Summary of the Forecast

This forecast follows upon the July Macroeconomic Forecast, which served as the basis for formulation of the macroeconomic framework of the draft 2011 State Budget and outlook to 2013. Newly included knowledge modifies, to some extent, the expected course of time of future economic developments.

Over the entire 2010 growth of nominal and real macro aggregates, important from the view of government sector revenues, should be considerably more dynamic than initially assumed. On the contrary, in 2011 moderate slowdown can be expected. Resulting level of these aggregates in 2011, i.e. of economic bases of tax receipts, should not be substantially influenced by this change of time course.

World economic recovery still remains encumbered with many uncertainties. Main sources of risk are connected with the state of the general government and situation in the banking sectors in some euro area countries.

Economic output of the Czech Republic has been recovering since the third quarter of 2009. For 2010 growth of real GDP by 2.2 % is assumed, with balanced contributions of main expenditure components. Slowdown in growth of some foreign economies and domestic consolidation fiscal measures are expected to lead possibly to moderate slowdown of growth dynamics to 2.0 % in 2011.

Average rate of inflation in 2010 is estimated at some 1.5 % while consumer price growth is assumed to accelerate to 2.2 % in 2011.

Consequences of recession are still seen on the labour market. After considerable growth of rate of unemployment (LFS), maximum for the entire year shall be hit in 2010 at some 7.4 %. After that, rate of unemployment should start falling slowly. Employment should decrease by 1.2 % in this year while in 2011 it should grow again by 0.8 %. Wage bill will probably increase by 0.5 % in this year while in 2011 wages and salaries could grow by as much as 3.4 %, despite cutting the wage bill in central government sector by as much as 10 %.

Ratio of current account deficit to GDP should remain at sustainable level.

Table: **Main Macroeconomic Indicators**

		2006	2007	2008	2009	2010	2011	2010	2011
						Forecast		*Previous forecast*	
Gross domestic product	*growth in %, const.pr.*	**6,8**	**6,1**	**2,5**	**-4,1**	**2,2**	**2,0**	1,6	2,3
Consumption of households	*growth in %, const.pr.*	**5,1**	**5,0**	**3,6**	**-0,2**	**1,5**	**1,5**	-0,5	2,0
Consumption of government	*growth in %, const.pr.*	**1,2**	**0,7**	**1,0**	**4,2**	**0,2**	**-4,5**	-1,8	-0,9
Gross fixed capital formation	*growth in %, const.pr.*	**6,0**	**10,8**	**-1,5**	**-9,2**	**-3,0**	**1,3**	-4,3	2,5
Cont. of foreign trade to GDP growth	*p.p., const.pr.*	**1,5**	**1,1**	**1,3**	**-0,6**	**0,7**	**1,5**	1,9	0,6
GDP deflator	*growth in per cent*	**1,1**	**3,4**	**1,8**	**2,6**	**-0,5**	**1,3**	-0,2	1,3
Average inflation rate	*per cent*	**2,5**	**2,8**	**6,3**	**1,0**	**1,5**	**2,2**	1,6	2,5
Employment *(LFS)*	*growth in per cent*	**1,3**	**1,9**	**1,6**	**-1,4**	**-1,2**	**0,8**	-1,4	0,6
Unemployment rate *(LFS)*	*average in per cent*	**7,1**	**5,3**	**4,4**	**6,6**	**7,4**	**7,2**	7,6	7,3
Wage bill *(domestic concept)*	*growth in %, curr.pr.*	**7,9**	**9,4**	**8,7**	**-0,1**	**0,5**	**3,4**	-0,3	3,8
Current account / GDP	*per cent*	**-2,4**	**-3,2**	**-0,6**	**-1,0**	**-1,4**	**-1,1**	-0,1	-1,0
Assumptions:									
Exchange rate CZK/EUR		**28,3**	**27,8**	**24,9**	**26,4**	**25,3**	**24,2**	25,5	24,6
Long-term interest rates	*% p.a.*	**3,8**	**4,3**	**4,6**	**4,7**	**3,8**	**3,9**	3,7	4,0
Crude oil Brent	*USD/barrel*	**65**	**73**	**98**	**62**	**78**	**84**	78	87
GDP in Eurozone (EA-12)	*growth in %, const.pr.*	**2,9**	**2,8**	**0,4**	**-4,1**	**1,6**	**1,5**	1,1	1,9

A Forecast Assumptions

*The forecast was made on the basis of data, known as of **11 October 2010.** Neither political decisions, newly released statistics nor world financial nor commodity markets developments could be taken into account after this date.*

Data from the previous forecast from July 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, The Economist, own calculations.

A.1 External Environment

Economic output

The world economy keeps on recovering but this tendency is fragile and its sustainability uncertain. Under IMF estimates, the world economy will grow by 4.8 % in 2010, slowing to 4.2 % in 2011. Similar slowdown is expected in all large economies and economic regions including China, India and Brazil. Growth is uneven, weakening in the US contrary to previous assumptions, strengthening in the euro area.

US economy grew QoQ by 0.9 % and by 0.4 % (*0.5 %),* respectively, in the first two quarters. Rate of inflation fell to 1.1 % in August; rate of unemployment has been stagnating closely below 10 % since January 2010.

Despite the government stimuli, the economic recovery is unexpectedly slow. For the most part it is caused by slow pace of household consumption growth in comparison with the years of boom. It is true that household consumption was growing in the last three quarters but consumers are cautious due to both high unemployment and lower housing wealth, whose value declined by some 25 % from its peak in 2007 and keeps on stagnating. It was constant growth of house prices that caused the previous excessive consumption. Fall in optimism is caused by weak growth of employment in private sector, with unemployment rising slightly to 9.6 %. Withdrawal of federal stimuli, which will not repeat due the country's high indebtedness, also raises concerns.

Certain stimulation to the economy is provided by the central bank, keeping the band for key refinancing rate at 0-0.25 % and heading to further „quantitative easing". Due to these expectations, the dollar weakened considerably against the euro, returning thus in essence to the February level.

Euro area's GDP (EA12) grew in the first two quarters of 2010 by 0.3 % and 1.0 % (*0.4 %)* QoQ respectively. Background of this significant increase is seen in unusually strong growth of German economy.

Recovery is unbalanced, in euro area this year GDP of Greece, Ireland and probably also Spain will obviously decline even more. Also inflation is unbalanced in the euro area. In August YoY inflation of the euro area was 1.6 %, ranging from deflation in Ireland (-1.2 %) through moderate inflation in Germany (1 %) to Greece (5.6 %). Industrial production in EA12 has been growing since mid-year 2009 but in July its MoM growth stopped as in EA12 as in Germany where however it grew again by 1.7 % in August. At the same time high unemployment persists, reaching 10.1 % in EA12 in August but falling to 6.8 % in Germany. On the contrary it is 20.5 % in Spain, 14.6 % in Slovakia and 13.9 % in Ireland, mostly with growing tendency.

Development in Germany is interesting. After slightly above-average QoQ growth by 0.5 % in the first quarter of 2010, unexpected 2.2 % (*0.4 %)* was achieved, which is the highest growth since the German unification. Growth resulted from extraordinarily strong exports during the spring, and in the second quarter even domestic demand was growing after previous three-quarter decline. Economic growth, as indicated by leading indicators (Ifo index) as well as by new start of industrial production in August, can be still relatively strong in the nearest quarter. Structure of demand and current strengthening of the euro suggest weakening of growth in the following period.

After spring turbulences on financial markets, most EA countries focus on fiscal consolidation. ECB still keeps the main refinancing rate at 1.00 % and supports some economies by purchase of sovereign bonds.

Central European economies are overcoming downturn caused by dependence on exports. Poland's and Slovakia's economies benefit from the fact that no problems appeared in the banking sector.

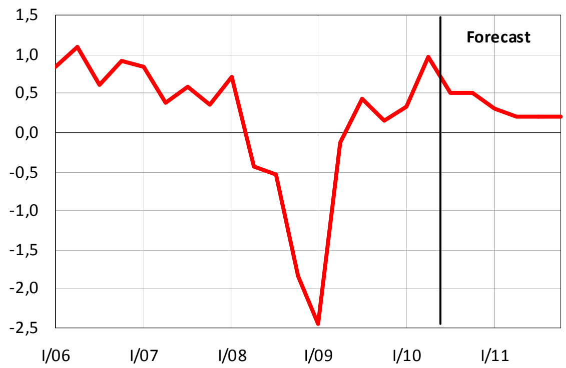
Slovakia has returned to high growth since the second quarter of 2009, pulled again by exports. Industrial production grew by 16.3 % YoY in August 2010. Rate of unemployment was 14.6 % in August, the second highest in the EA. Obviously it caused a decline in household consumption, which had long been one of the growth momentums: from 6 % of YoY growth in 2008 it fell to –0.7 % in 2009 and keeps on falling in the last three quarters in QoQ terms. The government will also have to cope with public finance deficit, expected to reach 7.8 % of GDP in 2010.

Poland's economy was the only one in the EU to avoid recession in 2009 and keeps on growing (1.1 % QoQ in the second quarter). Size of the domestic market makes it possible for growth to be pulled by domestic demand. The latter was growing constantly, contrary to Slovakia, albeit by half the pace during the crisis. Unemployment rate peaked at 9.8 % in March 2010 and has been falling slowly since then (9.4 % in August). Public finance deficit surpassed 7 % of GDP in 2009.

Our forecast is based on an assumption that no more major shocks will occur on financial markets. For 2010 recovery is expected with considerable differences among various world regions. With growth of advanced economies relatively weak, growth of emerging markets will be still dynamic.

US economy is expected to grow by 2.7 % (*2.8 %)* in 2010. For 2011 estimate of growth is reduced to 2.5 % (*3.2 %).* Recovery will be dampened by slow decline in unemployment and by stagnating housing market.

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



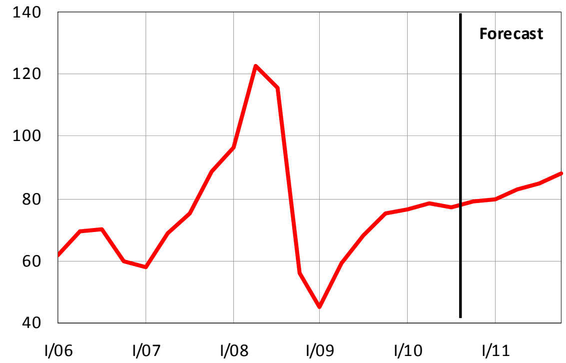
In EA12, GDP growth is estimated at 1.6 % (*1.1 %)* in 2010 and at 1.5 % (*1.9 %)* in 2011. Risks are seen in high unemployment, financial-sector problems in many countries (Ireland at the newest), high indebtedness of the general government and also uneven development in euro area's countries.

Commodity prices

Average price of Brent oil reached USD 78.7 per barrel in the second quarter of 2010 and the third-quarter price is estimated at USD 77 (*USD 78).* The price remained volatile, showing nevertheless rather a tendency to moderate decline. Such development obviously reflects doubts, in particular, on economic recovery strength. However, weaker dollar undoubtedly has an impact on price growth. Consumption is still „two-speed" as its decline in advanced economies is outweighed with demand in China and other countries.

Estimate for 2010 stands at USD 78 per barrel of Brent oil (*unchanged)* while for 2011 a downward adjustment was made to USD 84 per barrel (*USD 87).* Risks of forecast are seen as balanced.

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



Global financial markets

From the view of financial stability, events of recent months were not favourable (see e.g. October IMF's Global Financial Stability Report). Topics, which are of key importance from the European point of view, do not change – they cover especially future development of public finance, mainly in EA periphery countries (the so-called PIIGS countries), and banking sector situation. As regards financial-markets view, no change for the better is seen in the first field. Spreads between sovereign debt yields and German bonds are still high. Risk premia of Spanish and Italian bonds are roughly at the same level as during the May crisis of sovereign debt market, in case of Ireland and Portugal they are even higher. ECB still conducts interventions in the debt securities markets under Securities Markets Programme. Nevertheless compared with

May, when the programme was launched, the volumes are low. Some of PIIGS countries faced downgrading of rating again – on the last occasion it was Ireland in early October, whose rating was cut from A+ to AA- with negative outlook.

Ireland struggles with problems of its banking sector, rehabilitation of nationalized Anglo Irish bank is especially costly. Capital injection to Irish banking sector should raise public finance deficit in one-off terms to estimated 32 % (!) of GDP this year, nevertheless this bail-out will be spread over more than ten years as regards financing borrowing requirement. Moreover, Ireland has already raised enough money to finance borrowing up to mid-2011, and with regard to the current situation on bond markets it decided to abolish planned October and November auctions of government bonds. Return to market is planned for the beginning of 2011 when the situation could be already calmer. It should be helped by four-year consolidation plan, to be presented by Irish government in early November. The plan allows for cutting the deficit below 2 % of GDP by 2014.

Greece, whose fiscal problems stood at the beginning of the current debt crisis, received a second tranche of EUR 9bn from EFSF/IMF (EUR 2.5bn from IMF and EUR 6.5bn from other EA countries except for Slovakia). It was preceded at the turn of July and August by assessment of implementing the timetable of reforms and austerity fiscal package. IMF, ECB and European Commission's officials found that Greece had fulfilled all quantitative criteria by the end of June. Considerable progress was achieved also in the sphere of fiscal and structural reforms but huge risks remain (e.g. control over spending on local government level). Relatively successful auctions of treasury bills, which enjoyed quite popularity albeit at the price of required high yields, can be viewed with moderate optimism. Nevertheless it needs to be asked how much is demand for Greek T-bills influenced by euro area and IMF's bailout mechanism, which eliminates, *de facto*, risk of default within the horizon of T-bills maturity.

Stress testing of banks was obviously the most important event of this summer, regarding European banking sector. Committee of European Banking Supervisors released its results on 23 July. 91 banks, whose share of total assets of EU banking sector reaches 65 %, were tested. Unfavourable scenario of stress test allowed, inter alia, for stagnation of EU27 economy in 2010 and fall in EU27 GDP by 0.4 % in 2011. It further assumed growth of interest rates on all maturities (shift of entire yield curve) with this shift partially common for all EU countries and partially specific for individual countries. Under this unfavourable scenario, capital adequacy would fall below 6 % (Tier 1 capital/risk-weighted assets) for seven banks (Germany's Hypo Real Estate, Greece's ATE Bank and 5 Spain's saving banks) and additional capital injections would take EUR 3.5bn.

Release of results of individual banks (in a uniform way) together with some information on their exposure to foreign debt securities was straight positive aspect of the stress testing. However, tests raised also many questions. E.g. they concerned choice of criterion for successful handling of stress test. Problem is seen rather in the structure of Tier 1 capital rather than in concrete value of 6 %. The thing is that Tier 1 capital can include also the so-called hybrid capital (which has certain characteristics of core equity capital as well as certain features typical of debt securities) and so Tier 1 capital need not have a good informative value as regards bank's ability to absorb losses. Moreover, certain embarrassment can be raised by the financial size of „remedy" i.e. of those EUR 3.5bn.

