# **A Forecast Assumptions**

The forecast was made on the basis of data known as of **12 October 2011**. No political decisions, newly released statistics, or world financial or commodity market developments could be taken into account after this date.

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

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

## A.1 External Environment

## **Economic output**

The outlook for the world economy has worsened since the last forecast, and there are fears for a second round of recession. Uncertainty has increased, especially due to apprehensions about the sustainability of some euro zone countries' public finances and the political leadership's ability to resolve the situation. Furthermore, the generally adopted restrictive fiscal policies are hindering recovery. Growth in the developed economies of the USA and EU has slowed. In Japan, the decline has already lasted for three quarters. Not even the large emerging economies provide a clear picture. Although their growth remains high, there are signs of a slowdown.

Growth of the US economy was radically decreased by a revision of data from the end of July, which was the first of many poor macroeconomic reports. GDP increased QoQ by only 0.1% (versus 0.8%) in the first quarter of 2011 and by 0.3% (versus 0.7%) in the second. The main cause of the slowdown is the less significant growth in consumption, largely due to the indebtedness of households. It has been proven that growth, up to now, has not been self-supporting but rather has depended to a significant extent on government stimulus. New jobs still are not being created at the necessary rate, and the unemployment rate has been stagnant for four months now at 9.1%.

During the summer, moreover, a stalemate between the administration and opposition legislators arose over increasing the government debt ceiling, which led S&P to downgrade the US debt rating. One of the repercussions was volatility on equity markets. During the second week of August, the Dow Jones index dropped from 12,500 points (the level at the end of July) to below 11,000 points, and it was fluctuating around this value also in early October.

To strengthen growth and create new jobs, the President has proposed a package of public investments and tax relief amounting to USD 447 billion. The central bank, too, is stimulating the economy, as it continues to hold the band for the key

refinancing rate at 0–0.25% and has resorted to selling short-term while purchasing long-term bonds (so-called Operation Twist), the purpose of which is to keep interest rates low to stimulate consumption and lending.

**Growth in the euro zone** decelerated abruptly, and uncertainty is overflowing from the financial markets into the real economy. QoQ GDP growth in the EA12 slowed sharply to 0.2% (versus 0.4%) in the second quarter from 0.8% in the first quarter. As in the US, this slowing was caused especially by a decrease in consumption. In Germany, which has been the euro zone's powerhouse, QoQ GDP growth was only 0.1% in the second quarter (1.3% in the first quarter) while the French economy stagnated in this period (having grown 0.9% in the first quarter). Greece is in a deep economic slump, Portugal has found itself in recession, and Spain and Italy are close to stagnation. Outside the euro area, the Polish and Swedish economies are growing strongly and Great Britain is just holding steady.

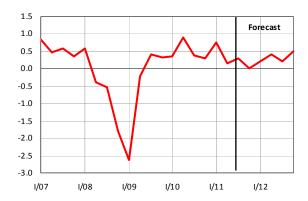
The unemployment rate in the EA12, which remained level at 10.0% in August, continues to be characterised by significant differences between individual countries. Germany has already reached 6% due to a long-term decrease, whereas unemployment has risen to a grim 21.2% in Spain, 14.6% in Ireland, and 13.4% in Slovakia.

The **Polish economy** grew by 1.1% QoQ in the second quarter of 2011 (*versus* 1.0%). The unemployment rate stood steady at 9.4% in August. Infrastructure investments in preparation for the European Football Championship have remained a support to the economy. Growth is therefore powered especially by investments, while growth in consumption has slightly decreased. In order to reduce the deficit, which is estimated at –6% of GDP this year, the government has increased VAT and has also begun selling state shares in energy companies and banks.

The **Slovak economy** grew by 0.9% (*versus 0.8%*) QoQ in both the first and second quarters. Growth has been driven mainly by exports, and in particular automobile

manufacturing. industrial Although production increased in August, the preceding drops in June and July indicate a slowdown. The economy is afflicted by high unemployment, which is the third highest in the euro zone. In combination with a drop in real wages, household this situation apparently caused consumption to decline. The government has prepared a number of measures, including introduction of the so-called debt brake, in order to decrease the deficit, estimated at -5.0% of GDP in 2011. Following collapse of the government, however, the future of the fiscal reforms is uncertain.

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



We have lowered our growth estimate for the US economy to 1.6% (*versus 2.8%*) for 2011 and to 1.9% (*versus 3.1%*) for 2012.

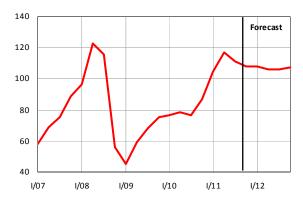
GDP growth forecast for the EA12 economy was decreased to 1.7% (versus 1.9%) for 2011 and to 1.0% (versus 2.0%) for 2012. Due to possible impacts of the debt crisis, the forecast contains downward risks.

## **Commodity prices**

Commodity prices peaked in April, when Brent crude oil reached USD 123 per barrel. Since then, a modest correction has occurred due to fears of a global slump. The average price per barrel of Brent crude was USD 117 in the second quarter and USD 112 in the third (in accordance with the forecast). Moreover, geopolitical unrest in the Middle East is quieting down and Libyan production is expected to restart.

Prices of other key raw materials present a similar picture. The price of wheat, for example, fell to USD 316 per ton in the third quarter versus an average of USD 339 in the previous quarter.

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



We have held the estimate for Brent crude oil at USD 110 per barrel (*unchanged*) for 2011. For 2012, we have decreased it to USD 107 (*versus USD 112*). Forecast risks are to the down side.

### Global financial markets

The third quarter of this year was characterised by escalation and deepening of the debt crisis in the euro zone. Greece has again found itself at the centre, though other problematic states have not been spared. The contagion is spreading to equity markets and is also impacting the banking sector.

The euro zone tried to find a solution to the debt crisis in mid-July at a summit in Brussels. There, its leading representatives agreed, among other things, on a second bailout package for Greece (EUR 109 billion from euro area member states and the IMF and up to EUR 50 billion from the private sector), an extension on the maturity of bailout loans (including current loans for Greece, Ireland and Portugal) from the current maximum of 7.5 years to 15-30 years, and more advantageous interest rates on the provided loans (now ca 3.5–4.0%). The powers of the European Financial Stability Facility (EFSF) bailout fund and its "successor", the European Stability Mechanism (ESM), were reinforced. Using loans to governments, the EFSF could finance a possible recapitalisation of financial institutions, even in countries which will not draw other financial aid from the EFSF. Under certain circumstances, it also could intervene on the secondary market for government bonds.

