# **A Forecast Assumptions**

The forecast was made on the basis of data known as of **March 28, 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 January 2011 are indicated by italics. Data in the tables relating to the years 2013 and 2014 are calculated by extrapolation, outlining only the direction of possible developments, and as such are not commented upon in the following text.

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

## A.1 External Environment

### **Economic output**

The world economy continues to recover but its speed is markedly unequal. All large developing economies, including China and India, are seeing a slight slowdown; however, growth remains high. Growth in developed economies is much weaker, but unlike previously, optimism in the American and German economies is growing. Commodity prices in all of the main groups have continued their sharp rise. A number of events occurred during the first quarter (unrest in the Middle East and the natural disaster in Japan), and these could influence the global economic cycle.

The US economy grew by 2.9% in 2010 and QoQ growth in the last quarter of 2010 was 0.7% (versus 0.5%). Consumer expenditure is helping growth; the growth "mix" is considered healthy (strong consumption and not too high level of supplies). The stock markets continue to grow, with the DJIA holding above 12 000 points. An agreement was reached between the Government and the opposition to extend tax breaks even to 2011 to continue to help support the economy. The current account deficit, which was under 3% during 2009, is again increasing, with the estimate for 2011 being 3.5% of GDP.

High unemployment remains the main cause for concern. It fell from 9.8% in November to 8.9% in February, but job creation has been weak. The painful process of household debt relief continues. The important index of new real estate purchases continues to stagnate, which shows that the process is still not over. The national debt has reached 100% of GDP, and several states and a number of municipalities are on the verge of bankruptcy.

Stimulation to the economy is being provided by the central bank, which is holding the band for the key refinancing rate at 0–0.25% and continues in quantitative easing.

**GDP** in the Eurozone grew by 1.7% in 2010, and QoQ for the fourth quarter of 2010 by 0.3% (*versus 0.4 %*). The strong growth of the German economy

contributed the most to this. Characteristic for developments in the Eurozone is marked unevenness: in 2010, the GDP of Greece, Ireland, and Spain fell, and these countries will likely be at near zero growth or in decline this year as well; in comparison, the German economy grew by 3.6 percent.

Inflation is also developing at different speeds, but is growing overall, and the differences between the countries are getting smaller. In February, inflation accelerated to 2.4% in particular due to the growth of energy prices.

Unemployment, which remains high, is also showing unevenness. In the Eurozone, it climbed to 9.9% in January, whereas in Germany it fell to 6.5%. In comparison, it stagnated in Spain at 20.4%, in Slovakia at 14.5%, and in Ireland at 13.5%.

After a spring full of turbulence on the financial markets, fiscal restrictions and consolidation are on the agenda for the majority of the countries in the Eurozone. No EA12 country has a surplus budget. The EA deficit is predicted to be at 4.5% of GDP in 2011. With last year's deficit of 3.3%, Germany is preparing to start more aggressive consolidation.

The ECB continues to maintain the main refinancing rate at 1.00% and has been helping certain economies by purchasing government bonds. However, it is sensitive to growing inflation and has thus made indications that it would soon increase the rate. The ECB's monetary policy has to deal with the problem of what common interest rate it should set for the powerful German economy on the one hand and, for example, the big stagnating Spanish economy on the other.

The degree of forced restriction of expenditure is another issue. In Ireland, severe restrictions led to an economic collapse. After many years, with high unemployment, emigration began to rise, and the resulting political instability led to the government's fall.

The Polish and Slovak economies are both benefiting from not having problems in the banking sector.

In 2010, the **Polish economy** grew dynamically by 3.8%, in the fourth quarter by more than 0.8% QoQ (*versus 0.4 %*). In January, the unemployment rate stagnated at 9.7%. Investment into infrastructure in the wake of the European football championships should help prop the economy in 2011. The public finance deficit in 2010 came close to 8% of GDP, which led to the implementation of economic measures and an increase in VAT. The Government also prepared a programme for the sale of state-owned companies.

After the recession, **Slovakia** is again showing dynamic GDP growth, which is driven mainly by export, as was the case in the previous period. In the fourth quarter, growth reached 0.9 % QoQ (versus 0.7%), with the economy growing by 4.0% for the entire year. Industrial production in January 2011 grew YoY by 17.1%. A strong dependence on automobile manufacturing and components imported for this sector could, as a result of the production outage in Japan, lead to production being cut back. The unemployment rate amounted to 14.5% in January, which is the second highest in the Eurozone. The public finance deficit in 2010 deteriorated to 8% of GDP against expectations. For this reason, the government prepared consolidation measures that will reduce it by about 2.5 p.p. and is preparing a number of privatisations, for example in energy.

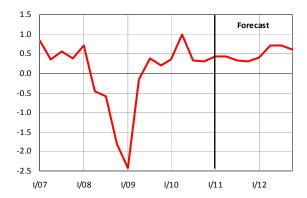
Our forecast is again based on the assumption that no more major shocks will occur on the financial markets and that the Eurozone countries will not experience an insolvency crisis. Recovery is expected in 2011, although a considerably different speed throughout the various regions of the world. While growth in advanced economies will be relatively weak despite a certain improvement, growth of developing markets will remain dynamic.

With respect to the US economy, we are increasing the growth estimate to 3.0 % (versus 2.9 %). For 2012, we are keeping the estimate at 3.1%.

We are keeping our forecast for expected GDP growth in the EA12 economy at 1.7% for 2011 and 2.0% for 2012. Problems in the financial sector of many countries, high public debt and unequal speeds of development in the Eurozone countries will represent the main risks.

Graph A.1.1: **Growth of GDP in EA12** 

QoQ growth in % (adjusted for seasonal and working day effects)



### **Commodity prices**

Renewed pressure on commodity prices since the second half of 2010 is a symptom of growth expectations. Commodity prices in all main market segments are reaching their maximums.

