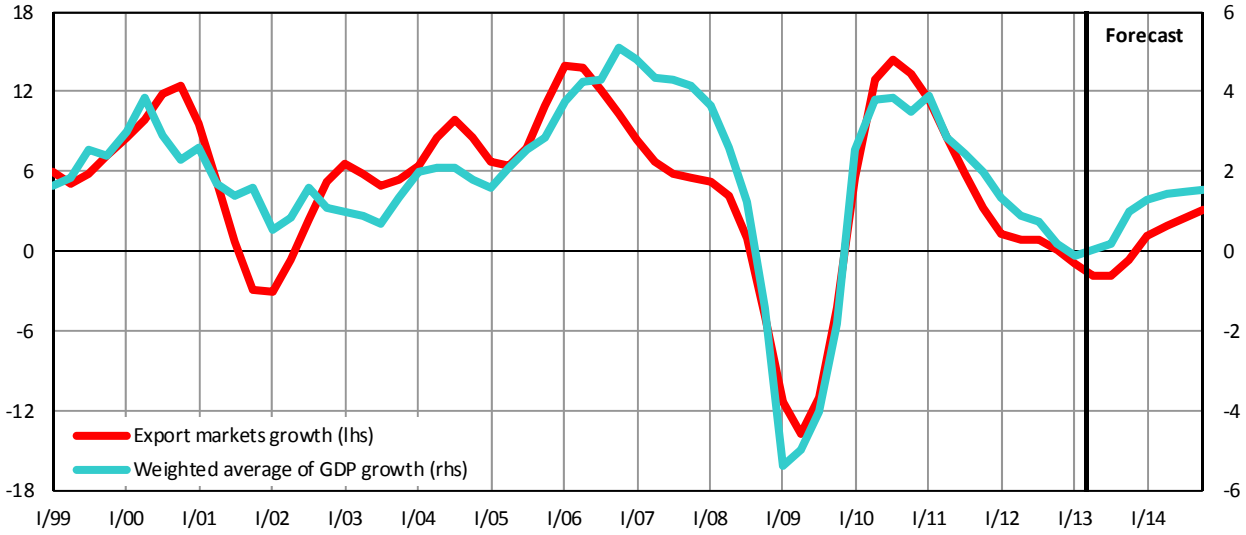
Table C.4.4: **Decomposition of Exports of Goods** – quarterly

		2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2 Estimate	2013 Q3 Forecast	2013 Q4 Forecast
GDP [1]	*average of 2005=100*	113.5	113.5	113.8	113.3	113.3	114	114	114
	growth in %	**1.3**	**0.9**	**0.7**	**0.2**	**-0.1**	**0.0**	**0.2**	**1.0**
Import intensity [2]	*average of 2005=100*	115.3	116.2	116.2	115.6	114.4	114	114	114
	growth in %	**0.0**	**0.0**	**0.1**	**0.0**	**-0.8**	**-1.8**	**-1.9**	**-1.5**
Export markets [3]	*average of 2005=100*	130.9	131.9	132.2	131.0	129.6	130	130	130
	growth in %	**1.3**	**0.9**	**0.8**	**0.2**	**-0.9**	**-1.8**	**-1.8**	**-0.6**
Export performance	*average of 2005=100*	121.6	118.4	112.5	118.4	116.0	120	114	120
	growth in %	**6.1**	**2.3**	**2.5**	**3.2**	**-4.6**	**1.6**	**1.7**	**1.7**
Real exports	*average of 2005=100*	159.1	156.2	148.7	155.1	150.3	156	149	157
	growth in %	**7.5**	**3.2**	**3.3**	**3.4**	**-5.5**	**-0.2**	**-0.1**	**1.1**
1 / NEER	*average of 2005=100*	84.1	84.8	84.8	84.8	85.5	87	87	87
	growth in %	**3.3**	**5.1**	**4.8**	**1.3**	**1.8**	**2.0**	**2.0**	**2.0**
Prices on foreign markets	*average of 2005=100*	113.6	113.5	113.1	113.0	112.9	113	113	113
	growth in %	**0.7**	**-0.7**	**-1.2**	**-0.6**	**-0.6**	**-0.2**	**-0.2**	**0.0**
Exports deflator	*average of 2005=100*	95.5	96.3	96.0	95.9	96.6	98	98	98
	growth in %	**4.0**	**4.3**	**3.5**	**0.7**	**1.1**	**1.8**	**1.8**	**2.0**
Nominal exports	*average of 2005=100*	152.0	150.5	142.8	148.8	145.2	153	145	153
	growth in %	**11.8**	**7.7**	**7.0**	**4.1**	**-4.4**	**1.6**	**1.7**	**3.1**

See notes to Table C.4.3.

