# Ministry of Finance Department for Financial Policies

# Macroeconomic Forecast

**Czech Republic** 

#### **Table of contents:**

#### **Commentaries:**

Summa	nary of the forecast	5
A Fo	orecast assumptions	6
A.1	External environment	6
A.2	Fiscal policy	
A.3	Monetary policy and interest rates	
A.4	Exchange Rates	
A.5	· ·	
A.6	Demographic trends	20
В Ес	conomic cycle	23
B.1	Position within the economic cycle	23
B.2	·	
B.3		
C Fo	orecast of macroeconomic indicators	
C.1	Economic output	27
C.2		
C.3		
C.4	External relations	31
C.5		
D Me	Monitoring of other institutions' forecast	
Tables	s and Graphs:	
C.1	=	
C.2	Prices of Goods and Services	
C.3	Labour Market	46
C.4	External Ralations	51
C.5	International Comparisons	58

Macroeconomic forecasts are prepared by the Financial Policy Department of the Czech Ministry of Finance with quarterly periodicity. It contains a forecast for current and following years (i.e. till 2011) and for some indicators an outlook for further 2 years (i.e. till 2013). As a rule, they are published in the second half of the first month of each quarter and are also available on the MoF websites at:

#### www.mfcr.cz/macroforecast

Any comments or suggestions that would help us to improve the quality of our publication and bring it closer to the needs of its users are welcomed. Please direct your possible comments towards the following e-mail address:

#### macroforecast@mfcr.cz

Detailed information on fiscal developments can be found in Fiscal Outlook of the Czech Republic and are also available at:

## www.mfcr.cz/fiscaloutlook

#### Note:

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

## List of used abbreviations:

CA	. current account of balance of payments
Const.p.	. constant prices
Curr.p.	. current prices
EA12	. euro area containing 12 countries
EMU	•
ESA 95	
EU27	<u> </u>
GDP	•
GG	
GFS	. Government Finance Statistics methodology of the International
	Monetary Fund
NFC	. non-fuel commodities
NPI	. non-profit institutions
Per	
Perc. point, p.p	. percentage point
Prelim	. preliminarily
sa	. seasonal adjustment
TI	
y-on-y terms	. year-on-year terms

## **Basic notions:**

Prelim. (preliminary data)	data from quarterly national accounts, released by the CZSO, which have not been verified yet by annual national accounts
Estimate	. prognosis of <b>past</b> numbers, which were not available on various grounds in time of elaborating the paper, e.g. previous quarter's GDP
Forecast	. prognosis of <b>future</b> numbers, using expert and mathematical methods
Outlook	. prognosis of <b>more distant future</b> numbers, using extrapolation methods mainly

## Symbols used in the tables:

-	dash in the place of number means absence of the phenomenon
	dot in the place of number means unavailability or unreliability of
	the figure
x, (s	pace)cross or space in the place of number means the entry is not
	possible from logical reasons

Deadline for data sources: 9th April 2010

## **Summary of the forecast**

The Macroeconomic Forecast was prepared on the basis of data known as of 9 April 2010. Implicitly it includes expected measures to consolidate general government after 2010. The measures will be specified in detail in May Fiscal Outlook.

The world economy has been recovering slowly from recession caused by financial market crisis. The Czech economy has already come out of recession, with economic activity recovering from the third quarter of 2009. Recovery nevertheless is still fragile and future development encumbered with many risks.

A slight increase in real GDP by 1.5 % is assumed for 2010. Structure of growth will be affected by economic recovery of our main trading partners and so economic growth should be pulled by means of foreign trade mainly. Under current assumptions, the economy's growth could accelerate to 2.4 % in 2011.

Average rate of inflation is estimated at some 1.5 % in 2010 with growth of consumer prices to accelerate to 2.3 % in 2011.

Consequences of lower economic activity make themselves felt on the labour market too. After considerable growth of rate of unemployment (LFS) from 4.4 % in 2008 to 6.7 % in 2009, a peak should be hit at some 7.9 % in 2010. After that, unemployment rate should start falling slowly. Employment should decrease by 0.6 % in this year and grow moderately by 0.1 % in 2011. Relatively significant positive revisions of employment and unemployment are due to

probable improvement in structural characteristics of the labour market. Decline in wage bill, even if minimal, should continue in 2010 as well. In 2011 wage bill could start growing again at 4.3 %.

Ratio of current account deficit to GDP should remain at favourable level and in 2010 current account surplus could be generated for the first time since 1993.

Under preliminary data, general government deficit reached 5.9 % of GDP in 2009, which is by 0.7 p.p. better result than previously expected.

The target for general government deficit in 2010 remains at 5.3 % of GDP. Based on early 2010 data, the MoF estimated an autonomous development of performance of general government in 2010 and notified a deficit of 5.9 % of GDP. The government at its earliest session will therefore discuss and approve a set of additional measures aimed at fulfilling this target. They will include, among others, further binding of expenditures in budget chapters, reassessment of outlays within the privatization account and higher than planned inclusion of property income in revenues of public budgets.

Table: Main Macroeconomic Indicators

		2006	2007	2008	2009	<b>2010</b> <i>Fored</i>	<b>2011</b>	<b>2009</b> <i>Pre</i>	<b>2010</b> vious foreco	<b>2011</b>
Gross domestic product	growth in %, const.pr.	6,8	6,1	2,5	-4,2	1,5	2,4	-4,0	1,3	2,6
Consumption of households	growth in %, const.pr.	5,2	5,0	3,6	-0,2	-1,1	2,0	1,4	-0,8	2,0
Consumption of government	growth in %, const.pr.	1,2	0,7	1,0	4,4	-2,5	-0,9	4,0	-1,7	1,0
Gross fixed capital formation	growth in %, const.pr.	6,0	10,8	-1,5	-8,3	-3,7	2,5	-7,5	-3,7	2,5
Cont. of foreign trade to GDP grow		1,5	1,1	1,3	-0,5	1,8	0,7	-0,6	1,5	0,6
GDP deflator	growth in per cent	1,1	3,4	1,8	2,7	0,2	1,1	3,1	0,5	1,0
Average inflation rate	per cent	2,5	2,8	6,3	1,0	1,5	2,3	1,0	2,0	1,8
Employment (LFS)	growth in per cent	1,3	1,9	1,6	-1,4	-0,6	0,1	-1,4	-1,8	0,0
Unemployment rate (LFS)	average in per cent	7,1	5,3	4,4	6,7	7,9	7,8	6,7	8,8	8,6
Wage bill (domestic concept)	growth in %, curr.pr.	7,1	9,4	8,7	-1,7	-0,1	4,3	-0,3	-0,7	4,5
Current account / GDP			-	-	•	-	- 1	· ·	-	-
•	per cent	-2,4	-3,2	-0,6	-1,0	0,4	-0,5	-1,0	0,5	-0,2
Assumption	<u>1S:</u>	202	27.0	24.0	26.4	25.5	246	26.4	25.0	240
Exchange rate CZK/EUR		28,3	27,8	24,9	26,4	25,5	24,6	26,4	25,8	24,8
Long-term interest rates	% p.a.	3,8	4,3	4,6	4,7	4,0	4,0	4,7	3,8	4,0
Crude oil Brent	USD/barrel	65	73	98	62	81	92	62	81	92
GDP in Eurozone (EA-12)	growth in %, const.pr.	2,9	2,7	0,6	-4,1	1,1	1,9	-3,9	1,1	1,9

## A Forecast assumptions

The forecast was made on the basis of data, known as of **9 April 2010.** No political decisions, newly released statistics, or world financial or commodity markets developments could be taken into account after this date.

Data from the previous forecast from January 2010 are marked in italics. Data in the tables covering years 2012 and 2013 are indicative, outlining only the direction of possible developments and as such are not commented on in the following text.

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

## A.1 External environment

#### **Economic output**

The world economy has come out of recession and has been recovering since mid-2009. Especially China and other Asian economies show robust growth. Stock market growth is accompanied by re-established growth of the world trade and industrial production. Prices of many commodities, especially of oil, are increasing again.

**US economy** declined by 2.4 % (2.6 % in January forecast) in 2009. In the third quarter decline was replaced by QoQ growth by 0.6 %, in the fourth quarter by 1.4 % (0.4 %). Inflation accelerated to 2.3 % in March 2010, year-on-year. Rate of unemployment decreased in March to 9.7 % compared with the October peak of 10.2 %.

Stock markets continue growing. Dow-Jones has risen by 60 % so far compared with the trough from early March 2009. Personal consumption started growing moderately in the second half of 2009, majority of the country's regions report rise in retail sales. So far, housing market records weak only and regionally differentiated growth. Recession experience seems to result in some changes in the US economy image. Households start saving more, ratio of consumption to GDP has been falling slowly since 2005, which can affect strongly the world economy in future. At the same time, demand for big houses and big types of cars is falling, which will obviously influence oil consumption in the US. Share of export is growing and current account deficit has narrowed to half of its value since 2006. i.e. below 3 % of GDP.

Transition to optimistic expectations was boosted by March growth in employment, the most spectacular in two years. Definitive passage of health insurance reform, accepted positively by the markets, also strengthened confidence in economic policy. Future shape of financial market regulation remains

unresolved. Fed still keeps interest rate within the range of 0 to 0.25 %. The dollar has been strengthening against the euro and the yen since late 2009.

**Euro area's GDP** (EA12) fell by 4.1% (3.9%) in 2009. In the third quarter of 2009 the economy grew 0.4 %, QoQ. In the fourth quarter, however, stagnation followed (*growth by 0.3 %*).

In strong recession Germany recorded GDP decline by 5.0 % (unchanged) in 2009. Turn for growth by 0.3 % in QoQ terms was seen somewhat surprisingly as soon as in the second quarter of 2009. In the third quarter German economy recorded growth by 0.7 % while in the fourth quarter stagnation was seen (growth by 0.1 %). Due to intensive state interventions, France's economy declined by mere 2.2 % (unchanged) in 2009. Several large EU economies and some peripheral ones experienced the biggest fall in GDP. UK and Italy fell by 5 % each, Ireland by 7.5 %, Lithuania by as much as 15 %. Main causes of such a deep downturn can be seen in structural problems of the economies, generating bubbles e.g. on housing markets and leading to loss of competitiveness.

YoY dropout in EA12 industrial production peaked in April and May 2009. Since then industrial production has been growing MoM. In February 2010 it grew by 4.1 % YoY, in Germany by 6.8 %. On the other hand, unemployment keeps growing, reaching in EA12 10 % in February but falling in Germany to 8.0 % in March compared with 8.2 % in February. Asymmetric shocks caused by recession put monetary union's coherence to severe test. Current troubles of Greece demonstrate

Following years of decline and stagnation, household consumption started growing in Germany in the first half of 2009. Relatively low unemployment and inflation boosted consumption. Nevertheless, in the third and fourth quarters consumption fell again. Also stagnation

of GDP in the fourth quarter indicates uncertain outlook. Leading indicators (IFO index) point to strong growth of industrial production in spring while IMF reduced its forecast for Germany based on the assumption of growing unemployment dampening consumer spending.

Also **Central European economies** are overcoming downturn caused by dependence on exports especially to the EU.

In **Slovakia** dropout in GDP reached 4.7 % (*5.3* %) in 2009, i.e. something more than in the Czech Republic as well as EU average. It was caused mainly by high share of exports, especially of cars, and by foreign investment reduction. However, since the second quarter GDP has been growing dynamically. Industrial production in February 2010 grew by 20 % YoY. Rate of unemployment is close to 13 %, which is the most in last four years. Such development can result in slowdown in household consumption, which was indicated by fall in February retail sales.

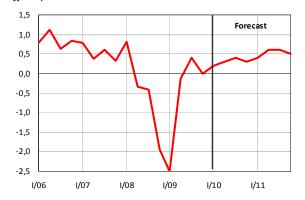
**Poland's economy** was the only one in the EU to avoid recession, growing by 1.7 % (1.2 %) in 2009. Growth was pulled by household consumption. The size of domestic market helped stabilize the situation. Also weakening of the zloty, robust fiscal impulse and low indebtedness of companies and households helped. On the other hand, unemployment is growing, reaching 13 % in February.

**Our forecast** is based on the key assumption that no more major shocks will occur on financial markets. For 2010 global recovery is expected.

As regards **US** economy, growth by 2.4 % (2.0 %) is expected in 2010 and by 2.8 % (2.5 %) in 2011. The estimate is rather cautious as recovery may be dampened especially by slow decline in high unemployment.

In **EA12** economy, growth of GDP is estimated at 1.1% (unchanged) in 2010 and at 1.9% in 2011 (unchanged). Risk can be seen especially in high and probably further growing unemployment and the question arises to what extent can export replace household consumption as a growth factor.

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

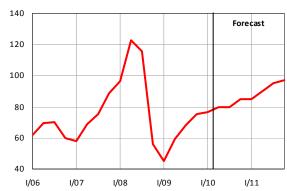


#### **Commodity prices**

Average price of **Brent oil** reached USD 76.7 per barrel (*USD 80*) in the first quarter of 2010 and in early April it is traded at slightly less than USD 85. Such development reflects perception of economic recovery with oil becoming again a subject of investment. Consumption is "two-speed" as decline in advanced economies is outweighed with growing demand in China and other countries. The question is, what effect on price of oil should potential appreciation of the yuan have.

Taking into account that the past forecast captured the development trend properly, estimate of price for 2010 is left unchanged, i.e. USD 81 per barrel of Brent oil. In common with the previous forecast, growth to values above USD 90 is considered probable in the medium run. Risks of forecast are seen as balanced.

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



### **Global financial markets**

Developments on the world financial markets since early 2010 up to now cannot be assessed unambiguously. Development of key stock indices, which continued growing after correction and reaching

the local minimums in early February, was positive. Also gradual withdrawal of some instruments of unconventional monetary policy indicates improving situation in the financial sector. On the other hand, news on the state of public finance in some European countries, especially in Greece, strongly remind of risks for future development.

By joining the euro Greece gained i.a. possibility to borrow under comparable conditions as e.g. Germany (Graph A.1.3). Although it was presumed that euro adoption would positively affect Greece's fiscal discipline, in the years 2001 through 2008 Greece fulfilled the three-percent criterion for deficit in 2006 only. In 2009 general government deficit reached – under current estimates – nearly 13 % of GDP and sovereign debt exceeded 113 % of GDP.

Graph A.1.3: **Greek Sovereign Risk Premia** spread of 10Y government bond yields against German bonds, in p.p., monthly average



Gradual revisions of data on the state of general government, made over the year 2009, together with uncertainty regarding credibility of Greek statistics data, resulted in Greece's rating cut and sharp rise in government bond yields. However, the latter in combination with high need of funding in next few years (debt refinancing, issue of bonds to cover budget deficits) creates danger of self-fulfilling expectations<sup>1</sup>.

Within Stability and Growth Programme the Greek government presented an ambitious programme of measures and reforms<sup>2</sup>, allowing for gradual reduction of deficits from presumed 8.7 % of GDP in 2010 to 2.0 % of GDP in 2013. Ratio of the sovereign debt to GDP should peak in 2011 slightly above 120 %.

Because of higher risk investors demand higher government bond yields, which increases costs to service the debt, worsens fiscal position and affects further growth of yields etc. The form of financial help to Greece in case of its default was discussed for a relatively long time. An idea even emerged of establishing the European Monetary Fund, sort of analogy to the IMF.

Period of speculations regarding the form of bailout package for Greece ended on 25 March by meeting of representatives of euro area's countries. They agreed upon basic outline of potential financial help. Should Greece ask for it, help would be provided in the form of bilateral loans of individual EMU members, while the IMF should contribute with a third of total sum.

Although this agreement was a breakthrough in a way it turned out soon that it was not sufficient to calm markets down. Problem was seen in its vagueness conditions under which Greece would borrow were not known (time of maturity, interest rate etc.). Yields of Greek government bonds thus rose steeply and CDS spreads also hit record levels.

Situation improved temporarily after 11 April when some details, especially formula for interest rate calculation, were specified. Programme of financial support to Greece should cover a three-year period with EA countries willing to lend Greece as much as EUR 30bn in the first year. With presumed IMF share in the funding (IMF one third, euro-area countries two thirds) thus Greece can gain up to EUR 45bn just over the first year.

The first response of markets was positive – yields of Greek bonds and CDS spreads fell and the euro strengthened against the dollar<sup>3</sup>. Also the follow-up auction of 26W and 52W Treasury bills was successful. However, positive sentiment did not last long as uncertainties emerged concerning duration and result of process of adoption of bilateral loans in those countries where approval by the parliament is necessary (i.a. Germany)

The ECB also tried to stabilize situation by means of extending the current less strict requirements on the collateral quality<sup>4</sup> beyond the 2010 horizon. *Ceteris paribus*, even in the next year it should be possible to gain liquidity from the ECB against the Greek government bonds. It should be nevertheless mentioned that Fitch downgraded Greece's rating by two notches (to BBB-) on 9 April and said the outlook remained negative. In the agency's assessment thus Greece fell to the lowest investment-grade rating.

<sup>&</sup>lt;sup>2</sup> Beyond framework of this programme, further austerity measures corresponding to 2.0 % of GDP were announced.

<sup>&</sup>lt;sup>3</sup> Since December 2009 the euro tended to weaken against the dollar.

<sup>&</sup>lt;sup>4</sup> BBB– or Baa3, i.e. the lowest threshold of investment band.

Greece's situation clearly demonstrates a need of more effective enforcement of fiscal rules in case of their infringement and points also to necessity to establish a mechanism of dealing with similar crisis situation on European level. But it is still true that prevention, i.e. responsible fiscal policy, is the best cure.

From the point of view of the Macroeconomic Forecast, state of public finance in some European countries represents a risk, which needs to be monitored closely. Further possible worsening of situation in Greece and other countries could trigger, at worst, a second wave of financial crisis with serious macroeconomic consequences.