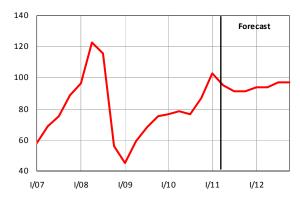
The consequences of globalisation in particular can be seen as the main cause. Industrialisation of the once developing world and the creation of numerous middle classes in these countries with much higher consumption standards are apparently creating long-term pressure on limited resources. Investments into commodity derivatives, which have seen a tremendous boom in recent years, are another factor. Furthermore, since the end of January the global market suffered shocks related to geopolitical turmoil (unrest in many oil-producing countries) or natural disasters (Japan). It is expected, however, that the impact of these shocks will only be short-term.

The average price of Brent crude oil for 2010 reached USD 79.7 per barrel; however, it will apparently exceed USD 103 per barrel for the first quarter of 2011 (versus USD 90).

We have adjusted our estimates of the price of crude oil for 2011 upward to USD 95/barrel (*versus USD 88*). The forecast risks are substantially skewed upwards. However, it is already possible to predict the consequences of the nuclear complications in Japan on the longer-term growth of energy prices.

Commodity prices have also been growing significantly for quite some time in other main market segments (metals, foodstuffs, and agricultural raw materials – namely cotton and Indian rubber). The FAO food price index continues to break new records. Although weather anomalies in 2010 are behind cereal prices, the other causes mentioned above also apply.

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



### Global financial markets

The debt crisis in the periphery of the Eurozone is continuing unabated even this year. On the one hand, there are signs allowing for slight optimism (certain differentiation of the financial markets between Portugal and Spain, see below); on the other hand, however, political factors are beginning to play an important role (e.g., the fall of the Portuguese government), which could have a significant negative effect on future development. Tensions on the global financial markets are further exacerbated by unrest in the Arab world and the situation in Japan.

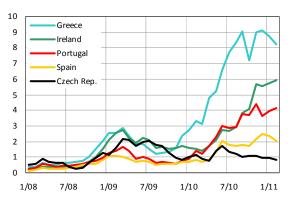
Yields on 10-year government bonds and the CDS spreads of Greece, Ireland, and Portugal continue to hover around record high levels without any apparent tendency to fall. In the case of Spain, it is possible to assess the development of these indicators slightly optimistically. Since the end of last year, yields on 10-year government bonds have stagnated above 5% and CDS spreads (5-year government bonds) for this period fell by more than 100 b.p. It appears that the financial markets are beginning to differentiate more between Portugal and Spain, i.e., countries that are often mentioned in connection with the utilisation of financial assistance from the EA/IMF stability mechanism.

The reason for this differentiation may be the different development of public budgets last year in relation to the targets that the Spanish and Portuguese governments had set for this period and the approach of the Spanish authorities to resolving problems in the banking sector. Capital requirements were made more restrictive in Spain and a framework adjusting the capital injection process to a new regulatory minimum was implemented. The preliminary estimates of the Spanish central bank saw banking institutions needing approximately EUR 15 billion for capital equalisation.

Although estimates made by other institutions may be higher, the financial markets have, nevertheless, been assessing these measures positively overall.

Graph A.1.3: Spreads against German Bonds

Difference in yields on 10-year government bonds of the country in question against 10-year German government bonds, in p.p., monthly average



Certain Irish banks will have to raise capital, too. According to the results of stress tests published by the Irish central bank at the end of March, the four tested banks will have to increase Tier 1 capital by EUR 24 billion in the period of 2011–2013. In response to these numbers (the stress tests took place in the framework of utilisation of financial assistance from the EA/IMF), the ECB announced that it would be accepting Irish government bonds as collateral regardless of their rating.

New stress tests are also being prepared for European banks. Although the results should not be published until June, the European Banking Authority (EBA), which is coordinating the entire testing process, presented the details of the macroeconomic scenario of the stress tests already in mid March. Just as was the case with the previous stress tests, opinions are being voiced that these tests will not contain sufficient "stress" and thus will not sufficiently verify the resilience of European banks against unfavourable shocks. However, the fact that Member States are to draw up a restructuring strategy for vulnerable institutions prior to the publication of the test results should be assessed positively.

Negotiations about the permanent European Stability Mechanism (ESM), which should replace the existing mechanism (which had been conceived as temporary from the onset) as of 2013, have advanced. At the end of March, the European Council agreed on the manner in which the credit capacity of the ESM will be increased to a EUR 500 billion amount that is real and not just "on paper". Unfortunately, no agreement was

reached on how to attain the same reinforcement of credit capacity of the existing stability mechanisms.

March also brought a series of changes in the valuation of the credit obligations of certain PIIGS countries. Moody's downgraded Greece by three notches (from Ba1 to B1) and Spain by one notch (from Aa1 to Aa2, negative outlook - the reason for downgrade had to do with the costs tied to bank restructuring and the budget deficits of autonomous Standard & Poor's downgraded Greece by two notches (from BB+ to BB-, negative outlook). It then adjusted Portugal's credit obligations as much as twice not even within a week (by three notches, from A- to BBB-; thus, Portugal's rating is only one level above noninvestment grade). The rating adjustments continued even in early April, when Standard & Poor's downgraded Ireland by one notch (from A- to BBB+, stable outlook). Fitch then downgraded Portugal by three notches (from A- to BBB-, negative outlook).

The reasons that Standard & Poor's mentioned for the change in the assessment of Greece's obligations are especially poignant. It is clear from the conclusions of the meeting of the European Council from 24 and 25 March 2011 that the provision of financial assistance from the ESM to a state that becomes insolvent will be conditional upon debt restructuring. Furthermore, the ESM will have a senior status. According to S & P, this agreement on the ESM brings Greece closer to default.

In view of the considerable complexity in the relationships between the financial sector, government, and other sectors of the real economy, and in view of the frequency with which new information is emerging, it is almost impossible to determine whether, when and how intensively will the development abroad impact on the Czech economy. Nevertheless, it still holds that the external environment is an important source of risks for the domestic economy and that it should be monitored closely.