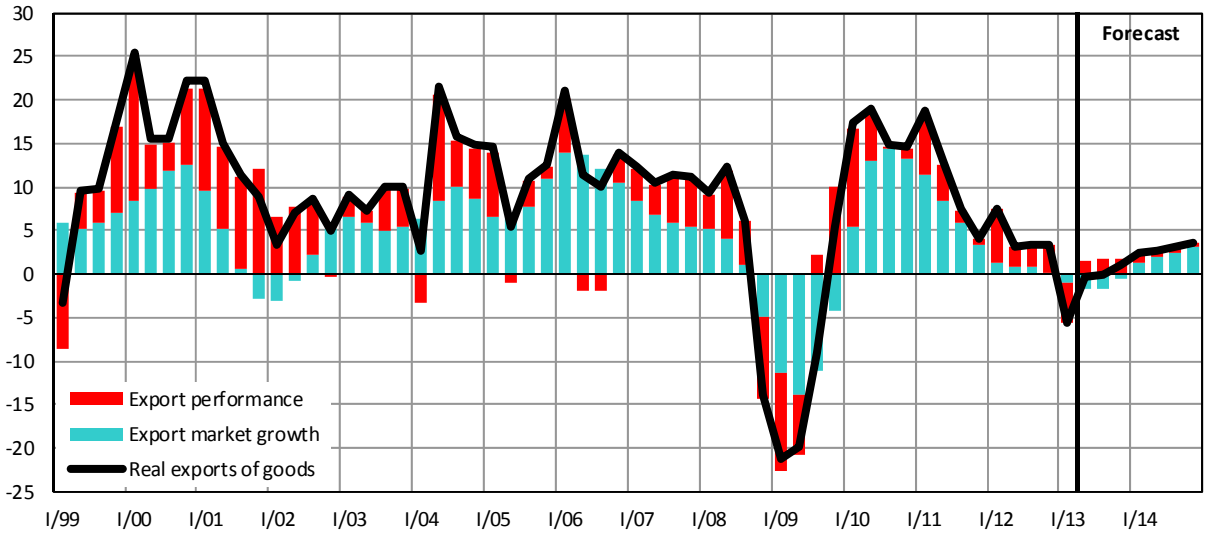
Graph C.4.5: **GDP and Imports of Goods in Main Partner Countries**