Further criticism of tests regarded default of some countries, which had not been considered within the horizon of stress test. Under unfavourable scenario, only trade portfolios of banks would be then affected where debt securities are re-priced according to the current market price. Most government bonds, however, are held by banks in their bank portfolios[1]. It is true that assumption of all states being able to carry out their liabilities could be justified by existence of EFSF (European Financial Stability Facility, see e.g. Macroeconomic Forecast of the CR from July 2010 for more) nevertheless even here several *„buts"* can be found. Although EFSF obtained the highest possible rating from three most important rating agencies (S&P, Moody's and Fitch), the fact is that it does not have financial means available in advance (is not „pre-funded"). It means that EFSF would raise the funds on the markets in the least convenient time as potential request of some EA country for financial support from EFSF would very probably give rise to corresponding response of financial markets (growth of bonds yields). It is necessary to realize too that maximum size of

[1] *Securities in bank portfolio are accounted differently from assets in trade portfolio. Usual market fluctuations of prices have no effect on assessment of assets in bank portfolio (the bank plans to hold these assets till their maturity) but default of the state whose bonds are held by the bank in bank portfolio, would influence assessment of these bonds.*

guarantees that can be granted by euro area's countries on EFSF liabilities (EUR 440bn) is much higher than the amount that troubled state(s) could draw from EFSF (guarantees amounting to 120 % of principal, cash buffers, country asking for help from EFSF would not provide guarantees).

From the medium and long-term point of view, adoption of Basel III standards by Basel Committee on Banking Supervision was an important event. Key principle of this regulation is to tighten regulatory capital definition and raise minimum amount of capital (in ratio to risk-weighted assets), which the banks ought to hold. Banks will also have to keep conservation buffers and countercyclical buffers. Individual measures should be introduced gradually from January 2013, full validity is allowed for from January 2023 (most measures should come into effect „as early as" from January 2019).

With regard to considerable complexity of interrelations among financial sector, government and other real economy's sectors, and also taking into account present frequency of new information appearance (often of quite significant character) it is almost impossible to determine of what intensity will be impact of external developments on the Czech economy. But it is still true that external environment represents a significant source of risks for the domestic economy, which needs to be monitored closely.

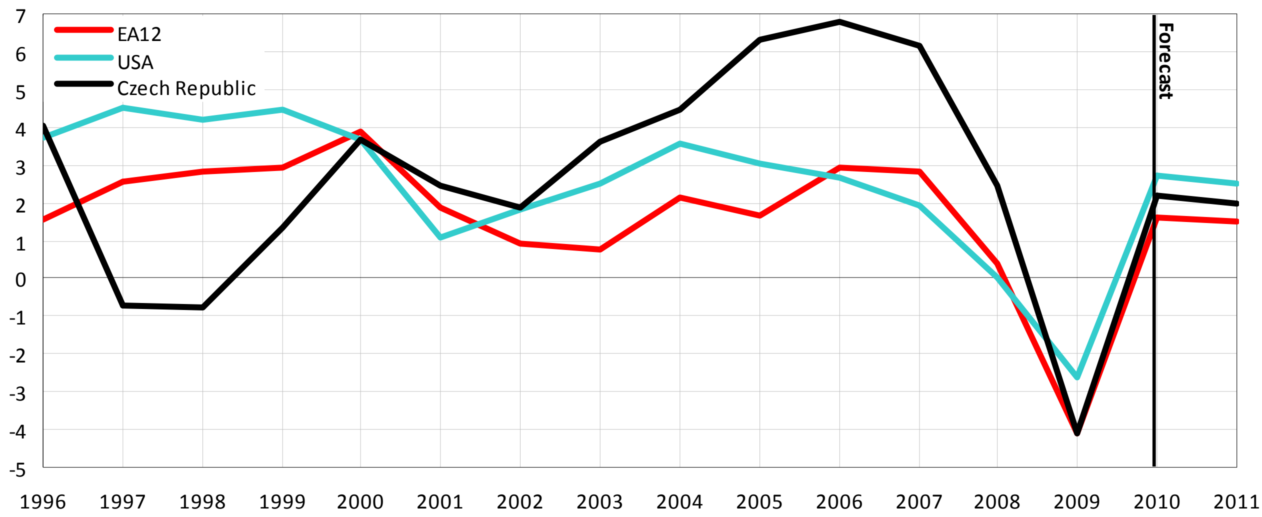
Table A.1.1: **Real Gross Domestic Product** – yearly
growth in %, non-seasonally adjusted data

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

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

		2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3 *Estimate*	2010 Q4 *Forecast*
EU27	*QoQ*	**-2,5**	**-0,3**	**0,3**	**0,2**	**0,3**	**1,0**	**0,4**	**0,5**
	YoY	-5,1	-5,1	-4,3	-2,2	0,7	1,9	2,0	2,3
EA12	*QoQ*	**-2,4**	**-0,1**	**0,4**	**0,2**	**0,3**	**1,0**	**0,5**	**0,5**
	YoY	-5,0	-4,9	-4,0	-2,0	0,8	1,9	2,0	2,3
Germany	*QoQ*	**-3,4**	**0,5**	**0,7**	**0,3**	**0,5**	**2,2**	**0,7**	**0,5**
	YoY	-6,6	-5,5	-4,4	-2,0	2,0	3,7	3,7	3,9
France	*QoQ*	**-1,5**	**0,1**	**0,3**	**0,6**	**0,2**	**0,7**	**0,3**	**0,3**
	YoY	-3,9	-3,1	-2,7	-0,5	1,2	1,7	1,8	1,5
United Kingdom	*QoQ*	**-2,3**	**-0,8**	**-0,3**	**0,4**	**0,4**	**1,2**	**0,5**	**0,6**
	YoY	-5,5	-6,0	-5,4	-3,0	-0,3	1,7	2,5	2,7
Austria	*QoQ*	**-2,3**	**-0,8**	**0,6**	**0,4**	**0,0**	**1,2**	**0,3**	**0,3**
	YoY	-3,9	-5,1	-4,0	-2,1	0,2	2,3	2,0	1,8
USA	*QoQ*	**-1,2**	**-0,2**	**0,4**	**1,2**	**0,9**	**0,4**	**0,5**	**0,5**
	YoY	-3,7	-4,1	-2,7	0,2	2,4	3,0	3,1	2,3
Hungary	*QoQ*	**-2,9**	**-1,3**	**-0,6**	**0,0**	**0,6**	**0,0**	**0,3**	**0,3**
	YoY	-6,1	-7,1	-6,7	-4,7	-1,2	0,1	1,0	1,3
Poland	*QoQ*	**0,4**	**0,5**	**0,7**	**1,2**	**0,7**	**1,1**	**0,5**	**0,5**
	YoY	1,6	1,3	1,3	2,9	3,1	3,8	3,5	2,8
Slovakia	*QoQ*	**-7,4**	**0,8**	**1,2**	**1,7**	**0,8**	**1,2**	**0,4**	**0,3**
	YoY	-4,5	-5,1	-5,2	-3,9	4,6	5,0	4,2	2,8
Czech Republic	*QoQ*	**-3,8**	**-0,5**	**0,5**	**0,5**	**0,4**	**0,9**	**0,7**	**0,5**
	YoY	-3,6	-4,7	-4,4	-3,2	1,0	2,4	2,6	2,5

Graph A.1.3: **Real Gross Domestic Product**
growth in %, sa data



Graph A.1.4: **Real Gross Domestic Product** – Central European new member state economies
growth in %, sa data

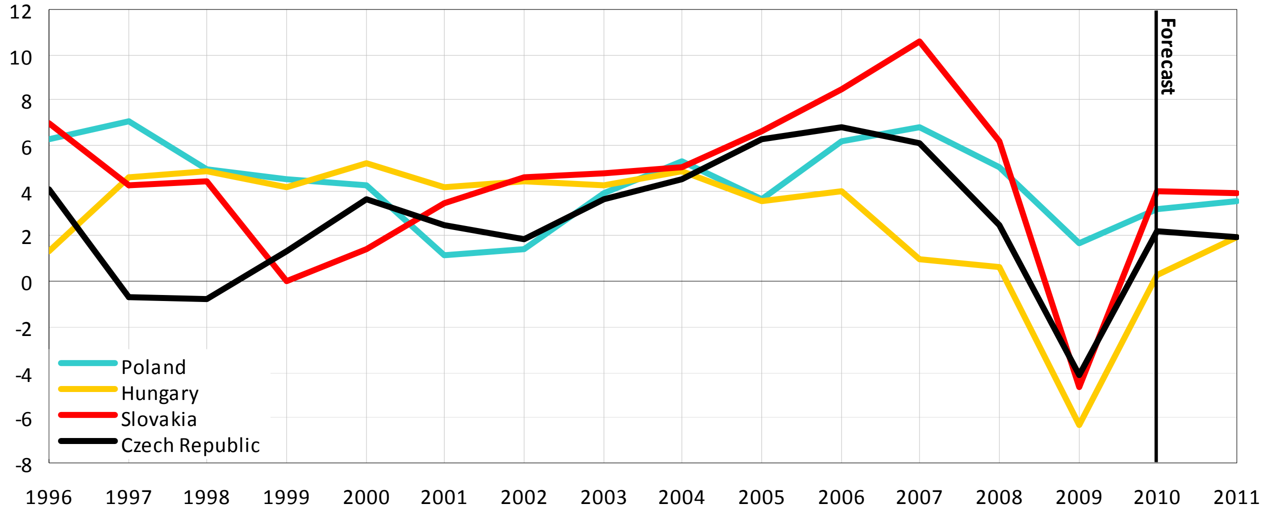


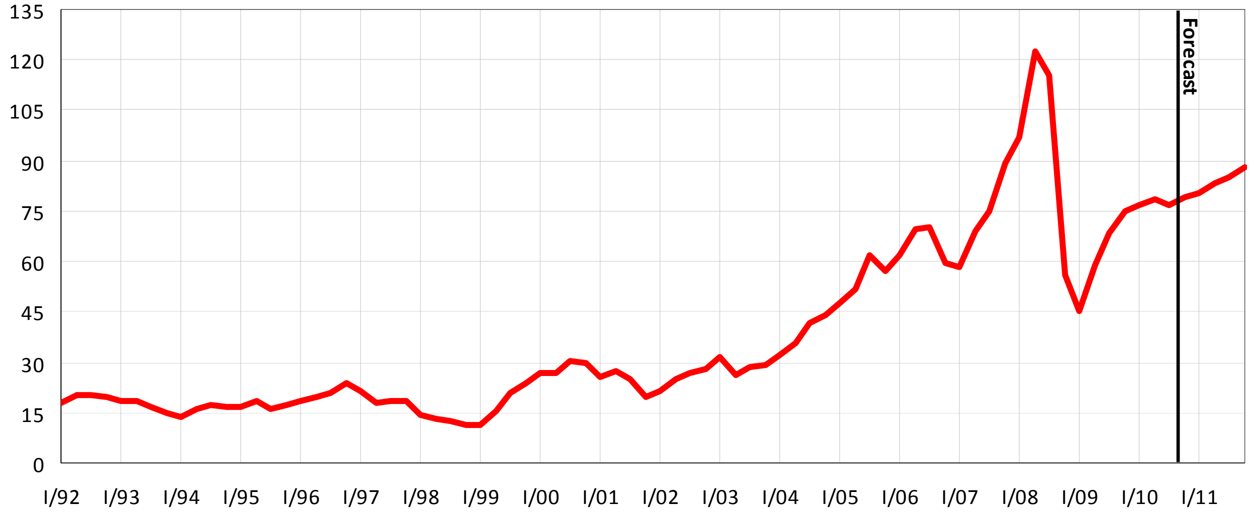
Table A.1.3: **Prices of Commodities** – yearly
spot prices

		2002	2003	2004	2005	2006	2007	2008	2009	2010 *Forecast*	2011 *Forecast*
Crude oil Brent	*USD/barrel*	**25,3**	**28,8**	**38,3**	**54,4**	**65,4**	**72,7**	**97,7**	**61,9**	**78**	**84**
	growth in % prev. y.	3,6	14,0	33,0	42,0	20,1	11,2	34,4	-36,7	25,8	7,9
Crude oil Brent index *(in CZK)*	*2005=100*	**63,5**	**62,4**	**75,6**	**100,0**	**113,4**	**113,3**	**127,7**	**90,5**	**115**	**120**
	growth in % prev. y.	-10,9	-1,7	21,1	32,3	13,4	-0,1	12,7	-29,1	27,4	4,3
Wheat	*USD/t*	**148,5**	**146,1**	**156,9**	**152,4**	**191,7**	**255,2**	**326,0**	**223,6**	.	.
	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	.	.

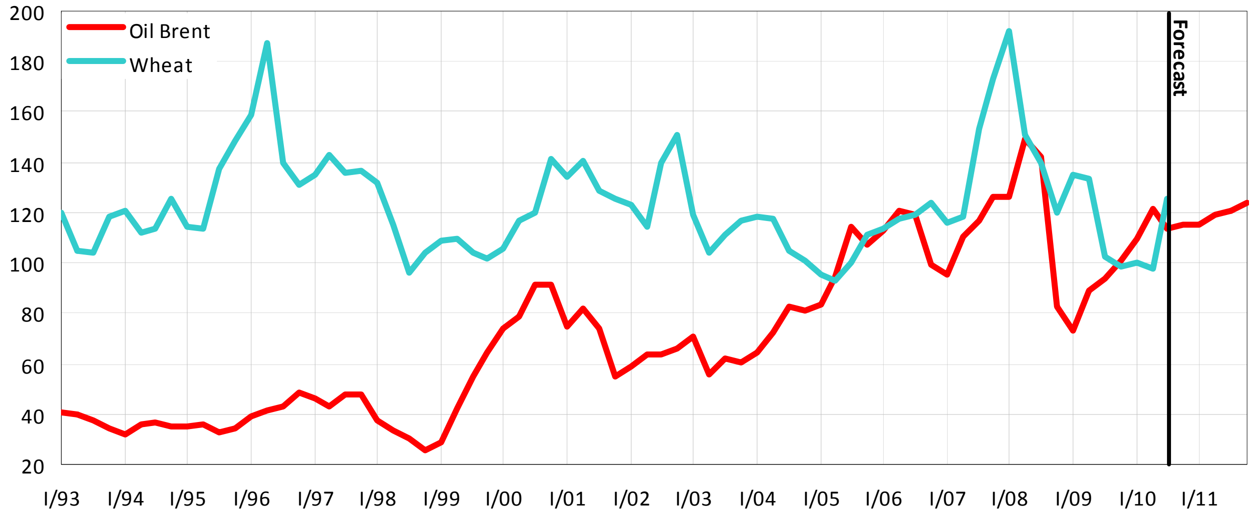
Table A.1.4: **Prices of Commodities** – quarterly
spot prices

		2009				2010			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3 *Estimate*	Q4 *Forecast*
Crude oil Brent	*USD/barel*	**45,0**	**59,1**	**68,4**	**75,0**	**76,7**	**78,7**	**77**	**79**
	růst v %	-53,5	-51,8	-40,8	34,2	70,4	33,2	12,6	5,3
Crude oil Brent index *(in CZK)*	*2005=100*	**73,0**	**88,6**	**93,7**	**100,7**	**109,9**	**121,4**	**114**	**115**
	růst v %	-42,2	-40,5	-34,0	22,2	50,4	37,0	21,4	14,2
Wheat price	*USD/t*	**232,0**	**248,0**	**208,8**	**205,4**	**195,7**	**177,5**	**238,1**	.
	růst v %	-43,6	-28,4	-34,3	-9,9	-15,6	-28,4	14,0	.
Wheat price index *(in CZK)*	*2005=100*	**134,7**	**133,0**	**102,3**	**98,6**	**100,2**	**97,9**	**125,8**	.
	růst v %	-30,0	-11,7	-26,8	-17,9	-25,6	-26,4	23,0	.