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
								Prelim.	Forecast	Forecast
EU27	1.3	2.5	2.0	3.2	3.0	0.5	-4.2	1.8	1.8	2.1
EA12	0.8	2.1	1.7	3.0	2.8	0.4	-4.1	1.7	1.7	2.0
Germany	-0.2	1.2	0.8	3.4	2.7	1.0	-4.7	3.6	2.4	2.0
France	1.1	2.5	1.9	2.2	2.4	0.2	-2.6	1.6	1.7	2.0
United Kingdom	2.8	3.0	2.2	2.8	2.7	-0.1	-4.9	1.3	1.5	2.0
Austria	0.8	2.5	2.5	3.6	3.7	2.2	-3.9	1.8	1.8	2.0
USA	2.5	3.6	3.1	2.7	1.9	0.0	-2.6	2.8	3.0	3.1
Hungary	4.0	4.5	3.2	3.6	0.8	0.8	-6.7	1.1	2.2	3.1
Poland	3.9	5.3	3.6	6.2	6.8	5.1	1.7	3.8	4.1	4.3
Slovakia	4.8	5.1	6.7	8.5	10.5	5.8	-4.8	4.0	3.3	4.1
Czech Republic	3.6	4.5	6.3	6.8	6.1	2.5	-4.1	2.3	1.9	2.3

Graph A.1.4: Real Gross Domestic Product

YoY growth in %, nsa data

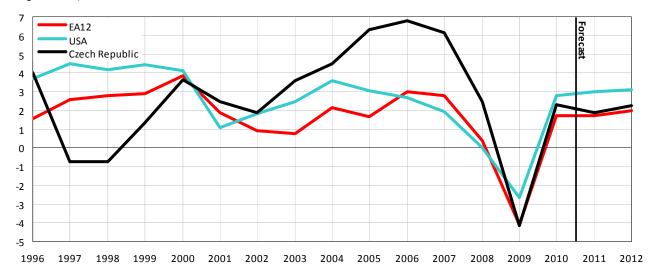


Table A.1.2: **Real Gross Domestic Product** – quarterly *growth in %, sa data* 

			201	10			201	11	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
EU27	20Q	0.4	1.0	0.5	0.2	0.4	0.5	0.4	0.3
	YoY	0.6	2.0	2.2	2.1	2.1	1.6	1.5	1.6
EA12	20Q	0.4	1.0	0.3	0.3	0.4	0.4	0.3	0.3
	YoY	0.8	2.0	1.9	2.0	2.1	1.5	1.5	1.5
Germany	20Q	0.6	2.2	0.7	0.4	0.5	0.4	0.4	0.3
	YoY	2.1	3.9	3.9	4.0	3.8	2.0	1.7	1.6
France	00Q	0.3	0.6	0.3	0.3	0.4	0.5	0.5	0.4
	YoY	1.2	1.6	1.7	1.5	1.6	1.5	1.7	1.8
United Kingdom	20Q	0.3	1.0	0.7	-0.6	0.4	0.5	0.5	0.6
	YoY	-0.3	1.5	2.5	1.5	1.5	1.0	0.8	2.0
Austria	20Q	0.0	1.2	0.9	0.6	0.4	0.2	0.2	0.3
	YoY	0.1	2.1	2.5	2.7	3.1	2.1	1.4	1.1
USA	20Q	0.9	0.4	0.6	0.8	0.8	0.8	0.8	0.9
	YoY	2.4	3.0	3.2	2.7	2.7	3.1	3.2	3.3
Hungary	QOQ	1.4	0.2	0.6	0.2	0.6	0.6	0.7	0.7
	YoY	-0.6	0.8	2.2	2.4	1.6	2.0	2.1	2.6
Poland	20Q	0.6	1.1	1.2	0.8	1.0	1.0	1.2	1.0
	YoY	3.1	3.7	4.6	3.9	4.2	4.1	4.1	4.3
Slovakia	20Q	0.7	0.9	0.9	0.9	0.6	0.8	0.9	0.9
	YoY	4.5	4.2	4.0	3.4	3.3	3.2	3.2	3.2
Czech Republic C	QOQ	0.7	0.7	0.9	0.3	0.3	0.6	0.5	0.6
	YoY	1.1	2.3	2.7	2.6	2.2	2.1	1.6	1.9

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

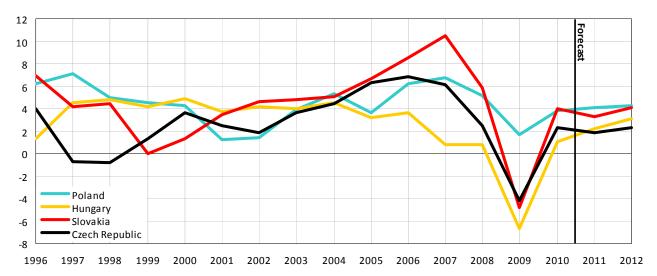


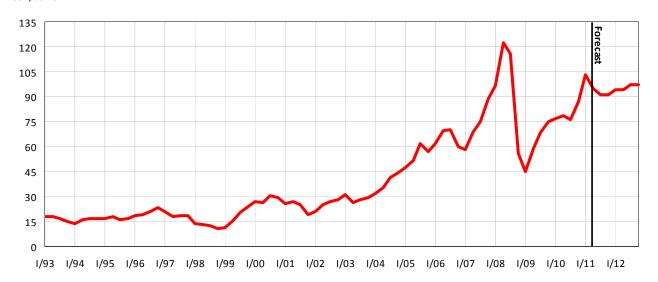
Table A.1.3: **Prices of Commodities** – yearly *spot prices* 