YoY growth, in %



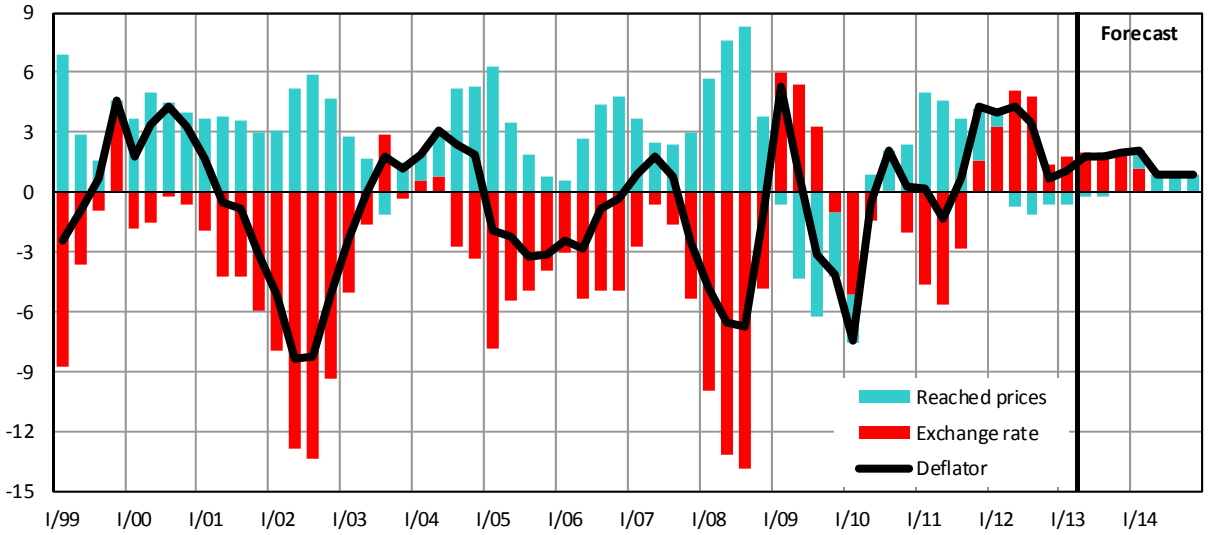
Graph C.4.6: **Real Exports of Goods**

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
									Prelim.	*Forecast*	*Forecast*
Slovenia	*PPS*	**19 700**	**20 700**	**22 100**	**22 700**	**20 300**	**20 500**	**21 000**	**21 000**	**20 800**	**21 100**
	EA12=100	79	79	80	83	79	77	77	76	75	74
Czech Republic	*PPS*	**17 800**	**18 900**	**20 700**	**20 200**	**19 400**	**19 500**	**20 100**	**20 200**	**20 200**	**20 700**
	EA12=100	72	73	75	74	75	73	73	73	72	72
Slovakia	*PPS*	**13 500**	**15 000**	**16 900**	**18 100**	**17 100**	**17 900**	**18 500**	**19 200**	**19 700**	**20 400**
	EA12=100	55	57	62	66	66	67	68	69	70	71
Portugal	*PPS*	**17 900**	**18 700**	**19 600**	**19 500**	**18 800**	**19 700**	**19 500**	**19 200**	**19 000**	**19 500**
	EA12=100	72	72	72	71	73	74	71	69	68	68
Lithuania	*PPS*	**12 300**	**13 600**	**15 500**	**16 100**	**13 600**	**14 900**	**16 600**	**17 800**	**18 800**	**19 800**
	EA12=100	49	52	56	59	53	56	60	64	67	69
Greece	*PPS*	**20 400**	**21 800**	**22 500**	**23 100**	**22 100**	**21 200**	**19 900**	**19 200**	**18 700**	**19 100**
	EA12=100	82	84	82	84	86	79	72	69	67	67
Estonia	*PPS*	**13 800**	**15 600**	**17 500**	**17 200**	**14 700**	**15 500**	**16 900**	**17 500**	**18 300**	**19 400**
	EA12=100	56	60	64	63	57	58	62	63	66	68
Poland	*PPS*	**11 500**	**12 300**	**13 600**	**14 100**	**14 200**	**15 300**	**16 200**	**16 800**	**17 300**	**17 900**
	EA12=100	46	47	50	51	55	57	59	61	62	63
Hungary	*PPS*	**14 200**	**14 900**	**15 400**	**16 000**	**15 300**	**15 900**	**16 500**	**16 800**	**17 100**	**17 600**
	EA12=100	57	57	56	58	59	59	60	61	61	62
Latvia	*PPS*	**11 100**	**12 500**	**14 300**	**14 600**	**12 700**	**13 200**	**14 700**	**15 900**	**16 900**	**17 900**
	EA12=100	45	48	52	53	49	49	54	57	60	63

