Macroeconomic Forecast

Czech Republic

July 2011

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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 2012) and for certain indicators an outlook for another 2 years (i.e. until 2014). As a rule, it is published in the second half of the first month of each quarter and is also available on the Ministry of Finance website at:

www.mfcr.cz/macroforecast

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

macroeconomic.forecast@mfcr.cz

Note:

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

List of Abbreviations:

const.pr. .... constant prices
CNB.. Czech National Bank
CPI .... consumer prices index
curr.pr... current prices
EA12 .... euro zone containing 12 countries
EMU.. Economic and Monetary Union
ESA 95... European methodology of national accounting
EU27 .... EU countries containing 27 countries
GDP.. gross domestic product
GFS .... Government Finance Statistics methodology of the IMF
HICP... harmonised index of consumer prices
IMF .... International Monetary Fund
LFS .... Labour Force Survey
NFC... non-fuel commodities
OECD .... Organisation for Economic Co-operation and Development
p.p. .... percentage point
prelim. .. .. preliminarily

Basic Terms:

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

Cut-off date for data sources: **June 24, 2011**.

Summary of the Forecast

In 2010, the Czech economy grew by 2.3%. GDP growth, driven especially by foreign trade and, to a lesser extent, also by gross capital formation, could accelerate moderately to 2.5% this year. Economic output could grow at this same rate in 2012, as well.

Compared to the Macroeconomic Forecast of April 2011, GDP growth is projected to be 0.6 p.p. higher for this year. This adjustment reflects the development in the first quarter of this year, which was better than expected.

We expect growth in domestic consumer prices for 2011 of around 2.3%. The inflation rate in 2012 and 2013 will be significantly influenced by the planned VAT adjustments.

We expect the situation on the labour market to improve gradually. After two years of decline, employment should increase by 0.2% in 2011 and by 0.4% in 2012. The unemployment rate, which evidently peaked in 2010 (average for the whole year), should decrease to 6.7% this year. In 2012, the unemployment rate may even fall to 6.4%. We expect the growth dynamics of the wage bill to gradually recover, possibly increasing by 2.3% this year and by 4.4% in 2012.

The current account to GDP ratio should remain at a sustainable level. The forecast, however, is subject to a higher level of uncertainty in connection with the recent data revision for 2009 and 2010.

Risks for the Czech economy are linked especially to the state of public budgets in several countries at the periphery of the euro zone.

Table: **Main Macroeconomic Indicators**

		2008	2009	2010	2011	2012	2011	2012
					Forecast		Previous forecast	
Gross domestic product	growth in %, const.pr.	2.5	-4.1	2.3	2.5	2.5	1.9	2.3
Consumption of households	growth in %, const.pr.	3.6	-0.2	0.2	0.5	2.0	0.7	1.9
Consumption of government	growth in %, const.pr.	1.1	2.6	-0.1	-2.4	-2.1	-3.4	-2.5
Gross fixed capital formation	growth in %, const.pr.	-1.5	-7.9	-3.1	1.9	3.2	0.7	3.2
Cont. of foreign trade to GDP growth	p.p., const.pr.	1.3	-0.6	1.0	1.9	1.1	1.8	1.1
GDP deflator	growth in %	1.8	2.5	-1.2	-0.8	2.6	-0.5	2.7
Average inflation rate	%	6.3	1.0	1.5	2.3	3.5	2.1	3.2
Employment (LFS)	growth in %	1.6	-1.4	-1.0	0.2	0.4	0.2	0.5
Unemployment rate (LFS)	average in %	4.4	6.7	7.3	6.7	6.4	6.9	6.5
Wage bill (domestic concept)	growth in %, curr.pr.	8.7	0.0	1.2	2.3	4.4	2.1	4.4
Current account / GDP	%	-0.6	-3.2	-3.8	-3.9	-3.6	-4.0	-3.4
Assumptions:								
Exchange rate CZK/EUR		24.9	26.4	25.3	24.2	23.5	24.1	23.5
Long-term interest rates	% p.a.	4.6	4.7	3.7	4.0	4.3	4.1	4.3
Crude oil Brent	USD/barrel	98	62	80	110	112	95	96
GDP in Eurozone (EA-12)	growth in %, const.pr.	0.3	-4.1	1.7	1.9	2.0	1.7	2.0

A Forecast Assumptions

*The forecast was made on the basis of data known as of **June 24, 2011**. No political decisions, newly released statistics, or world financial or commodity market developments could be taken into account after this date.*

Data from the previous forecast of April 2011 are indicated by italics. Data in the tables relating to the years 2013 and 2014 are calculated by extrapolation, outlining only the direction of possible developments, and as such are not commented upon in the following text.

Sources of tables and graphs: Czech Statistical Office (CZSO), Czech National Bank (CNB), Ministry of Finance of the Czech Republic, Eurostat, IMF, OECD, European Central Bank (ECB), The Economist, our own calculations.

A.1 External Environment

Economic output

Although the world economy continues to recover, as compared to the April forecast it is burdened with greater uncertainties. Growth remains strong in China and India, but there are indications of overheating and central banks are turning to stricter currency policies due to rising inflation. By contrast, the growth dynamics in developed economies continue to be weak. The US economy has already slowed somewhat, while Japan, influenced by the effects of the earthquake, slipped into recession in the first quarter of 2011. Thus far, optimism is persisting in the German economy. In the euro zone as well as the US, fears of a possible debt crisis are growing. Very high commodity prices were increasing further from April to May.

QoQ growth of the **US economy** slowed from 0.8% in the fourth quarter of 2010 to 0.5% in the first quarter of 2011. The data on newly created job positions were also disappointing. The repeated growth of the unemployment rate from 8.8% in March to 9.1% in May has reflected in consumer spending. It appears that growth, for the time being, is not self-supporting but depends to a significant extent on government stimulus. The stagnating real estate market attests to the fact that the effects of the boom and subsequent slump on the real estate market have by no means been overcome. Of course, it must be added that many forecasts (including that of the Fed) predict that the economy will again pick up speed in the year's second half.

The economy is being stimulated by the central bank, which continues to hold the band for the key refinancing rate at 0–0.25%. In June, however, the second stage of quantitative easing (QE2) is ending and is not expected to continue. The national debt is at 100% of GDP, and several member states are on the verge of bankruptcy. This results in a difficult decision-making process regarding the priorities of economic policy. At present, additional government stimuli are not politically viable. A stalemate between the government and opposition has developed. The latter is demanding spending cuts, upon which it is conditioning its agreement with the increase of the national debt ceiling. Whilst the prevailing opinion is that an agreement will be reached by the beginning of August, nothing can be ruled out in an unusually embittered domestic political situation.

Euro zone GDP recorded unexpectedly strong QoQ growth of 0.8% *(versus 0.5%)* in the first quarter of 2011. The greatest contribution to this strong growth came from the two largest euro zone countries. GDP rose QoQ by 1.5% in Germany and 1.0% in France. However, development in the euro zone is very uneven. Portugal is in recession, Greece experienced a sharp downturn, the development in Ireland is uncertain, and the large economies of Spain and Italy will probably stagnate this year as well.

Similar discrepancies can be found in unemployment levels. It remains at a high level overall in the EA12, stagnating in April at 9.9% for the third month in a row. At the same time, it is constantly falling in Germany, reaching 6.1% in April. At the other end of the scale is Spain, where unemployment was 20.7% in March and April (the unemployment rate in the age category of up to 25 years is at 44%). In Ireland unemployment is stagnating at 14.7%, while in Slovakia it fell slightly to 13.9%.

For the present, the relatively positive picture of euro zone growth hinges especially on the extraordinarily strong German economy, which is experiencing a strong export boom and unusually strong household consumption. Neither the development of industrial production or of new orders as yet is indicating a significant export deceleration, but rather a gradual reduction. The development of the important Chinese market and the high prices of raw materials present some uncertainty. In addition, the question remains what impact the decision to abandon nuclear energy will have.

The programme of most euro zone countries is fiscal restriction and consolidation. No country in the EA12 has a budget surplus, and the budget deficit of EA

countries is estimated at 4.3% of GDP in 2011. The ECB raised its main rate by 25 basis points to 1.25% in April and indicated a possible rate increase in July, although it cannot be ruled out that it would change its opinion following a drop in the prices of commodities. The ECB's currency policy faces a difficult question of what common rate to establish for both the more powerful economy of the euro zone's north, on the one hand, and the stagnating southern wing, on the other.

The main issue of the euro zone's present economic policy is to resolve the debt crisis in Greece and prevent its worsening in other member states. The protracted and sometimes contradictory decisions taken so far present no great cause for optimism.

The **Polish economy** grew by 1.0% QoQ in the first quarter of 2011 (*as had been estimated*). The unemployment rate stagnated at 9.3% in April. Infrastructure investments in preparation for the European Football Championship have been a support to the economy. The deepening of the public finance deficit to 7.9% of GDP in 2010 led to the initiation of austerity measures and a VAT increase. The government aims to reduce the deficit to 5.6% of GDP this year and to 2.9% (i.e. below the excessive deficit procedure limit) in 2012.

Driven mainly by exports, the **Slovak economy** grew dynamically by 1.0% (*versus 0.6%*) QoQ in the first quarter. Industrial production increased YoY by 8.3% in April 2011. The economy is afflicted by high unemployment, which reached 13.9% in April and is the third highest in the euro zone. In combination with a drop in real wages caused by high inflation (4.2% YoY in May), this situation caused household consumption to decline. The public finance deficit deteriorated in 2010 to 7.9% of GDP, and the government thus has prepared consolidation measures to reduce it to 4% in 2012.

Graph A.1.1: **Growth of GDP in EA12**
QoQ growth in % (adjusted for seasonal and working day effects)
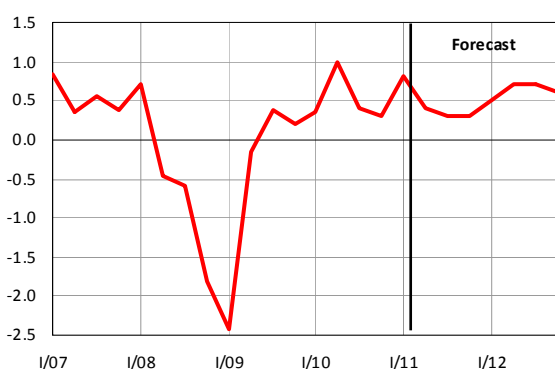
We have lowered our growth estimate for the US economy to 2.8% (*versus 3.0%*). For 2012, our estimate remains at 3.1%.

The GDP growth forecast for the EA12 economy for 2011 has been increased to 1.9% (*versus 1.7%*), while leaving it at 2.0% for 2012. Forecast risks are connected mainly to the debt crisis on the euro zone's periphery.

Commodity prices

Influenced by growth expectations, commodity prices reached their maxima in all main segments of the market at the turn of April to May. In recent weeks, however, most prices have shown a certain correction.

The causes for price growth are the same as those mentioned in the previous forecast: rapid growth in the developing world is putting pressure on limited resources, investments into commodity derivatives are booming (also in connection with the weak dollar), and geopolitical unrest persists in many oil-producing countries.

The average price for Brent crude in the second quarter of 2011 evidently reached USD 115 per barrel (*versus USD 95*), peaking at USD 123 in April. At the same time, Brent has an unusually high price spread against WTI (West Texas Intermediate) crude, which is evidently caused by the loss of Libyan production.

Graph A.1.2: **Dollar Prices of Brent Crude Oil**
in USD per barrel
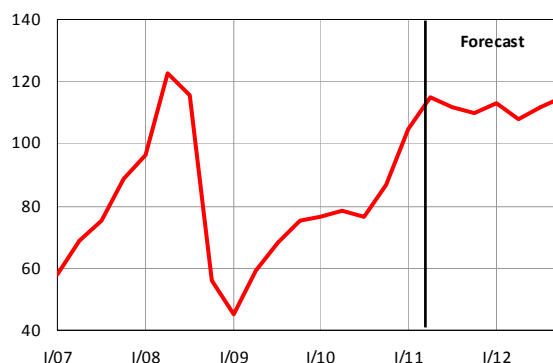
We thus had to correct the oil price estimate for 2011 significantly upwards to USD 110/barrel (*versus USD 95*), the risks now being downward deviations. Fears of deceleration in global growth and, for example, the increase in oil inventories in the US are contributing factors. Fears that supplies might be interrupted abated even before the interventions by the International Energy Agency (IEA) and US government, which promised to release strategic reserves. Similarly, Saudi Arabia promised to increase supplies in order to compensate for the situation in

Libya. The termination of QE2 at the end of June also could contribute to a general drop in commodity prices, at least in the short term.

Global financial markets

The debt crisis on the euro zone's periphery struck with renewed force in the second quarter of this year. While Portugal requested financial aid from the EA/IMF (totalling EUR 78 billion), Greece again became the centre of attention of (among others) financial markets. The country was to be saved from the threat of bankruptcy by a financial injection in the record amount of EUR 110 billion. However, the EA/IMF bailout package from May 2010 is proving insufficient after only a year.

While the Greek government managed to decrease the general government deficit from an alarming 15.4% of GDP in 2009 to 10.5% of GDP last year through a series of austerity measures on both the income and expenditure sides, revenues and reductions in expenses still lag behind expectations. By contrast, the effects of fiscal restriction on economic activity in Greece surpassed expectations, in a negative sense. According to current Eurostat data, the YoY GDP decline was 7.7% in the first quarter of 2011, and in the final quarter of 2010 it was even 8.8%. Although GDP grew in the first quarter of 2011 (in seasonally adjusted data) by 0.8% QoQ, taking into account the further prepared austerity measures, whose acceptance is now also a condition for the release of an additional tranche from last year's bailout package, this probably does not yet represent a trend reversal.

Greece's problem continues to be high indebtedness of the government sector, which climbed from 127% of GDP in 2009 to 142% of GDP last year. The mere stabilisation of the debt-to-GDP ratio would require significant primary surpluses, even using relatively optimistic estimates for economic growth and interest rates.

Probably the most pressing problem that Greece currently (i.e. at the end of June) faces is connected to last year's financial aid from the EA/IMF. The bailout package was calculated with the expectation that Greece would be partly able to finance itself on capital markets already in 2012. As graph A.1.3 indicates, however, that yields of Greek 10-year bonds are reaching record high levels[1] and are considerably higher than they were in 2010. A similar picture of how

financial markets regard the state of Greek public finances is provided by CDS spreads as well as by a further series of rating downgrades of Greece in recent months (of all countries currently evaluated by the agency S&P, Greece has the worst rating). Hence, any notion of Greece's returning to the financial market already next year would be unrealistic.

Graph A.1.3: **Yields on 10Y government bonds**
in % p.a., monthly average
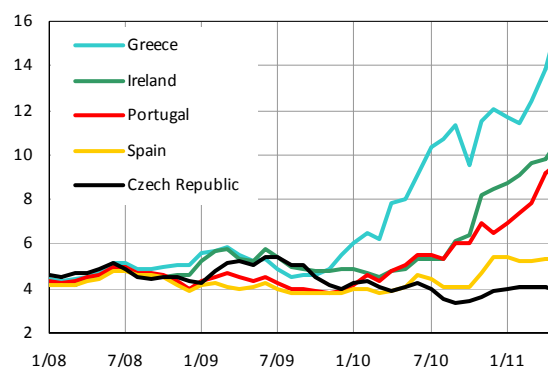
The issue of how to cover this financial deficit is currently being discussed. It is expected that Greece will obtain a portion of the funds through a massive programme for privatising state property, which could bring in up to EUR 50 billion in the course of the next several years. Another part would be supplied by euro zone countries in the form of conditional financial aid.

A potential agreement with private creditors (especially financial institutions) about a "rollover"[2] of Greek bonds also could provide partial relief to Greek public finances. The newly issued bonds would have longer maturities than the original (maturing) bonds.

The participation of private investors could of course prove problematic. Rating agencies have already announced that under certain conditions (especially if the involvement of investors were not completely voluntary) they would consider a "reprofiling" of Greek debt as a default. The ECB is taking a stand against the participation of private investors as well, fearing the consequences of a potential default and drawing attention to the possibility that financial infection may spread in this connection.

A decision about further aid to Greece should come sometime in July. Although some are of the opinion that any kind of additional aid to Greece would only delay the inevitable (i.e. default), "buying time" could also have its justifications, provided this time were

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[1] *The yields for Greek two-year bonds even exceeded the 30% mark in June.*

[2] *The payment of maturing bonds would be covered by the sale of new bonds.*

used for fiscal consolidation in certain countries and for strengthening the capital of banks. However, the much-needed stress tests of European banks are probably (again) not going to inspire much confidence in financial markets in light of the probability that at least one country of the euro zone may default. This is because the European stress tests do not take this possibility into account.

The impact of the potential default of a euro zone country would evidently not be limited to the financial sector (losses due to repricing of bonds, possible spread of the financial infection, etc.) but, due to the many mutual links between the financial sector and the real economy, could in time be reflected in economic activity as well. Considering the exposure of West European banks to the periphery of the euro zone, and taking into account the territorial structure of the Czech foreign trade, a shock in the form of a default could indirectly be reflected also in the domestic economy.

Of course, it is practically impossible to predict when and how the consequences of a potential default would specifically influence the Czech economy. The only certainty is that the external environment will continue to present a significant source of risks for the domestic economy. These risks need to be closely monitored.

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

	2003	2004	2005	2006	2007	2008	2009	2010 Prelim.	2011 Forecast	2012 Forecast
EU27	1.3	2.5	2.0	3.3	3.0	0.5	-4.3	1.8	2.0	2.1
EA12	0.7	2.2	1.6	3.1	2.8	0.3	-4.1	1.7	1.9	2.0
Germany	-0.2	1.2	0.8	3.4	2.7	1.0	-4.7	3.6	3.2	2.2
France	0.9	2.5	1.8	2.5	2.3	-0.1	-2.7	1.5	2.0	1.9
United Kingdom	2.8	3.0	2.2	2.8	2.7	-0.1	-4.9	1.3	1.5	2.0
Austria	0.8	2.5	2.5	3.6	3.7	2.2	-3.9	2.0	2.7	2.0
USA	2.5	3.6	3.1	2.7	1.9	0.0	-2.6	2.9	2.8	3.1
Hungary	4.0	4.5	3.2	3.6	0.8	0.8	-6.7	1.2	2.6	3.1
Poland	3.9	5.3	3.6	6.2	6.8	5.1	1.7	3.8	4.2	4.3
Slovakia	4.8	5.1	6.7	8.5	10.5	5.8	-4.8	4.0	3.4	3.9
Czech Republic	3.6	4.5	6.3	6.8	6.1	2.5	-4.1	2.3	2.5	2.5

Graph A.1.4: **Real Gross Domestic Product**
YoY growth in %, nsa data
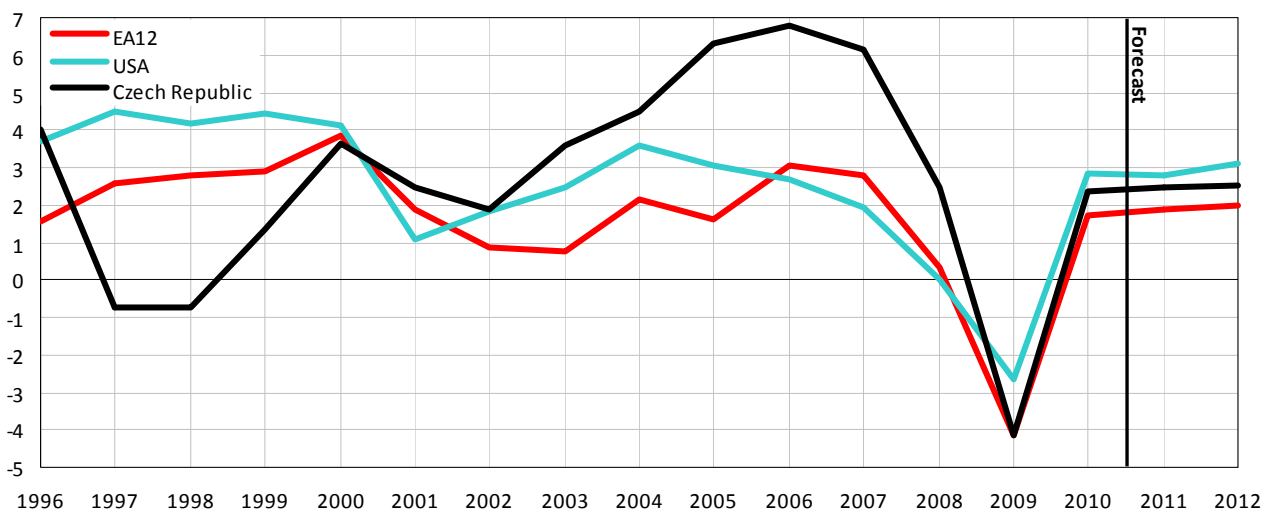
Table A.1.2: **Real Gross Domestic Product** – quarterly
growth in %, sa data

| | | **2010** | | | | **2011** | | | |
		Q1	Q2	Q3	Q4	Q1	Q2 *Forecast*	Q3 *Forecast*	Q4 *Forecast*
EU27	*QoQ*	**0.4**	**1.0**	**0.5**	**0.2**	**0.8**	**0.5**	**0.4**	**0.3**
	YoY	0.6	2.0	2.2	2.1	2.5	2.0	1.9	2.0
EA12	*QoQ*	**0.4**	**1.0**	**0.4**	**0.3**	**0.8**	**0.4**	**0.3**	**0.3**
	YoY	0.8	2.0	2.0	1.9	2.5	1.9	1.8	1.8
Germany	*QoQ*	**0.5**	**2.1**	**0.8**	**0.4**	**1.5**	**0.5**	**0.3**	**0.3**
	YoY	2.3	3.9	3.9	3.8	4.8	3.2	2.7	2.6
France	*QoQ*	**0.3**	**0.5**	**0.4**	**0.3**	**1.0**	**0.4**	**0.4**	**0.3**
	YoY	1.2	1.6	1.7	1.5	2.2	2.1	2.1	2.1
United Kingdom	*QoQ*	**0.3**	**1.1**	**0.7**	**-0.5**	**0.5**	**0.4**	**0.5**	**0.5**
	YoY	-0.3	1.6	2.6	1.6	1.8	1.1	0.9	1.9
Austria	*QoQ*	**0.0**	**1.0**	**1.1**	**0.9**	**1.0**	**0.2**	**0.2**	**0.3**
	YoY	0.1	2.0	2.5	3.0	4.1	3.2	2.3	1.7
USA	*QoQ*	**0.9**	**0.4**	**0.6**	**0.8**	**0.5**	**0.7**	**0.8**	**0.9**
	YoY	2.4	3.0	3.2	2.8	2.4	2.7	2.8	2.9
Hungary	*QoQ*	**1.4**	**0.1**	**0.8**	**0.5**	**0.7**	**0.6**	**0.7**	**0.7**
	YoY	-0.7	0.7	2.3	2.8	2.1	2.6	2.5	2.7
Poland	*QoQ*	**0.6**	**1.1**	**1.2**	**0.8**	**1.0**	**1.0**	**1.2**	**1.0**
	YoY	3.0	3.5	4.3	3.8	4.2	4.1	4.1	4.3
Slovakia	*QoQ*	**0.7**	**0.8**	**0.9**	**0.9**	**1.0**	**0.8**	**0.7**	**0.8**
	YoY	4.4	4.1	3.8	3.3	3.6	3.6	3.4	3.3
Czech Republic	*QoQ*	**0.8**	**0.6**	**0.8**	**0.5**	**0.9**	**0.3**	**0.6**	**0.5**
	YoY	1.2	2.3	2.6	2.7	2.8	2.5	2.3	2.3

Graph A.1.5: **Real Gross Domestic Product** – Central European economies
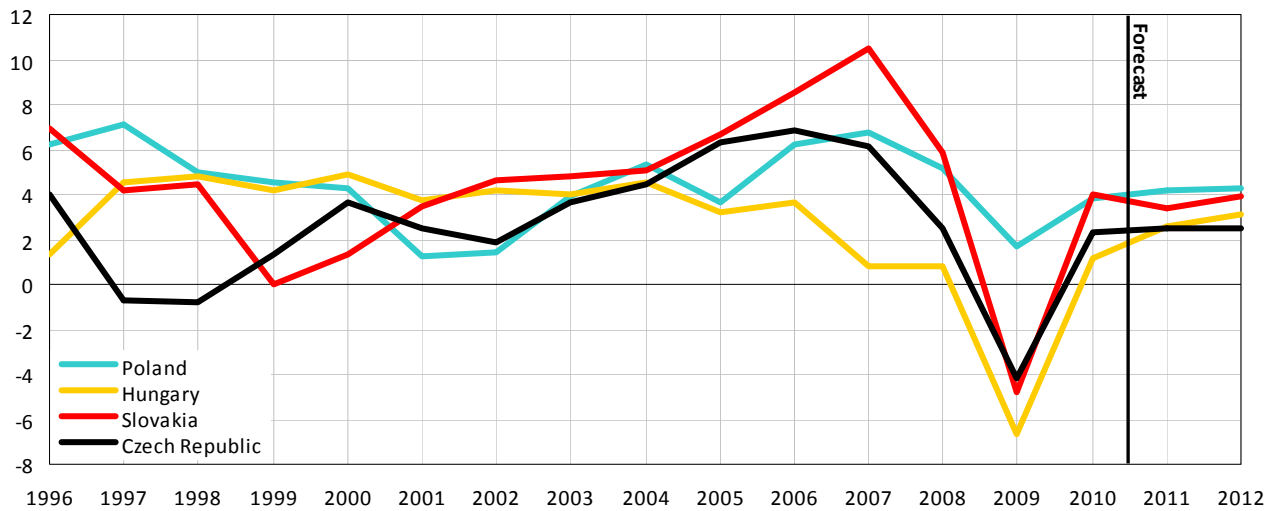*YoY growth in %, nsa data*

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

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
										Forecast	*Forecast*
Crude oil Brent	*USD/barrel*	**28.8**	**38.3**	**54.4**	**65.4**	**72.7**	**97.7**	**61.9**	**79.7**	**110**	**112**
	growth in %	14.0	33.0	42.0	20.1	11.2	34.4	-36.7	28.7	38.7	1.4
Crude oil Brent index *(in CZK)*	*2005=100*	**62.4**	**75.6**	**100.0**	**113.4**	**113.3**	**127.7**	**90.5**	**116.8**	**148**	**150**
	growth in %	-1.7	21.1	32.3	13.4	-0.1	12.7	-29.1	29.1	26.5	1.4
Wheat	*USD/t*	**146.1**	**156.9**	**152.4**	**191.7**	**255.2**	**326.0**	**223.6**	**223.7**	**.**	**.**
	growth in %	-1.6	7.3	-2.8	25.8	33.1	27.7	-31.4	0.1	**.**	**.**
Wheat price index *(in CZK)*	*2005=100*	**113.0**	**110.5**	**100.0**	**118.7**	**142.0**	**152.1**	**116.7**	**117.1**	**.**	**.**
	growth in %	-15.2	-2.3	-9.5	18.7	19.6	7.1	-23.3	0.3	**.**	**.**

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

		2010				2011			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Forecast	*Forecast*	*Forecast*
Crude oil Brent	*USD/barrel*	**76.7**	**78.7**	**76.4**	**86.8**	**104.9**	**115**	**112**	**110**
	growth in %	70.4	33.2	11.7	15.7	36.8	46.1	46.6	26.7
Crude oil Brent index *(in CZK)*	*2005=100*	**109.9**	**121.4**	**112.9**	**121.3**	**143.2**	**148**	**148**	**149**
	growth in %	50.4	37.0	20.4	**20.5**	30.3	22.0	31.3	23.1
Wheat price	*USD/t*	**195.7**	**177.5**	**237.9**	**283.6**	**330.5**	**.**	**.**	**.**
	growth in %	-15.6	-28.4	13.9	38.1	68.9	**.**	**.**	**.**
Wheat price index *(in CZK)*	*2005=100*	**100.2**	**97.9**	**125.7**	**141.7**	**161.3**	**.**	**.**	**.**
	growth in %	-25.6	-26.4	22.9	43.8	60.9	**.**	**.**	**.**

## Graph A.1.6: **Dollar Prices of Oil**
USD/barrel
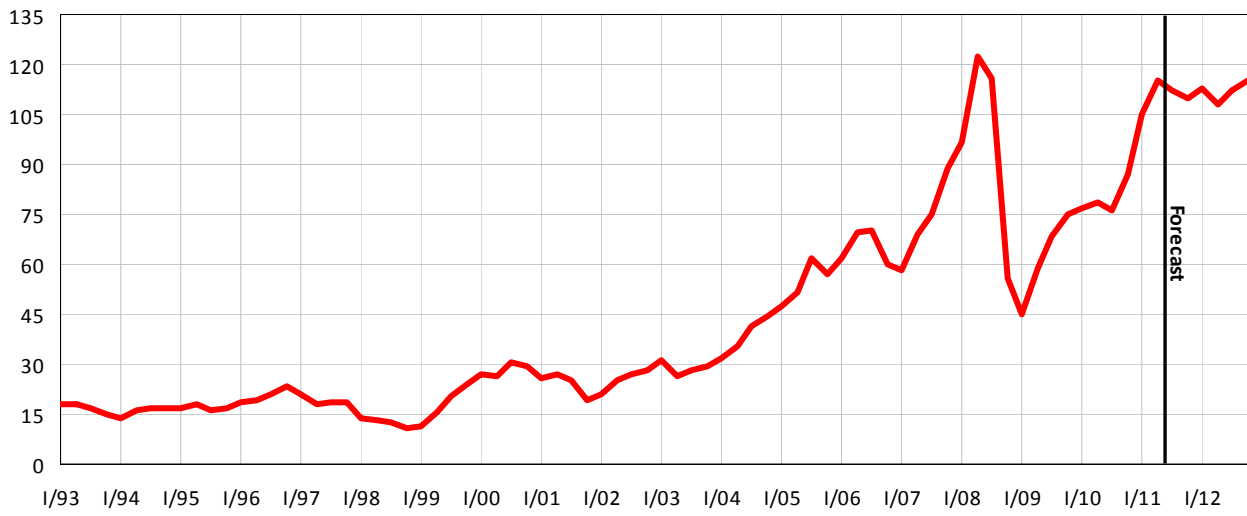
Graph A.1.7: **Koruna Indices of World Commodity Prices**
index 2005=100
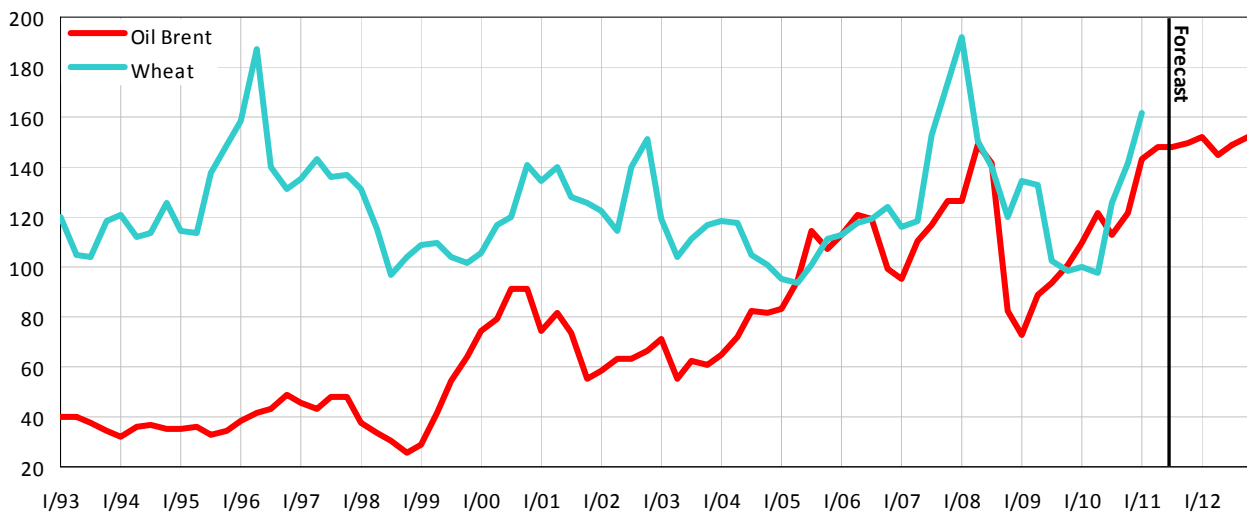
A.2   Fiscal Policy

Considering that the notification of the government deficit and debt is prepared and published on a semi-annual basis, the development described herein is based to a large extent on the latest issue of the Fiscal Outlook of the Czech Republic from May 2011.

Graph A.2.1: **Net Lending/Borrowing**
in % of GDP
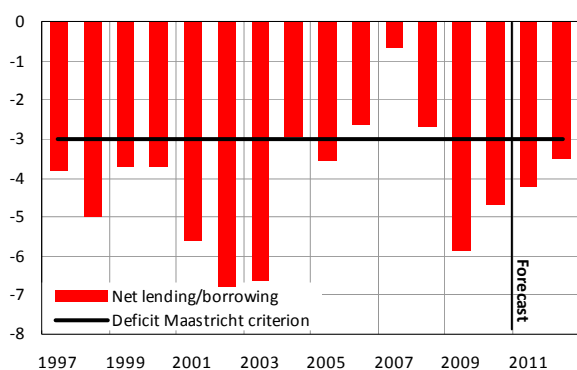
According to preliminary estimates of the CZSO, the **general government deficit** reached CZK 172.8 billion in 2010, which was 4.7% of GDP. Revenues recovered in comparison to 2009 following the period of stagnation and decline in 2008 and 2009. On the expenditures side, a whole range of measures resulted in a decline in government sector expenditures. These constituted operational savings in government administration (stagnation in the wage bill and a decline in intermediate consumption), as well as a decline in investment expenditures and subsidies to subjects outside the government sector.

Very positive development was evident for interest expenses, which grew only moderately despite relatively high debt dynamics. Interest rates have dropped in all issued maturities on the yield curve for government bonds. This reflects positive evaluation of the consolidation strategy being implemented.