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

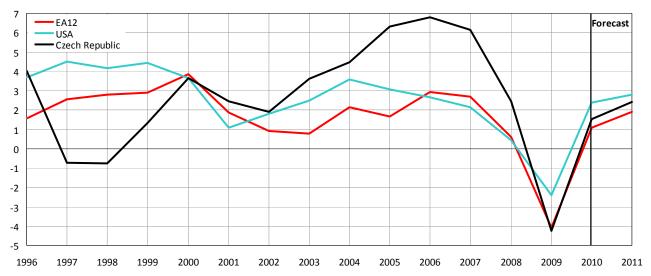
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
									Forecast	Forecast
EU27	1,2	1,3	2,5	2,0	3,2	2,9	0,8	-4,2	1,1	2,0
EA12	0,9	0,8	2,1	1,7	2,9	2,7	0,6	-4,1	1,1	1,9
Germany	0,0	-0,2	1,2	0,8	3,2	2,5	1,3	-5,0	1,4	1,9
France	1,0	1,1	2,5	1,9	2,2	2,3	0,4	-2,2	1,4	1,7
United Kingdom	2,1	2,8	3,0	2,2	2,9	2,6	0,5	-5,0	1,2	2,1
Austria	1,6	0,8	2,5	2,5	3,5	3,5	2,0	-3,6	1,3	1,9
USA	1,8	2,5	3,6	3,1	2,7	2,1	0,4	-2,4	2,4	2,8
Hungary	4,4	4,3	4,9	3,5	4,0	1,0	0,6	-6,3	-1,0	1,5
Poland	1,4	3,9	5,3	3,6	6,2	6,8	5,0	1,7	2,5	2,9
Slovakia	4,6	4,8	5,0	6,7	8,5	10,6	6,2	-4,7	2,3	3,9
Czech Republic	1,9	3,6	4,5	6,3	6,8	6,1	2,5	-4,2	1,5	2,4

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

			2	:009			20	10	
		Q1	Q2	Q3	Q4	<b>Q1</b> Forecast	<b>Q2</b> Forecast	Q3 Forecast	<b>Q4</b> Forecast
EU27	QoQ	-2,4	-0,3	0,3	0,1	0,2	0,3	0,4	0,3
	YoY	-5,0	-5,0	-4,3	-2,3	0,3	0,9	1,0	1,2
EA12	QoQ	-2,5	-0,1	0,4	0,0	0,2	0,3	0,4	0,3
	YoY	-5,0	-4,9	-4,1	-2,2	0,5	0,9	0,9	1,2
Germany	QoQ	-3,5	0,4	0,7	0,0	0,3	0,3	0,4	0,4
	YoY	-6,7	-5,8	-4,8	-2,4	1,5	1,3	1,0	1,4
France	QoQ	-1,4	0,3	0,2	0,6	0,2	0,4	0,2	0,4
	YoY	-3,5	-2,7	-2,3	-0,3	1,3	1,4	1,4	1,2
United Kingdom	QoQ	-2,6	-0,7	-0,3	0,4	0,4	0,0	0,5	0,6
	YoY	-5,3	-5,9	-5,3	-3,1	-0,2	0,5	1,3	1,5
Austria	QoQ	-2,2	-0,5	0,5	0,4	0,3	0,4	0,3	0,4
	YoY	-3,8	-4,6	-3,5	-1,9	0,6	1,6	1,4	1,4
USA	QoQ	-1,6	-0,2	0,6	1,4	0,5	0,4	0,5	0,6
	YoY	-3,3	-3,8	-2,6	0,1	2,2	2,8	2,8	2,0
Hungary	QoQ	-2,3	-1,4	-1,2	-0,4	-0,1	0,3	0,2	0,5
	YoY	-5,6	-6,8	-7,1	-5,3	-3,1	-1,4	0,0	0,9
Poland	QoQ	0,3	0,7	0,6	1,2	0,5	0,6	0,5	0,5
	YoY	1,5	1,5	1,3	2,8	3,0	3,0	2,8	2,1
Slovakia	QoQ	-8,1	1,2	1,6	2,0	0,0	0,0	0,0	0,0
	YoY	-4,9	-5,3	-4,9	-3,5	4,9	3,7	2,0	0,0
Czech Republic	QoQ	-4,1	-0,3	0,6	0,7	0,2	0,3	0,3	0,4
	YoY	-4,0	-4,9	-4,5	-3,1	1,2	1,8	1,5	1,2

Graph A.1.4: Real Gross Domestic Product

growth in %, sa data



Graph A.1.5: **Real Gross Domestic Product** – Central European new member state economies *growth in %, sa data* 

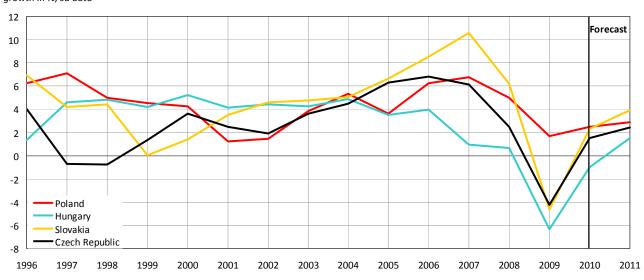


Table A.1.3: **Prices of Commodities** – yearly *spot prices* 

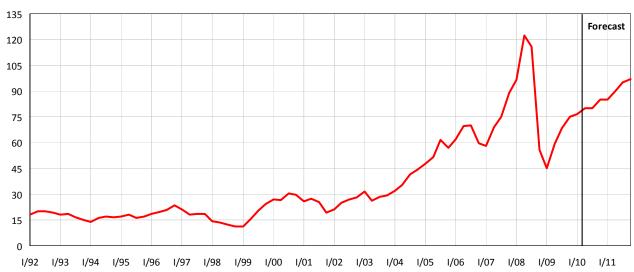
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
										Forecast	Forecast
Crude oil Brent	USD/barrel	25,3	28,8	38,3	54,4	65,4	72,7	97,7	61,9	81	92
	growth in % prev. y.	3,6	14,0	33,0	42,0	20,1	11,2	34,4	-36,7	30,1	14,0
Crude oil Brent index (in CZK)	2005=100	63,5	62,4	75,6	100,0	113,4	113,3	127,7	90,5	116	128
	growth in % prev. y.	-10,9	-1,7	21,1	32,3	13,4	-0,1	12,7	-29,1	28,2	10,5
Wheat	USD/t	148,5	146,1	156,9	152,4	191,7	255,2	326,0	223,5		
	growth in % prev. y.	17,1	-1,6	7,3	-2,8	25,8	33,1	27,7	-31,4	•	
Wheat price index (in CZK)	2005=100	133,2	113,0	110,5	100,0	118,7	142,0	152,1	116,7		
	growth in % prev. y.	0,8	-15,2	-2,3	-9,5	18,7	19,6	7,1	-23,3		

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

				2009		2010					
		Q1	Q1 Q2 Q3 Q4			Q1	Q2	Q3	Q4		
							Forecast	Forecast	Forecast		
Crude oil Brent	USD/barel	45,0	59,1	68,4	75,0	76,7	80	80	85		
	růst v %	-53,5	-51,8	-40,8	34,2	70,4	35,4	17,0	13,3		
Crude oil Brent index (in CZK)	2005=100	73,0	88,6	93,7	100,7	110	116	115	121		
	růst v %	-42,2	-40,5	-34,0	22,2	50,4	31,2	22,9	20,4		
Wheat price	USD/t	232,0	248,0	209,0	205,0	196,0					
	růst v %	-43,6	-28,4	-34,3	-10,1	-15,5					
Wheat price index (in CZK)	2005=100	134,7	133,0	102,4	98,4	100,4					
	růst v %	-30,0	-11,7	-26,7	-18,1	-25,5					

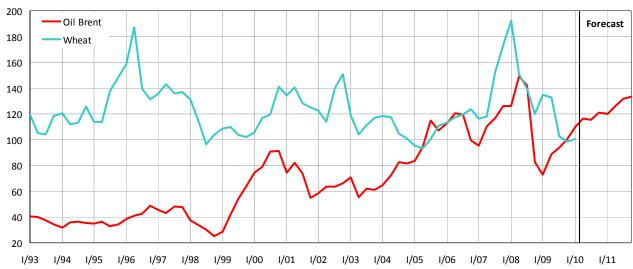
Graph A.1.6: Dollar Prices of Oil

in USD/barrel



**Graph A.1.7: Koruna Indices of World Commodity Prices** 

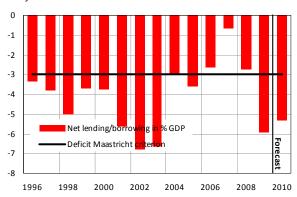
*index 2005 = 100* 



## A.2 Fiscal policy

In previous years, the performance of general government was positively influenced in particular by the peak phase of the economic cycle. However, economic recession has been bringing worsening of outcomes since 2008, revealing again structural deficiencies on the expenditure side of public budgets.

Graph A.2.1: **Net lending/borrowing** in % of GDP



Under preliminary CZSO data, general government deficit reached 5.9 % of GDP in 2009. Compared with the October forecast, the estimated size of the general government deficit improved by 0.7 % of GDP. More favourable result stemmed in particular from higher than expected accrual tax receipts. However, these preliminary data are still subject to some uncertainty especially as regards tax receipts developments, in particular those related to corporate income tax, and also gross fixed capital formation.

With regard to unfavourable general government performance, the debt reached 35.4 % of GDP by the end of 2009. It is likely to grow significantly, owing to the current unsustainable fiscal policy setup.

The target for general government deficit in 2010 remains at 5.3 % of GDP. Based on early 2010 data, the MoF estimated an autonomous development of performance of general government in 2010 and notified a deficit of 5.9 % of GDP. The government at its earliest session will therefore discuss and approve a set of additional measures aimed at fulfilling this target. They will include, among others, further binding of expenditures in budget chapters, reassessment of outlays within the privatization account and higher than planned inclusion of property income in revenues of public budgets.

The MoF took the spring notifications as an in-depth audit of public budgets and an update of existing fiscal

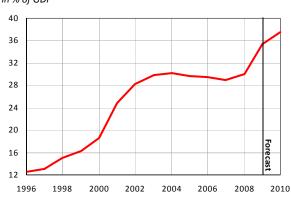
plans. Comparing original forecasts with the outcome of spring notifications makes it possible to identify the size of additional measures required to reach the planned deficit of general government.

Worsening of the notified deficit, compared with the data in the Convergence Programme, is caused mainly by lower estimate reflecting the tax collection in the beginning of the year, by lower estimate of revenues from property incomes, by higher-than-expected expenditures of local budgets indicating as yet rather unwillingness to adjust their spending to expected receipts, and by updating of the size of tied expenditures in individual budgetary chapters.

For the time being, first information on the size of tax collection in 2010 do not fully correspond to expected increase of revenues. Nevertheless collection in the beginning of this year was still influenced by expiring bonus for employer-paid security contributions and also could reflect partial advance buying of products covered by an increase in VAT rates. For this reason, a slight upward revision of revenues cannot be excluded.

When assessing fiscal policy results in 2009 and 2010 it is necessary to say that expenditure frameworks valid for these years were set as early as in 2007, i.e. in period of the highest boom and were only minimally changed afterward. Consequently, their setting partially reflected the then optimistic expectations of future economic developments.

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



In 2010, the general government debt should reach 37.5 % of GDP, reflecting the development of deficit. Nevertheless growth of debt is slightly impeded by inclusion of funds gained by bond issues in the past years.

For future years the Macroeconomic Forecast allows for fiscal consolidation, as outlined in the Convergence Programme of the Czech Republic, and thus for fulfilment of the Maastricht criterion for government deficit in 2013. Although with regard to elections concrete mix of consolidation measures is uncertain, consolidation contained step-by-step Convergence Programme can be considered a necessary minimum, also with regard of the CR's commitments toward the EU.

Table A.2.1: Net lending/borrowing and debt

		2001	2002	2003	2004	2005	2006	2007	<b>2008</b> <i>Prel</i> .	<b>2009</b> <i>Prel</i> .	<b>2010</b> Forecast
General government balance	bill. CZK	-132	-167	-170	-83	-107	-84	-23	-99	-214	-196
General government debt	bill. CZK	585	695	768	848	885	948	1024	1105	1282	1383
	growth in %	44,2	18,9	10,5	10,4	4,4	7,1	8,0	7,9	16,1	7,9
	% GDP	24,9	28,2	29,8	30,1	29,7	29,4	29,0	30,0	35,4	37,5
Interest derivatives 1)	bill. CZK	0,0	0,0	-0,5	-0,5	-0,2	-0,4	-0,7	-1,8	-1,3	-1,1
EDP B.9 <sup>2)</sup>	bill. CZK	-132	-167	-171	-83	-107	-85	-24	-100	-215	-197
	% GDP	-5,6	-6,8	-6,6	-3,0	-3,6	-2,6	-0,7	-2,7	-5,9	-5,3
Interest expenditure	% GDP	1,0	1,2	1,1	1,2	1,2	1,1	1,1	1,1	1,3	1,7
Primary balance	% GDP	-4,6	-5,5	-5,5	-1,8	-2,4	-1,5	0,5	-1,7	-4,6	-3,6

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

1) Hadains instruments

Note: The notified deficit for 2009 was 5.9 % of GDP, the notified debt stood at 38.1 % of GDP.

#### **A.3** Monetary policy and interest rates

#### Monetary policy

To secure price stability, the CNB makes use of inflation-targeting regime. Inflation target is generally defined as the YoY increase in the CPI by 2.0 % (with tolerance band of  $\pm 1$  p.p.) from January 2010. Inflation target is set as medium-term with a monetary-policy horizon of 12-18 months.

Limit interest rate for 2-week repo operations (2W repo rate) is the primary instrument of monetary policy. It remained at unchanged level of 1.00 % in the first quarter of 2010.

Monetary measures implemented by the US Fed and ECB in the first quarter of 2010 did not change interest differential. The latter was at zero level between the CR and EMU and reached 0.75-1.00 p.p. between the CR and US by the end of March 2010. From the viewpoint of future development of interest differentials no major depreciation or appreciation pressures on the Czech koruna are expected. Slow appreciation against both currencies should be adequate to the convergence scenario.

#### Interest rates

3-month **PRIBOR** rate decreased in the first quarter of 2010 against the fourth quarter of 2009 by 0.3 p.p. to 1.5 % (unchanged) thanks to lower average level of 2W repo rate and lower risk premia. From the second half of 2010 a gradual rising of inter-bank interest rates is expected, which should not however dampen ongoing economic recovery. In the economy no major pro-inflationary pressures are identified (inflationary outlook corresponding to target, negative output gap, growth of real wage costs below long-term average). For 2010 average PRIBOR rate is estimated at 1.5 % (1.7%) and for 2011 at 2.2% (2.4%).

Hedging instruments used to avoid interest rate change risk.

<sup>&</sup>lt;sup>2)</sup> General government net lending/borrowing relevant for fulfilment of Maastricht convergence criteria. Compared to net lending/borrowing from national accounts, this item is adjusted for interest rate derivatives.

Graph A.3.1: PRIBOR 3M

in %



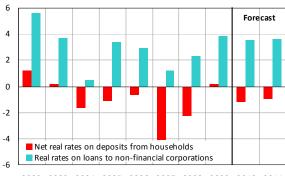
Average yields to maturity of 10-year government bonds reached 3.9 % (3.7 %) in the first quarter of 2010. For the following period their stability is expected to continue at average level of 4.0 % (3.8 %) as well as in 2011 (unchanged).

Average nominal interest rates from deposits of households are expected to remain more or less stable over 2010 at some 1.3 % (unchanged). Due to a lag they should start responding to rising inter-bank rates approximately from early 2011 and their average level is estimated at 1.4 % (1.3 %). Average nominal interest rates from credits to non-financial businesses, influenced not only by inter-bank rates but also by level of risk of individual firms, are expected to grow by end of this year. In 2010 average rate is estimated at some 4.2 % (unchanged) and in 2011 at 4.6 % (4.5 %).

Average **real rates from deposits** of households after taxation are expected at -1.2% in 2010 and at 0.9% in 2011 thanks to year-on-year decline in consumer price index (between December 2011 and 2010) and growth of nominal interest rates. **Real rates from credits** to non-financial businesses are expected only slightly lower in comparison with 2009, 3.5% in 2010, 3.7% in 2011.

# Graph A.3.2: Average Real Rates on Credits and Deposits

rates on credits deflated by end-of-year final domestic use deflator, rates on time/savings deposit (net of 15% income tax) deflated by end-of-year CPI growth, in % p.a.



2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Interest rates from new credits to households increased to 14.9 % in the fourth quarter. Tightening of interest conditions was partially caused by change in the structure of provided credits where share of higher-interest-bearing bank overdrafts increased (their average stock increased in the fourth quarter, QoQ, despite decline in other types of credits. Interest rates from new credits to non-financial businesses fell negligibly to 4.1 % in the fourth quarter (without change in the structure they would remain the same).

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

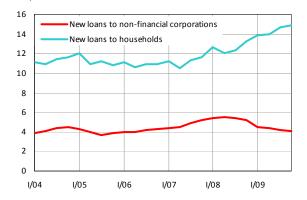


Table A.3.1: **Interest Rates** - yearly average interest rates in per cent p.a.

2002 2003 2010 2011 2004 2005 2006 2007 2008 2009 Forecast Forecast Repo 2W CNB (end of year) 2,75 2,00 2,50 2,00 2,50 3,50 2,25 1,00 Main refinancing rate ECB (end of year) 2,75 3,50 1,00 2,00 2,00 2,25 4,00 2,50 Federal funds rate (end of year) 1,25 4,25 1,00 2,25 5,25 4,25 0,25 0,25 PRIBOR 3M 3,55 2,28 2,36 2,01 2,30 3,09 4,04 2,19 1,5 2,2 Government bond yield to maturity (10Y) 4,94 4,12 4,75 3,51 3,78 4,28 4,55 4,67 4,0 4,0 Interest rates on loans to non-financial corpor. 5,82 4,57 4,51 4,27 4,29 4,85 5,59 4,58 4,2 4,6 Interest rates on deposits from households 2,06 1,40 1,33 1,24 1,22 1,29 1,54 1,37 1,3 1,4 Real rates on loans to non-financial corporations 1) 5,65 3,72 0,47 3,38 2,95 2,33 3,7 1,22 3,89 3,5 Net real rates on deposits

1,19

0,18

-1,64

-1,13

-0,63

-4,10

-2,26

0,17

-1,2

-0,9

Table A.3.2: Interest Rates - quarterly

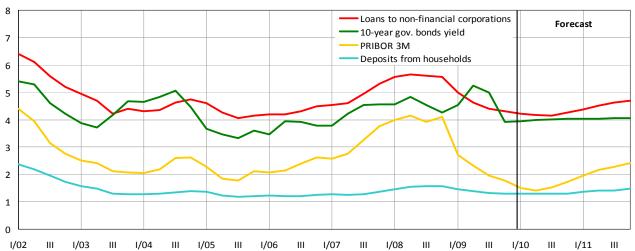
from households with agreed maturity 2)

average interest rates in per cent p.a.

		200	9			20	10	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Estima te	Fo re c ast	Forecast	Fo re ca st
Repo 2W rate CNB (end of period)	1,75	1,50	1,25	1,00	1,00			
Main refinancing rate ECB (end of period)	1,50	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	2,71	2,32	1,97	1,77	1,50	1,4	1,5	1,7
Long term interest rates								
-10-year government bonds yield to mat.	4,55	5,24	4,99	3,91	3,94	4,0	4,0	4,0
Interest rates on loans to non-financial corporations	4,99	4,63	4,40	4,32	4,2	4,2	4,1	4,3
Interest rates on deposits from households	1,47	1,40	1,33	1,30	1,3	1,3	1,3	1,3

Graph A.3.4: Interest Rates

in % p.a.



<sup>1)</sup> Deflated by domestic demand deflator.

<sup>&</sup>lt;sup>2)</sup> Net of 15 % income tax, deflated by CPI.

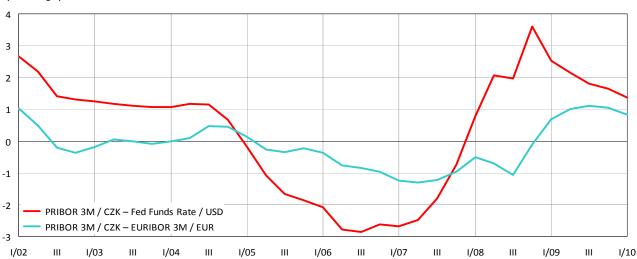
Graph A.3.5: Real PRIBOR 1Y

deflated ex post and ex ante by final domestic use deflator, in % p.a.



