# **A Forecast Assumptions**

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

### A.1 External Environment

### **Economic output**

Similarly to the previous forecast, the outlook for the world economy varies significantly. In the USA, the mild recovery is continuing and the government measures temporarily warded off the threat of strong fiscal restriction. A rather favourable conditions can be seen on the stock markets. We are still far from witnessing economic recovery in the EU, the EU thus remains the least dynamic region. The Japanese economy has again slipped into recession, but there are expectations of growth induced by the government's fiscal stimulus. Emerging market economies are positively contributing to global growth, however, they face weak external demand. Sustaining rapid growth in China depends on successful reorientation to domestic consumption.

#### **USA**

In Q4 2012, the US economy saw QoQ stagnation (*versus 0.5% growth*), where decline in inventories and government consumption, especially defence expenditure, contributed negatively. For the whole of 2012, GDP increased by 2.2% (*consistent with the forecast*). In the course of the year, growth was driven especially by household consumption, partially also by foreign investment.

We are continuing to observe a favourable situation on the stock markets. The Dow Jones index climbed above the level of 14,000 points, thus reaching the recordbreaking levels of 2007. In February we saw a boost in consumer confidence, with fears of the fiscal crisis temporarily wearing off. Considerable price increases can be observed on the real estate market. Favourable development is continuing in the energy sector, where energy cost reduction and job creation are expected. In February, the unemployment rate decreased by 0.2 p.p. to 7.7%, the lowest amount in the last four years. At the same time, the authorities are registering considerable growth in new jobs, especially in the construction industry. The economy continues to be supported by the Fed's highly accommodative monetary policy with interest rates unchanged ("at zero") for 3 years already. The Fed is using its dual mandate and has tied interest rates to the unemployment rate. Favourable development over the last months is however leading to speculations as to whether the third round of quantitative easing will be terminated this year.

The economic growth in the USA appears to be sustainable. For 2013, we have left estimated growth at 2.1%. We assume that growth will speed up in the second half of 2013. A favourable development on the financial markets, together with a turning point in terms of the situation on the real estate market, has resulted in improvement of the financial situation of households and it is expected that these factors will contribute to increased consumption during the course of the year. For 2014 we still expect GDP to grow by 3%. At the same time we expect that the problem of the medium-term fiscal consolidation will be resolved successfully.

### ΕU

In Q4 2012, the euro zone's GDP dropped by 0.6% in QoQ terms (*versus 0.1%*), which represented a YoY decrease of 0.9% (*versus 0.4%*). On a QoQ basis, it was already the fifth decrease in economic performance in succession. Even though the situation in individual EA12 countries varies, it is possible to identify a decrease in household consumption as the main cause of the continuing recession. It is perhaps a consequence of strong fiscal consolidation applied since 2010. In comparison with the pre-crisis period, we are observing a significantly higher propensity to save.

In Q4 2012, **Germany** saw a considerable QoQ decline of 0.6% (*versus 0.1%*), especially due to a decline in exports. Nevertheless the current account surplus for the whole of 2012 exceeded 6% of GDP; moreover, further growth is expected this year due to the high level of competitiveness.

In Q4 2012, **France's** GDP decreased by 0.3% QoQ (*versus stagnation*). Despite good export dynamics, the economy stagnated in 2012 (*versus 0.1% growth*). There is a low consumer confidence and growing unemployment hinders a recovery in consumption.

Italy (since Q3 2011) and **Spain** (since Q4 2011), i.e. the 3<sup>rd</sup> and the 4<sup>th</sup> largest economy of the euro zone, are still in recession. In Q4 2012, **the British economy** also saw a QoQ decline, where GDP shrank by 0.3% (*versus 0.3% growth*). Fear of a triple-dip recession is intensifying. Out of 27 EU countries, 18 decreased in Q4 2012, Poland being the only growing economy among the bigger ones.

Divergences of development in the euro zone can be best illustrated as usual, by unemployment rate. In January, the unemployment rate in EA12 increased to 11.9% (1.1 p.p. increase YoY). The highest level of unemployment is newly recorded in Greece (26.4%, although the data refer to December 2012), further Spain (26.2%), Portugal (17.6%) followed by Slovakia (14.9%). On the contrary, the unemployment rate in Germany gradually declined to 5.3%. In addition to the economic dimension, the situation on the labour market in some countries also harbours a significant political dimension. Furthermore, high unemployment rates have unfavourable implications e.g. for household consumption, considerably aggravating government efforts to consolidate public finances.

The ECB's measures are conducive to stabilizing the situation in the EA12; the ECB has committed itself to leaving the interest rates at low levels for as long as deemed necessary. It appears, however, that an extremely accommodative monetary policy cannot fully compensate for unfavourable economic development with restrictive fiscal policies.

Due to a certain discrepancy between "hard" data and leading indicators, we have assessed the short-term outlook for the EA12 as considerably uncertain. We expect that GDP of the EA12 will decrease by 0.4% (versus 0.2%) this year, however, for 2014 we assume growth of 0.6% (versus 0.5%).

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



In **Poland** the rate of economic growth is slowing down, which was confirmed by data for Q4 2012. In 2012 the Polish economy grew by 2.0% (*versus 2.3%*), the lowest growth rate since 2009. Domestic demand stagnates, unemployment rate increased to 10.6% in January (0.7 p.p. increase YoY). In addition, the period of important one-off infrastructure investments connected to the European Football Championship came to an end. At the beginning of March, the central bank decreased rates to their historical low of 3.25%,

however, no major impact is expected here. The estimate for growth in 2013 was thus lowered to 1.5% (*versus 1.9%*).

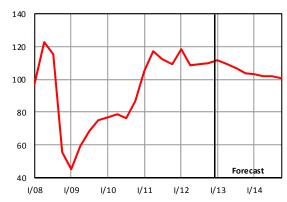
In Slovakia, strong dependence on exports remains evident. Due to a weakening in foreign demand, GDP grew by just 2.0% in 2012, which, with the exception of 2009, is the lowest growth since 2000. Household consumption repeatedly fell, while unemployment continues to rise. We have lowered the estimate for growth in 2013 to 1.3% (*versus 1.7%*).

### **Commodity prices**

In Q4 2012, oil prices averaged 110 USD/barrel. In 2012, the average daily price of Brent crude oil was 111.7 USD/barrel, a historically highest average price of crude oil. For Q1 2013 we expect that the price will amount to 112 USD per barrel (*versus 108 USD*).

In February 2013, the forecast for both global growth and demand for crude oil was revised and the market underwent a price correction. For the time being, the one-off risks of geopolitical character have ceased to pose a threat. For 2013 we expect to see a decline in the average daily price of crude oil to 108 USD/barrel (*versus 105 USD*), mainly as a consequence of a slowdown in global demand for crude oil and production capacity growth (especially in the USA). We expect that the gradual decrease in the crude oil price will also continue in 2014 where the price could reach an average of 102 USD/barrel (*unchanged*).