The results of the July summit were approved in all states of the euro zone after almost three months, though in Slovakia the extension of the EFSF was approved only at a second attempt. At the same time, discussions have already started on its further reinforcement, as EFSF in its current form is not large

enough to handle possible difficulties in Italy and Spain.

Meanwhile, spread of the debt contagion into the third and fourth largest economies of the euro zone is not just a hypothetical scenario. Italy and Spain had already come under pressure from financial markets at the turn of July and August, as the yields of 10Y state bonds surpassed the 6% level. Only the ECB's interventions in the form of state bond purchases on the secondary market contributed to alleviating that pressure. The total volume of bonds purchased under the Securities Markets Programme increased by EUR 89 billion between 8 August and 7 October.

Italy and Spain have also been warned by rating agencies. S&P downgraded Italy's rating by one level (from A+ to A, negative outlook) in mid-September. A similar change in rating occurred for Spain less than a month later, as its rating also was downgraded by a notch (from AA to AA—, negative outlook). In October, Italy's rating was also downgraded by both Moody's (by 3 levels, from Aa2 to A2) and Fitch (by one level, from AA— to A+, negative outlook), the latter also adjusting its rating for Spain (rating downgraded by two levels, from AA+ to AA—,negative outlook).

Regardless of the situation in Italy and Spain, future development will play out in Greece, which has in reality been insolvent for a long time. It is only prevented from sinking by a lifebelt of loans from euro area member states and the IMF. Nevertheless, Greece has been unable to fulfil the objectives in consolidating public finances (among other areas) as agreed with the euro zone and IMF. Despite this, another tranche of financial aid should be provided to Greece in early

November in the amount of EUR 8 billion (5.8 billion from euro zone countries and 2.2 billion from the IMF).

Although Greece should not default in the nearest term, a restructuring of its debt clearly cannot be avoided. In the event of a managed bankruptcy for Greece (and unmanaged bankruptcy is highly improbable), the current bailout mechanism (the EFSF) clearly would not prevent a spread of the contagion to other problematic states. Moreover, the banking sector would also become infected, even in countries at the heart of the euro zone (Germany, France). European politicians thus should attempt to create an environment which would limit the risks of deep impacts from a Greek default.

In this respect, a certain change in the euro zone's stance on resolving the current situation is indicated by the conclusion of a meeting between Chancellor Merkel and President Sarkozy in Berlin on 9 October. A focus should be placed on recapitalising banks so that they are able to absorb possible losses resulting from holding state bonds of problematic countries. The existence of instruments that would enable a swift response to developments and rapid replenishment of bank capital would open a path to a managed bankruptcy for Greece. At the same time, such instruments should reduce risk for the occurrence of bank crises and the spread of the debt crisis to other countries.

The impact on the Czech economy would then depend primarily on whether and to what extent these risks would become reality after Greece's managed bankruptcy (for more, see the introductory chapter "Risks to the Forecast").

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

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
									Forecast	Forecast
USA	2.5	3.5	3.1	2.7	1.9	-0.3	-3.5	3.0	1.6	1.9
EU27	1.3	2.5	1.9	3.3	3.1	0.5	-4.3	1.8	1.7	1.1
EA12	0.7	2.1	1.6	3.2	2.9	0.4	-4.2	1.8	1.7	1.0
Germany	-0.4	1.2	0.7	3.7	3.3	1.1	-5.1	3.7	2.9	1.2
France	0.9	2.5	1.8	2.5	2.3	-0.1	-2.7	1.5	1.7	1.3
United Kingdom	2.8	3.0	2.2	2.8	2.7	-0.1	-4.9	1.4	1.2	1.8
Austria	0.9	2.6	2.4	3.7	3.7	1.4	-3.8	2.3	2.9	1.9
Hungary	4.0	4.5	3.2	3.6	0.8	0.8	-6.7	1.2	1.4	1.7
Poland	3.9	5.3	3.6	6.2	6.8	5.1	1.6	3.8	4.2	3.6
Slovakia	4.8	5.1	6.7	8.5	10.5	5.8	-4.8	4.0	3.4	3.0
Czech Republic	3.6	4.5	6.3	6.8	6.1	2.5	-4.1	2.3	2.1	1.0

Graph A.1.3: Real Gross Domestic Product

YoY growth in %, nsa data

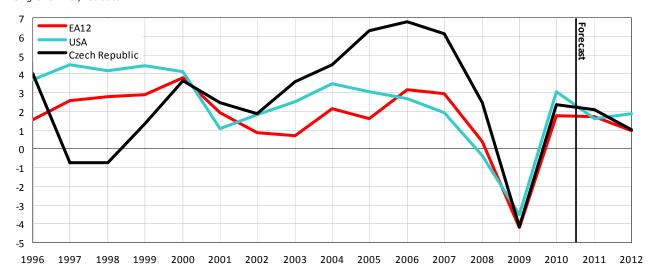


Table A.1.2: **Real Gross Domestic Product** – quarterly *growth in %, sa data* 

		201	.0			20	11	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast
USA QoQ	1.0	0.9	0.6	0.6	0.1	0.3	0.4	0.3
YoY	2.2	3.3	3.5	3.1	2.2	1.6	1.4	1.1
EU27 Q0Q	0.4	1.0	0.5	0.2	0.7	0.2	0.4	0.3
You	0.7	2.1	2.3	2.1	2.4	1.7	1.6	1.7
EA12 Q0Q	0.4	0.9	0.4	0.3	0.8	0.1	0.3	0.0
YoY	0.9	2.0	2.0	1.9	2.4	1.6	1.5	1.2
Germany QoQ	0.5	1.9	0.8	0.5	1.3	0.1	0.3	0.2
Yor	2.4	4.1	4.0	3.8	4.6	2.8	2.3	2.0
France QoQ	0.2	0.5	0.4	0.3	0.9	0.0	0.4	0.3
YoY	1.1	1.5	1.7	1.4	2.1	1.6	1.6	1.6
United Kingdom QoQ	0.4	1.1	0.6	-0.5	0.5	0.2	0.5	0.5
Yor	-0.3	1.6	2.5	1.5	1.6	0.7	0.6	1.6
Austria QoQ	-0.9	1.4	1.4	0.6	0.8	0.7	0.2	0.3
Yor	0.4	2.8	3.6	2.5	4.3	3.5	2.3	2.0
Hungary QoQ	1.0	0.4	0.8	0.2	0.3	0.0	0.6	0.4
Yor	-0.9	0.7	2.4	2.4	1.7	1.2	1.0	1.3
Poland QoQ	0.7	1.1	1.3	0.9	1.1	1.1	0.7	0.8
YoY	3.1	3.6	4.6	3.9	4.4	4.5	3.9	3.8
Slovakia QoQ	0.7	0.9	0.8	0.8	0.9	0.9	0.7	0.7
Yor	4.5	4.3	4.0	3.3	3.5	3.5	3.4	3.3
Czech Republic QoQ	0.8	0.6	0.8	0.5	0.9	0.1	0.3	0.1
YoY	1.2	2.3	2.6	2.7	2.8	2.2	1.8	1.4