Graph A.3.6: Short - Term Interest Rate Spread

in percentage points



Graph A.3.7: Long - Term Interest Rate Spread

government bonds, in percentage points



## A.4 Exchange Rates

Flexibility of the **exchange rate** helps the economy to respond to unfavourable shocks. Weakening of the exchange rate of the koruna against the euro up to two-year trough of CZK/EUR 28.46 in February 2009 contributed to abatement of exporters' problems when external demand had weakened sharply in global economic crisis. Average value of the exchange rate in March 2010 was CZK/EUR 25.54, which was by 1.5 % less than the trend value.

The adopted scenario assumes that the exchange rate will hover below the long-term trend values over 2010 and 2011, keeping the tendency to moderate nominal and real appreciation.

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

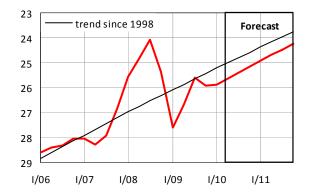


Table A.4.1: Exchange Rates - yearly

			2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
										Forecast	Forecast	Outlook
Nominal exchar	nge rates:											
CZK / EUR		average	31,84	31,90	29,78	28,34	27,76	24,94	26,45	25,5	24,6	23,7
	appreciation	growth in %	-3,2	-0,2	7,1	5,1	2,1	11,3	-5,7	3,7	3,8	3,8
CZK / USD		average	28,23	25,70	23,95	22,61	20,31	17,03	19,06	18,8	18,2	17,5
	appreciation	growth in %	16,0	9,8	7,3	5,9	11,3	19,2	-10,6	1,5	3,2	3,8
NEER		average of 2005 = 100	93,5	94,1	100,0	105,1	107,9	120,4	116,2	119	124	128
	appreciation	growth in %	-0,1	0,7	6,2	5,1	2,6	11,6	-3,5	2,7	3,7	3,8
Real exchange r	ate 1)											
to EA12		average of 2005 = 100	93,2	95,4	100,0	104,2	107,5	119,2	114,2	118	121	126
	appreciation	growth in %	-4,4	2,4	4,8	4,2	3,1	10,9	-4,2	3,1	3,1	3,9

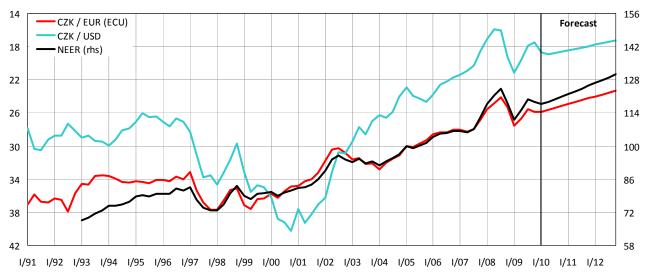
<sup>1)</sup> Deflated by GDP deflators.

Table A.4.2: Exchange Rates - quarterly

				200	9		2010					
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
							Estimate	Forecast	Forecast	Forecast		
Nominal exchange rat	tes:											
CZK / EUR			27,60	26,68	25,60	25,91	25,9	25,6	25,4	25,2		
	appreciation	growth in %	-7,4	-6,9	-5,9	-2,2	6,7	4,1	0,8	3,0		
CZK / USD			21,21	19,59	17,90	17,53	18,7	19,0	18,8	18,6		
	appreciation	growth in %	-19,5	-18,9	-10,4	9,8	13,3	3,2	-4,8	-5,9		
NEER		average of 2005 = 100	111,1	115,1	119,8	118,5	118	119	120	121		
	appreciation	growth in %	-5,7	-5,2	-3,6	0,4	6,0	3,0	-0,1	2,0		
Real exchange rate to EA12 average of 2005=100		110,0	113,3	116,9	116,8	117	117	117	120			
	appreciation	growth in %	-5,8	-4,9	-4,6	-1,2	6,0	3,6	0,3	2,6		

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

quarterly average, average 2005 = 100 (rhs)



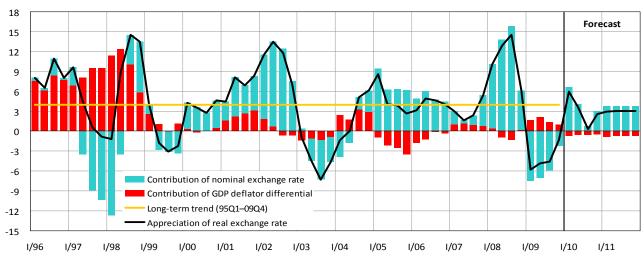
Graph A.4.3: Real Exchange Rate to EA12

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



Graph A.4.4: Real Exchange Rate to EA12

deflated by GDP deflators, YoY growth, in percentage points



## A.5 Structural policies

In February 2010 the Czech government adopted a document called **Recovery from the Crisis** – **Government Policy in the Short- and Medium-term Horizon,** aimed to mitigate negative consequences of crisis and start economic growth. Proposed measures include general government consolidation, support of enterprising, more effective state administration or fight with corruption. They are conceived as recommendation for government arising from May elections.

#### **Business environment**

In March 2010 the Chamber of Deputies adopted a law that should help **reduce administrative burden of entrepreneurs.** The amendment changes eight regulations representing extra administrative burden, which turned out ineffective in practice. The changes cover especially entering the business and business activities of SMEs, excessive duty to send forms and documents to oversight bodies has been abolished. Expected economy due to administrative burden lowering should exceed CZK 0.5bn a year.

On 15 March 2010 the Czech government approved a proposal to simplify drawing of finance from structural funds and Cohesion Fund. The changes cover especially authorisation procedures, financial planning and management, control activity and tackling of discrepancies. They will lead to administrative burden reduction and will help to consolidate rules of granting subsidies for all groups of beneficiaries.

#### **Taxation**

On 1 April 2010 an **amendment to the Act on Consumption Tax** became effective, creating a legal framework for the Union's electronic system for transport and monitoring of products liable to consumption tax. The system was established to fight with tax frauds regarding consumption taxation.

#### **Labour market**

Strengthening of economic activity was the aim of amendments to the Act on Employment and Act on Assistance in Material Poverty, increasing interconnection of job-seekers' material-security claims with system of assistance in material poverty and introducing stricter rules of active employment policy. The period of support in unemployment was shortened by one month while unemployment benefit was increased – for the first two months it amounts to

65 % of average net monthly earnings reached in the last job, for the next two months to 50 % and for the remaining part of period of support to 45 %. <sup>5</sup> Changes were made also as regards material-poverty assistance benefits: now they are paid in the form of vouchers for purchase of goods from 35 % at least and 65 % at most.

As regards health insurance system, in 2009 payment of sickness benefits was abolished for the first three calendar days of illness and payment of the benefits by the employer was introduced for the fourth through fourteenth day. The measure was to eliminate sick pay abuse and to reach lower sickness rate. Changes were accompanied with a cut in social insurance rate by 1.0 p.p. Also social contributions paid by employees were cut by 1.5 p.p. with rate on physical persons' income tax and tax allowances being preserved. For 2010 reduction thresholds of healthcare insurance were increased and size of sick pay and of financial assistance in maternity for the whole period of support time were temporarily reduced to single 60 %.

An increase in earned net income of persons with children is to be ensured by higher tax allowance/bonus per child in 2010. The size of children's allowances thus gets back to the same level as before anti-crisis package. Within consolidation measures of the state budget, ceilings for social and healthcare insurance premiums<sup>6</sup> were increased for 2010 to 72-multiple of average monthly wage.

Measures of the **first stage of pension reform** came into effect in 2010, extending gradually the statutory retirement age up to 65 years for men and to 62-65 years for women (depending on the number of brought-up children). The amendment extends necessary time of insurance to 35 years and excludes time of study from the category of alternative periods of insurance. It re-considered also definition of full and partial disablement in the sense of more targeted directing of disablement pension, introducing three degrees of disablement. Among structural measures, also **strengthening of motivation of older persons** to

<sup>&</sup>lt;sup>5</sup> Anti-crisis measure that should increase unemployment benefit to 80 % in the first two months and to 55 % for the remaining part of period of support or to 85 % in case of re-qualification, never became effective.

Within proposed measures for 2011, such state should remain preserved also after 2010.

stay on the labour market is important. Motivation includes more severe cuts in old-age pensions in case of early retirement, and growth of percent term of

old-age pension in case of concurrence of employment and drawing a full or partial pension.

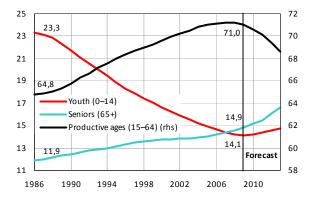
## A.6 Demographic trends

Under preliminary data, population of the CR grew over 2009 by 0.4 %, surpassing the level of 10.5 mil. for the first time since the mid-forties of the past century.

Despite falling demand for foreign workforce, positive balance of migration kept on relatively high level of 28 thousand people, representing the most important factor of an increase in population although its intensity fell considerably in comparison with 2008.

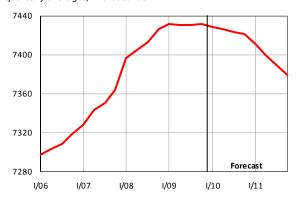
Natural increase of population reached 11 thousand persons, which is 4 thousand less compared with 2008. These characteristics suggest that demographic situation hovers between trajectories of high and mean variant of the CZSO 2009 Demographic Projection.

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



In general it can be said that from economic point of view the Czech population has still a very favourable structure with high share of working-age population (15 to 64 years), which however obviously reached its maximum at the turn of 2008 and 2009.

Graph A.6.2: Czech Population from 15 to 64 years quarterly averages, in thousands



Also under assumptions of high variant of the projection, net immigration of 40 thousand persons at most can be expected, which does not outweigh domestic factors worsening the demographic structure slightly.

In our calculations, however, stagnation or following moderate decline in the number of working-age population should be more than compensated by effects within the age structure of the workforce when structural shares of age groups with high or growing participation increase. Further rise in labour market flexibility could help create situation when the Czech economy will not suffer from lack of available workforce.

On the other hand, the projection confirms progressing **population ageing process.** For the first time in Czech history, number of people younger than 15 years was lower in 2007 than number of people in the age category 65+. In future the number and share of seniors in the population will grow thanks to demographic structure and further continuation of intensive process of lengthening of average life expectancy. Structural share of inhabitants older than 65 years in total population, which in early 2009 amounted to less than 15 %, should rise to nearly 20 % by early 2020.

## Graph A.6.3: Life Expectancy

in years

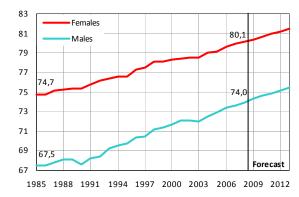


Table A.6.1: **Demography** *in thousands of persons, end-of-year* 

	2004	2005	2006	2007	2008	2009	2010 Forecast	2011	2012 Outlook	2013 Outlook
Population (January 1)	10 211	10 221	10 251	10 287	10 381	10 468	10 507	10 560	10 613	10 665
growth in %	1	0,1	0,3	0,4	0,9	0,8	0,4	0,5	0,5	0,5
Age structure (January 1):										
(0-14)	1 5 5 4	1 527	1 501	1 480	1 477	1 480	1 492	1 5 1 6	1 545	1 573
growth in %	-2,2	-1,8	-1,7	-1,5	-0,2	0,2	0,8	1,6	1,9	1,8
(15-64)	7 234	7 259	7 293	7 325	7 391	7 431	7 418	7 408	7 366	7 3 2 0
growth in %	0,5	0,3	0,5	0,4	0,9	0,5	-0,2	-0,1	-0,6	-0,6
(65 and more)	1 423	1 435	1 456	1 482	1 5 1 3	1 556	1 598	1 636	1 702	1 772
growth in %	0,4	0,8	1,5	1,8	2,1	2,9	2,7	2,4	4,0	4,1
Old-age pensioners (Jan 1)	1 933	1 965	1 985	2 024	2 061	2 102	2 145	2 182	2 218	2 253
growth in %	0,6	1,7	1,0	2,0	1,8	2,0	2,0	1,7	1,6	1,6
Old-age dependency ratios (Jan 1 in %):										
Demographic 1)	19,7	19,8	20,0	20,2	20,5	20,9	21,5	22,1	23,1	24,2
Under current legislation 2)	32,8	32,8	33,0	33,3	33,4	33,7	34,1	34,5	34,8	35,2
Effective 3)	40,9	41,5	41,3	41,6	41,5	41,8	43,5	44,8	45,4	45,9
Fertility rate	1,226	1,282	1,328	1,438	1,497	1,49	1,51	1,53	1,54	1,55
Population increase	9	31	36	94	86	39	53	53	53	52
Natural increase	-10	-6	1	10	15	11	13	13	13	12
Live births	98	102	106	115	120	118	118	118	117	116
Deaths	107	108	104	105	105	107	106	105	105	104
Net migration	19	36	35	84	72	28	40	40	40	40
Im m igration	53	60	68	104	78	40				
Emigration	35	24	33	21	6	12				

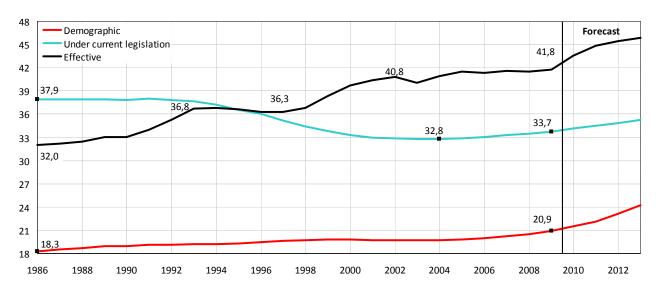
<sup>&</sup>lt;sup>1)</sup> Demographic dependency: ratio of people in senior ages (60 and more) to people in productive ages (20 - 59).

<sup>&</sup>lt;sup>2)</sup> Dependency under current legislation: ratio of people above the official retirement age to the people over 19 below the official retirement age.

<sup>3)</sup> Effective dependency: ratio of old-age pensioners to working people.

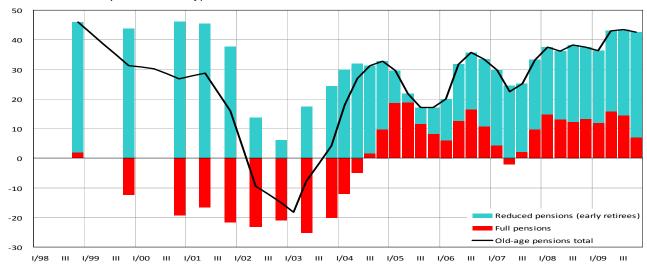
## Graph A.6.4: Dependency Ratios

definitions – see Table A.6.1, in %



## Graph A.6.5: Old-Age Pensioners

absolute increase over a year in thousands of persons



## **B** Economic cycle

## **B.1** Position within the economic cycle

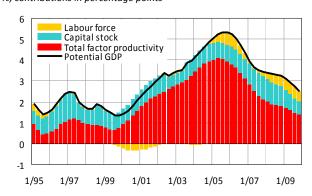
Potential product, specified on the basis of calculation by means of the Cobb-Douglas production function, indicates the level of GDP achieved with average use of production factors. Growth of potential product expresses possibilities for long-term sustainable growth of the economy free of imbalances. It can be broken down into contributions of the labour force, capital stock, and total factor productivity. The output gap identifies the cyclical position of the economy and expresses the relationship between GDP and potential product. The concepts of potential product and output gap are used to analyze economic development and to calculate the structural balance of the general government.

Under current conditions, however, when steep changes in the level of economic output are taking place, it is very difficult to distinguish the influence of deepening of the negative output gap from that of a slowdown in potential product growth. Results of these calculations thus display high volatility and should be treated very cautiously.

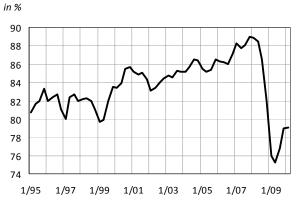
Graph B.1.1.: **Output Gap** in % of potential GDP



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



Graph B.1.3: Utilisation of Capacities in Industry



Graph B.1.4: **Total Factor Productivity** *YoY growth in %* 

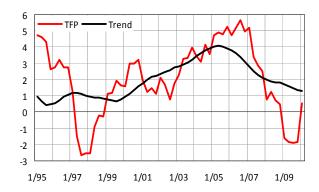


Table B.1: Output Gap and Potential Product

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 Q1
Output gap	per cent	-0,1	-1,4	-1,5	-1,6	-0,6	1,3	3,8	2,9	-4,2	-4,5
Potential output	growth in per cent	2,6	3,3	3,7	4,5	5,2	4,8	3,6	3,3	2,8	2,4
Contributions:											
TFP	percentage points	2,0	2,5	3,0	3,7	4,0	3,5	2,4	1,9	1,5	1,3
Fixed assets	percentage points	0,8	0,7	0,7	0,8	8,0	0,9	1,1	1,0	0,7	0,6
Participation rate	percentage points	-0,4	-0,1	-0,2	-0,2	0,2	0,2	-0,2	0,0	0,4	0,5
Demography 1)	percentage points	0,2	0,2	0,2	0,2	0,2	0,3	0,3	0,4	0,2	0,0

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

Economic recession, which hit the Czech economy at the turn of 2008 and 2009, resulted in an emergence of a deeply negative **output gap.** According to current calculations, it hovered between -4.5% and -3.5% over the entire year 2009 and in early 2010, which indicates the lowest utilisation of economic potential in the post-transformation period.

Deep negative output gap reflects in the economy by extremely low utilisation of production capacities in the industry, steep rise in the unemployment rate, reduction in the number of vacancies and, last but not least, substantial worsening of the general government deficit.

**Total factor productivity (TPF)** is the component of the potential product that was hit most. Economic problems led to YoY decline in TPF over the year 2009. Although in early 2010 YoY growth of TPF apparently revived, its trend value keeps on slowing to assumed 1.4 % in the first quarter of 2010.

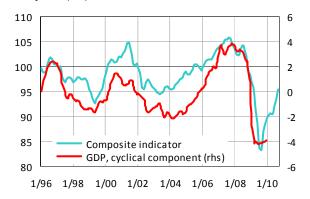
Deep dropout in investment activity led to lowering of contribution of **capital stock** from 1.1 p.p. in the fourth quarter of 2007 to expected 0.6 p.p. in the fourth quarter of 2010. On the contrary, labour supply, measured as ratio of labour force to the number of population aged 15-64, accelerated its growth in 2009.

Slowdown in growth of trend TPF reflects directly in YoY growth of **potential product**, which decreased probably to 2.8 % over 2009 and reached apparently 2.4 % in the first quarter of 2010. Further development of potential product will depend on the speed of the economy's recovery. To close gradually the negative output gap and to accelerate potential growth again, the economy will have to start reaching higher paces of GDP growth compared with the potential product.

## **B.2** Composite leading indicator

Leading composite indicator is compiled from the results of business cycle surveys meeting basic demands made on cyclical leading indicators – economic significance, statistically observable relation to the course of economic cycle ahead of time and timely and regular availability. Since December 2008 the indicator is compiled from those business cycle indicators that showed a high level of correlation with average lead of six months.

Graph B.2.1: **Leading Composite Indicator** average 2000=100 (lhs) synchronized with cyclical component of GDP based on statistical methods (Hodrick-Prescott filter) in % of GDP (rhs)



Leading composite indicator signalled approximation of relative cyclical component to zero value in the fourth quarter of 2009 i.e. further QoQ growth of real GDP. Real data confirmed such development.

For the first quarter of 2010 the leading composite indicator signals further improvement of negative value of relative cyclical component with possible slowdown in this process in the second quarter of 2010.