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
										Forecast	Forecast
Crude oil Brent	USD/barrel	28.8	38.3	54.4	65.4	72.7	97.7	61.9	79.7	95	96
	growth in %	14.0	33.0	42.0	20.1	11.2	34.4	-36.7	28.7	19.3	0.5
Crude oil Brent index (in CZK)	2005=100	62.4	75.6	100.0	113.4	113.3	127.7	90.5	116.8	134	132
	growth in %	-1.7	21.1	32.3	13.4	-0.1	12.7	-29.1	29.1	14.5	-1.0
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		

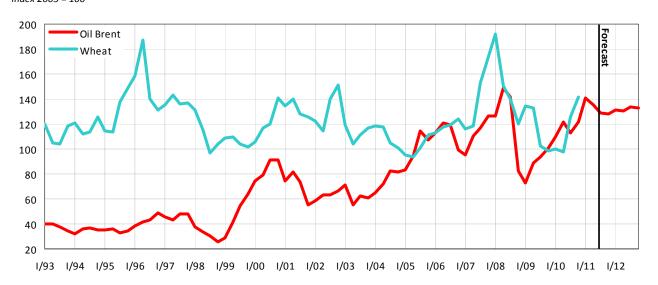
Table A.1.4: **Prices of Commodities** – quarterly *spot prices* 

			201	0			201	1	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Crude oil Brent	USD/barrel	76.7	78.7	76.4	86.8	103	95	91	91
	growth in %	70.4	33.2	11.7	15.7	34.3	20.7	19.1	4.8
Crude oil Brent index (in CZK)	2005=100	109.9	121.4	112.9	121.3	141	135	129	128
	growth in %	50.4	37.0	20.4	20.5	28.5	11.4	14.0	5.4
Wheat price	USD/t	195.7	177.5	237.9	283.6				
	growth in %	-15.6	-28.4	13.9	38.1				
Wheat price index (in CZK)	2005=100	100.2	97.9	125.7	141.7				
	growth in %	-25.6	-26.4	22.9	43.8				

Graph A.1.6: **Dollar Prices of Oil** *USD/barrel* 



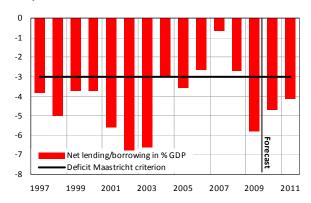
**Graph A.1.7: Koruna Indices of World Commodity Prices** *index 2005 = 100* 



# A.2 Fiscal Policy

While in past years, general government performance was positively influenced particularly by the peaking of the economic cycle, the recent recession had been bringing deteriorating results since 2008, thereby revealing structural deficiencies in general government operations.

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



According to preliminary estimates of the CZSO, the **general government deficit** for 2010 has reached CZK 172.8 billion, which is 4.7% of GDP. In comparison with the MoF's estimate in January, this is only a minimal change; thus, the MoF's original estimates remained fulfilled to a great extent.

Compared a period of stagnation and decline in 2008 and 2009, revenues again began to increase On the expenditure side, however, an entire range of measures were undertaken, which resulted in a reduction in government expenditure. This included savings related to public administrative operations (stagnation of the wage bill and a drop in intermediate consumption) and a decrease in investment expenditure and subsidies to entities outside the government sector.

The development of interest costs was very positive, growing only slightly despite the relatively high debt dynamic. This can be attributed chiefly to the fall in interest rates in all issued maturities of the yield curve for government bonds, which thus reflects the positive valuation of the implementation of the consolidation strategy.

Although the result of the past year appears relatively optimistic, certain facts should be stressed. Tax revenues were influenced to a significant degree by legislative measures (e.g., increase in VAT or the rates of certain excise taxes). Furthermore, government deficit data for 2010 are still burdened with uncertainty

about estimated corporate income tax revenue accruals. More dependable data stemming from incoming tax returns will not be available until the October report.

In 2011, the MoF is expecting the deficit to fall to CZK 154 billion, which represents 4.2% of GDP. This is thus a fiscal consolidation of 0.5 p.p.; after adjusting for cyclical events and one-off factors, fiscal efforts amount to as much as 0.9 p.p. The revenue side will probably be strengthened by faster growth and certain tax revenues such as VAT and corporate income tax. In the case of VAT, this is the effect of the 2010 rate increase, which will apparently not show up to any great extent until later this year. In the case of corporate income tax, this has to do with the affect of accelerated depreciation. Furthermore, the fact that interest rates coming into 2011 have not decreased, as was the case in previous years, needs to be taken into account. Property tax will see a jump, primarily due to the introduction of gift tax on emission allowances which are provided by the government to the private sector free of charge.

As in previous years, a significant inflow of money from the European funds is expected and could reach historical record amounts. These resources influence the balance only up to the amount of national cofinancing. Otherwise, they are reflected also on the expenditure side, mainly in the form of government investment.

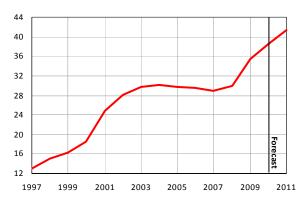
Thanks to a more marked increase in investment transfers outside the sector, a slight increase on the revenue side will likely occur again. In this case, a massive influx of European funds even outside the government sector, where public budgets can contribute partially to co-financing, is expected.

Another striking factor is the risk of acceleration of interest on public debt, where a deterioration of last year's conditions could occur. With regard to the volatility of the financial markets, this item represents a significant future risk for the public budget. A moderate increase is also expected in social transfers. In comparison, the greatest decrease in expenditure is expected on public administration employees.

The risks presented in the government deficit forecast for 2011 stem primarily from the estimated gross fixed capital formation, where even the data for 2010 are still not fully reliable at this time and are to a certain extent based on estimates. Naturally, this makes a subsequent estimate into 2011 more difficult.

**Government debt** at the end of 2011 is estimated at 41.4% of GDP and thus remains under the value of Maastricht convergence criteria.