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



In the first half of 2013, we expect to see wheat and maize prices stagnate at high levels. For the second half of 2013, long-term weather forecasts and the extent to which they become a reality will be crucial. In the case of wheat, there are speculations of a record-breaking harvest this year, the prices could drop at the end of this year.

#### Debt crisis in the euro zone

Political risks resulting from the outcome of the February parliamentary elections in Italy, as well as the risk of possible complications in negotiations on the bailout programme for Cyprus mentioned in the January Forecast, have to a certain extent in both cases become a reality.

In the Italian preliminary parliamentary elections held on 24 and 25 February, voters selected their representatives for the Chamber of Deputies and the Senate. Even though the centre-left coalition led by Pier Luigi Bersani's Democratic Party got the most mandates in both Chambers, it only has the absolute majority in the Chamber of Deputies (the majority for the winning entity is guaranteed here by the election system). However, to win the vote of confidence, the government has to have a majority support in both Chambers of the Parliament.

Therefore, considering the post-election arithmetic, it will be very difficult to form a government. Italy would in fact need a government with strong political mandate, which would enable it not only to carry out the much needed structural reforms, but also to address the unfavourable economic situation (in Q4 2012, GDP decreased by 2.7% YoY) coupled with a high level of government debt. These factors led to a downgrade in Italy's rating by the Fitch agency on 8 March (the rating was lowered by 1 notch, from A— to BBB+, negative outlook).

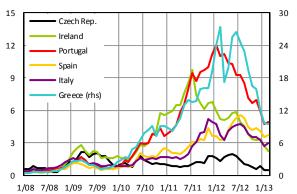
Both Ireland and Portugal are successfully continuing in their efforts to fully return to the primary market for government bonds. The fact that these two countries can once again enjoy investors' trust (the necessary condition for returning to the primary market) is evidenced not only by decreasing yields on their bonds on the secondary market (Graph A.1.3), but also by the results of recent auctions of government bonds and treasury bills. The treasury bill auctions in March were conducted against the background of the "Cypriot crisis" which was not, however, significantly reflected in the financial markets.

A relatively radical turning point in negotiations on the bailout programme for Cyprus was brought by the Euro Group's meeting held on 15 March in Brussels<sup>1</sup>. The representatives of Cyprus left this meeting with the plan for one-off taxation of banking deposits, this should have been one of the measures to contribute to a reduction in financial aid provided to Cyprus under

the bailout programme. Due to this, the aid should have not exceeded EUR 10 billion (approx. 56% of GDP), which should have been consistent with the sustainable trajectory of government debt.

Graph A.1.3: Spreads over German Bonds

The difference between yields of 10Y gov. bonds of the respective country and yields of 10Y German bonds, in p.p., monthly averages



According to the original proposal, any deposits up to EUR 100,000 should have been taxed at 6.75%, any deposits above this limit should have been subject to the rate of 9.9%. In total, this measure should have earned up to EUR 5.8 billion. On 19 March the Cypriot Parliament voted on the version according to which any deposits up to EUR 20,000 would be kept "spare", the Parliament, however, unequivocally rejected the submitted proposal.

After this (undoubtedly surprising for the European political elite) rejection taken by the Cypriot Parliament, the Cypriot representatives tried to find an alternative solution which would enable them to get the required EUR 5.8 billion. The Cypriot Finance Minister even tried negotiating with Russian representatives for several days (at the beginning of 2012 Russia granted a loan of EUR 2.5 billion to Cyprus) regarding the possibility of supplying aid, however, these negotiations ultimately failed.

The pressure on reaching a quick agreement between Cyprus and the EU/IMF on the bailout programme, which would enable recapitalizing of several Cypriot banks severely affected by the write-off of "voluntary" Greek government bonds in March 2012, was applied especially by the ECB. On 21 March, the ECB notified willingness to provide, under the given circumstances (the absence of an agreement with the EU/IMF), Cypriot banks with liquidity under the so-called ELA (Emergency Liquidity Assistance) until 25 March only. Such a measure, should the ECB decide to take it, would result in complete collapse of the Cypriot banking system possibly posing a serious threat to Cyprus abidance in the euro zone.

In addition, the Finance Ministers of the euro zone agreed with extension of maturity periods for the EFSF bailout loans granted to Portugal and Ireland.

On 22 March, the Cypriot Parliament passed several important acts including a regulation enabling the government to introduce capital controls (in practice these controls would amount to restrictions on cashless and cash operations) or legislative proposals regulating restructuring of the banking sector. Capital controls will have to be introduced (in order to prevent run on banks) before banks are reopened, which is expected to happen on 28 March.

Cyprus managed to come to agreement with the EU/IMF as late as at the Euro Group's extraordinary summit on 24 March in Brussels. The Cypriot banking sector should undergo a fundamental restructuring, which will, among other things, result in the sector being considerably downsized. The agreement also anticipates that the Laiki bank (the second biggest bank in the country) will be immediately resolved. Performing loans, other assets and insured deposits (up to EUR 100,000) will be transferred from Laiki to the Bank of Cyprus (the biggest bank in the country). The remaining assets and liabilities will subsequently be transferred to a bad bank, it is certain that any entities with uninsured deposits above EUR 100,000, just like the bank's shareholders and bondholders, will suffer considerable losses (no detailed information is available yet). However, the situation will not be much better for holders of uninsured deposits in the Bank of Cyprus, as they will remain "frozen" until the Bank of Cyprus' recapitalization (losses cannot be ruled out afterwards either).

Since an emphasis on fiscal consolidation will be an essential feature of the bailout programme (it is expected that negotiations on the Memorandum of Understanding at the technical level will be concluded at the beginning of April) it is possible to expect a considerable deepening of the economic downturn in Cyprus, given the current situation and probable future development in the banking sector. The bailout programme could thus easily turn out to be insufficient.

In spite of political uncertainty in Italy and a recent escalation of tension relating to the bailout programme for Cyprus, the financial markets remain relatively calm. That said, an escalation of the debt crisis in the euro zone cannot be ruled out in the future. As a small open economy with very strong links to EU countries, the Czech Republic would clearly be negatively affected by a possible escalation of the debt crisis (the impact on expectations of households and firms, decrease in foreign demand). The main advantage of the Czech Republic is, however, the high resilience of its banking sector towards negative shocks and the credibility of its fiscal policy, as evidenced e.g. by the very low yields on government bonds.

