# **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, U.S. Energy Information Administration

## A.1 External Environment

The IMF's outlook for global economic growth has slightly deteriorated, in particular as a result of lower than expected growth in large developing economies. Moreover, the related uncertainties persist. Also, the problem of the Fed's quantitative easing tapering is being discussed.

In China, efforts to re-orientate the economy towards growth based on domestic demand continue, although the government's support is limited for the time being. In many developing economies the growth is still hindered by structural problems.

#### **USA**

The American economy continues to recover. The recovery should further strengthen in the following year, in particular due to an improvement on the labour market. In Q2 2013, the economy grew by 0.6% QoQ (consistent with the forecast), with growth being driven especially by private demand. Fiscal consolidation, which started in Q1 2013, created uncertainty regarding the economic outlook. However, it had no significant impact on consumer confidence. Likewise the impact on economic activity was only temporary. Recovery is apparent on the real estate market, conditions on the financial markets are easing and growth of credit activity can be observed. Growth in the prices of real estate and other assets has a positive impact on household wealth, reducing net household debt. A favourable situation can also be seen on the stock market - the Dow Jones index is still averaging above 14,000 points, the record-breaking levels of 2007.

The economy remains supported by the Fed's accommodative monetary policy. With the outlook improving, a discussion on the timing of the exit from the quantitative easing programme is gaining ground. In spite of the recent Fed's assurances that the programme would continue, the general opinion of the market that there will soon be a revision of monetary policy has not changed. While a premature termination of the programme could put the economic recovery at risk, late reaction could, on the contrary, result in considerable costs in the form of sub-optimal capital allocation. The Fed's current policy is facilitated by low inflation rate and surplus capacities, mitigating the pressure on price and wage growth.

A change in the Fed's Board of Governors will be made in the near future as the current Fed Governor's term of office ends in January. However, no major change in the current policy of the Fed is expected.

The unemployment rate has decreased by 0.8 pp over the last 12 months (in August, it was 7.3%); however, the decrease was largely caused by transition of a part of the unemployed persons to the non-active category. Moreover, the labour market faces structural problems.

For 2013 we are slightly decreasing our growth forecast to 1.8% (*versus 2.0%*), in 2014 GDP could grow by 2.9% (*unchanged*). We expect that the current dispute regarding government funding and an increase in the debt ceiling will be solved quickly.

#### ΕU

In the EA12 GDP grew by of 0.3% QoQ (*versus 0.2%*) in Q2 2013; in a YoY comparison, however, economic output declined by 0.6% (*versus 0.8%*). On a QoQ basis we observed the first increase in GDP since Q3 2011.

Although the situation in individual EA12 countries continues to differ considerably, the general driver of recovery seems to be the increasing domestic demand. A positive contribution of net exports and improving sentiment on financial markets, in industry and in services can also be seen. Furthermore, the "long winter" contributed to output as it lead to a partial shift of investment and consumption from Q1 2013 to Q2 2013. Therefore, to a certain extent, the recovery can be regarded as temporary. Growth continues to be hindered by structural problems and low competitiveness in some economies.

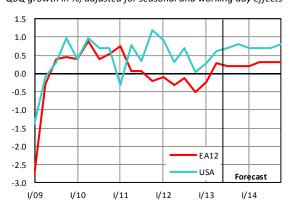
Monetary policy of the ECB remains accommodative. Moreover, the ECB is prepared to launch other extraordinary long-term refinancing operations and take additional steps to improve the transmission of measures into real economy. Pressure on inflation growth is mitigated and the ECB sees inflation risks as balanced.

Divergence among the individual countries of the euro zone can be illustrated by the unemployment rate, which in the EA12 reached 12.0% in August (up by 0.5 pp YoY). The highest unemployment rate was in Greece (27.9% in June), Spain (26.2%) and Cyprus

(16.9%). In contrast, the unemployment rate in Germany decreased to 5.2% in July and remained at that level in August. The high unemployment rate in the euro zone hinders the recovery of household consumption.