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



The mid-term outlook for the budget for the years 2012–2013 assumes a continued gradual improvement of the government balance to 2.9% of GDP in 2013, with the targeted deficit trajectory should lead to balanced budgets in 2016. The current fiscal policy setting is given by the government-approved expenditure frameworks. Nevertheless, significant conceptual structural reforms, which are being discussed at this time and should be approved this or next year, are planned for 2012 and 2013.

A more detailed overview of future results of government operations will be provided in early May in the Convergence Programme of the Czech Republic and in late May in the Fiscal Outlook of the Czech Republic.

Table A.2.1: Net Lending/Borrowing and Debt

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
										Prelim.	Forecast
General government balance 1)	bill. CZK	-167	-171	-83	-107	-85	-24	-100	-213	-173	-154
	% GDP	-6.8	-6.6	-3.0	-3.6	-2.6	-0.7	-2.7	-5.9	-4.7	-4.2
Cyclical balance	% GDP	-0.5	-0.5	-0.5	-0.2	0.4	1.1	0.8	-0.9	-0.7	-0.8
Cyclically adjusted balance	% GDP	-6.3	-6.1	-2.4	-3.4	-3.0	-1.8	-3.6	-4.9	-4.0	-3.4
One-off measures	% GDP	-0.1	-0.3	-0.7	-1.3	-0.2	-0.3	-0.1	0.3	0.0	-0.3
Structural balance	% GDP	-6.2	-5.9	-1.7	-2.1	-2.8	-1.5	-3.5	-5.3	-4.0	-3.1
Fiscal effort <sup>2)</sup>	percent. points	0.6	-0.3	-4.1	0.4	0.7	-1.3	2.0	1.8	-1.3	-0.9
Interest expenditure	% GDP	1.2	1.1	1.2	1.2	1.1	1.1	1.1	1.3	1.4	1.7
Primary balance	% GDP	-5.4	-5.2	-1.1	-1.2	-1.3	0.7	-1.6	-4.9	-3.3	-2.1
Cyclically adjusted primary balance	% GDP	-4.9	-4.7	-0.6	-1.0	-1.7	-0.4	-2.4	-4.0	-2.6	-1.4
General government debt	bill. CZK	695	768	848	885	948	1 024	1 105	1 282	1 414	1 538
	% GDP	28.2	29.8	30.1	29.7	29.4	29.0	30.0	35.4	38.5	41.4
Change in debt-to-GDP ratio	percent. points	3.3	1.6	0.3	-0.4	-0.2	-0.5	1.0	5.4	3.2	2.8

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.

<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.

# A.3 Monetary Policy and Interest Rates

### Monetary policy

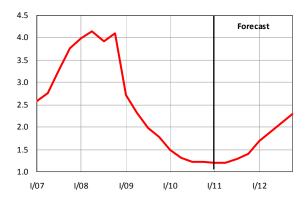
The CNB's main policy objective is ensuring price stability. To achieve this, the central bank uses an **inflation targeting** regime. By means of monetary instruments, the CNB influences total inflation so that the YoY increase in the CPI does not deviate from the medium-term inflationary target of 2% by more than  $\pm\,1$  p.p. The main monetary policy instrument is the interest rate for 2W repo operations, which stood at 0.75% in the first quarter of 2011, which is very low from the long-term perspective.

In relation to price levels, the CNB also monitors developments in **interest rate differentials** versus other economies (EA, USA). The interest-rate differentials may significantly affect international capital flows and thus affect price levels in the individual countries through the exchange rate. At present, there are no important pressures from this perspective, especially due to the effect of relatively narrow interest rate spreads, which, in the first quarter of 2011, remained at –0.25 p.p. between the Czech Republic and EMU and relative to the US at 0.50 to 0.75 p.p.

### Interest rates

The average value for **3M PRIBOR** held at 1.2% (in line with the forecast) in the first quarter of 2010. For 2011, it is forecast at 1.3% (no change). A moderate increase in PRIBOR is expected in the second half of 2011, but this should not be too considerable and should not dampen the not so high economic growth weakened by restrictive government measures. In connection with an expected increase in repo rates, we estimate average 3M PRIBOR at 2.0% for 2012 (versus 1.9%).

Graph A.3.1: PRIBOR 3M in %



Long-term interest rates should slowly rise in the coming years and thus reflect the economic recovery in progress. Given the Czech Republic's current relatively good rating (as at 28 March 2011: Moody's: A1; Standard & Poor's: A; Fitch Ratings: A1), further successful issues of government bonds can be expected. The credibility of Czech fiscal policy is reflected in the negative spread compared to average long-term rates in the Eurozone (see Graph A.3.7).

With regard to the not very stable situation in certain EMU countries (e.g., Portugal's current problems), it is not out of the question that the risk premium on government bonds could increase, which would lead to the financing of public debt becoming more expensive. Assuming that external conditions do not markedly deteriorate, we predict the average **yield to maturity of 10-year government bonds** to be 4.1% in 2011 (versus 3.8%) and 4.3% in 2012 (versus 4.0%). The spread between Czech and German bonds should narrow slightly.

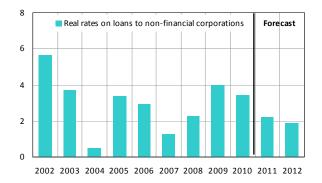
Interest **rates for deposits and loans** respond to changes in interbank rates with a lag of several months. Therefore, in connection with stagnation, repo rates for loans to non-financial corporations and on household deposits remained at 4.1% and 1.2%, respectively, in the fourth quarter of 2010. We expect the average rates for loans to non-financial corporations to be at approximately 4.1% in 2011 (*no change*) and, in connection with the mentioned increase in interbank rates, a growth of 4.5% is expected in 2012 (*versus 4.4%*). Average rates for household deposits should reach 1.3% in 2011 (*versus 1.2%*) and increase to 1.5% in 2012 (*versus 1.3%*).

In the context of the real economy, the development of real interest rates is important. The developments of nominal interest rates, CPI, and the deflator for final domestic use imply a decrease in real interest rates for loans to 2.2% in 2011 (*versus 2.0*%) and 1.9% in 2012 (*versus 2.3*%). The lower value compared to the last forecast is due in particular to administrative influences (increase in VAT).