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
									Forecast	Forecast
USA	3.1	2.7	1.9	-0.3	-3.1	2.4	1.8	2.2	2.1	3.0
China	11.3	12.7	14.2	9.6	9.2	10.4	9.1	7.9	7.9	8.0
EU27	2.1	3.3	3.2	0.3	-4.3	2.1	1.5	-0.3	-0.2	0.7
EA12	1.7	3.2	3.0	0.4	-4.4	2.0	1.4	-0.6	-0.4	0.6
Germany	0.7	3.7	3.3	1.1	-5.1	4.2	3.0	0.7	0.5	1.6
France	1.8	2.5	2.3	-0.1	-3.1	1.7	1.7	0.0	0.1	1.0
United Kingdom	2.8	2.6	3.6	-1.0	-4.0	1.8	0.9	0.2	0.8	1.5
Austria	2.4	3.7	3.7	1.4	-3.8	2.1	2.7	0.7	0.7	1.5
Hungary	4.0	3.9	0.1	0.9	-6.8	1.3	1.6	-1.7	0.0	1.0
Poland	3.6	6.2	6.8	5.1	1.6	3.9	4.3	2.0	1.5	2.4
Slovakia	6.7	8.3	10.5	5.8	-4.9	4.4	3.2	2.0	1.3	3.0
Czech Republic	6.8	7.0	5.7	3.1	-4.5	2.5	1.9	-1.3	0.0	1.2

## Graph A.1.4: Real Gross Domestic Product

YoY growth in %, seasonally unadjusted data

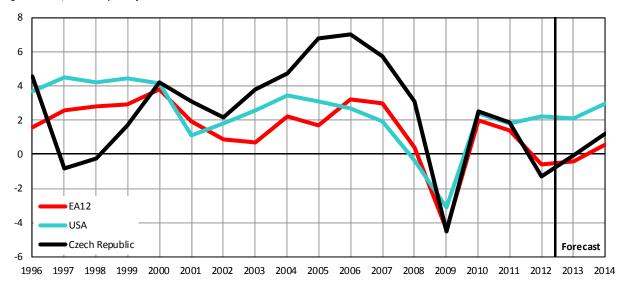


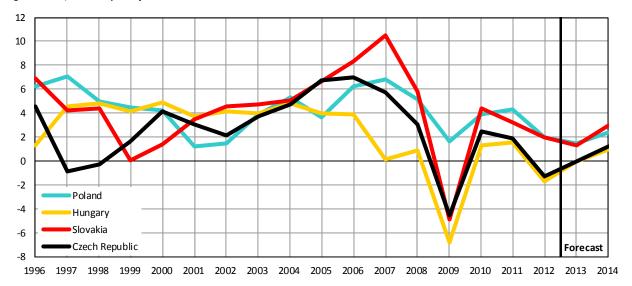
Table A.1.2: Real Gross Domestic Product – quarterly

growth in %, seasonally adjusted data

		201	12			201	13	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Estimate	Forecast	Forecast	Forecast
USA Qoo	0.5	0.3	0.8	0.0	0.5	0.5	0.8	0.8
Yoʻ	2.4	2.1	2.6	1.6	1.6	1.8	1.8	2.6
China Qoo	1.5	2.0	2.2	1.8	1.9	1.9	2.0	2.0
Yo	8.3	8.0	7.8	7.9	8.1	8.0	7.8	8.0
EU27 Qoo	0.0	-0.2	0.1	-0.5	0.0	0.1	0.2	0.2
Yo	0.2	-0.3	-0.4	-0.5	-0.5	-0.3	-0.2	0.5
EA12 Qoo	-0.1	-0.2	-0.1	-0.6	0.0	0.1	0.1	0.2
Yo	-0.2	-0.5	-0.7	-0.9	-0.8	-0.6	-0.4	0.4
Germany	0.5	0.3	0.2	-0.6	0.2	0.2	0.5	0.4
Yo*	1.2	1.0	0.9	0.4	0.1	0.0	0.3	1.3
France Qoo	-0.1	-0.1	0.1	-0.3	0.0	0.1	0.2	0.2
Yo*	0.2	0.0	-0.1	-0.4	-0.3	-0.1	0.0	0.5
United Kingdom Qoo	-0.1	-0.4	1.0	-0.3	0.1	0.2	0.3	0.3
Yo	0.3	-0.2	0.2	0.2	0.4	1.0	0.3	0.9
Austria	0.4	0.1	0.1	-0.2	0.3	0.2	0.4	0.3
Yo*	0.8	0.6	0.8	0.5	0.4	0.4	0.7	1.2
Hungary Qoo	-1.0	-0.5	-0.4	-0.9	0.3	0.4	0.4	0.5
Yo	-1.2	-1.4	-1.8	-2.8	-1.5	-0.6	0.2	1.6
Poland Qoo	0.4	0.1	0.3	0.2	0.4	0.5	0.5	0.6
Yo	3.5	2.2	1.4	1.0	1.0	1.4	1.6	2.0
Slovakia Qoo	0.3	0.4	0.3	0.2	0.3	0.3	0.5	0.4
Yo¹	2.6	2.2	1.8	1.2	1.2	1.1	1.3	1.5
Czech Republic Qoo	-0.5	-0.6	-0.4	-0.2	0.0	0.3	0.4	0.3
Yo	-0.4	-1.1	-1.5	-1.7	-1.3	-0.4	0.4	1.0

Graph A.1.5: Real Gross Domestic Product – Central European economies

YoY growth in %, seasonally unadjusted data



Graph A.1.6: GDP in the Czech Republic and the neighbouring states

Q3 2008=100, seasonally adjusted data

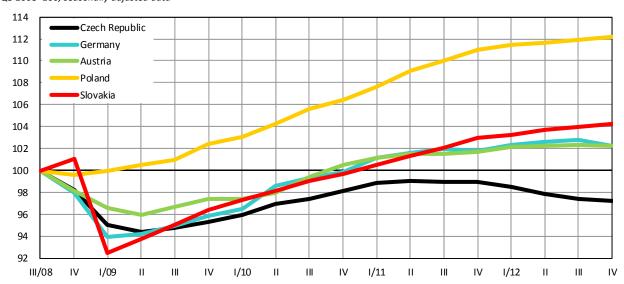


Table A.1.3: Prices of Commodities – yearly

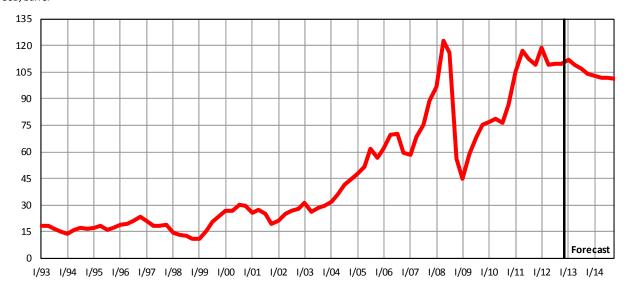
spot prices

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
										Forecast	Forecast
Crude oil Brent	USD/barrel	54.4	65.4	72.7	97.7	61.9	79.6	111.0	111.7	108	102
	growth in %	42.0	20.1	11.2	34.4	-36.7	28.7	39.3	0.7	-3.3	-5.6
Crude oil Brent index (in CZK)	2005=100	100.0	113.3	113.3	127.9	90.5	116.7	150.6	167.8	162	151
	growth in %	32.4	13.3	-0.1	12.9	-29.3	29.0	29.0	11.4	-3.4	-6.6
Wheat	USD/t	152.4	191.7	255.2	326.0	223.6	223.7	316.2	313.3		
	growth in %	-2.8	25.8	33.1	27.7	-31.4	0.1	41.4	-0.9		
Wheat price index (in CZK)	2005=100	100.0	118.7	141.9	152.4	116.7	117.1	153.3	168.1		
	growth in %	-9.4	18.7	19.6	7.3	-23.4	0.3	30.9	9.7		