CZSO new preliminary data for the fourth quarter of 2009 accompanied by data revision of 2009 quarterly national accounts led again to considerable shift of the end of time series of relative cyclical component, correlating now more with recent development of composite indicator.

Higher volatility of estimated relative cyclical component of GDP is caused by change in seasonal adjustment method used by the CZSO.

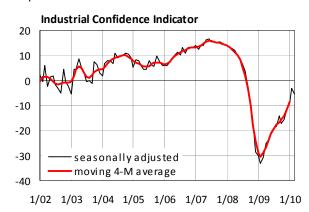
## **B.3** Individual business cycle indicators

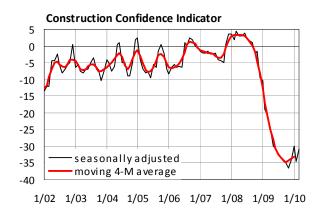
Business cycle surveys express respondents' views of the current situation and short-term outlook and serve to identify in advance possible turning points in the economic cycle. The main advantage lies in quick availability of results reflecting a wide range of effects shaping expectations of economic entities.

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

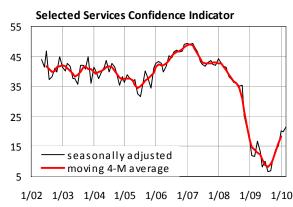
Aggregate indicator of confidence is presented as weighted average of seasonally adjusted indicators of confidence in industry, construction, trade, select sectors of services and of consumer confidence. Weights are established as follows: indicator of confidence in industry is assigned weight of 40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

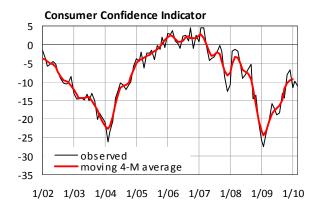
**Graph B.3.1: Confidence Indicators** 











Assessment of the first months of 2010 in **industrial businesses** was favourable. It stemmed from improving economic situation and total and foreign demand. However, in their outlook for the second quarter of 2010 the respondents are more cautious and allow for less favourable development of production activity. It is due to lower assessment of expected total and foreign demand. In three-month horizon thus partial worsening of economic situation of businesses is expected, in sixmonth horizon improvement again.

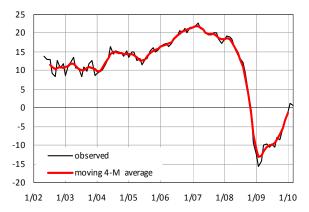
In **construction** situation started turning for the better at last in the first quarter of 2010. For the second quarter expectations regarding construction activity are still cautious but respondents expect improvement in employment. As regards economic situation assessment, a major improvement cannot be expected for the time being. Construction businesses allow for improvement in the next period.

As regards **trade**, economic problems were solved in the first quarter. It is reflected in better assessment of the current economic situation and in slightly optimistic three-month outlook. In selected sectors of **services** situation is stable, assessment of expected demand shows growing trend.

**Consumer** confidence fell slightly in the March survey but still keeps on stable level. It stems from the survey

that next twelve-month development will bring a slight worsening of total economic situation but improvement in financial situation of consumers. Share of respondents, expecting an increase in unemployment, slightly increased.

Graph B.3.2: Aggregate Confidence Indicator



On the basis of economic entities' opinions it can be assumed that QoQ growth continued in the first quarter of 2010 (industry, services). For the second quarter of 2010 the survey indicates further possible moderate growth. However, risk related with external demand development increases.

## C Forecast of macroeconomic indicators

## **C.1** Economic output

After downturn at the turn of 2008 and 2009, the Czech Republic is recovering successfully. Pro-growth measures had their impacts on the domestic market over 2009, Czech firms profited also from stimulation programmes abroad. Stabilization of economies of our main trading partners has started to make itself felt.

In the fourth quarter of 2008 the Czech Republic was fully hit by the world economic crisis and entered the recession. Under current CZSO estimates, recession lasted three quarters with seasonally adjusted **real GDP** decreasing by 5.0 % during this period. After slowdown in decline in the second quarter, a turnaround was seen in the third quarter with QoQ growth reaching 0.6 % (0.8 %). Recovery roughly in line with potential product growth has continued in the fourth quarter of 2009 with GDP growth by 0.7 % (0.8 %). With regard to revision of the previous quarters it means a YoY decline in real GDP in the fourth quarter of 2009 by 2.8 %<sup>7</sup> (2.3 %). For the entire 2009 thus real GDP fell by 4.2 % (4.0%) in comparison with 2008.

During the first quarter of 2010 the Czech economy obviously continued recovering too. One-off stabilization measures in the beginning of the year probably caused a moderate slowdown. QoQ growth is estimated at 0.2 % (decline by 0.2 %), which means YoY growth by 1.2 % (1.6 %).

Improved external conditions should gradually compensate restrictive impacts of stabilization measures. Contribution of foreign trade should become the key pro-growth factor instead of current government institutions spending. In the following years also domestic demand should recover. The forecast of GDP growth for 2010 is 1.5 % (1.3 %). In 2011 a moderate acceleration to 2.4 % (2.6 %) should be seen.

A considerable improvement of terms of trade, connected in particular with lower YoY prices of oil, resulted in considerably lower decline in **real gross domestic income (RGDI)**, reflecting income situation of the Czech Republic, than in real GDP. In the fourth quarter of 2009 RGDI fell by mere 1.6 % (*growth by 0.3 %*) YoY. In 2010 real income could rise by 0.7 % (0.8 %) and in 2011 by 2.1 % (2.5 %).

<sup>7</sup> Data without seasonal adjustment are given in the text, unless stated otherwise.

Real dynamics is reflected also in nominal GDP, the key variable for fiscal forecasts. In the fourth quarter of 2009 a YoY decline by 1.5 % (growth by 0.5 %) was recorded where YoY contraction in real economy was mitigated by improvement in terms of trade. For the entire 2009 GDP in current prices fell by 1.7 % (1.1 %). First nominal GDP decline in the history of market economy in the CR was thus recorded. In 2010 growth by 1.7 % (1.9 %) is expected and in 2011 by 3.5 % (3.6 %).

As regards **income structure of GDP**, stagnation in the business profitability is expected. In the fourth quarter of 2009 gross operational surplus fell by 0.2 % (*growth by 3.0 %*) and for the entire 2009 by 0.4 % (0.1 %). In 2010 growth by 0.7 % (1.8 %) is expected. In 2011 growth by 1.8 % (3.5 %) can be assumed i.e. with dynamics below the level of nominal GDP.

Forecasts are still related with high rate of uncertainty ensuing especially from external environment. Impacts of data revisions on past development of the economy can be also relevant. The situation is documented by means of Graph C.1.2 in an annex.

### **Expenditures in GDP**

Change in inventories was the dominant component of unfavourable economic development in 2009. Its contribution to total decline in economic output was -2.5 p.p. Although updating of quarterly national accounts data for the first to third quarters of 2009 brought along a reduction in average contribution to YoY decline from -3.4 p.p. to -1.7 p.p., fourth-quarter results came as an unpleasant surprise.

Instead of expected gradual restoration of the stock of inventories related with the economy's recovery, a contribution of -5.1 p.p. was recorded, surpassing significantly YoY decline in real GDP (see Graph C.1.7 in an annex). Under tightened economic conditions and pressure to maintain cash-flow, businesses have been motivated to reduce inventories. Nevertheless contribution of change in inventories to GDP development needs to be assessed rather cautiously. In revisions of data made by the CZSO, absolute value of contribution of change in inventories decreases regularly to a considerable extent.

YoY decline in real **household expenditures on final consumption** reached 0.9 % (*growth by 0.4 %*) in the fourth quarter of 2009. For the entire 2009 household consumption fell by 0.2 % (*growth by 1.4 %*). Noticeable difference between reported decline and the January forecast stems mainly from change in data for the first through third quarters of 2009 where originally reported cumulative increase by 1.7 % was updated to 0.1 %.

National accounts provide an interesting view of the main cause of reduction of real household consumption. By intuition it could have been assumed that it was caused mainly by drop in employment and related decline in wage bill, reaching 1.7 % nominally and 2.0 % in real terms (household consumption deflator). However, deeper analysis shows that lower gross wage bill was fully compensated by tax allowances within stimulation measures and that dropout in incomes from household property by 26.3 %, i.e. by CZK 43bn, was the dominant factor.

From early 2010 budgetary measures to stabilize general government balance make themselves felt. Further growth of consumption will be counteracted by falling employment and ensuing worsening income situation of households.

In 2010 household consumption is expected to fall by 1.1 % (*decline by 0.8 %*). In 2011 it is expected to start growing again at some 2.0 % (*unchanged*).

Government expenditures on final consumption rose by 5.1% (2.4%) in the fourth quarter of 2009. In 2009 rise in government consumption reached 4.4% (4.0%). Government consumption thus was the most important component of use slowing the economic decline.

In accordance with adopted stabilization measures austerity behaviour of government institutions is expected as regards both employment in the government sector and purchases of goods and services. Expected development of government consumption in 2010 should reflect efficient measures to cut government sector deficit. In the following years it should reflect consolidation strategy adopted by the government, which is to ensure meeting of the Maastricht criterion for public finance deficit in 2013.

In 2010 real government consumption is assumed to fall by 2.5 % (1.7 %). In 2011 government consumption should fall by 0.9 %  $(growth\ by\ 1.0\ \%)$ .

Volume of gross fixed capital formation fell by 7.0 % (7.3 %) in the fourth quarter of 2009. Purchases of transport vehicles fell most, by 23.1 %, investments in

other machines by 22.6 %. Nevertheless investments in housing fell by mere 7.7 %, investments in other construction even grew by 8.7 %.

In the current uncertain situation it is necessary to take into account that many investment plans were reconsidered or postponed due to low utilisation of existing capacities. Willingness of foreign investors to make new investments or reinvest profits from their business operations in the CR will depend on their situation in their home countries. On the other hand, room for new production capacities may arise after the market has been cleaned up in recent months.

After overheating of the housing market in 2007 and 2008, situation should gradually return to trajectory sustainable in the long run. With regard to households' financial situation, trajectory deviation in the opposite direction can be rather expected.

On the other hand, fall in investment could be mitigated by infrastructure investment with contributions from EU funds. Volume of investment fell by 8.3 % (7.5 %) in 2009. For 2010 further decline by 3.7 % (unchanged) is expected. In 2011 growth dynamics should restore at some 2.5 % (unchanged).

After dropout to -3.1 p.p. in the fourth quarter of 2008, contribution of **foreign trade** (FT) on sa data was improving over 2009, reaching positive value of 2.7 p.p. in the fourth quarter. For the entire year the contribution reached -0.5 p.p. (-0.6 p.p.).

In the second and third quarters of 2009 the export and thus also FT contribution to GDP development was obviously positively influenced by foreign governments' measures, especially the industry support. This effect, however, needs to be taken as temporary one.

In 2010 positive effect of domestic demand reduction due to stabilization measures as well as ongoing recovery in partner countries should be seen. FT contribution should be distinctly positive, amounting to 1.8 p.p. (1.5 p.p.). For 2011 FT contribution at some 0.7 p.p. (0.6 p.p.) is expected.

## C.2 Prices of goods and services

#### **Consumer prices**

March YoY inflation reached 0.7 % (1.5 %). This value is significantly lower than expected, in particular due to lesser increase of regulated prices, especially regulated rents, market inflation, and also due to updating of consumption basket weights from this January, whose shape was known as late as after the closing date of the January version of the Macroeconomic Forecast. Also increases in some indirect taxes, regulated prices and fuel prices contributed to price growth.

Contribution of administrative measures played again a dominant role in growth of prices. Within government package to cut the state budget deficit, VAT basic and reduced rates were increased by 1 p.p. and excise taxes on fuels, spirits and beer were increased too (contribution of 1.0 p.p.) from January. Since mid-year an increase in excise taxes on cigarettes is expected to reflect in prices (contribution of 0.2 p.p.). Also prices of regulated rents (contribution of 0.2 p.p.), heat, water rate, sewage charges and medicines (total contribution of 0.2 p.p.) were growing, even if more slowly. From the fourth quarter also prices of gas should increase (contribution of 0.2 p.p.). Prices of electricity fell (contribution of -0.1 p.p.).

Estimate of contribution of regulated rents in January forecast (0.6 p.p.) seems to have been apparently overvalued. This item is difficult to predict, both its size and timing. The calculated contribution always represents maximum growth and spread over time, but its actual fulfilment depends on local administrations decision.

Prices in the section of transport were influenced by opposite development of prices of fuels and cars. While average price of Natural 95 petrol was the highest in March from August 2008, prices of cars were falling. Due to the strong effect of low comparison basis especially in the first half of 2009, oil prices are nevertheless an important contributor to YoY consumer inflation.

YoY declines in food prices slow down responding thus to development of agriculture producer prices and world prices. Their negative contribution should gradually fully disappear. Since mid-2010 a moderate increase is expected.

Weak domestic demand, which is well visible in development of demand for non-food consumer goods, has anti-inflationary effect. Record MoM fall in prices in the section of clothing and footwear recorded in January

was followed by the above-mentioned decline in prices of cars. Also prices in sections of recreation and culture or housing furnishings and equipment were lower in YoY terms. Fragile recovery of domestic economy, persisting negative output gap, worsened conditions on the labour market, moderate growth of wages and related cooling household consumption create a very limited room for consumer price growth.

On the basis of mentioned assumptions, average rate of inflation in 2010 is expected to reach 1.5 % (2.0 %) with an increase of prices over the year by 2.3 % (2.4 %). Market inflation should return to slightly positive values in the second half of the year.

In 2011 gradual recovery of household consumption and positive market inflation over the entire year is expected. Contribution of administrative measures, taking into account proposed government measures to consolidate public budgets, should remain at the same level as in 2010. Average rate of inflation in 2011 should thus hover around 2.3 % (1.8 %) with an increase of the prices over the year by 2.1 % (1.9 %).

#### **Deflators**

YoY growth of gross domestic expenditure deflator, which is a comprehensive indicator of price development in the economy, accelerated to 0.7~% (0.5~%) in the fourth quarter of 2009 in comparison with revised 0.2~% in the third quarter. Stopping of YoY decline for household consumption deflator outweighed effect of lower deflators for fixed capital formation and government consumption.

For entire 2009 growth of gross domestic expenditure deflator reached 1.1 % (unchanged). In 2010 average value should reach 1.1 % (1.2 %) with tendency to gradual growth especially due to acceleration of consumer inflation. In 2011 deflator should grow 1.6 % (1.3 %).

Growth of **implicit GDP deflator** reached 1.3 % (2.8~%) in the fourth quarter of 2009. Compared with gross domestic expenditure deflator, it was influenced upwards by growth of terms of trade by 1.9 % (4.1~%). For entire 2009 it recorded growth by 2.7 % (3.1~%). Should terms of trade fall in 2010, growth by mere 0.2 % (0.5~%) is expected while in 2011 growth by 1.1 % (1.0~%) is allowed for.

## C.3 Labour market and households

Labour market environment seems to have undergone significant changes of structural character but compared with standard expectations immediately after the crisis, very positive ones. An increased flexibility demonstrated by southwest shift of the Beveridge curve, by growing rate of economic activity or flexibility of wage development, as well as by elasticity of regular or part-time jobs including adjustment of working time fund, apparently more than indicates recent fundamental changes on the Czech labour market.

#### **Employment**

Under Labour Force Survey (LFS), **employment fell by 2.1** % (2.2 %) YoY in the fourth quarter of 2009. It was caused by a decline in the number of employees by 2.9 % (3.1 %). Growth in the number of entrepreneurs was lower in relative terms, reaching 2.2 % (2.6 %).

Growth of labour supply continued – labour force grew by 48 thousand persons YoY, with shrinkage of the employed amounting to 106 thousand and an increase of the unemployed amounting to 154 thousand. **Rate of economic activity** (15-64 years) thus grew by 0.5 p.p. YoY to 70.4 % and ratio of labour force to 15-64 years population by 0.6 p.p. to 71.5 %. Increasing participation during unfavourable economic performance is due to positive institutional changes at the labour market, due to demographic factor and probably also income factor when other persons entered the market to overcome revenue dropout during recession.

Due to delayed effect of economic slump, rate of employment (15-64 years) fell by 1.6 p.p. YoY to 65.3 %. Number of people working in the secondary sector kept on falling considerably. The decline was most significant in manufacturing where under LFS 164 thousand of workers were fewer in YoY terms and 136 thousand for entire 2009. Similarly as in the previous period it was partially offset by growth in the number of persons employed in the tertiary sector (education and trade) and in construction.

By the end of the first quarter of 2010 there were 316 thousand foreigners employed in the CR (less by 25 thous. YoY). Due to reduction of jobs in industry, number of registered foreign employees was falling over the past year and in early 2010. By the end of March 220 thousand were registered, which means YoY shrinkage by 42 thousand. Since early 2009, number of foreigners – tradesmen was increasing with moderately growing intensity, compensating in this way – similarly as some

domestic workers – for loss of job. Their YoY number was higher by 18 % in the first quarter of 2010.

Although short-term outlook is slightly optimistic, further running of non-profitable businesses out or reserved approach of employers when hiring new workers may appear. However, efforts of newly unemployed persons to create their own business activities (new working activities or possibly the so-called tax optimization of businesses by means of hiring self-employed persons instead of entering into a contract) are not expected to continue to a large extent.

For entire 2009 employment fell by 1.4 % (*unchanged*). Despite economic recovery, weak decline by 0.6 % (1.8 %) is still expected in 2010 with gradual turnaround leading to stagnation in 2011.

#### Unemployment

Growth of registered unemployment continued in the first quarter of 2010 up to 571 thousand (13 thousand less than predicted). In March a positive surprise occurred. Seasonally adjusted registered unemployment slightly fell MoM for the first time since August 2008. Optimism-generating faster turnover in flows continued, especially as regards growth in the number of job seekers placed and decline in the number of newly reported job seekers. On the other hand, at the turn of 2009 and 2010 unfavourable turn in development of the long-term unemployed was confirmed with their share in registered unemployed rising to 26 %. Nevertheless this number is still considerably lower than in periods of strong economic growth.

As regards differences in statistics, higher values can be assumed to keep on, should the legislation preserve status quo when persons registered with the employment agencies as unemployed can legally work for a limited period, which is excluded by LFS definition.

Internationally comparable rate of unemployment under LFS reached 7.2 % (7.5 %) in the fourth quarter of 2009. It is of interest in international comparison that EU27 average reached 9.2 % and EA16 average as much as 9.7 %. Consequently, despite dramatic increase, rate of unemployment in the CR is nearly 2.0 p.p. or 2.5 p.p. lower than European averages. Over entire 2009 it was 6.7 % (unchanged). In 2010 it should reach its maximum of 7.9 % (8.8 %), falling moderately to 7.8 % (8.6 %) in 2011. Main causes of deeper corrections in

labour market outlook are seen in more optimistic economic development and improving structural characteristics of labour market, reflecting i.a. in unemployment lagging behind economic output. In common with the past forecast, both changes in legislation and announced or already implemented reduction of jobs in the non-business sphere were taken into account.