Although last year's outcome appears relatively optimistic, some facts should be highlighted. Tax receipts were significantly influenced by legislative changes, e.g. by increasing VAT and excise rates. Moreover, data on the general government deficit for 2010 are still subject to uncertainty regarding the estimate of accrued tax revenue from corporate income tax. More reliable data will only be available in the October Macroeconomic Forecast and Fiscal Outlook.

The Ministry of Finance expects the deficit to decrease to CZK 157 billion in 2011, which represents 4.2% of

GDP. Compared with the estimates in the last Fiscal Outlook, this constitutes a slight worsening in absolute terms, but the ratio to GDP remains basically unchanged due to a higher estimate of nominal GDP.

In view of the data for the first quarter of 2011, it was necessary to reassess the estimate of government consumption, as the originally anticipated nominal decline of 2% turned out to be too optimistic. We now estimate a 1% decline in government expenditures on final consumption, which has a negative impact on the government balance. At the same time, the outlook for corporate income tax revenues has been worsened (see below). On the contrary, the VAT could develop more positively, as a result of higher GDP dynamics.

The presented economic estimate for 2011 thus assumes fiscal consolidation in the order of 0.5 p.p. After adjustments for cyclical effects and one-off factors, the fiscal effort amounts to 0.7 p.p. Compared with 2010, the revenue side will probably be strengthened by faster growth of some tax revenues, namely VAT, as the effect of the 2010 VAT rates increase should be – to a large extent – evident only this year. Moreover, the hike in the reduced VAT rate in 2012 will also play a role, as e.g. an effort to complete new constructions is expected.

On the contrary, the development in corporate income tax is highly uncertain. On one hand, the impact of accelerated depreciation, which was introduced as one of the counter-crisis measures in 2009, is fading away, but on the other, more aggressive tax optimization might be used and tax-deductible losses applied in the future.

Property taxes are recording sharp growth, due primarily to the impact of introducing a gift tax on emission allowances, which the government sector supplies free of charge to the private sector.

As in previous years, a substantial influx of money from European funds is expected for this year as well, possibly reaching historically record-breaking levels. These resources influence the balance only in the amount of national co-financing. Otherwise, they are also reflected on the expenditures side, mainly in the form of government investments.

Moderate growth will most likely be seen on the expenditure side in comparison to last year, due to the significant increase in investment transfers outside the sector. In this case, a more substantial inflow of

European funds to sectors other than the government is also expected, whereby public budgets can partly contribute to co-financing.

Another prominent factor is the risk for acceleration of interest costs from government debt in case of a worsening of market conditions. Considering the volatility of financial markets, this item presents a significant future risk for the state budget. In addition, we expect social transfers to grow moderately as well.

By contrast, the most significant decrease on the expenditure side is seen for personnel costs in public administration. Taking into account the preliminary data for the first quarter, the originally estimated decrease had to be partly reduced, which is the main reason for changing the government consumption estimate.

The risks to the presented forecast of the general government deficit for 2011 stem primarily from the estimate of gross fixed capital formation, as not even data from 2010 are fully reliable and are based to a considerable extent on estimates. As a result, the subsequent forecast for 2011 is of course made more difficult.

We estimate the **general government debt** at 41.2% of GDP for the end of 2011, which still remains relatively well below the Maastricht convergence criterion.

Graph A.2.2: **Government Debt**
in % of GDP
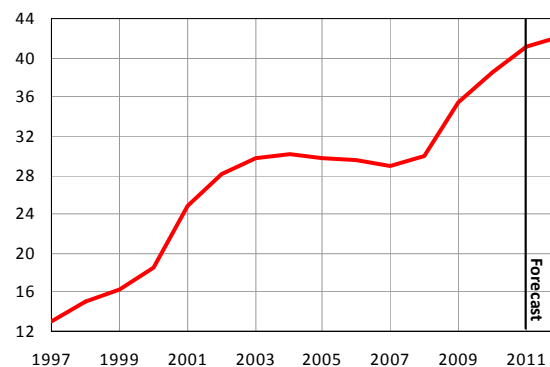
The medium-term budget outlook for 2012–2014 presumes further continuous improvements in the general government balance to 1.9% of GDP in 2014. The targeted deficit trajectory follows the aim to achieve balance in the general government sector in 2016.

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

		2003	2004	2005	2006	2007	2008	2009	2010 Prelim.	2011 Forecast	2012 Forecast
General government balance [1]	bill. CZK	-171	-83	-107	-85	-24	-100	-213	-173	-157	-139
	% GDP	-6.6	-3.0	-3.6	-2.6	-0.7	-2.7	-5.9	-4.7	-4.2	-3.5
Cyclical balance	% GDP	-0.5	-0.5	-0.2	0.4	1.1	0.8	-0.9	-0.8	-0.6	-0.6
Cyclically adjusted balance	% GDP	-6.1	-2.4	-3.4	-3.0	-1.8	-3.6	-4.9	-4.0	-3.6	-3.0
One-off measures	% GDP	-0.3	-0.7	-1.3	-0.2	-0.3	-0.1	0.3	0.0	-0.3	-0.3
Structural balance	% GDP	-5.9	-1.7	-2.1	-2.8	-1.5	-3.5	-5.3	-4.0	-3.3	-2.8
Fiscal effort [2]	percent. points	0.3	4.1	-0.4	-0.7	1.3	-2.0	-1.8	1.3	0.7	0.5
Interest expenditure	% GDP	1.1	1.2	1.2	1.1	1.1	1.1	1.3	1.4	1.7	1.7
Primary balance	% GDP	-5.2	-1.1	-1.2	-1.3	0.7	-1.6	-4.9	-3.3	-2.2	-1.6
Cyclically adjusted primary balance	% GDP	-4.7	-0.6	-1.0	-1.7	-0.4	-2.4	-4.0	-2.6	-1.6	-1.1
General government debt	bill. CZK	768	848	885	948	1 024	1 105	1 282	1 414	1 538	1 654
	% GDP	29.8	30.1	29.7	29.4	29.0	30.0	35.4	38.5	41.2	42.2
Change in debt-to-GDP ratio	percent. points	1.6	0.3	-0.4	-0.2	-0.5	1.0	5.4	3.2	2.7	0.9

Note: Government debt consists of the following financial instruments: currency and deposits, securities other than shares excluding financial derivatives and loans. Government debt means total gross debt at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government. The nominal value is considered to be an equivalent to the face value of liabilities. It is therefore equal to the amount that the government will have to refund to creditors at maturity.
[1] *Balance in EDP methodology, i.e. general government net lending (+)/borrowing (-) including interest derivates.*
[2] *Change in structural balance.*

A.3   Monetary Policy and Interest Rates

Monetary policy

The CNB's main policy objective is maintaining price stability. To achieve this, an **inflation-targeting** regime is used. By means of monetary instruments, the CNB influences total inflation so that the YoY increase in the CPI should not deviate from the medium-term inflationary target of 2% by more than ± 1 p.p. The main monetary policy instrument is the interest rate for **2W repo operations**, which remained at 0.75% in the second quarter of 2011.

In relation to price levels, the CNB also monitors developments in **interest-rate differentials** versus other world economies (EA, USA). The interest-rate differentials may significantly affect international capital flows and thus affect price levels in the individual countries through the exchange rate. At present, there are no important pressures from this perspective, especially due to the narrow spreads in monetary policy rates, which, as of the second quarter of 2011, remained at −0.50 p.p. between the Czech Republic and EMU and relative to the US at 0.50 to 0.75 p.p.

Interest rates

The average value for **3M PRIBOR** held at 1.2% (*in line with the forecast*) in the second quarter of 2011. For full 2011, it is predicted at 1.3% (*unchanged*), with a moderate increase expected during the second half of 2011. This should not be too substantial, however, and should have no fundamental impact on the real economy. In connection with the universally expected repo rate increase, we estimate 3M PRIBOR to average 2.1% (*versus 2.0%*) for 2012.

Graph A.3.1: **PRIBOR 3M**
in %
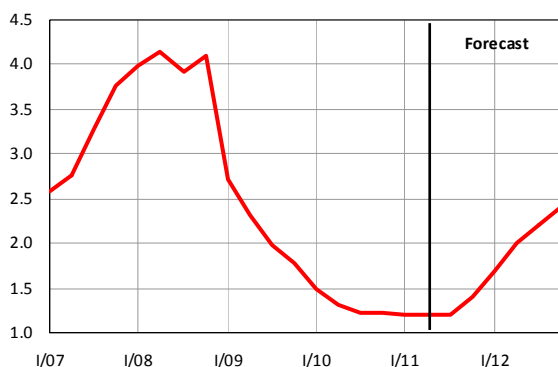
Long-term interest rates should rise moderately in coming months and thus reflect the economic recovery in progress. Given the Czech Republic's relatively positive current ratings (Moody's: A1, Standard & Poor's: A, Fitch Ratings: A1), further successful issues of government bonds can be expected. Faith in Czech fiscal policy is reflected in the negative spread versus average long-term rates in the euro zone (see Graph A.3.7).

Under certain circumstances, the debt crisis that has afflicted several euro zone countries (especially Greece) could lead to a risk premium increase, which would boost the costs for funding the state debt. Assuming this will not occur, we predict the average **yield to maturity for 10-year government bonds** to be 4.1% (*in line with the previous forecast*) in 2011 and 4.3% (*also unchanged*) for 2012. The spread between Czech and German bonds should decrease moderately.

The CNB has published its Financial Stability Report, in which it states that while the current position of the financial sector is good, the aforementioned fiscal development in the euro zone and other factors stemming from the global environment present certain risks. Stress tests carried out by the CNB confirmed a high risk resistance in the banking sector. Only extreme shocks, such as a long-lasting recession or the default of large bank debtors, could prove a problem for the banks.

Growth in bank loans to households as a proportion of GDP, which was high in the years 2002–2009, slowed in 2010. This ratio reached 28.7% in 2010, which was 1.7 p.p. more than in 2009. The growth halted completely in the first quarter of 2011. The share of nonperforming loans of households fluctuated at 5.3% in April 2011 (0.8 p.p. more than in April 2010), while this proportion reached 9.3% for non-financial corporations (0.3 p.p. more than in April 2010).

Interest **rates for deposits and loans** respond with a lag to the fluctuations of interbank rates. In the first quarter of 2011, these decreased moderately to 4.0% for loans to non-financial corporations, while stagnating at 1.2% for households' deposits. We expect average rates for loans to non-financial corporations to reach approximately 4.1% in 2011 (*unchanged*), and in 2012 we expect an increase to 4.6% (*versus 4.5%*) due to the rise in interbank rates mentioned above. Average household deposit rates should reach 1.3% in

2011 (*unchanged*) and in 2012 rise further to 1.5% (*unchanged*).

The development of real interest rates is fundamental to the real economy. The estimates of nominal interest rates, CPI and the gross domestic expenditures deflator imply a decrease in real interest rates for loans to non-financial corporations to 1.9% (*versus 2.2%*) in 2011 and to 2.0% (*versus 1.9%*) in 2012.

Graph A.3.2: **Average Real Rates on Loans**
rates on loans deflated by end-of-year final domestic use deflator, in % p.a.
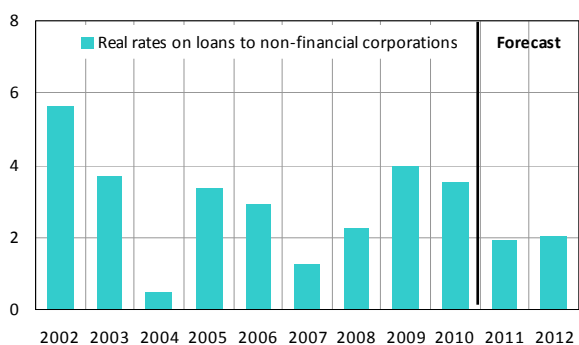
Weighted average interest rates for new loans to households remained at 14.9% in the first quarter of 2011. Interest rates for new loans to non-financial corporations declined to 3.7%.

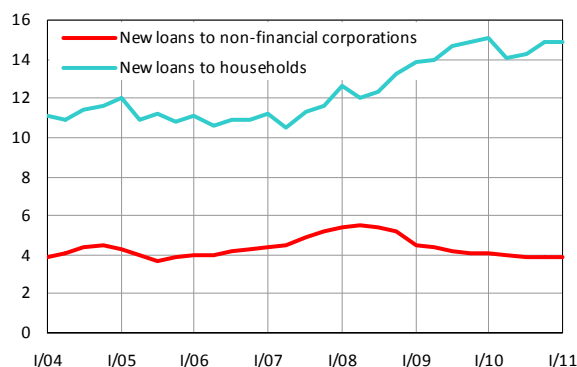Graph A.3.3: **Interest Rates on New Loans to Households and Non-Financial Corporations**
in % p.a.

Table A.3.1: **Interest Rates** – yearly
average interest rates in per cent p.a.

	2003	2004	2005	2006	2007	2008	2009	2010	2011 Forecast	2012 Forecast
Repo 2W CNB (*end of year*)	2.00	2.50	2.00	2.50	3.50	2.25	1.00	0.75		
Main refinancing rate ECB (*end of year*)	2.00	2.00	2.25	3.50	4.00	2.50	1.00	1.00		
Federal funds rate (*end of year*)	1.00	2.25	4.25	5.25	4.25	0.25	0.25	0.25		
PRIBOR 3M	2.28	2.36	2.01	2.30	3.09	4.04	2.19	1.31	1.3	2.1
Government bond yield to maturity (10Y)	4.12	4.75	3.51	3.78	4.28	4.55	4.67	3.71	4.0	4.3
Interest rates on loans to non-financial corpor.	4.57	4.51	4.27	4.29	4.85	5.59	4.58	4.10	4.1	4.6
Interest rates on deposits from households	1.40	1.33	1.24	1.22	1.29	1.54	1.37	1.25	1.3	1.5
Real rates on loans to non-financial corporations [1]	3.72	0.47	3.38	2.95	1.24	2.27	3.97	3.52	1.9	2.0
Net real rates on deposits from households with agreed maturity [2]	0.18	-1.64	-1.13	-0.63	-4.11	-2.26	0.17	-1.21	-1.9	-1.6

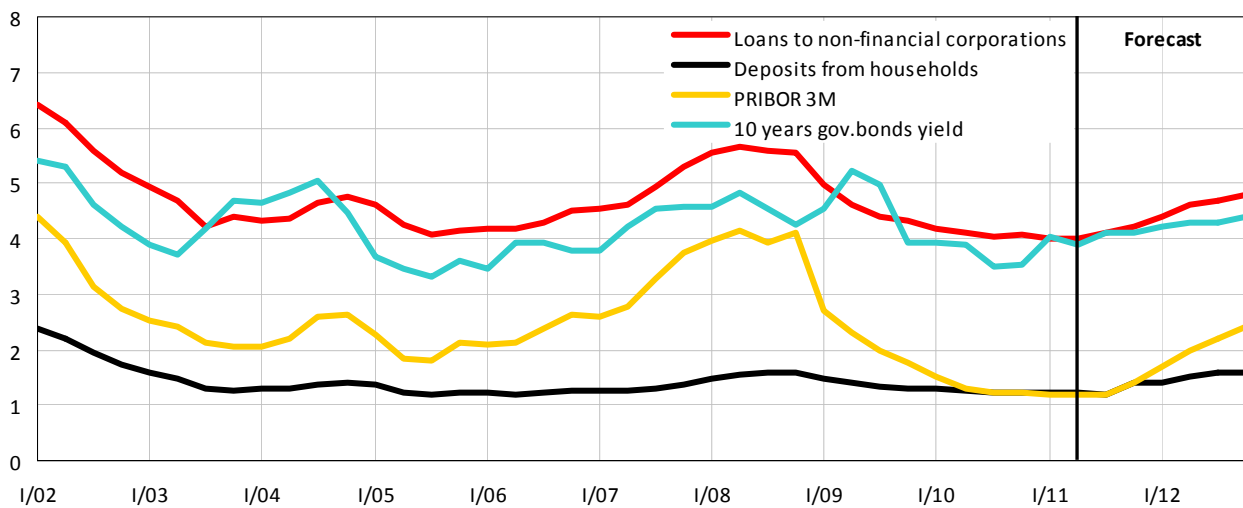[1] *Deflated by gross domestic expenditure deflator.*
[2] *Net of 15 % income tax, deflated by CPI.*

Table A.3.2: **Interest Rates** – quarterly
average interest rates in per cent p.a.

|	2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Forecast	*Forecast*	*Forecast*
Repo 2W rate CNB *(end of period)*	1.00	0.75	0.75	0.75	0.75	.	.	.
Main refinancing rate ECB *(end of period)*	1.00	1.00	1.00	1.00	1.00	.	.	.
Federal funds rate *(end of period)*	0.25	0.25	0.25	0.25	0.25	.	.	.
PRIBOR 3M	1.50	1.30	1.23	1.21	1.20	1.2	1.2	1.4
– 10-year government bonds yield to mat.	3.94	3.90	3.48	3.51	4.03	3.9	4.1	4.1
Interest rates on loans to non-fin. corporations	4.19	4.11	4.05	4.06	4.00	4.0	4.1	4.2
Interest rates on deposits from households	1.30	1.27	1.22	1.22	1.21	1.2	1.2	1.4

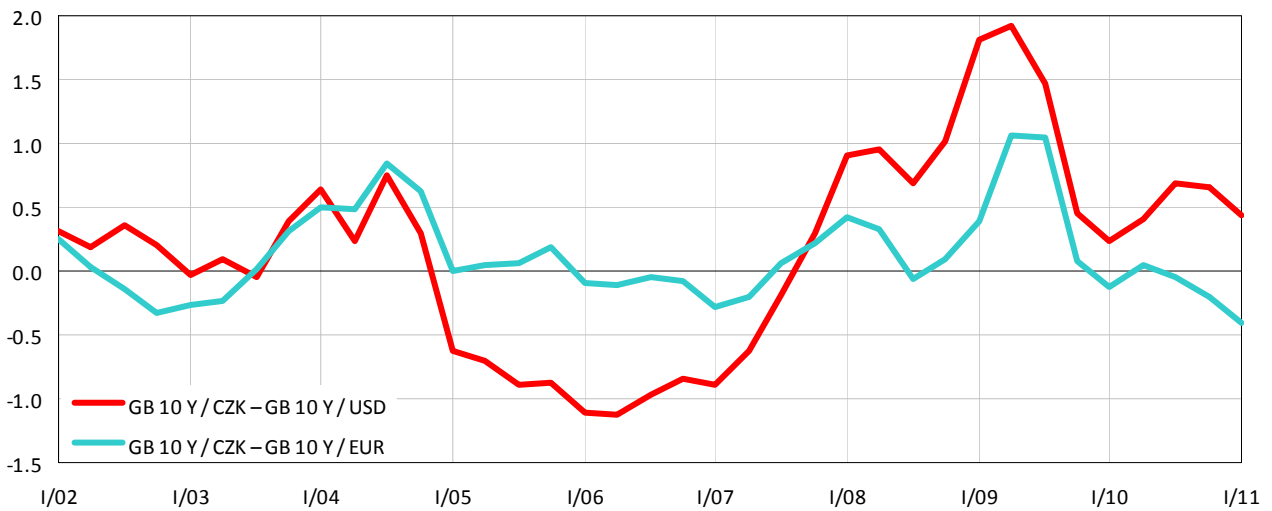Graph A.3.4: **Interest Rates**
in % p.a.

Graph A.3.5: **Real PRIBOR 1Y**
deflated ex post and ex ante by grossl domestic expenditure deflator, in % p.a.
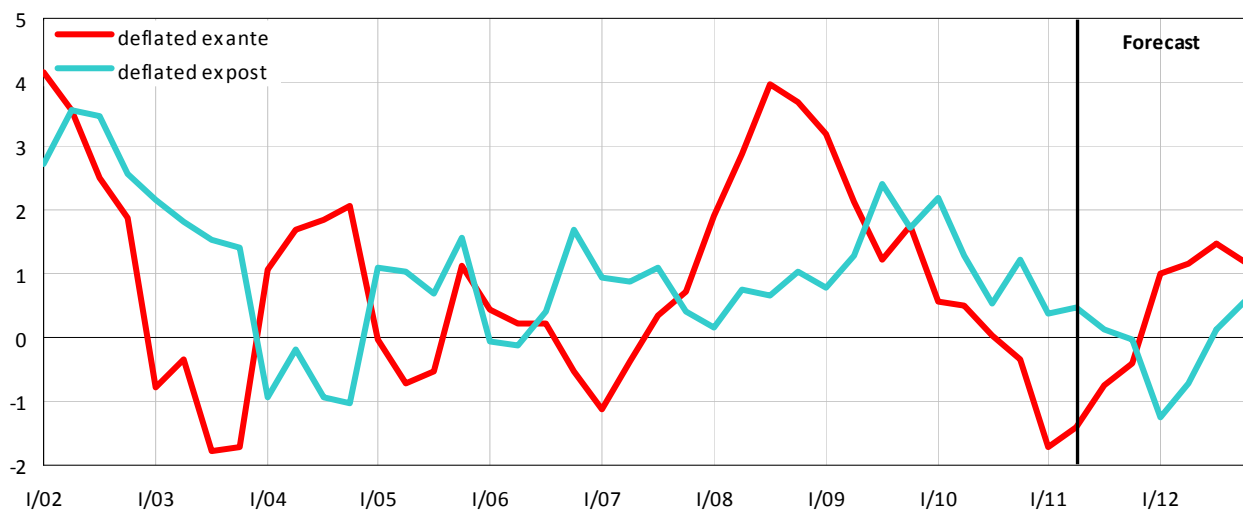
Graph A.3.6: **Short-Term Interest Rate Spread**
in percentage points

Legend:
- PRIBOR 3M / CZK − Fed Funds Rate / USD
- PRIBOR 3M / CZK − EURIBOR 3M / EUR
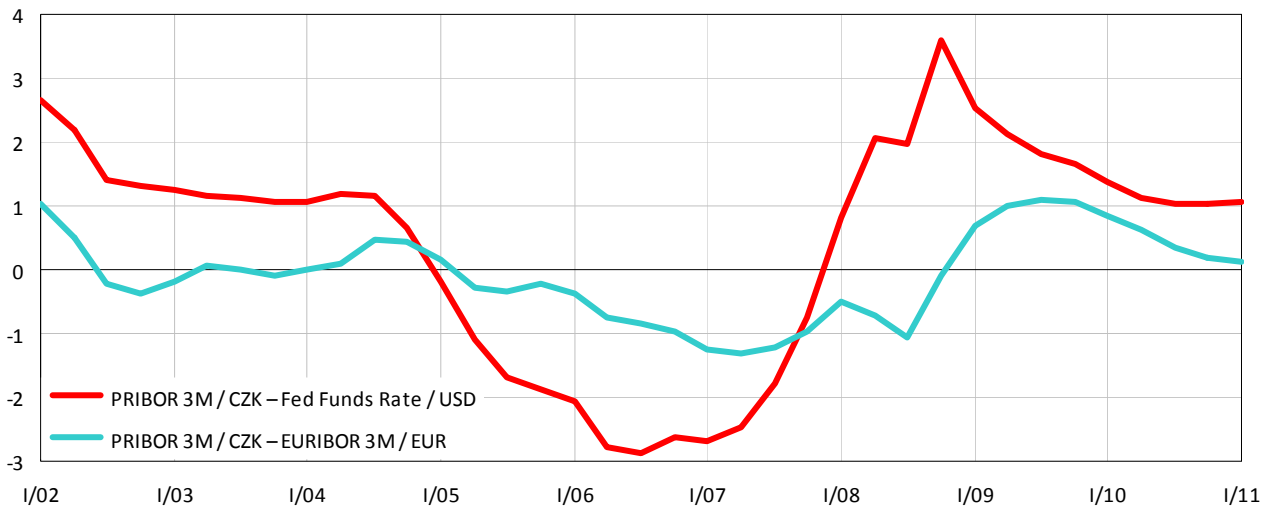
Graph A.3.7: **Long-Term Interest Rate Spread**
government bonds, in percentage points

Legend:
- GB 10 Y / CZK − GB 10 Y / USD
- GB 10 Y / CZK − GB 10 Y / EUR

A.4 Exchange Rates

In keeping with the long-term trend, **the CZK/EUR exchange rate** has been gaining in value since roughly the middle of 2010. During individual quarters, however, a relatively high volatility remained perceptible. This volatility reflects the current period of heightened global uncertainty and of sudden mood swings among investors on financial markets, as well as the level of their risk aversion.

The adopted scenario assumes that the rate will continue to fluctuate roughly along the trend trajectory of moderate nominal and real appreciation, which is in accordance with macroeconomic fundamentals. Should the situation in the euro zone's problem countries become more dramatic, sudden movements of the exchange rate in either direction cannot be ruled out. If the Czech koruna remains stronger versus the long-term trajectory over a longer period, this could result in a risk of decrease in the trade balance surplus.

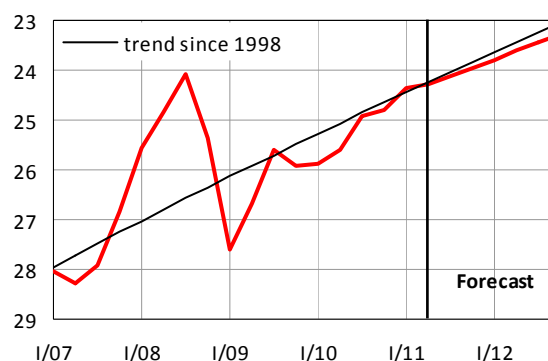Graph A.4.1: **Exchange Rate CZK/EUR**
quarterly averages

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

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
								Forecast	*Forecast*	*Outlook*	*Outlook*
Nominal exchange rates:											
CZK / EUR	*average*	**29.78**	**28.34**	**27.76**	**24.94**	**26.45**	**25.29**	**24.2**	**23.5**	**22.9**	**22.2**
appreciation	*growth in %*	7.1	5.1	2.1	11.3	-5.7	4.6	4.6	2.8	2.9	2.9
CZK / USD	*average*	**23.95**	**22.61**	**20.31**	**17.03**	**19.06**	**19.11**	**17.4**	**17.4**	**16.9**	**16.5**
appreciation	*growth in %*	7.3	5.9	11.3	19.2	-10.6	-0.3	9.7	0.0	2.9	2.9
NEER	*average of 2005=100*	**100.0**	**105.1**	**107.9**	**120.4**	**116.2**	**119.1**	**124**	**127**	**131**	**135**
appreciation	*growth in %*	6.2	5.1	2.6	11.6	-3.5	2.5	4.4	2.4	2.9	2.9
Real exchange rate to EA12[1]	*average of 2005=100*	**100.0**	**104.3**	**107.5**	**119.5**	**114.4**	**117.2**	**120**	**124**	**128**	**131**
appreciation	*growth in %*	4.8	4.3	3.1	11.1	-4.2	2.5	2.4	3.7	2.6	2.5

[1] *Deflated by GDP deflators.*

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

		2010				2011			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
							Estimate	*Forecast*	*Forecast*
Nominal exchange rates:									
CZK / EUR	*average*	**25.87**	**25.59**	**24.91**	**24.79**	**24.37**	**24.3**	**24.1**	**23.9**
appreciation	*growth in %*	6.7	4.3	2.7	4.6	6.1	5.3	3.3	3.5
CZK / USD	*average*	**18.71**	**20.16**	**19.30**	**18.26**	**17.83**	**16.8**	**17.3**	**17.7**
appreciation	*growth in %*	13.3	-2.8	-7.3	-4.0	5.0	19.7	11.6	2.9
NEER	*average of 2005=100*	**117.3**	**117.3**	**120.3**	**121.6**	**123.1**	**124**	**125**	**125**
appreciation	*growth in %*	5.5	1.9	0.4	2.6	5.0	6.0	3.7	2.9
Real exchange rate to EA12	*average of 2005=100*	**115.0**	**116.0**	**118.4**	**119.6**	**119.5**	**119**	**120**	**122**
appreciation	*growth in %*	4.3	2.3	1.1	2.1	3.9	2.2	1.2	2.2

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

quarterly average, average 2005 = 100 (rhs)

Legend:
- CZK / EUR (ECU)
- CZK / USD
- NEER (rhs)

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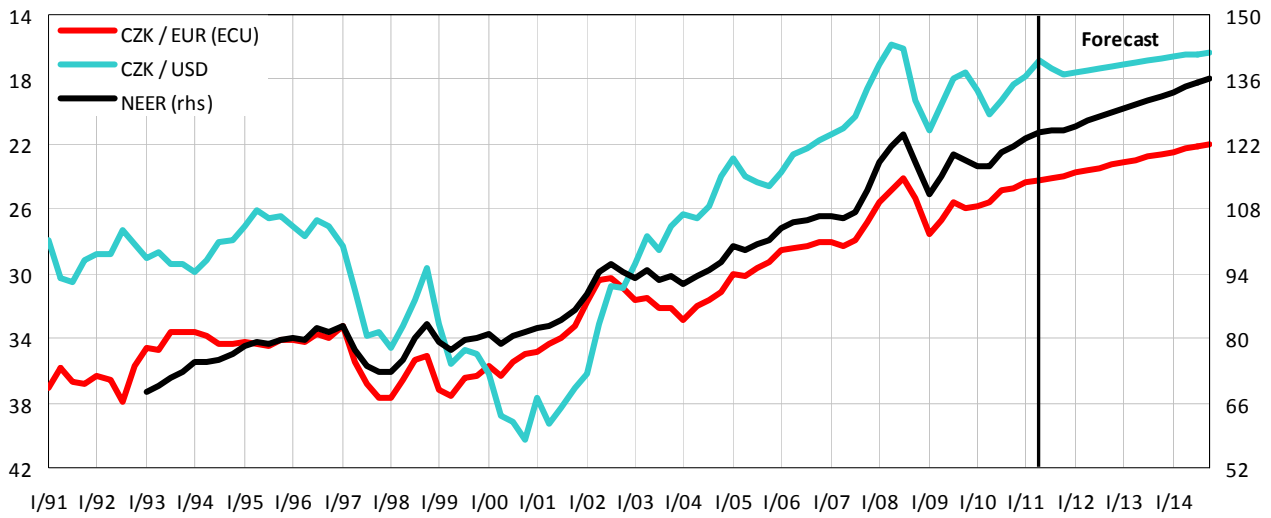
Graph A.4.3: **Real Exchange Rate to EA12**

quarterly average, deflated by GDP deflators, average 2005 = 100

Legend:
- Real exchange rate to EA12
- Exponential trend

Forecast
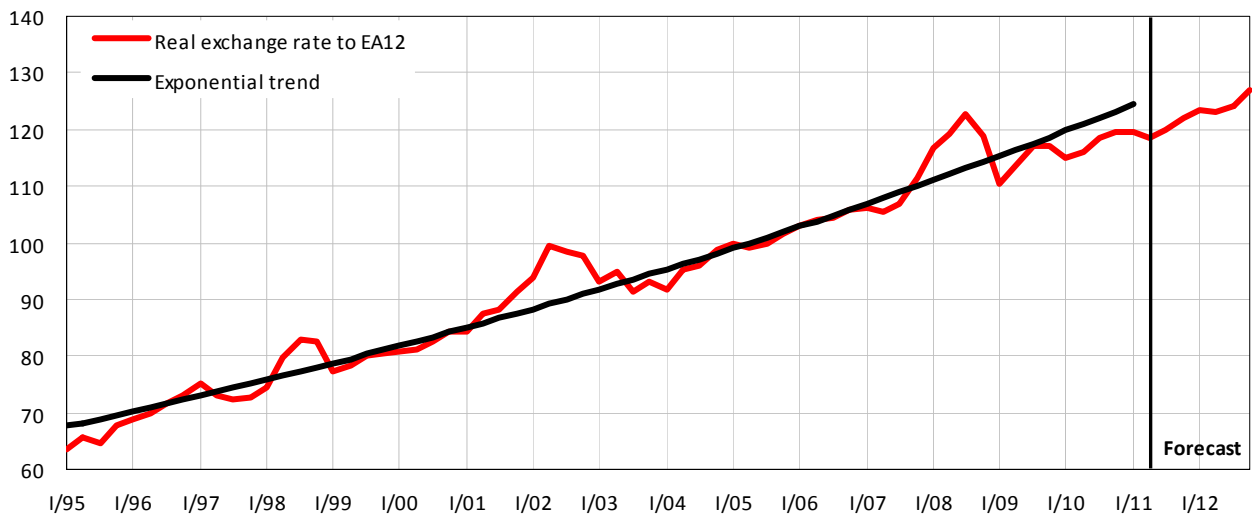
Graph A.4.4: **Real Exchange Rate to EA12**

deflated by GDP deflators, YoY growth, in percentage points

Legend:
- Contribution of nominal exchange rate
- Contribution of GDP deflator differential
- Long-term trend (95Q1–11Q1)
- Appreciation of real exchange rate

Forecast
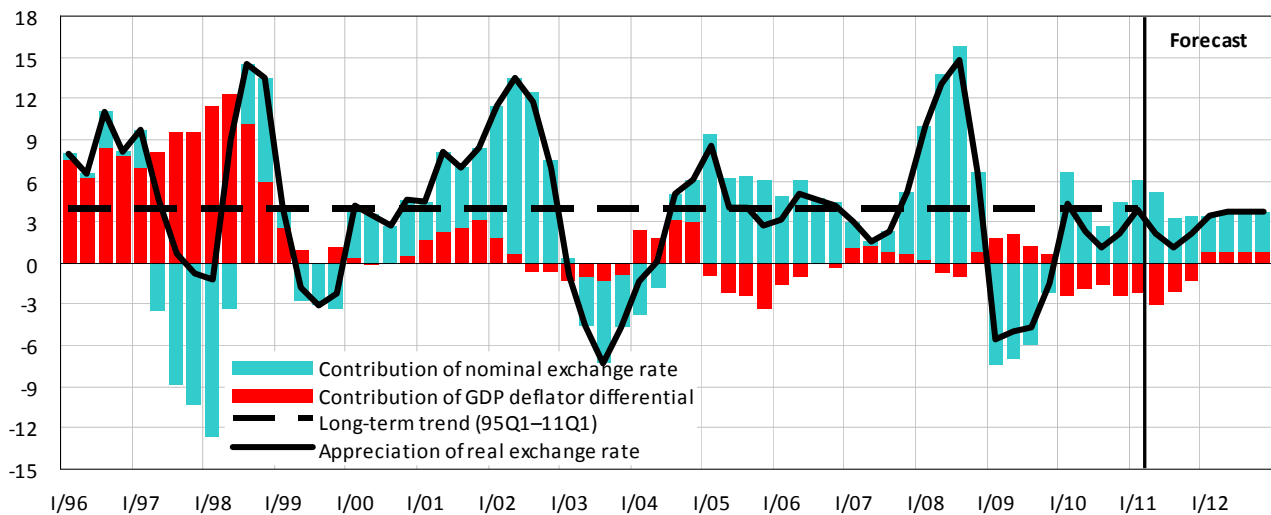
A.5   Structural Policies

On 27 April 2011, the government passed the National Reform Programme of the Czech Republic 2011, in which it details its goals in accordance with the Europe 2020 strategy. Main priorities include consolidating public finances, making the labour market more flexible, increasing the quality of education, supporting research and innovation, and increasing energy efficiency. The priorities set in the National Reform Programme of the Czech Republic 2011 are in accordance with the government's policy statement from August 2010.