Graph A.1.5: **Dollar Prices of Oil**
in USD/barrel



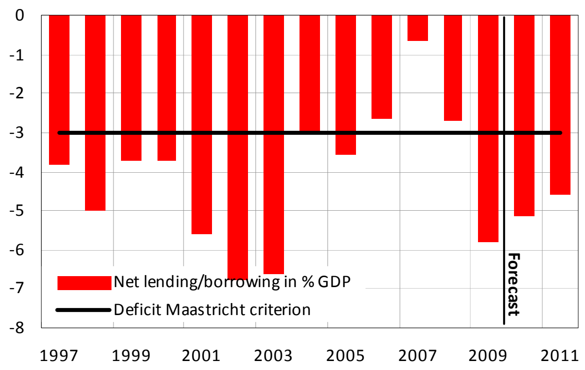
Graph A.1.6: **Koruna Indices of World Commodity Prices**
index 2005 = 100



A.2 Fiscal Policy

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

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



Under preliminary CZSO data, general government deficit reached 5.8 % of GDP in 2009. Thus, compared to the April notification, our estimation of the general government deficit has improved by 0.1 % of GDP.

With regard to unfavourable general government performance, debt reached 35.3 % of GDP by the end of 2009.

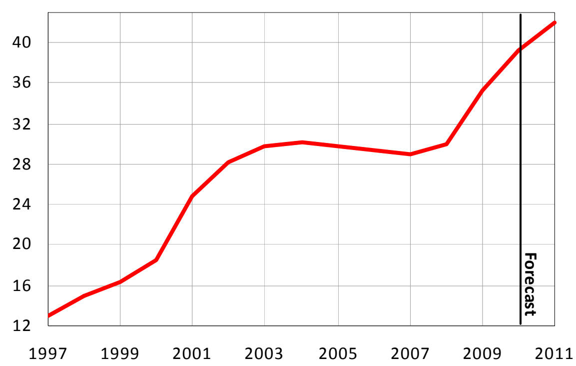
In April on the basis of data from the beginning of the year, the MoF prepared an estimate of autonomous development of general government performance in 2010, notifying general government deficit of 5.9 %. The government then responded to this figure, making many active steps (tying of expenditures, cuts in expenditures to cover environmental damage etc.), which ought to ensure 2010 deficit of 5.3 % of GDP.

According to the new estimate for October notification, 2010 deficit is estimated at 5.1 % of GDP, still a better result than pledged by the government. Improvement results especially from positive development on financial markets where thanks to cuts in risk premia for Czech sovereign bonds costs of government debt financing have fallen considerably. Moreover, thanks to principle of prudence and credibility, April estimate of costs of government debt financing was more of pessimistic.

Despite surprisingly good outcome, certain risks need to be mentioned. It is true that tax receipts will obviously grow moderately (by some 3 %) compared with the previous year but they are influenced by many legislative changes. It is also very difficult to assess whether the economy gets already back on sustainable growth trajectory and whether tax receipts will thus grow in subsequent years too. Situation on financial markets is also very volatile and current favourable development can be very easily reversed. Further development of deficits in EU troubled countries (see chapter A.1) is of fundamental importance. It could negatively affect government debt financing and then impede reform steps prepared by the government.

On the other hand, inflow of finance from European funds can be assessed very positively: they have a small impact on the deficit (to the extent of national co-financing) but they reflect significantly in aggregate demand. Size of multiplication effect, which can be relatively small, remains to be point at issue, but taking into account that given impulse is not paid from national resources, it can be indicated as welcome.

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



General government debt should reflect development of deficit also in 2010, reaching 39.3 % of GDP.

Draft state budget for 2011 and medium-term outlook of the state budget for 2012-2013 assume further improvement of general government balance up to – 2.9 % of GDP in 2013. Compared with the Convergence Programme from January 2010, the present government thus tightened fiscal targets for the following years. At the same time it set a goal of balanced performance of the government institutions sector in 2016 under assumption of economic growth in the period under consideration. The current fiscal policy setting stems from the expenditure frameworks approved by the government, nevertheless in 2012 and 2013 conception structural reforms, developed in 2011, should be launched.

As regards sustainability of public finance, tackling of structural deficiencies of public finance is a matter of principle. In the medium term a goal of 1 % GDP for structural deficit of the general government (MTO) is set for the CR by the Stability and Growth Pact. With current fiscal policy setting, this goal will not be fulfilled within the years covered by the outlook. Structural deficit is expected to reach 4.2 % of GDP in 2010, falling then gradually up to 2.2 % of GDP in 2013. Should this trend be maintained in the following years, MTO would not be probably reached before 2017.

With current fiscal policy setting and assumptions of further consolidation, level of debt should hit its maximum of some 44 % of GDP in 2013, falling slowly in subsequent years.

Table A.2.1: **Consolidation Measures in 2011**

Impact of income-side measures on deficit reduction in 2011 (CKZ bill.)

Measure		Balance change
Value added tax - parametric changes		**0,2**
Corporate income tax - removed 50% tax allowance related to employment of disabled employees		**0,2**
Personal income tax - technical modifications		**6,6**
of which	50% withholding tax on building savings	4,5
Social security contributions		**12,9**
of which	Retaining 2010 ceiling of SSC assess. base	3,1
	Retaining 2010 SSC rate	9,8
Total		**19,9**

Impact of expenditure-side measures on deficit reduction in 2011 (CKZ bill.)

Measure	Balance change
Reduction in public sector wages (excl. teachers)	**13,3**
Social expenditures	**12,6**
Reduction in non-mandatory current and capital expenditures	**13,3**
Expenditures of general treasury	**11,1**
Expenditures of other budget chapters	**10,9**
Increase in R&D support	**-0,6**
Increase of wages in education	**-2,1**
Total	**58,5**

Table A.2.2: **Net Lending/Borrowing and Debt**

		2002	2003	2004	2005	2006	2007	2008	2009 Prel.	2010 Forecast	2011 Forecast
General government debt	*bill. CZK*	**695**	**768**	**848**	**885**	**948**	**1024**	**1105**	**1282**	**1451**	**1603**
	growth in %	18,9	10,5	10,4	4,4	7,1	8,0	7,9	16,1	13,1	10,5
	% GDP	**28,2**	**29,8**	**30,1**	**29,7**	**29,4**	**29,0**	**30,0**	**35,3**	**39,3**	**42,1**
General government balance	*bill. CZK*	**-167**	**-170**	**-83**	**-107**	**-84**	**-23**	**-99**	**-209**	**-189**	**-173**
Interest derivatives [1)]	*bill. CZK*	0,0	-0,5	-0,5	-0,2	-0,4	-0,7	-1,8	-1,2	-1,3	-1,3
EDP B.9 [2)]	*bill. CZK*	**-167**	**-171**	**-83**	**-107**	**-85**	**-24**	**-100**	**-210**	**-190**	**-174**
	% GDP	**-6,8**	**-6,6**	**-3,0**	**-3,6**	**-2,6**	**-0,7**	**-2,7**	**-5,8**	**-5,1**	**-4,6**
One-off measures	*% GDP*	**-0,1**	**-0,3**	**-0,7**	**-1,3**	**-0,2**	**-0,3**	**-0,1**	**0,3**	**0,0**	**-0,3**
Cyclical balance	*% GDP*	**-0,5**	**-0,5**	**-0,5**	**-0,2**	**0,4**	**1,1**	**0,8**	**-1,0**	**-1,0**	**-1,1**
Structural balance	*% GDP*	**-6,2**	**-5,9**	**-1,7**	**-2,1**	**-2,8**	**-1,5**	**-3,4**	**-5,1**	**-4,1**	**-3,2**
Fiscal effort	*% GDP*	**-0,6**	**0,3**	**4,1**	**-0,4**	**-0,7**	**1,3**	**-2,0**	**-1,6**	**1,0**	**0,9**
Interest expenditure	*% GDP*	**1,2**	**1,1**	**1,2**	**1,2**	**1,1**	**1,1**	**1,1**	**1,3**	**1,2**	**1,8**
Primary balance	*% GDP*	**-5,5**	**-5,5**	**-1,8**	**-2,4**	**-1,5**	**0,5**	**-1,6**	**-4,5**	**-3,9**	**-2,7**

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)] *Hedging instruments used to avoid interest rate change risk.*

[2)] *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.*

A.3 Monetary Policy and Interest Rates

Monetary policy

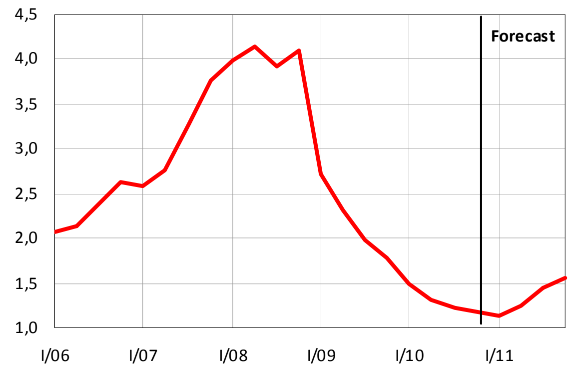
The main goal of the CNB is to attend to price stability. To secure it, the central bank makes use of **inflation-targeting** regime. By means of monetary instruments the CNB affects total inflation so that YoY increase in the CPI would not deviate from medium-term inflationary target of 2 % by more than 1 p.p. in both directions. As a primary instrument of monetary policy a limit interest rate for **2W repo operations** is used. It remained at its historic minimum of 0.75 % during the third quarter.

The CNB also monitors **interest differentials** against main world economies. Interest differential between the CR and EMU reached negative values (0.25 p.p.) in late September but short-term inter-bank interest rates of the CR still stood above the EA rates. Interest differential measured between the CR and US ranged within 0.50-0.75 p.p. in the end of the third quarter.

Interest rates

3-month **PRIBOR** rate fell to 1.2 % (*in accordance with the forecast)* in the third quarter of 2010 and in 2010 it is estimated at 1.3 % *(unchanged)*. Forecast of interest rates for 2011 was adjusted downward, which is closely connected with lower estimated economic growth in 2011, low demand-related inflationary pressures and expected later tightening of monetary conditions. Average value of PRIBOR rate is then expected at some 1.3 % (*2.0 %)* in 2011.

Graph A.3.1: **PRIBOR 3M**
in %



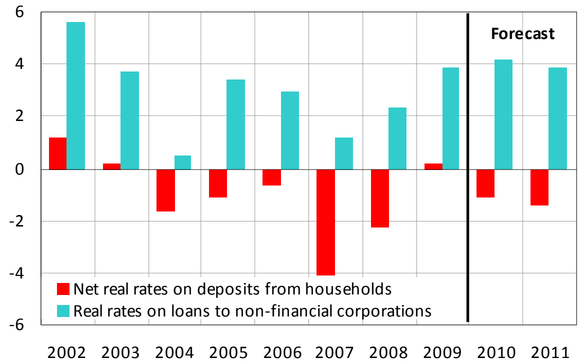
Successful issue of government bonds denominated in euros, positive outlook of rating agencies for the CR and also falling yields of first-class foreign, especially German, government bonds probably contributed to lower average yields of Czech **10-year government bonds** (*3.5 % against expected 3.6 %)* in the third quarter of 2010. Future yields should be further positively influenced by these facts. In 2010 they are expected to reach 3.7 % (*unchanged)* and in 2011 3.9 % (*4.0 %).*

Nominal **interest rates from deposits and credits** respond to changes in inter-bank rates with moderate lag and intensity. Average interest rates from household deposits therefore continued decreasing (to 1.3 %) in the second quarter with average rates from credits also decreasing to 4.1 %. Nominal interest rates from credits to non-financial businesses are expected at 4.1 % (*unchanged)* in 2010 while their moderate increase to 4.2 % (*4.4 %)* could be seen in 2011. Household deposit rates are estimated at some 1.2 % for both years (*1.1 % and 1.3 % in 2010 and 2011, respectively).*

Real economy is influenced especially by **real interest rates,** so the Forecast estimates also course of these rates. Under assumptions set for development of nominal interest rates and under expected development of CPI and deflator of final use, real interest rates from credits to non-financial businesses are estimated at 2.6 % in 2010 and at 2.3 % in 2011. Real rates from household deposits should be probably negative both in 2010 and 2011, at some –1.1 % (-*1.6 %)* in 2010 and –1.4 % (-*1.1 %)* 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.



Interest rates from new credits fell in the second quarter of 2010. Compared to the first quarter, rates from new credits to households fell more considerably (by 1.1 p.p. to 14.1 %). Major part of this decline was caused by change in structure of credits (0.7 p.p.) while cut in rates itself reflected in 0.4 p.p. Interest rates from credits to non-financial businesses fell by mere 0.1 p.p. to 4.0 %.

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

in % p.a.

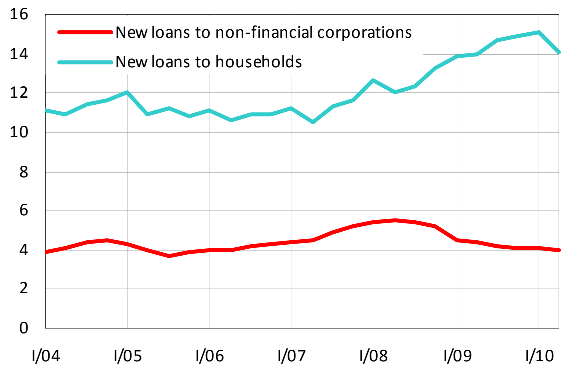


Table A.3.1: **Interest Rates** – yearly
average interest rates in per cent p.a.