#### Wages

Due to lower demand and productivity of labour in main production industries, YoY decline in wage bill continued in the third quarter of 2009, reaching 1.8 % (1.9 %). In this context high growth of nominal average wage presented by the CZSO by 5.2 % (4.6 %) (under the data from personal statistics, on recalculated numbers and including additional calculations of small businesses) was seemingly paradoxical. Besides administrative effects it was caused primarily by dismissal of lower-paid employees and by YoY decline in sickness rate (change in sick pay regime obviously reduced its abuse), and, possibly, by pay-out of those wages that were planned on early 2010 with lower rate of security contributions due to tax optimization.

**Unit labour costs** grew by 0.8 % (0.9 %) in the last quarter of 2009 i.e. in accordance with the forecast, although individual parts of this composite indicator developed in a different way than predicted. Employee compensations stagnated in fact (slight growth was predicted) and productivity of labour fell a bit more.

On the basis of data revision for the previous period, fourth-quarter results and signals from the business sphere as well as decisions on the public sector wages for the following period, only a very moderate increase in average wages with gradual acceleration is expected

#### C.4 External relations

(Balance of payments definitions)

Together with release of balance-of-payments data for the fourth quarter of 2009, the CNB published a revision of data for previous quarters of 2009 and entire 2008. Size of the revision considerably influenced possibility of comparing previous forecasts with the facts and correctness of their results. It related most to changes in data in balance of income and balance of services, as shown in the following table

in short-term outlook. With regard to cuts in the number of employees, wage bill is expected to decrease, YoY, by the end of the first half of 2010. For entire 2010 decline should reach 0.1 % (0.7~%) while in 2011 growth by 4.3 % (4.5~%) is expected together with ongoing recovery of the economy.

#### Households

(In nominal terms under the sector account of households from quarterly national accounts)

Within household incomes, social and other transfers grew in the fourth quarter of 2009 in YoY comparison but change of other components of household current incomes was negative, which in total resulted in decline by 2.3 % (0.2 %). The deepest decline was seen in property incomes (by 23.5 %). Shrinkage of disposable income by 1.0 % (growth by 3.1 %) could not be offset even by 4.9 % (6.7 %) decline in current expenditures given mainly by considerably lower paid taxes and social contributions in YoY terms (postponement of advance payments, social security contribution credits etc.). Households offset cut in disposable income by nominal 1.0 % decrease in final consumption spending (growth by 0.3 %). Rate of saving thus rather stagnated in YoY terms.

For entire 2009 disposable income fell by 0.5 % (*growth by 2.1 %*). With de facto rigid development of wage bill and moderate growth of welfare incomes on the revenue side and, on the other hand, with tax and social security adjustments, a moderate decline in disposable income (*stagnation*) can be expected in 2010 and growth by 2.8 % (*4.0 %*) in 2011.

Positive expectations accompanied by first signals of economic environment rehabilitation will probably lead to lower rate of saving and growing tendency to consumption.

Table: Revision of the balance of payment in bill. of CZK

		2008	Q1-Q3 2009
Current Account	before revision	-113,9	-24,9
	after revision	-22,9	-29,5
Trade balance	before revision	103,2	140,0
	after revision	102,7	138,3
Balance of services	before revision	82,0	43,3
	after revision	65,9	26,8
Income balance	before revision	-288,8	-199,3
	after revision	-174,3	-187,1
Current transfers	before revision	-10,2	-8,8
	after revision	-17,2	-7,5

External imbalance, expressed by ratio of **current account (CA) balance to GDP**, reached -1.0 % (*unchanged*) in 2009, worsening slightly compared with the previous year (by 0.4 p.p). Improvement of trade balance and balance of current transfers was outweighed by worsening of balance of income and balance of services.

Economic recession led to steep decline in demand and radical lowering of traded goods volumes. For the first time since the second quarter of 2002 a YoY decline in export markets was recorded in the fourth quarter of 2008<sup>8</sup>, which continued also in 2009. After reaching its trough in the second quarter of 2009 (fall by 14.5 %) decline started to slow, reaching 6.6 % (8.2 %) in the last quarter. Since the third quarter export performance, indicating share of Czech goods in the export markets, has been improving - by 9.0 % (3.2 %) in the fourth quarter. Such development resulted in an increase in real imports of goods by 1.9 % (decline by 5.2 %). Pace of dropout in nominal exports and imports hit its trough during the first half of 2009. In first two months of 2010 exports performed better in YoY terms. Since March 2009 imports have been falling faster than exports and trade balance surplus improved. For entire 2009 ratio of trade balance surplus to GDP improved by 2.2 p.p. to 5.0 % (4.8 %).

With regard to oil price scenario, further slow growth of prices of raw materials is assumed in 2010 and 2011 with an increase in SITC 3 deficit to some -3.6% (unchanged) and -4.0% of GDP, respectively. Taking

recovery of trade into account, growth of export markets by 3.5 % (2.2 %) is expected in 2010 with growth accelerating to 5.2 % (*unchanged*) in 2011. Export performance should rise, too.

Surplus of non-fuel part of the balance is estimated to rise to 8.9 % (7.0 %) of GDP in 2010 and to 9.2 % in 2011. With current growth of deficit of fuel part of the balance, trade balance surplus (in balance of payments definitions) should reach 6.2 % of GDP<sup>9</sup> (4.8 %) with the same estimate for 2011. Effect of foreign trade recovery and domestic demand restriction should outweigh higher prices of oil in 2010 at least.

After long-term growth, surplus of **balance of services** started decreasing in 2009. As changes in balance of transport services and tourism were relatively unimpressive, this trend was influenced most by growth of expenditures of the so-called other services. Ratio of balance-of-services asset to GDP worsened in 2009 in year-on-year terms by 1.1 p.p. to 0.7 %. In period of slow recovery of foreign trade with goods, a slow rise in trade with services is expected too.

Balance-of-income deficit, including reinvested and repatriated profits of foreign investors, started deepening again. Volume of yields and costs of this part of the balance decreased with revenues falling more. Such development was related with decline in estimate of reinvested profits abroad and lower interest yields. The liability side of balance of income was influenced most by an increase in estimate of foreign employees' compensations. For 2010 balance-of-income deficit is estimated at -6.2 % of GDP while in 2011 it should deepen to -7.1 % of GDP (-7.7 %).

Taking into account the above-mentioned, ratio of **current account surplus** to GDP is estimated to reach 0.4 % (0.5 %) in 2010. It would be the first surplus of CR's current account since 1993. The forecast for 2011 is -0.5 % of GDP.

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

<sup>&</sup>lt;sup>9</sup>Another item is represented by costs on transport and insurance of imported goods amounting to some 0.9 % of GDP, which cannot be assigned to individual items from available sources.

## **C.5** International Comparisons

Comparisons for the period to 2008 are based on Eurostat statistics. Since 2009, our own calculations are used based on real exchange rates.

With use of purchasing power parity method, comparisons of economic output of individual countries within EU are made in PPS (purchasing power standards). PPS is an artificial currency unit expressing quantity of goods that can be bought on average for one euro on the EU27 territory after exchange rate conversion for countries that use other currency unit than the euro. Under Eurostat data, purchasing power parity of the CR in 2008 was CZK/PPS 17.55 in comparison with EU27 or CZK/EUR 16.80 in comparison with EA12.

Due to economic recession, when adjusted by current purchasing power parity, tendency of economic convergence and other Central European countries (except for Poland, see chapter A.1) toward EA12 average has stopped. Some countries (Baltic states, Hungary, Slovenia), which have been hit by the crisis more than EA12 countries, even experience bigger or smaller decline in their relative economic level.

In 2009 Czech Republic's GDP p.c. reached some PPS 19 400, which corresponds to 73 % of EA12 economic output.

Alternative way of calculation by means of the current **exchange rate** takes into account a market assessment of the currency and ensuing differences in price levels. GDP of the CR p.c. then reaches some EUR 13 100, which corresponds to 47 % of EA12 level. Compared with 2008 thus a decline appears given by correction of inappropriate appreciation of the exchange rate in 2008.

Comparative price level of GDP reached some 65 % of EA12 average in 2009. Depreciation of the real exchange rate is seen here in YoY decline by 2 p.p. Such movement helped increase price competitiveness and make overcoming of difficult situation easier. A major depreciation of the exchange rate was seen in Poland where decline of relative price level reached approx. Incredible 10 p.p. and helped thus Poland avoid economic recession.

## D Monitoring of other institutions' forecast

The Czech Ministry of Finance monitors macroeconomic forecasts of other institutions, engaged in forecasting of future developments of the Czech economy. Forecasts of 13 institutions are continuously monitored from openaccess data sources. Of these, 8 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 summed up in the following table.

Table D.1: Consensus Forecast

			March 2010		April 2010
		min.	max.	consensus	forecast MoF
Gross domestic product (2010)	%, const.pr.	0,8	2,1	1,5	1,5
Gross domestic product (2011)	%, const.pr.	2,0	2,8	2,4	2,4
Average inflation rate (2010)	%	1,4	2,2	1,7	1,5
Average inflation rate (2011)	%	1,9	2,5	2,1	2,3
Average monthly wage (2010)	%	2,0	3,8	2,8	2,0
Average monthly wage (2011)	%	2,8	5,0	4,0	4,3
Current account / GDP (2010)	%	-2,3	0,7	-0,9	0,4
Current account / GDP (2011)	%	-2,4	1,2	-0,5	-0,5

Consensus forecasts of **GDP** growth for 2010 have hovered within 1-2 % for a time. For the most part of the monitored period, MoF forecasts have been more conservative in comparison with the consensus.

Institutions assume on average that the Czech economy's performance will increase by 1.5 % in 2010 and by 2.4 % in 2011. These estimates are identical with MoF forecast.

Current forecasts of **rate of inflation** for this year allow for average rate of inflation at some 1.7 % while for 2011 institutions expect acceleration of consumer price growth to 2.1 %. MoF forecast is in accordance with this tendency.

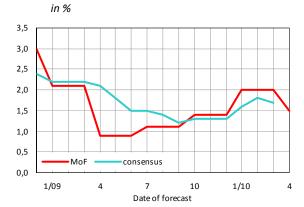
For 2010 institutions expect further slowdown in growth of **average wage.** Consensus forecast allows for an increase in average wage by 2.8 % in 2010 and by 4.0 % in the following year. The MoF expects slower growth in 2010 while in 2011 it allows for a slightly faster growth.

Consensus forecasts of ratio of current account of balance of payments to GDP for 2010 are gradually revised upward (lower CA deficit). Contrary to forecast average, the MoF allows for positive CA balance in 2010. Prediction for 2011 is identical with forecast average.

Graph D.1: Forecast of Real GDP Growth for 2010



Graph D.2: Forecast of Aver. Inflation Rate for 2010



# **Tables and Graphs:**

## **Economic Output**

Sources: CZSO, MoF estimates.

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

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
							Prelim.	Forecast	Forecast	Outlook	Outlook
Gross domestic product	bill. CZK 2000	2474	2630	2809	2982	3055	2925	2970	3041	3140	3279
	growth in %	4,5	6,3	6,8	6,1	2,5	-4,2	1,5	2,4	3,2	4,4
Private consumption exp. <sup>1)</sup>	bill. CZK 2000	1309	1342	1411	1481	1534	1532	1515	1545	1589	1653
	growth in %	2,9	2,5	5,2	5,0	3,6	-0,2	-1,1	2,0	2,9	4,0
Government consumption exp.	bill. CZK 2000	527	542	548	552	557	582	567	562	558	571
	growth in %	-3,5	2,9	1,2	0,7	1,0	4,4	-2,5	-0,9	-0,7	2,3
Gross capital formation	bill. CZK 2000	774	767	841	920	895	733	759	792	829	881
	growth in %	9,1	-0,8	9,6	9,4	-2,7	-18,1	3,6	4,3	4,7	6,3
<ul> <li>Gross fixed capital formation</li> </ul>	bill. CZK 2000	716	729	773	856	844	773	745	763	791	841
	growth in %	3,9	1,8	6,0	10,8	-1,5	-8,3	-3,7	2,5	3,6	6,4
- Change in stocks and valuables	bill. CZK 2000	58	38	69	64	51	-41	15	29	38	40
Exports of goods and services	bill. CZK 2000	2039	2275	2633	3029	3210	2882	3134	3356	3596	3882
	growth in %	20,7	11,6	15,8	15,0	6,0	-10,2	8,7	7,1	7,2	8,0
Imports of goods and services	bill. CZK 2000	2192	2301	2629	3004	3144	2823	3010	3213	3424	3698
	growth in %	17,9	5,0	14,3	14,3	4,7	-10,2	6,6	6,7	6,6	8,0
Dom estic dem and	bill. CZK 2000	2608	2652	2796	2943	2979	2861	2851	2904	2977	3101
	growth in %	3,1	1,7	5,4	5,2	1,2	-4,0	-0,3	1,9	2,5	4,2
Methodological discrepancy 2)	bill. CZK 2000	18	5	4	3	2	20	4	0	-8	-9
Real gross domestic income	bill. CZK 2000	2582	2712	2869	3074	3110	3030	3052	3115	3238	3391
	growth in %	4,7	5,0	5,8	7,1	1,2	-2,6	0,7	2,1	4,0	4,7
Contribution to GDP growth 3)											
– Domestic demand	percent. points	3,2	1,7	5,3	5,1	1,2	-3,8	-0,3	1,7	2,4	3,8
<ul><li>consumption</li></ul>	percent. points	0,7	1,9	2,8	2,6	1,9	0,8	-1,1	0,8	1,3	2,5
<ul> <li>gross capital formation</li> </ul>	percent. points	2,5	-0,2	2,5	2,5	-0,7	-4,6	0,8	0,9	1,0	1,4
– Foreign balance	percent. points	1,3	4,6	1,5	1,1	1,3	-0,5	1,8	0,7	0,9	0,6

<sup>1)</sup> 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

			200	••					
			200				20		
		Q1	Q2	Q3	Q 4	Q1	Q2	Q3	Q4
		Prelim.	Prelim.	Prelim.	Prelim.	Estim.	Forecast	Forecast	Forecast
Gross domestic product	bill. CZK 2000	702	740	739	744	710	755	753	751
	growth in %	-3,9	-5,2	-5,0	-2,8	1,2	2,0	1,9	0,9
	growth in % 1)	-4,0	-4,9	-4,5	-3,1	1,2	1,8	1,5	1,2
	quart.growth in % 1)	-4,1	-0,3	0,6	0,7	0,2	0,3	0,3	0,4
Private consumption exp.	bill. CZK 2000	364	384	390	394	360	381	385	390
	growth in %	0,9	0,0	-0,6	-0,9	-1,1	-0,8	-1,3	-1,2
Government consumption exp.	biII. CZK 2000	132	142	143	164	129	138	140	160
	growth in %	3,4	3,4	5,5	5,1	-2,1	-2,4	-2,6	-2,8
Gross capital form ation	bill. CZK 2000	187	187	191	167	189	199	201	171
	growth in %	-11,4	-17,0	-16,7	-26,8	0,9	6,1	5,3	2,1
<ul> <li>Gross fixed capital formation</li> </ul>	bill. CZK 2000	179	200	195	201	170	191	188	196
	growth in %	-8,1	-7,7	-10,4	-7,0	-4,7	-4,3	-3 ,5	-2,5
– Change in stocks and valuables	bill. CZK 2000	9	-12	-4	-33	19	8	13	-25
Exports of goods and services	bill. CZK 2000	669	713	736	764	750	779	790	815
	growth in %	-18,5	-16,1	-7 ,7	3,0	12,1	9,3	7,3	6,7
Imports of goods and services	bill. CZK 2000	651	686	726	759	716	738	762	794
	growth in %	-17,5	-15,7	-6,1	-1,2	9,9	7,6	4,9	4,6
Methodological discrepancy	bill. CZK 2000	1	0	6	13	-2	-4	0	10
Real gross domestic income	bill. CZK 2000	729	766	766	769	734	777	773	768
	growth in %	-2,7	-3,4	-2 ,7	-1,6	0,7	1,4	0,9	-0,2

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

Table C.1.3: Nominal GDP by type of expenditure – yearly

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
							Prelim.	Forecast	Forecast	Outlook	Outlook
Gross domestic product	bill. CZK	2815	2984	3222	3535	3689	3627	3689	3819	4017	4280
	growth in %	9,2	6,0	8,0	9,7	4,3	-1,7	1,7	3,5	5,2	6,5
Private consumption	bill. CZK	1417	1464	1562	1687	1834	1837	1839	1917	2016	2143
	growth in %	6,3	3,4	6,6	8,0	8,7	0,2	0,1	4,3	5,2	6,3
Government consumption	bill. CZK	622	658	687	718	753	802	791	793	798	813
	growth in %	3,1	5,9	4,3	4,5	4,9	6,4	-1,4	0,3	0,6	1,8
Gross capital formation	bill. CZK	774	766	863	955	934	781	815	854	887	963
	growth in %	10,6	-1,1	12,7	10,6	-2,2	-16,4	4,3	4,7	4,0	8,5
<ul> <li>Gross fixed capital formation</li> </ul>	bill. CZK	727	742	796	890	883	822	797	823	858	919
	growth in %	5,8	2,0	7,3	11,8	-0,8	-6,9	-3,1	3,2	4,3	7,1
- Change in stocks and valuables	bill. CZK	47	24	67	64	51	-41	18	31	29	43
External balance	bill. CZK	2	95	110	176	168	208	244	255	316	362
<ul> <li>Exports of goods and services</li> </ul>	bill. CZK	1975	2155	2462	2830	2844	2522	2712	2874	3093	3447
	growth in %	24,0	9,1	14,3	14,9	0,5	-11,3	7,6	6,0	7,6	11,5
<ul> <li>Imports of goods and services</li> </ul>	bill. CZK	1973	2060	2352	2655	2676	2314	2468	2620	2777	3086
	growth in %	19,5	4,4	14,2	12,9	0,8	-13,5	6,7	6,1	6,0	11,1
Gross national income	bill. CZK	2660	2850	3062	3288	3426	3411	3472	3560	3718	3939
	growth in %	7,9	7,1	7,5	7,4	4,2	-0,4	1,8	2,6	4,4	6,0
Primary income balance	bill. CZK	-155	-134	-160	-247	-263	-216	-217	-258	-300	-341

Table C.1.4: Nominal GDP by type of expenditure - quarterly

			200	09			20	10	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Prelim.	Prelim.	Prelim.	Prelim.	Estim.	Forecast	Forecast	Forecast
Gross domestic product	bill. CZK	874	918	909	927	884	938	929	938
	growth in %	-0,4	-1,9	-2,8	-1,5	1,2	2,2	2,1	1,2
Private consumption	bill. CZK	438	462	466	470	435	463	467	475
	growth in %	2,1	0,8	-1,2	-0,8	-0,8	0,1	0,1	0,9
Government consumption	bill. CZK	178	194	195	234	176	191	193	231
	growth in %	7,4	5,9	7,0	5,8	-1,4	-1,4	-1,4	-1,4
Gross capital formation	bill. CZK	201	200	201	180	205	213	213	184
	growth in %	-8,6	-14,9	-15,9	-25,3	2,0	6,7	6,1	2,4
<ul> <li>Gross fixed capital formation</li> </ul>	bill. CZK	192	213	205	212	185	205	199	208
	growth in %	-5,1	-5,8	-9,7	-6,9	-4,0	-3,6	-2,8	-1,8
- Change in stocks and valuables	bill. CZK	8	-13	-4	-32	20	8	14	-24
External balance	bill. CZK	57	62	47	42	69	71	56	48
<ul> <li>Exports of goods and services</li> </ul>	bill. CZK	620	628	621	653	672	679	670	691
	growth in %	-15,5	-16,1	-10,8	-1,9	8,4	8,2	7,8	5,9
<ul> <li>Imports of goods and services</li> </ul>	bill. CZK	563	566	575	610	603	608	614	643
	growth in %	-16,1	-17,9	-12,3	-7,6	7,1	7,5	6,8	5,3