Business environment

On 18 May 2011 the government passed the **Commercial Companies and Cooperatives Act**, the objectives of which are to simplify entrepreneurship, strengthen the motivation for good company governance, and improve the position of creditors. The act introduces a number of fundamental changes. The amount of registered capital necessary to found a limited liability company will be reduced from CZK 200,000 to CZK 1. The members of statutory bodies of a company in liquidation will be held liable by means of their property to honour all the liabilities of the company, if so stipulated by a court. Companies also will not be permitted to pay out any funds if this would induce bankruptcy and endanger creditors. Joint-stock companies will be able to choose between two governance models: a supervisory board plus board of directors, or a statutory director and board of trustees. In the case of a limited liability company, a member will be able to own multiple ownership interests and the company will be able to issue multiple types of ownership interests (e.g. priority or with voting rights). The act should come into effect in 2013.

In order to increase the transparency of the public procurement process, the government ratified an **amendment to the Public Procurement Act** on 18 May 2011. The amendment reduces the limit for small-scale public orders to CZK 1 million, makes the requirements for bidders and evaluators of significant public orders more strict and introduces compulsory cancellation of an awarding process should fewer than 3 bids remain for evaluation after reviewing the bids. The practice of determining the winner of the selection process by drawing will be abolished. Instead, a panel of experts will evaluate the bids. The amendment is expected to come into force in 2012.

On 21 June 2011, the Chamber of Deputies passed an **amendment to the Public Administration Information Systems Act**. On its basis, banks and savings banks will now also be able to perform the service of a public administration contact point (Czech POINT).

An **amendment to the General Health Insurance Premiums Act**, which the President of the Czech Republic signed on 11 May 2011, unifies the deadlines for paying any social and health insurance premiums. The amendment will come into effect on 1 August 2011.

Taxes

On 25 May 2011, the government ratified an amendment to the **Value Added Tax Act**. On 1 January 2012 the reduced tax rate will be increased from 10% to 14%, and on 1 January 2013 the rates will be harmonised at 17.5%.

Financial markets

An amendment to the Czech National Bank Act came into effect on 6 April 2011. The amendment adjusts the CNB's sphere of activity as part of the newly created European System of Financial Supervision, which was established on 1 January 2011 and whose purpose is to ensure supervision of the EU's financial system.

On 18 May 2011, the government approved **legislation amending the conditions of building savings schemes** with the goal of reducing budgetary costs from supporting building savings schemes. The maximum amount of state contribution was decreased from 15% to 10%, while the maximum limit for the base was retained at CZK 20,000 and tax breaks for interest from building society savings were abolished. The amendment is expected to come into force on 1 January 2012.

On 27 May 2011, an **amendment to the Payments Act** came into effect. The amendment transposes into Czech law the European directive on electronic money and the irrevocability of settlement in payment systems and systems for settling securities transactions. The amendment significantly liberalises institutions' management of electronic money.

Education, science and research

On 13 April 2011 the government passed an **amendment to the Schools Act**, the primary purpose of which is to reduce schools' bureaucratic burdens and to facilitate access to education. The amendment

simplifies requirements for companies that run their own nursery school, specifies regulations for attending foreign schools, retains the current form of state school-leaving examinations for two years, and abolishes final evaluations of pupils by primary schools. Last but not least, it introduces a six-year term of office for school directors and simplifies their dismissal, if necessary.

Energy

On 9 June 2011, the Senate approved an **amendment to the Energy Act**, which implements the so-called third EU energy package, the intent of which is the separation of gas transport from its production and trade under Czech law. The amendment to the Act should liberalise the energy market, improve consumer protection in the energy market, and strengthen the authority and independence of the Energy Regulatory Office.

An amendment to the Renewable Energies Support Act, which was ratified by the government on 11 May 2011, should lead to effectively achieving the goal of 13% of energy consumption from renewable sources in 2020. Should the Energy Regulatory Office establish by the end of April in a given year that it has already issued licences to construct power stations for the corresponding estimated installed output and the ecological commitment has thereby been fulfilled, support for the production of electricity from renewable sources is suspended for the next year. The measure will apply only to new applicants for connecting power stations to the network. Under the amendment, owners of solar power stations connected to the network in 2009 and 2010 will be charged with compulsory levies in 2012 and 2013 amounting to 28% of subsidies received.

Labour market

The government approved **pension reform** on 29 June 2011. The reform is comprised of two pieces of legislation, one concerning pensions and the other concerning supplementary pensions. The legislation is necessary for creation of the pension system's second tier and transformation of the third tier. The legislation stipulates that the second tier be financed by release of the pension contributions from the first tier. Participants in the second tier lower their contribution rate to the first tier by 3 p.p. and add an additional 2 p.p. from their own sources. At the same time, they will be able to request to transfer an amount corresponding to 1 p.p. to the account of parents who are beneficiaries of old age pensions. People will be

able to decide about this release prior to reaching the age of 35. People older than 35 at the time of the reform's launch will be able to make a decision within a 6-month time frame. A decision may not be changed after it has been taken or after the deadline has passed.

As it is now, the old age pension from the first tier will consist of basic and percentage allowances. The basic pension allowance will be paid out in full regardless of participation in the second tier, while the percentage allowance will be calculated to reflect the length of participation in the second tier and hence the lower pension contributions paid into the first tier. Old age pension from the second tier will be paid in the form of either lifelong annuities, lifelong annuities with an agreed payment of survivor's pension in the same amount for the period of 3 years from the day of the participant's death, or annuities paid out for a period of 20 years (in case of the pension beneficiary's death before the 20-year period has elapsed the entitlement to the pension payments passes to the inheritance).

The administration of funds is to be provided by pension companies, which will be required to offer four types of funds (general, conservative, balanced and dynamic) reflecting different investment limits, portfolio structures and risks. Transformation costs (due to dropping away of income to the first tier) will be covered primarily with resources received from increase in the reduced VAT rate. The reform should come into effect from 2013.

On 21 June 2011, the Chamber of Deputies voted to overrule the Senate and passed an **amendment to the Pension Insurance Act** which strengthens the tie between the pension and pension contributions paid. The basic pension allowance and reduced ceiling for its calculation will no longer be stipulated as a fixed amount but will be derived from the average wage in the economy. The basic pension allowance will now be 9% of the average salary. The first reduction ceiling, which was newly set at 44% of the average salary, will remain roughly unchanged at the current level of CZK 11,000, and any income that does not exceed this amount will be taken into account at 100% also in future. The second reduction ceiling will be raised from the current CZK 28,200 to 400% of the average salary. For the purposes of pension calculations, however, only 26% of this amount will be included. The reduction from the current 30% will be carried out gradually. Income exceeding 400% of the average salary will no longer influence the pension amount

after 2014. The increase will be carried out gradually in several steps, from 30 September 2011 until the end of 2014.

The amendment also accelerates harmonisation of the retirement ages for men and women. For people born in 1975, harmonisation will be reached in 2041. Thereafter, the retirement age of all policyholders will be increased at a rate of two months per year in accordance with the expected development of life expectancy, without an explicit designation of the final retirement age.

The goal of the **amendment to the Labour Code** approved by the government on 29 June 2011 is to make the labour market more flexible and to increase the motivation of companies to create new jobs. The new adjustment allows for an employment contract to be negotiated for a fixed period of up to 3 years, during which negotiation of employment for a fixed period may be repeated twice more. The trial period may be extended to six months for senior staff. The amount of severance pay upon termination of employment will be determined by the number of years spent at the company. The amendment also adjusts contracts of services, doubling the limit to 300 hours yearly and also setting the monthly income ceiling at CZK 10,000 from which no health or social insurance will be paid. Last but not least, it introduces a new cause for dismissal consisting in serious breach of the duty of an employee on sick leave to adhere to the medical regimen during the first 21 calendar days of sick leave.

On 18 May 2011, the government approved three legislative amendments, collectively known as **social reform I**, with the aim of simplifying the social security system, reducing administrative burdens for users of services, and improving the targeting and needs calculation of social benefits. The reform concerns amendments to several acts related to consolidating the payment of non-insurance social benefits, the Act on Providing Benefits to Persons with Disabilities, and the Employment Act. The aforementioned acts should come into effect on 1 January 2012.

An act amending several acts related to consolidating the payment of non-insurance social benefits consolidates the process of paying out non-insurance social security benefits. The Labour Office of the Czech Republic takes over the responsibilities for benefits for aid in case of material need, benefits for persons with disabilities, and contributions towards care, together with the role of performing inspection of social services provision. The office at the same time becomes the sole contact point for benefit claimants. Furthermore, the act toughens conditions for persons who consciously evade work, introduces a time limit for the payment of housing contributions, and expands the possibilities of parents to select both the length of time for drawing and amount of parental benefits.

The Act on Providing Benefits to Persons with Disabilities combines the existing benefits into two aggregated benefits – a monthly mobility contribution and a one-time contribution to special aids. The Act also governs the permit for people with disabilities and several advantages the holders of these permits are entitled to.

The Employment Act makes support for the employment of persons with disabilities at protected workplaces more effective, limits the abuse of legal regulations in the area of providing benefits to support the employment of persons with disabilities, and governs the provision of so-called alternative compliance with the required proportion of persons with disabilities. The act also toughens penalties for undertaking illegal work and adjusts the definition of illegal work to make it easier to verify. Last but not least, it regulates the intermediation of employment and unemployment benefits.

Health care

On 21 June, the Chamber of Deputies passed an amendment to the Public Health Insurance Act, known as the first phase of the **health care reform**. The amendment introduces a definition of standard care and enables patients in individual cases to pay for so-called extra care. It also introduces electronic auctions for medication prices. One type of medication selected by the State Institute for Drug Control will be paid for in full by public health insurance, while others will be paid for at only 75% of the basic coverage. Last but not least, the amendment raises the hospital-stay fee from CZK 60 to CZK 100 per day, imposes a charge on medication of up to CZK 50, and introduces a single charge for prescriptions of CZK 30.

A.6 Demographic Trends

According to preliminary data, the population of the Czech Republic grew by 3 thousand to 10.536 million persons in the first quarter of 2011. Both natural population decline and slightly positive migration balance repeated the development in the first quarter of 2010.

Graph A.6.1: **Groups by Age**
structure in per cent
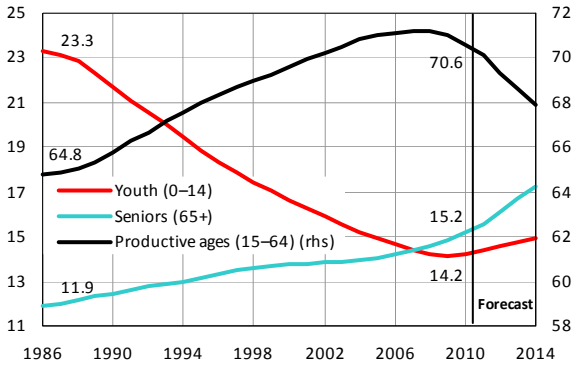
Regarding age structure, the Czech population reached the highest number of working-age inhabitants (15–64 years) in 2009. Nevertheless, it still has a very favourable age structure, especially in comparison to Western European countries.

Graph A.6.2: **Czech Population from 15 to 64 Years**
quarterly averages, in thousands
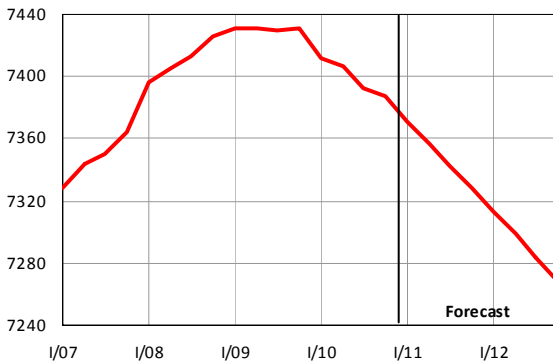
The decline in the working-age population should be compensated, however, to a large extent by effects within the age structure of the workforce, as the structural proportions of age groups with high or growing participation increase. This has been and will continue to be supported by the previously enacted extension of the retirement age. (The effects of further acceleration among women with several children as part of the "small pension reform" will become evident only beyond the forecast's horizon.) While immigration could be another positive factor, its volume, as the recent period has shown, fluctuates greatly. The rise in labour market flexibility should also help create a situation wherein the Czech economy will not suffer from an insufficiently suitable workforce.

Graph A.6.3: **Life Expectancy**
in years
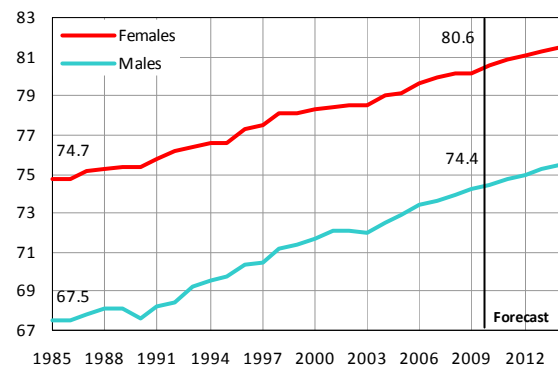
The continuing **process of population ageing** also has been confirmed. In 2007, for the first time in Czech history, the number of people younger than 15 years was lower than the number of people in the 65+ age category. In future, the number and proportion of seniors in the population will rise due to the demographic structure and continuation of the intensive process to extend the life expectancy. The structural proportion of persons over 64 years of age in the total population, which was just below 15% in early 2009, should surpass 16% at the beginning of 2012 and increase to nearly 20% by 2020.

Table A.6.1: **Demography**

in thousands of persons

	2005	2006	2007	2008	2009	2010 Prelim.	2011 Forecast	2012 Forecast	2013 Outlook	2014 Outlook
Population (January 1)	**10 221**	**10 251**	**10 287**	**10 381**	**10 468**	**10 507**	**10 533**	**10 567**	**10 600**	**10 632**
growth in %	0.1	0.3	0.4	0.9	0.8	0.4	0.2	0.3	0.3	0.3
Age structure (January 1):										
(0–14)	**1 527**	**1 501**	**1 480**	**1 477**	**1 480**	**1 494**	**1 513**	**1 539**	**1 563**	**1 587**
growth in %	-1.8	-1.7	-1.5	-0.2	0.2	1.0	1.3	1.7	1.6	1.5
(15–64)	**7 259**	**7 293**	**7 325**	**7 391**	**7 431**	**7 414**	**7 385**	**7 329**	**7 269**	**7 215**
growth in %	0.3	0.5	0.4	0.9	0.5	-0.2	-0.4	-0.8	-0.8	-0.7
(65 and more)	**1 435**	**1 456**	**1 482**	**1 513**	**1 556**	**1 599**	**1 635**	**1 700**	**1 768**	**1 829**
growth in %	0.8	1.5	1.8	2.1	2.9	2.7	2.3	3.9	4.0	3.5
Old-age pensioners (January 1)[1]	**1 965**	**1 985**	**2 024**	**2 061**	**2 102**	**2 147**	**2296**	**2 335**	**2 367**	**2 399**
growth in %	1.7	1.0	2.0	1.8	2.0	2.1	.	1.7	1.4	1.3
Old-age dependency ratios (January 1, in %):										
Demographic [2]	**19.8**	**20.0**	**20.2**	**20.5**	**20.9**	**21.6**	**22.1**	**23.2**	**24.3**	**25.4**
Under current legislation [3]	**35.3**	**35.6**	**35.8**	**35.9**	**36.1**	**36.6**	**37.0**	**37.4**	**37.8**	**38.2**
Effective [4]	**41.5**	**41.3**	**41.6**	**41.5**	**41.8**	**43.6**	**46.7**	**47.5**	**47.9**	**48.2**
Fertility rate	**1.282**	**1.328**	**1.438**	**1.497**	**1.492**	**1.49**	**1.51**	**1.52**	**1.53**	**1.54**
Population increase	**31**	**36**	**94**	**86**	**39**	**26**	**34**	**33**	**32**	**31**
Natural increase	**-6**	**1**	**10**	**15**	**11**	**10**	**9**	**8**	**7**	**6**
Live births	**102**	**106**	**115**	**120**	**118**	**117**	**116**	**114**	**113**	**112**
Deaths	**108**	**104**	**105**	**105**	**107**	**107**	**106**	**106**	**106**	**106**
Net migration	**36**	**35**	**84**	**72**	**28**	**16**	**25**	**25**	**25**	**25**
Immigration	**60**	**68**	**104**	**78**	**40**	**31**	**.**	**.**	**.**	**.**
Emigration	**24**	**33**	**21**	**6**	**12**	**15**	**.**	**.**	**.**	**.**

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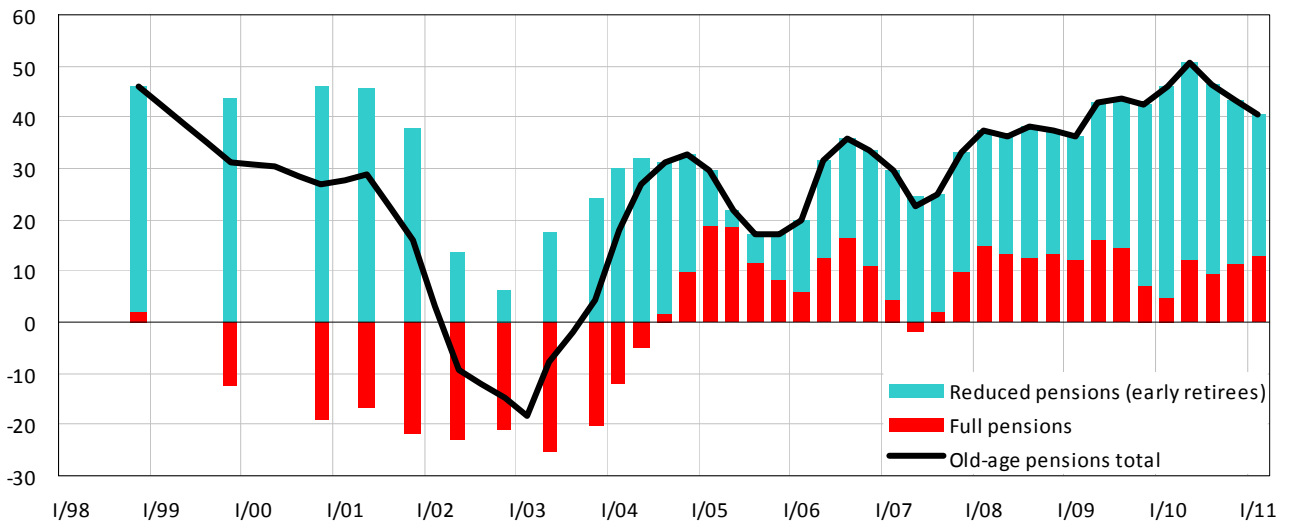[4] *Effective dependency: ratio of old-age pensioners to working people.*

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
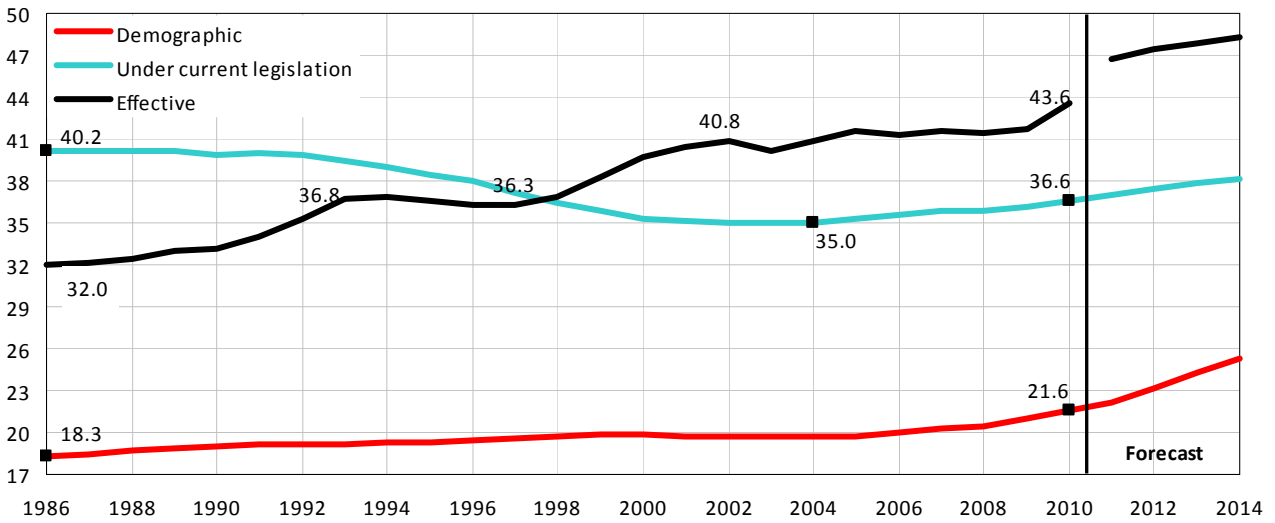
Graph A.6.5: **Old-Age Pensioners**

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

## B.1 Position within the Economic Cycle

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

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

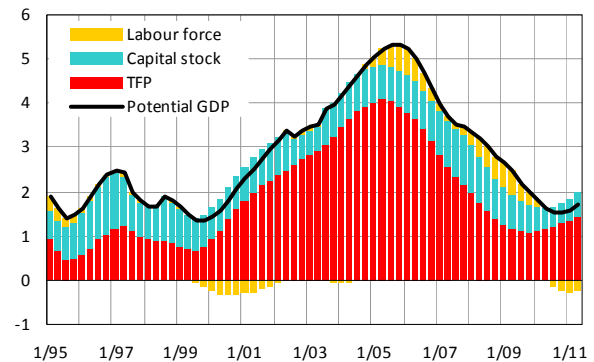*Sources of tables and graphs: CZSO, CNB and Ministry of Finance's own calculations.*

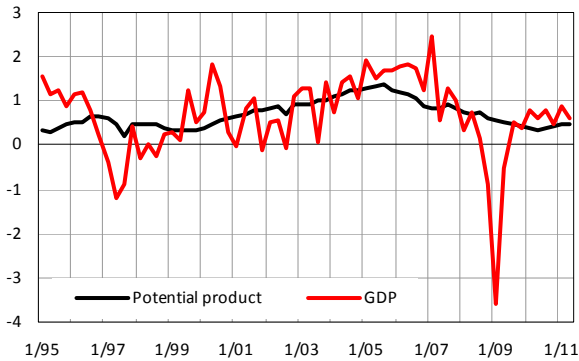Graph B.1.1.: **Output Gap**
in % of potential GDP
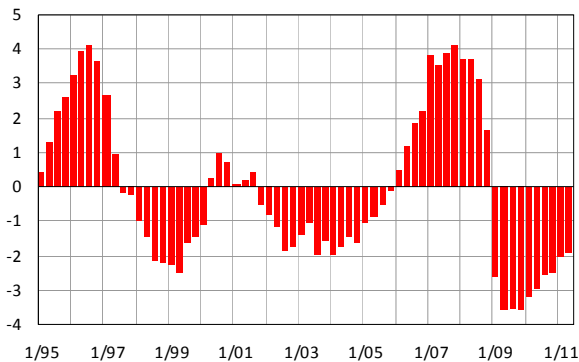
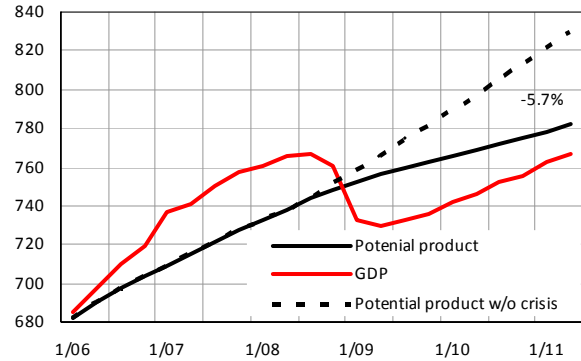Graph B.1.2: **Potential Product Growth**
in %, contributions in percentage points

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

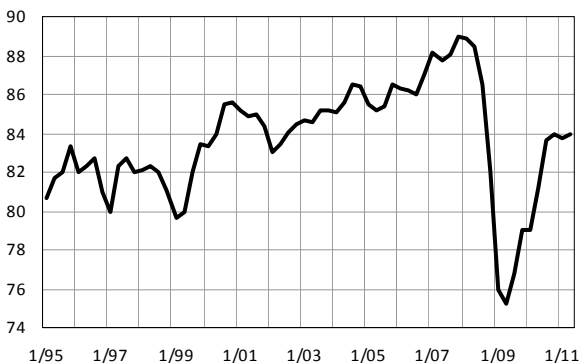Graph B.1.4: **Levels of Potential Product and GDP**
in bill. CZK of 2000

Note: „Potential product w/o crisis" in graph B.1.4 is a hypothetical level of PP steadily growing from Q4/08 by the average QoQ growth of years 2001–2007.

Graph B.1.5: **Utilisation of Capacities in Industry**
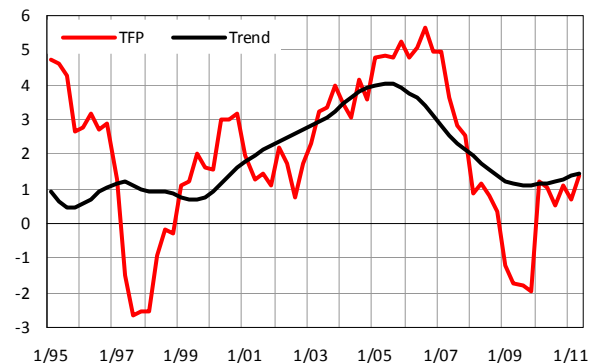*in %*

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

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 Q1–Q2
Output gap	*per cent*	-1.4	-1.5	-1.6	-0.6	1.3	3.7	3.1	-3.4	-2.7	-2.0
Potential output	*growth in %*	3.3	3.7	4.5	5.2	4.8	3.7	3.1	2.3	1.6	1.7
Contributions:											
TFP	*perc. points*	2.5	3.0	3.7	4.0	3.5	2.5	1.7	1.2	1.2	1.4
Fixed assets	*perc. points*	0.7	0.7	0.8	0.8	0.9	1.1	1.0	0.7	0.5	0.5
Participation rate	*perc. points*	-0.1	-0.2	-0.2	0.2	0.2	-0.2	0.0	0.3	0.1	0.1
Demography [1]	*perc. points*	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.2	-0.2	-0.4

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

Economic recession from the turn of 2008 to 2009 gave rise to a deeply negative **output gap**. According to the current calculations, it reached ca –3.4% in 2009, thus indicating the lowest utilisation of economic potential in the post-transformation period. Since the beginning of 2010 the intensity of economic recovery has moderately exceeded the growth of potential product, and in the second quarter of 2011 the output gap reached circa –1.8%.

This development also confirms other indirect indicators. The decreasing unemployment rate still remains above the long-term average. Likewise, it is possible to explain the low inflation rate (also in an international comparison) in part by the absence of demand impulses.

The YoY growth of **potential product** fell to as low as 1.6% in 2010. In view of the aforementioned instability in the calculations, however, we believe that this estimate probably underestimates the reality. On the other hand, our computations show that the QoQ growth already reached a minimum during 2010.

The PP component most seriously affected was **total factor productivity** (TFP). The recession led to YoY decline in TFP by 1.8% in 2009 and slowing of the TFP trend growth rate to 1.2% in 2009 and 2010. In 2011, however, TFP's trend growth showed signs of

recovering. The intended increase in labour market flexibility should improve the situation substantially. TFP growth, which is now rather low by international comparison, should become the main source of recovery in PP growth dynamics.

A deep drop in investment activity led to a decrease in **capital stock's** contribution from 1.1 p.p. in 2007 to 0.5 p.p. in 2010 and in the first quarter of 2011.

The labour supply is starting to be affected markedly by the decrease in the number of working-age inhabitants, which stems from the process of population ageing as well as from the significant drop in immigration versus the situation recorded in 2006–2008. The participation trend, measured as the ratio of labour force to the number of inhabitants aged 15–64 and which paradoxically accelerated its growth during the recession in 2009, has thus far only partly compensated the demographic development.

Graph B.1.4 illustrates that the recession and gradual overcoming of its consequences have so far resulted in a loss of ca 5.7% in the PP level.

Future PP development will depend on the pace of economic recovery. To close the negative output gap and re-accelerate potential growth, the economy will need to achieve constantly higher rates of real GDP growth relative to PP.

B.2 Composite Leading Indicator

The composite leading indicator is compiled from the results of business cycle surveys that fulfil the basic demands made on leading cyclical indicators: that they are economically significant, demonstrate statistically observable leading relationships with regard to the economic cycle, and are regularly available on a timely basis. Since October 2010, the indicator is compiled from those business cycle indicators that have showed a high level of correlation with an average lead time of three months.

Graph B.2.1: **Composite Leading Indicator**
average 2000 = 100 (lhs), in % of GDP (rhs)
synchronized with cyclical component of GDP based on statistical methods (Hodrick-Prescott filter)
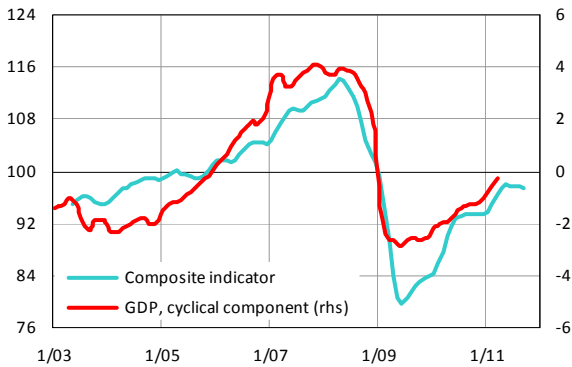
For the first quarter of 2011, the composite indicator signalled that actual GDP was nearing its trend value, and hence that GDP's cyclical component was growing. Data published in June 2011 supported this indication.

For the second quarter of 2011, the indicator signals further growth in GDP's cyclical component, influenced especially by heightened expectations in the retail trade and services sector. According to the composite indicator, GDP's cyclical component should stagnate in the third quarter of 2011.

B.3 Individual 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. The main advantage lies in the quick availability of results reflecting a wide range of influences that shape the expectations of economic entities.

The surveys share a common characteristic in that respondents' answers provide not direct quantification but rather use more general qualitative expressions (such as better, the same, worse, or growing, not changing, falling, etc.). Tendencies are reflected in the business cycle balance, which is the difference between the answers "improvement" and "worsening", expressed in percentages of observations.

The aggregate confidence indicator is presented as a weighted average of seasonally adjusted indicators of confidence in industry, construction, retail trade and selected services sectors as well as of consumer confidence. Weights are established as follows: the indicator of confidence in industry is assigned a weight of 40%, those for construction and retail trade 5% each, that for selected services 30%, and that for consumer confidence 20%.