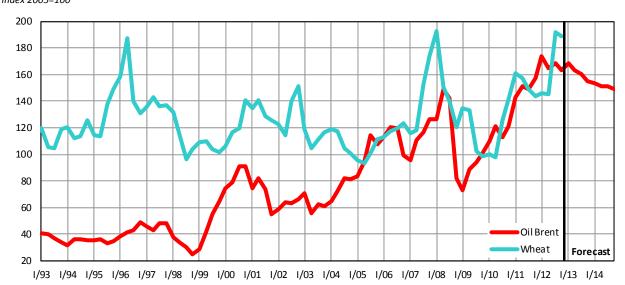
Table A.1.4: **Prices of Commodities** – quarterly *spot prices* 

			201	2			201	.3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Crude oil Brent	USD/barrel	118.5	108.9	109.5	109.8	112	109	107	104
	growth in %	13.0	-7.0	-2.7	0.5	-5.5	0.1	-2.3	-5.3
Crude oil Brent index (in CZK)	2005=100	173.6	164.5	168.2	163.2	168	163	160	155
	growth in %	21.3	8.6	13.1	3.9	-3.0	-0.6	-4.9	-5.0
Wheat price	USD/t	278.8	269.0	349.5	355.7				
	growth in %	-15.6	-20.6	10.7	27.2				
Wheat price index (in CZK)	2005=100	146.1	145.3	192.0	189.1				
	growth in %	-9.4	-7.4	28.7	31.5				

Graph A.1.7: **Dollar Prices of Oil** *USD/barrel* 



**Graph A.1.8: Koruna Indices of World Commodity Prices** *index 2005=100* 



# A.2 Fiscal Policy

According to the preliminary estimate of the CZSO, the government sector balance ended up with the deficit of CZK 169.0 billion in 2012, representing 4.4% of GDP. The actual estimate is by 0.6 p.p. better, compared to the estimate of the MoF from January 2013. The result of the year 2012 is negatively influenced by the inclusion of financial compensation to churches totalling CZK 59.0 billion (approximately 1.5% of GDP) and also by corrections of the non-refunded part of EU resources amounting to CZK 12 billion (approximately 0.3% of GDP). Had it been adjusted for these one-offs, the January 2013 estimate of the deficit would have amounted to 3.2% of GDP, whereas the preliminary estimate of the CZSO, excluding those effects, would be 2.5% of GDP.

To a lesser extent, the difference from the January Macroeconomic Forecast stems from the revenue side, which ended up 0.1% of GDP better than originally expected. More favourable result is evident especially in the case of VAT, where higher income from Q1 2013 accrues to the year 2012. On the expenditure side, being by 0.5% of GDP lower than estimated, much lower than expected (by 0.4% of GDP) investment expenditure had the biggest impact. In YoY terms, investment expenditure thus significantly declined (by approximately 15% last year) in the third consecutive year. Savings amounting to 0.1% of GDP occurred also in case of social transfers.

In 2013, the MoF expects the general government deficit to reach CZK 109.6 billion, representing 2.8% of GDP. Thus the estimate of budgetary development is by 0.1 p.p. below the stated target.

Total revenues should increase by 1.2% from last year, mainly due to tax revenues, which should be 1.6% higher. However, a whole range of discretionary measures, from which mainly the increase of both VAT rates by 1 p.p. with the total effect amounting to CZK 15 billion should be the most influential, contribute to that increase. More considerable personal income tax collection, where the effect of discretionary measures

(especially abolition of the allowance for working pensioners, surtax of 7% for high-income earners and reduction of lump-sum expenditure deductions) could reach almost CZK 7 billion, is expected. Positive discretionary change is anticipated also in the case of excises (e.g. increase in the rate of tobacco tax) and real estate transfer tax (increase in the rate to 4%). On the contrary, loss in income from social security contributions, induced by the transfer of resources to the pension savings pillar, should have a negative effect of approximately CZK 6 billion.

Having significantly declined in the last year, capital transfers, used among other things to finance European projects, should increase by 5.4%.

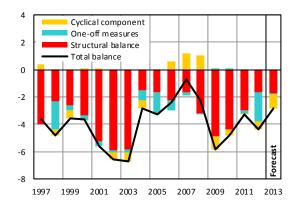
Expenditures should drop by 2.4%, but excluding the impact of the aforementioned one-off measures they would increase by 1.9%. Expenditures on final government consumption should be higher by 1.2% mainly due to growth of intermediate consumption. Unlike in the previous years when it was falling, intermediate consumption could increase by 2.2% due to autonomous development and the change in VAT rates. In the case of government investment, a reversal in the trend of the last years is expected. Thus, gross capital formation should grow by 4.1%.

The forecast does not consider the effects of a sale of frequency bands to mobile operators as well as a sale of emission allowances, which, if implemented in 2013, would improve the deficit. Downside risk, however, is represented by possible additional corrections of the non-refunded part of EU resources (there are ongoing negotiations with the EC). Risks to this year's deficit forecast thus seem balanced.

Government debt could increase by 6.4% this year, reaching the level of 48.5% of GDP by the end of the year.

Outlook for the years 2014–2016 will be published as a part of the April update of the Convergence Program of the CR.