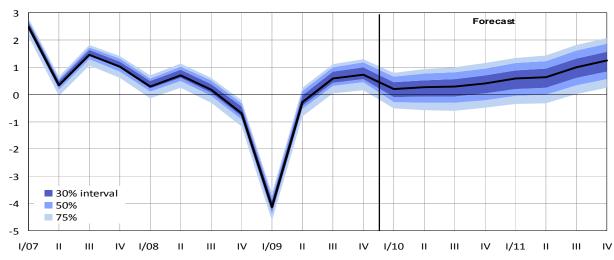
Graph C.1.1: Gross Domestic Product (real)

chained volumes, bill. CZK in const. prices of 2000, seasonally adjusted



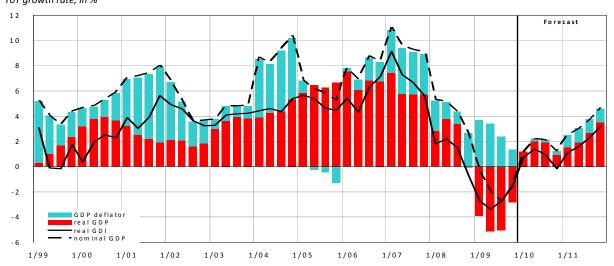
Graph C.1.2: Gross Domestic Product (real)

QoQ growth rate, in %, seasonally adjusted



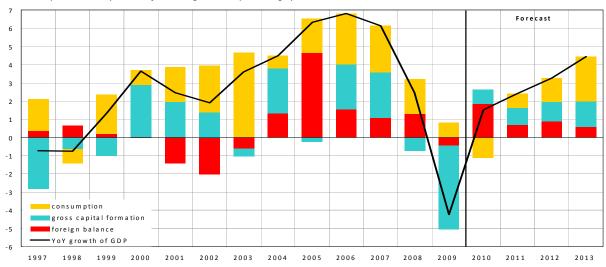
 ${\it Distribution of probabilities of the backcast is based on the history of revisions.}$ 

Graph C.1.3: Gross Domestic Product and Real Gross Domestic Income YoY growth rate, in %



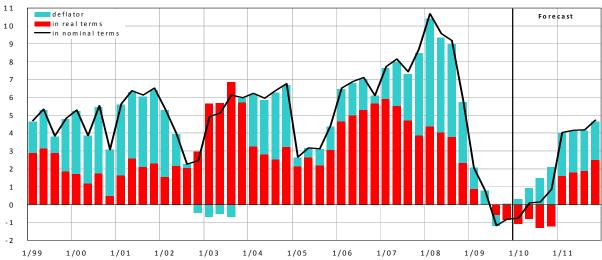
 ${\it Graph C.1.4: {\bf Gross \ Domestic \ Product -} \ contributions \ to \ YoY \ growth}$ 

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



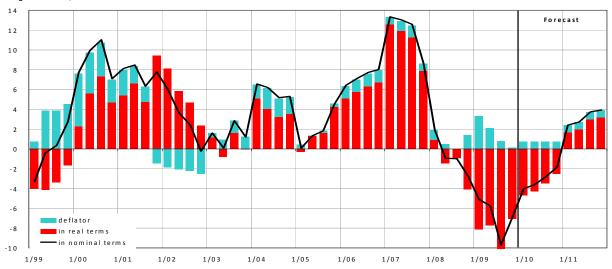
Graph C.1.5: Private Consumption (incl. NPISH)

YoY growth rate, in %



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

YoY growth rate, in %



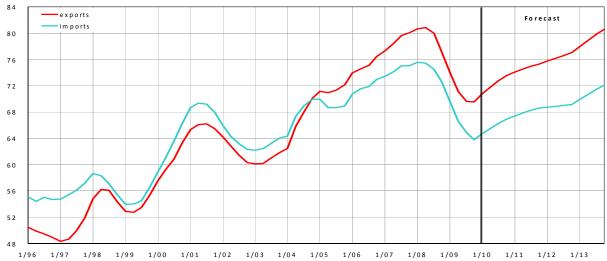
Graph C.1.7: Change in Inventories and Valuables (real)

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



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

yearly moving sums, in %



Graph C.1.9: GDP - Income Structure

yearly moving sums, in %

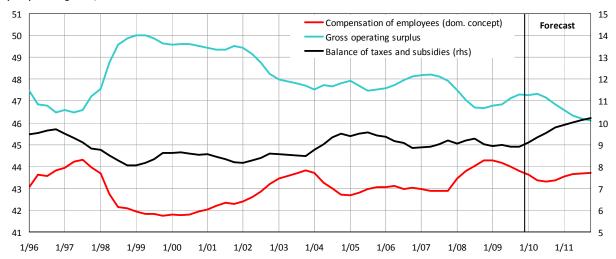


Table C.1.5: **GDP – by type of income** – yearly

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
									Prelim.	Forec ast	Forecast
G DP	bill. CZK	2464	2577	2815	2984	3222	3535	3689	3627	3689	3819
	growth in %	4,8	4,6	9,2	6,0	8,0	9,7	4,3	-1,7	1,7	3,5
Balance of taxes and subsidies	bill. CZK	211	219	267	281	285	325	3 33	323	361	390
	growth in %	9,8	3,4	22,2	5,1	1,6	13,8	2,5	-3,0	11,7	8,1
- Taxes on production and imports	bill. CZK	268	287	331	353	363	407	4 18	424	462	492
	growth in %	3,9	7,1	15,5	6,4	2,9	12,0	2,9	1,4	9,0	6,5
- Subsidies on production	bill. CZK	57	68	64	72	78	82	85	101	102	102
	growth in %	-13,5	20,6	-5,9	12,2	7,8	5,4	4,1	18,7	0,5	0,9
Compensation of employees	bill. CZK	1064	1129	1202	1285	1386	1516	1634	1589	1600	1669
	growth in %	7,0	6,1	6,5	6,9	7,9	9,4	7,7	-2,8	0,7	4,3
<ul><li>Wages and salaries</li></ul>	bill. CZK	805	853	907	970	1047	1145	1245	1224	1223	1276
	growth in %	6,6	6,0	6,3	6,9	7,9	9,4	8,7	-1,7	-0,1	4,3
<ul> <li>Social security contributions</li> </ul>	bill. CZK	260	276	295	315	339	371	3 89	365	377	393
	growth in %	8,3	6,2	7,0	6,7	7,8	9,5	4,7	-6,2	3,3	4,3
Gross operating surplus	bill. CZK	1189	1229	1345	1418	1551	1694	1722	1715	1728	1760
	growth in %	2,0	3,4	9,4	5,4	9,3	9,3	1,6	-0,4	0,7	1,8
– Consum ption of capital	bill. CZK	492	509	538	554	576	611	639	655	668	688
	growth in %	3,0	3,5	5,7	3,0	4,1	6,1	4,6	2,4	2,0	3,0
<ul> <li>Net operating surplus</li> </ul>	bill. CZK	697	721	808	865	974	1083	1083	1061	1060	1072
	growth in %	1,4	3,4	12,1	7,0	12,7	11,1	0,0	-2,1	0,0	1,1

Table C.1.6: **GDP - by type of income –** quarterly

			20	09			20	10	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Prelim.	Prelim.	Prelim.	Prelim.	Estimate	Forecast	Forecast	Forecast
GDP	bill. CZK	874	918	909	927	884	938	929	938
	growth in %	-0,4	-1,9	-2,8	-1,5	1,2	2,2	2,1	1,2
Balance of taxes and subsidies	bill. CZK	71	88	92	71	80	98	102	81
	growth in %	-5,1	0,2	-5,7	-1,0	12,0	10,8	10,5	13,8
Compensation of employees	bill. CZK	392	392	383	421	390	392	389	428
	growth in %	-0,4	-3,1	-4,5	-2,9	-0,5	-0,2	1,7	1,8
– Wages and salaries	bill. CZK	297	300	299	328	293	297	302	331
	growth in %	-0,3	-2,4	-2,2	-1,8	-1,4	-1,0	0,9	1,0
<ul> <li>Social security contributions</li> </ul>	bill. CZK	95	92	84	93	97	95	87	98
	growth in %	-0,7	-5,5	-12,1	-6,7	2,1	2,5	4,4	4,5
Gross operating surplus	bill. CZK	410	437	434	434	414	449	437	428
	growth in %	0,5	-1,3	-0,5	-0,2	1,0	2,6	0,7	-1,4

## **C.2** Prices of Goods and Services

Sources: CZSO, MoF estimates.

Table C.2.1: Prices of Goods and Services – yearly

		2003	2004	2005	2006	2007	2008	2009	<b>2010</b> Forecast	<b>2011</b> Forecast	<b>2012</b> Outlook
Consumer Price Index											
average of a year	average 2005=100	95,5	98,2	100,0	102,5	105,4	112,1	113,3	115,0	117,7	119,8
	growth in %	0,1	2,8	1,9	2,5	2,8	6,3	1,0	1,5	2,3	1,9
end of a year	average 2005=100	95,8	98,5	100,6	102,3	107,9	111,8	112,9	115,6	118,1	120,6
	growth in %	1,0	2,8	2,2	1,7	5,4	3,6	1,0	2,3	2,1	2,1
– of which contribution of											
administrative measures	percentage points	0,3	1,7	1,9	0,8	2,2	4,3	1,0	1,8	1,7	1,1
market increase	percentage points	0,7	1,1	0,4	0,8	3,3	-0,7	0,0	0,5	0,4	1,1
HICP	average 2005=100	96,0	98,4	100,0	102,1	105,1	111,7	112,4	113,7	116,1	118,0
	growth in %	-0,1	2,6	1,6	2,1	3,0	6,3	0,6	1,2	2,1	1,6
Deflators											
GDP	average 2000=100	108,8	113,8	113,4	114,7	118,6	120,8	124,0	124,2	125,5	127,9
	growth in %	0,9	4,5	-0,3	1,1	3,4	1,8	2,7	0,2	1,1	1,9
Domestic final use	average 2000=100	104,2	107,8	108,9	111,3	114,2	118,2	119,5	120,8	122,7	124,3
	growth in %	0,6	3,5	1,0	2,2	2,6	3,5	1,1	1,1	1,6	1,3
Consumption of households	average 2000=100	104,8	108,2	109,1	110,7	113,9	119,5	119,9	121,4	124,1	126,9
	growth in %	-0,4	3,3	0,8	1,4	2,9	4,9	0,3	1,2	2,3	2,2
Consumption of government	average 2000=100	110,5	118,0	121,5	125,3	130,1	135,2	137,8	139,5	141,1	143,0
	growth in %	2,4	6,8	3,0	3,1	3,8	3,9	2,0	1,2	1,2	1,3
Fixed capital formation	average 2000=100	99,8	101,5	101,8	103,0	104,0	104,7	106,3	107,0	107,8	108,5
	growth in %	1,0	1,8	0,2	1,3	0,9	0,7	1,5	0,7	0,7	0,7
Exports of goods and services	average 2000=100	94,3	96,9	94,7	93,5	93,4	88,6	87,5	86,5	85,7	86,0
	growth in %	0,1	2,7	-2,2	-1,3	-0,1	-5,2	-1,2	-1,1	-1,0	0,4
Imports of goods and services	average 2000=100	88,8	90,0	89,5	89,5	88,4	85,1	82,0	82,0	81,5	81,1
	growth in %	-0,4	1,3	-0,5	-0,1	-1,2	-3,7	-3,7	0,0	-0,6	-0,5
Terms of trade	average 2000=100	106,2	107,6	105,8	104,5	105,7	104,1	106,7	105,5	105,1	106,0
	growth in %	0,5	1,4	-1,7	-1,2	1,2	-1,6	2,5	-1,1	-0,5	0,9

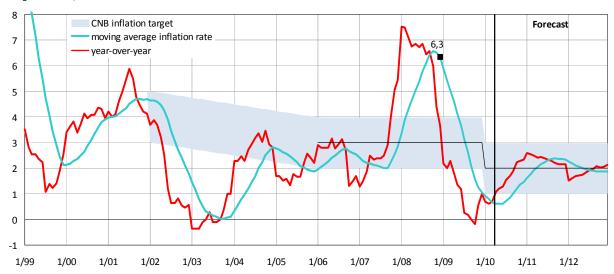
<sup>&</sup>lt;sup>1)</sup> The contribution of increase in regulated prices and in indirect taxes to increase of December YoY consumer price inflation.

Table C.2.2: Prices of Goods and Services - quarterly

			200	19			20	10	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estim ate	Forecast	Forecast	Forecast
Consumer Price Index	averag e 2 005 =10 0	113,7	113,7	113,1	112,7	114,4	115,1	115,0	115,3
	growthin%	2,2	1,4	0,1	0,4	0,7	1,2	1,7	2,3
Contributions:									
administrative measures	percentage p oints	2,6	2,3	1,7	1,0	1,0	1,3	1,5	1,8
market increase	percentage p oints	-0,4	-0,9	-1,5	-0,6	-0,3	-0,1	0,2	0,5
HICP	averag e 2 005 =10 0	112,7	112,9	112,2	111,6	113,2	113,9	113,8	113,9
	growth in %	1,5	1,0	-0,1	0,0	0,4	0,9	1,5	2,0
GDP deflator	averag e 2 000 =10 0	124,5	124,0	123,0	124,5	124,5	124,3	123,2	124,9
	growthin%	3,7	3,4	2,4	1,3	0,0	0,2	0,2	0,3
Domestic final use deflator	averag e 2 000 =10 0	119,3	119,7	118,8	120,4	120,1	120,7	120,2	122,3
	growthin%	2,2	1,6	0,2	0,7	0,6	0,9	1,2	1,5
Terms of trade	averag e 2 000 =10 0	107,2	106,7	106,7	106,3	106,4	105,7	105,2	104,8
	growthin%	2,0	2,7	3,4	1,9	-0,7	-0,9	-1,3	-1,4

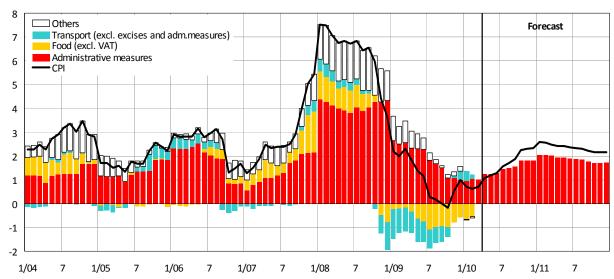
**Graph C.2.1: Consumer Prices** 

YoY growth rate, in %



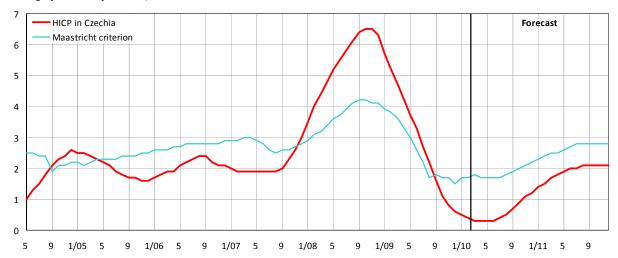
**Graph C.2.2: Consumer Prices** 

 $\dot{\textit{decomposition}}$  of the YoY increase in consumer prices, in percentage points



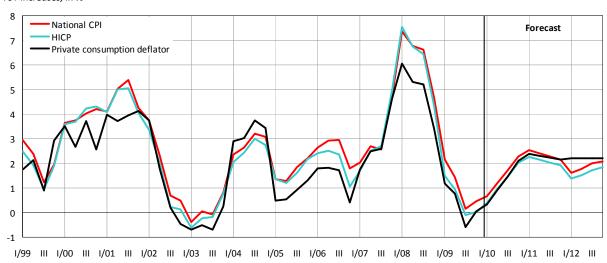
Graph C.2.3: HICP and Maastricht Criterion of Inflation

moving inflation rate from HICP, in %



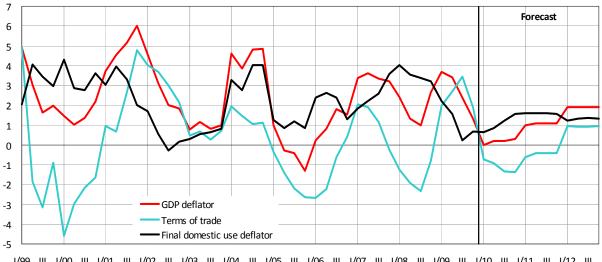
**Graph C.2.4: Indicators of Consumer Prices** 

YoY increases, in %



Graph C.2.5: GDP Deflator

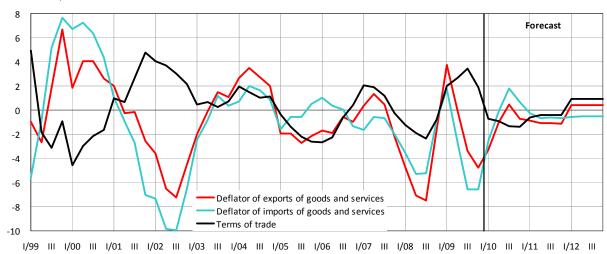
YoY indices of final domestic use deflator and terms of trade, in %



1/99 III 1/00 III 1/01 III 1/02 III 1/03 III 1/04 III 1/05 III 1/06 III 1/07 III 1/08 III 1/09 III 1/10 III 1/11 III 1/12 III

### Graph C.2.6: Terms of Trade

YoY increases, in %



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

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

Table C.3.1: Employment – yearly

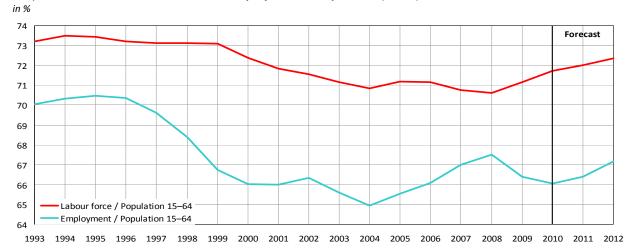
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
									Forecast	Forecast	Outlook
Labour Force Survey											
Em ployment	average in thous.persons	4733	4707	4764	4828	4922	5002	4934	4904	4909	4936
	growth in %	-0,7	-0,6	1,2	1,3	1,9	1,6	-1,4	-0,6	0,1	0,5
– em ployees	average in thous.persons	3922	3914	4001	4048	4125	4196	4107	4070	4071	4088
	growth in %	-2,0	-0,2	2,2	1,2	1,9	1,7	-2,1	-0,9	0,0	0,4
– enterpreneurs and	average in thous.persons	811	792	763	780	797	807	827	834	838	848
self-employed	growth in %	6,4	-2,4	-3,7	2,2	2,2	1,2	2,6	0,8	0,5	1,1
Unemployment	average in thous.persons	399	426	410	371	276	230	352	421	414	381
Unemployment rate	average in per cent	7,8	8,3	7,9	7,1	5,3	4,4	6,7	7,9	7,8	7,2
Labour force	average in thous.persons	5132	5133	5174	5199	5198	5232	5286	5325	5324	5318
	growth in %	-0,1	0,0	0,8	0,5	0,0	0,7	1,0	0,7	0,0	-0,1
Productive-age (15-64)	average in thous.persons	7214	7247	7270	7307	7347	7410	7431	7425	7395	7351
population	growth in %	0,4	0,4	0,3	0,5	0,5	0,9	0,3	-0,1	-0,4	-0,6
Employment/Pop. 15-64	average in per cent	65,6	64,9	65,5	66,1	67,0	67,5	66,4	66,0	66,4	67,2
Employment rate 15-64 <sup>1)</sup>	average in per cent	64,9	64,2	64,8	65,3	66,1	66,6	65,4	64,9	65,2	65,9
Labour force/Pop. 15-64	average in per cent	71,1	70,8	71,2	71,2	70,8	70,6	71,1	71,7	72,0	72,3
Participation rate 15-64 <sup>2)</sup>	average in per cent	70,4	70,1	70,4	70,3	69,8	69,7	70,1	70,6	70,8	71,1
SNA											
Em ploym ent	average in thous.persons	4923	4940	4992	5088	5224	5288	5226	5191	5197	5225
(domestic concept)	growth in %	-1,3	0,3	1,0	1,9	2,7	1,2	-1,2	-0,7	0,1	0,5
Hours worked	bill. hours	9,58	9,65	9,81	9,97	10,18	10,37	9,88	9,62	9,63	9,70
	growth in %	-1,3	0,8	1,6	1,7	2,0	1,9	-4,7	-2,6	0,1	0,8
Hours worked / employmen	nt hours	1945	1954	1965	1960	1948	1962	1891	1853	1853	1857
	growth in %	0,1	0,4	0,6	-0,2	-0,6	0,7	-3,6	-2,0	0,0	0,2
Registered unemployment											
Unemployment	average in thous.persons	521,6	537,4	514,3	474,8	392,8	324,6	465,6	554	541	495
Unemployment rate 3)	average in per cent	9,90	10,24	9,79							
onem proyment rate	average in per cent		9,2	8,97	8,13	6,62	5,44	7,97	9,4	9,3	8,5
Registered foreign workers											
Total	average in thous.persons	163,2	169,4	195,2	233,2	276,2	343,5	335,4			
	growth in %	-2,6	3,8	15,3	19,4	18,5	24,4	-2,3			
– em ployees	average in thous.persons	102,3	106,1	131,2	165,5	209,7	270,2	252,6			
	growth in %	-3,5	3,7	23,7	26,1	26,7	28,8	-6,5			
– self-employed	average in thous.persons	60,9	63,3	64,0	67,7	66,5	73,3	82,8			
	growth in %	-1,1	3,9	1,2	5,7	-1,8	10,2	13,0			

<sup>&</sup>lt;sup>1)</sup> The indicator does not contain employment over 64 years.
<sup>2)</sup> The indicator does not contain labour force over 64 years.
<sup>3)</sup> Old methodology in the first row, new methodology in the second row.