Graph B.3.1.: **Industrial Confidence Indicator**
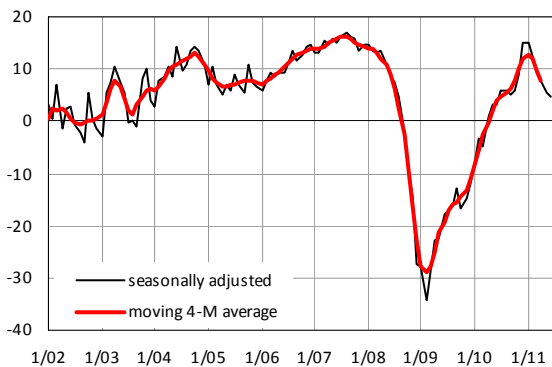
Graph B.3.2: **Construction Confidence Indicator**
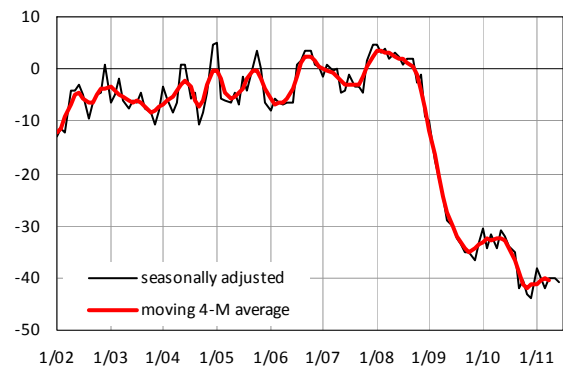
Graph B.3.3: **Retail Trade Confidence Indicator**

Graph B.3.4: **Selected Services Confidence Indicator**

Graph B.3.5: **Consumer Confidence Indicator**

Graph B.3.6: **Aggregate Confidence Indicator**

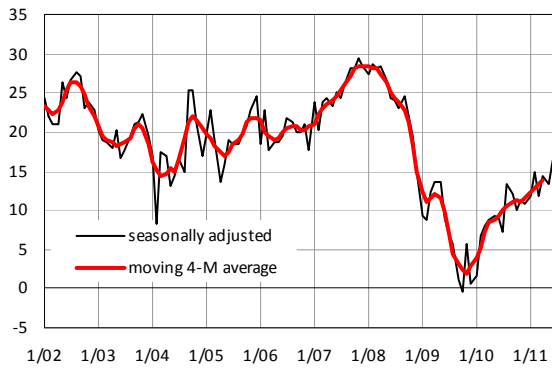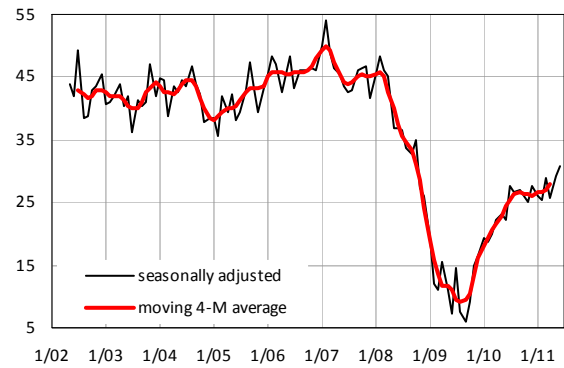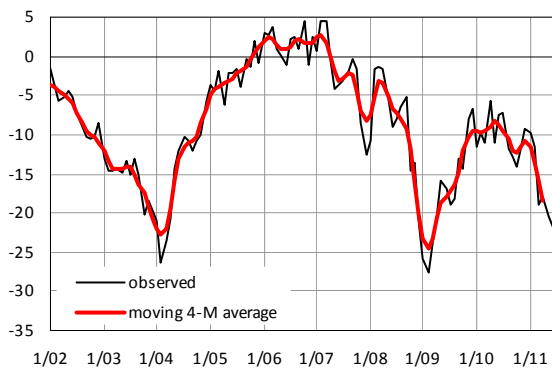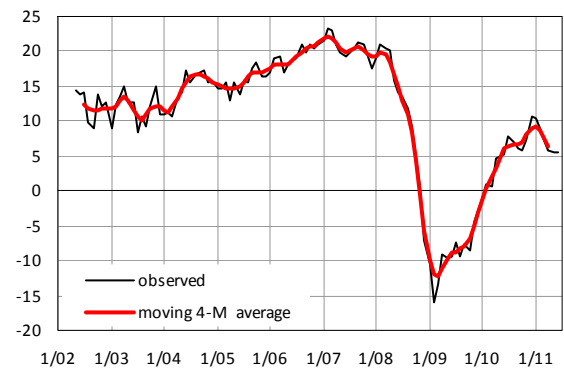Confidence in **industry** started to decline in 2011, following gradual growth in 2010. Respondents began evaluating economic development in enterprises more cautiously. Their assessment of the current economic situation moderately weakened in the second quarter, as has the assessment of overall demand. A levelling off was recorded only in relation to foreign demand. Respondents expect a slight improvement in the growth of production activity for the third quarter of 2011, but they are cautious regarding employment. This growth has thus far not affected assessments of the future economic situation.

Neither were respondents too optimistic regarding **construction** in the second quarter. The low assessment of demand rather stabilised, while the view on the current economic situation declined. Respondents expect a slower pace of construction activities at nearly stagnating employment for the third quarter of 2011. A moderate improvement occurred in the assessment for development in the economic situation, especially on the six-month horizon.

In the **retail trade** and selected **services** segments, respondents boosted their assessment of the current

economic situation. Accordingly, they also expect the economic situation to improve on the three-month and six-month horizons. They expect continued growth in demand for services.

According to the June survey, the **consumer confidence** indicator continued to fall. Above all, consumers expect the overall economic situation to worsen in the coming 12 months. Expectations regarding their own financial situations have stagnated for the time being, although fears of price increases in the coming 12 months remain high. The proportion of respondents who expect unemployment to rise is also increasing.

Based upon the individual business cycle indicators, it can be assumed that QoQ growth could slow in the second quarter of 2011 and grow moderately in the third. Demand development remains a risk.

C Forecast of the Development of Macroeconomic Indicators

C.1 Economic Output

The recovery of the Czech economy is still continuing. However, the quarterly national accounts published in March 2011 have given rise to fears that economic growth is slowing. According to data at that time, the QoQ growth of seasonally adjusted GDP was to decelerate to 0.3% in the fourth quarter of 2010, which influenced preparation of the April forecast of the Ministry of Finance of the Czech Republic. According to current data, however, the QoQ GDP growth in the fourth quarter of 2010 reached 0.5%. The seasonally adjusted real GDP grew QoQ by 0.9% in the first quarter of 2011, representing a YoY increase[3] of 3.1% (*versus 2.3%*). The fears of slowing growth thus were not confirmed. Nevertheless, the level of seasonally adjusted GDP is still 0.6% below the previous peak from the third quarter of 2008.

Economic growth in 2011 and 2012 should be driven by foreign trade. Growth in household consumption should be limited by fiscal consolidation measures, and government consumption should decrease. The end of inventories replenishment after the recession also must be taken into account. We expect moderate growth acceleration to 2.5% (*versus 1.9%*) for 2011, and in 2012 we expect growth dynamics to be maintained at 2.5% (*versus 2.3%*).

The substantially worsening terms of trade led **real gross domestic income** (RGDI), which reflects the income situation of the Czech economy, to grow more slowly than GDP. In the first quarter of 2011, it grew YoY by only 0.7% (*versus a decline of 0.3%*). The income situation of Czech economic entities thus has improved more slowly than has the growth in economic output. RGDI should level off in 2011 (*versus a decline of 0.2%*) and grow by 2.3% in 2012 (*unchanged*).

Real dynamics are causing **nominal GDP** (which is a key variable for fiscal forecasts) to be higher than originally anticipated. YoY growth of 2.2% (*versus 0.8%*) was reported in the first quarter of 2011. We expect nominal GDP growth of 1.7% (*versus 1.3%*) for 2011 and 5.2% (*versus 5.0%*) for 2012.

Regarding the **income structure of GDP**, we expect to see a gradual rise in the profitability of the business sector. The gross operating surplus increased by 2.7%

YoY in the first quarter of 2011 (*versus a decline of 0.7%*). Growth of 1.0% (*versus stagnation*) can be expected for 2011, and in 2012 the increase in operating surplus should reach 5.6% (*versus 5.2%*).

Forecasts still reflect the high level of uncertainty ensuing especially from developments in the external environment. Impacts of data revisions on past economic development also may be relevant.

Expenditures on GDP

In the first quarter of 2010, seasonally adjusted **household consumption** fell by 0.6 % QoQ. That means that the YoY drop in real household expenditures on final consumption reached only 0.4% (*versus 0.7%*) in the first quarter of 2011. The unfavourable income situation of households, and especially the decrease in wages in part of the public sector, continues to work against an increase in consumption. We expect household consumption growth dynamics at a level of around 0.5% (*versus 0.7%*) for 2011. The increase in the reduced VAT rate from 10% to 14% will slow consumption growth in 2012. That is one reason why we expect an increase of just 2.0% (*versus 1.9%*), which is below the growth in economic output.

Government expenditures on final consumption in the first quarter of 2011 fell in real terms by 1.2% (*versus 3.2%*). The causes of the more moderate decrease are discussed in Chapter A.2. In accordance with adopted stabilisation measures and the approved consolidation strategy, government institutions are expected to behave thriftily regarding both employment and purchases of goods and services. Government consumption should decrease by 2.4% (*versus 3.4%*) in 2011. We expect consumption expenditures to continue to decline in 2012 by 2.1% (*versus 2.5%*).

Gross fixed capital formation increased YoY by 3.7% (*versus 0.3%*) in the first quarter of 2011. (At the same time, the drop in investments for 2010 was revised from 4.6% to 3.1%.) Purchases of vehicles especially contributed to the recovery of investment dynamics, as these increased by 20.2%. Construction investments in non-housing structures grew by 8.8%. By contrast, purchases of machinery other than vehicles fell by 4.9% and housing investments declined YoY by 2.3%. The willingness of foreign investors to make new investments or to reinvest profits from their business

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[3] *Data without seasonal adjustment are presented in the remaining text, unless stated otherwise.*

operations in the Czech Republic will also depend on the situations in their home countries. A gradual shift in capacities that profited from inexpensive labour can be expected as well. The influence of infrastructure investments and contributions from EU funds should have a positive effect, and investors should also be attracted by the macroeconomic stability in the Czech Republic.

We have adjusted the previous forecast for 2011 in accordance with the revision of growth in 2010. Growth in investments should be restored at a level of 1.9% (*versus 0.7%*), while growth of about 3.2% (*unchanged*) is expected for 2012.

The contribution of **change in inventories** to YoY GDP growth in the first quarter of 2011 on seasonally adjusted data was zero. We expect a contribution of

0.4 p.p. (*unchanged*) for 2011 and 0.2 p.p. (*versus 0.1 p.p.*) for 2012.

The contribution of **foreign trade** to YoY GDP growth on seasonally adjusted data reached 2.5 p.p. for the first quarter of 2011. The external balance is positively influenced by the ongoing recovery in trading-partner countries accompanied by concurrent limited growth in domestic demand. We expect a foreign trade contribution of 1.9 p.p. (*versus 1.8 p.p.*) for 2011, while for 2012 we expect 1.1 p.p. (*unchanged*) due to the export volume's slower growth rate.

The estimated figures do not at all anticipate any changes connected to the revision of national accounts to be carried out by the CZSO at the end of September 2011.

C.2   Prices

Consumer prices

The YoY growth in consumer prices accelerated to 2.0% (*versus 1.9%*) in May, with a contribution from administrative measures of 0.6 p.p.

The YoY acceleration of inflation was caused primarily by prices in the food and non-alcoholic beverages sector, which reflects increase in prices of domestic agricultural producers and food commodities on global markets. The price levels of food and non-alcoholic beverages surpassed the 2008 peak already in April, and YoY growth has now lasted 12 months in a row. We expect food prices to have a pro-inflation impact for the rest of the year as well.

In the transport sector, two opposing tendencies are present in YoY terms: car prices are falling while fuel prices are rising. The price of Natural 95 petrol reached its historic maximum of CZK 35.21/l in May. The accepted assumptions about future dollar prices of oil and the CZK/USD exchange rate lead to higher CZK oil prices as compared to the previous forecast and contribute to the increased inflation estimate.

The impacts of administrative measures will be substantial for the remainder of this year, as well. We estimate their contribution to YoY consumer price index growth in December 2011 to be 0.9 p.p. (*versus 0.8 p.p.*). The gas price increases in June and July will have a total impact of 0.2 p.p.

Inflation impulses, which are primarily external and caused especially by high commodity prices, are mitigated by the persistent cyclical position of the

Czech economy in the negative output gap, slow improvement of the labour market situation, and moderate growth in wages. We continue to regard the inflation as cost–push inflation.

Considering the presented circumstances and projections, we estimate that the average inflation rate will reach 2.3% (*versus 2.1%*) in 2011, with a price increase of 3.0% (*versus 2.5%*) YoY in the end of the year.

In 2012, inflation will be influenced considerably more by administrative measures. The increase in the reduced VAT rate from 10% to 14% will have the greatest influence, and we estimate its impact on the CPI to be 1.1 p.p. after revision. In view of the forecasted low elasticity of demand for goods affected by the VAT increase, we assume its full reflection in consumer prices. Of indirect taxes, excise taxes on cigarettes and tobacco will continue to grow (impact 0.1 p.p.). In terms of regulated prices, we expect the greatest impact from electricity (0.2 p.p.). This will depend, however, on what limit of funds from the state budget the government will set for grants to finance additional costs connected with supporting the production of electricity from renewables. The unregulated component of the electricity price (the actual electricity) will be influenced by future development of markets in Germany. The uncertainty of price development in the housing sector is due also to a possible price increase for solid waste collection. The increased hospital-stay fee is already incorporated into the forecast (impact 0.1 p.p.). We expect administrative measures to make up about two thirds

of the YoY growth in consumer prices in 2012. The contribution in December should be 2.3 p.p. (*forecast unchanged*).

The inflation expectations, which we regard as well founded, should not be influenced by the larger extent of administrative measures next year, as the measures mentioned have a one-off character with regards to consumer price dynamics.

Based on the above, we estimate an average inflation rate of 3.5% (*versus 3.2%*) in 2012, with a December price increase of 2.9% (*unchanged*). The market price increase should be positive for the entire forecast horizon.

In the outlook for 2013 and 2014, inflation should stay within the tolerance band for the Czech National Bank's inflation target. This outlook presumes that in January 2013 the VAT rate will be unified at 17.5%, which should have an impact of –0.2 p.p. on the CPI.

C.3 Labour Market

The labour market reflects the improving economic situation and is slowly approaching the standard lag in cyclical development relative to the economic cycle as measured by output. However, the impact of administrative decisions is evidenced by the further decline in average wages in the state-run sector.

Employment

According to the Labour Force Survey (LFS), employment rose YoY in the first quarter of 2011 by 0.7% (*versus 0.6%*).

With regards to employment by sector, according to preliminary data the most significant YoY growth in employee numbers was recorded in the secondary sector (over 30,000 persons) and mostly in the manufacturing industry. The number of employees in the tertiary sector increased only slightly, and the number of persons in the primary sector remained basically the same.

The dynamic increase of the category of entrepreneurs and self-employed continued, although its rate slowed to 4.3% YoY from 7.5% in the fourth quarter of 2010 due to deceleration in growth among self-employed persons to 6.3%. The continuing increase in the self-employed demonstrates employers' persisting interest in tax optimisation, but the rate deceleration and the fact that the YoY decline in employees and entrepreneurs with employees has halted give hope that the development will gradually improve.

Deflators

The aggregate price level in the economy has increased only moderately. The **gross domestic expenditure deflator**, which is a comprehensive indicator of domestic inflation, grew by 1.4% (*versus 1.2%*) in the first quarter of 2011 as compared to the same period of last year. It should increase by 1.7% (*versus 1.5%*) in 2011 and by 3.0% (*versus 2.8%*) in 2012, due primarily to acceleration in consumer inflation.

The value of the **implicit GDP deflator** fell by 0.9% (*versus a 1.4% decline*) in the first quarter of 2011. Unlike the gross domestic expenditure deflator, it was driven downward by the 2.8% decline (*versus 3.0%*) in the terms of trade. We expect a decline in the deflator of 0.8% (*versus 0.5%*) for 2011 and growth of 2.6% (*versus 2.7%*) for 2012.

The **rate of employment** (15–64 years of age) rose YoY by 0.9 p.p. to 65.0%. Growth in the age category of 55–59 years in particular was a very positive phenomenon, reaching 3.2 p.p. in the fourth quarter of 2010. Nevertheless, the departure of higher age categories into non-activity continued.

Rate of economic activity (15–64 years) was constant at 70.1% in a YoY comparison. However, the labour supply continued to fall YoY in the first quarter of 2011 due to the declining number of working-age persons. The lower supply was evidenced by a decline in the number of unemployed persons. Another part of dismissed workers entitled to old-age pension opted for non-activity. According to Czech Social Insurance Administration statistics, however, growth in the number of old-age pensioners has recently slowed.

Due to employment's lag in reviving compared to the economic recovery and the beginning of stabilisation, employment rose in the first quarter of 2011 in accordance with the forecast. For 2011 and 2012, however, we continue to look for growth of less than 1%, corresponding to rational personnel policy, incorporation of available capacities, and continuing restrictive policy in the state-run sector.

Unemployment

After a sharp increase at the end of 2010 caused by dismissals in the government sector, registered unemployment has fallen more quickly in 2011 than

we anticipated in the previous forecast. Another positive development is that already in April and May there was a YoY decline in job seekers in all regions.

The internationally comparable unemployment rate according to LFS reached 7.2% (*as forecast*) in the first quarter of 2011, representing a YoY decline of 0.7 p.p.

Considering past development and the factors presented below, we expect a drop in the LFS unemployment rate to 6.7% (*versus 6.9%*) in 2011 and 6.4% (*versus 6.5%*) in 2012. This more optimistic outlook for unemployment is made possible especially by the improving structural characteristics of the labour market and expected economic growth. The new legislative adjustments should contribute, as well.

Wages

The **wage bill** (NA, domestic concept) grew by 2.4% (*versus 1.8%*) in the first quarter of 2011, along with growth in production. The discrepancy between the forecast and current outcome must be attributed in part to the growth revision for 2010 from 0.1% in the April forecast to the currently valid 1.2% (the change of opinion was most striking in the first quarter; the YoY decline of 2.4% was reduced to 0.7%).

For 2011, we expect an increase in the wage bill of 2.3% (*versus 2.1%*). As a result of the gradual economic recovery and the improvement in the situation for businesses, we also expect the YoY growth in the overall wage bill to continue. Austerity measures in the budget will continue to forestall higher growth. As the

most important data basis, the estimated wage bill of CZK 1,289 billion is entirely in agreement with the state budget's macroeconomic framework for 2011 (CZK 1,288 billion).

Assuming wage bill growth in the government sector, as well, we expect total growth of 4.4% in 2012.

The **average wage** (CZSO, company-based method, full time equivalent) grew nominally by 2.1% (*as forecast*) YoY in the first quarter for the economy as a whole. This was due exclusively to the business sector (3.0% growth), while it continued to fall in the non-business sector (by 1.7%). The differing development in these sectors has led to a situation in which the average wage in the non-business sector (CZK 22,608), which employs a significantly higher proportion of university-educated employees, has fallen below the average nominal wage in the business sector (CZK 23,266).

On the basis of data from previous periods, signals from the business sector, and known intents and decisions regarding public sector salaries for the forthcoming period, growth in average nominal wages is expected to become more moderate in the forthcoming period. We expect growth of 2.3% (*versus 2.6%*) for 2011, driven exclusively by the business sector, and of 4.0% (*versus 4.1%*) for 2012.

C.4 External Relations

The external imbalance, expressed as the **ratio of the current account balance to GDP,** reached −3.4% (*versus −3.9%*) in the first quarter of 2011, worsening YoY by 0.3 p.p. This was caused exclusively by a 0.9 p.p. deterioration of the trade balance. Other components of the current account achieved better or similar results YoY.

World trade continued to grow in the first quarter of 2011. After the strong growth in export markets[4] by 12.2% in 2010, its rate slowed somewhat in the first quarter of 2011 to 10.5%. For 2011 and 2012, we expect export markets growth of 7.0% and 6.9%, respectively. Similarly, we anticipate a somewhat lower growth rate for Czech imports and exports in the coming two years than that achieved in past four quarters (19.9% for exports, 22.4% for imports). We estimate that the **trade balance** will reach 0.6% of GDP in 2011 (*versus 0.7%*) and 1.1% of GDP (*versus 1.4%*) in 2012. This estimate is burdened by significant uncertainties, however. Due to methodology changes, the results of the available time series on foreign trade vary greatly. Hence, the analysis of the structure and tendencies of foreign trade for previous periods and any forecast of its further development is highly problematic. According to the CZSO, the various time series should be harmonised in September 2011.

In view of the oil price scenario, we assume the current high prices of raw materials will remain high over the course of 2011 and 2012, thus increasing the fuels balance deficit (SITC 3). Its ratio to GDP reached −3.7% in 2010, and we expect it to increase further to ca −4.8% (*versus −4.4%*) and −4.9% (*versus −4.1%*) in 2011 and 2012, respectively.

The **balance of services** surplus remained steady YoY at 1.8% of GDP (*versus 1.9%*) in the first quarter of 2011. Revenues and expenditures from all components of the balance of services grew for the second quarter in a row. Considering the relatively positive development of the global economy at present, we expect moderate improvement in the balance of services for the rest of 2011 and also in 2012, increasing to ca 2.0% of GDP this year and 2.1% of GDP next year.

The deficit in the **income balance**, which includes foreign investors' reinvested and repatriated profits, showed only a weak growth tendency. Income payments increased slightly, especially from portfolio investments, while revenues were roughly unchanged. The income balance from direct investments achieved moderately better results YoY. Revenue grew faster than expenditure consisting primarily of reinvested profits,. The balance of compensation of employees continues to improve due to domestic industrial enterprises' low demand for employing foreigners. We expect this trend to continue in 2011, and with a steady investment income balance we estimate a slight decrease in the income deficit to 6.7% of GDP (*versus no change at −7.0%*). We anticipate the deficit will increase gradually again to −7.0% of GDP (*versus −7.3%*) in 2012.

Within this context, we estimate that the **current account** deficit as a proportion of GDP will reach −3.9% (*versus −4.0%*) in 2011. The forecast for 2012 is −3.6% of GDP (*versus −3.4%*). A current account deficit of this size presents no significant risk of macroeconomic imbalance.

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

C.5   International Comparisons

Comparisons for the period up to and including 2010 are based on Eurostat statistics. Since 2011, our own calculations are 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 exchange rate conversion for countries that use currency units other than the euro. Using updated Eurostat data, purchasing power parity of the Czech Republic in 2010 was CZK 17.87/PPS in comparison to the EU27 or CZK 16.92/EUR in comparison to the EA12.

As a result of the economic crisis, per capita GDP adjusted using current purchasing power parity fell in 2009 in the Czech Republic and in other Central European countries. The only exception was Poland, which was not hit by recession. By contrast, recession hit the Baltic countries and Slovenia especially hard, and their relative economic levels compared to the EA12 decreased. Last year, the economic recession continued only in Greece, while in the other monitored economies economic recovery led to GDP growth. The relative economic level compared to the EA12 fell not only in Greece, however, but also in the Czech Republic and Slovenia.

In 2010, per capita GDP of the Czech Republic reached ca PPS 19,500, corresponding to 73% of EA12 economic output. The relative economic level of the Czech Republic compared to the EA12 decreased by 2 p.p. against the previous year and, according to Eurostat data, fell below the level of Portugal. We believe it is necessary to view this data simply as a preliminary estimate, since real GDP growth in the Czech Republic surpassed that in the EA12 by 0.6 p.p., whereas growth in Portugal lagged behind the EA12 by 0.4 p.p. Population growth reached 0.3 p.p. in the EA12 and 0.2 p.p. in the Czech Republic, while it stagnated in Portugal. Finally, country rankings according to GDP will still be influenced by data revisions for 2010.

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 ensuing differences in price levels. In the case of the Czech Republic, this indicator amounted to ca EUR 13,800 in 2010, i.e. nearly half of the EA12 level (49%). Due to growth recovery and gradual appreciation of the exchange rate, the pre-crisis level of 2008 should be surpassed as early as this year.

The comparative price level of GDP in the Czech Republic reached 67% of the EA12 average in 2010. Depreciation of the real exchange rate was reflected in

a YoY drop in the price level by 4 p.p. in 2009, which significantly helped to boost the competitiveness of the Czech economy. Much faster exchange rate depreciation was seen in Poland, where decline of the relative price level reached almost 12 p.p. and thus helped Poland to avoid economic recession.

The comparative price level of Czech GDP grew already by 3 p.p. last year and should continue to rise gradually, led by productivity growth and growth in the Czech economy's competitiveness due to factors not related to price.

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 13 institutions are continuously monitored from publicly available data sources. Of these, eight 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 2011			*July 2011*
		min.	*max.*	*consensus*	*MoF forecast*
Gross domestic product (2011)	*growth in %, const.pr.*	1.5	2.5	2.0	2.5
Gross domestic product (2012)	*growth in %, const.pr.*	2.0	3.5	2.8	2.5
Average inflation rate (2011)	*%*	1.8	2.2	2.0	2.3
Average inflation rate (2012)	*%*	2.0	3.1	2.6	3.5
Average monthly wage (2011)	*growth in %*	1.7	2.8	2.3	2.3
Average monthly wage (2012)	*growth in %*	3.3	4.6	4.1	4.0
Current account / GDP (2011)	*%*	-4.0	-1.8	-3.2	-3.9
Current account / GDP (2012)	*%*	-4.3	-1.2	-3.1	-3.6

Estimates of **GDP** growth for 2011 have long fluctuated around 2%. Institutions whose forecasts are followed expect an average increase in the Czech economy's output by 2.0% in 2011 and by 2.8% the following year. The Ministry of Finance forecast counts upon GDP growth of 2.5% in 2011 and 2012. The apparent optimism of the Ministry of Finance for 2011 is seen in that the Ministry of Finance forecast, unlike those of other institutions, already takes into account (unexpectedly positive) data on GDP development in the first quarter.

Current forecasts anticipate the **average rate of inflation** in this year to be 2.0%, which is approximately in accordance with the Ministry of Finance forecast. The marked difference of the Ministry of Finance forecast for 2012 from the average

of those of other institutions can be explained by the inclusion in the Ministry's forecast of the impact of the proposed VAT changes, and by the absence of this factor in the forecasts of some of the monitored institutions.

According to the monitored institutions' predictions, the **average wage** should increase by 2.3% in 2011 and this growth is expected to accelerate to 4.1% for 2012. The Ministry's view on the development of the average wage is practically identical with these figures.

The **current account deficit of the balance of payments** should remain at a sustainable level. Considering the recent revision of data on the development of the balance of payments in 2009 and 2010, however, comparing the Ministry's forecast with those of other institutions is not very informative.

Graph D.1: **Forecast of Real GDP Growth for 2011**
in %
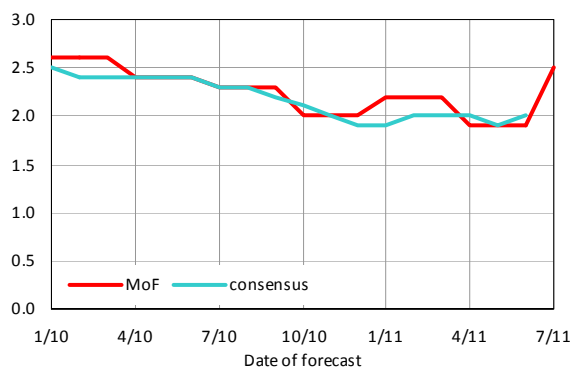
Graph D.2: **Forecast of Average Inflation Rate for 2011**
in %

E Evaluation of Forecasting History at the Ministry of Finance

The first experimental publication, which summarised past and expected future development of basic economic indicators, was published by the Mi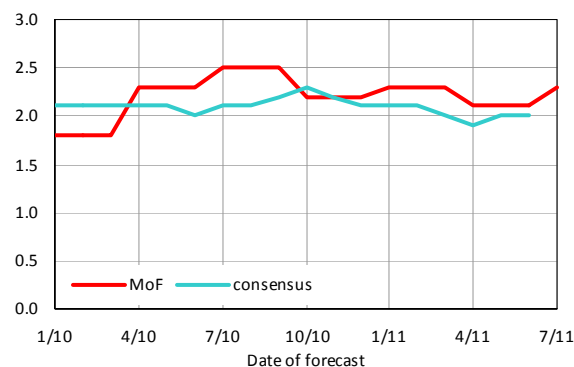nistry of Finance of the Czech Republic in November 1995. The foundation of this traditional publication was thus laid, and it has gradually become a knowledge source for the general Czech and foreign economic public.

Sources of tables and graphs: Ministry of Finance of the Czech Republic, European Commission, OECD, IMF, MoF estimates.

The already 16-year history of these regular quarterly forecasts provides quality source material for evaluating their success. Such assessment can help users comprehend how precisely it is possible to identify future development of basic macroeconomic indicators over various time horizons.

At the same time, it is necessary to realise that fundamental changes in the Czech economy occurred during the evaluated period, as it shifted from a volatile transition economy to a more or less stable market economy within the EU. A similar shift occurred in the statistical characterisation of the economic reality, and even in the prognostic methods and procedures used. Thus we have divided the period from 1995 to 2010 into two periods of equal length (1995–2002 and 2003–2010) in order also to be able to evaluate how successfully the forecasts have developed over time.

All macroeconomic forecasts are by their nature conditioned upon the assumptions adopted regarding the development of exogenous factors. Some of these cannot be predicted – natural disasters, development of financial markets including commodity prices, or changes of political environment both within and outside the Czech Republic. Others, e.g. impact of structural policy measures, are very difficult to quantify. Revisions to the underlying data for past periods, which especially concern the most important indicators of the system of national accounts, represent another significant source of uncertainty.

Identifying the impacts of these factors which arise externally and are entirely beyond the forecast team's control, however, is difficult, if not impossible. In accordance with the literature (see list), we therefore exclude these factors from the analysis.

Basic terms

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

Average forecasting error (AFE) indicates forecasts' deviation. Positive AFE values indicate systematic or prevalent "over-estimation" in the forecasts, while negative values indicate "under-estimation". AFE is defined by the following relationship:

$$AFE = \frac{\sum_{t=1}^{T}(F_t - A_t)}{T}$$, where A_t is the actual value at 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 as compared to reality. MAE is determined as follows:

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

Theil's inequality coefficient (TIE) serves for assessing the success of forecasts. The coefficient is defined as the ratio of the mean squared errors of analysed 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, then the forecast matches the actual situation. Coefficient values greater than 1 indicate that the results of forecast activities are worse than those of the naive forecast. In interpreting results, it is necessary to take into consideration the fact that this indicator considerably "penalises" an isolated, markedly worse result as compared to the naive forecast and, by contrast, yields a substantial "bonus" for well estimated sudden shifts in the development of predicted quantities.

A **naive forecast** is a mechanically created forecast whereby the value of a given indicator for the year t+1 equals the measured, estimated or forecast value of this indicator for the year t.

The **forecast horizon** is understood to be the time from publishing the forecast to the end of the forecast period.

All statistics were calculated in comparison with the first estimates published by the CZSO or CNB, as it is not possible to estimate the scope of changes in past development through subsequent revisions of time series, which for the most part cannot be divided into components of further precisioning of the given indicator and methodological change.

E.1 Real GDP Growth

While forecasts from the years 1995–2002 significantly overvalued real GDP growth, in the subsequent period the deviation toward overvaluing growth was already much lower and in a short time horizon real GDP growth was instead slightly undervalued.

The high mean absolute error in a horizon of over 15 months, amounting to 2–3 p.p. for the entire monitored period, was caused by inaccurate estimates of real GDP growth in the years 1998 and 2009, when the onset of recession was not detected sufficiently in advance.

In connection with the recent recession, it is necessary, however, to emphasise that it was caused exclusively by an unfavourable development in the external environment. The difficulty in predicting future development in this period is evidenced, for example,

by comparisons with the forecasts of other institutions from this period (see Macroeconomic Forecast, July 2008, Chapter D, http://www.mfcr.cz/cps/rde/xbcr/mfcr/MakroPre_2008Q3_komplet_pdf.pdf) or gradual adjustment of the forecasts of international institutions (see Macroeconomic Forecast, April 2009, Chapter A1, table A.1.1, http://www.mfcr.cz/cps/rde/xbcr/mfcr/MakroPre_2009Q2_komplet_pdf.pdf).

The same explanation can be offered for Theil's coefficient values, which in a horizon of longer than 24 months exceed 1.0. The marked decrease in the Theil's coefficient in the second monitored period in the horizon of 6–18 months indicates improvement in the quality of the forecasts of real GDP growth.

Graph E.1.1: **Average Forecasting Error**
in p.p.
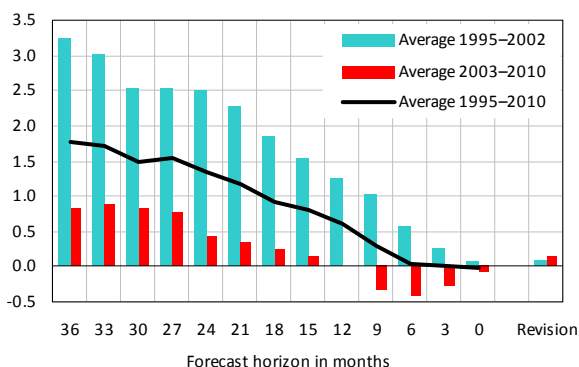
Graph E.1.2: **Theil's Inequality Coefficient**
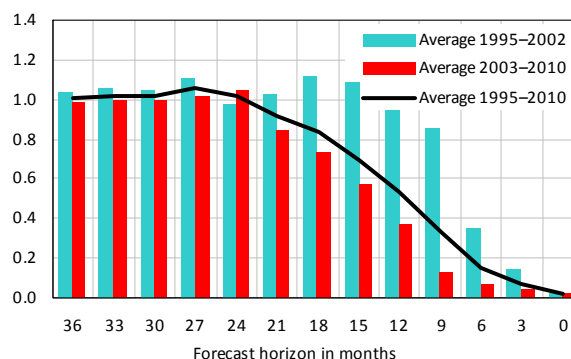
E.2   Nominal GDP Growth

From the viewpoint of the budgetary process, nominal GDP is the most important macroeconomic indicator. It is used as the denominator in ratio indicators, and forecasts of budget income are derived from the magnitude of its components.

Nominal GDP growth in both monitored periods was slightly overvalued in longer horizons, but the average forecasting error was significantly lower in the second period and almost zero in a horizon of up to 9 months.

The mean absolute error, which was lower by an average 35% in the second monitored period, also confirms the increase in the quality of forecasts. In an 18-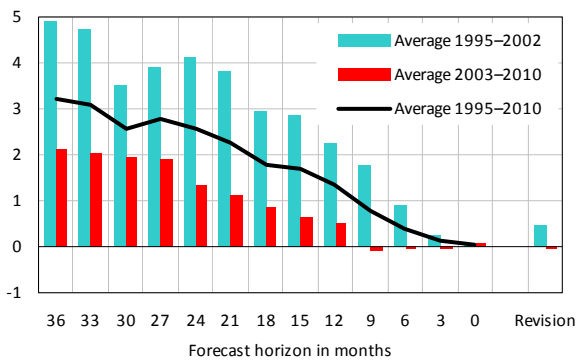month horizon, which represents the starting point for preparing the state budget, absolute error shows a decreasing character. High values in the years 1997 and 2009 fall within periods of economic recessions, while that in 1999 falls within a period of disinflation. The estimate for 2010, on the other hand, was entirely accurate.

Graph E.2.1: **Average Forecasting Error**
in p.p.

Graph E.2.2: **MAE in the 18-month horizon**
in p.p.
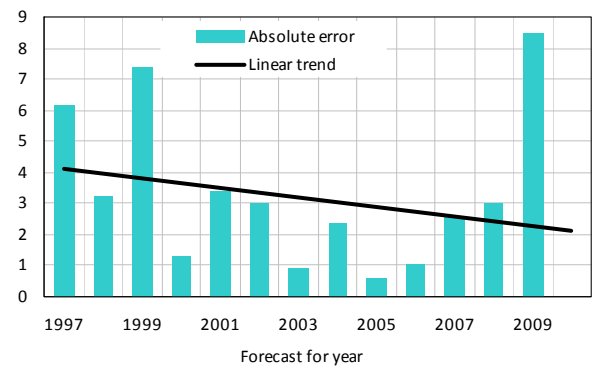
E.3   GDP Deflator Growth

Growth in the GDP deflator was overvalued in both monitored periods, but the average forecasting error did not exceed 1.5 p.p. throughout the horizon. As with nominal GDP growth, the significant decrease in mean absolute error during 2003–2010, which fell by more than two fifths on average as compared with the first period, was evident here as well.