Graph A.1.4: **Real Gross Domestic Product** – Central European economies *YoY growth in %, nsa data* 

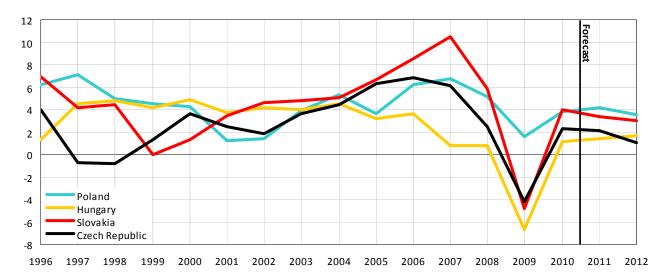


Table A.1.3: **Prices of Commodities** – yearly *spot prices* 

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
										Forecast	Forecast
Crude oil Brent	USD/barrel	28.8	38.3	54.4	65.4	72.7	97.7	61.9	79.7	110	107
	growth in %	14.0	33.0	42.0	20.1	11.2	34.4	-36.7	28.7	38.4	-3.2
Crude oil Brent index (in CZK)	2005=100	62.4	75.6	100.0	113.4	113.3	127.7	90.5	116.8	148	145
	growth in %	-1.7	21.1	32.3	13.4	-0.1	12.7	-29.1	29.1	26.7	-1.9
Wheat	USD/t	146.1	156.9	152.4	191.7	255.2	326.0	223.6	223.7		
	growth in %	-1.6	7.3	-2.8	25.8	33.1	27.7	-31.4	0.1	•	
Wheat price index (in CZK)	2005=100	113.0	110.5	100.0	118.7	142.0	152.1	116.7	117.1		
	growth in %	-15.2	-2.3	-9.5	18.7	19.6	7.1	-23.3	0.3	•	

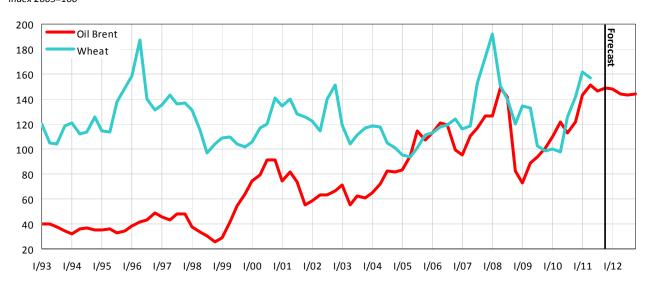
Table A.1.4: **Prices of Commodities** – quarterly *spot prices* 

			201	0			20	11	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Estimate	Forecast
Crude oil Brent	USD/barrel	76.7	78.7	76.4	86.8	104.9	117.1	111	108
	growth in %	70.4	33.2	11.7	15.7	36.8	48.8	45.3	24.4
Crude oil Brent index (in CZK)	2005=100	109.9	121.4	112.9	121.3	143.2	151.5	147	149
	growth in %	50.4	37.0	20.4	20.5	30.3	24.8	30.0	22.5
Wheat price	USD/t	195.7	177.5	237.9	283.6	330.5	339.0	316	
	growth in %	-15.6	-28.4	13.9	38.1	68.9	91.0	32.7	
Wheat price index (in CZK)	2005=100	100.2	97.9	125.7	141.7	161.3	156.8	149	
	growth in %	-25.6	-26.4	22.9	43.8	60.9	60.1	18.7	

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



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

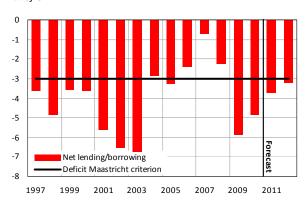


# A.2 Fiscal Policy

All data in this chapter, in contrast to other sections of the Macroeconomic Forecast, already include a reconciling revision of the annual national accounts (see Chapter E) and are thus fully compatible with the nominal values of the government deficit and debt from the autumn notification.

According to preliminary CZSO estimates, the general government deficit reached approximately CZK 183 billion (4.8% of GDP) in 2010.

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



Compared to the estimate from last April, the deficit increased by almost CZK 10 billion (0.3% of GDP) in **2010**. The revision is due both to new facts which were not or could not have been known in April and to changes in the methodological approach for compiling national accounts<sup>1</sup>.

Another change was a new approach to calculating accrual tax revenue from corporate entities and entrepreneurs. There was a shift in accounting for tax payments based on tax returns wherein the tax returns submitted from last November through August of this year are key for the past year (originally this period matched the calendar year). This change, however, will only adjust the distribution of tax revenues over time. Cumulative over a longer period, there will be no difference.

Sector reclassification in accordance with Eurostat rules also influences considerably the development of transactions and, therefore, the deficit. Based on the test criterion for inclusion under general government, a number of units were moved to the general government sector while several others were moved to other sectors. The impact of this operation on the 2010 balance is on the order of CZK 3 billion.

<sup>1</sup> For individual income tax, for example, the revenue now includes a tax bonus, which reached ca CZK 11 billion in 2010. The same amount, however, was subsequently attributed to the expenditure side as a transfer provided to households, and the resulting final balance has therefore not changed.

In contrast to the sharp drop in 2009, a recovery was recorded in general government revenues. This was evident especially in social contributions, VAT and excise taxes. A whole range of measures resulted in a decline on the expenditure side. These comprised operational savings in government administration (decrease in the wage bill and a drop in intermediate consumption), as well as a decline in investment expenditures and subsidies to subjects outside the government sector.

Positive development was evident also for interest costs, which grew only moderately despite relatively high debt dynamics. Interest rates have dropped in all issued maturities along the yield curve for government bonds. This reflects a positive view of the consolidation strategy being implemented.

Although last year's outcome appears relatively optimistic, it should be pointed out that tax receipts were significantly influenced by legislative changes, e.g. by increasing VAT and excise rates.