Compared to the previous quarter, weighted interest rates for new loans to households rose in the fourth quarter of 2010 by 0.6 p.p. to 14.9%. Interest rates for new loans to non-financial corporations remained at 4.1%.

Graph A.3.2: Average Real Rates on Loans

rates on loans deflated by end-of-year final domestic use deflator, in % p.a.



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

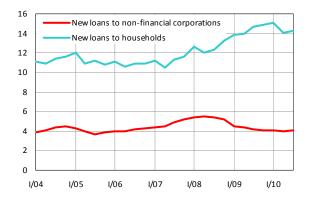


Table A.3.1: Interest Rates – yearly

average interest rates in per cent p.a.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	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	1.3	2.0
Government bond yield to maturity (10Y)	4.12	4.75	3.51	3.78	4.28	4.55	4.67	3.71	4.1	4.3
Interest rates on loans to non-financial corpor.	4.57	4.51	4.27	4.29	4.85	5.59	4.58	4.1	4.1	4.5
Interest rates on deposits from households	1.40	1.33	1.24	1.22	1.29	1.54	1.37	1.25	1.3	1.5
Real rates on loans to non-financial corporations 1)	3.72	0.47	3.38	2.95	1.24	2.27	3.97	3.41	2.2	1.9
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	-1.22	-1.4	-1.6

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

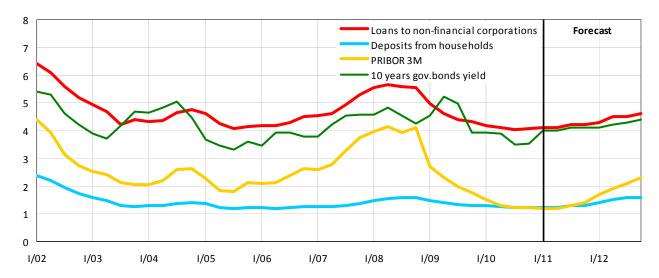
Table A.3.2: Interest Rates – quarterly

average interest rates in per cent p.a.

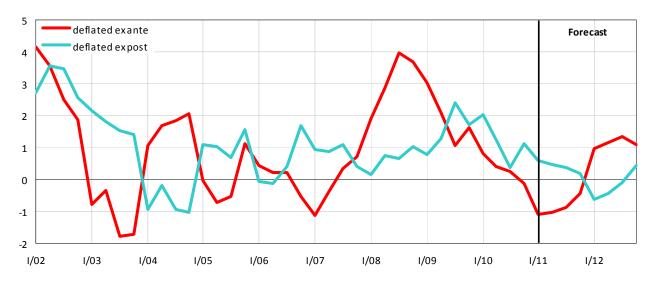
		2010	0			201	1					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
					Estimate	Forecast	Forecast	Forecast				
Repo 2W rate CNB (end of period)	1.00	0.75	0.75	0.75								
Main refinancing rate ECB (end of period)	1.00	1.00	1.00	1.00								
Federal funds rate (end of period)	0.25	0.25	0.25	0.25		•	•	•				
PRIBOR 3M	1.50	1.30	1.23	1.21	1.2	1.2	1.3	1.4				
-10-year government bonds yield to mat.	3.94	3.90	3.48	3.51	4.0	4.0	4.1	4.1				
Interest rates on loans to non-fin. corporations	4.19	4.11	4.05	4.06	4.1	4.1	4.2	4.2				
Interest rates on deposits from households	1.30	1.27	1.22	1.22	1.2	1.2	1.3	1.3				

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

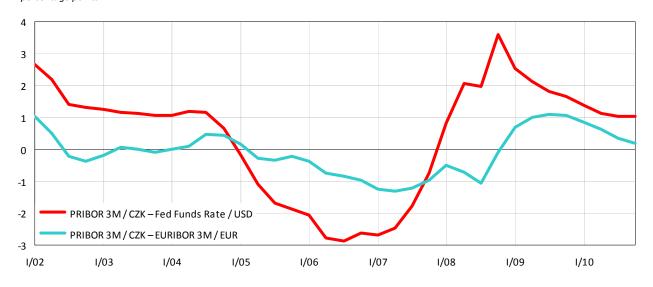
Graph A.3.4: Interest Rates in % p.a.



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

Since mid 2010, **the CZK/EUR exchange rate** has gradually appreciated roughly in accordance with the long-term trend, even though relatively high volatility remained in the various quarters. The average exchange rate for the fourth quarter of 2010 was 24.79 CZK/EUR; in February 2011, the exchange rate attained an average value of 24.28 CZK/EUR, but during March it weakened, falling over 24.50 CZK/EUR.

The adopted scenario assumes that the exchange rate will continue to move along the trend trajectory of both moderate nominal and real appreciation, which is in line with underlying macroeconomic fundamentals. Any marked strengthening above this trajectory would increase the risk for development of the trade balance.

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

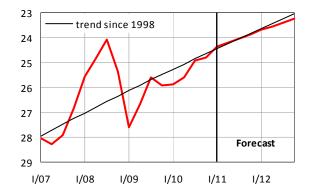


Table A.4.1: Exchange Rates – yearly

			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	24.1	23.5	22.8	22.2
	appreciation	growth in %	7.1	5.1	2.1	11.3	-5.7	4.6	4.9	2.7	2.7	2.7
CZK / USD		average	23.95	22.61	20.31	17.03	19.06	19.11	18.3	18.0	17.6	17.1
	appreciation	growth in %	7.3	5.9	11.3	19.2	-10.6	-0.3	4.2	1.6	2.7	2.7
NEER		average of 2005=100	100.0	105.1	107.9	120.4	116.2	119.1	123	127	130	134
	appreciation	growth in %	6.2	5.1	2.6	11.6	-3.5	2.5	3.6	2.6	2.7	2.7
Real exchange	rate to EA12 <sup>1)</sup>	average of 2005=100	100.0	104.3	107.5	119.4	114.4	117.4	121	125	128	131
	appreciation	growth in %	4.8	4.3	3.1	11.1	-4.2	2.6	2.7	3.6	2.5	2.3