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

EA12=100

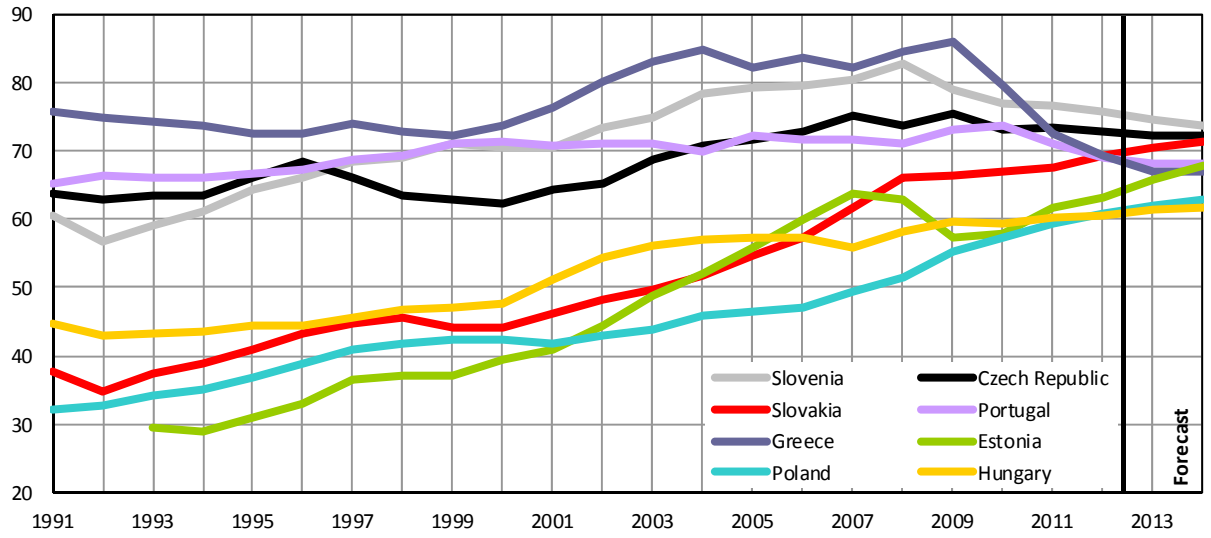
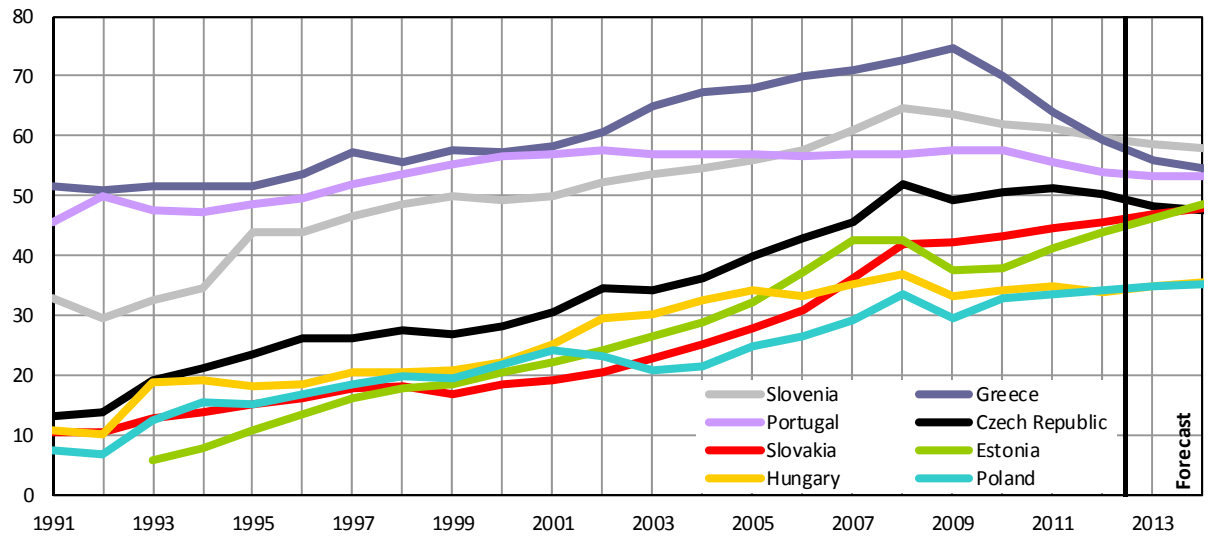