The graph depicting the absolute error in an 18-month horizon also confirms this decreasing trend. The error

for 1999 falls in a period of disinflation, when growth of the GDP deflator fell from 10.8% in 1998 to 2.7% in 1999. Although the decline was expected and properly identified in time, its scope exceeded all expectations.

The Theil's coefficient for the entire 16-year period did not exceed 0.85 at any point in the horizon, although its average values were slightly higher in the second period.

Graph E.3.1: **Mean Absolute Error**
in p.p.
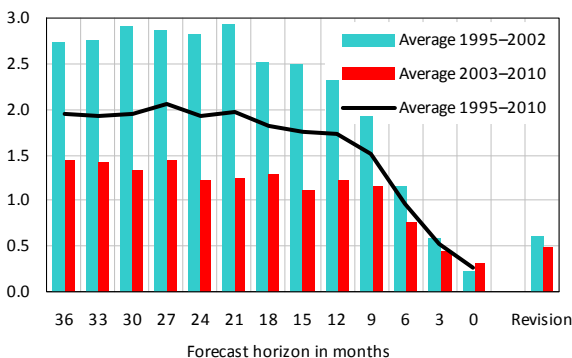
Graf E.3.2: **MAE in the 18-month horizon**
in p.p.
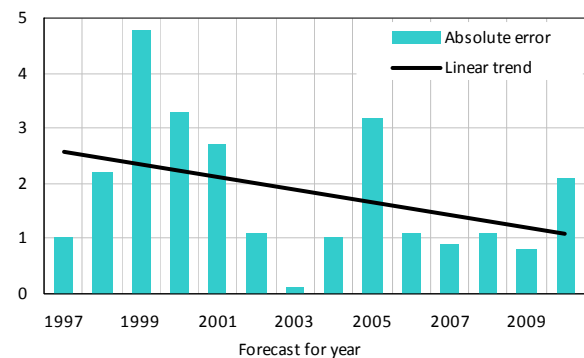
E.4   Average Inflation Rate

Inflation forecasts in the Macroeconomic Forecast were surprisingly accurate in the majority of cases. Generally, the forecasts slightly overvalued the average inflation rate. In a horizon of up to 30 months, the average forecasting error did not exceed 1 p.p. in either monitored period.

Similar to the average forecasting error, the mean absolute error in the second period is also significantly lower and has a decreasing character over the 18-month budget horizon. The error for 1999 falls into a

period of fierce disinflation, as the average inflation rate fell from 10.7% in 1998 to 2.1% in 1999. Although this trend was properly identified, its scope exceeded all expectations. On the other hand, the absolute error did not exceed 1.0 p.p. during the 18-month budget horizon in 8 of the 14 years monitored. This can be seen as very positive.

The Theil's inequality coefficient never exceeded 0.75 in either monitored period over the entire time horizon.

Graph E.4.1: **Mean Absolute Error**
in p.p.

Graph E.4.2: **MAE in the 18-month horizon**
in p.p.
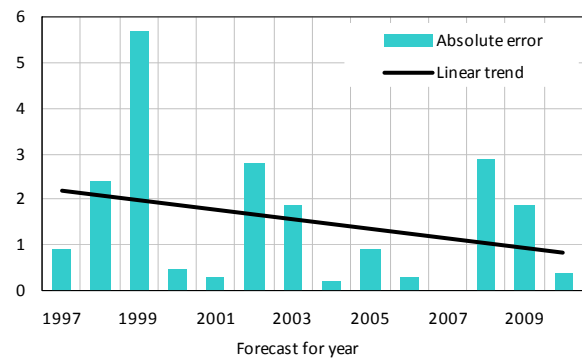
E.5   Average Unemployment Rate (LFS)

The unemployment rate according to LFS has been forecasted only since 2000, and thus it was not possible to compare the quality of forecasts over time.

Forecasts systematically overvalued the unemployment rate, but the average forecasting error did not exceed 0.6 p.p. over any time horizon. The unemployment rate was undervalued only in 2009, when it grew by 2.3 p.p. in comparison with the previous year as a result of economic recession.

Mean absolute error shows a continuously decreasing trend and does not exceed 1.0 p.p. in a horizon less than 15 months. High Theil's inequality coefficient values in the horizon over 18 months are due primarily to inaccurate estimates in the years 2007 and 2009. The drop in the unemployment rate in 2007 as a result of rapid economic growth surpassed our expectations, while in 2009 we were unable to detect the onset of the recession sufficiently in advance.

Graph E.5.1: **Mean Absolute Error**
in p.p.

Graph E.5.2: **Theil's Inequality Coefficient**
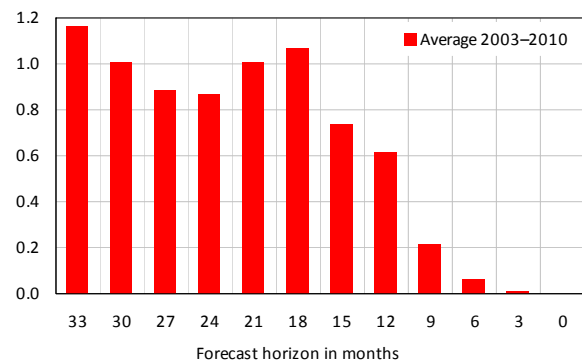
E.6 Current Account as a Percentage of GDP

Although forecasts overvalued the ratio of the current account to GDP during the monitored period, the average forecasting error did not exceed 0.5 p.p. on average in either period. The mean absolute error ranged, with a few exceptions, between 1 p.p. and 2 p.p. and typically was lower in the second monitored period. Absolute error in the 18-month horizon shows a decreasing character.

Apart from the 24-month horizon, the Theil's coefficient is lower in the first monitored period. In the

second period, it even surpassed 1 in the 9–18 months range. This can be blamed largely upon a change to the revision system which occurred in the second monitored period. While previously revisions were made almost permanently, now this is done only once per year. As a result, the period in which the forecast is established on past development, which, as is later shown, does not correspond to reality, thus is extended.

Graph E.6.1: **Mean Absolute Error**
in p.p.

Graph E.6.2: **Theil's Inequality Coefficient**
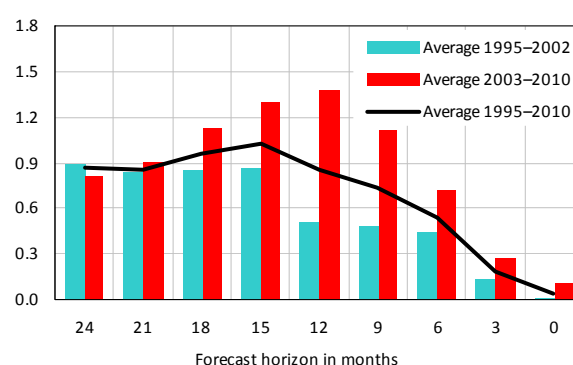
E.7 Comparing the Success of Ministry of Finance Forecasts with Forecasts of International Institutions

We have compared forecasts of the Czech Ministry of Finance with the macroeconomic prognoses of OECD, the European Commission and the International Monetary Fund. In this case as well, we made use of the average forecasting error, mean absolute error and Theil's inequality coefficient to evaluate the success of

forecasts, though we conducted the comparison only for the period 2003–2010. The results indicate that the **success of all institutions' forecasts basically do not much differ**. Nevertheless, the forecasts of the Czech Ministry of Finance and of OECD achieve the best results in the majority of cases.

Table E.7.1: **Forecasts of Real GDP Growth**

	Average Forecasting Error (AFE)				Mean Absolute Error (MAE)				Theil's Inequality Coefficient			
	MoF	EC	OECD	IMF	MoF	EC	OECD	IMF	MoF	EC	OECD	IMF
27 months	0.78	0.79	0.78	-	2.70	2.59	2.58	-	1.01	0.94	1.08	-
21 months	0.35	0.44	0.50	0.13	2.58	2.54	2.40	2.55	0.85	0.85	0.72	0.80
15 months	0.15	0.21	0.25	0.04	2.38	2.26	1.88	2.29	0.57	0.55	0.42	0.58
9 months	-0.34	-0.41	-0.39	-0.65	1.24	1.16	0.74	1.08	0.13	0.12	0.06	0.10
3 months	-0.28	-0.28	-0.11	-0.55	0.58	0.60	0.46	0.75	0.04	0.04	0.03	0.07

Table E.7.2: **Forecasts of Nominal GDP Growth**

| | Average Forecasting Error (AFE) | | | Mean Absolute Error (MAE) | | | Theil's Inequality Coefficient | | |
	MoF	EC	OECD	MoF	EC	OECD	MoF	EC	OECD
27 months	1.91	1.97	1.55	3.16	3.50	2.90	0.99	0.95	0.93
21 months	1.11	1.58	1.45	2.36	2.77	2.30	0.71	0.85	0.47
15 moths	0.65	0.98	0.98	2.30	2.66	2.28	0.61	0.56	0.54
9 months	-0.10	0.02	0.88	1.60	1.83	1.98	0.25	0.33	0.62
3 months	-0.04	0.00	0.18	0.66	1.48	0.73	0.06	0.11	0.08

Table E.7.3: **Forecast of GDP Deflator Growth**

| | Average Forecasting Error (AFE) | | | Mean Absolute Error (MAE) | | | Theil's Inequality Coefficient | | |
	MoF	EC	OECD	MoF	EC	OECD	MoF	EC	OECD
27 months	1.08	1.02	0.70	1.45	1.45	0.95	1.29	0.87	0.62
21 months	0.73	1.07	0.93	1.25	1.60	1.00	0.50	0.77	0.22
15 moths	0.45	0.73	0.66	1.13	1.41	1.24	0.38	0.53	0.40
9 months	0.21	0.44	1.23	1.16	1.50	1.73	0.38	0.61	1.13
3 months	0.21	0.25	0.28	0.44	1.20	0.48	0.06	0.45	0.07

Table E.7.4: **Forecasts of Average Inflation Rate**

| | Average Forecasting Error (AFE) | | | Mean Absolute Error (MAE) | | | Theil's Inequality Coefficient | | |
	MoF	EC	OECD	MoF	EC	OECD	MoF	EC	OECD
27 months	0.51	0.67	-	1.49	1.47	-	0.73	0.76	-
21 months	0.24	0.35	0.57	1.26	1.37	1.40	0.41	0.42	0.57
15 moths	0.32	0.44	0.66	1.02	0.94	1.24	0.27	0.21	0.34
9 months	0.00	0.46	0.31	0.27	0.54	0.39	0.02	0.09	0.04
3 months	-0.01	0.17	0.25	0.14	0.20	0.25	0.01	0.01	0.01

Table E.7.5: **Forecasts of Average Unemployment Rate (LFS)**

| | Average Forecasting Error (AFE) | | | Mean Absolute Error (MAE) | | | Theil's Inequality Coefficient | | |
	MoF	EC	OECD	MoF	EC	OECD	MoF	EC	OECD
27 months	0.03	0.30	0.16	1.43	1.57	1.41	0.89	0.92	0.85
21 months	0.51	0.53	0.83	1.40	1.30	1.49	1.01	0.84	1.10
15 moths	0.16	0.31	0.29	0.87	0.86	0.94	0.74	0.72	0.63
9 months	0.27	0.36	0.44	0.50	0.56	0.44	0.22	0.29	0.20
3 months	0.00	0.21	0.09	0.10	0.21	0.16	0.01	0.08	0.02

Table E.7.6: **Forecasts of Current Account to GDP Ratio**

| | Average Forecasting Error (AFE) | | | Mean Absolute Error (MAE) | | | Theil's Inequality Coefficient | | |
	MoF	EC	OECD	MoF	EC	OECD	MoF	EC	OECD
27 months	-	-0.30	-	-	1.43	-	-	0.87	-
21 months	0.05	0.59	-0.43	1.40	1.81	1.05	0.91	1.61	0.71
15 moths	0.33	0.21	0.10	1.95	2.24	1.28	1.30	1.43	0.97
9 months	0.06	0.45	-0.18	1.76	1.58	1.38	1.12	0.95	0.65
3 months	0.19	0.00	0.36	0.76	1.00	1.29	0.27	0.40	0.61

Note : As for consumer prices, EC produces only forecasts of HICP which is not quantitatively comparable with national CPI. IMF Outlook consists only of forecasts of real GDP growth, inflation and current account/GDP ratio.

E.8 Conclusion

An evaluation of the historical values of Ministry of Finance Macroeconomic forecasts showed that their quality is improving over time. The Ministry's forecasts are fully comparable with those of renowned international institutions, and in several cases are even better. At the same time, the Ministry of Finance of the Czech Republic usually publishes its forecasts before the other institutions included in this comparison do so.

Based on the conducted analyses, it can also be stated that for the majority of macroeconomic indicators the forecasts have informative value on a horizon of up to approximately 18 months. On a longer time horizon, forecasts rather establish expectations for the trend of economic development, as is stated also in the introduction to Chapter C.

Literature:

Koutsogeorgopoulou, V.: A Post-Mortem on Economic Outlook Projections, OECD Economic Department Working Papers No. 274. Paris, OECD Economic Department, 2000.

Melander, A., Sismanidis, G., Grenouilleau, D.: The track record of the Commission's forecasts – an update. Brussels, European Commission, 2007.

Novotný, F., Raková, M.: Assessment of Consensus Forecasts Accuracy: The Czech National Bank Perspective. Prague, Czech National Bank, 2010.

Tables and Graphs:

C.1 Economic Output

Sources: CZSO, MoF estimates

Table C.1.1: **Real GDP by Type of Expenditure** – yearly
chained volumes, reference year 2000

		2005	2006	2007	2008	2009	2010 Prelim.	2011 Forecast	2012 Forecast	2013 Outlook	2014 Outlook
Gross domestic product	*bill. CZK 2000*	2630	2809	2982	3055	2928	2997	3071	3148	3254	3382
	growth in %	**6.3**	**6.8**	**6.1**	**2.5**	**-4.1**	**2.3**	**2.5**	**2.5**	**3.3**	**3.9**
Private consumption exp.[1]	*bill. CZK 2000*	1342	1411	1482	1535	1532	1535	1543	1573	1625	1694
	growth in %	**2.5**	**5.1**	**5.0**	**3.6**	**-0.2**	**0.2**	**0.5**	**2.0**	**3.3**	**4.2**
Government consumption exp.	*bill. CZK 2000*	542	548	551	557	571	571	557	545	541	541
	growth in %	**2.9**	**1.2**	**0.5**	**1.1**	**2.6**	**-0.1**	**-2.4**	**-2.1**	**-0.8**	**0.1**
Gross capital formation	*bill. CZK 2000*	767	841	921	895	753	797	825	855	901	962
	growth in %	**-0.8**	**9.6**	**9.4**	**-2.8**	**-15.8**	**5.8**	**3.4**	**3.6**	**5.4**	**6.9**
– Gross fixed capital formation	*bill. CZK 2000*	729	773	856	844	777	753	768	792	837	897
	growth in %	**1.8**	**6.0**	**10.8**	**-1.5**	**-7.9**	**-3.1**	**1.9**	**3.2**	**5.6**	**7.2**
– Change in stocks and valuables	*bill. CZK 2000*	38	69	64	51	-24	44	57	62	64	66
Exports of goods and services	*bill. CZK 2000*	2275	2633	3029	3210	2865	3381	3804	4227	4681	5218
	growth in %	**11.6**	**15.8**	**15.0**	**6.0**	**-10.8**	**18.0**	**12.5**	**11.1**	**10.7**	**11.5**
Imports of goods and services	*bill. CZK 2000*	2301	2629	3004	3144	2810	3316	3670	4050	4483	5021
	growth in %	**5.0**	**14.3**	**14.3**	**4.7**	**-10.6**	**18.0**	**10.7**	**10.3**	**10.7**	**12.0**
Domestic demand	*bill. CZK 2000*	2652	2796	2943	2979	2868	2908	2924	2967	3054	3176
	growth in %	**1.7**	**5.4**	**5.2**	**1.2**	**-3.7**	**1.4**	**0.6**	**1.5**	**2.9**	**4.0**
Methodological discrepancy[2]	*bill. CZK 2000*	6	5	3	2	17	29	13	-2	-11	-13
Real gross domestic income	*bill. CZK 2000*	2712	2869	3074	3110	3031	3051	3052	3121	3230	3365
	growth in %	**5.0**	**5.8**	**7.1**	**1.2**	**-2.5**	**0.6**	**0.0**	**2.3**	**3.5**	**4.2**
Contribution to GDP growth[3]											
– Domestic demand	*percent. points*	**1.7**	**5.3**	**5.1**	**1.2**	**-3.6**	**1.3**	**0.5**	**1.4**	**2.8**	**3.8**
– consumption	*percent. points*	**1.9**	**2.8**	**2.5**	**1.9**	**0.4**	**0.1**	**-0.3**	**0.6**	**1.5**	**2.2**
– gross capital formation	*percent. points*	**-0.2**	**2.5**	**2.5**	**-0.8**	**-4.0**	**1.3**	**0.8**	**0.8**	**1.2**	**1.6**
– gross fixed capital formation	*percent. points*	**0.5**	**1.5**	**2.7**	**-0.4**	**-1.9**	**-0.7**	**0.4**	**0.7**	**1.2**	**1.6**
– change in stocks	*percent. points*	**-0.7**	**1.0**	**-0.1**	**-0.4**	**-2.1**	**2.0**	**0.4**	**0.2**	**0.0**	**0.0**
– Foreign balance	*percent. points*	**4.6**	**1.5**	**1.1**	**1.3**	**-0.6**	**1.0**	**1.9**	**1.1**	**0.6**	**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.1.2: **Real GDP by Type of Expenditure** – quarterly

chained volumes, reference year 2000

		2010				2011			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
		Prelim.	*Prelim.*	*Prelim.*	*Prelim.*	*Prelim.*	*Estim.*	*Forecast*	*Forecast*
Gross domestic product	*bill. CZK 2000*	712	764	756	765	734	781	776	781
	growth in %	**1.2**	**2.9**	**2.3**	**3.0**	**3.1**	**2.2**	**2.6**	**2.1**
	growth in % [1]	**1.2**	**2.3**	**2.6**	**2.7**	**2.8**	**2.5**	**2.3**	**2.3**
	quart.growth in % [1]	**0.8**	**0.6**	**0.8**	**0.5**	**0.9**	**0.3**	**0.6**	**0.5**
Private consumption exp.	*bill. CZK 2000*	363	384	388	399	362	385	393	403
	growth in %	**-0.1**	**0.1**	**-0.3**	**1.0**	**-0.4**	**0.1**	**1.2**	**1.2**
Government consumption exp.	*bill. CZK 2000*	133	140	140	157	131	137	136	153
	growth in %	**2.3**	**0.9**	**-0.7**	**-2.4**	**-1.2**	**-2.6**	**-2.9**	**-2.8**
Gross capital formation	*bill. CZK 2000*	184	204	223	187	192	206	232	195
	growth in %	**-7.4**	**4.4**	**16.3**	**11.1**	**4.2**	**1.3**	**4.0**	**4.3**
– Gross fixed capital formation	*bill. CZK 2000*	165	190	194	204	171	194	196	207
	growth in %	**-7.8**	**-4.7**	**-0.2**	**-0.1**	**3.7**	**1.9**	**1.0**	**1.5**
– Change in stocks and valuables	*bill. CZK 2000*	19	13	29	-17	21	12	36	-12
Exports of goods and services	*bill. CZK 2000*	786	862	837	896	914	970	930	989
	growth in %	**18.0**	**20.7**	**15.7**	**17.7**	**16.3**	**12.6**	**11.0**	**10.4**
Imports of goods and services	*bill. CZK 2000*	756	826	843	890	862	913	922	973
	growth in %	**15.4**	**20.0**	**18.6**	**17.9**	**14.0**	**10.5**	**9.3**	**9.3**
Methodological discrepancy	*bill. CZK 2000*	2	0	10	17	-3	-5	7	14
Real gross domestic income	*bill. CZK 2000*	730	778	768	775	735	772	769	776
	growth in %	**-0.1**	**1.2**	**0.4**	**1.0**	**0.7**	**-0.7**	**0.1**	**0.1**

[1] *From seasonally and working day adjusted data*

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

		2005	2006	2007	2008	2009	2010 Prelim.	2011 Forecast	2012 Forecast	2013 Outlook	2014 Outlook
Gross domestic product	bill. CZK	2984	3222	3535	3689	3626	3667	3729	3922	4116	4356
	growth in %	6.0	8.0	9.7	4.3	-1.7	1.1	1.7	5.2	4.9	5.8
Private consumption	bill. CZK	1464	1562	1688	1835	1837	1864	1916	2023	2126	2262
	growth in %	3.4	6.6	8.1	8.7	0.1	1.5	2.8	5.6	5.1	6.4
Government consumption	bill. CZK	658	687	717	753	799	800	792	797	801	811
	growth in %	5.9	4.3	4.4	5.0	6.1	0.1	-1.0	0.6	0.5	1.2
Gross capital formation	bill. CZK	766	863	955	934	788	829	862	911	970	1047
	growth in %	-1.1	12.7	10.6	-2.2	-15.5	5.1	4.0	5.7	6.4	8.0
– Gross fixed capital formation	bill. CZK	742	796	890	883	814	783	802	848	906	985
	growth in %	2.0	7.3	11.8	-0.8	-7.8	-3.8	2.5	5.7	6.9	8.8
– Change in stocks and valuables	bill. CZK	24	67	65	50	-26	46	60	64	64	61
External balance	bill. CZK	95	110	176	168	201	175	158	191	219	236
– Exports of goods and services	bill. CZK	2155	2462	2830	2844	2507	2909	3254	3624	4024	4507
	growth in %	9.1	14.3	14.9	0.5	-11.8	16.0	11.9	11.4	11.1	12.0
– Imports of goods and services	bill. CZK	2060	2352	2655	2676	2305	2734	3096	3433	3805	4271
	growth in %	4.4	14.2	12.9	0.8	-13.8	18.6	13.2	10.9	10.8	12.2
Gross national income	bill. CZK	2850	3062	3288	3523	3411	3429	3499	3670	3842	4059
	growth in %	7.1	7.5	7.4	7.1	-3.2	0.5	2.0	4.9	4.7	5.7
Primary income balance	bill. CZK	-134	-160	-247	-166	-215	-238	-230	-253	-275	-297

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

		2010 Q1 Prelim.	2010 Q2 Prelim.	2010 Q3 Prelim.	2010 Q4 Prelim.	2011 Q1 Prelim.	2011 Q2 Estim.	2011 Q3 Forecast	2011 Q4 Forecast
Gross domestic product	bill. CZK	870	936	923	938	889	940	941	959
	growth in %	-0.6	1.8	1.8	1.6	2.2	0.5	1.9	2.2
Private consumption	bill. CZK	439	467	474	485	449	475	489	503
	growth in %	0.1	1.1	1.6	3.0	2.3	1.8	3.3	3.8
Government consumption	bill. CZK	182	196	195	228	180	194	193	225
	growth in %	2.2	1.1	0.1	-2.2	-0.9	-1.0	-1.0	-1.0
Gross capital formation	bill. CZK	191	213	231	193	199	216	243	205
	growth in %	-8.5	4.4	16.6	9.0	3.8	1.5	4.9	6.0
– Gross fixed capital formation	bill. CZK	172	198	202	211	176	203	206	217
	growth in %	-9.4	-5.4	-0.3	-0.7	2.7	2.3	2.1	2.8
– Change in stocks and valuables	bill. CZK	20	14	29	-18	23	13	36	-12
External balance	bill. CZK	58	60	23	33	61	56	16	26
– Exports of goods and services	bill. CZK	676	750	719	764	782	830	798	844
	growth in %	9.4	19.3	17.7	17.5	15.6	10.7	10.9	10.6
– Imports of goods and services	bill. CZK	618	689	696	731	721	775	782	819
	growth in %	8.9	21.3	23.6	20.4	16.6	12.3	12.4	12.0

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

chained volumes, bill. CZK in const. prices of 2000, seasonally adjusted
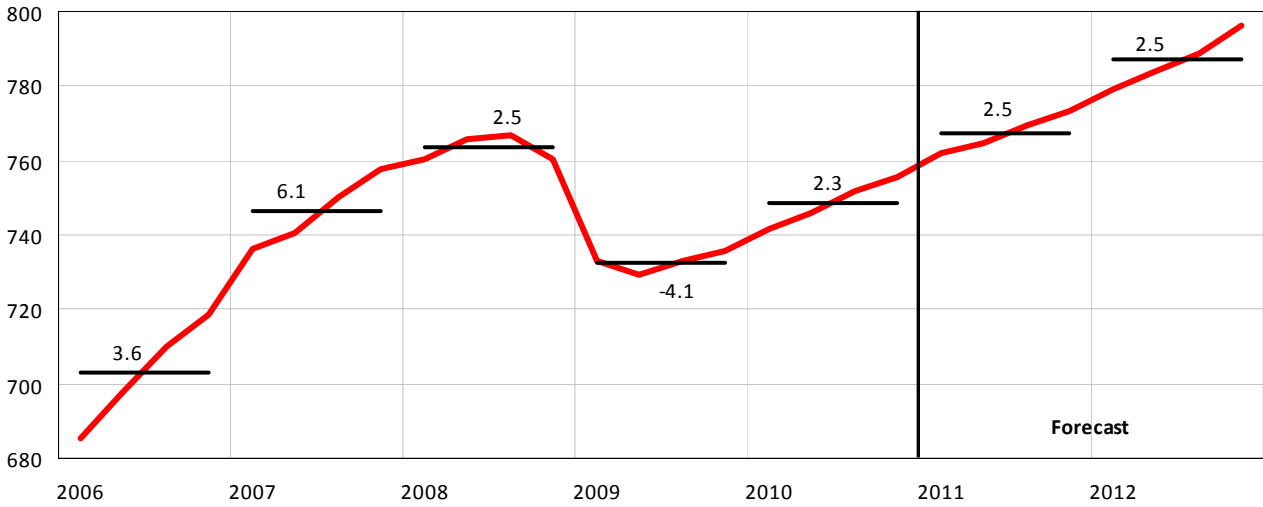
Graph C.1.2: **Gross Domestic Product** (*real*)

QoQ growth rate, in %, seasonally adjusted
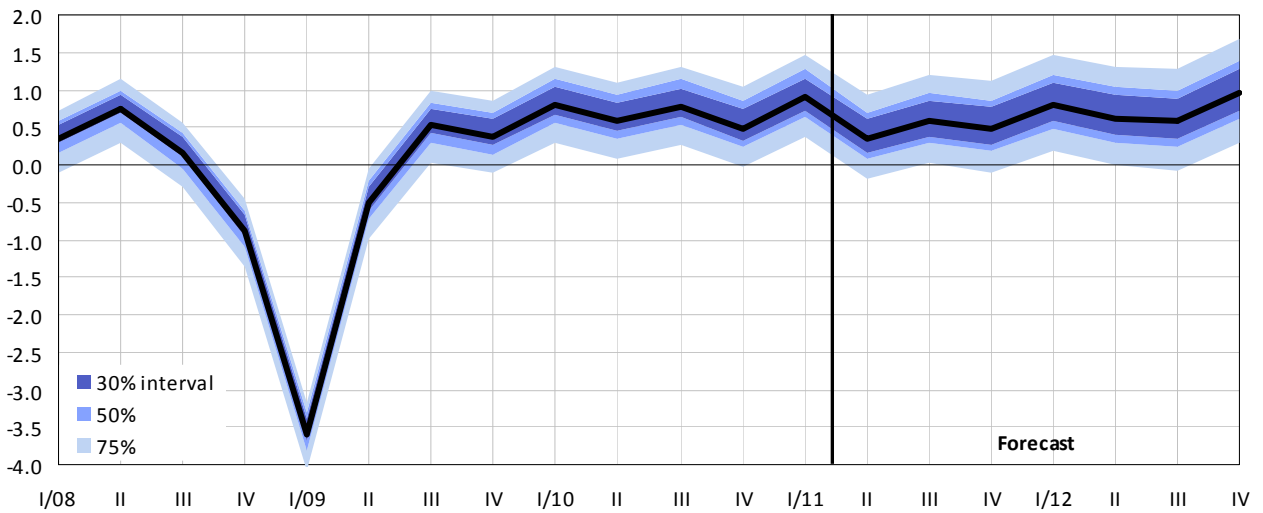
Graph C.1.3: **Gross Domestic Product and Real Gross Domestic Income**

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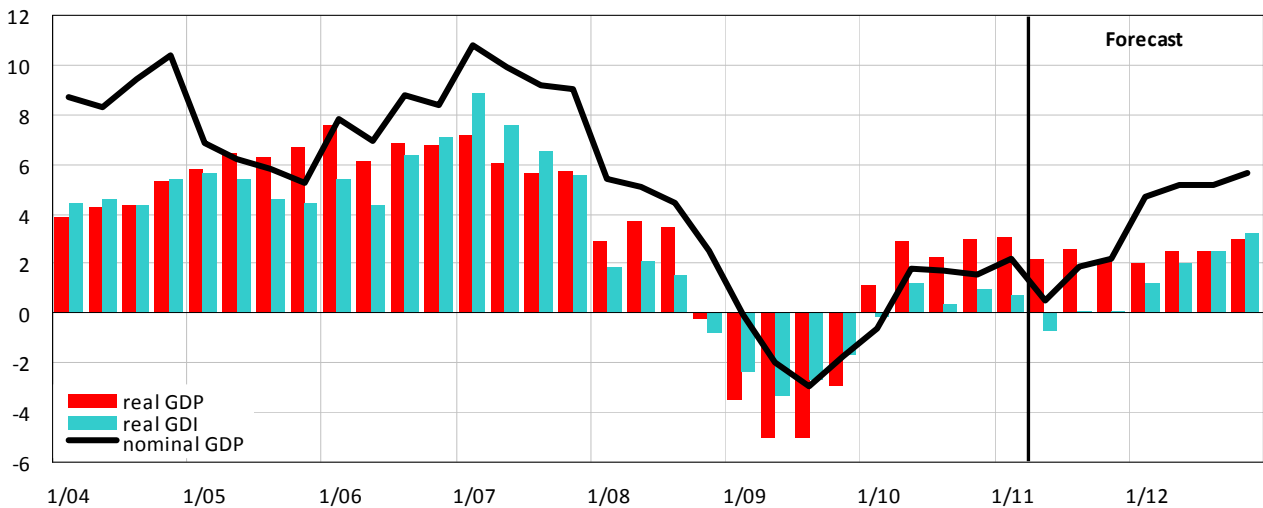
Graph C.1.4: **Gross Domestic Product** – *contributions to YoY growth*
in constant prices, decomposition of the YoY growth, in percentage points

Legend:
- consumption
- gross capital formation
- foreign balance
- YoY growth of GDP

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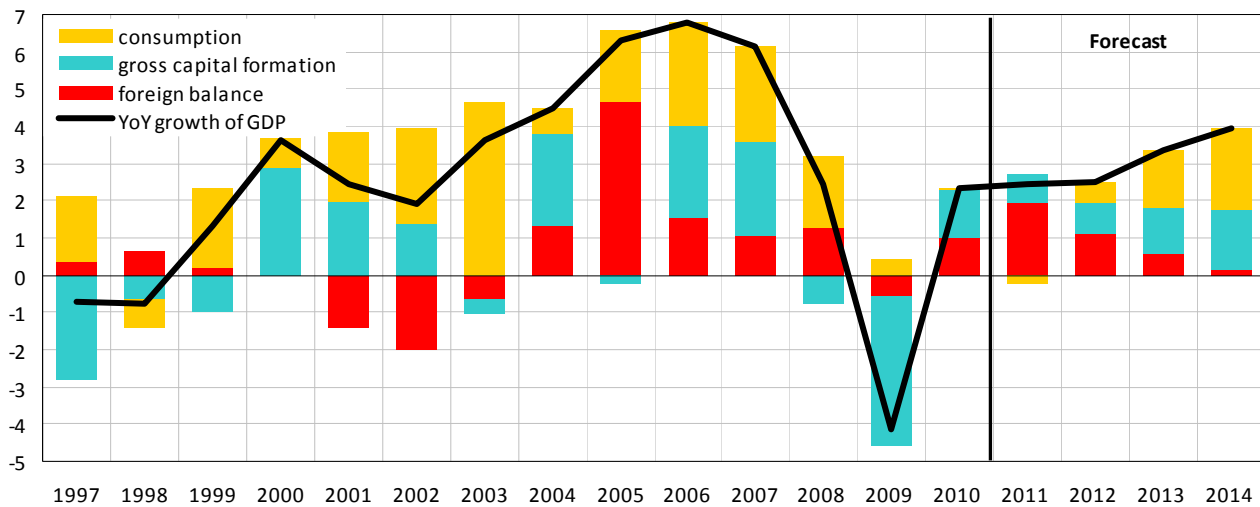
Graph C.1.5: **Private Consumption** (*incl. NPISH*)
YoY growth rate, in %