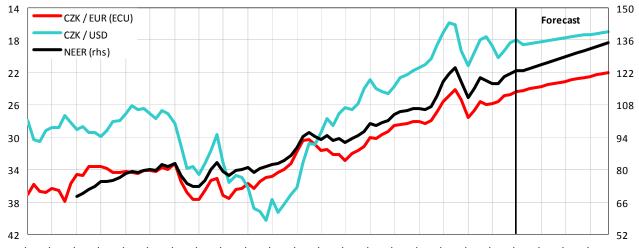
<sup>1)</sup> Deflated by GDP deflators.

Table A.4.2: Exchange Rates - quarterly

				201	0			201	1	
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast	Forecast	Forecast
Nominal exch	nange rates:									
CZK / EUR			25.87	25.59	24.91	24.79	24.4	24.2	24.0	23.9
	appreciation	growth in %	6.7	4.3	2.7	4.6	6.2	5.8	3.7	3.9
CZK / USD			18.71	20.16	19.30	18.26	17.9	18.6	18.5	18.4
	appreciation	growth in %	13.3	-2.8	-7.3	-4.0	4.5	8.3	4.5	-0.5
NEER		average of 2005=100	117.3	117.3	120.3	121.6	123	123	124	124
	appreciation	growth in %	5.5	1.9	0.4	2.6	4.6	4.7	2.7	2.4
Real exchang	e rate to EA12	average of 2005=100	115.2	116.1	118.7	119.7	119	120	121	123
	appreciation	growth in %	4.4	2.4	1.3	2.2	3.1	3.0	1.9	2.8

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

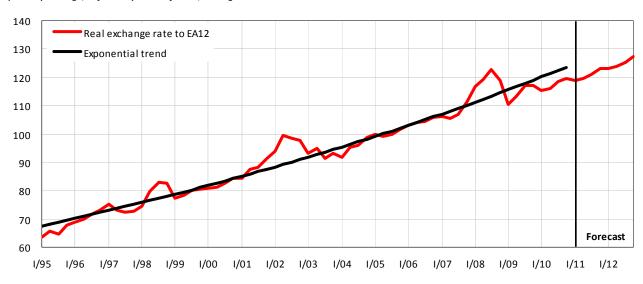
quarterly average, average 2005 = 100 (rhs)



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

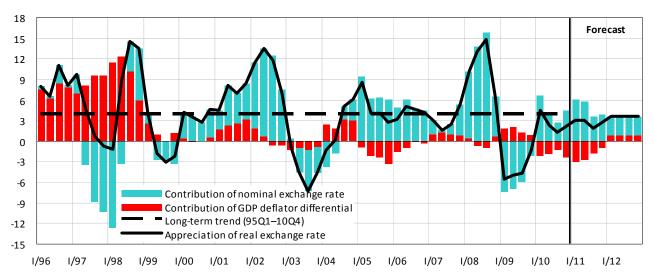
Graph A.4.3: Real Exchange Rate to EA12

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

On 26 January 2011, the Government of the Czech Republic approved the Government Legislative Work Plan for 2011 and the Government Legislative Work Outlook for 2012 to 2014, which contains a schedule of key structural reforms that the Government of the Czech Republic has pledged to in its programme statement. Some of the main measures include reform of public finance, reform of the pension and health care systems, a new income tax act, reform of tertiary education, and a fight against corruption.

### **Business environment**

In order to increase transparency of the process of awarding public contracts, the Government approved an amendment to the public procurement act on 17 March 2011. The amendment reduces and consolidates the maximum value of contracts for which it will not be necessary to put out a tender to CZK 1 million. At the same time, it puts greater restrictions on the requirements imposed on contracting entities and evaluators of contracts that exceed CZK 300 million, and, last but not least, it imposes the obligation to cancel the award procedure if less than three bidders remain after offers are evaluated.

On 31 March 2011, the **amendment to the insolvency act** came into force. This amendment reinforces the position of creditors in insolvency proceedings. It revives the right of creditors to contest the receivables of other creditors if the solution to a debtor's insolvency ends up being bankruptcy or debt relief.

### **Taxes**

On 1 April 2011, the **amendment to the value added tax act entered** into force. This amendment was adopted to restrict tax evasion. It allows for corrections to already disclosed and paid taxes with respect to receivables from debtors who are in bankruptcy. At the same time, it introduced taxpayer guarantees for intentionally undisclosed tax, laying the burden of proof on the tax authorities.

On 29 March 2011, the President of the Czech Republic signed the **amendment to the excise tax act**, which increases the minimum excise tax rate for tobacco products in two steps (as of 1 January 2012 and as of 1 January 2014). The amendment also cancels the hitherto excise tax exemption on emulsified diesel and specifies the conditions for small-scale distilling.

#### Financial markets

On 28 February 2011, the **amendment to the bank supervision act**, which transposes the European directive on bank supervision into Czech law, entered into force. The main objective of the law is to reinforce cooperation and remove obstacles to exchanging information between authorities overseeing the banking market in the countries of the EU.

The amendment to the act on the Czech National Bank was approved by the Senate on 3 March 2011. The amendment regulates the CNB's authority as part of the newly created European financial market supervision system, which was established on 1 January 2011 and whose purpose is to oversee the EU's financial system.