Graph A.2.1: Decomposition of the government balance in % of GDP



Graph A.2.2: Government Debt in % of GDP

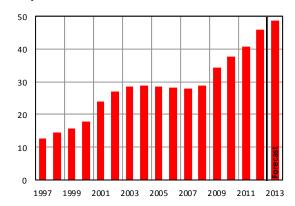


Table A.2.1: Net Lending/Borrowing and Debt

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013 Forecast
										Premm.	Forecast
General government balance 1)	bill. CZK	-83	-101	-80	-27	-86	-218	-183	-125	-169	-110
	% GDP	-2.8	-3.2	-2.4	-0.7	-2.2	-5.8	-4.8	-3.3	-4.4	-2.8
Cyclical balance	% GDP	-0.6	-0.1	0.6	1.2	1.0	-1.0	-0.5	0.0	-0.6	-1.0
Cyclically adjusted balance	% GDP	-2.2	-3.2	-3.0	-1.9	-3.3	-4.8	-4.3	-3.2	-3.8	-1.8
One-off measures	% GDP	-0.7	-1.5	-0.7	-0.3	-0.1	0.0	0.0	-0.2	-2.1	-0.1
Structural balance	% GDP	-1.5	-1.6	-2.3	-1.6	-3.2	-4.9	-4.4	-3.0	-1.7	-1.8
Fiscal effort 2)	percent. points	4.3	-0.1	-0.6	0.6	-1.5	-1.7	0.5	1.4	1.3	-0.1
Interest expenditure	% GDP	1.1	1.1	1.1	1.1	1.0	1.3	1.3	1.4	1.5	1.5
Primary balance	% GDP	-1.8	-2.2	-1.3	0.4	-1.2	-4.5	-3.5	-1.9	-2.9	-1.3
Cyclically adjusted primary balance	% GDP	-1.2	-2.1	-1.9	-0.8	-2.2	-3.6	-3.0	-1.8	-2.3	-0.3
General government debt	bill. CZK	848	885	948	1 023	1 104	1 286	1 437	1 569	1 759	1 872
	% GDP	28.9	28.4	28.3	27.9	28.7	34.2	37.8	40.8	45.8	48.5
Change in debt-to-GDP ratio	percent. points	0.4	-0.5	-0.1	-0.3	0.8	5.5	3.6	3.0	4.9	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.

Balance in EDP methodology, i.e. general government net lending (+)/borrowing (-) including interest derivatives.

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

# A.3 Monetary Policy and the Financial Sector

### Monetary policy

The primary monetary policy instrument is the interest rate for **2W** (**2-week**) **repo operations**, which has been at a historical and technical low of 0.05% since November 2012. Therefore, it is not possible to completely rule out the possibility of interventions on the foreign exchange market. Due to stagnation of the ECB's main refinancing rate, **the interest-rate differential** between the Czech Republic and the Economic and Monetary Union remained at –0.70 p.p. at the end of Q1 2013, while the differential relative to the US reached –0.20 to 0.05 p.p.

#### Financial sector and interest rates

We estimate that the average value of **3M (3-month) PRIBOR rate** in Q1 2013 will be 0.5% (*unchanged*). For 2013 we forecast the value of 0.5% (*unchanged*), for 2014 a slight increase to 0.6% (*unchanged*).

Long-term interest rates should remain over the coming period at the current very low values or only increase slightly. Considering the fact that the Czech Republic's rating is constantly at a good investment level — Standard & Poor's AA—, Moody's A1, Fitch Ratings A+ (all with a stable outlook), it is possible to expect further successful auctions of government bonds.

In January, the CNB conducted another examination of credit terms and bank standards. The survey concluded that banks tightened credit standards for corporate loans in Q4 2012, while relaxing those for housing loans and leaving those for consumer loans unchanged. For Q1 2013, a further tightening of credit standards for corporate loans was expected, with a further relaxing of those for housing loans.

As far as development on the interbank market is concerned, a survey conducted in January 2013 showed that fluctuations in the volume of deposit and

repo operations were at slightly lower values than in the previous quarter. After decreasing in the previous quarter, the volume of derivative operations IRSs (Interest Rate Swaps) increased slightly (due to trading with non-residents), the volume of FRAs (Forward Rate Agreements) also increased. Uncertainty on the interbank market, measured by the spread between 2W or 3M PRIBOR and the 2W repo rate, remains stable at around 0.45 p.p.

This year, we expect **yields to maturity of 10-year government bonds** reaching 2.2% (*unchanged*) on average. They should remain at similarly low levels (2.3%) in 2014 (*unchanged*).

In Q4 2012, interest rates on loans to non-financial corporations decreased by 0.3 p.p. QoQ to 3.4%, rates on loans to households decreased by 0.1 p.p. to 6.3%. Rates on household deposits remained at 1.2%, those on deposits of non-financial corporations decreased by 0.1 p.p. to 0.5%.

The household debt contraction rate is continuing to slow down. Growth of their overall loans is driven exclusively by the growth of housing loans, while the volume of consumer loans is slightly decreasing. Coupled with a still considerable increase in deposits, the continuing slowdown in terms of the growth of loans to non-financial corporations may suggest a prevailing unwillingness to invest.

The situation concerning loans in default has been stabilized. In Q4 2012 their share stood at 5.2% for households (0.1 p.p. more YoY) and 7.5% for non-financial corporations (0.7 p.p. less YoY). Considering the unfavourable macroeconomic development, we can evaluate this as a very positive phenomenon, on the other hand, it is necessary to take into account that there is a certain lag time before loans in default become apparent.

Table A.3.1: Interest Rates, Deposits and Loans – yearly

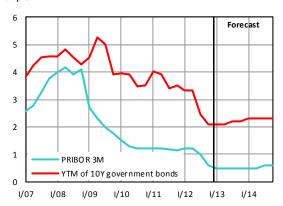
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
										Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	2.00	2.50	3.50	2.25	1.00	0.75	0.75	0.05		
Main refinancing rate ECB (end of period)	in % p.a.	2.25	3.50	4.00	2.50	1.00	1.00	1.00	0.75		
Federal funds rate (end of period)	in % p.a.	4.25	5.25	4.25	0.25	0.25	0.25	0.25	0.25		
PRIBOR 3M	in % p.a.	2.01	2.30	3.09	4.04	2.19	1.31	1.19	1.00	0.5	0.6
YTM of 10Y government bonds	in % p.a.	3.51	3.78	4.28	4.55	4.67	3.71	3.71	2.80	2.2	2.3
Households – MFI (CR, unless stated otherwi	se)										
-interest rates on loans	in % p.a.	7.53	6.93	6.63	6.81	7.00	7.00	6.83	6.46		
-loans	growth in %	32.6	32.1	31.7	28.9	16.3	8.7	6.5	4.9		
-loans without housing loans	growth in %	28.6	28.3	27.3	25.3	19.1	8.3	6.8	1.4		
-deposits	growth in %	5.2	7.3	10.6	9.4	10.5	5.4	5.0	4.7		
-share of non-performing loans	in %	4.2	3.7	3.2	3.0	3.7	4.8	5.3	5.2		
-loans to deposits ratio	in %	33	40	48	57	60	61	62	65		
-loans to deposits ratio (Eurozone)	in %	94	99	99	94	89	90	90	87		
Non-financial firms – MFI (CR, unless stated	otherwise)										
-interest rates on loans	in % p.a.	4.27	4.29	4.85	5.59	4.58	4.10	3.93	3.69		
-loans	growth in %	10.3	13.9	16.7	17.5	0.2	-6.5	3.3	2.5		
-deposits	growth in %	4.5	10.9	13.2	5.3	-1.7	4.8	0.9	8.2		
-share of non-performing loans	in %	5.7	4.5	3.8	3.6	6.2	8.6	8.5	7.7		
-loans to deposits ratio	in %	113	117	120	134	137	123	126	122		
-loans to deposits ratio (Eurozone)	in %	290	292	296	315	315	294	286	273		