The Ministry of Finance expects the government deficit to decrease to CZK 142 billion (3.7% of GDP) in 2011. Compared with the notification of the government deficit and debt from early April, this constitutes an improvement of 0.5% of GDP, due in part to an improvement in the balance by approximately CZK 12 billion as well as a more significant change in the base (GDP) versus the April forecast.

A slight improvement in tax revenues is expected compared to April. After adjusting for the influence of the tax bonus, the change is just under CZK 2 billion. Better development is estimated for social contributions, amounting to CZK 5 billion.

Interest costs also have a favourable influence, as a much more optimistic development is expected in comparison to April and the new estimate is some CZK 10 billion lower. The very cautious approach from early this year, which anticipated an increase in interest rates, now seems unrealistic, as this did not in fact occur.

Both the revenue and expenditure sides are also influenced by a decrease in investment subsidies (sources from the EU), which are reflected on the expenditure side in government investments, and overall thus influence the balance only in the amount of national co-financing. The decrease in government investments from April adjusted for deficit-neutral

investment subsidies from the EU thus comprises just under CZK 9 billion. This development is caused both by a decrease in last year's base, as the CZSO revised this item, and by revaluation of the outlook on the development of investments from national sources. As a result, the April assumption was corrected to approximately the same amount as last year.

The sales forecast, in contrast, developed negatively, dropping by almost CZK 14 billion due to, among other factors, a considerable decrease in the base from the preceding year.

Social transfers, both in-kind and monetary, were also reassessed negatively. Increased expenditures on health care by health insurance companies and on retirement pensions are expected in particular, thus placing greater demands on the state budget than originally expected due to a significant increase in the number of pensions paid out this year. The total amount of in-kind and monetary transfers is thus CZK 4 billion higher than in the previous estimate.

The influence of other items on revenues and expenditures is less significant and is largely compensated for.

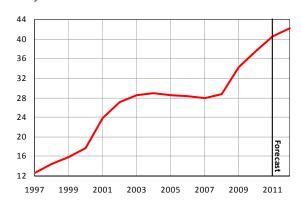
The current estimate, however, also bears certain risks. On the revenue side, the main concern is the nonfulfilment of tax estimates (VAT and social insurance contributions). The most recent development of cash performance suggests a decrease in their collection, and a key question is how this will develop in the remaining part of the year.

Non-fulfilment of the estimate for government investments financed from EU sources may present another problem, and especially due to the influence of subsequent co-financing. For some projects, moreover, the payment of EU funds is currently on hold. Projects continue to be implemented, however, with financing from national resources. In case of favourable development, the requested amount will be paid in arrears with no influence on the deficit. If the payment is not made, then these expenditures will be reclassified as investments exclusively from national resources and will thus have a negative impact on the balance.

The last significant risk is the possible adoption of a law by which the government will settle claims of property grievances vis-à-vis churches and religious institutions. The amount of money owed would be CZK 59 billion (1.5% GDP) and will probably be entirely assigned to the deficit in the year in which the law is adopted. Its effect would be one-off and would not influence government consolidation effort. The question remains whether the law will be passed and what will be the speed of the legislative process, which would then determine the year to which the transaction is included.

General government debt is estimated at 40.5% of GDP for the end of 2011. Primary deficit and then interest payments are the main contributors to an increase in debt quota.

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



The medium-term budget outlook for 2012–2014 presumes further continuous improvements in the general government balance. The targeted deficit trajectory aims to achieve a balanced budget of the general government sector in 2016. Towards this end, it has been proposed to further tighten the central government's medium-term expenditure frameworks. However, the risks posed by current macroeconomic developments in the foreign and domestic economies are so big that in order to fulfil the deficit trajectory, additional consolidation measures would be necessary should those risks be realised.

Further analysis of future development for the general government sector will be available in the November issue of the Fiscal Outlook of the Czech Republic.

Table A.2.1: Net Lending/Borrowing and Debt

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
									Prelim.	Forecast	Forecast
General government balance 1)	bill. CZK	-180	-83	-101	-80	-27	-86	-219	-183	-142	-128
	% GDP	-6.7	-2.8	-3.2	-2.4	-0.7	-2.2	-5.8	-4.8	-3.7	-3.2
Cyclical balance	% GDP	-0.7	-0.7	-0.1	0.6	1.2	1.1	-1.0	-0.5	-0.3	-0.5
Cyclically adjusted balance	% GDP	-6.0	-2.2	-3.1	-3.0	-1.9	-3.3	-4.9	-4.3	-3.4	-2.8
One-off measures	% GDP	-0.3	-0.7	-1.2	-0.2	-0.3	-0.1	0.3	0.0	-0.3	-0.3
Structural balance	% GDP	-5.8	-1.5	-1.9	-2.8	-1.6	-3.3	-5.2	-4.4	-3.1	-2.5
Fiscal effort <sup>2)</sup>	percent. points	0.1	4.3	-0.4	-0.9	1.1	-1.6	-1.9	0.8	1.2	0.6
Interest expenditure	% GDP	1.0	1.1	1.1	1.1	1.1	1.0	1.3	1.4	1.4	1.4
Primary balance	% GDP	-5.4	-1.1	-1.0	-1.1	0.6	-1.1	-4.9	-3.5	-2.0	-1.5
Cyclically adjusted primary balance	% GDP	-4.7	-0.4	-0.8	-1.7	-0.6	-2.2	-3.9	-3.0	-1.7	-1.1
General government debt	bill. CZK	768	848	885	948	1 024	1 105	1 282	1 418	1 560	1 670
	% GDP	28.6	28.9	28.4	28.3	28.0	28.7	34.3	37.6	40.5	42.2
Change in debt-to-GDP ratio	percent. points	1.5	0.4	-0.5	-0.1	-0.3	0.8	5.6	3.3	2.9	1.7

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.

# A.3 Monetary Policy and Interest Rates

## Monetary policy

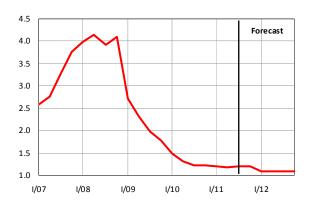
The CNB's main policy objective is to maintain price stability. To achieve this, an **inflation-targeting** regime is used. By means of monetary instruments, the CNB tries to influence headline inflation so that YoY increase in the CPI should not deviate from the medium-term inflationary target of 2% by more than  $\pm$  1 p.p. The main monetary policy instrument is the interest rate for **2W repo operations**, which remained at 0.75% in the third quarter of 2011. This can be regarded as a very low value from a long-term perspective.