Table C.5.2: **GDP p.c. – using current exchange rates**

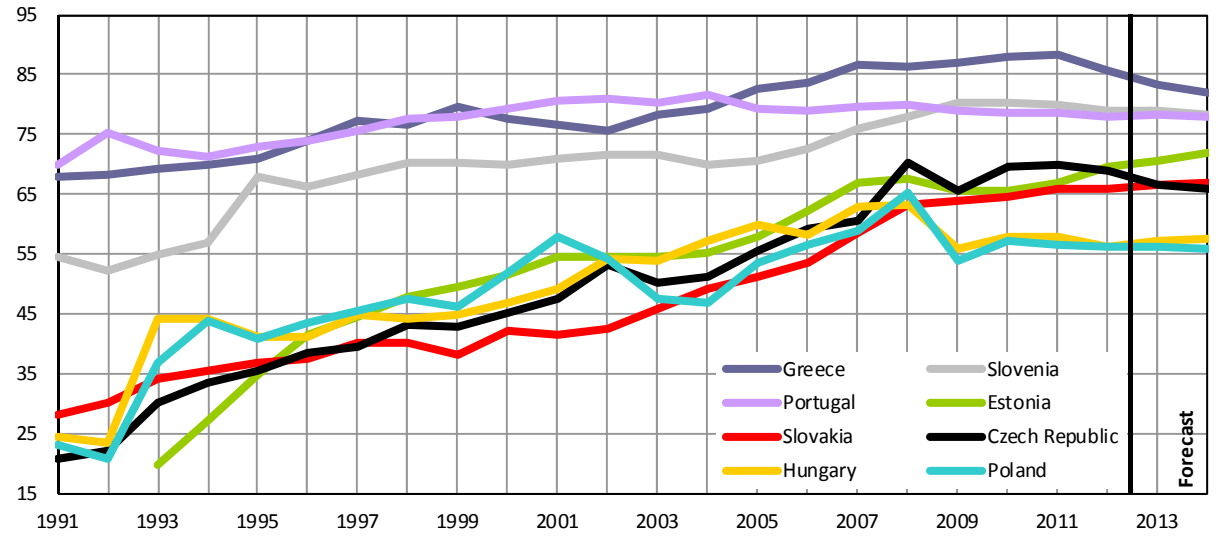
			2005	2006	2007	2008	2009	2010	2011	2012 Prelim.	2013 Forecast	2014 Forecast
Slovenia		*EUR*	**14 400**	**15 500**	**17 100**	**18 400**	**17 400**	**17 400**	**17 600**	**17 200**	**17 100**	**17 200**
		EA12=100	56	58	61	65	63	62	61	60	59	58
	Comparative price level	*EA12=100*	**71**	**73**	**76**	**78**	**80**	**80**	**80**	**79**	**79**	**78**
Greece		*EUR*	**17 400**	**18 700**	**19 900**	**20 800**	**20 500**	**19 600**	**18 500**	**17 200**	**16 300**	**16 300**
		EA12=100	68	70	71	73	75	70	64	59	56	55
	Comparative price level	*EA12=100*	**83**	**84**	**87**	**86**	**87**	**88**	**88**	**86**	**83**	**82**
Portugal		*EUR*	**14 600**	**15 200**	**16 000**	**16 200**	**15 900**	**16 300**	**16 100**	**15 600**	**15 500**	**15 800**
		EA12=100	57	57	57	57	58	58	56	54	53	53
	Comparative price level	*EA12=100*	**79**	**79**	**80**	**80**	**79**	**78**	**78**	**78**	**78**	**78**
Czech Republic		*EUR*	**10 200**	**11 500**	**12 800**	**14 800**	**13 500**	**14 300**	**14 800**	**14 500**	**14 000**	**14 200**
		EA12=100	40	43	46	52	49	51	51	50	48	48
	Comparative price level	*EA12=100*	**56**	**59**	**61**	**70**	**66**	**70**	**70**	**69**	**67**	**66**
Slovakia		*EUR*	**7 100**	**8 300**	**10 200**	**11 900**	**11 600**	**12 100**	**12 800**	**13 200**	**13 700**	**14 200**
		EA12=100	28	31	36	42	42	43	44	46	47	48
	Comparative price level	*EA12=100*	**51**	**54**	**59**	**63**	**64**	**65**	**66**	**66**	**67**	**67**
Estonia		*EUR*	**8 300**	**10 000**	**12 000**	**12 100**	**10 300**	**10 700**	**11 900**	**12 700**	**13 500**	**14 500**
		EA12=100	32	37	43	42	37	38	41	44	46	49
	Comparative price level	*EA12=100*	**58**	**62**	**67**	**68**	**65**	**66**	**67**	**70**	**71**	**72**
Lithuania		*EUR*	**6 300**	**7 400**	**8 900**	**10 100**	**8 400**	**8 900**	**10 200**	**11 000**	**11 700**	**12 500**
		EA12=100	25	28	32	36	31	32	35	38	40	42
	Comparative price level	*EA12=100*	**50**	**53**	**56**	**61**	**58**	**57**	**58**	**59**	**60**	**61**
Latvia		*EUR*	**5 800**	**7 200**	**9 600**	**10 500**	**8 600**	**8 600**	**9 800**	**10 900**	**11 700**	**12 500**
		EA12=100	23	27	34	37	32	31	34	38	40	42
	Comparative price level	*EA12=100*	**50**	**56**	**65**	**69**	**64**	**62**	**64**	**66**	**66**	**67**
Hungary		*EUR*	**8 800**	**8 900**	**9 900**	**10 500**	**9 100**	**9 700**	**10 000**	**9 800**	**10 200**	**10 600**
		EA12=100	34	33	35	37	33	34	35	34	35	36
	Comparative price level	*EA12=100*	**60**	**58**	**63**	**63**	**56**	**58**	**58**	**56**	**57**	**58**
Poland		*EUR*	**6 400**	**7 100**	**8 200**	**9 500**	**8 100**	**9 200**	**9 600**	**9 900**	**10 100**	**10 400**
		EA12=100	25	27	29	33	30	33	33	34	35	35
	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**