Legend:
- deflator
- in real terms
- in nominal terms

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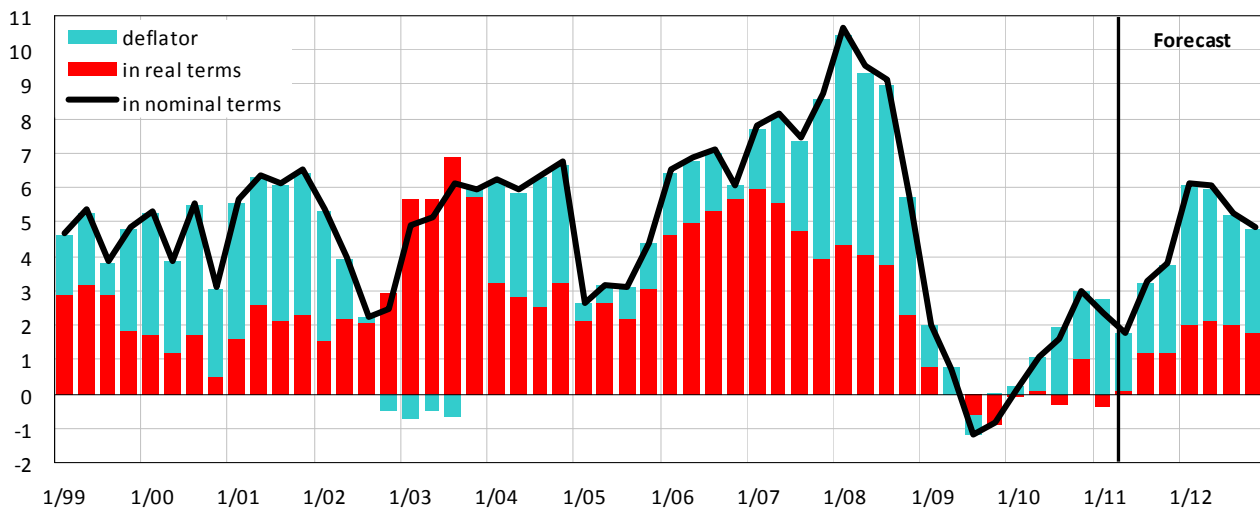
Graph C.1.6: **Gross Fixed Capital Formation**
YoY growth rate, in %

Legend:
- deflator
- in real terms
- in nominal terms

Forecast
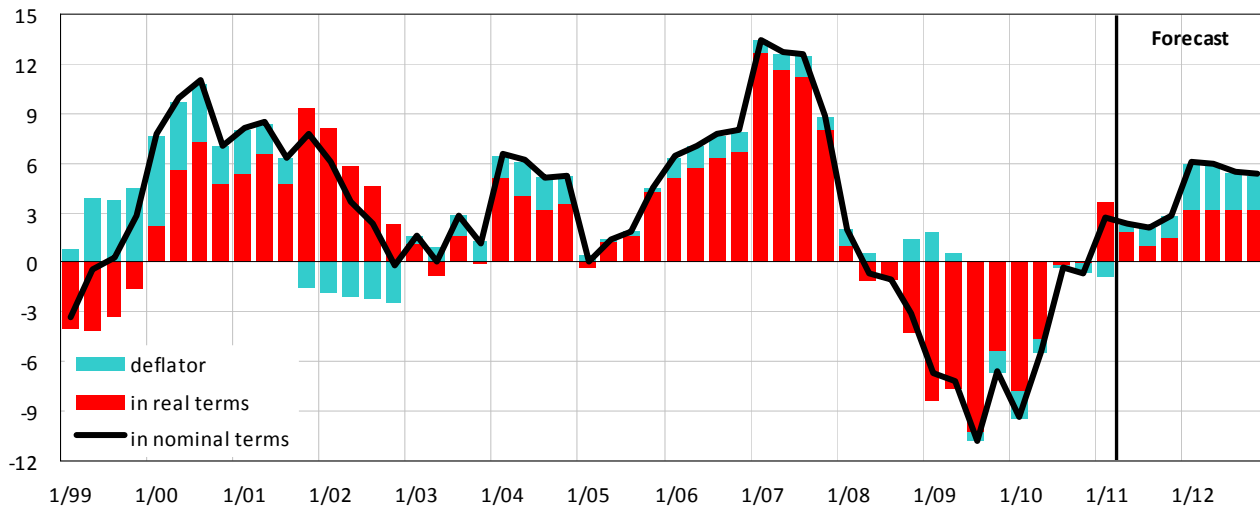
Graph C.1.7: **Change in Inventories and Valuables** (*real*)
seasonally adjusted, contributions to YoY growth of GDP in p.p.
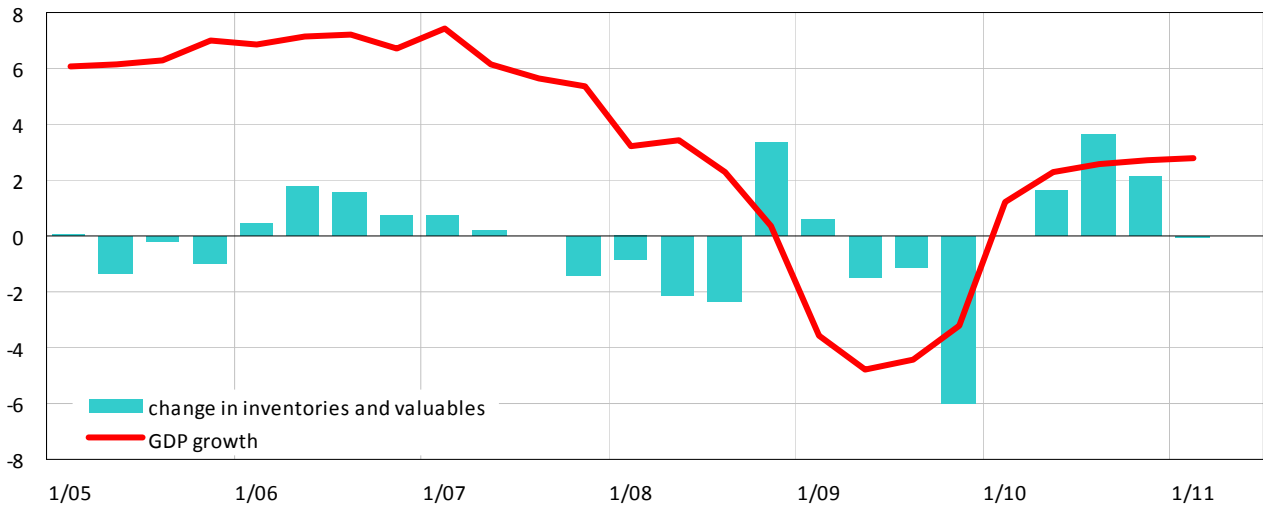
Graph C.1.8: **Ratio of Exports and Imports of Goods and Services to GDP** (*nominal*)
yearly moving sums, in %
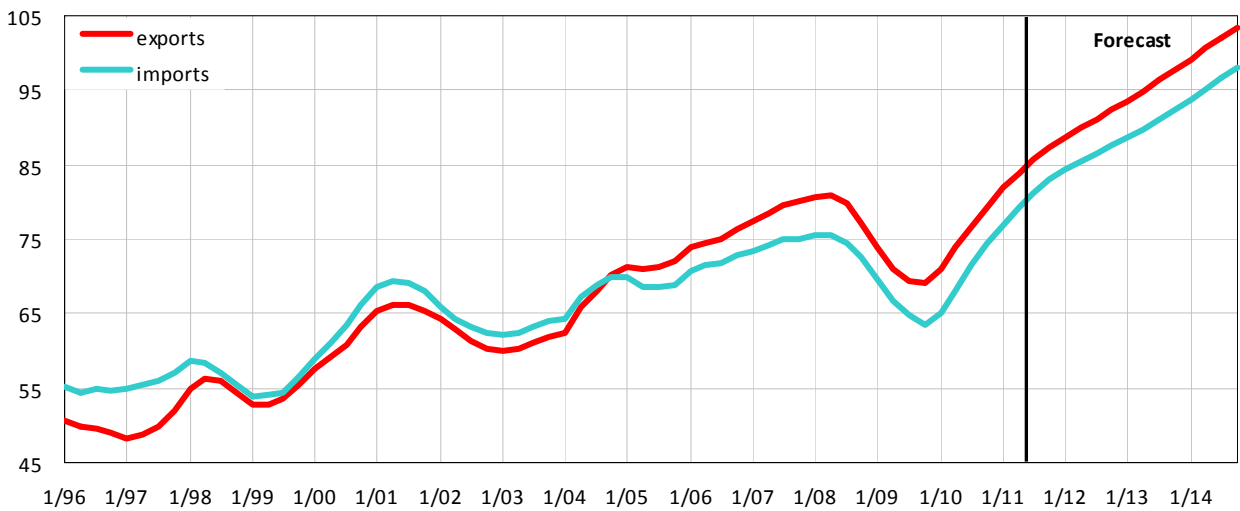
Graph C.1.9: **GDP – Income Structure**
yearly moving sums, in %

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

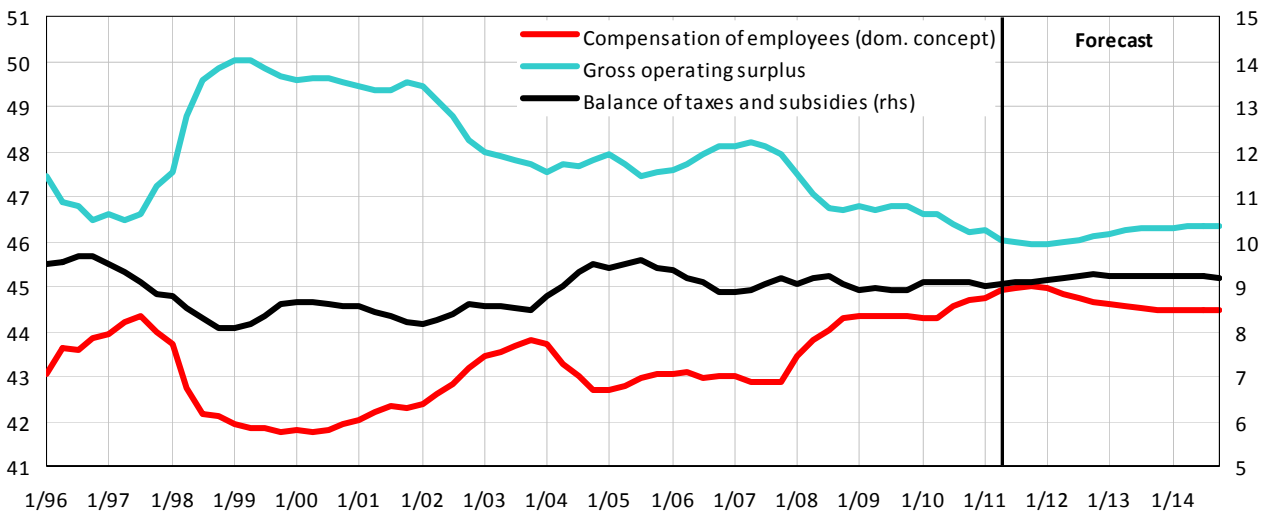|		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
							Prelim.	*Forecast*	*Forecast*	*Outlook*	*Outlook*
GDP	bill. CZK	**2984**	**3222**	**3535**	**3689**	**3626**	**3667**	**3729**	**3922**	**4116**	**4356**
	growth in %	6.0	8.0	9.7	4.3	-1.7	1.1	1.7	5.2	4.9	5.8
Balance of taxes and subsidies	bill. CZK	**281**	**285**	**325**	**333**	**322**	**333**	**339**	**363**	**379**	**401**
	growth in %	5.1	1.6	13.8	2.5	-3.2	3.4	1.7	7.0	4.5	5.6
– Taxes on production and imports	bill. CZK	**353**	**363**	**407**	**418**	**424**	**433**	**440**	**467**	**486**	**511**
	growth in %	6.4	2.9	12.0	2.9	1.4	2.1	1.7	6.0	4.2	5.0
– Subsidies on production	bill. CZK	**72**	**78**	**82**	**85**	**102**	**100**	**101**	**104**	**107**	**110**
	growth in %	12.2	7.8	5.4	4.1	19.3	-1.9	1.6	2.5	3.0	3.0
Compensation of employees	bill. CZK	**1285**	**1386**	**1516**	**1633**	**1608**	**1639**	**1677**	**1751**	**1831**	**1938**
	growth in %	6.9	7.9	9.4	7.7	-1.6	2.0	2.3	4.4	4.6	5.8
– Wages and salaries	bill. CZK	**970**	**1047**	**1145**	**1245**	**1244**	**1259**	**1289**	**1345**	**1411**	**1493**
	growth in %	6.9	7.9	9.4	8.7	0.0	1.2	2.3	4.4	4.9	5.8
– Social security contributions	bill. CZK	**315**	**339**	**371**	**389**	**363**	**380**	**389**	**406**	**420**	**444**
	growth in %	6.7	7.8	9.5	4.7	-6.6	4.6	2.3	4.4	3.5	5.8
Gross operating surplus	bill. CZK	**1418**	**1551**	**1694**	**1722**	**1696**	**1695**	**1712**	**1809**	**1906**	**2018**
	growth in %	5.4	9.3	9.3	1.7	-1.5	-0.1	1.0	5.6	5.4	5.9
– Consumption of capital	bill. CZK	**554**	**576**	**611**	**639**	**655**	**661**	**674**	**695**	**715**	**737**
	growth in %	3.0	4.1	6.1	4.5	2.4	1.0	2.0	3.0	3.0	3.0
– Net operating surplus	bill. CZK	**865**	**974**	**1083**	**1083**	**1041**	**1034**	**1038**	**1114**	**1190**	**1281**
	growth in %	7.0	12.7	11.1	0.0	-3.9	-0.8	0.4	7.3	6.8	7.6

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

		2010				2011			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Prelim.	*Prelim.*	*Prelim.*	*Prelim.*	*Prelim.*	*Estimate*	*Forecast*	*Forecast*
GDP	bill. CZK	**870**	**936**	**923**	**938**	**889**	**940**	**941**	**959**
	growth in %	-0.6	1.8	1.8	1.6	2.2	0.5	1.9	2.2
Balance of taxes and subsidies	bill. CZK	**78**	**90**	**93**	**72**	**77**	**92**	**95**	**74**
	growth in %	10.4	1.9	0.2	2.4	-1.4	2.7	2.6	2.9
Compensation of employees	bill. CZK	**392**	**405**	**405**	**438**	**401**	**414**	**415**	**448**
	growth in %	-0.9	1.8	4.3	2.8	2.4	2.2	2.3	2.4
– Wages and salaries	bill. CZK	**299**	**310**	**313**	**337**	**306**	**317**	**320**	**346**
	growth in %	-0.7	1.7	2.4	1.4	2.4	2.2	2.3	2.4
– Social security contributions	bill. CZK	**92**	**94**	**93**	**101**	**94**	**96**	**95**	**103**
	growth in %	-1.5	2.0	11.0	7.6	2.2	2.2	2.3	2.4
Gross operating surplus	bill. CZK	**400**	**441**	**425**	**428**	**411**	**435**	**431**	**436**
	growth in %	-2.3	1.8	-0.2	0.2	2.7	-1.5	1.3	1.9

C.2 Prices

Sources: CZSO, MoF estimates

Table C.2.1: **Prices** – yearly

		2005	2006	2007	2008	2009	2010 Prelim.	2011 Forecast	2012 Forecast	2013 Outlook	2014 Outlook
Consumer Price Index											
average of a year	*average 2005=100*	100.0	102.5	105.4	112.1	113.3	115.0	117.6	121.7	123.8	126.5
	growth in %	**1.9**	**2.5**	**2.8**	**6.3**	**1.0**	**1.5**	**2.3**	**3.5**	**1.7**	**2.1**
December	*average 2005=100*	100.6	102.3	107.9	111.8	112.9	115.5	119.0	122.5	124.7	127.2
	growth in %	**2.2**	**1.7**	**5.4**	**3.6**	**1.0**	**2.3**	**3.0**	**2.9**	**1.8**	**2.0**
– of which contribution of											
administrative measures [1]	*percentage points*	**1.9**	**0.8**	**2.2**	**4.3**	**1.0**	**1.6**	**0.9**	**2.3**	**0.5**	**0.8**
market increase	*percentage points*	**0.4**	**0.8**	**3.3**	**-0.7**	**0.0**	**0.7**	**2.1**	**0.7**	**1.3**	**1.3**
HICP	*average 2005=100*	100.0	102.1	105.1	111.7	112.4	113.7	116.4	120.5	122.6	125.2
	growth in %	**1.6**	**2.1**	**3.0**	**6.3**	**0.6**	**1.2**	**2.3**	**3.5**	**1.7**	**2.1**
Offering prices of flats	*average 2005=100*	100.0	108.9	131.6	162.4	157.9	151.6	.	.	.	.
	growth in %	**.**	**8.9**	**20.8**	**23.4**	**-2.8**	**-4.0**	**.**	**.**	**.**	**.**
Deflators											
GDP	*average 2000=100*	113.4	114.7	118.6	120.8	123.8	122.4	121.4	124.6	126.5	128.8
	growth in %	**-0.3**	**1.1**	**3.4**	**1.8**	**2.5**	**-1.2**	**-0.8**	**2.6**	**1.6**	**1.8**
Domestic final use	*average 2000=100*	108.9	111.3	114.2	118.2	119.4	120.1	122.1	125.8	127.6	129.7
	growth in %	**1.0**	**2.2**	**2.6**	**3.5**	**1.0**	**0.6**	**1.7**	**3.0**	**1.5**	**1.6**
Consumption of households	*average 2000=100*	109.1	110.7	113.9	119.5	119.9	121.5	124.2	128.6	130.8	133.6
	growth in %	**0.8**	**1.4**	**2.9**	**4.9**	**0.3**	**1.3**	**2.3**	**3.5**	**1.7**	**2.1**
Consumption of government	*average 2000=100*	121.5	125.3	130.1	135.2	139.8	140.2	142.2	146.2	148.2	149.8
	growth in %	**3.0**	**3.1**	**3.8**	**3.9**	**3.4**	**0.2**	**1.5**	**2.8**	**1.3**	**1.1**
Fixed capital formation	*average 2000=100*	101.8	103.0	104.0	104.7	104.8	104.0	104.5	107.0	108.3	109.9
	growth in %	**0.2**	**1.3**	**0.9**	**0.7**	**0.1**	**-0.8**	**0.5**	**2.4**	**1.2**	**1.5**
Exports of goods and services	*average 2000=100*	94.7	93.5	93.4	88.6	87.5	86.0	85.5	85.7	86.0	86.4
	growth in %	**-2.2**	**-1.3**	**-0.1**	**-5.2**	**-1.2**	**-1.7**	**-0.6**	**0.2**	**0.3**	**0.5**
Imports of goods and services	*average 2000=100*	89.5	89.5	88.4	85.1	82.0	82.5	84.3	84.8	84.9	85.1
	growth in %	**-0.5**	**-0.1**	**-1.2**	**-3.7**	**-3.6**	**0.5**	**2.3**	**0.5**	**0.1**	**0.2**
Terms of trade	*average 2000=100*	105.8	104.5	105.7	104.1	106.6	104.3	101.4	101.1	101.3	101.5
	growth in %	**-1.7**	**-1.2**	**1.2**	**-1.6**	**2.5**	**-2.2**	**-2.8**	**-0.3**	**0.2**	**0.2**

[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

		2010				2011			
		Q1	Q2	Q3	Q4	Q1	Q2 *Estimate*	Q3 *Forecast*	Q4 *Forecast*
Consumer Price Index	*average 2005=100*	114.4	115.1	115.2	115.1	116.4	117.4	118.1	118.4
	growth in %	**0.7**	**1.2**	**1.9**	**2.1**	**1.7**	**2.0**	**2.4**	**2.9**
contr. of administrative measures	*percentage points*	**1.0**	**1.3**	**1.6**	**1.6**	**0.8**	**0.7**	**0.9**	**0.9**
contribution of market increase	*percentage points*	**-0.3**	**-0.1**	**0.4**	**0.5**	**0.9**	**1.2**	**1.6**	**1.9**
HICP	*average 2005=100*	113.1	113.9	114.0	113.8	115.3	116.2	116.8	117.1
	growth in %	**0.4**	**0.9**	**1.6**	**2.0**	**1.9**	**2.0**	**2.5**	**2.9**
Offering prices of flats	*average 2005=100*	152.7	152.2	151.3	150.0	147.3	.	.	.
	growth in %	**-7.3**	**-2.2**	**-3.3**	**-3.0**	**-3.5**	**.**	**.**	**.**
GDP deflator	*average 2000=100*	122.2	122.4	122.1	122.7	121.1	120.5	121.3	122.8
	growth in %	**-1.8**	**-1.1**	**-0.5**	**-1.3**	**-0.9**	**-1.6**	**-0.7**	**0.1**
Domestic final use deflator	*average 2000=100*	119.1	120.1	120.0	121.0	120.9	121.7	122.1	123.6
	growth in %	**-0.1**	**0.6**	**1.2**	**0.6**	**1.4**	**1.3**	**1.8**	**2.1**
Terms of trade	*average 2000=100*	105.2	104.2	104.1	103.9	102.3	100.8	101.1	101.5
	growth in %	**-1.8**	**-2.2**	**-2.4**	**-2.2**	**-2.8**	**-3.3**	**-2.8**	**-2.3**

Graph C.2.1: **Consumer Prices**
YoY growth rate, in %
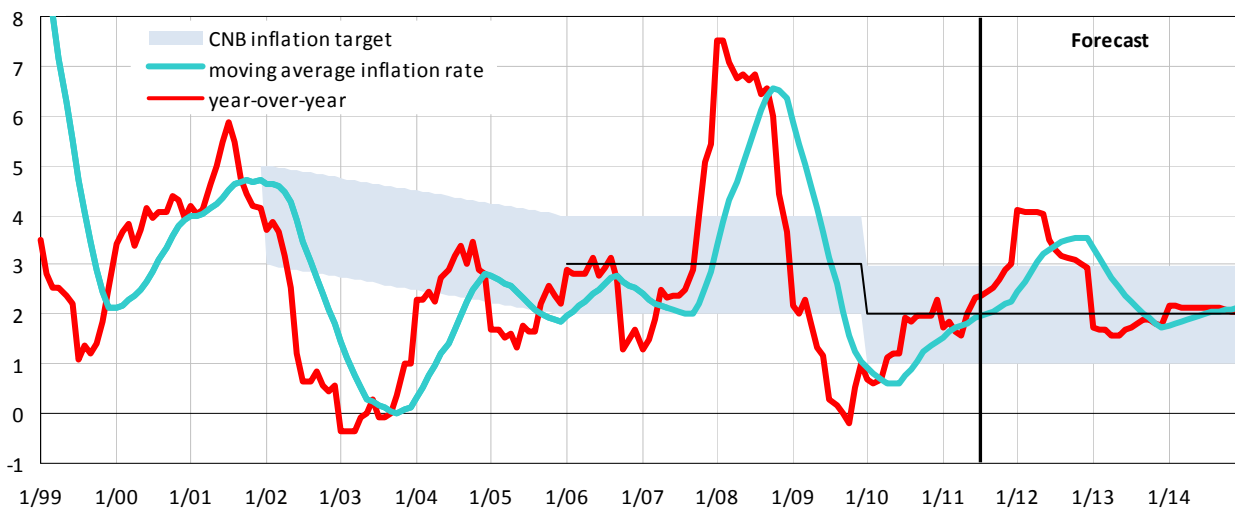
Graph C.2.2: **Consumer Prices**

decomposition of the YoY increase in consumer prices, in percentage points

Legend:
- Others
- Transport (excl. excises and adm.measures)
- Food (excl. VAT)
- Administrative measures
- CPI

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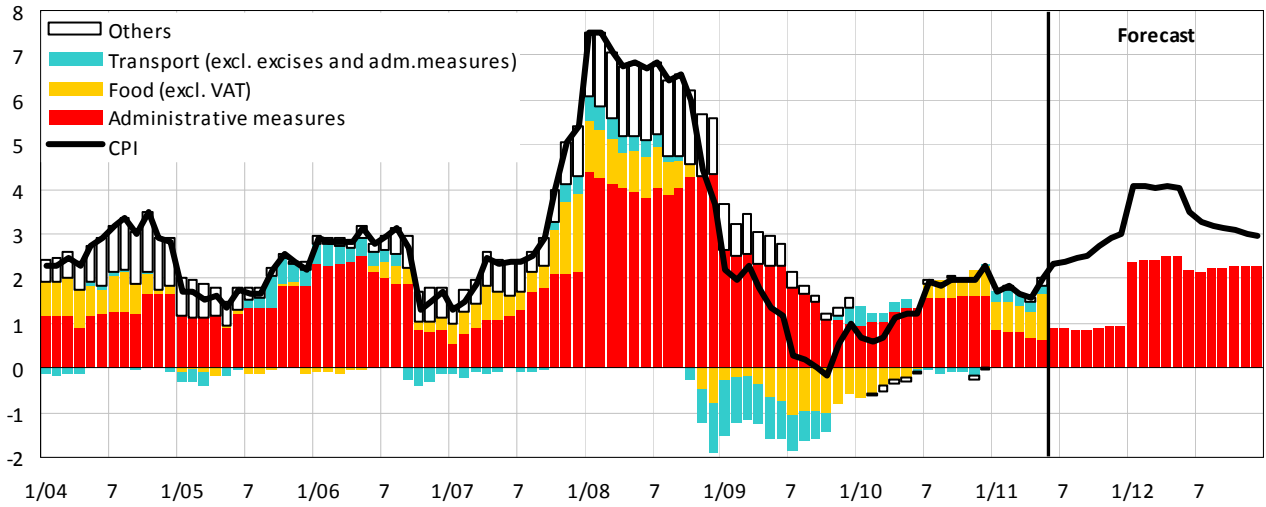
Graph C.2.3: **Indicators of Consumer Prices**

YoY increases, in %

Legend:
- National CPI
- HICP
- Private consumption deflator

Forecast
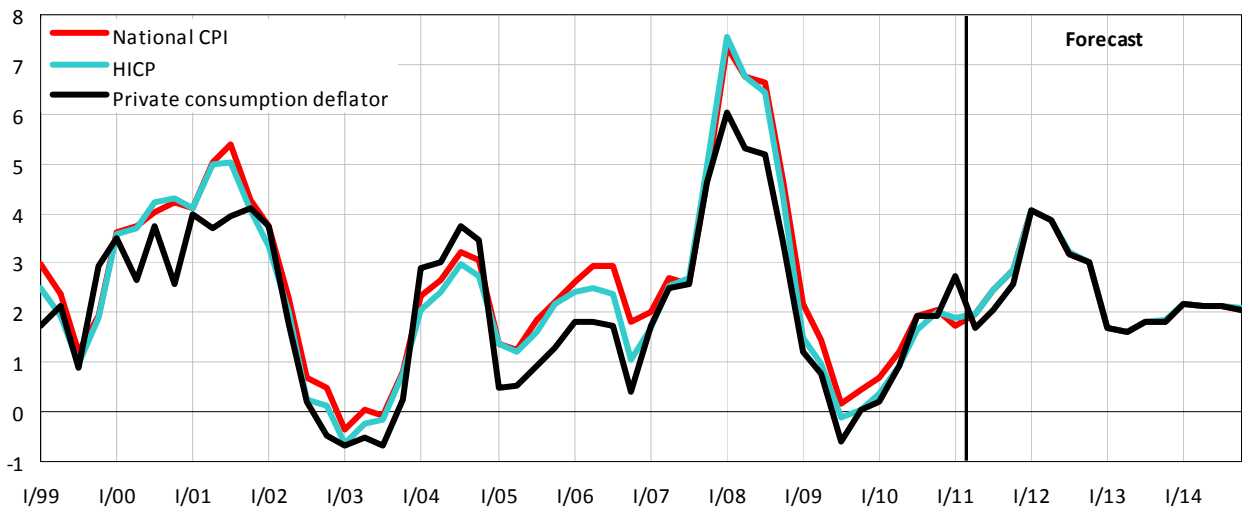
Graph C.2.4: **GDP Deflator**

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

Legend:
- GDP deflator
- Terms of trade
- Final domestic use deflator

Forecast
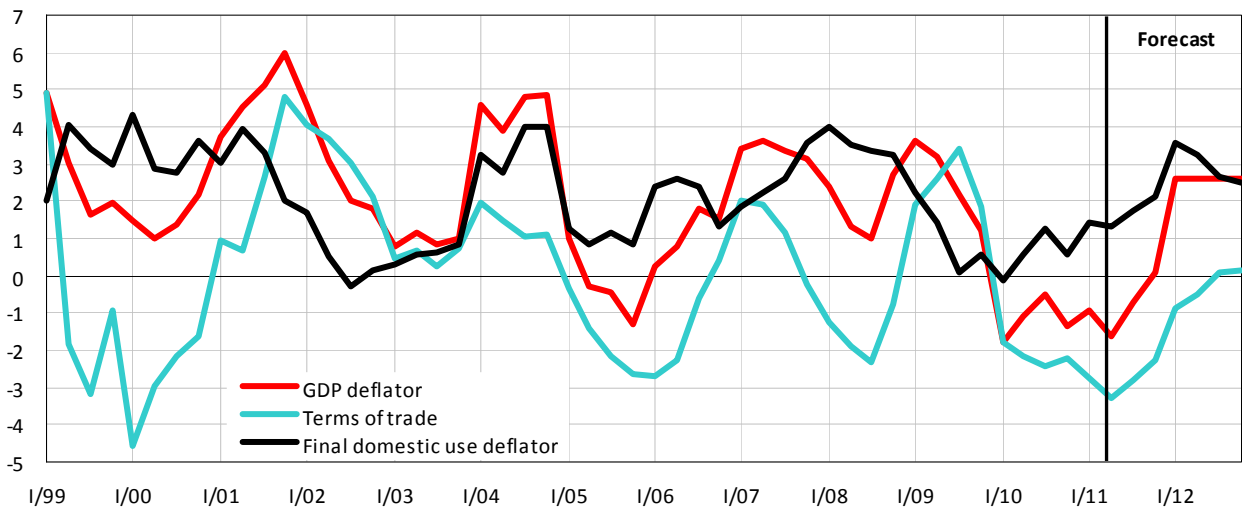
Graph C.2.5: **Terms of Trade**
YoY increases, in %
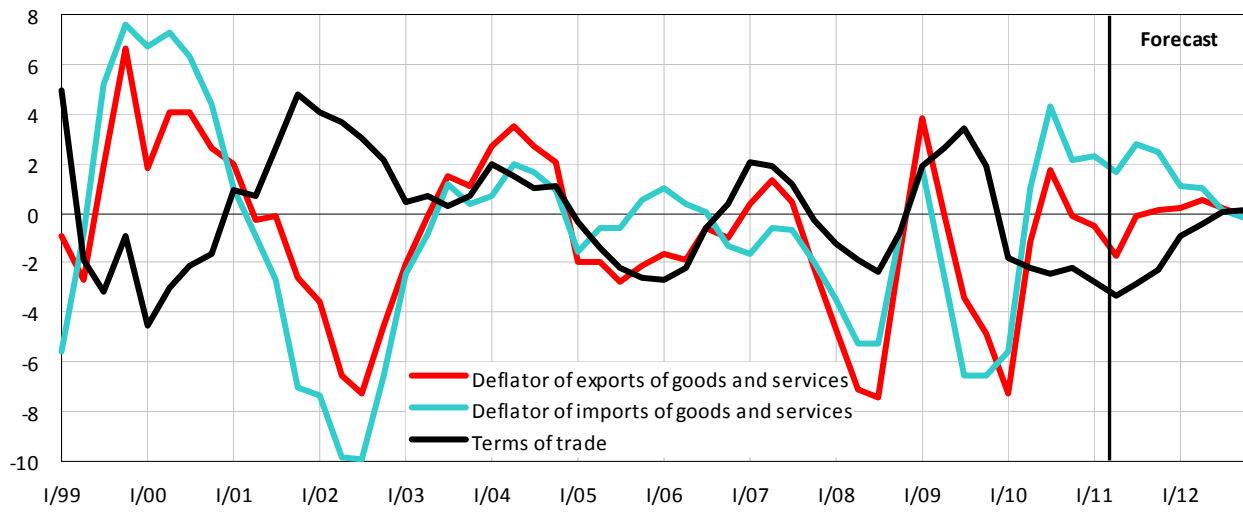
C.3   Labour Market

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

Table C.3.1: **Employment** – yearly

		2005	2006	2007	2008	2009	2010	2011 Forecast	2012 Forecast	2013 Outlook	2014 Outlook
Labour Force Survey											
Employment	*av. in thous.persons*	**4764**	**4828**	**4922**	**5002**	**4934**	**4885**	**4897**	**4916**	**4943**	**4976**
	growth in %	1.2	1.3	1.9	1.6	-1.4	-1.0	0.2	0.4	0.6	0.7
– employees	*av. in thous.persons*	**4001**	**4048**	**4125**	**4196**	**4107**	**4019**	**4015**	**4020**	**4031**	**4048**
	growth in %	2.2	1.2	1.9	1.7	-2.1	-2.1	-0.1	0.1	0.3	0.4
– enterpreneurs and	*av. in thous.persons*	**763**	**780**	**797**	**807**	**827**	**866**	**882**	**895**	**911**	**928**
self-employed	*growth in %*	-3.7	2.2	2.2	1.2	2.5	4.7	1.8	1.5	1.8	1.8
Unemployment	*av. in thous.persons*	**410**	**371**	**276**	**230**	**352**	**384**	**350**	**338**	**323**	**299**
Unemployment rate	*average in per cent*	**7.9**	**7.1**	**5.3**	**4.4**	**6.7**	**7.3**	**6.7**	**6.4**	**6.1**	**5.7**
Labour force	*av. in thous.persons*	**5174**	**5199**	**5198**	**5232**	**5286**	**5269**	**5247**	**5253**	**5265**	**5275**
	growth in %	0.8	0.5	0.0	0.7	1.0	-0.3	-0.4	0.1	0.2	0.2
Population aged 15–64	*av. in thous.persons*	**7270**	**7307**	**7347**	**7410**	**7431**	**7399**	**7349**	**7291**	**7235**	**7185**
	growth in %	0.3	0.5	0.5	0.9	0.3	-0.4	-0.7	-0.8	-0.8	-0.7
Employment/Pop. 15–64	*average in per cent*	**65.5**	**66.1**	**67.0**	**67.5**	**66.4**	**66.0**	**66.6**	**67.4**	**68.3**	**69.3**
Employment rate 15–64[1]	*average in per cent*	**64.8**	**65.3**	**66.1**	**66.6**	**65.4**	**65.0**	**65.6**	**66.3**	**67.2**	**68.1**
Labour force/Pop. 15–64	*average in per cent*	**71.2**	**71.2**	**70.8**	**70.6**	**71.1**	**71.2**	**71.4**	**72.0**	**72.8**	**73.4**
Participation rate 15–64[2]	*average in per cent*	**70.4**	**70.3**	**69.8**	**69.7**	**70.1**	**70.2**	**70.3**	**70.9**	**71.6**	**72.3**
SNA											
Employment (domestic concept	*av. in thous.persons*	**4992**	**5088**	**5224**	**5288**	**5226**	**5185**	**5196**	**5215**	**5244**	**5280**
	growth in %	1.0	1.9	2.7	1.2	-1.2	-0.8	0.2	0.4	0.6	0.7
Hours worked	*bill. hours*	**9.81**	**9.97**	**10.18**	**10.37**	**9.88**	**9.89**	**9.95**	**10.04**	**10.10**	**10.13**
	growth in %	1.6	1.7	2.0	1.9	-4.7	0.1	0.6	0.8	0.6	0.3
Hours worked / employment	*hours*	**1965**	**1960**	**1948**	**1962**	**1891**	**1907**	**1916**	**1924**	**1925**	**1918**
	growth in %	0.6	-0.2	-0.6	0.7	-3.6	0.9	0.4	0.4	0.0	-0.4
Registered unemployment											
Unemployment	*av. in thous.persons*	**514.3**	**474.8**	**392.8**	**324.6**	**465.6**	**528.7**	**503**	**467**	**442**	**406**
Unemployment rate	*average in per cent*	**8.97**	**8.13**	**6.62**	**5.45**	**7.98**	**9.01**	**8.5**	**8.0**	**7.6**	**6.9**
Registered foreign workers											
Total	*av. in thous.persons*	**195.2**	**233.2**	**276.2**	**343.5**	**335.4**	**313.5**	.	.	.	.
	growth in %	15.3	19.4	18.5	24.4	-2.3	-6.5	.	.	.	.
– employees	*av. in thous.persons*	**131.2**	**165.5**	**209.7**	**270.2**	**252.6**	**219.6**	.	.	.	.
	growth in %	23.7	26.1	26.7	28.8	-6.5	-13.0	.	.	.	.
– self-employed	*av. in thous.persons*	**64.0**	**67.7**	**66.5**	**73.3**	**82.8**	**93.9**	.	.	.	.
	growth in %	1.2	5.7	-1.8	10.2	13.0	13.4	.	.	.	.