### **Labour market**

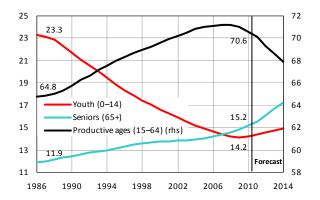
On 23 February 2011, the Government of the Czech Republic approved the amendment to the act on pension insurance, which addresses the ruling of the Constitutional Court and reinforces the link between the pension amount and income subject to social insurance contributions. The basic pension assessment and the reduction limit for calculating it will no longer be fixed but derived from average wage. The basic pension assessment, which amounts to CZK 2 230 at this time will now amount to 9% of average wage. The first reduction limit which has now been set at 44% of average wage will remain at the current level of CZK 11000, and incomes not exceeding this amount will continued to be taken into account in their full amount. The second reduction limit will be raised from the current CZK 28 200 to 400% of average wage. For the purposes of calculating pensions, only 26% of this amount will be included, however, with the reduction from the current 30% being carried out gradually. Incomes exceeding 400% of average wage will no longer affect pension amounts after 2014. The increase will be carried out gradually in a number of steps beginning 30 September 2011 and ending on the last day of 2014.

The amendment also accelerates consolidation of the age of retirement of men and women. Consolidation will be finnished in 2041 for those born in 1975. The retirement age will be increased for everyone by two months per year, i.e., in compliance with expected development of life expectancy. Final retirement age is not explicitly defined.

# A.6 Demographic Trends

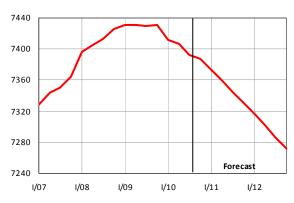
According to preliminary data, the population of the Czech Republic grew by 26 thousand to 10.533 million in 2010. The natural increase in population reached 10 thousand persons, which is only slightly less compared to the previous year. The positive balance of migration in the second half of the year increased and totalled 16 thousand persons compared to 28 thousand in 2009.

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



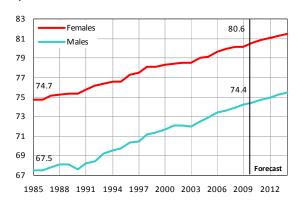
In terms of age structure, the number of inhabitants of productive age (15–64 years) in the Czech population peaked already in 2009. However, from the economic perspective, it still has a very favourable age composition, especially in comparison with Western European countries.

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



A moderate decline in the working-age population should be more than compensated by the effects within the age structure of the workforce as the structural proportions of age groups with high or growing participation increase. This is and will be supported by the enacted extension of retirement age. Another positive factor should be immigration, which is highly volatile, as demonstrated in recent periods. A further rise in labour market flexibility should also help create a situation where the Czech economy will not suffer from a lack of a suitable labour force.

Graph A.6.3: Life Expectancy in years



On the other hand, the continuing aging of the population has been confirmed. In 2007, for the first time in Czech history, the number of people younger than 15 years was lower than the number of people in the 65+ age category. In the future, the number and proportion of seniors in the population will rise due to the demographic structure and the continuation of the intensive process to prolong life expectancy. The proportion of persons over 64 years of age in the total population, which was just below 15% in early 2009, should exceed 16% in early 2012 and increase to nearly 20% by 2020.

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	1 501	1 480	1 477	1 480	1 494	1513	1 539	1 563	1 587
growth in %	-1.8	-1.7	-1.5	-0.2	0.2	1.0	1.3	1.7	1.6	1.5
(15–64)	7 259	7 293	7 325	7 391	7 431	7 414	7 385	7 329	7 269	7 2 1 5
growth in %	0.3	0.5	0.4	0.9	0.5	-0.2	-0.4	-0.8	-0.8	-0.7
(65 and more)	1 435	1 456	1 482	1513	1 5 5 6	1 599	1 635	1 700	1 768	1 829
growth in %	0.8	1.5	1.8	2.1	2.9	2.7	2.3	3.9	4.0	3.5
Old-age pensioners (January 1) <sup>1)</sup>	1 965	1 985	2 024	2 061	2 102	2 147	2 299	2 335	2 370	2 405
growth in %	1.7	1.0	2.0	1.8	2.0	2.1		1.6	1.5	1.5
Old-age dependency ratios (January 1, in %):										
Demographic <sup>2)</sup>	19.8	20.0	20.2	20.5	20.9	21.6	22.1	23.2	24.3	25.4
Under current legislation 3)	32.8	33.0	33.3	33.4	33.7	34.2	34.6	35.0	35.4	35.9
Effective 4)	41.5	41.3	41.6	41.5	41.8	43.6	46.7	47.4	47.9	48.3
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.

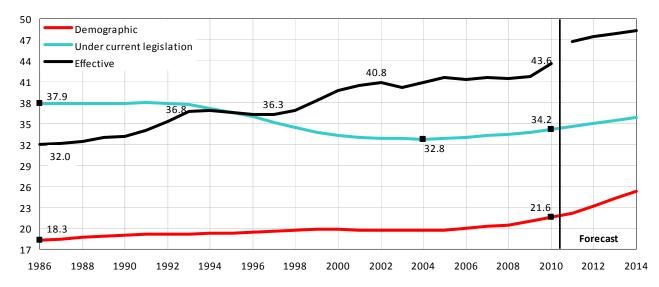
2) Demographic dependency: ratio of people in senior ages (60 and more) to people in productive age (20–59).

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

<sup>4)</sup> Effective dependency: ratio of old-age pensioners to working people.

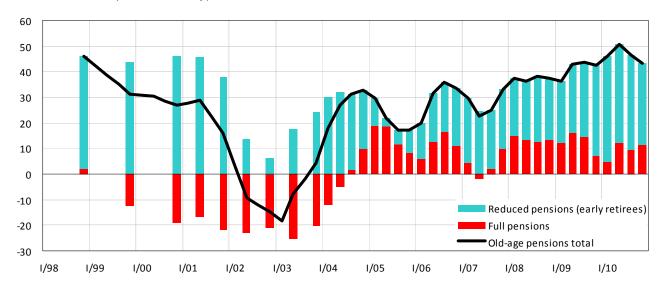
### **Graph A.6.4: Dependency Ratios**

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.