Table C.3.2: Employment - quarterly

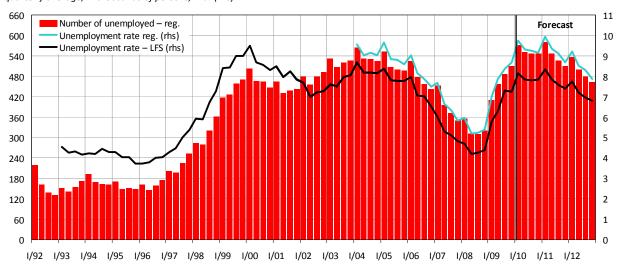
			200	19			20	10	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estim ate	Forecast	Forecast	Forecast
Labour Force Survey									
Employment	average in thous.persons	4947	4941	4922	4927	4884	4907	4906	4918
	growth in %	-0,2	-1,2	-1,9	-2,1	-1,3	-0,7	-0,3	-0,2
– em ployees	average in thous.persons	4124	4119	4089	4096	4052	4074	4071	4083
	growth in %	-0,9	-1,8	-2,8	-2,9	-1,7	-1,1	-0,4	-0,3
<ul> <li>enterpreneurs and self-employed</li> </ul>	average in thous.persons	823	823	833	831	832	833	834	835
	growth in %	3,2	1,8	3,0	2,2	1,1	1,3	0,2	0,5
Unem ployment	average in thous.persons	303	334	387	385	432	418	415	418
Unemployment rate	average in per cent	5,8	6,3	7,3	7,2	8,1	7,8	7,8	7,8
Labour force	average in thous.persons	5250	5275	5309	5312	5317	5325	5321	5336
	growth in %	0,9	1,0	1,3	0,9	1,3	0,9	0,2	0,5
Productive-age (15-64)	average in thous.persons	7432	7431	7430	7431	7429	7426	7424	7422
population	growth in %	0,5	0,3	0,2	0,1	0,0	-0,1	-0,1	-0,1
Employment/Pop.15-64	average in per cent	66,6	66,5	66,2	66,3	65,7	66,1	66,1	66,3
	increase over a year	-0,5	-1,1	-1,4	-1,5	-0,8	-0,4	-0,2	0,0
Employment rate 15–64	average in per cent	65,6	65,4	65,2	65,3	64,7	65,0	65,0	65,1
	increase over a year	-0,5	-1,2	-1,5	-1,6	-0,9	-0,4	-0,3	-0,1
Labour force/Pop.15-64	average in per cent	70,6	71,0	71,4	71,5	71,6	71,7	71,7	71,9
	increase over a year	0,3	0,5	0,8	0,6	0,9	0,7	0,2	0,4
Participation rate 15-64	average in per cent	69,6	69,9	70,4	70,4	70,5	70,6	70,6	70,8
	increase over a year	0,2	0,3	0,7	0,5	0,8	0,7	0,1	0,3
SNA									
Employment (domestic concept)	average in thous.persons	5235	5228	5220	5222	5157	5192	5203	5213
	growth in %	0,0	-0,9	-1,9	-1,9	-1,5	-0,7	-0,3	-0,2
Hours worked	bill.	2,51	2,57	2,35	2,46	2,40	2,50	2,29	2,42
	growth in %	-3,8	-4,0	-6,2	-5,2	-4,1	-2,6	-2,4	-1,4
Hours worked / employment	hours	479	491	450	471	466	482	441	465
	growth in %	-3,8	-3,1	-4,4	-3,3	-2,7	-1,9	-2,1	-1,2
Registered unemployment									
Unem ploym ent	average in thous.persons	409,2	456,8	487,1	509,2	571	551	547	547
Unemployment rate	average in per cent	7,0	7,9	8,4	8,7	9,7	9,3	9,2	9,1
Registered foreign workers									
Total	average in thous.persons	348,4	336,5	331,8	324,8	315,0			
	growth in %	10,4	-0,2	-6,5	-11,2	-9,6			
– em ployees	average in thous.persons	270,1	255,0	247,2	238,1	222,8			
	growth in %	9,9	-3,8	-11,9	-17,8	-17,5			
– self-employed	average in thous.persons	78,3	81,5	84,6	86,8	92,2			
	growth in %	12,1	12,8	13,6	13,6	17,7			

Graph C.3.1: Ratio of Labour Force and Employment to Population (15-64)



### Graph C.3.2: Unemployment

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



**Graph C.3.3: Economic Output and Unemployment** 

YoY increase of real GDP in % and change in unemployment in thous. persons

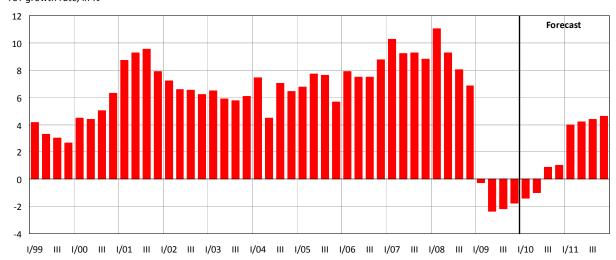


Table C.3.3: Labour Market - analytical indicators

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
										Forecast	Forecast
Compensation per employee											
– nominal	growth in %	7,3	8,2	6,7	4,6	6,6	7,3	5,9	-0,6	1,6	4,3
– real	growth in %	5,4	8,1	3,8	2,6	4,0	4,4	-0,4	-1,7	0,1	1,9
Average monthly wage 1)											
– nominal	CZK	15 524	16 430	17 466	18 344	19 546	20 957	22 691	23 615	24 100	25 100
	growth in %	8,0	5,8	6,3	5,0	6,6	7,2	8,3	4,1	2,0	4,3
– real	CZK 2005	16 274	17 206	17 791	18 344	19 063	19 874	20 235	20 841	20 900	21 300
	growth in %	6,1	5,7	3,4	3,1	3,9	4,3	1,8	3,0	0,5	1,9
Labour productivity	growth in %	1,1	4,3	5,1	5,0	5,4	4,1	0,8	-2,9	2,1	2,3
Unit labour costs 2)	growth in %	6,1	3,8	1,5	-0,5	1,2	3,1	5,1	2,3	-0,5	1,9
Compensations of employees / GDP	%	43,2	43,8	42,7	43,1	43,0	42,9	44,3	43,8	43,4	43,7

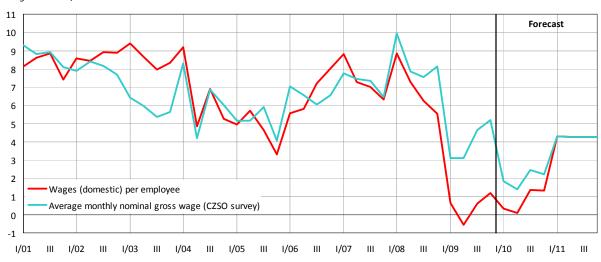
<sup>&</sup>lt;sup>1)</sup> Since June 2009 new time series: average wage is derived from full-time-equivalent employers in the entire economy.
<sup>2)</sup> Ratio of nominal compensation per employee to real productivity of labour .

Graph C.3.4: **Wage Bill** – nominal, domestic concept YoY growth rate, in %



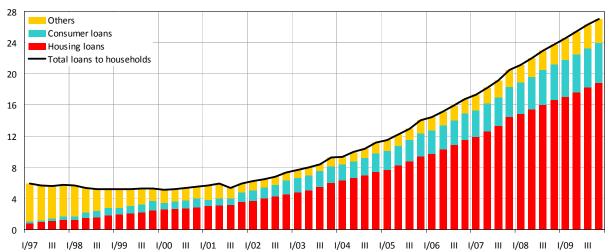
Graph C.3.5: Average Nominal Wage

YoY growth rate, in %



Graph C.3.6: Ratio of Bank Loans to Households to GDP

yearly moving sums of GDP, in %



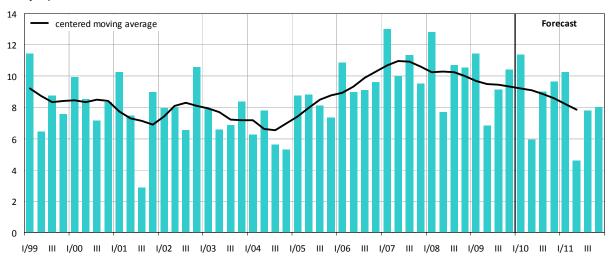
 $\label{thm:come} \mbox{Table C.3.4: } \mbox{\bf Income and Expenditures of Households} - \mbox{\it yearly} \\ \mbox{\it SNA methodology} - \mbox{\it national concept} \\$ 

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
								Prelim.	Forecast	Forecast
<u>Current income</u>										
Compensation of employees bill.CZ	1049	1120	1186	1273	1387	1511	1615	1575	1594	1659
growth in 9	6,8	6,8	5,9	7,3	8,9	8,9	6,8	-2,4	1,2	4,1
Gross mixed income bill.CZ	395	425	449	446	470	505	543	515	515	528
growth in 9	1,2	7,5	5,7	-0,6	5,4	7,5	7,5	-5,2	0,0	2,5
Property income received bill.CZ	98	97	109	120	133	158	165	122	116	120
growth in 9	-5,1	-1,1	12,7	9,6	11,2	18,5	4,5	-26,3	-5,0	3,5
Social benefits not-in-kind bill.CZ	313	324	369	386	417	466	488	526	539	550
growth in 9	8,0	3,6		4,6	8,1	11,8	4,5	7,9	2,5	2,0
Other current transfers received bill.CZ	85	91	93	103	113	122	137	146	152	159
growth in 9	7,8	6,8	2,9	10,1	9,8	8,4	12,2	6,3	4,0	5,0
Current expenditure										
Property income paid bill.CZ	13	19	21	20	25	29	33	22	17	18
growth in 9	-18,0	49,0	12,4	-5,3	22,3	19,4	12,5	-34,3	-20,0	1,0
Current taxes on income and property bill.CZ	115	128	138	140	141	157	152	138	145	155
growth in 9	8,0	11,9	7,6	1,7	0,7	10,9	-3,0	-8,9	4,8	7,1
Social contributions bill.CZ	382	408	474	507	561	615	634	596	630	656
growth in 9	9,2	6,7		7,1	10,6	9,5	3,2	-6,1	5,8	4,1
Other current transfers paid bill.CZ	82	93	100	109	118	129	141	150	153	163
growth in 9	3,4	13,7	7,2	9,2	8,6	9,3	9,1	6,7	2,0	6,0
Gross disposable income bill.CZ	1348	1409	1474	1551	1675	1833	1987	1977	1969	2024
growth in 9	4,3	4,5	4,6	5,3	8,0	9,4	8,4	-0,5	-0,4	2,8
Final consumption bill.CZ	1248	1317	1399	1443	1537	1659	1804	1804	1806	1883
growth in 9	3,4	5,6	6,2	3,1	6,6	7,9	8,7	0,0	0,1	4,3
Change in share in pension funds bill.CZ	11	13	17	19	23	26	24	14	14	14
Gross savings bill.CZ	112	105	92	128	161	200	207	187	177	155
Capital transfers										
(income (-) / expenditure (+)) bill.CZ	-36	-21	-23	-25	-23	-23	-37	-38	-25	-25
Gross capital formation bill.CZ	129	122	132	136	154	191	191	167	160	159
growth in 9	6,8	-5,1	7,8	2,6	13,5	24,2	-0,2	-12,4	-4,0	-1,0
Change in financial assets and liab. bill.CZ	23	6	-18	20	30	32	39	43	42	21
Real disposable income growth in 9	2,4	4,4	1,8	3,3	5,3	6,4	1,9	-1,5	-1,8	0,4
Gross savings rate	8,3	7,4	6,2	8,2	9,6	10,9	10,4	9,5	9,0	7,7

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

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

in % of disposable income



## **C.4** External Ralations

Sources: CNB, CZSO, Eurostat, MoF estimates

Table C.4.1: Balance of Payments - yearly

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
										Forecast	Forecast
Exports of goods (fob)	bill.CZK	1254	1371	1723	1869	2145	2479	2474	2131	2319	2462
	growth in %	-1,2	9,3	25,7	8,5	14,8	15,6	-0,2	-13,8	8,8	6,2
Imports of goods (fob) 1)	bill.CZK	1326	1441	1736	1809	2079	2359	2371	1951	2090	2226
	growth in %	-4,4	8,7		4,2	14,9	13,4	0,5	-17,7	7,2	6,5
Balance of trade 1)	bill.CZK	-71	-70	-13	59	65	121	103	181	229	237
of which:											
– mineral fuels (SITC 3) <sup>2)</sup>	bill.CZK	-64	-68	-72	-110	-139	-124	-166	-105	-134	-153
- others <sup>2)</sup>	bill.CZK	-7	-1	46	149	179	212	233	256	330	355
- difference fob-cif	bill.CZK			13	21	25	33	35	29	33	35
Exports of services	bill.CZK	231	219	247	282	314	342	370	385	390	408
	growth in %	-14,3	-5,2		14,3	11,2	8,8	8,4	4,0	1,2	4,7
Imports of services	bill.CZK	209	206	231	245	269	292	304	358	373	389
	growth in %	-1,1	-1,6		6,5	9,6	8,5	4,3	17,7	4,0	4,3
Balance of services	bill.CZK	22	13	17	37	45	50	66	27	17	20
Balance of income	bill.CZK	-116	-120	-157	-143	-167	-256	-174	-231	-231	-275
of which:											
– compensation of employees	bill.CZK	-18	-17	-16	-11	1	-5	-19	-14	-6	-10
- investment income	bill.CZK	-97	-103	-141	-132	-168	-251	-155	-217	-225	-265
Balance of transfers	bill.CZK	29	16	6	7	-20	-28	-17	-14	0	0
Current account	bill.CZK	-136	-161	-147	-40	-77	-113	-23	-37	15	-18
Capital account	bill.CZK	0	0	-14	5	8	20	30	41	43	41
Financial account	bill.CZK	348	157	177	155	92	126	59	95		
- foreign direct investments	bill.CZK	271	54	102	280	90	179	36	26		
– portfolio investments	bill.CZK	-47	-36	53	-81	-27	-57	-9	114		
- other investments	bill.CZK	124	139	23	-44	29	4	32	-45		
Change in reserves	bill.CZK	217	13	7	93	2	16	40	61		
Gross external debt	bill.CZK	813	895	1012	1142	1194	1375	1607	1515	1516	1530
Balance of trade / GDP 1)	per cent	-2,9	-2,7	-0,5	2,0	2,0	3,4	2,8	5,0	6,2	6,2
Current account / GDP	per cent	-5,5	-6,2	-5,2	-1,3	-2,4	-3,2	-0,6	-1,0	0,4	-0,5
Financial account / GDP	per cent	14,1	6,1	6,3	5,2	2,9	3,6	1,6	2,6		
Gross external debt / GDP 3)	per cent	33,0	34,7	35,9	38,3	37,0	38,9	43,6	41,8	41	40

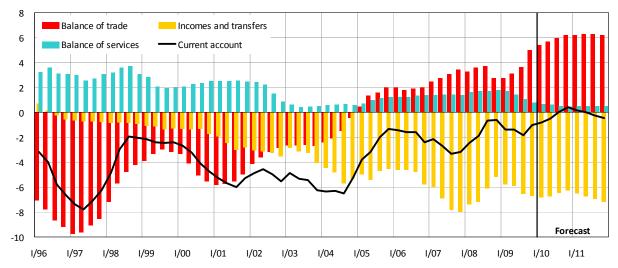
<sup>&</sup>lt;sup>1)</sup> Imports cif till April 2004, fob since May 2004 <sup>2)</sup> Imports cif <sup>3)</sup> In CZK