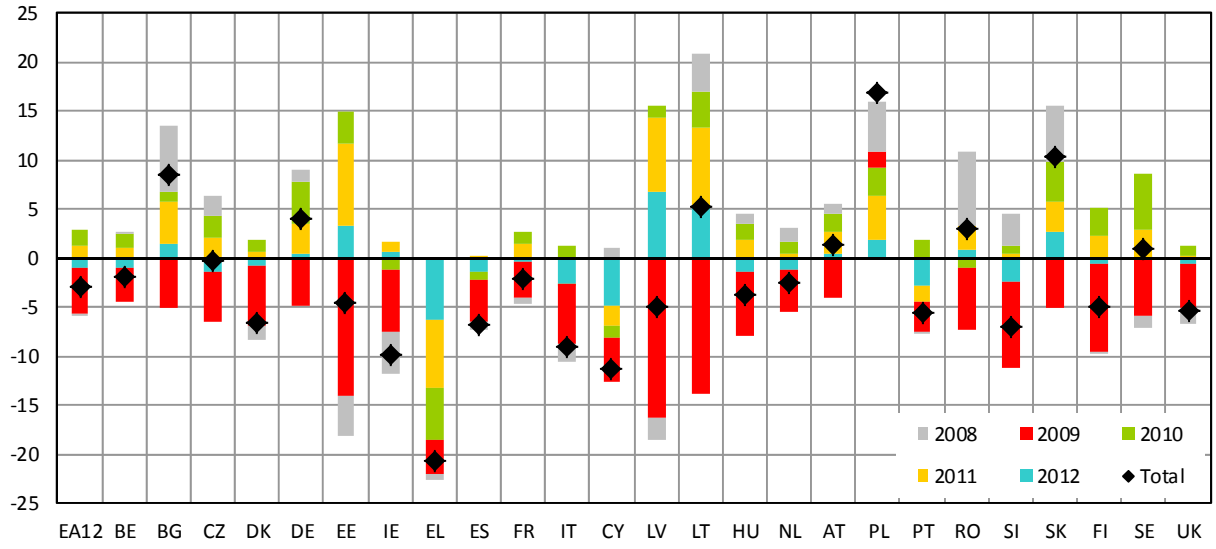
EA12=100



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



Graph C.5.4: **Change in real GDP per capita during 2008–2012**
growth in %



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