Table A.3.2: Interest Rates, Deposits and Loans – quarterly

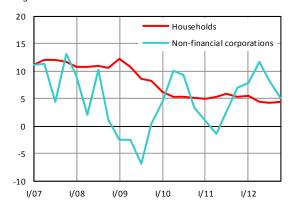
			201	2			201	13	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	0.75	0.50	0.50	0.05				
Main refinancing rate ECB (end of period)	in % p.a.	1.00	1.00	0.75	0.75	•			•
Federal funds rate (end of period)	in % p.a.	0.25	0.25	0.25	0.25				
PRIBOR 3M	in % p.a.	1.20	1.23	0.98	0.59	0.5	0.5	0.5	0.5
YTM of 10Y government bonds	in % p.a.	3.34	3.31	2.46	2.09	2.1	2.1	2.2	2.2
Households – MFI (CR, unless stated otherw.	ise)								
– interest rates on loans	in % p.a.	6.59	6.51	6.42	6.31	•			
-loans	growth in %	5.6	5.1	4.5	4.1				
-loans without housing loans	growth in %	3.9	1.5	0.6	-0.3				
-deposits	growth in %	5.5	4.4	4.2	4.4				
-share of non-performing loans	in %	5.0	5.2	5.2	5.2				
-loans to deposits ratio	in %	64	64	65	65				
-loans to deposits ratio (Eurozone)	in %	88	88	87	86		•		
Non-financial firms – MFI (CR, unless stated	d otherwise)								
- interest rates on loans	in % p.a.	3.87	3.86	3.67	3.37	•			
-loans	growth in %	4.1	1.9	2.0	1.9	•			
-deposits	growth in %	7.8	11.6	8.3	5.2				
-share of non-performing loans	in %	8.1	7.9	7.6	7.5				
-loans to deposits ratio	in %	125	120	124	118			•	
– loans to deposits ratio (Eurozone)	in %	282	280	274	257				

### Graph A.3.1: Interest Rates

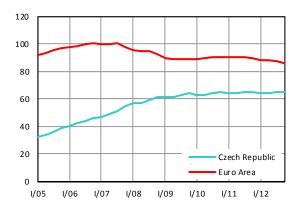
in % p.a.



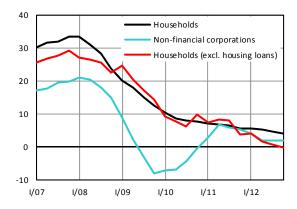
Graph A.3.3: Deposits of Households and Firms YoY growth in %



Graph A.3.5: Households – Loans to Deposits Ratio

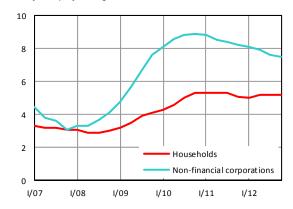


Graph A.3.2: Loans to Households and Firms YoY growth in %



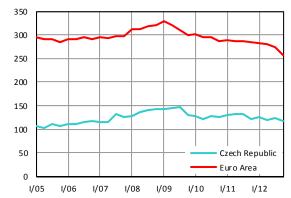
Graph A.3.4: Non-performing Loans

ratio of non-performing to total loans, in %

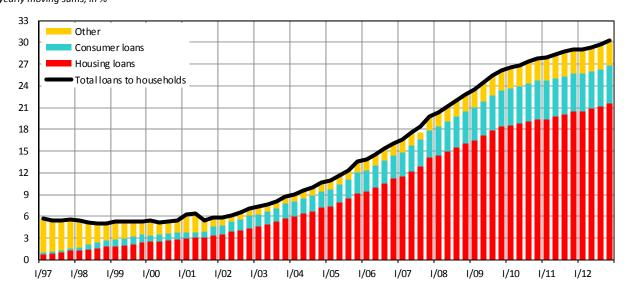


Graph A.3.6: Firms – Loans to Deposits Ratio

in %



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



# A.4 Exchange Rates

Weak growth performance of the Czech economy and negative interest-rate differential resulted in the long-term trend of the CZK/EUR exchange rate appreciation coming to a halt in 2011. In 2012, the exchange rate fluctuated above 25 CZK/EUR and in the absence of a substantial trend towards strengthening or weakening it reached an average value of 25.14 CZK/EUR. Compared to 2011, the rate was weaker by 2.2%, to which gradual reduction in the main interest rates from the CNB contributed in the second half of 2012. During the first two months of 2013, the koruna weakened further by 0.9%, while in this period the exchange rate could have been influenced by the declared possibility of foreign exchange interventions by the CNB.

The adopted scenario assumes that the rate will continue to fluctuate below the level of the last long-term trend for the duration of the forecast. However, the tendency towards moderate nominal and real appreciation should be maintained. In 2013, the

average exchange rate should reach 25.4 CZK/EUR, at a later point, the koruna should appreciate by 1.1% per year on average. In case of deteriaration of situation in problematic countries of the euro zone, significant movements of the rate in both directions cannot be ruled out.

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



Table A.4.1: Exchange Rates – yearly

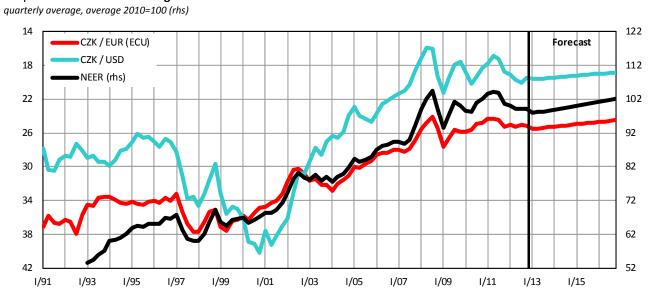
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
							Estimate	Forecast	Forecast	Outlook	Outlook
Nominal exchange rates:											
CZK / EUR	average	27.76	24.96	26.45	25.29	24.59	25.14	25.4	25.2	24.9	24.6
	appreciation in %	2.1	11.3	-5.6	4.6	2.8	-2.2	-1.1	1.1	1.1	1.1
CZK / USD	average	20.31	17.06	19.06	19.11	17.69	19.59	19.6	19.3	19.1	18.9
	appreciation in %	11.3	19.0	-10.5	-0.3	8.0	-9.7	0.1	1.1	1.1	1.1
NEER	average of 2010=100	90.6	101.2	98.0	100.0	103.1	99.5	98	99	100	102
	appreciation in %	2.7	11.7	-3.2	2.1	3.1	-3.5	-1.2	1.1	1.1	1.1
Real exchange rate to EA12 <sup>1)</sup>	average of 2010=100	91.9	102.3	97.8	100.0	100.9	99	97	97	98	98
	appreciation in %	3.1	11.3	-4.4	2.3	0.9	-2.1	-1.7	0.2	0.5	0.2
REER	average of 2010=100	88.7	102.2	98.1	100.0	102.4					•
(Eurostat, CPI deflated, 36 countries)	appreciation in %	2.9	15.2	-4.0	2.0	2.4					