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

#### Interest rates

The average value for **3M PRIBOR** held at 1.2% (*in line with the forecast*) in the third quarter of 2011. Due to presumed very weak growth, we estimate the same value for all of 2011 (*versus 1.3%*). For 2012, we expect a slight decrease in 3M PRIBOR to 1.1% (*versus 2.1%*). The significant change versus the previous prediction is due to the presumed absence of demand inflation.

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



<sup>&</sup>lt;sup>1)</sup> Balance in EDP methodology, i.e. general government net lending (+)/borrowing (-) including interest derivates.

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

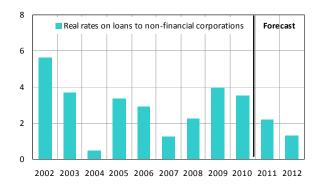
Long-term interest rates should rise only very moderately in coming months. In August, Standard & Poor's upgraded the Czech Republic's debt rating from A to AA–, i.e. by two notches. Moody's and Fitch Ratings kept their ratings at A1. Due to this development, further successful issues of government bonds can be expected. Faith in Czech fiscal policy is reflected in the negative spread versus average long-term rates in the euro zone (see Graph A.3.6).

The influence of the debt crisis that has afflicted several euro zone countries (especially Greece) on development of the risk premia for government bonds is very difficult to estimate. At present, the Czech Republic can be considered to have a positive image among investors, as reflected, for example, by the strong positive correlation between the yields of Czech and German bonds. We estimate the average **yield to maturity for 10-year government bonds** in 2011 and 2012 to be 3.7% (*versus 4.1% and 4.3%, respectively*), rising slightly only in late 2012. The spread between Czech and German bonds should decrease moderately.

Interest **rates for deposits and loans** respond with a lag to the fluctuations of interbank rates. In the second quarter of 2011, these held steady at 4.0% for loans to non-financial corporations and at 1.2% for households' deposits. We expect average rates for loans to non-financial corporations to reach

approximately 3.9% (*versus 4.1%*) this year, and in 2012 we expect these to stay level at 3.9% (*versus 4.6%*) due to the aforementioned steady interbank rates. Average household deposit rates should reach 1.2% (*versus 1.3%*) in 2011 and remain at this value in 2012 (*versus an increase to 1.5%*). This forecast, however, is conditioned upon the debt crisis in the euro zone not deepening further.

Graph A.3.2: **Average Real Rates on Loans** rates on loans deflated by end-of-year final domestic use deflator, in % p.a.



The development of real interest rates is fundamental to the real economy. The estimates of nominal interest rates, CPI and the final domestic use deflator imply a decrease in real interest rates for loans to non-financial corporations to 2.2% (*versus 1.9%*) in 2011 and to 1.3% (*versus 2.0%*) in 2012.

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

<u> </u>										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
									Forecast	Forecast
Repo 2W CNB (end of year)	2.00	2.50	2.00	2.50	3.50	2.25	1.00	0.75		
Main refinancing rate ECB (end of year)	2.00	2.00	2.25	3.50	4.00	2.50	1.00	1.00		
Federal funds rate (end of year)	1.00	2.25	4.25	5.25	4.25	0.25	0.25	0.25		
PRIBOR 3 M	2.28	2.36	2.01	2.30	3.09	4.04	2.19	1.31	1.2	1.1
Government bond yield to maturity (10Y)	4.12	4.75	3.51	3.78	4.28	4.55	4.67	3.71	3.7	3.7
Interest rates on loans to non-financial corpor.	4.57	4.51	4.27	4.29	4.85	5.59	4.58	4.10	3.9	3.9
Interest rates on deposits from households	1.40	1.33	1.24	1.22	1.29	1.54	1.37	1.25	1.2	1.2
Real rates on loans to non-financial corporations 1)	3.72	0.47	3.38	2.95	1.24	2.27	3.97	3.52	2.2	1.3
Net real rates on deposits										
from households with agreed maturity 2)	0.18	-1.64	-1.13	-0.63	-4.11	-2.26	0.17	-1.21	-1.6	-1.3

<sup>1)</sup> Deflated by gross domestic expenditure deflator.

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

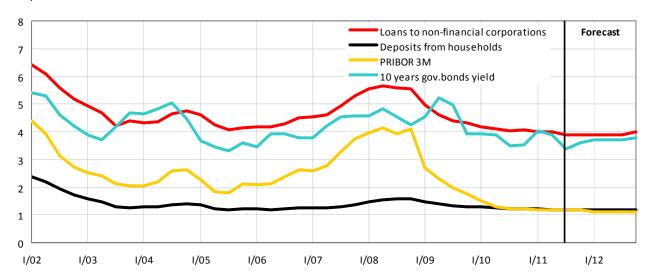
Table A.3.2: Interest Rates – quarterly

average interest rates in per cent p.a.

		2010	)			20:	11	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast
Repo 2W rate CNB (end of period)	1.00	0.75	0.75	0.75	0.75	0.75	0.75	
Main refinancing rate ECB (end of period)	1.00	1.00	1.00	1.00	1.00	1.25	1.50	
Federal funds rate (end of period)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
PRIBOR 3M	1.50	1.30	1.23	1.21	1.20	1.21	1.18	1.2
-10-year government bonds yield to mat.	3.94	3.90	3.48	3.51	4.03	3.90	3.40	3.6
Interest rates on loans to non-fin. corporations	4.19	4.11	4.05	4.06	4.00	3.99	3.9	3.9
Interest rates on deposits from households	1.30	1.27	1.22	1.22	1.21	1.20	1.2	1.2

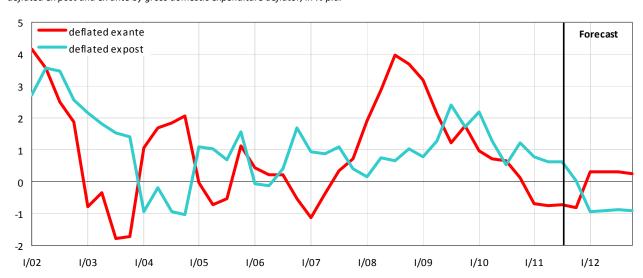
Graph A.3.3: Interest Rates

in % p.a.



Graph A.3.4: Real PRIBOR 1Y

deflated ex post and ex ante by gross domestic expenditure deflator, in % p.a.