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

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

		2010				2011			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
Labour Force Survey									
Employment	*av. in thous. persons*	**4829**	**4881**	**4912**	**4919**	**4864**	**4897**	**4908**	**4920**
	YoY growth in %	-2.4	-1.2	-0.2	-0.2	0.7	0.3	-0.1	0.0
	QoQ growth in %	-0.5	0.2	0.3	0.1	0.0	0.0	0.0	0.1
– employees	*av. in thous. persons*	**3992**	**4013**	**4035**	**4036**	**3989**	**4014**	**4022**	**4036**
	growth in %	-3.2	-2.6	-1.3	-1.5	-0.1	0.0	-0.3	0.0
– entrepreneurs and	*av. in thous. persons*	**837**	**868**	**876**	**883**	**875**	**883**	**886**	**883**
self-employed	*growth in %*	1.7	5.5	5.2	6.3	4.6	1.7	1.1	0.0
Unemployment	*av. in thous. persons*	**423**	**375**	**374**	**363**	**376**	**339**	**345**	**341**
Unemployment rate	*average in per cent*	**8.0**	**7.1**	**7.1**	**6.9**	**7.2**	**6.5**	**6.6**	**6.5**
Labour force	*av. in thous. persons*	**5252**	**5256**	**5286**	**5282**	**5241**	**5236**	**5253**	**5260**
	growth in %	0.0	-0.4	-0.4	-0.6	-0.2	-0.4	-0.6	-0.4
Population aged 15–64	*av. in thous. persons*	**7412**	**7406**	**7393**	**7387**	**7371**	**7356**	**7342**	**7328**
	growth in %	-0.3	-0.3	-0.5	-0.6	-0.6	-0.7	-0.7	-0.8
Employment/Pop. 15–64	*average in per cent*	**65.2**	**65.9**	**66.4**	**66.6**	**66.0**	**66.6**	**66.8**	**67.1**
	increase over a year	-1.4	-0.6	0.2	0.3	0.8	0.7	0.4	0.5
Employment rate 15–64	*average in per cent*	**64.1**	**64.9**	**65.4**	**65.5**	**64.9**	**65.5**	**65.8**	**66.0**
	increase over a year	-1.4	-0.5	0.2	0.3	0.8	0.6	0.3	0.5
Labour force/Pop. 15–64	*average in per cent*	**70.9**	**71.0**	**71.5**	**71.5**	**71.1**	**71.2**	**71.5**	**71.8**
	increase over a year	0.2	0.0	0.1	0.0	0.2	0.2	0.0	0.3
Participation rate 15–64	*average in per cent*	**69.8**	**70.0**	**70.5**	**70.4**	**70.0**	**70.1**	**70.5**	**70.7**
	increase over a year	0.2	0.0	0.1	0.0	0.2	0.1	0.0	0.2
SNA									
Employment (domestic concept)	*av. in thous. persons*	**5126**	**5176**	**5215**	**5224**	**5162**	**5196**	**5207**	**5220**
	growth in %	-2.1	-1.0	-0.1	0.0	0.7	0.4	-0.1	-0.1
Hours worked	*bill. hours*	**2.46**	**2.54**	**2.39**	**2.50**	**2.46**	**2.58**	**2.41**	**2.51**
	growth in %	-1.9	-0.9	1.7	1.6	0.0	1.3	0.7	0.6
Hours worked / employment	*hours*	**480**	**492**	**458**	**478**	**476**	**496**	**462**	**481**
	growth in %	0.2	0.1	1.8	1.5	-0.7	0.9	0.8	0.7
Registered unemployment									
Unemployment	*av. in thous. persons*	**571.1**	**530.5**	**502.4**	**510.9**	**564.5**	**505**	**477**	**466**
Unemployment rate	*average in per cent*	**9.75**	**9.00**	**8.59**	**8.69**	**9.57**	**8.5**	**8.1**	**7.9**
Registered foreign workers									
Total	*av. in thous. persons*	**315.0**	**316.2**	**312.9**	**310.0**	**303.0**	.	.	.
	growth in %	-9.6	-6.0	-5.7	-4.6	-3.8	.	.	.
– employees	*av. in thous. persons*	**222.8**	**218.4**	**218.1**	**219.3**	**211.2**	.	.	.
	growth in %	-17.5	-14.3	-11.8	-7.9	-5.2	.	.	.
– self-employed	*av. in thous. persons*	**92.2**	**97.9**	**94.7**	**90.7**	**91.8**	.	.	.
	growth in %	17.7	20.1	11.9	4.5	-0.5	.	.	.

[1] *Seasonal adjustment done by the MoF.*

Graph C.3.1: **Employment**

Seasonally adjusted data, in thousands of persons, growth rates in %
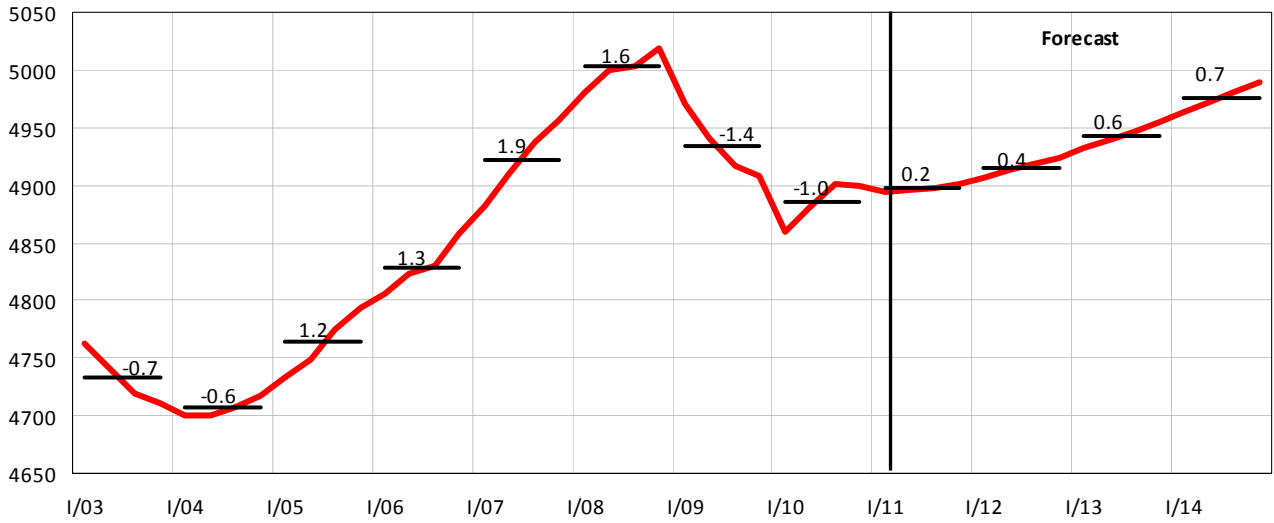
Graph C.3.2: **Ratio of Labour Force to Population aged 15–64** (*in %*)
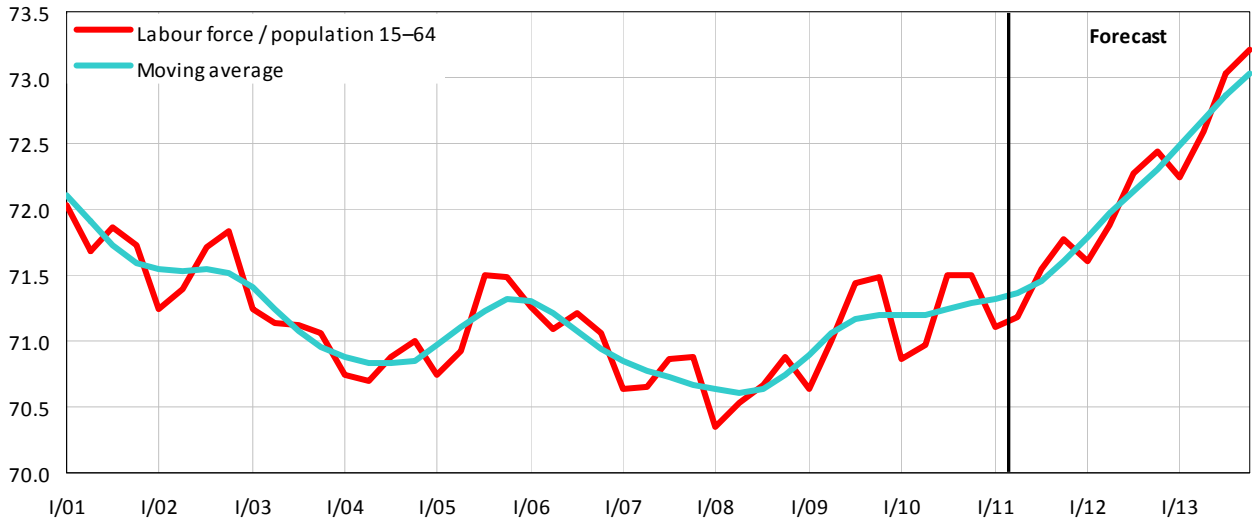
Graph C.3.3: **Unemployment**

quarterly average, in thousands of persons, in % (rhs)
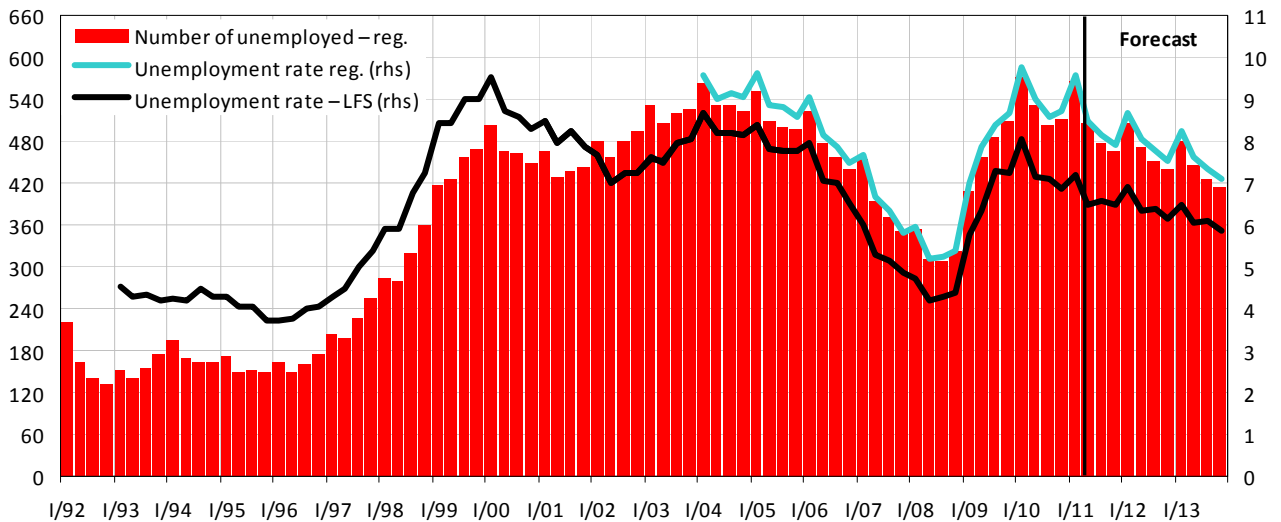
Graph C.3.4: **Economic Output and Unemployment**

YoY increase of real GDP in %. Change in unemployment in thousands of persons
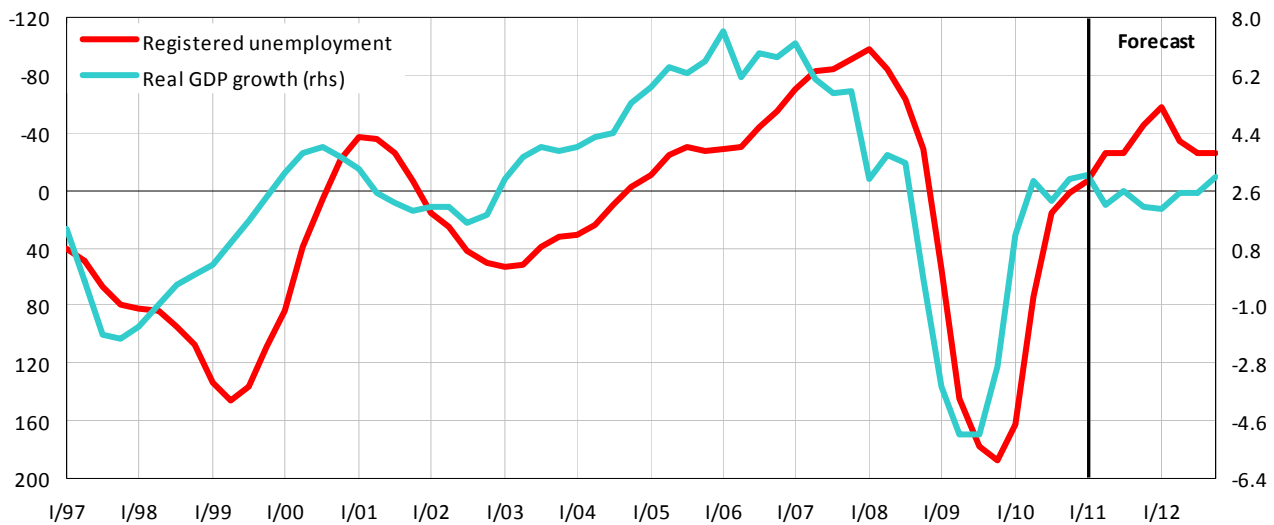
Table C.3.3: **Labour Market** – analytical indicators

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
									Prelim	Forecast	Forecast
Compensation per employee											
– **nominal**	growth in %	8.2	6.7	4.6	6.6	7.3	5.9	0.5	4.2	2.4	4.2
– **real**	growth in %	8.1	3.8	2.6	4.0	4.4	-0.4	-0.5	2.7	0.2	0.7
Average monthly wage [1]											
– **nominal**	CZK	16 430	17 466	18 344	19 546	20 957	22 592	23 344	23 797	24 300	25 300
	growth in %	5.8	6.3	5.0	6.6	7.2	7.8	3.3	1.9	2.3	4.0
– **real**	CZK 2005	17 206	17 791	18 344	19 063	19 874	20 147	20 602	20 699	20 700	20 800
	growth in %	5.7	3.4	3.1	3.9	4.3	1.4	2.3	0.5	0.1	0.5
Labour productivity	growth in %	4.3	5.1	5.0	5.4	4.1	0.8	-2.8	3.4	2.2	2.1
Unit labour costs [2]	growth in %	3.8	1.5	-0.5	1.2	3.1	5.1	3.5	0.8	0.2	2.0
Compensations of employees / GDP	%	43.8	42.7	43.1	43.0	42.9	44.3	44.3	44.7	45.0	44.6

[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 %
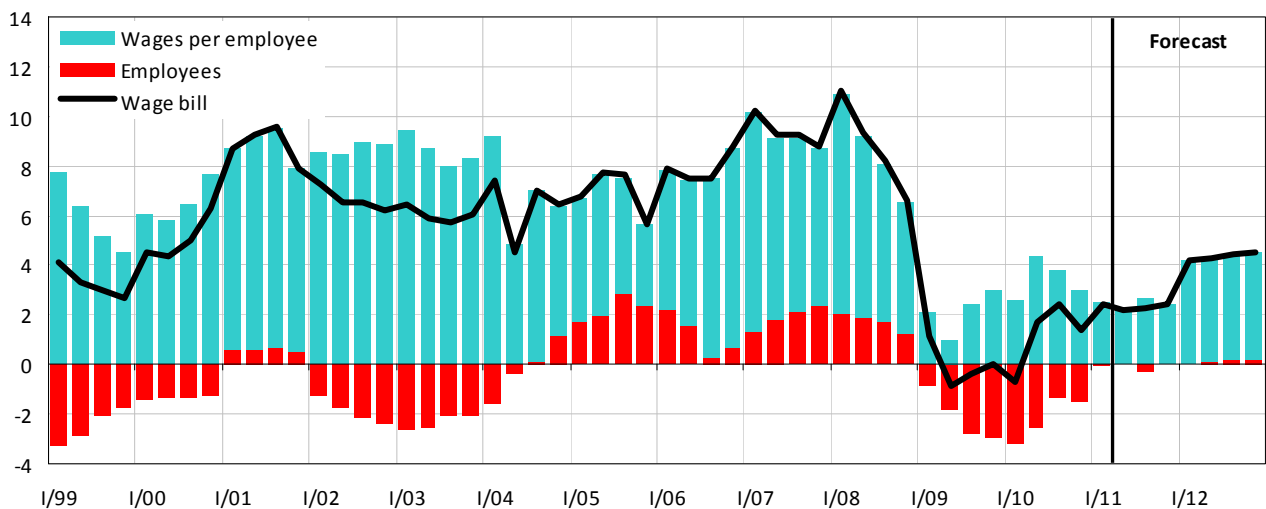
Graph C.3.6: **Average Nominal Wage**
YoY growth rate, in %

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

Graph C.3.8: **Gross Savings Rate of Households**
in % of disposable income

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

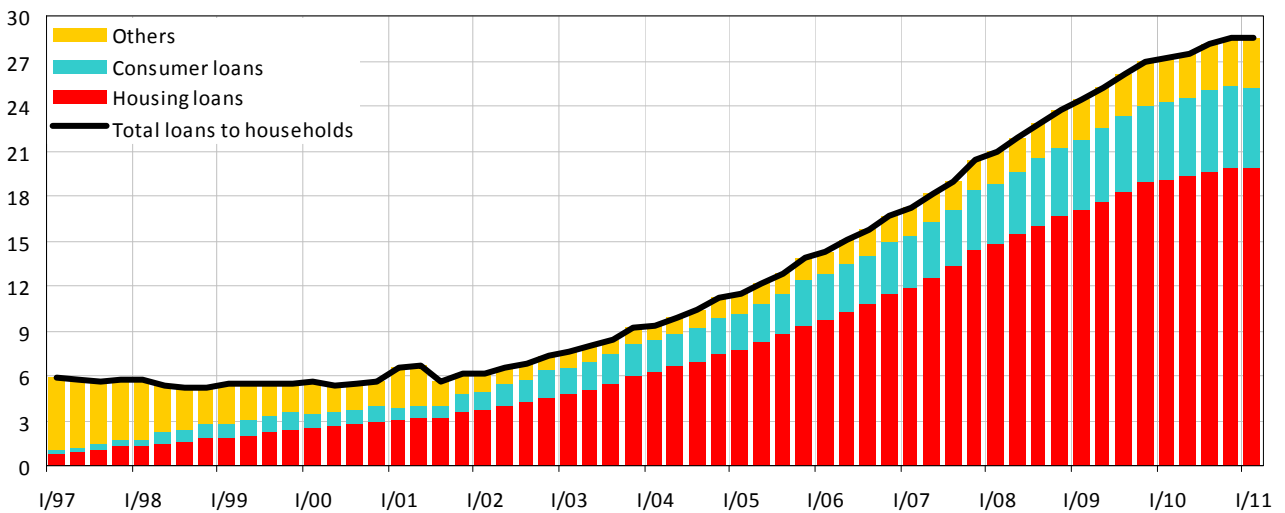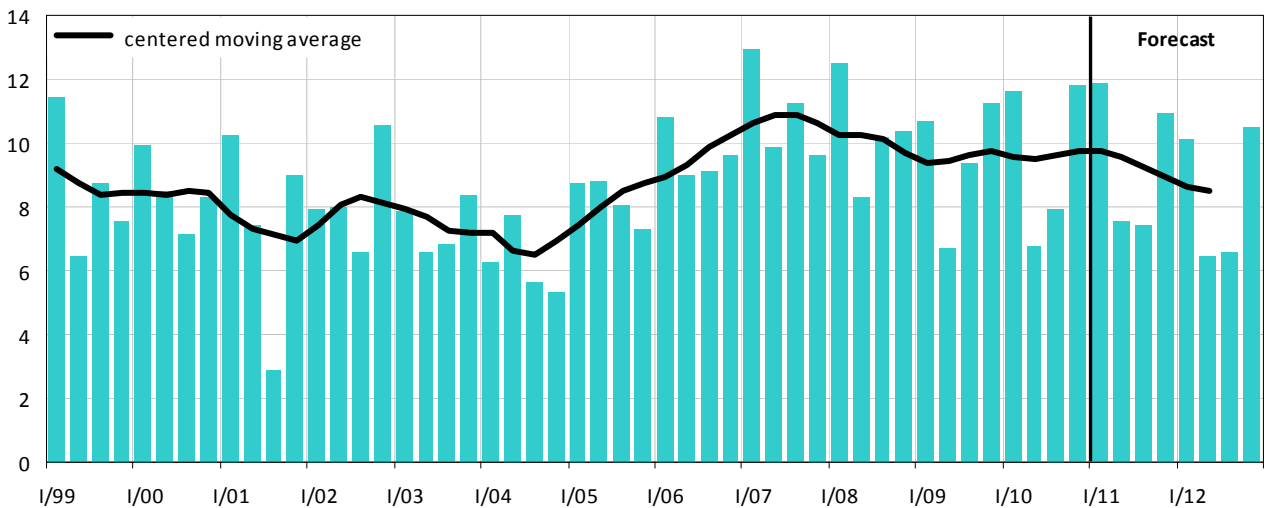|		2003	2004	2005	2006	2007	2008	2009	2010 Prelim.	2011 Forecast	2012 Forecast
Current income											
Compensation of employees	bill.CZK	**1120**	**1186**	**1273**	**1387**	**1511**	**1614**	**1594**	**1622**	**1660**	**1725**
	growth in %	6.8	5.9	7.3	8.9	8.9	6.8	-1.3	1.7	2.3	3.9
Gross operating surplus	bill.CZK	**425**	**449**	**446**	**470**	**505**	**543**	**495**	**503**	**528**	**562**
and mixed income	growth in %	7.5	5.7	-0.6	5.4	7.5	7.5	-8.8	1.6	5.0	6.5
Property income received	bill.CZK	**97**	**109**	**120**	**133**	**158**	**151**	**122**	**126**	**129**	**134**
	growth in %	-1.1	12.7	9.6	11.2	18.5	-4.2	-19.5	3.8	2.0	4.0
Social benefits not-in-kind	bill.CZK	**324**	**369**	**386**	**417**	**466**	**488**	**527**	**534**	**537**	**545**
	growth in %	3.6	.	4.6	8.1	11.8	4.5	8.1	1.4	0.5	1.4
Other current transfers received	bill.CZK	**91**	**93**	**103**	**113**	**122**	**137**	**144**	**146**	**152**	**160**
	growth in %	6.8	2.9	10.1	9.8	8.4	12.2	4.8	1.9	4.0	5.0
Current expenditure											
Property income paid	bill.CZK	**19**	**21**	**20**	**25**	**29**	**33**	**22**	**17**	**17**	**17**
	growth in %	49.0	12.4	-5.3	22.3	19.5	12.5	-34.3	-20.3	-2.0	0.0
Curr. taxes on income and property	bill.CZK	**128**	**138**	**140**	**141**	**157**	**140**	**135**	**136**	**139**	**142**
	growth in %	11.9	7.6	1.7	0.7	10.9	-10.8	-3.6	0.9	2.3	1.7
Social contributions	bill.CZK	**408**	**474**	**507**	**561**	**615**	**634**	**596**	**619**	**633**	**657**
	growth in %	6.7	.	7.1	10.6	9.5	3.2	-6.1	3.9	2.3	3.7
Other current transfers paid	bill.CZK	**93**	**100**	**109**	**118**	**129**	**141**	**150**	**147**	**150**	**153**
	growth in %	13.7	7.2	9.2	8.6	9.3	9.1	6.7	-2.1	2.0	2.0
Gross disposable income	bill.CZK	**1409**	**1474**	**1551**	**1675**	**1833**	**1985**	**1979**	**2012**	**2066**	**2157**
	growth in %	4.5	4.6	5.3	8.0	9.4	8.3	-0.3	1.7	2.7	4.4
Final consumption	bill.CZK	**1317**	**1399**	**1443**	**1537**	**1660**	**1804**	**1804**	**1835**	**1887**	**1992**
	growth in %	5.6	6.2	3.1	6.6	8.0	8.7	0.0	1.7	2.8	5.6
Change in share in pension funds	bill.CZK	**13**	**17**	**19**	**23**	**26**	**24**	**14**	**15**	**16**	**17**
Gross savings	bill.CZK	**105**	**92**	**128**	**161**	**200**	**205**	**189**	**192**	**196**	**182**
Capital transfers											
(income (-) / expenditure (+))	bill.CZK	**-21**	**-23**	**-25**	**-23**	**-23**	**-23**	**-23**	**-27**	**-22**	**-17**
Gross capital formation	bill.CZK	**122**	**132**	**136**	**154**	**191**	**191**	**197**	**179**	**181**	**180**
	growth in %	-5.1	7.8	2.6	13.5	24.2	-0.2	3.5	-9.0	1.0	-0.5
Change in financial assets and liab.	bill.CZK	**6**	**-18**	**20**	**30**	**31**	**37**	**14**	**39**	**37**	**19**
Real disposable income	growth in %	**4.4**	**1.8**	**3.3**	**5.3**	**6.4**	**1.8**	**-1.3**	**0.2**	**0.4**	**0.8**
Gross savings rate	%	**7.4**	**6.2**	**8.2**	**9.6**	**10.9**	**10.3**	**9.5**	**9.6**	**9.5**	**8.4**

Note: Government payments to social security systems for non-active population have been imputed to social benefits and social security contributions since 2004.

C.4 External Relations

Sources: CNB, CZSO, Eurostat, MoF estimates

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

		2003	2004	2005	2006	2007	2008	2009	2010	2011 Forecast	2012 Forecast
Balance of goods and services	bill.CZK	-57	3	96	110	170	169	146	120	98	125
-- balance of trade [1]	bill.CZK	-70	-13	59	65	121	103	81	54	23	43
--- of which mineral fuels (SITC 3)[2]	bill.CZK	-68	-72	-110	-139	-124	-166	-106	-136	-178	-191
-- balance of services	bill.CZK	13	17	37	45	50	66	65	66	75	82
Balance of income	bill.CZK	-120	-157	-143	-167	-256	-174	-252	-258	-250	-274
– compensation of employees	bill.CZK	-17	-16	-11	1	-5	-19	-14	-4	-4	-12
– investment income	bill.CZK	-103	-141	-132	-168	-251	-155	-238	-254	-247	-263
Balance of transfers	bill.CZK	16	6	7	-20	-28	-17	-9	-2	5	10
Current account	bill.CZK	-161	-147	-40	-77	-113	-23	-115	-139	-147	-140
Capital account	bill.CZK	0	-14	5	8	20	30	42	34	30	32
Financial account	bill.CZK	157	177	155	92	126	59	154	182	.	.
– foreign direct investments	bill.CZK	54	102	280	90	179	36	38	97	.	.
– portfolio investments	bill.CZK	-36	53	-81	-27	-57	-9	159	157	.	.
– other investments	bill.CZK	139	23	-44	29	4	32	-42	-72	.	.
Change in reserves	bill.CZK	13	7	93	2	16	40	61	41	.	.
Gross external debt	bill.CZK	895	1012	1142	1194	1375	1607	1639	1789	1873	1998
Balance of goods and services / GDP	per cent	-2.2	0.1	3.2	3.4	4.8	4.6	4.0	3.3	2.6	3.2
Current account / GDP	per cent	-6.2	-5.2	-1.3	-2.4	-3.2	-0.6	-3.2	-3.8	-3.9	-3.6
Financial account / GDP	per cent	6.1	6.3	5.2	2.9	3.6	1.6	4.3	5.0	.	.
Gross external debt / GDP [3]	per cent	34.7	35.9	38.3	37.0	38.9	43.6	45.2	48.8	50	51

Because of large discrepancies between balance of payments and quarterly national accounts the values of exports and imports of goods and services have not been forecasted. Data for 2008 and earlier are to be revised during 2011 (see main text).
[1] *Imports – fob since May 2004*
[2] *Imports – cif*
[3] *Ratio of external debt (in CZK) at the end of period to GDP (in CZK)*

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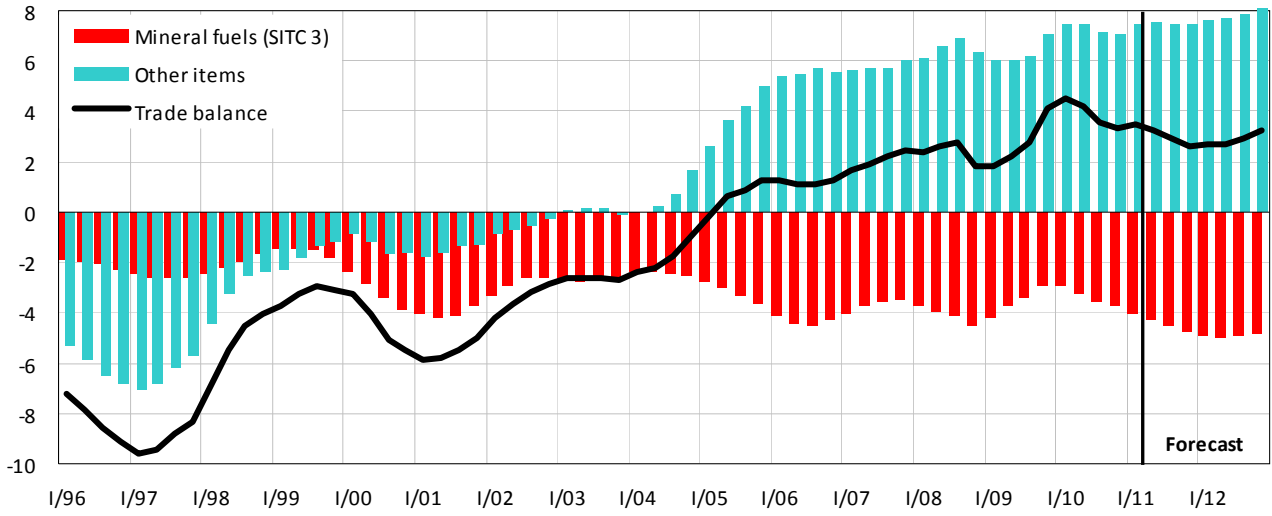*moving sums of the latest 4 quarters*

		2010				2011			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	*Forecast*	*Forecast*
Balance of goods and services	bill.CZK	**154**	**155**	**131**	**120**	**123**	**116**	**107**	**98**
-- balance of trade	bill.CZK	89	83	62	54	56	47	35	23
---- of which mineral fuels (SITC 3)	bill.CZK	-108	-120	-131	-136	-148	-158	-168	-178
-- balance of services	bill.CZK	65	72	69	66	66	69	71	75
Balance of income	bill.CZK	**-250**	**-235**	**-267**	**-258**	**-247**	**-248**	**-249**	**-250**
– compensation of employees	bill.CZK	-10	-7	-5	-4	-4	-4	-4	-4
– investment income	bill.CZK	-240	-228	-262	-254	-244	-245	-246	-247
Balance of transfers	bill.CZK	**-15**	**-11**	**-5**	**-2**	**-1**	**-4**	**2**	**5**
Current account	bill.CZK	**-111**	**-91**	**-141**	**-139**	**-126**	**-136**	**-140**	**-147**
Capital account	bill.CZK	**28**	**33**	**42**	**34**	**32**	**29**	**30**	**30**
Financial account	bill.CZK	**137**	**113**	**236**	**182**	**178**	**.**	**.**	**.**
– foreign direct investments	bill.CZK	52	62	150	97	80	.	.	.
– portfolio investments	bill.CZK	173	157	211	157	99	.	.	.
– other investments	bill.CZK	-88	-106	-124	-72	-1	.	.	.
Change in reserves	bill.CZK	**18**	**15**	**78**	**41**	**21**	**.**	**.**	**.**
Gross external debt	bill.CZK	**1601**	**1716**	**1732**	**1789**	**1735**	**1774**	**1848**	**1873**