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

Table A.4.2: Exchange Rates – quarterly

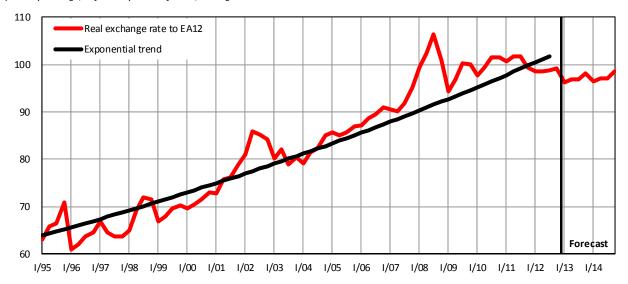
			201	.2			201	13	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Estimate	Estimate	Forecast	Forecast	Forecast
Nominal exchange rates:									
CZK / EUR	average	25.08	25.26	25.07	25.17	25.5	25.5	25.4	25.3
	appreciation in %	-2.8	-3.7	-2.7	0.4	-1.8	-0.8	-1.3	-0.6
CZK / USD	average	19.14	19.73	20.07	19.42	19.6	19.6	19.5	19.5
	appreciation in %	-6.9	-14.3	-13.9	-3.3	-2.5	0.7	2.7	-0.3
NEER	average of 2010=100	100.2	99.2	99.3	99.2	98	98	98	99
	appreciation in %	-3.2	-4.8	-4.5	-1.3	-2.3	-1.1	-0.9	-0.6
Real exchange rate to EA12	average of 2010=100	98.6	98.5	98.8	99	96	97	97	98
	appreciation in %	-2.1	-3.2	-2.8	-0.2	-2.4	-1.6	-1.9	-0.9
REER	average of 2010=100	101.4	99.9	99.7					
(Eurostat, CPI deflated, 36 countries)	appreciation in %	-1.7	-3.3	-3.5					

Graph A.4.2: Nominal Exchange Rates



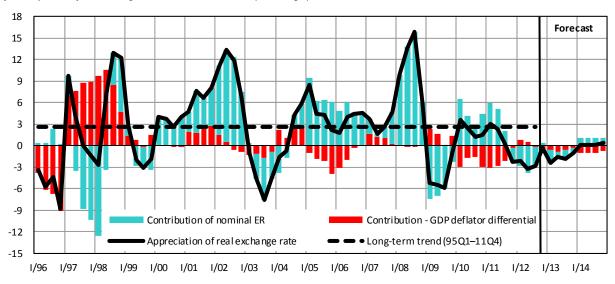
Graph A.4.3: Real Exchange Rate to EA12

quarterly average, deflated by GDP deflators, average 2010=100



Graph A.4.4: Real Exchange Rate to EA12

deflated by GDP deflators, YoY growth in %, contributions in percentage points



## A.5 Structural Policies

### **Business environment**

On 16 January 2013, the government approved a new Government Strategy in the Battle against Corruption for 2013 and 2014. The material includes an analysis of corruption perception and its economic impacts, basic strategic guidelines of fighting with corruption and a list of specific anti-corruption measures. Ten priority tasks, fulfilment of which will be considered paramount, include the Act on Civil Servants, the Conflict of Interest Act, the Act on Free Access to Information, revealing final owners, the protection of announcers, financial control and audit, ownership policy of the state, strategy and methodology of public purchasing, the Act on Public Prosecution and the Anti-Corruption Programme.

On 30 January 2013, the government approved Draft solution on measures to strengthen competitiveness and develop entrepreneurship in the Czech Republic from the perspective of legal regulations concerning environment protection. The measures concerning waste disposal and the nature, landscape and water conservation should reduce the administrative burden of entrepreneurs, however, at the same time they should not lead to a deterioration of environmental protection or breaching of obligations resulting from EU legislation.

### Information and communication technologies

On 20 March 2013, the government approved the Digital Czech Republic v. 2.0: Way to digital economy strategy which aspires to contribute to the

development of electronic communications by 2020. The strategy supports the development of high-speed Internet, increasing accessibility and development of digital services and boosting digital literacy and skills in the area of information and communication technologies.

#### **Financial markets**

In order to make business relations more transparent and restrict the space for possible corruption, on 19 February 2013, the Chamber of Deputies approved an Act on Increasing Transparency of Joint-Stock Companies, limiting the anonymous ownership of bearer shares. This Act imposes on joint-stock companies with bearer certificated shares the obligation to choose among various means of transformation of these shares, i.e. physical custody at banks, book entry with the central banker or changing to registered shares. For the purposes of paying out dividends, shareholders holding certificated registered shares will be obliged to open an account with a banking institution allowing them to verify the shareholder's identification carried out by the company itself, but also to monitor the flow of dividends and other monetary payments for the benefit of the given shareholder.

On 25 February 2013, an **amendment to the Consumer Credit Act** came into effect, strengthening the position of the consumers. From now on, a creditor is able to provide a consumer loan only in the case that, upon evaluating the debtor's creditworthiness with expert care, it will become apparent that the debtor is able to repay the loan. From now on, the consumer will be able to withdraw from an agreement on intermediation of a consumer loan within 14 days upon

its conclusion, without penalty and without citing a reason for doing so. With respect to frequent misuse, it is prohibited to use bills of exchange and cheques in connection with consumer credit. Last, but not least, it is not possible to use telephone numbers with higher than a usual price for offering, arranging or mediating consumer credit.

### **Energy industry and environmental protection**

On 19 March 2013, an **amendment to the Act on Integrated Prevention** came into effect, specifying the rules for permitting defined industrial and agricultural facilities. The amendment strengthens the emphasis on using the best available technical equipment representing manufacturing procedures which are most environmentally friendly, taking into account costs and benefits. At the same time, it specifies the conditions for granting exceptions and increases the emphasis on land and groundwater protection.