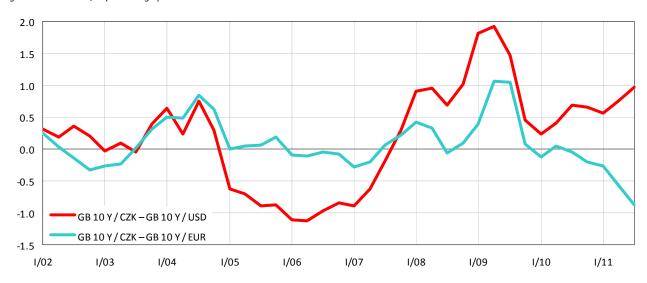
Graph A.3.5: Short-Term Interest Rate Spread

in percentage points



Graph A.3.6: Long-Term Interest Rate Spread

government bonds, in percentage points



# A.4 Exchange Rates

The average CZK/EUR exchange rate reached 24.39 in the third quarter of 2011, approximately the same value as in the first half of the year. The worsening situation on financial markets and increasing aversion to risk during September 2011 led to a gradual weakening to the value of 24.90 CZK/EUR. We regard this weakening of the free-floating Czech koruna as positive, because it may help exporters to cope with the expected slowdown in foreign demand.

We have moderated the assumption of exchange-rate appreciation for the coming period such that both the nominal and real exchange rates should stay under the long-term trend for the entire forecast horizon. Should the situation in the euro zone's problem countries become more dramatic, an increase of volatility is likely and sharp movements of the exchange rate in either direction cannot be ruled out.

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

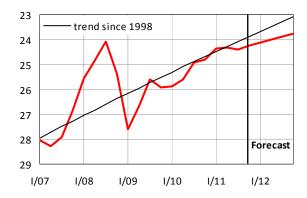


Table A.4.1: Exchange Rates – yearly

			2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
									Forecast	Forecast	Outlook	Outlook
Nominal excha	ange rates:											
CZK / EUR		average	29.78	28.34	27.76	24.94	26.45	25.29	24.3	23.9	23.4	22.9
	appreciation	growth in %	7.1	5.1	2.1	11.3	-5.7	4.6	3.9	1.7	2.2	2.2
CZK / USD		average	23.95	22.61	20.31	17.03	19.06	19.11	17.5	17.7	17.4	17.0
	appreciation	growth in %	7.3	5.9	11.3	19.2	-10.6	-0.3	9.2	-1.3	2.2	2.2
NEER		average of 2005=100	100.0	105.4	108.5	120.3	117.0	118.8	124	125	128	131
	appreciation	growth in %	5.6	5.4	3.0	10.8	-2.8	1.5	4.1	1.3	2.2	2.2
Real exchange	rate to EA12 <sup>1)</sup>	average of 2005=100	100.0	104.3	107.6	119.7	114.6	117.5	120	123	124	126
	appreciation	growth in %	4.8	4.3	3.1	11.2	-4.2	2.5	2.6	1.9	1.3	1.3

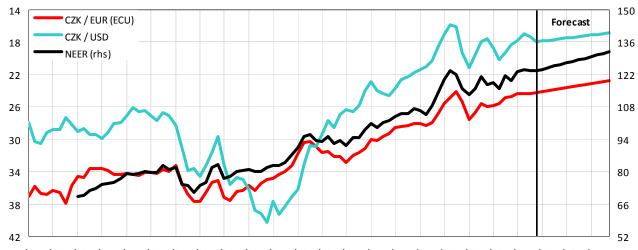
<sup>1)</sup> Deflated by GDP deflators.

Table A.4.2: Exchange Rates – quarterly

				201	0			201	11	
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
									Estimate	Forecast
Nominal exch	ange rates:									
CZK / EUR		average	25.87	25.59	24.91	24.79	24.37	24.32	24.39	24.3
	appreciation	growth in %	6.7	4.3	2.7	4.6	6.1	5.2	2.2	2.2
CZK / USD		average	18.71	20.16	19.30	18.26	17.83	16.90	17.27	18.0
	appreciation	growth in %	13.3	-2.8	-7.3	-4.0	5.0	19.3	11.7	1.6
NEER		average of 2005=100	118.3	116.0	121.6	119.3	123.4	124.1	124	124
	appreciation	growth in %	4.4	0.1	0.4	1.3	4.3	7.0	1.6	3.7
Real exchange	e rate to EA12	average of 2005=100	115.3	116.3	118.7	119.8	119.3	120.3	120	122
	appreciation	growth in %	4.3	2.3	1.1	2.1	3.5	3.5	1.1	2.0

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

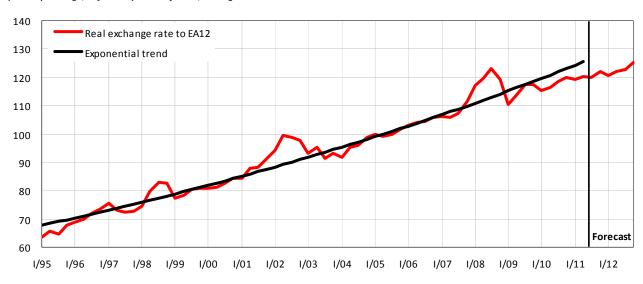
quarterly average, average 2005 = 100 (rhs)



1/91 1/92 1/93 1/94 1/95 1/96 1/97 1/98 1/99 1/00 1/01 1/02 1/03 1/04 1/05 1/06 1/07 1/08 1/09 1/10 1/11 1/12 1/13 1/14

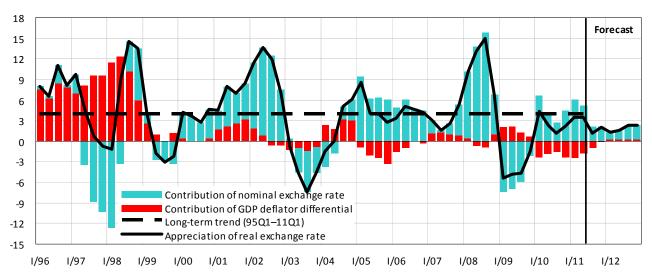
Graph A.4.3: Real Exchange Rate to EA12

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

#### **Business environment**

On 27 September 2011, the Chamber of Deputies passed a proposal for the act on criminal liability of legal entities, which will make it possible to punish companies, for example, for money laundering, tax evasion, operating rigged games and wagers, money counterfeiting, or arranging an advantage in awarding a public contract. Punishment can take the form of a ban on activities, monetary fines, forfeiture of property, prohibition to receive subsidies, or prohibition to participate in public tenders. It will even be possible to liquidate a company if its activities are primarily criminal. The act is expected to take effect as from 1 January 2012.