	2002	2003	2004	2005	2006	2007	2008	2009	2010 *Forecast*	2011 *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	2,00	2,00	2,25	3,50	4,00	2,50	1,00	.	.
Federal funds rate *(end of year)*	1,25	1,00	2,25	4,25	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	1,3	1,3
Government bond yield to maturity (10Y)	4,94	4,12	4,75	3,51	3,78	4,28	4,55	4,67	3,7	3,9
Interest rates on loans to non-financial corpor.	5,82	4,57	4,51	4,27	4,29	4,85	5,59	4,58	4,1	4,2
Interest rates on deposits from households	2,06	1,40	1,33	1,24	1,22	1,29	1,54	1,37	1,2	1,2
Real rates on loans to non-financial corporations [1]	5,65	3,72	0,47	3,38	2,95	1,22	2,33	3,89	2,6	2,3
Net real rates on deposits										
from households with agreed maturity [2]	1,19	0,18	-1,64	-1,13	-0,63	-4,10	-2,26	0,17	-1,1	-1,4

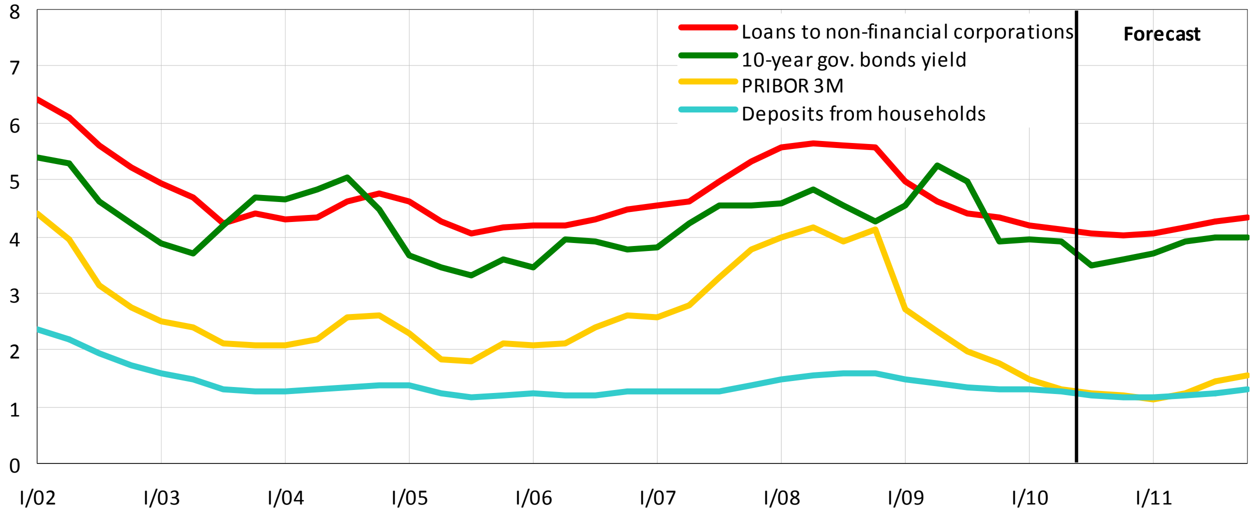
[1] *Deflated by domestic demand deflator.*
[2] *Net of 15 % income tax, deflated by CPI.*

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

	2009				2010			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3 *Estimate*	Q4 *Forecast*
Repo 2W rate CNB *(end of period)*	1,75	1,50	1,25	1,00	1,00	0,75	0,75	.
Main refinancing rate ECB *(end of period)*	1,50	1,00	1,00	1,00	1,00	1,00	1,00	.
Federal funds rate *(end of period)*	0,25	0,25	0,25	0,25	0,25	0,25	0,25	.
PRIBOR 3M	2,71	2,32	1,97	1,77	1,50	1,30	1,23	1,2
Long term interest rates								
– 10-year government bonds yield to mat.	4,55	5,24	4,99	3,91	3,94	3,90	3,48	3,6
Interest rates on loans to non-financial corporations	4,99	4,63	4,40	4,32	4,19	4,11	4,1	4,0
Interest rates on deposits from households	1,47	1,40	1,33	1,30	1,30	1,27	1,2	1,2

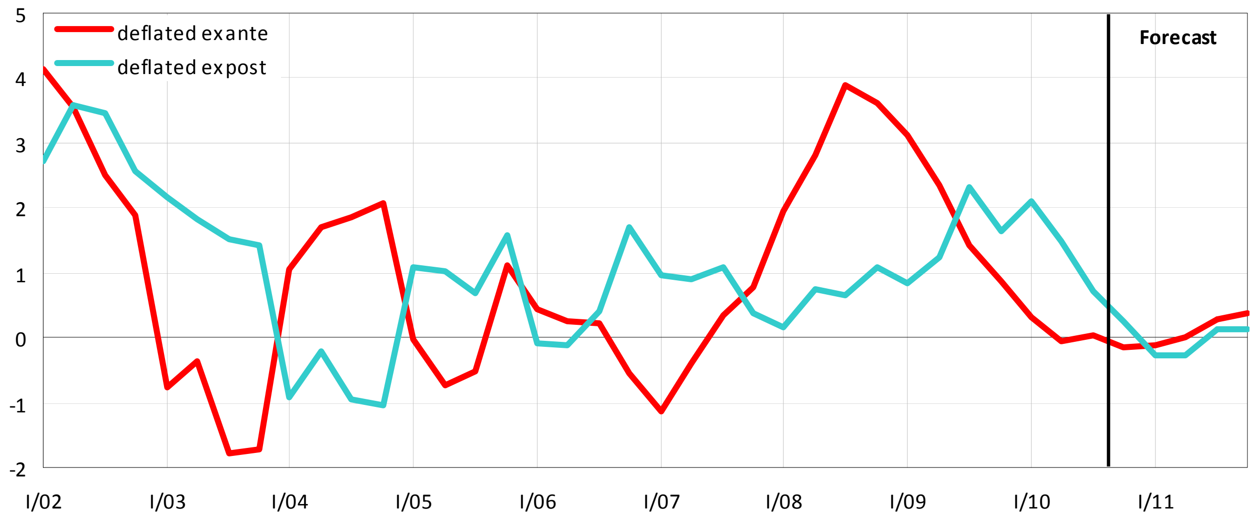
Graph A.3.4: **Interest Rates**

in % p.a.



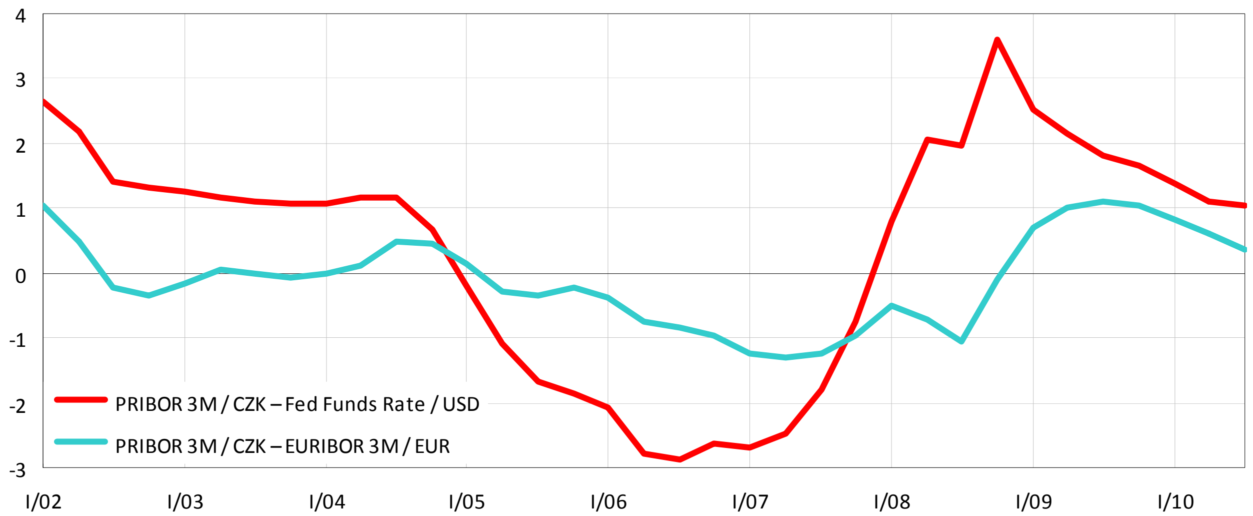
Graph A.3.5: **Real PRIBOR 1Y**

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

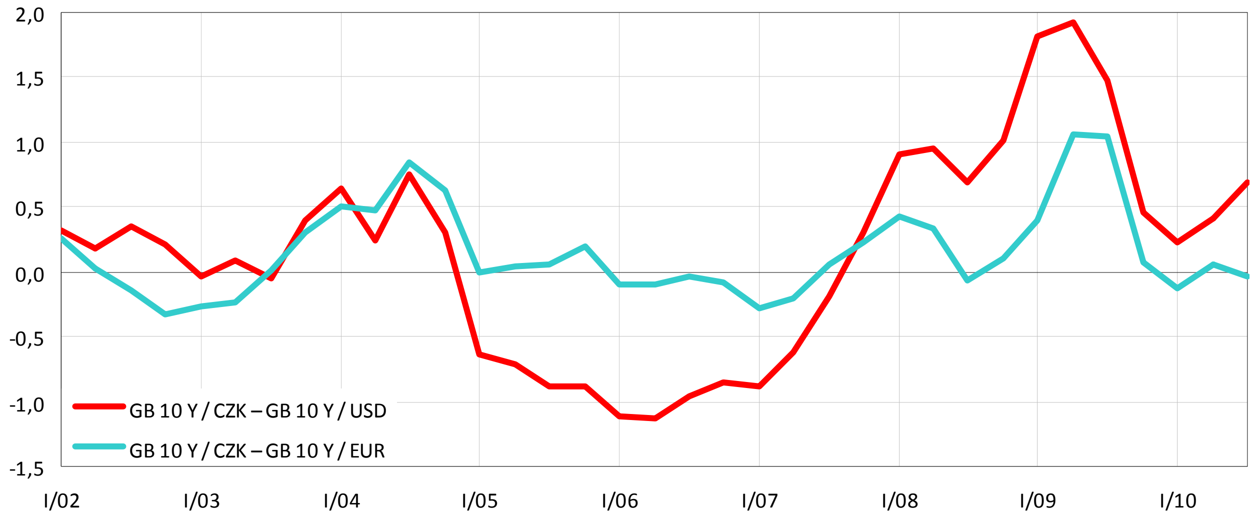


Graph A.3.6: **Short - Term Interest Rate Spread**

in percentage points



Graph A.3.7: **Long - Term Interest Rate Spread**
government bonds, in percentage points



A.4 Exchange Rates

CZK/EUR exchange rate has shown tendency to gradual appreciation since the beginning of 2010. Average value of the exchange rate was CZK/EUR 24.91 in the third quarter of 2010, roughly in accordance with trend value. In September the exchange rate reached CZK/EUR 24.65 on average and by the deadline for the Forecast's data sources (11 October 2010) it stood at CZK/EUR 24.54. At present the exchange rate is thus slightly stronger compared with the trend value and its further inappropriate strengthening under conditions of reduced foreign demand would already increase risk for future development of trade balance.

Adopted scenario assumes that the deviation is temporary only and the exchange rate will return to trend trajectory over the fourth quarter of 2010. In the following period till the end of 2011, tendency to moderate only nominal and real appreciation is expected to maintain.

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

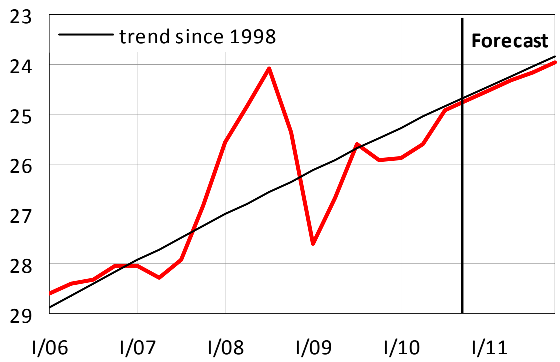


Table A.4.1: **Exchange Rates – yearly**

			2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
									Forecast	*Forecast*	*Outlook*	*Outlook*
Nominal exchange rates:												
CZK / EUR		*average*	**31,90**	**29,78**	**28,34**	**27,76**	**24,94**	**26,45**	**25,3**	**24,2**	**23,5**	**22,8**
	appreciation	*growth in %*	-0,2	7,1	5,1	2,1	11,3	-5,7	4,6	4,3	3,2	3,2
CZK / USD		*average*	**25,70**	**23,95**	**22,61**	**20,31**	**17,03**	**19,06**	**19,3**	**18,6**	**18,1**	**17,5**
	appreciation	*growth in %*	9,8	7,3	5,9	11,3	19,2	-10,6	-1,2	3,5	3,2	3,2
NEER		*average of 2005=100*	**94,1**	**100,0**	**105,1**	**107,9**	**120,4**	**116,2**	**119**	**124**	**128**	**132**
	appreciation	*growth in %*	0,7	6,2	5,1	2,6	11,6	-3,5	2,7	4,1	3,2	3,2
Real exchange rate to EA12[1)]		*average of 2005=100*	**95,4**	**100,0**	**104,3**	**107,5**	**119,4**	**114,4**	**118**	**123**	**127**	**131**
	appreciation	*growth in %*	2,4	4,8	4,3	3,1	11,1	-4,2	3,5	3,8	3,5	3,0

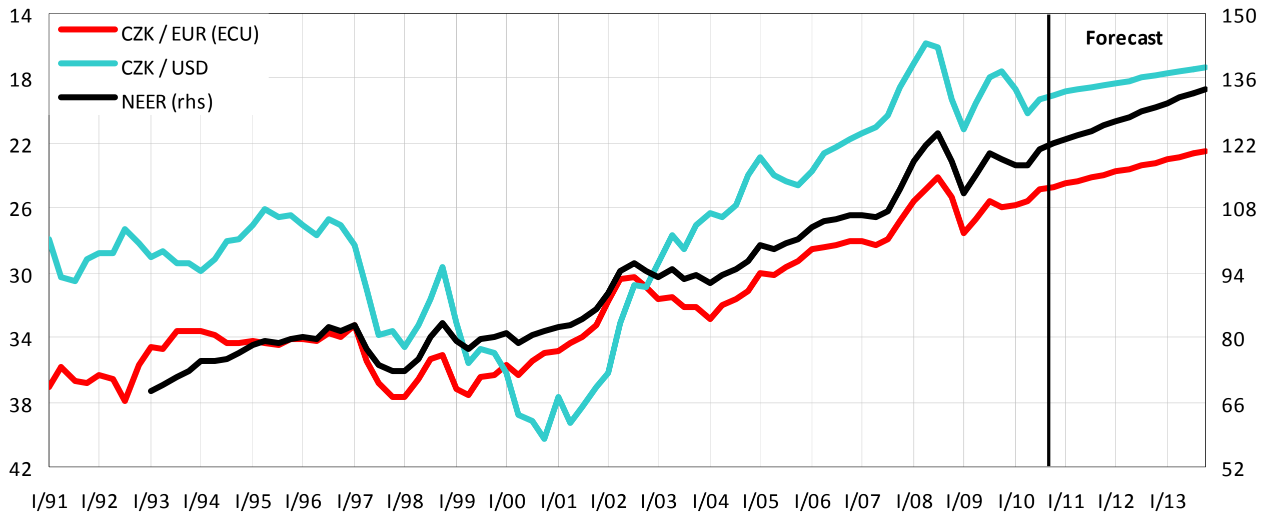
[1)] *Deflated by GDP deflators.*

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

			2009				2010			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
									Estimate	*Forecast*
Nominal exchange rates:										
CZK / EUR			**27,60**	**26,68**	**25,60**	**25,91**	**25,87**	**25,59**	**24,91**	**24,7**
	appreciation	*growth in %*	-7,4	-6,9	-5,9	-2,2	6,7	4,3	2,7	4,8
CZK / USD			**21,21**	**19,59**	**17,90**	**17,53**	**18,71**	**20,16**	**19,30**	**19,0**
	appreciation	*growth in %*	-19,5	-18,9	-10,4	9,8	13,3	-2,8	-7,3	-7,8
NEER		*average of 2005=100*	**111,1**	**115,1**	**119,8**	**118,5**	**117,3**	**117,3**	**121**	**122**
	appreciation	*growth in %*	-5,7	-5,2	-3,6	0,4	5,5	1,9	0,8	2,7
Real exchange rate to EA12		*average of 2005=100*	**110,2**	**113,4**	**117,2**	**117,1**	**115,2**	**116,1**	**120**	**123**
	appreciation	*growth in %*	-5,7	-4,9	-4,6	-1,3	4,6	2,3	2,2	4,6