### Education, science and research

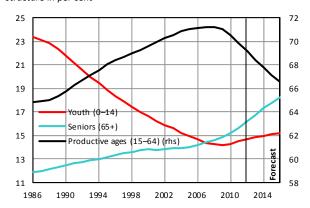
For the purpose of further development of vocational education, increasing practical usability of graduates and strengthening prestige of secondary vocational education system between 2013 and 2016, on 9 January 2013 the government approved **Draft new measures to support vocational education**. The measures should lead to increased pupil motivation at primary schools to choose secondary vocational branches, improving the conditions for cooperation of schools, founders of schools and employers, modifications to educational programmes and the system of financing the regional education system and last, but not least, also creating a preparatory system and means of obtaining qualifications for educational staff.

# A.6 Demographic Trends

At the beginning of 2013, 10,516 million people were living in the Czech Republic. In the course of 2012, population growth amounted to a mere 11 thousand people, the lowest number since 2004. Natural population growth was more or less zero, thus indicating that the population increase is on account of the positive migration balance, which, however, still decreased by 8 thousand people YoY. It is likely that the economic recession considerably reduced the attractivity of the Czech Republic for migrants.

A lower population growth due to reduced immigration and a low birth rate forced us to deduce assumptions of future demographic development from **the low variant of the CZSO 2009 Demographic Projection**, contrary to the medium variant used up to now.

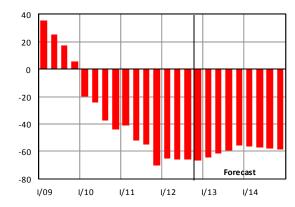
Graph A.6.1: **Groups by Age** structure in per cent



In terms of age structure, the proportion of the population aged 15-64 has been sharply decreasing since 2008 and will perhaps continue to decline (see Graph A.6.1). Persons born in the very weak years in terms of the new-born population at the end of the 1990s exceed the lower limit of this age category, while the population-strong generation born after the Second World War is gradually being classified as senior citizens. In absolute terms the working-age population is decreasing by nearly 70 thousand people per year, in relative terms it is decreasing by 0.9% (see Graph A.6.2).

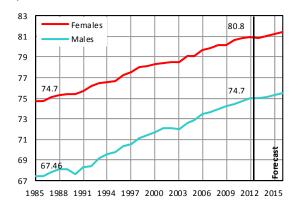
The economic impacts of this situation are described in detail in Chapter B.1.

Graph A.6.2: **Czech Population Aged 15–64** YoY increases of quarterly averages, in thousands



On the other hand, the structural proportion of persons over 64 years in the total population reached 16.2% at the beginning of 2012, and according to the low variant of the CZSO's Demographic Projection, this should increase to more than 20% by 2020. Both the number and proportion of seniors in the population is significantly rising due the demographic structure and further continuation of the intensive process of increasing life expectancy.

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



In 2012, the number of old-age pensioners stagnated for the first time since 2003. However, we assume that this was a one-off matter compensating for the unprecedented increase in 2011 (see Graph A.6.5), when potential future pensioners optimized the opportunity for retirement during the period when rules for determining pension payments were changed.

Table A.6.1: Demography

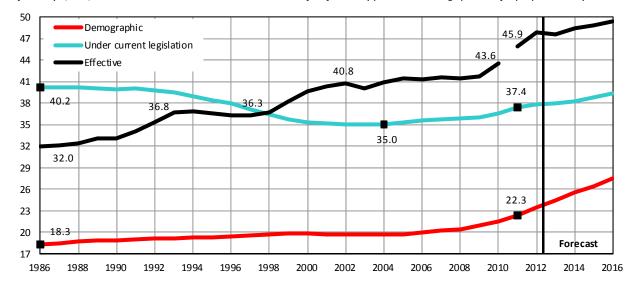
in thousands of persons

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
							Forecast	Forecast	Outlook	Outlook
Population (January 1)	10 287	10 381	10 468	10 507	10 487	10 505	10 516	10 532	10 545	10 557
growth in %	0.4	0.9	0.8	0.4	-0.2	0.2	0.1	0.2	0.1	0.1
Age structure (January 1):										
(0–14)	1 480	1 477	1 480	1 494	1 522	1 541	1 560	1 573	1 592	1 608
growth in %	-1.5	-0.2	0.2	1.0	1.8	1.3	1.2	0.8	1.2	1.0
(15–64)	7 325	7 391	7 431	7 414	7 328	7 263	7 194	7 138	7 079	7 019
growth in %	0.4	0.9	0.5	-0.2	-1.2	-0.9	-0.9	-0.8	-0.8	-0.8
(65 and more)	1 482	1513	1 556	1 599	1 637	1 701	1 763	1821	1874	1 930
growth in %	1.8	2.1	2.9	2.7	2.4	3.9	3.6	3.3	2.9	3.0
Old-age pensioners (January 1) <sup>1)</sup>	2 024	2 061	2 102	2 147	2260	2340	2341	2 370	2 398	2 424
growth in %	2.0	1.8	2.0	2.1		3.5	0.1	1.2	1.2	1.1
Old-age dependency ratios (January 1, in %):										
Demographic <sup>2)</sup>	20.2	20.5	20.9	21.6	22.3	23.4	24.5	25.5	26.5	27.5
Under current legislation 3)	35.8	35.9	36.1	36.6	37.4	37.8	38.0	38.3	38.8	39.3
Effective 4)	41.6	41.5	41.8	43.6	45.9	47.9	47.6	48.4	48.9	49.4
Fertility rate	1.438	1.497	1.492	1.493	1.427	1.45	1.49	1.50	1.50	1.51
Population increase	94	86	39	-20	19	11	16	14	11	9
Natural increase	10	15	11	10	2	0	1	-1	-4	-6
Live births	115	120	118	117	109	109	110	108	106	104
Deaths	105	105	107	107	107	108	109	109	110	110
Net migration	84	72	28	16	17	10	15	15	15	15
Immigration	104	78	40	31	23	30				
Emigration	21	6	12	15	6	20				
Census difference	х	х	х	-46	х	х	х	х	х	х

<sup>1)</sup> In 2010 disability pensions of pensioners over 64 were transferred into old-age pensions.
2) Demographic dependency: ratio of people in senior ages (65 and more) to people in productive age (15–64).
3) Dependency under current legislation: ratio of people above the official retirement age to the people over 19 below the official retirement age.
4) Effective dependency: ratio of old-age pensioners to working people.

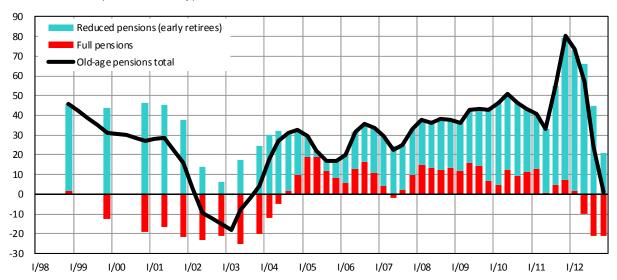
### Graph A.6.4: Dependency Ratios

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



Graph A.6.5: Old-Age Pensioners

absolute increase over a year in thousands of persons



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