#### **Taxes**

In order to simplify the tax system and decrease tax administration, on 24 August 2011 the Czech government passed a proposal for an act amending other acts related to establishing a single collection point. The proposal is known as the **3rd pillar of the tax reform** and represents a reform of direct taxes and contributions.

The reform discards the concept of a super-gross wage and unifies the individual and corporate income tax rates as well as gift tax rate at 19%. The employer's contributions to social security and public health insurance will be realised by means of a contribution from the total wages to public insurance with a rate of 32%. Insurance rates for social security and public health insurance for employees will be unified at 6.5% while the upper limit for the social security premium will be four times the average wage and the limit for the social security premium will be six times the average wage. The basic discount per payer in the amount of CZK 24,840 will only be provided up to four times the average wage. Tax relief for a child will increase by CZK 1,800 yearly, and the maximum tax bonus amount will increase by CZK 8,100. Tax deductibility of interest from mortgage loans will be decreased from CZK 300,000 to CZK 80,000 per household.

The tax reform proposal also cancels certain tax deductions, such as for catering provided in non-monetary form at the workplace or as part of company catering provided by other entities, including food vouchers, or advantages provided by the employer for personal public transport to its employees and their family members in the form of free or discounted

fares. A tax discount in the amount of CZK 3,000 per year will be introduced in this connection.

Premium rates for social security and public health insurance for self-employed persons will be decreased to 6.5%, but the assessment base will be extended to 100%. Expenditure flat rates will be preserved. The limit for mandatory value added taxpayer registration for taxable persons and entities will be decreased to CZK 750,000.

Last but not least, the reform cancels the dividends tax but introduces a 20% tax on companies operating in the gambling sector.

The reform measures are expected to come into effect on 1 January 2013. The only exception concerns contributions from lotteries, for which the proposed date of effectiveness is 1 January 2012.

On 2 September 2011, the Chamber of Deputies ratified an amendment to the **Value Added Tax Act**. On 1 January 2012, the reduced tax rate will be increased from 10% to 14%. On 1 January 2013, the rates will be harmonised at 17.5%.

## **Financial markets**

With the goal of reducing budgetary costs from supporting building savings schemes, the Chamber of Deputies approved on 2 September 2011 **legislation amending the conditions of building savings schemes**. The maximum amount of state contribution will be decreased from 15% to 10%, while the maximum limit for the base will be retained at CZK 20,000 and tax breaks for interest from building society savings will be abolished. The amendment is expected to come into force on 1 January 2012.

### **Energy**

On 21 September 2011, the government of the Czech Republic approved the request for allocation of free-of-charge permits to be used for investments in equipment and modernisation of infrastructure and in clean technologies and the national investment plan, prepared by the Ministry of the Environment of the Czech Republic. In the years 2013–2020, the Czech Republic will have 638 million permits available, of which 280 million permits will be sold in auction, 250 million permits will be allocated free of charge to Czech industry, and the remaining 108 million permits will be allocated to electricity companies for free in exchange for investments in clean technologies. The number of

free permits allocated to electricity companies will gradually be decreased over the course of the entire period, and in 2020 permits will only be sold to electricity companies in auction.

### Labour market

The Chamber of Deputies approved pension reform on 9 September 2011. The reform is comprised of two pieces of legislation, one concerning pensions and the other concerning supplementary pensions. The legislation is necessary for creation of the pension system's second tier and transformation of the third tier. The legislation stipulates that the second tier be financed by release of pension contributions from the first tier. Participants in the second tier reduce their contribution rate to the first tier by 3 p.p. and add an additional 2 p.p. from their own sources. People will be able to decide about this release prior to reaching the age of 35. People older than 35 at the time of the reform's launch will have to make a decision within a 6 months time frame. A decision may not be changed after it has been taken or after the deadline has passed.

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

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

An **amendment to the Pension Insurance Act** took effect on 30 September 2011, strengthening the tie between the pension and pension contributions paid. The basic pension allowance and reduced ceiling for its

calculation will no longer be stipulated as a fixed amount but will be derived from the average wage in the economy. The basic pension allowance is currently CZK 2,230 and will now be 9% of the average salary. The first reduction ceiling, which was newly set at 44% of the average salary, will remain roughly unchanged at the current level of CZK 11,000, and any income that does not exceed this amount will be taken into account at 100% also in future. The second reduction ceiling will be raised from the current CZK 28,200 to 400% of the average salary. For the purposes of pension calculations, however, only 26% of this amount will be included. The reduction from the current 30% will be carried out gradually. Income exceeding 400% of the average salary will no longer influence the pension amount after 2014. The increase will be carried out gradually in several steps, from 30 September 2011 until the end of 2014.

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

On 9 September 2011, the Chamber of Deputies approved three legislative amendments, collectively known as **social reform I**, with the objective of simplifying the social security system, reducing administrative burdens for users of services, and improving the targeting and needs calculation of social benefits. The reform concerns amendments to several acts related to consolidating the payment of non-insurance social benefits, the Act on Providing Benefits to Persons with Disabilities, and the Employment Act. The aforementioned acts should come into effect on 1 January 2012.

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

for the payment of housing contributions, and expands the possibilities of parents to select both the length of time for drawing and amount of parental benefits.

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

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

On 9 September 2011, the Chamber of Deputies approved an amendment to the Labour Code which should make the labour market more flexible and increase the motivation of companies to create new jobs. The amendment will allow a trial period for senior staff of up to 6 months and a severance payment upon termination of employment due to organisational changes according to the number of years of employment. It will be possible to conclude employment for a fixed period of up to 3 years, and it will be possible to extend this twice more by the same period with the same employer. It will now also be possible to give notice to an employee who seriously

breaches a treatment regime in the first 21 days of sick leave. The amendment to the Labour Code should become effective on 1 January 2012.

### **Health care**

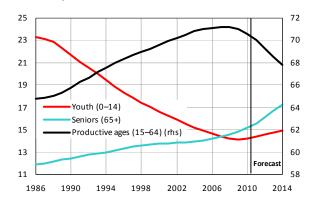
On 29 September 2011, the President of the Czech Republic signed an amendment to the Public Health Insurance Act, known as the first phase of the health care reform. The amendment introduces a definition of standard care and enables patients in individual cases to pay for so-called above-standard care. It also introduces electronic auctions for medication prices. One type of medication selected by the State Institute for Drug Control will be paid for in full by public health insurance, while others will be paid for at only 75% of the basic coverage. Last but not least, the amendment raises the hospital-stay fee from CZK 60 to CZK 100 per day, imposes a charge on medication of up to CZK 50, and introduces a single charge for prescriptions of CZK 30. The reform will become effective on 1 January 2012.