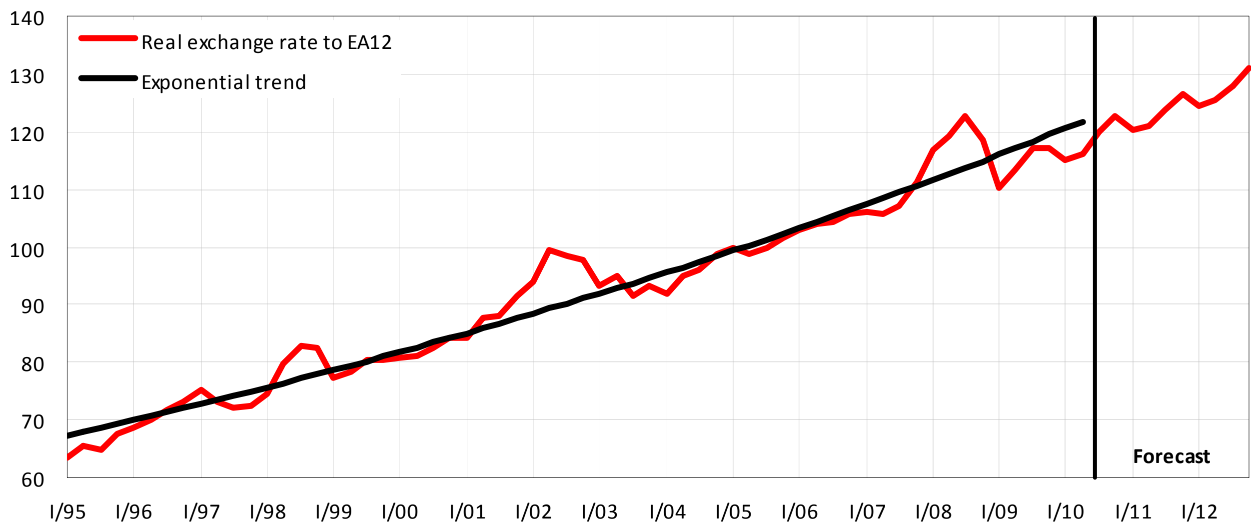
Graph A.4.2: **Nominal Exchange Rates**

quarterly average, average 2005 = 100 (rhs)

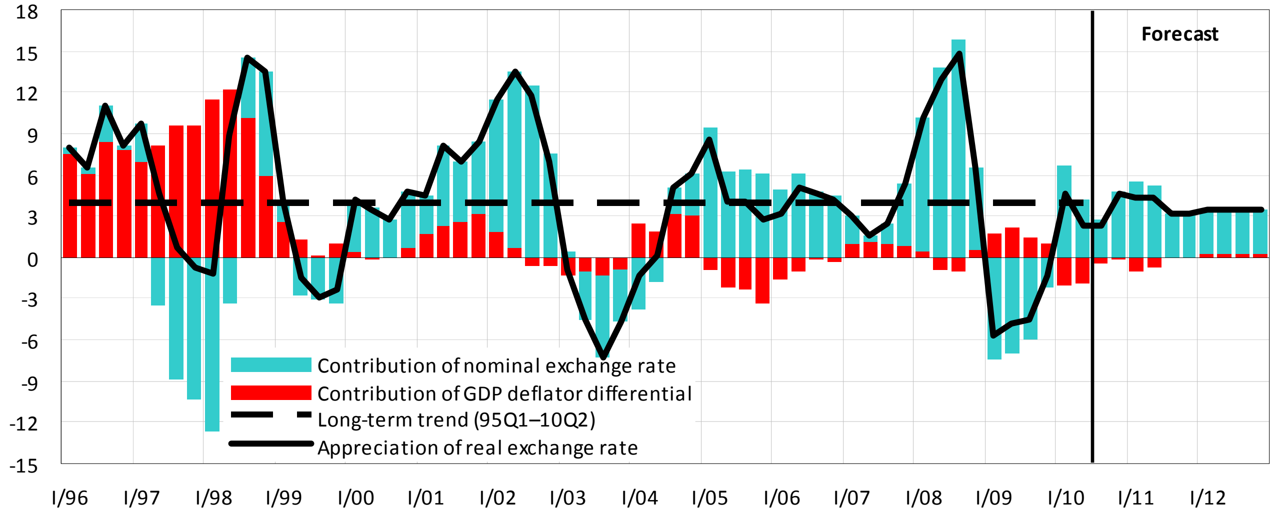


Graph A.4.3: **Real Exchange Rate to EA12**

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

On 4 August 2010 the Czech government adopted its policy statement, setting following key tasks:

- **To reform public finance, stopping thus growth of public debt** (in 2013 at the latest the general government deficit should be maximally 3 % of GDP, in 2016 – under assumption of economic growth – general government should be balanced);
- **To reform pension system** so that its long-term sustainability could be secured (to supply the basic PAYG system with possibility of private saving; to cover part of transformation costs, all privatization receipts and dividends of government-controlled firms will be tied on special account of state financial assets);
- **To modernize healthcare system and increase its effectiveness** (preservation and modernization of public health insurance, increase of finance by means of inflow of private sources);
- **To reform tertiary education system** (increase of system diversification and responsibility of schools for results in science and research, education and schools' economic performance, launching of graduates' participation in covering of study-related costs together with a system of financial assistance to students);
- **To improve quality and efficiency of public administration** (completion of „basic registers of public administration" project and further development of information system of data boxes and public administration contact points - Czech POINT);
- **To increase transparency in public procurement and reduce space for corruption in public sector** (introduction of obligatory assessment of regulation impacts (RIA) and assessment of corruption risks (CIA), submitting of complex legislation for lobbing).

Business environment

As of 1 August 2010 a law came into effect that should help **reduce administrative burden of entrepreneurs.** Its aim is to simplify and make the existing legislation clearer and improve entrepreneurs' conditions to conduct their business activities. Changes cover especially consumer protection, entering the business, and technical legislation.

Taxation

On 22 September the Czech government approved an amendment to the Act on **Income Taxation** bringing reduction of the basic allowance per taxpayer by CZK 100 a month.

To implement EU directives, the government approved an amendment to the Act on **VAT** and amendment to the Act on **Excises**. The first amendment introduces changes regarding guarantees and regime of delegating tax duty to recipient of payment. The second amendment proposes increases in rates of excises on tobacco products in two steps from 1 January 2012 and 1 January 2014.

Financial markets

Changes in conditions of **construction saving** were approved by the government on 22 September. The amendment introduces a special tax on income amounting to 50 % from provided state benefit that would be credited to participants' accounts in 2011. From 2012 maximum size of credited state benefit will be reduced to CZK 2000.

Energy sector

On 25 August the government approved **National Action Plan of the CR for Energy from Renewable Sources.** The plan proposes a target of 13.5 % for share of energy from renewable sources in gross final consumption of energy and a target of 10.8 % for share for energy from renewable sources in gross final consumption in transport.

Labour market

In connection with consolidation measures of the state budget, **ceilings for social and healthcare security contributions** were increased for 2010 to 72 multiple of average monthly wage. This state should be preserved for social insurance in 2011 as well but for maximum assessment base for healthcare security contributions period of validity is not restricted. Contrary to the existing legislation where rate of employer-paid social contribution should have fallen by 0.9 % from the beginning of 2011, this rate will stay at the current 25 % level. At the same time, employer's option to deduct half of wage compensation for the period of sick leave from contributions will be abolished. On the other hand, for employers with 25 employees at most and enrolled in special system of insurance premium payment with a rate higher by 1 p.p., refund of half the wage compensation will be introduced.

As regards **health insurance,** in 2009 payment of sickness benefits was abolished for the first three calendar days and payment of the benefits by the employer was introduced for the fourth through fourteenth day. Moreover, this measure is extended up to 21st calendar day of the sickness for years 2011 to 2013. At the same time, amount of sickness benefit will be further determined only from 60 % of daily assessment base. As regards self-employed people, abuse of maternal benefits will be also limited by tighter interconnection of pension and healthcare insurance.

Measures of the **first stage of pension reform** came into effect in 2010, extending gradually the statutory retirement age 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 paying contributions to 35 years and excludes time of study from the category of alternative periods of insurance. Among structural measures, also **strengthening of motivation of older persons** to 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. The government newly approved taxation of incomes of working pensioners, should they surpass triple the average wage.

As regards new **benefit measures,** the government approved abolition of social bonus. Maternity grant will be given to primiparas in low-income households only and summary size of paternal benefit will be the same in four-year variant as when the benefit is drawn for two years.

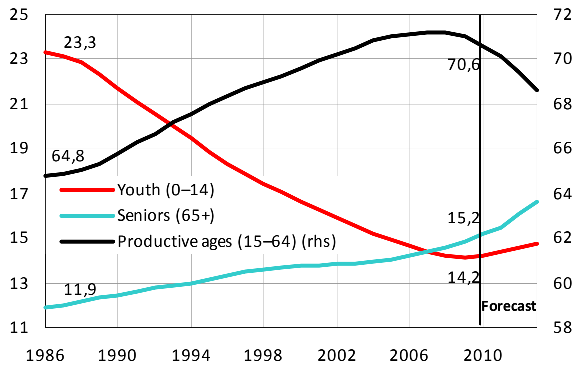
Unemployment benefit now excludes concurrence with exercise of non-colliding employment and those, who terminated their contract without serious cause themselves or by agreement, should draw only 45 % of assessment base. Besides, the benefit will be provided only after the period, corresponding to the amount of severance pay or gratuity, expires. Only then the period of support starts passing with appropriate amount of benefit. When the job seeker decides to start self-employment, he can receive the so-called bridging contribution from employment agency, aimed to cover operational costs for five months up to one fourth of average wage.

A.6 Demographic Trends

Under preliminary data, population of the CR grew by 8 thousand to 10.516 million people in the first half of 2010. Natural increase of population reached 6 thousand people, which is 2 thousand more compared with the same period of 2009 and in accordance with high variant of CZSO 2009 Demographic Projection.

On the other hand, positive balance of migration with regard to falling demand for foreign workforce reached mere 3 thousand persons compared with 20 thousand in the first half of 2009. It is nearly sure that assumption of 2010 migration balance of 40 thousand from high variant or 25 thousand from mean variant will not be fulfilled. Obviously thus (at least temporarily) period of demographic structure improvement by means of immigration of working-age foreigners has come to an end.

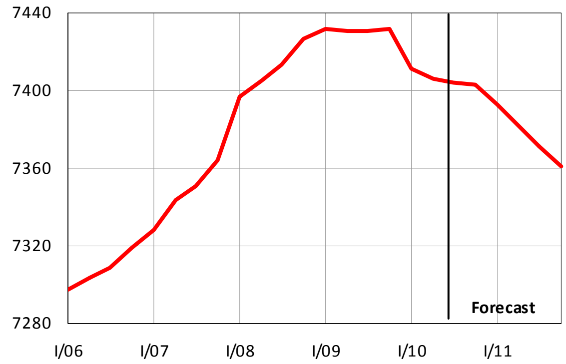
Graph A.6.1: **Groups by Age**
structure in per cent



Nevertheless 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 (15–64 years), which however obviously reached its maximum at the turn of 2008 and 2009.

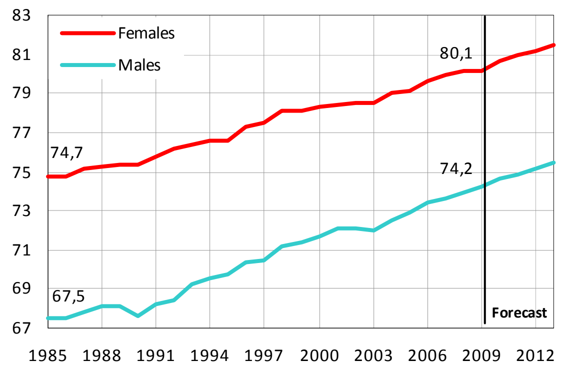
In our calculations, however, moderate decline in the number of working-age population should be more than compensated by means of effects within the age structure of the workforce when structural shares of age groups with high or growing participation increase.

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



It will be further supported by enacted extension of retirement age. Further rise in labour market flexibility should help create situation when the Czech economy will not suffer from lack of available workforce.

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



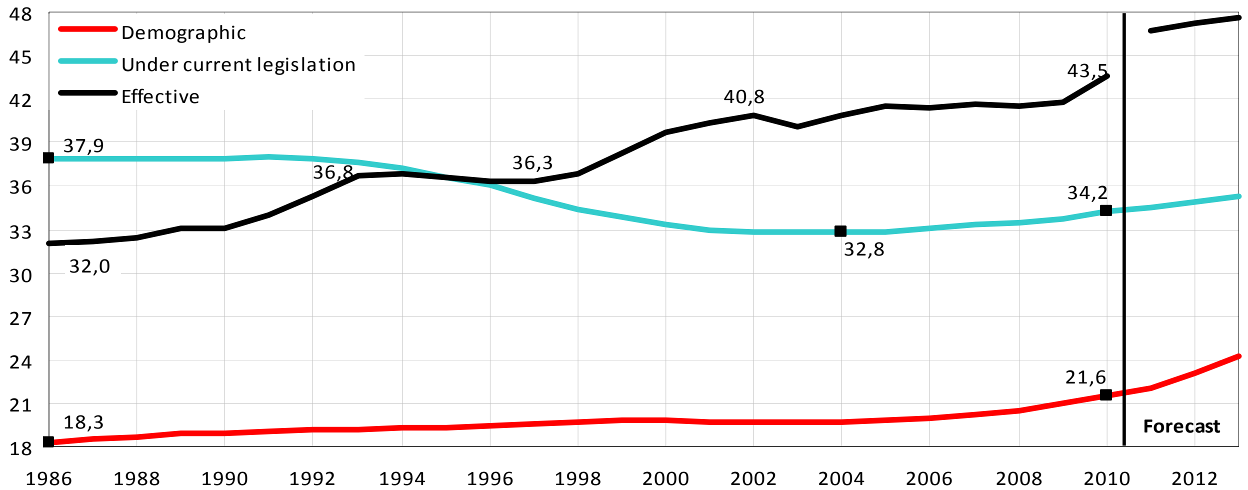
On the other hand, progressing **population ageing process** has been confirmed. For the first time in Czech history, number of people younger than 15 years was lower than number of people in the age category 65+ in 2007. In future the number and share of seniors in the population will grow due to demographic structure and further continuation of intensive process of lengthening of average life expectancy. Structural share of inhabitants older than 64 years in total population, which in early 2009 amounted to less than 15 %, should rise to nearly 20 % by 2020.