Graph C.4.1: **Current Account**
moving sums of the latest 4 quarters, in % of GDP,trade and service balances in BoP definitions
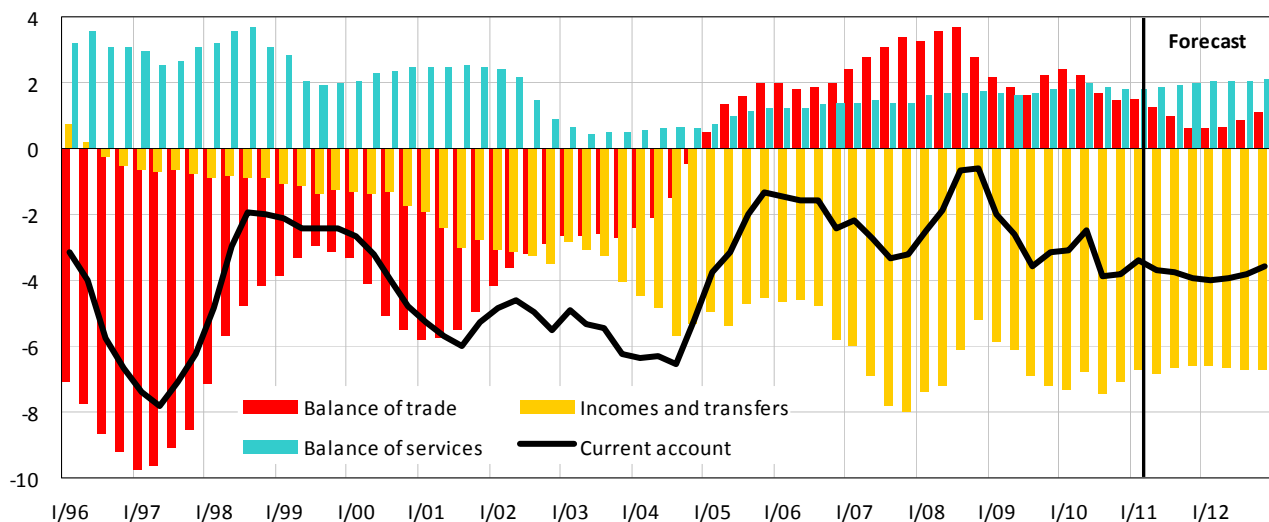
Graph C.4.2: **Balance of Trade** (*exports fob, imports cif*)
moving sums of the latest 4 quarters, in % of GDP, in cross-border definitions

Legend:
- Mineral fuels (SITC 3)
- Other items
- Trade balance

Forecast

Graph C.4.3: **Balance of Services**
moving sums of the latest 4 quarters, in % of GDP

Forecast

Legend:
- Transport
- Others
- Tourism
- Balance of services
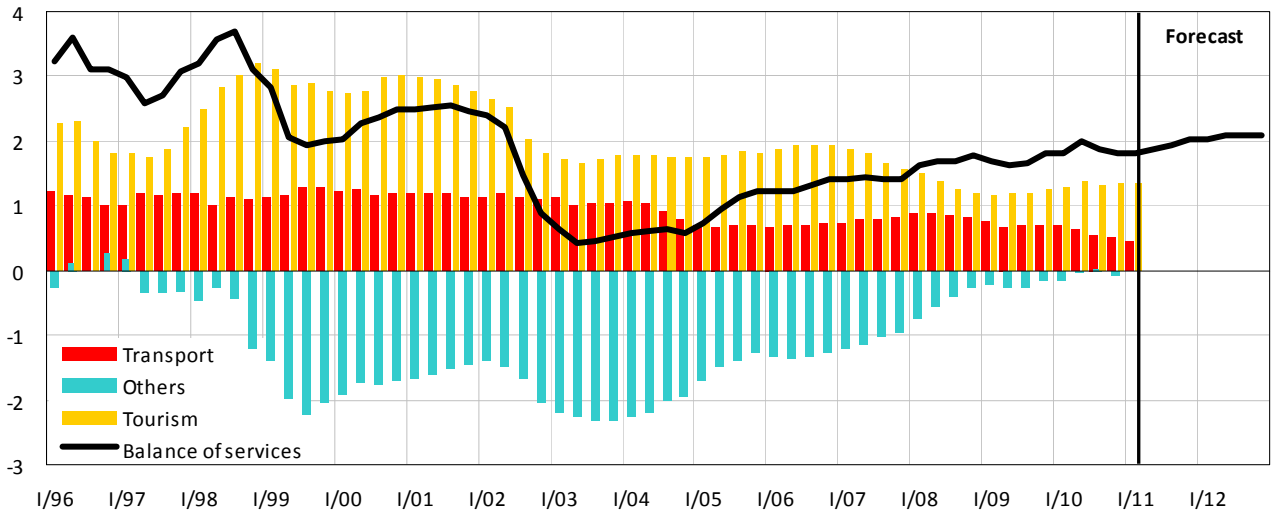
Graph C.4.4: **Balance of Income**
moving sums of the latest 4 quarters, in % of GDP

Legend:
- Compensation of employees
- Investment income
- Balance of income

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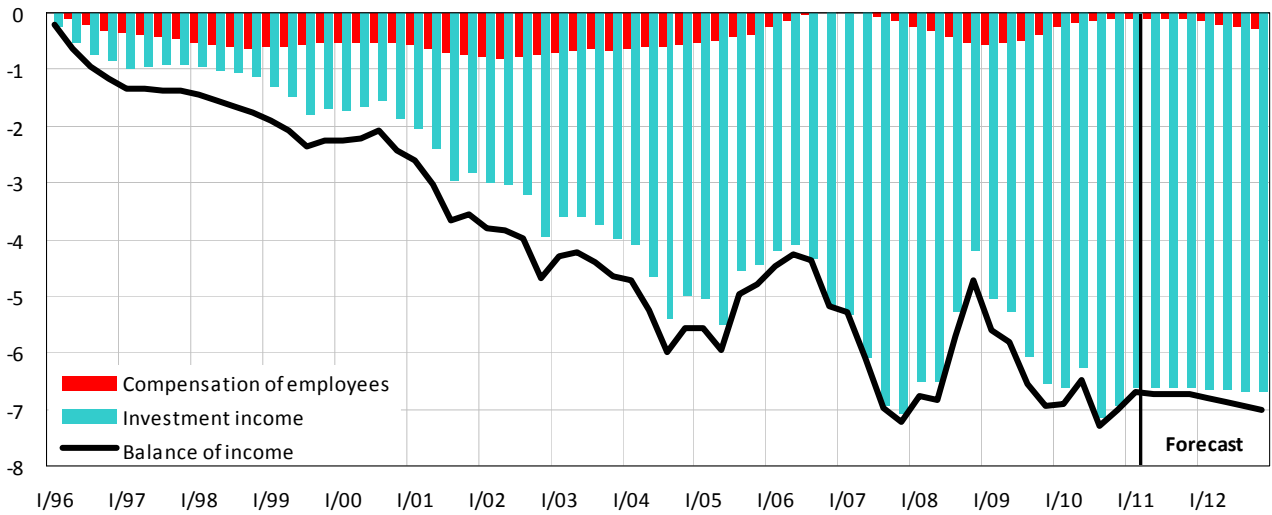
Table C.4.3: **Decomposition of Exports of Goods** – yearly

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
										Forecast	Forecast
GDP [1]	average of 2000=100	103.7	105.8	108.0	112.5	117.0	118.8	114.2	117.6	121	124
	growth in %	1.0	2.0	2.1	4.2	4.0	1.5	-3.9	3.0	3.1	2.3
Import intensity [2]	average of 2000=100	105.8	112.3	118.7	127.9	130.6	130.0	120.2	130.9	136	142
	growth in %	4.4	6.1	5.7	7.7	2.1	-0.5	-7.5	8.9	4.0	4.5
Export markets [3]	average of 2000=100	109.7	118.8	128.1	143.8	152.8	154.4	137.3	153.9	165	176
	growth in %	5.5	8.2	7.9	12.2	6.2	1.1	-11.1	12.2	7.2	6.9
Export performance	average of 2000=100	120.3	136.7	141.5	146.9	160.2	167.5	160.9	170.8	179	185
	growth in %	3.6	13.7	3.5	3.8	9.0	4.6	-3.9	6.2	4.6	3.8
Real exports	average of 2000=100	132.0	162.4	181.3	211.3	244.8	258.7	220.8	263.0	295	327
	growth in %	9.3	23.0	11.6	16.6	15.8	5.7	-14.6	19.1	12.1	10.9
1 / NEER	average of 2000=100	85.9	85.3	80.3	76.4	74.5	66.7	69.2	67.4	65	63
	growth in %	0.0	-0.7	-6.0	-4.8	-2.5	-10.4	3.7	-2.5	-4.2	-2.4
Prices on foreign markets	average of 2000=100	107.8	110.9	114.6	118.5	121.4	127.5	122.8	124.4	130	133
	growth in %	0.0	2.8	3.3	3.4	2.4	5.0	-3.7	1.3	4.5	2.7
Exports deflator	average of 2000=100	92.7	94.6	92.0	90.6	90.4	85.1	84.9	83.9	84	84
	growth in %	0.0	2.1	-2.8	-1.5	-0.1	-5.9	-0.2	-1.3	0.0	0.3
Nominal exports	average of 2000=100	122.3	153.7	166.7	191.3	221.1	220.0	187.3	220.5	247	275
	growth in %	9.3	25.7	8.5	14.8	15.6	-0.5	-14.9	17.7	12.2	11.2

[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

		2010				2011			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast	Forecast
GDP	average of 2000=100	115.8	117.4	118.4	118.9	120.2	121	122	122
	growth in %	2.1	3.3	3.4	3.2	3.9	3.0	2.7	2.9
Import intensity	average of 2000=100	126.3	130.0	132.8	134.4	134.4	135	137	138
	growth in %	3.4	10.2	11.6	10.3	6.4	4.2	2.9	2.6
Export markets	average of 2000=100	146.2	152.6	157.2	159.8	161.5	164	166	169
	growth in %	5.6	13.8	15.5	13.9	10.5	7.3	5.7	5.5
Export performance	average of 2000=100	169.6	175.8	165.2	172.7	179.5	184	172	179
	growth in %	13.6	7.2	0.9	3.7	5.8	4.5	4.3	3.8
Real exports	average of 2000=100	247.9	268.3	259.6	276.0	289.9	301	286	302
	growth in %	19.9	22.0	16.5	18.0	16.9	12.1	10.3	9.5
1 / NEER	average of 2000=100	68.5	68.5	66.8	66.0	65.2	65	64	64
	growth in %	-5.2	-1.8	-0.4	-2.5	-4.8	-5.7	-3.6	-2.8
Prices on foreign markets	average of 2000=100	121.9	123.9	125.7	126.0	128.3	130	131	131
	growth in %	-1.6	1.1	2.9	3.1	5.2	4.6	4.2	3.8
Exports deflator	average of 2000=100	83.5	84.8	83.9	83.2	83.7	84	84	84
	growth in %	-6.8	-0.8	2.4	0.5	0.2	-1.3	0.5	0.9
Nominal exports	average of 2000=100	207.0	227.6	217.8	229.7	242.5	252	241	254
	growth in %	11.8	21.1	19.4	18.6	17.2	10.6	10.8	10.5

Graph C.4.5: **GDP and Imports of Goods in Main Partner Countries**
YoY growth, in %

- Export markets growth (lhs)
- Weighted average of GDP growth (rhs)
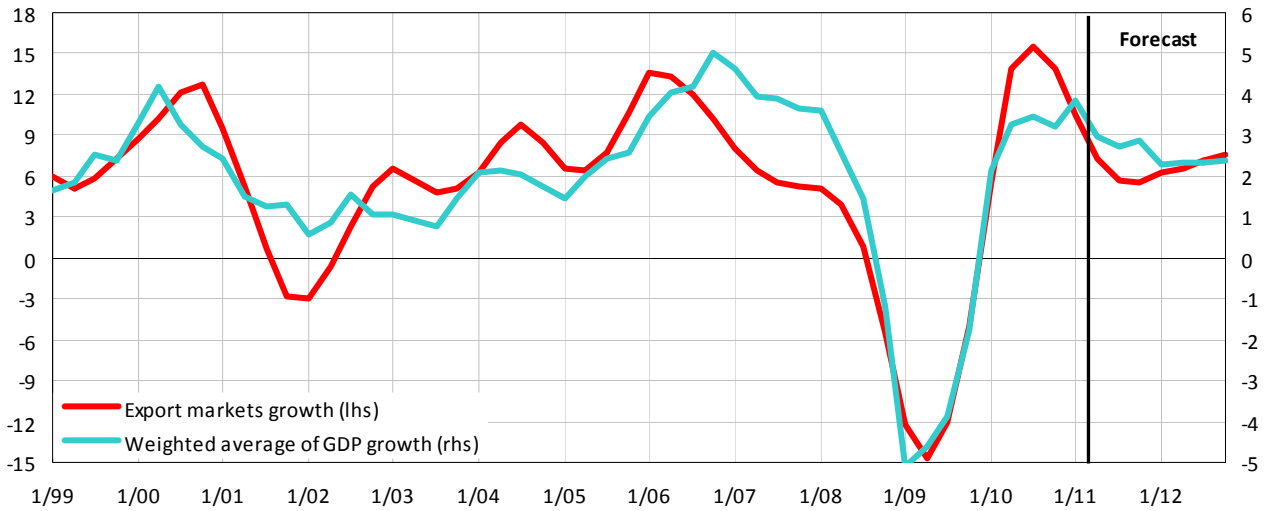
Graph C.4.6: **Real Exports of Goods**
decomposition of YoY growth, in %

- Export performance
- Export market growth
- Real exports of goods
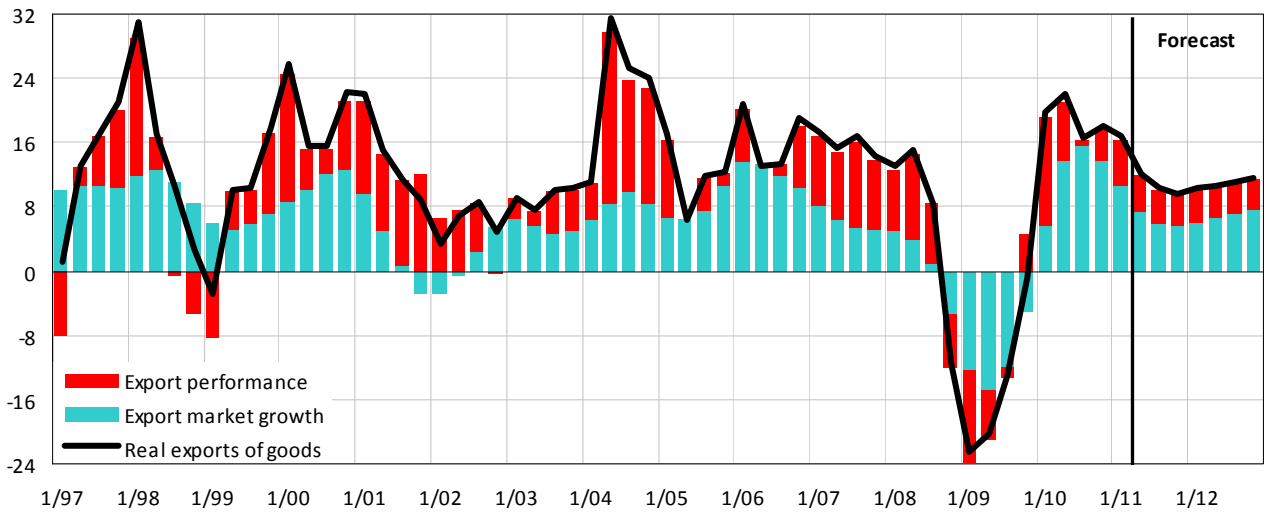
Graph C.4.7: **Deflator of Exports of Goods**
decomposition of YoY growth, in %

- Reached prices
- Exchange rate
- Deflator
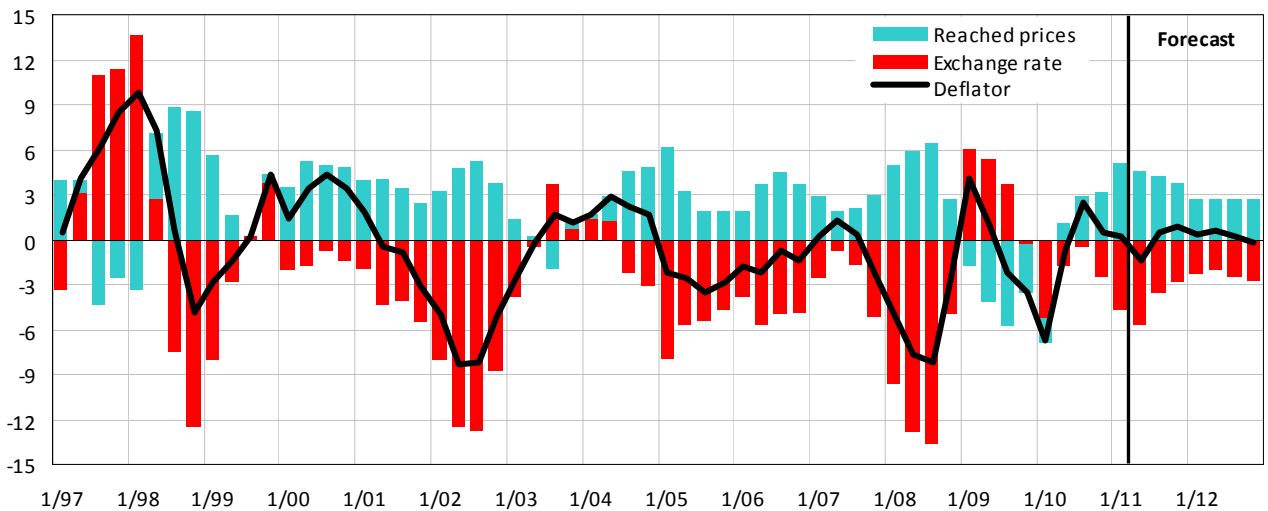
Table C.4.5: **Savings and Investments** – yearly

		2003	2004	2005	2006	2007	2008	2009	2010 Prelim.	2011 Forecast	2012 Forecast
Gross capital formation	*% of GDP*	27.2	27.5	25.7	26.8	27.0	25.3	21.7	22.6	23.1	23.2
– fixed capital formation	*% of GDP*	26.7	25.8	24.9	24.7	25.2	23.9	22.5	21.3	21.5	21.6
– change in stocks	*% of GDP*	0.5	1.7	0.8	2.1	1.8	1.4	-0.7	1.2	1.6	1.6
– government sector	*% of GDP*	4.4	4.7	4.9	5.0	4.6	4.9	5.3	4.6	5.4	5.7
– households	*% of GDP*	4.8	4.7	4.5	4.8	5.4	5.2	5.4	4.9	4.9	4.6
– non-financial and financial sectors	*% of GDP*	18.1	18.1	16.3	17.0	17.0	15.2	11.0	13.1	12.9	12.9
Gross national savings	*% of GDP*	20.7	22.0	23.9	24.7	24.4	24.5	20.5	20.0	19.2	19.7
– government sector	*% of GDP*	1.4	4.0	3.5	3.7	4.8	3.0	-0.9	-0.5	1.6	3.1
– households	*% of GDP*	4.1	3.3	4.3	5.0	5.6	5.6	5.2	5.2	5.2	4.6
– non-financial and financial sectors	*% of GDP*	15.2	14.7	16.1	16.0	14.0	15.9	16.2	15.3	12.3	12.0
Financial balance											
– government sector	*% of GDP*	-2.9	-0.7	-1.3	-1.3	0.2	-1.9	-6.2	-5.2	-3.8	-2.7
– households	*% of GDP*	-0.7	-1.4	-0.3	0.2	0.2	0.4	-0.2	0.4	0.4	0.0
– non-financial and financial sectors	*% of GDP*	-2.9	-3.4	-0.1	-1.0	-3.0	0.7	5.2	2.3	-0.6	-0.9
– methodological discrepancy	*% of GDP*	0.3	0.2	0.4	-0.3	-0.6	0.2	-1.9	-1.2	0.0	0.0
Current account BoP	*% of GDP*	-6.2	-5.2	-1.3	-2.4	-3.2	-0.6	-3.2	-3.8	-3.9	-3.6

Graph C.4.8: **Financial Balances of Individual Sectors**
savings less investments, in % of GDP
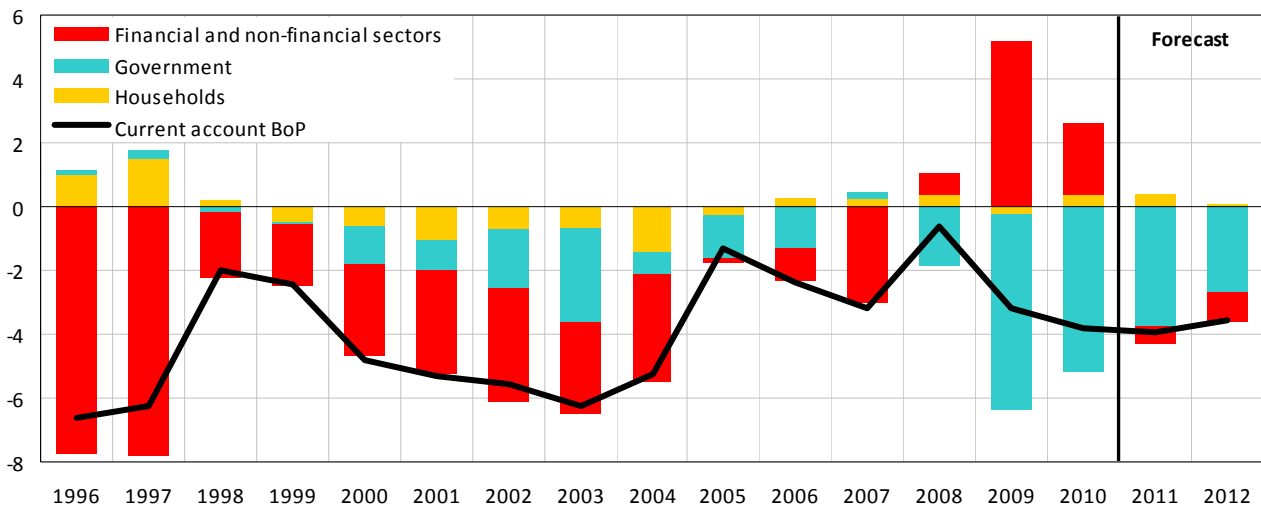
C.5 International Comparisons

Sources: Eurostat, OECD, IMF, MoF estimates

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

		2003	2004	2005	2006	2007	2008	2009	2010 Prelim.	2011 Forecast	2012 Forecast
Slovenia	PPS	17 300	18 700	19 700	20 700	22 100	22 800	20 700	21 300	22 000	22 700
	EA12=100	75	78	79	79	80	83	81	80	80	81
Greece	PPS	19 200	20 300	20 600	22 100	22 900	23 500	22 100	21 700	21 300	21 300
	EA12=100	83	85	83	85	83	86	86	82	78	76
Czech Republic	PPS	15 200	16 300	17 000	18 200	19 900	20 200	19 200	19 500	20 200	20 900
	EA12=100	66	68	69	70	73	74	75	73	74	75
Portugal	PPS	16 400	16 700	17 800	18 600	19 600	19 500	18 900	19 800	20 100	20 400
	EA12=100	71	70	72	71	72	71	73	74	73	73
Slovakia	PPS	11 500	12 300	13 500	15 000	17 000	18 100	17 200	18 100	18 800	19 800
	EA12=100	50	52	54	57	62	66	67	68	69	71
Estonia	PPS	11 300	12 400	13 800	15 600	17 300	17 000	15 000	15 900	16 700	18 000
	EA12=100	49	52	56	60	63	62	58	60	61	64
Hungary	PPS	13 000	13 700	14 200	14 900	15 600	16 100	15 300	15 700	16 100	16 600
	EA12=100	56	57	57	57	57	59	59	59	59	59
Poland	PPS	10 100	11 000	11 500	12 300	13 600	14 100	14 300	15 200	16 000	16 900
	EA12=100	44	46	46	47	50	51	55	57	59	60
Lithuania	PPS	10 200	10 900	11 900	13 100	14 700	15 300	12 900	14 200	14 800	15 600
	EA12=100	44	46	48	50	54	56	50	53	54	56
Latvia	PPS	9 000	9 900	10 900	12 200	13 900	14 100	12 200	12 600	13 100	13 800
	EA12=100	39	41	44	47	51	52	47	47	48	49

Graph C.5.1: **GDP p.c. – using current purchasing power parities**
EA12=100
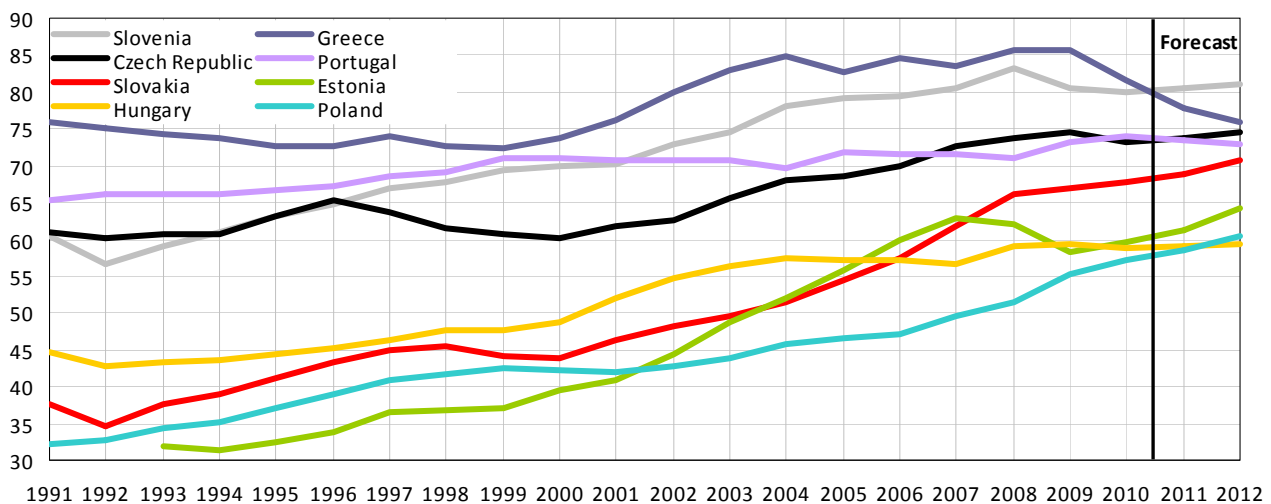
Table C.5.2: **GDP p.c. – using current exchange rates**

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
									Prelim.	Forecast	Forecast
Greece	*EUR*	15 600	16 700	17 500	19 000	20 300	21 100	20 800	20 400	20 000	20 100
	EA12=100	65	67	68	71	72	74	76	72	69	68
Comparative price level	*EA12=100*	**78**	**79**	**83**	**84**	**87**	**86**	**88**	**89**	**89**	**89**
Slovenia	*EUR*	12 900	13 600	14 400	15 400	17 100	18 400	17 300	17 600	18 300	19 000
	EA12=100	54	55	56	57	61	65	63	62	63	64
Comparative price level	*EA12=100*	**72**	**70**	**71**	**72**	**76**	**78**	**78**	**78**	**79**	**79**
Portugal	*EUR*	13 700	14 200	14 600	15 100	16 000	16 200	15 900	16 200	16 600	16 900
	EA12=100	57	57	57	57	57	57	58	58	57	57
Comparative price level	*EA12=100*	**80**	**82**	**79**	**79**	**80**	**80**	**79**	**78**	**78**	**78**
Czech Republic	*EUR*	7 900	8 600	9 800	11 100	12 300	14 200	13 000	13 800	14 600	15 700
	EA12=100	33	35	38	41	44	50	47	49	51	53
Comparative price level	*EA12=100*	**50**	**51**	**56**	**59**	**61**	**67**	**64**	**67**	**69**	**71**
Slovakia	*EUR*	5 500	6 300	7 100	8 300	10 200	11 900	11 600	12 100	12 700	13 600
	EA12=100	23	25	28	31	36	42	42	43	44	46
Comparative price level	*EA12=100*	**46**	**49**	**51**	**54**	**59**	**63**	**63**	**64**	**64**	**65**
Estonia	*EUR*	6 400	7 200	8 300	10 000	11 800	12 000	10 300	10 800	11 500	12 400
	EA12=100	27	29	32	37	42	42	38	38	40	42
Comparative price level	*EA12=100*	**55**	**55**	**58**	**62**	**67**	**68**	**65**	**64**	**65**	**65**
Hungary	*EUR*	7 300	8 200	8 800	8 900	10 000	10 600	9 300	9 800	10 400	11 100
	EA12=100	30	33	34	33	36	37	34	35	36	37
Comparative price level	*EA12=100*	**54**	**57**	**60**	**58**	**63**	**63**	**57**	**59**	**61**	**63**
Poland	*EUR*	5 000	5 300	6 400	7 100	8 100	9 500	8 100	9 300	10 200	11 400
	EA12=100	21	21	25	27	29	33	30	33	35	38
Comparative price level	*EA12=100*	**48**	**47**	**54**	**57**	**59**	**65**	**53**	**58**	**60**	**64**
Lithuania	*EUR*	4 800	5 300	6 100	7 100	8 500	9 600	7 900	8 300	8 700	9 300
	EA12=100	20	21	24	26	30	34	29	30	30	31
Comparative price level	*EA12=100*	**45**	**46**	**50**	**53**	**56**	**60**	**58**	**56**	**56**	**56**
Latvia	*EUR*	4 300	4 800	5 700	7 000	9 300	10 200	8 200	8 000	8 100	8 500
	EA12=100	18	19	22	26	33	36	30	28	28	29
Comparative price level	*EA12=100*	**46**	**47**	**50**	**56**	**66**	**69**	**63**	**60**	**59**	**58**

Graph C.5.2: **GDP p.c. – using current exchange rates**
EA12=100
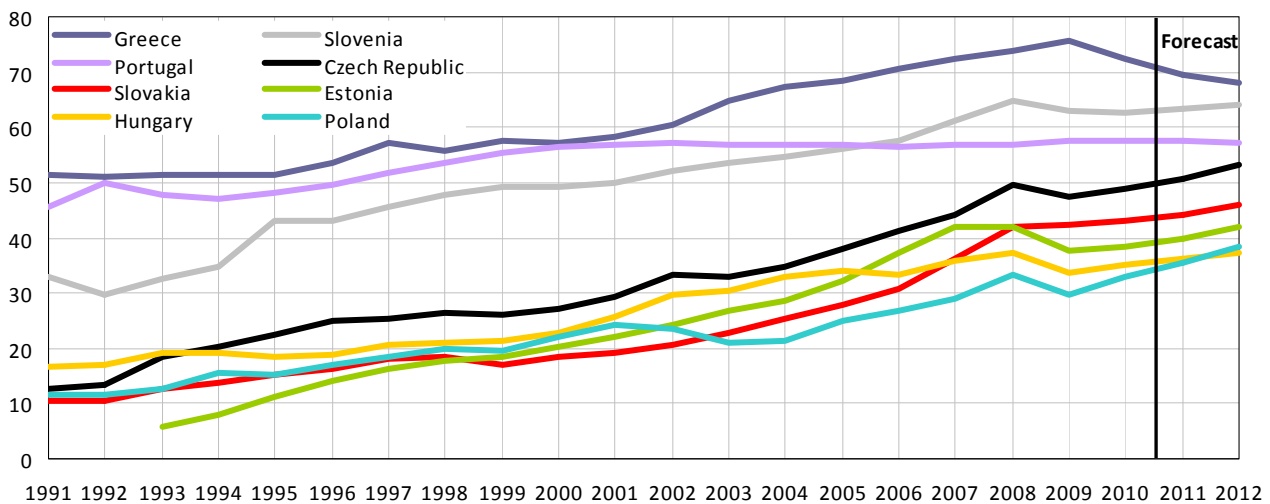
Graph C.5.3: **Index of Comparative Price Level of GDP p.c.**
EA12=100
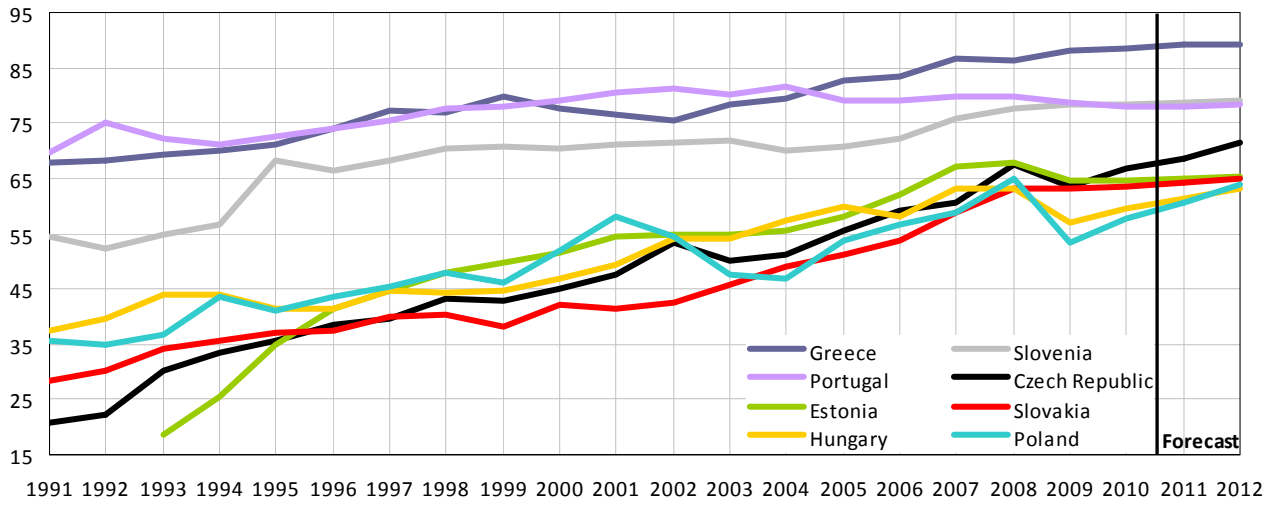
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