Table C.4.2: Balance of Payments - quarterly

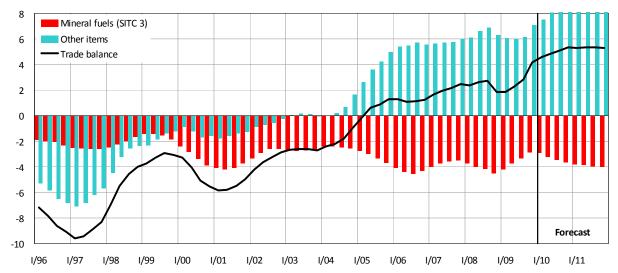
			200	9			20	10	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Exports of goods (fob)	bill.CZK	522	527	525	557	574	578	572	595
	growth in %	-19,1	-19,4	-13,0	-2,4	9,9	9,6	8,9	6,9
Imports of goods (fob)	bill.CZK	481	475	481	515	517	514	516	543
	growth in %	-20,2	-22,7	-16,6	-10,9	7,6	8,2	7,4	5,6
Balance of trade	bill.CZK	42	52	44	42	57	64	56	5 2
– mineral fuels (SITC 3) 1)	bill.CZK	-28	-24	-25	-28	-31	-34	-35	-35
– others 1)	bill.CZK	63	69	63	62	79	90	82	79
- difference fob-cif	bill.CZK	7	7	7	8	8	8	8	8
Exports of services	bill.CZK	96	99	95	95	97	100	97	9 (
	growth in %	10,1	5,8	2,4	-1,6	0,5	1,0	1,5	2,0
Imports of services	bill.CZK	82	90	93	94	85	93	96	9
	growth in %	19,4	20,3	18,7	13,0	4,0	4,0	4,0	4,0
Balance of services	bill.CZK	15	9	3	0	12	7	0	-:
Balance of income	bill.CZK	-36	-92	-60	-44	-36	-92	-60	-4
<ul> <li>compensation of employees</li> </ul>	bill.CZK	-5	-3	-3	-2	-3	-1	-1	(
– investment income	bill.CZK	-31	-88	-56	-42	-33	-90	-58	-44
Balance of transfers	bill.CZK	4	-1	-11	-6	0	0	0	
Current account	bill.CZK	25	-31	-24	-8	33	-21	-4	:
Capital account	bill.CZK	15	5	5	16	16	5	6	10
Financial account	bill.CZK	-9	26	27	51				
– foreign direct investments	bill.CZK	15	0	-18	30				
– portfolio investments	bill.CZK	-1	74	24	17				
– other investments	bill.CZK	-22	-48	21	4				
Change in reserves	bill.CZK	36	6	-1	19				
Gross external debt	bill.CZK	1555	1519	1465	1515	1479	1506	1516	150

<sup>1)</sup> Imports cif

Graph C.4.1: Current Account

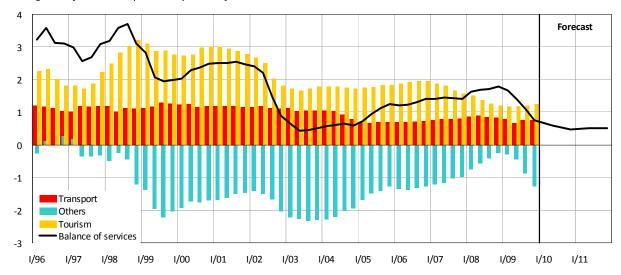


Graph C.4.2: Balance of Trade (exports fob, imports cif)



Graph C.4.3: Balance of Services

moving sums of the latest 4 quarters in per cent of GDP



Graph C.4.4: Balance of Income

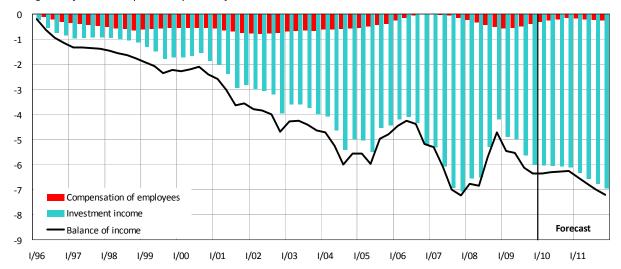


Table C.4.3: **Decomposition of Exports of Goods –** yearly

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 Forecast
GDP 1)	average of 2000=100	102,6	103,7	105,8	108,0	112,4	116,8	118,9	114,2	116	118
	growth in %	1,0	1,1	2,0	2,1	4,0	3,9	1,8	-3,9	1,7	2,0
Import intensity 2)	average of 2000=100	101,3	105,8	112,3	118,6	128,0	130,7	130,5	120,5	123	127
	growth in %	0,0	4,4	6,1	5,7	7,9	2,1	-0,2	-7,6	1,8	3,2
Export markets 3)	average of 2000=100	104,0	109,8	118,8	128,2	143,9	152,7	155,1	137,6	142	150
	growth in %	1,0	5,5	8,2	7,9	12,2	6,1	1,6	-11,3	3,5	5,2
Export performance	average of 2000=100	116,1	120,3	136,7	141,5	146,9	160,3	166,8	163,0	172	176
	growth in %	4,8	3,5	13,7	3,5	3,8	9,2	4,0	-2,3	5,8	2,2
Real exports	average of 2000=100	120,8	132,0	162,4	181,3	211,3	244,8	258,7	224,3	246	264
	growth in %	5,9	9,3	23,0	11,6	16,6	15,8	5,7	-13,3	9,5	7,5
1 / NEER	average of 2000=100	85,9	85,9	85,3	80,3	76,4	74,5	66,7	69,2	67	65
	growth in %	-10,5	0,0	-0,7	-6,0	-4,8	-2,5	-10,4	3,7	-2,7	-3,6
Prices on foreign markets	average of 2000=100	107,8	107,8	110,9	114,6	118,5	121,4	127,5	122,7	125	128
	growth in %	4,2	0,0	2,8	3,3	3,4	2,4	5,0	-3,8	1,9	2,5
Exports deflator	average of 2000=100	92,7	92,7	94,6	92,0	90,6	90,4	85,1	84,9	84	83
	growth in %	-6,7	0,0	2,1	-2,8	-1,5	-0,1	-5,9	-0,2	-0,8	-1,2
Nominal exports	average of 2000=100	111,9	122,3	153,7	166,7	191,3	221,1	220,0	190,1	207	220
	growth in %	-1,2	9,3	25,7	8,5	14,8	15,6	-0,5	-13,6	8,7	6,2

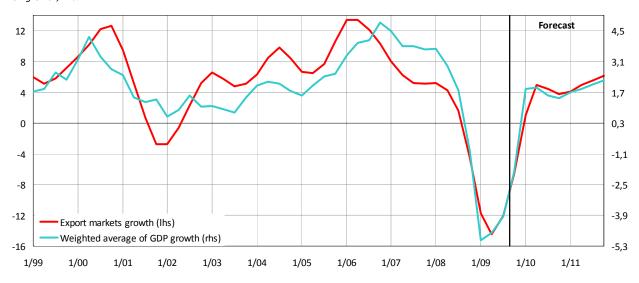
Weighted average of GDP of the seven most important partners – Germany, Slovakia, Austria, the United Kingdom, Poland, France and Italy. Index of ratio of real imports of goods to real GDP.

Weighted average of imports of goods of the main partners.

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

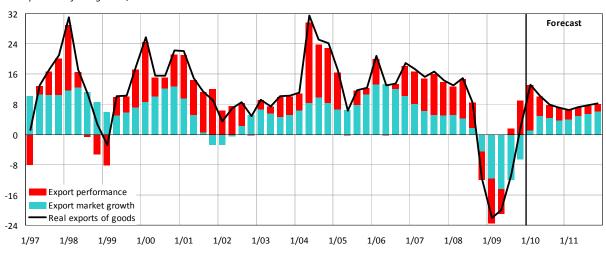
			200	9		2010					
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
						Estimate	Forecast	Forecast	Forecast		
GDP	average of 2000=100	113,4	113,7	114,5	115,1	115	116	116	117		
	growth in %	-5,1	-4,7	-4,0	-1,9	1,8	1,9	1,5	1,4		
Import intensity	average of 2000=100	122,9	118,7	119,6	120,9	122	122	123	124		
	growth in %	-7,0	-10,2	-8,5	-4,8	-0,8	3,0	2,8	2,3		
Export markets	average of 2000=100	139,4	135,0	136,9	139,2	141	142	143	144		
	growth in %	-11,7	-14,5	-12,1	-6,6	1,0	4,9	4,4	3,8		
Export performance	average of 2000=100	149,3	163,1	167,1	172,5	167	171	173	178		
	growth in %	-11,8	-6,5	1,5	9,0	12,0	5,1	3,3	3,3		
Real exports	average of 2000=100	208,1	220,2	228,8	240,0	235	243	247	257		
	growth in %	-22,1	-20,0	-10,8	1,9	13,1	10,3	7,9	7,2		
1 / NEER	average of 2000=100	72,3	69,8	67,0	67,7	68	68	67	66		
	growth in %	6,0	5,4	3,7	-0,4	-5,7	-2,9	0,1	-1,9		
Prices on foreign markets	average of 2000=100	123,9	122,5	122,1	122,2	128	125	123	124		
	growth in %	-1,9	-4,3	-5,8	-3,2	3,0	2,4	0,9	1,4		
Exports deflator	average of 2000=100	89,5	85,5	81,9	82,8	87	85	83	82		
	growth in %	4,0	0,9	-2,3	-3,6	-2,9	-0,6	1,0	-0,5		
Nominal exports	average of 2000=100	186,3	188,2	187,3	198,7	205	206	204	212		
	growth in %	-19,0	-19,3	-12,8	-1,8	9,9	9,6	8,9	6,6		

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



Graph C.4.6: Real Exports of Goods

decomposition of YoY growth, in %



Graph C.4.7: Deflator of Exports of Goods

decomposition of YoY growth, in %

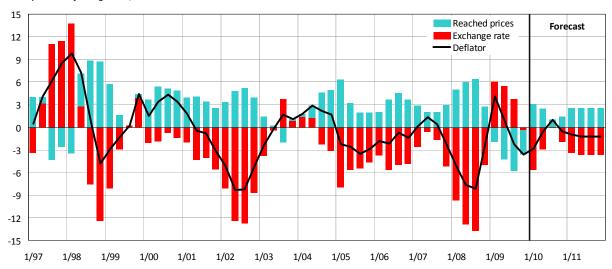


Table C.4.5: Savings and Investments – yearly

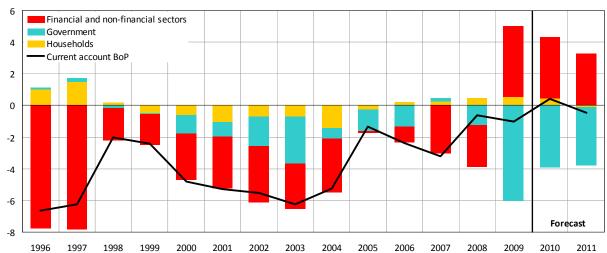
		2002	2003	2004	2005	2006	2007	2008	2009 Prelim.	2010 Forecast	2011 Forecast
Gross capital formation	% of GDP	28,6	27,2	27,5	25,7	26,8	27,0	25,3	21,5	22,1	22,4
– fixed capital formation	% of GDP	27,5	26,7	25,8	24,9	24,7	25,2	23,9	22,7	21,6	21,5
- change in stocks	% of GDP	1,1	0,5	1,7	0,8	2,1	1,8	1,4	-1,1	0,5	0,8
– government sector	% of GDP	3,9	4,4	4,7	4,9	5,0	4,6	4,9	5,1	5,6	5,8
– households	% of GDP	5,2	4,8	4,7	4,5	4,8	5,4	5,2	4,6	4,3	4,2
– non-financial and financial sectors	% of GDP	19,4	18,1	18,1	16,3	17,0	17,0	15,2	11,8	12,2	12,4
Gross national savings	% of GDP	22,4	20,7	22,0	23,9	24,7	24,4	21,9	20,5	22,5	21,9
- government sector	% of GDP	2,0	1,4	4,0	3,5	3,7	4,8	3,7	-0,9	1,6	2,1
– households	% of GDP	4,5	4,1	3,3	4,3	5,0	5,7	5,6	5,2	4,8	4,1
– non-financial and financial sectors	% of GDP	15,9	15,2	14,7	16,1	16,0	14,0	12,6	16,2	16,1	15,7
Financial balance											
- government sector	% of GDP	-1,9	-2,9	-0,7	-1,3	-1,3	0,2	-1,3	-6,0	-3,9	-3,7
– households	% of GDP	-0,7	-0,7	-1,4	-0,3	0,2	0,3	0,4	0,6	0,5	-0,1
– non-financial and financial sectors	% of GDP	-3,5	-2,9	-3,4	-0,1	-1,0	-3,0	-2,6	4,4	3,9	3,3
- methodological discrepancy	% of GDP	0,6	0,3	0,2	0,4	-0,3	-0,6	2,8	0,0	0,0	0,0
Current account BoP	% of GDP	-5,5	-6,2	-5,2	-1,3	-2,4	-3,2	-0,6	-1,0	0,4	-0,5

**Graph C.4.8: Gross National Savings and Consumption** 



**Graph C.4.9: Financial Balances of Individual Sectors** 

savings minus investments as percent of GDP



# **C.5** International Comparisons

Sources: Eurostat, OECD, IMF, MoF estimates

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
									Prelim.	Forecast	Forecast
Greece	PPS	18 500	19 200	20 400	20 600	22 000	23 100	23 600	23 300	22 300	22 100
	EA 12 = 100	80	83	85	83	84	84	86	88	83	80
Slovenia	PPS	16 800	17 300	18 700	19 700	20 700	22 100	22 800	21 200	21 600	22 300
	EA 12 = 100	73	75	78	79	79	81	83	80	81	81
Czech Republic	PPS	14 400	15 200	16 300	17 100	18 200	19 900	20 100	19 400	19 800	20 400
	EA 12 = 100	63	66	68	69	70	73	74	73	74	74
Portugal	PPS	15 800	15 900	16 100	17 300	18 100	18 800	19 100	18 700	18 900	19 200
	EA 12 = 100	68	69	67	70	69	69	70	71	70	70
Slovakia	PPS	11 100	11 500	12 300	13 500	15 000	16 900	18 100	17 400	18 000	19 000
	EA 12 = 100	48	50	52	54	57	61	66	66	67	69
Hungary	PPS	12 600	13 000	13 700	14 200	15 000	15 600	16 100	15 300	15 400	15 800
	EA 12 = 100	55	56	57	57	57	57	59	58	57	58
Estonia	PPS	10 200	11 300	12 400	13 800	15 400	17 100	16 900	14 700	15 200	16 000
	EA 12 = 100	44	49	52	56	59	63	62	56	57	58
Poland	PPS	9 900	10 100	11 000	11 500	12 300	13 600	14 100	14 500	15 100	15 700
	EA 12 = 100	43	44	46	46	47	49	52	55	56	57
Lithuania	PPS	9 000	10 200	10 900	11 900	13 100	14 800	15 500	13 400	13 700	14 200
	EA 12 = 100	39	44	46	48	50	54	57	51	51	52
Latvia	PPS	8 400	9 000	9 900	10 900	12 200	13 900	14 400	11 900	11 600	12 100
	EA 12 = 100	37	39	41	44	47	51	52	45	44	44

Graph C.5.1: **GDP p.c.** - using current purchasing power parities EA 12 = 100

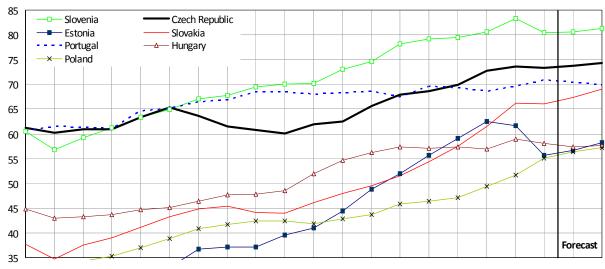
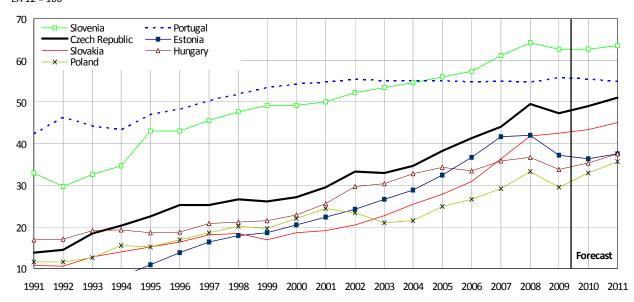


Table C.5.2: GDP p.c. - using current exchange rates

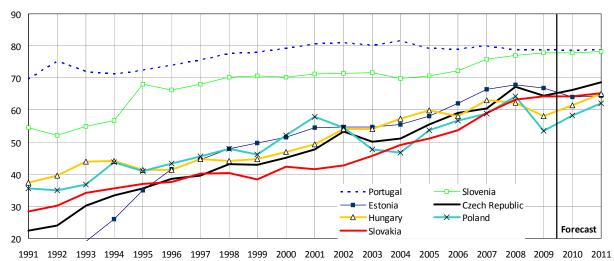
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
									Prelim.	Forec ast	Forecast
Gr ee ce	EUR	14300	15 600	16800	17 600	18 9 00	20200	21 300	21 000	20200	20 200
	EA 12 = 100	60	65	67	69	70	72	74	76	72	70
	Comparative price level EA 12 = 100	76	78	79	83	84	86	86	86	87	87
Slovenia	EUR	12300	12 900	13600	14 400	15 400	17100	18 400	17 300	17500	18 200
	EA 12 = 100	52	53	55	56	57	61	64	63	63	64
	Comparative price level EA 12 = 100	71	72	70	71	72	76	77	78	78	78
Czech Republic	EUR	7800	7 900	8600	9 80 0	11 100	12300	14 200	13 100	13700	14 600
	EA 12 = 100	33	33	35	38	41	44	50	47	49	51
	Comparative price level EA 12 = 100	53	50	51	56	59	61	67	65	66	69
Portugal	EUR	13100	13 300	13700	14 100	14 700	15 400	15 700	15 400	15500	15 800
	EA 12 = 100	55	55	55	55	55	55	55	56	55	55
	Comparative price level EA 12 = 100	81	80	82	79	79	80	79	79	79	79
Slovakia	EUR	4800	5 5 0 0	6300	7 100	8 3 00	10200	12 00 0	11 700	12100	12 900
	EA 12 = 100	20	23	25	28	31	36	42	42	43	45
	Comparative price level EA 12 = 100	43	46	49	51	54	59	63	64	64	65
Hungary	EUR	7 0 0 0	7 3 0 0	8 2 0 0	8 80 0	8 9 00	10100	10 500	9 3 0 0	9900	10 800
	EA 12 = 100	30	30	33	34	33	36	37	34	35	38
	Comparative price level EA 12 = 100	54	54	57	60	58	63	62	58	62	65
Est on ia	EUR	5 700	6 400	7 2 0 0	8 30 0	9 8 00	11600	12 00 0	10 200	10200	10 800
	EA 12 = 100	24	27	29	32	37	42	42	37	36	38
	Comparative price level EA 12 = 100	55	55	55	58	62	66	68	67	64	65
Poland	EUR	5 5 0 0	5 0 0 0	5 3 0 0	6 40 0	7 100	8100	9 500	8 100	9200	10 200
	EA 12 = 100	23	21	21	25	27	29	33	30	33	36
	Comparative price level EA 12 = 100	55	48	47	54	57	59	64	54	58	62
Lithuania	EUR	4 3 0 0	4 8 0 0	5 3 0 0	6 100	7 100	8500	9 60 0	8 000	7900	8 300
	EA 12 = 100	18	20	21	24	26	30	34	29	28	29
	Comparative price level EA 12 = 100	47	45	46	50	53	56	59	57	56	56
Latvia	EUR	4 2 0 0	4 3 0 0	4800	5 700	7 0 00	9300	10 200	8 300	7600	7 700
	EA 12 = 100	18	18	19	22	26	33	36	30	27	27
	Comparative price level EA 12 = 100	49	46	47	50	56	66	68	67	62	61

Graph C.5.2: **GDP p.c.** - using current exchange rates *EA 12 = 100* 



Graph C.5.3: Index of Comparative Price Level of GDP p.c.

EA 12 = 100



### **C.5 International Comparisons**