Table A.6.1: **Demography**
in thousands of persons

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
						Estimate	*Forecast*	*Forecast*	*Outlook*	*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 %	0,1	0,1	0,3	0,4	0,9	0,8	0,4	0,5	0,5	0,5
Age structure (January 1):										
(0–14)	1 554	1 527	1 501	1 480	1 477	1 480	1 494	1 516	1 545	1 574
growth in %	-2,2	-1,8	-1,7	-1,5	-0,2	0,2	1,0	1,5	1,9	1,8
(15–64)	7 234	7 259	7 293	7 325	7 391	7 431	7 414	7 407	7 365	7 319
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	1 513	1 556	1 599	1 636	1 702	1 772
growth in %	0,4	0,8	1,5	1,8	2,1	2,9	2,7	2,3	4,0	4,1
Old-age pensioners (Jan 1)[1)]	1 933	1 965	1 985	2 024	2 061	2 102	2 145	2 292	2 330	2 367
growth in %	0,6	1,7	1,0	2,0	1,8	2,0	2,0	.	1,6	1,6
Old-age dependency ratios *(Jan 1 in %)*:										
Demographic [2)]	19,7	19,8	20,0	20,2	20,5	20,9	21,6	22,1	23,1	24,2
Under current legislation [3)]	32,8	32,8	33,0	33,3	33,4	33,7	34,2	34,5	34,8	35,2
Effective [4)]	40,9	41,5	41,3	41,6	41,5	41,8	43,5	46,7	47,2	47,7
Fertility rate	1,226	1,282	1,328	1,438	1,497	1,492	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
Immigration	53	60	68	104	78	40	.	.	.	.
Emigration	35	24	33	21	6	12	.	.	.	.

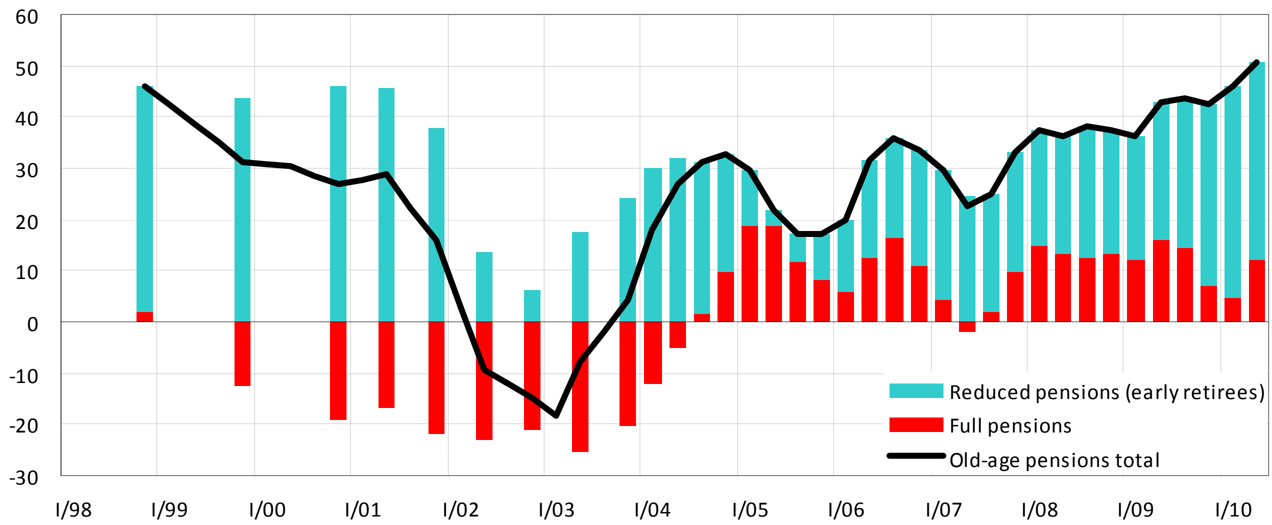
[1)] *In 2010 disability pensions of pensioners over 64 were transferred into old-age pensions.*
[2)] *Demographic dependency: ratio of people in senior ages (60 and more) to people in productive ages (20 - 59).*
[3)] *Dependency under current legislation: ratio of people above the official retirement age to the people over 19 below the official retirement age.*
[4)] *Effective dependency: ratio of old-age pensioners to working people.*

Graph A.6.4: **Dependency Ratios**
in %



Note: See Table A.6.1 for definitions and a reason to break the time series between 2010 and 2011.

Graph A.6.5: **Old–Age Pensioners**
absolute increase over a year in thousands of persons



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

B Business Cycle

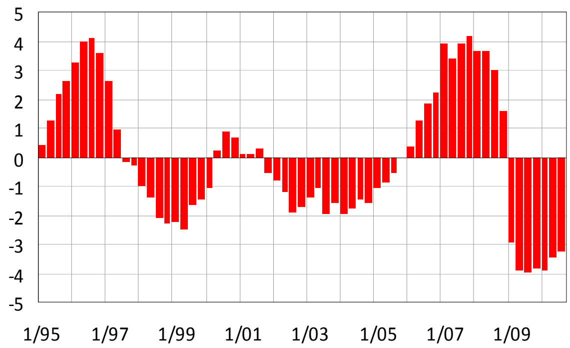
B.1 Position within the Business Cycle

Potential product (PP), specified on the basis of calculation by means of Cobb-Douglas production function, indicates the level of GDP achieved with average use of production factors. Growth of PP 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 PP. The concepts of potential product and output gap are used to analyze economic development and to calculate the structural balance of the general government.

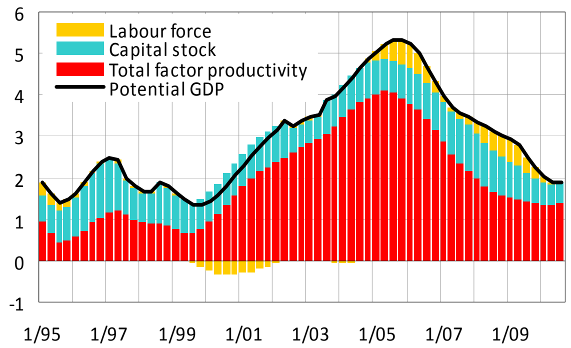
Under current conditions, however, when steep changes in the level of economic output have occurred, it is very difficult to distinguish the influence of deepening of the negative output gap from slowdown in PP growth. Results of these calculations thus display high volatility and should be treated very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

Sources of tables and graphs: CZSO, CNB and own calculations.

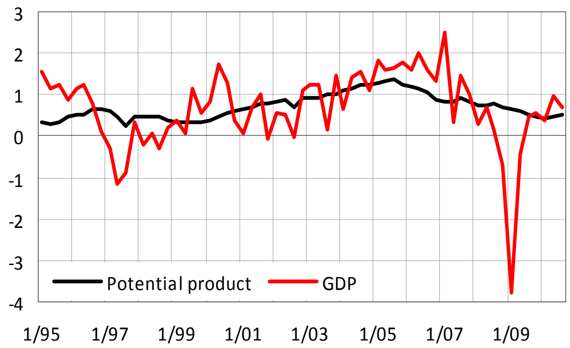
Graph B.1.1.: **Output Gap**
in % of potential GDP



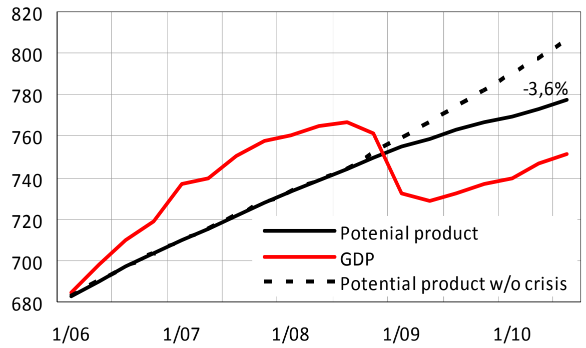
Graph B.1.2: **Potential Product Growth**
in %, contributions in percentage points



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

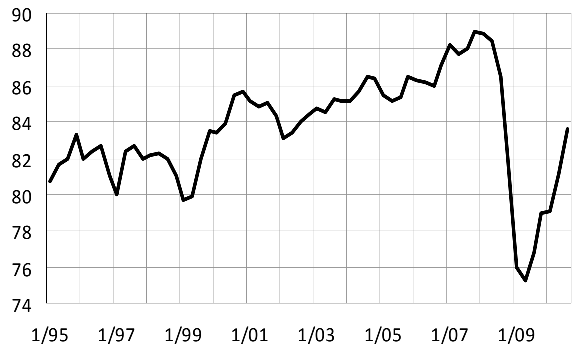


Graph B.1.4: **Levels of Potential Product and GDP**
in bill. CZK of 2000



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

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



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

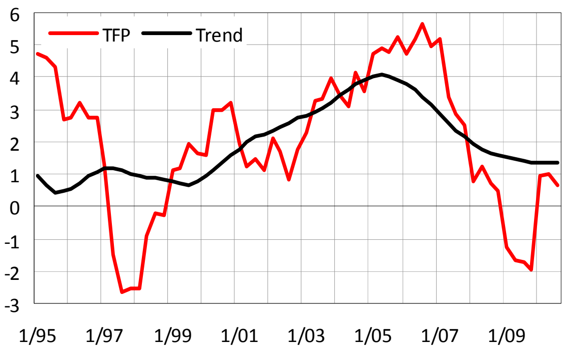


Table B.1: **Output Gap and Potential Product**

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

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

Economic recession from the turn of 2008 and 2009 gave rise to a deeply negative **output gap.** According to current calculations, it stood at some –4 % from end of recession in the second quarter of 2009 to the first quarter of 2010, which indicated the lowest utilisation of economic potential in the post-transformation period. In the second quarter of 2010 intensity of economic recovery (0.9 % QoQ) considerably exceeded growth of potential product and negative output gap started closing at some 3.5 %. Similar development can be expected also as regards the third quarter of 2010.

Closing of negative output gap reflected by steep rise in capacity utilisation in industry to 83.4 % in the third quarter of 2010, which is close to long-term average of 84 %. Unemployment rate (LFS) also fell strongly to 7.1 % in the second quarter (long-term average is 5.6 %).

Growth of **potential product** fell probably to 2.6 % YoY over 2009 and obviously reached only 1.9 % in the first through third quarter of 2010. Gradual stabilization and subsequent acceleration of pace of PP growth could be helped considerably by means of stopping of slowdown in growth of trend **total factor productivity** (TPF).

TFP is the PP component that was hit most. Economic problems led to decline in TFP by 1.8 % in 2009. In the first quarter of 2010, however, a radical turn occurred with TFP growing by 1.0 % QoQ, which considerably exceeded its trend growth. Nevertheless, this promising development was not confirmed in the second quarter. The mentioned dynamic growth by 0.9 % QoQ, was achieved with growth of employment by 0.6 % and used capacities by 1.3 %, resulting in repeated stagnation of TFP. Economic reforms under preparation, especially higher flexibility of labour market, should improve the situation substantially.

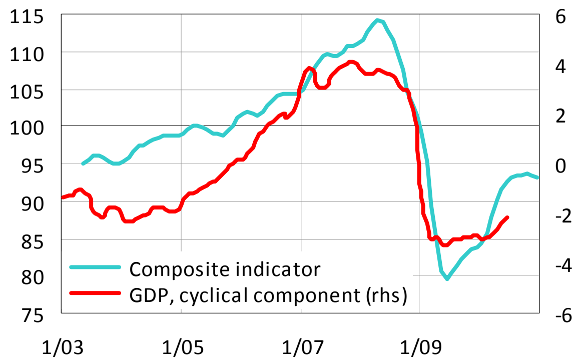
Deep dropout in investment activity led to lowering of contribution of **capital stock** from 1.1 p.p. in the fourth quarter of 2007 to expected 0.5 p.p. in the third quarter of 2010. **Supply of labour,** measured as ratio of labour force to the number of population aged 15-64, which in 2009 paradoxically accelerated its growth, stagnated more or less in YoY terms after withdrawal of stimulation measures in the beginning of 2010. Graph B.1.4 illustrates that recession and coping with its consequences have resulted in loss of some 3.6 % in PP level.

Future development of PP will depend on the speed of the economic recovery. To close negative output gap and to re-accelerate potential growth, the economy will have to reach constantly higher paces of GDP growth compared to PP.

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 October 2010 the indicator is compiled from those business cycle indicators that show a high level of correlation with average lead of three 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)



With regard to revision of input time series due to transition to new Classification of Economic Activities (CZ-NACE), data of input times series are now available only from the beginning of 2003. This fact led to requirement to reconstruct the previous composite indicator.

The previous composite indicator was construed with 6-month lead. Relative brevity of time series and related very limited possibilities to test their ability resulted in construction of new composite indicator with 3-month lead. Leading indicator comprises indicators from industry, construction, trade and services in such a way so that percent representation of single sectors corresponded approximately with their shares in gross added value.

For the third quarter of 2010 composite indicator signals a very moderate acceleration of economic activity and for the fourth quarter its stagnation. Indicated stagnation is from the view of the indicator's structure caused mainly by sectors of construction and services. Consequently, relative cyclical component of GDP should stay at approximately the same level in the second half of 2010.