The second phase of the health reform, which includes the act on medical services, act on emergency medical services, and act on specific medical services, was approved by the Chamber of Deputies on 7 September 2011. The reform regulates the rights and obligations of medical personnel and patients, stipulates the conditions for providing emergency medical service, and establishes procedures for performing medical operations which in the majority of cases are irreversible. The reform is expected to come into effect on the 1st day of the 4th calendar month after its announcement.

# A.6 Demographic Trends

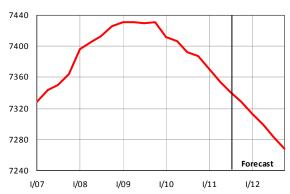
According to preliminary data, the population of the Czech Republic grew by 9 thous. to 10.542 million people in the first half of 2011. Neither the slight natural population increase (1 thous.) nor the slightly positive migration balance (8 thous.) diverged significantly from development in the first half of 2010.

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



Regarding age structure, the Czech population reached its peak number of working-age inhabitants (15–64 years) in 2009. Nevertheless, it still has a very favourable age structure, especially in comparison to Western European countries.

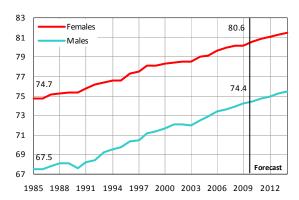
Graph A.6.2: **Czech Population from 15 to 64 Years** quarterly averages, in thousands



The decline in the working-age population is, however, partially compensated by effects within the age

structure of the labour force, as the structural proportions of age groups with high or growing participation are increasing. This has been, and will continue to be, supported by extension of the retirement age. While immigration could be another positive factor, its volume, as the recent period has shown, fluctuates greatly. The increase in labour market flexibility should also help to create a situation wherein the Czech economy will not suffer from an insufficiency of suitable labour force.

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



The continuing **ageing of the population** has been confirmed. The structural proportion of persons over 64 years of age in the total population, which reached 14% in early 2005, should exceed 16% in 2012 and increase to nearly 20% by 2020. In future, the number and proportion of seniors in the population will continue to rise due to the demographic structure and intensive continuation in extending the life expectancy.

Table A.6.1: Demography

in thousands of persons

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
				**********************		Prelim.	Forecast	Forecast	Outlook	Outlook
Population (January 1)	10 221	10 251	10 287	10 381	10 468	10 507	10 533	10 567	10 600	10 632
growth in %	0.1	0.3	0.4	0.9	0.8	0.4	0.2	0.3	0.3	0.3
Age structure (January 1):										
(0–14)	1 527	1501	1 480	1 477	1 480	1 494	1518	1 540	1 5 6 5	1 588
growth in %	-1.8	-1.7	-1.5	-0.2	0.2	1.0	1.6	1.5	1.6	1.5
(15–64)	7 259	7 293	7 325	7 391	7 431	7 414	7 3 7 9	7 327	7 268	7 214
growth in %	0.3	0.5	0.4	0.9	0.5	-0.2	-0.5	-0.7	-0.8	-0.7
(65 and more)	1 435	1 456	1 482	1513	1 556	1 599	1 636	1 700	1 768	1 829
growth in %	0.8	1.5	1.8	2.1	2.9	2.7	2.3	3.9	4.0	3.5
Old-age pensioners (January 1) <sup>1)</sup>	1 965	1 985	2 024	2 061	2 102	2 147	2296	2 336	2 368	2 400
growth in %	1.7	1.0	2.0	1.8	2.0	2.1		1.7	1.4	1.3
Old-age dependency ratios (January 1, in %):										
Demographic <sup>2)</sup>	19.8	20.0	20.2	20.5	20.9	21.6	22.2	23.2	24.3	25.4
Under current legislation 3)	35.3	35.6	35.8	35.9	36.1	36.6	37.1	37.4	37.8	38.2
Effective 4)	41.5	41.3	41.6	41.5	41.8	43.6	46.7	47.4	48.2	48.7
Fertility rate	1.282	1.328	1.438	1.497	1.492	1.49	1.51	1.52	1.53	1.54
Population increase	31	36	94	86	39	26	34	33	32	31
Natural increase	-6	1	10	15	11	10	9	8	7	6
Live births	102	106	115	120	118	117	116	114	113	112
Deaths	108	104	105	105	107	107	106	106	106	106
Net migration	36	35	84	72	28	16	25	25	25	25
Immigration	60	68	104	78	40	31				
Emigration	24	33	21	6	12	15				

In 2010 disability pensions of pensioners over 64 were transferred into old-age pensions.

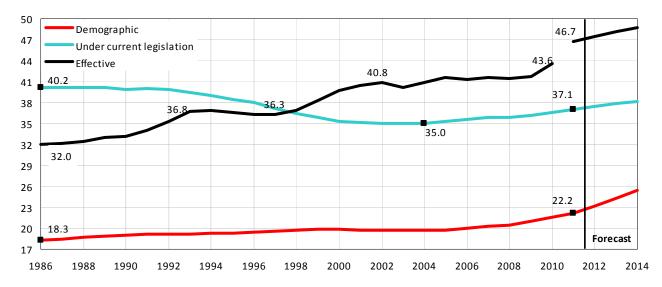
Demographic dependency: ratio of people in senior ages (65 and more) to people in productive age (15–64).

Dependency under current legislation: ratio of people above the official retirement age to the people over 19 below the official retirement age.

Effective dependency: ratio of old-age pensioners to working people.

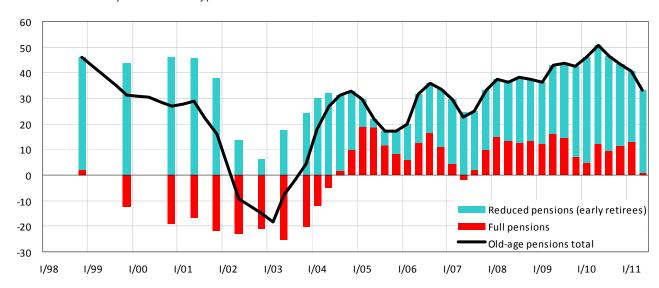
## **Graph A.6.4: Dependency Ratios**

As of January 1, in %, inconsistent between 2010 and 2011 due to transfer of disability pensions to old-age pensions for people over 64 years



Graph A.6.5: Old-Age Pensioners

absolute increase over a year in thousands of persons



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