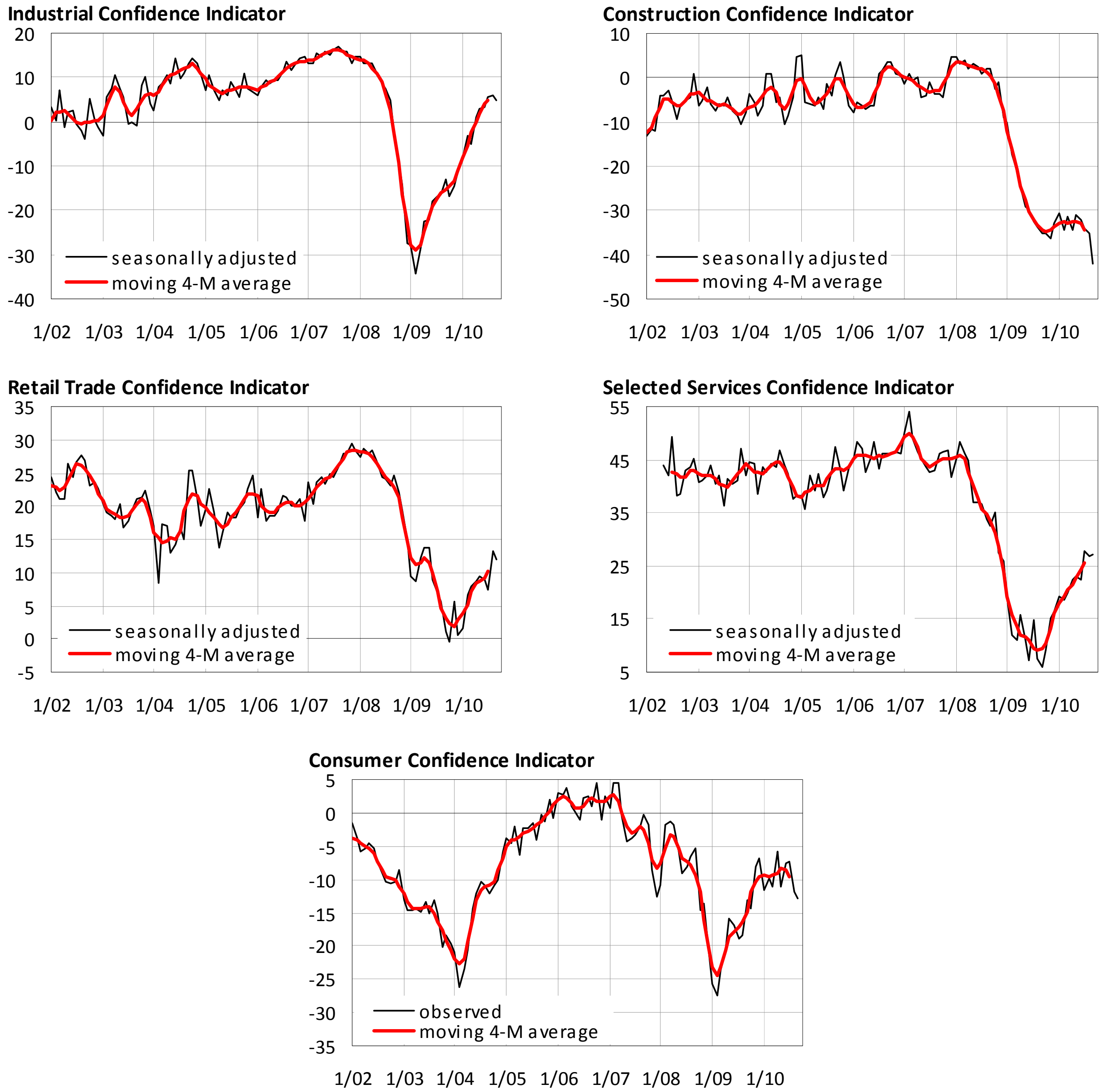
B.3 Individual Business Cycle Indicators

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 data 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.[2]

Aggregate indicator of confidence is presented as weighted average of seasonally adjusted indicators of confidence in industry, construction, trade, selected 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**



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

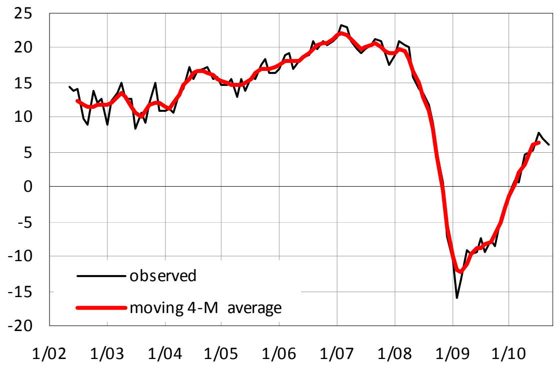
In the third quarter of 2010 **industrial businesses** prospered and so respondents continued to assess their performance favourably. Assessment of both economic situation and total and external demand improved. In outlook for next three months, assessment of production activity increased slightly and after a longer period also assessment of employment. In three-month horizon partial improvement of economic situation of businesses is expected but in six-month horizon respondents are more cautious.

Despite short-term indications of improvement, **construction** failed to stabilize so far. Respondents thus cut their expectations of development of construction activity and employment in the fourth-quarter outlook. Also no changes occurred in assessment of economic situation development where no major improvement can be expected.

Businesses in **trade** improved slightly their assessment of the current economic situation. Also as regards the outlook, especially the six-month one, respondents are more optimistic. In selected s**ervices** the situation is stable, assessment of expected demand and economic situation increased slightly.

Consumer confidence fell in September 2010 survey but still remains relatively stable. For the next twelve months consumers allow for worsening of total economic situation as well as of their financial situation.

Graph B.3.2: **Aggregate Confidence Indicator**



On the basis of development assessment by respondents of economic entities it can be assumed that QoQ growth in the third and fourth quarters will be weaker than in the second quarter. Further development of demand, especially abroad, is seen as risk.

C Forecast of Macroeconomic Indicators

C.1 Economic Output

The Czech economy's recovery continues well with growth of output accelerating further. Restored dynamics of exports has positive impacts on domestic demand and household consumption develops well.

In the fourth quarter of 2008 the Czech economy 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 4.9 % during this period. In the third quarter of 2009 a turnaround was seen. Stabilization of economies of our main trading partners as well as government's pro-growth measures started manifesting themselves. In the second quarter of 2010 QoQ growth of GDP accelerated to 0.9 % (*0.4 %*), which meant YoY growth of real GDP by 3.0 %[3] *(2.0 %)*.

Also during the third quarter of 2010 the Czech economy's recovery obviously continued. QoQ growth is estimated at 0.7 % (*0.4 %),* which means YoY growth by 2.4 % *(1.7 %).*

Improved external conditions should reflect in ongoing economic growth. Forecast of GDP growth for 2010 is 2.2 % (*1.6 %). In* 2011 austerity government policy should reflect in moderate slowdown of economic growth to 2.0 % (*2.3 %).*

Due to worsening of term of trade, **real gross domestic income (RGDI),** reflecting income situation of the Czech economy, grew more slowly than GDP. In the second quarter of 2010 it grew by 1.4 % (*0.1 %).* In 2010 real income could increase by 1.1 % (*0.6 %).* Income situation of the Czech economic entities thus improves more slowly than growth of economic output. In 2011 RGDI should grow by 1.7 % (*2.1 %).*

Real dynamics reflects also in development of **nominal GDP,** the key variable for fiscal forecasts. In the second quarter of 2010 YoY growth by 1.7 % (*0.7 %)* was recorded. For 2010 growth by 1.7 % (*1.4 %)* and for 2011 by 3.4 % (*3.7 %)* is expected. Aggregate value of GDP should reach CZK 3 812bn, which is nearly the same value as in the July Forecast *(CZK 3 814bn).*

As regards **income structure of GDP,** stagnation of the business sector profitability is expected. In the second quarter of 2010 gross operational surplus increased by 1.5 % (*decline by 0.3 %)*, YoY. For 2011 growth by 3.2 % (*3.5 %)* can be assumed i.e. with dynamics below the nominal GDP level. Gross operational surplus should reach CZK 1 768bn (*CZK 1 769bn).*

Forecasts are still related with high rate of uncertainty ensuing especially from external environment. Risks are deviated more like downward. Impacts of data revisions on past development of the economy can be also relevant.

Expenditures on GDP

QoQ decline in household expenditures lagged behind contraction of aggregate economic output. Similarly, start of household consumption recovery lagged behind GDP by two quarters. In the second quarter of 2010 household consumption grew by 0.6 % QoQ. It means that YoY growth of **real household expenditures on final consumption** reached 1.1 % (*decline by 0.5 %)* in the second quarter of 2010. For 2010 household consumption is expected to grow 1.5 % (*decline by 0.5 %).*

Announced cut in public-sector wage bill should have its considerable effect in 2011. Dynamics of household consumption growth should stay at some 1.5 % (*growth by 2.0 %)* in 2011. In nominal terms household consumption should amount to CZK 1 954bn, a moderate increase compared with CZK 1 936bn from the July Forecast.

Government expenditures on final consumption rose by 0.8 % (*decline by 2.7 %)* in the second quarter of 2010.

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. For the following years consumption should reflect consolidation strategy approved by the government that is to ensure fulfilment of the Maastricht criterion for public finance deficit in 2013.

In 2010 real government consumption is assumed to grow by 0.2 % (*decline by 1.8 %).* In 2011 it should fall by 4.5 % (*decline by 0.9 %).*

Volume of **gross fixed capital formation** fell by 4.3 % (*decline by 4.7 %)* in the second quarter of 2010, YoY.

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

Purchases of transport vehicles fell by 2.7 %, investments in other constructions decreased by 2.2 % and in other machines by as much as 13.9 %. On the contrary, construction investments in housing rose by 6.4 %.

In the current uncertain situation it is necessary to take into account that many investment plans were reconsidered or postponed. Also capacities, which profited from cheap workforce, can be expected gradually to move elsewhere. Willingness of foreign investors to make new investments and reinvest profits from their business operations in the CR will depend on their situation in their home countries.

On the other hand, investment dropout could be mitigated by infrastructure investment with contributions from EU funds. Till the end of 2010, boom of solar power stations should have its effect. Contribution of these investments to GDP growth is compensated by corresponding growth of imports of components for these power stations.

For 2010 further decrease in fixed capital formation by 3.0 % (*decline by 4.3 %)* is expected. In 2011 growth dynamics should restore at some 1.3 % (*2.5 %).*

Contribution of **change in inventories** to YoY growth of GDP on seasonally adjusted data reaching 2.3 p.p. in the second quarter of 2010 can be explained only partially by economic recovery.

Contribution of **foreign trade** (FT) to YoY growth of GDP on seasonally adjusted data reached 0.4 p.p. in the second quarter of 2010.

External balance should be positively influenced in 2010 by ongoing recovery in partner countries while domestic demand acceleration has opposite effects. Growth of export volume by 13.3 % (*10.2 %)* should secure positive FT contribution of 0.7 p.p. (*1.9 p.p.)* despite massive imports of solar-power stations components. In 2011 FT contribution at some 1.5 p.p. (*0.6 p.p.)* is expected.

C.2 Prices of Goods and Services

Consumer prices

September YoY growth of consumer prices was 2.0 % (*2.1 %).* Contribution of administrative measures (1.6 p.p.) was the main source of price growth, which still reflected impacts of government package to consolidate general government, valid from this January, and also growth of regulated prices. E.g. regulated rents contributed with 0.3 p.p., heat with 0.1 p.p., on the contrary electricity with –0.1 p.p. In July price of gas increased by 4.4 % (contribution of 0.1 p.p.). Market movement of prices turned positive after 19 months in July, staying positive also in August and September. YoY growth of consumer prices in September was formed from 90 % by price growth in section of food and soft drinks, alcoholic beverages and tobacco, and housing.

With regard to the above-mentioned it is expected that **average rate of inflation in 2010 will reach 1.5 %** (*1.6 %)* with December inflation of **2.2 % YoY** (*2.6 %).* Contribution of market movement of prices will remain positive and should accelerate slightly.

In the last quarter prices of fuels declined and YoY growth in the section of transport slowed compared with the first half of the year. Adopted assumptions regarding dollar oil prices and CZK/USD exchange rate do not lay ground to major inflationary risks.

As regards food prices, latest Macroeconomic Forecasts' assumptions on positive contributions to YoY inflation from mid-year were confirmed. Taking into account world-market development of food commodity prices and agriculture producer prices, future movements of food prices represent a substantial inflationary risk. The forecast is based on an assumption of food price increase by 2 % in the next twelve months.

Compared with the past Forecast, major changes occurred in administrative measures that were reduced in their total for 2011. As from 1 January 2011 regulation of rents in major part of flats with hitherto regulated rent-prices will be abolished, contribution of regulated rent for 2011 was cut correspondingly to 0.1 p.p. with expected growth by 16 %. On the basis of information provided by the Ministry for Local Development it is at the same time assumed that in flats, where regulation comes to an end, rent prices will grow approx. by 21 % (contribution of 0.2 p.p.). Quantification of results of future negotiations between tenants and landlords is of course very difficult. In 2011 and 2012 no changes in VAT or environmental taxation increases are allowed for. On the contrary, estimate of electricity price growth was increased (contribution of 0.5 p.p.).

Demand-pulled inflation is not identified, which corresponds with the cyclical position in negative output gap, relatively high rate of unemployment and moderate growth of real wages. Inflation still maintains its cost-related character. Inflationary risk can be seen in secondary impacts of expected relatively high growth of electricity prices for producers.

Market inflation should be positive also for the entire year 2011. With regard to cut in estimate of administrative measures contribution it is expected that **average inflation rate should stand at some 2.2 % in 2011** *(2.5 %)* with prices increasing by **2.5 %** (*2.2 %)* YoY in December. Within the horizon of the Forecast, inflation should thus hover in the upper part of the tolerance band, set by the Czech National Bank around its inflation target.

Deflators

Aggregate price level in the economy is stable. **Gross domestic expenditure deflator**, which is a comprehensive indicator of inflation, grew by 0.3 % YoY *(0.7 %)* in the second quarter of 2010.

In 2010 increase of gross domestic expenditure deflator should reach 0.7 % (*0.9 %)* with tendency to gradual acceleration especially due to consumer inflation. In 2011 it should grow by 1.8 % (*1.8 %).*

Implicit GDP deflator fell by 1.2 % (*decline by 1.3 %)* in the second quarter of 2010. Compared to gross domestic expenditure deflator, it was pulled downward by decline of terms of trade by 2.2 % (*decline by 2.7 %).* For 2010 decline of deflator by 0.5 % (*decline by 0.2 %)* is assumed with worsening of terms of trade by 1.5 % (*decline by 1.4 %).* For 2011 growth by 1.3 % (*unchanged)* is expected.

C.3 Labour Market and Households

Employment

Under Labour Force Survey (LFS), **employment** continued falling in the second quarter of 2010, by 1.2 % YoY (*1.7 %).* Nevertheless from QoQ view, dynamic growth by 0.6 % was recorded after seasonal adjustment. It was the first QoQ rise in employment since the second quarter of 2008. It turns out that economic situation improvement has already started to manifest itself on the labour market whose cyclical development usually lags behind the course of business cycle.

Rise in the number of persons in the business segment by 5.5 % (*1.9 %),* YoY, was very intensive, in the framework of which number of the self-employed grew by 7.8 %. The question is, however, what part of new tradesmen further operates *de facto* as employees.

Supply of labour fell moderately in the second quarter, YoY. Shrinkage of employment (by 60 thousand people) was higher than growth of the unemployed (by 41 thousand people). Part of the dismissed people entitled to old-age pension opted for non-activity – relatively considerable increase in the number of pensioners was recorded under LFS as well as Czech Social Insurance Administration. **Rate of economic activity** (15-64 years) stagnated at less than 70 %, YoY, just as ratio of workforce to population of 15-64 years (71.0 %). Higher rate of economic activity given by growth of employment is allowed for only after 2010.

Number of workers in the primary sector has obviously already stabilized after long-term decline. Persons working in the tertiary sector increased noticeably at the expense of secondary sector. Dropout in employment in the secondary sector, stemming especially from dismissals in manufacturing, slowed however in the second quarter of 2010 (decrease in the first quarter was 117 thousand, in the second quarter 80 thousand).

Number of legally working foreign nationals fell by 6 % YoY in the second quarter and by 5.7 % in the third quarter, with number of third-country workers decreasing and number of EU/EES nationals stagnating or slightly growing.

With regard to above-mentioned effects, **rate of employment** (15-64 years) fell by 0.5 p.p. YoY to 64.9 % with turn for growth expected by the end of 2010.

Taking into account that development in employment lags behind the economy's recovery, decline in employment of 1.2 % (*1.4 %)* is expected in 2010. For 2011 and 2012 less than one-percent growths are expected, corresponding to rational personnel policy and gradual involvement of free capacities under moderate economic dynamics.

However, risk of the submitted Forecast is seen in the final shape of amendments to the Labour Code and other regulations effecting behaviour of single labour-market agents.

Unemployment

Registered unemployment peaked in February 2010 but then numbers of the unemployed on seasonally adjusted data recorded a considerable decline for the entire second quarter; pace of decline in the third quarter, however, moderated visibly. Faster turnover in flows continued, especially as regards higher number of job seekers placed. On the other hand, unfavourable turn in development of the long-term unemployed was confirmed with their share in the sum of registered unemployed surpassing 30 % in the second quarter and under LFS already 40 %.

Internationally comparable unemployment rate (LFS) reached 7.1 % (*7.7 %)* in the second quarter of 2010. Similarly as with the rate of registered unemployment, LFS rate of unemployment is assumed to fall in the following quarter of 2010, reaching on average 7.4 % *(7.6 %)* for the entire year with further decline to 7.2 % (*7.3 %)* in 2011 and 7.0 % in 2012. Improving structural characteristics of labour market are the main cause of more optimistic outlook in the sphere of unemployment but uncertainty regarding effect of new legislation under preparation is similar as in the case of employment.

Wages

After dropout in the first quarter, **wage bill** (NA, domestic concept) grew by 0.6 % YoY (*decline by 1.0 %)* in the second quarter. With gradual recovery of the economy, ongoing YoY growth can be expected. In 2010 wage bill is expected to grow by 0.6 % (*decline by 0.3 %),* in 2011 by 3.4 % *(3.8 %)* under wage bill cut in major part of the general government by 10 %. Wage bill, as economic base for social security contributions and substantial part of personal income tax, should reach CZK 1 292 bn (*CZK 1 288bn*)**.**

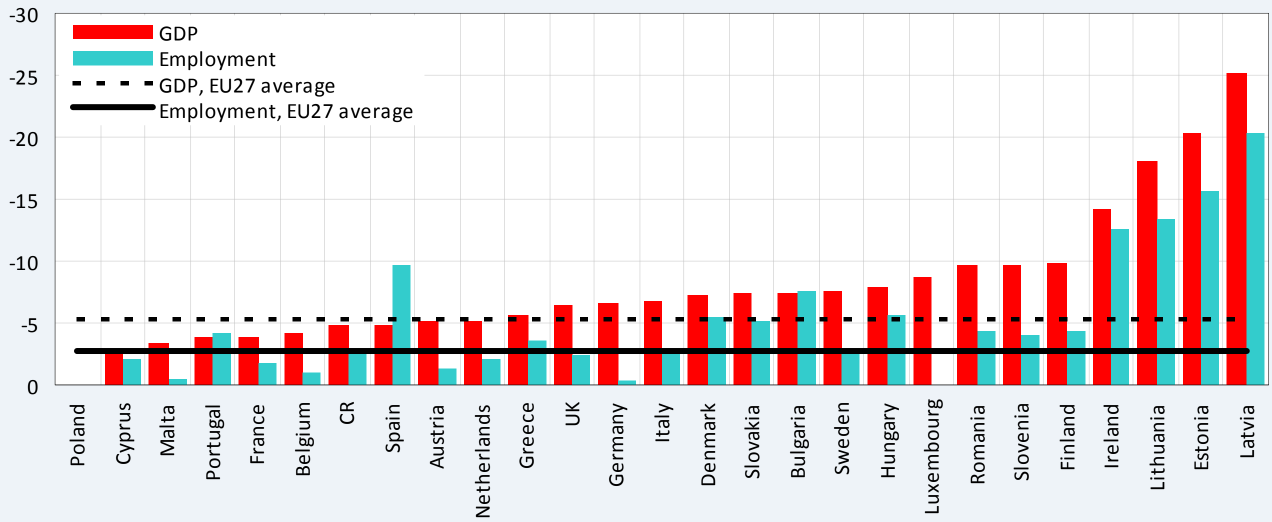
Average gross monthly wage (CZSO, company-based method, recalculated numbers) grew by 2.4 % in nominal terms. Its growth was pulled by the business sector (2.7 %) but in the non-business sector growth recorded 1.0 % only, which meant decline of the average wage in real terms. Growth of average wage was given especially by cut in the number of employees as total volume of wage funds under this concept grew 0.3 % only.

On the basis of previous-periods data, business-sector signals, and decisions and intents regarding public-sector salaries for the forthcoming period, a relatively moderate growth of average wages in the forthcoming period is expected, pulled by the business sector mainly. In 2010 thus growth of average wage should reach 2.4 % (*unchanged)* and in 2011 moderate acceleration to 2.8 % (*3.5 %)* is expected.

Box C.3.1: **Impact of Recession on Employment**

Economic recession was seen not only in GDP dropout but also in related decrease in jobs – both occupied (fall in employment) and vacancies[4]. In European comparison, Baltic economies (Latvia, Estonia and Lithuania) and Ireland suffered the biggest total loss of output (measured as ratio of real GDP level at the lowest point to GDP to the peak of previous boom). Also the aggregate shrinkage of employment correlates strongly (coefficient 0.88) with cumulated dropout of GDP. It follows from simple regression analysis of these two variables that dropout of GDP by 1 p.p. resulted on average in fall in employment by 0.7 p.p. In Latvia thus employment decreased by one fifth, in Ireland, Lithuania and Estonia by more than 12 %. Employment in Spain deviates from analysis results as it fell by nearly 10 % when GDP dropped only by half of that. The Czech Republic lost cumulated 4.9 % of GDP during recession with shrinkage of employment amounting to 2.8 %. In total, development in the CR thus corresponded to weighted EU average in both variables (see graph Box C.3.1).

Graph Box C.3.1: **Cumulated Decline of GDP and Employment** *(in % of the peak)*



Dismissal of employees was combined in some economies with reduction in the average number of worked-off hours. E.g. in Estonia at the turn of 2008/2009 number of worked-off hours per worker decreased by some 9 %, in Slovakia by 6 %, in Germany after long-term stable development by some 3 % and in the CR by 5 %. At present, hours worked on average are growing again in these countries.

Number of the unemployed in EU27 grew by less than 50 %, which corresponds to growth of rate of unemployment by more than 3 p.p. First signs of this unfavourable development could be seen on average in the second half of 2008. Number of the unemployed culminated in Q1/2010. Development in the CR was slightly above average, with low number of the unemployed nearly doubling from Q2/2008 (minimum) and rate of unemployment growing by nearly 4 p.p. in Q1/2010. Germany is a bright exception as regards unemployment, with number of the unemployed growing by mere 14 % (rate by some 1 p.p.). Estonia, Lithuania, Latvia and Spain stand at the opposite side with highest increases in the unemployed, which corresponds to GDP and employment development.

From gender point of view, recession contributed especially to higher unemployment of men than women as men were primarily employed in industries that had been hit most. In the group of the juveniles and school-leavers, YoY change in average rate of men's unemployment in all EU was nearly by 2 p.p. higher than difference in rates of women's unemployment. In the „prime-age" group and pre-retirement age group difference between rates of unemployment of men and women was similar, 0.7 p.p. on average. In the CR it can be said that impact on „prime age" workforce was quite balanced while the juveniles and people above 60 experienced more vigorous growth of rates of unemployment than men.

With growth of unemployment and with low recovery of European economies, risk of long-term unemployment, gradual erosion of human capital and danger of unemployability rounded off by exit from workforce, increases.

[4] *E.g. in the CR rate of vacancies was nearly 3.5 % in the first half of 2008.*

C.4 External Relations

(Balance of payments definitions)

External imbalance, expressed by **ratio of current account (CA) balance to GDP,** reached –1.1 % (*-1.4 %)* in the second quarter of 2010, improving slightly compared with the same period of the previous year. Improvement of trade balance outweighed worsening of balance of services and balance of income. Balance of current transfers did not change in year-on-year terms.

After abatement of recession, volume of foreign trade started growing again. After more than year of export market[5] slump, reaching its trough in the second quarter of 2009 (YoY decline by 14.7 %), markets started growing from early 2010, in the second quarter of 2010 by strong 12.5 % (*8.5 %).* Since the fourth quarter of 2009 export performance, indicating share of the Czech goods in export markets, has been improving. It grew by 2.3 % (*4.0 %)* in the second quarter*.* Such development resulted in an increase in real exports of goods by 15.2 % (*12.8 %).* Strong growth of nominal exports and imports was on one hand influenced by low comparison basis of the previous year; on the other hand volume of turnover reached roughly the level of pre-crisis years. Imports of especially commodities for intermediary consumption and investment grow significantly, imports of consumption goods shows also further growth. Balance is strongly influenced also by delayed effect of growing prices of mineral fuels on the world markets. In yearly terms, ratio of trade balance to GDP improved by 2.5 p.p. to 5.6 % (*unchanged)* in the second quarter.

With regard to oil price scenario, further slow growth of prices of raw materials and increase in fuels balance deficit (SITC 3) is assumed over 2010 and in 2011. Its ratio to GDP should be at some –3.7 % (*unchanged)* in 2010 and at similar –3.8 % (*-4.1 %)* in 2011*.* Taking recovery of trade into account, further growth of export markets is assumed, by 10.3 % (*6.6 %)* in 2010 and by 6.6 % (*5.5 %)* in 2011. Export performance should grow too.

Lead of pace of growth of import on export, lasting since March 2010, reduces trade balance surplus. Surplus of non-fuel part of the balance is expected to rise only slightly to 7.2 % of GDP (*8.8 %)* in 2010 and to 8.0 % of GDP (*9.1 %)* in 2011. Under these assumptions surplus of trade balance (balance of payments definitions) should reach 5.5 % of GDP (*7.0 %),* and in 2011 it is estimated at 6.3 % of GDP (*6.9 %).* Effect of foreign trade recovery and lowering of pace of growth of domestic demand should thus outweigh higher prices of oil.

After period of decline during the recession, foreign trade in services started to recover. Except for expenses on tourism, volume in all areas of services provided across the border has been increasing in 2010. Shift of balance of **balance of services** from active to passive was connected in particular with considerably higher imports of the so-called other services. Balance of services worsened from +1.4 % to -0.3 % of GDP in the second quarter of 2010 in annual terms, YoY[6]. Growth of expenses in the item of other services is assumed to outweigh only moderate improvement in balance of transport and tourism, with total balance of services remaining deficit in the forthcoming periods.

Reduction in the **balance-of-income** deficit in the previous two years was caused especially by strong decline of investment activity in time of economic recession. As a result, outflow of investment yields fell and volume of compensations paid to foreign employees decreased too. With gradual improvement of world economic situation, gradual growth of outflow from balance of income is expected, related with return of previous trend of foreign investment growth. Balance-of-income deficit is estimated at –6.4 % of GDP (*-6.3 %)* in 2010 and at –7.1 % of GDP (*-7.3 %)* in 2011.

Within this context it is estimated that ratio of **current account** deficit to GDP will reach –1.4 % (*-0.1 %)* in 2010. Deficit of this size is easy to finance and risk of related macroeconomic imbalance is considered minimum.

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

[6] *Balance of balance of services under national accounts concept did not show such dramatic development. Its surplus only fell slightly from 1.3 % of GDP in the second quarter of 2009 to 1.1 % of GDP in the second quarter of 2010.*

C.5 International Comparisons

Comparisons for the period to 2009 are based on Eurostat statistics. Since 2010, our own calculations are used on the basis of 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 2009 was CZK/PPS 18.23 in comparison with EU27 or CZK/EUR 16.98 in comparison with EA12.

Economic recession hit EA12 countries and most Central European countries with similar intensity. As a result, when adjusted by current **purchasing power parity,** tendency of economic convergence of the CR and other Central European countries (except for Poland, see chapter A.1) toward EA12 average has stopped in 2009. Some countries (Baltic states, Hungary, Slovenia, which have been hit by the crisis more than EA12 countries, even experienced decline in their relative economic level.

In 2010 GDP of the Czech Republic p.c. will reach some PPS 19 400, which corresponds to 74 % of EA12 economic output. Thanks to higher growth in the CR than in EA12, relative performance of the Czech economy should start growing again since 2010.

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 will obviously reach some EUR 13 900, which corresponds to 49 % of EA12 level. Thanks to growth recovery and gradual appreciation of the exchange rate, pre-crisis level of 2008 should be surpassed in 2011.

Comparative price level of GDP should reach some 66 % of EA12 average in 2010. Depreciation of the real exchange rate reflected in YoY decline in price level by 3 p.p. in 2009. 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 incredible 11 p.p. and helped thus Poland avoid economic recession.

In this and following years, gradual moderate increase in comparative price level should be seen in accordance with lead of productivity growth and growth of non-price competitiveness of the Czech economy.

D Monitoring of Other Institutions' Forecasts

The Czech Ministry of Finance monitors macroeconomic forecasts of other institutions, engaged in forecasting of future development of the Czech economy. Forecasts of 13 institutions are continuously monitored from open-access 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.

Sources of tables and graphs: own calculations.

Table D.1: **Consensus Forecast**

		September 2010			October 2010
		min.	max.	consensus	forecast MoF
Gross domestic product (2010)	%, const.pr.	1,0	2,2	1,7	2,2
Gross domestic product (2011)	%, const.pr.	1,7	3,0	2,2	2,0
Average inflation rate (2010)	%	1,3	2,6	1,7	1,5
Average inflation rate (2011)	%	1,4	2,7	2,2	2,2
Average monthly wage (2010)	%	1,3	2,6	2,0	2,4
Average monthly wage (2011)	%	2,3	4,4	3,3	2,8
Current account / GDP (2010)	%	-3,3	0,1	-1,4	-1,4
Current account / GDP (2011)	%	-3,6	-0,4	-1,7	-1,1

Consensus forecasts of **GDP growth** for 2010 have hovered within 1-2 % for a time. Past year's MoF forecasts were mostly more conservative compared to other institutions' forecasts, this year's forecasts differ to a minimum extent only.

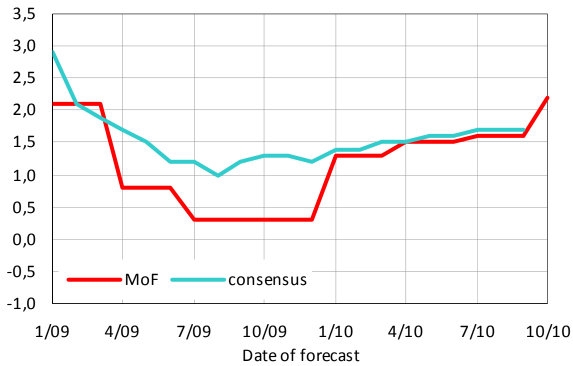
Institutions assume on average that the Czech economy's performance will increase by 1.7 % in 2010 and by 2.2 % in 2011. Under MoF forecast and forecasts of some other domestic institutions, however, moderate slowdown in growth should be seen in 2011.

Current forecasts of **rate of inflation** allow for this year average rate of inflation at some 1.7 % while for 2011 institutions expect acceleration of consumer price growth to 2.2 %. These estimates are nearly identical with those of the MoF.

For 2010 institutions expect further slowdown in growth of **average wage.** Consensus forecast allows for an increase in average wage by 2.0 % this year and 3.3 % in 2011. MoF forecast is in accordance with this tendency although higher pace average wage growth is expected in this year. On the contrary, due to impact of wage bill cut in the government sector, a slower pace is expected in 2011.

Consensus forecast just as MoF forecast expects deficit in ratio of current account to GDP amounting to 1.4 % in 2010. In 2011 deficit should deepen moderately according to institutions but reduce according to MoF.

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



Graph D.2: **Forecast of Average Inflation Rate for 2010**
in %