In H2 2013, the economic situation in the euro zone should improve only slightly. The pace of fiscal consolidation should further decelerate, private demand should strengthen due to improvement in consumer sentiment and the stabilization in the banking sector should resume. The short-term outlook for the euro zone is still associated with a high degree of uncertainty. We assume that the GDP of the EA12 will decrease by 0.4% (*versus 0.5%*) this year and we expect to see it grow by 1.0% (*unchanged*) in 2014.

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



We expect relatively favourable development in **Germany**, whose GDP grew by 0.7% QoQ (*versus 0.4%*) in Q2 2013. As expected, stagnation at the beginning of the year proved to be temporary. The ECB's low rates have a positive impact on the economy. Household consumption is strengthened by the labour market situation. Low interest rates and a low unemployment rate should further positively affect the real estate market. The positive expectations of economic entities are implied not only by the Ifo index, but also the consumer sentiment index. Both indexes currently reach a 6-year maximum.

Given slightly more favourable situation in the euro zone the high competitiveness of German companies should continue to support economic growth also in 2014. Developments in the banking sector, where many institutions are going through a deleveraging process, will be fundamental. The government's infrastructure investment decisions will also be important and the result of the parliamentary elections has sent out a positive message in this respect for the economy. Continuity in economic policy and a stable business environment for the private sector can be

expected. We expect GDP to grow by 0.6% (*versus 0.4%*) this year, while in 2014 we forecast a growth of 1.8% (*versus 1.7%*).

The situation in **France** is less favourable, despite GDP increase by 0.5% QoQ (*versus 0.1%*) in Q2 2013. The growth was driven mainly by rising domestic demand, in particular by government consumption. Besides low consumer confidence, household consumption is also hampered by the growing unemployment rate. Low confidence among entrepreneurs and structural problems are reflected in the lack of investment. The current fiscal situation limits room for further support of the economy. This year we expect GDP to grow by 0.3% (*versus a decrease of 0.1%*); in 2014 the economy should grow by 1.0% (*versus 0.9%*).

In **Poland**, GDP grew by 0.5% QoQ in Q2 2013. This development was triggered mainly by recovery in the EA12 and growing private consumption. While the consumption is still negatively influenced by a decline in real wages and consumer confidence, the rate of unemployment growth has halted. The central bank supported the economy by a further decrease in the reference rate to a historical low of 2.5%. We are slightly increasing our estimate of growth for 2013 to 1.2% (*versus* 1.1%); for 2014 we predict growth of 2.0% (*versus* 2.2%).

Thanks to the recovery in the euro zone, **Slovakia** is maintaining its export performance. In Q2 2013, GDP grew by 0.3% QoQ (*versus 0.4%*). We expect a favourable development of domestic demand as a consequence of improving consumer sentiment. However, economic growth is hampered by the situation on the labour market and fiscal consolidation. We are reducing the growth estimate for 2013 to 0.9% (*versus 1.1%*); while economic growth in 2014 could accelerate to 2.2% (*versus 2.5%*).

### **Commodity prices**

As a consequence of overly optimistic expectations for global economic growth, the price of Brent crude oil was high at the beginning of this year. At the end of Q1 2013, however, the outlook was revised and the market recorded a price correction. Growth was seen again during Q2 2013 and Q3 2013, especially due to the escalation of the conflict in Syria, the shortfall in supply from Libya and maintenance of infrastructure in the North Sea. For the whole 2013, we expect the price of crude oil to be at USD 108 per barrel (*versus USD 106*). The decrease in the price of Brent crude oil in the outlook is influenced by expanding production capacities, the expectation of slightly lower global economic growth in 2014 and the substitution of

imports into the USA and Canada with American crude oil as extraction in North America expands. In 2014, the average price of Brent crude oil could reach USD 103 per barrel (*versus USD 102*).

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



#### Debt crisis in the euro zone

The situation on the euro zone periphery remains relatively calm, but risks of an escalation of the so-called debt crisis persist. Moreover, the overall economic situation continues to be unfavourable, especially in the south of the euro zone.

Greek GDP fell by 3.8% YoY in Q2 2013. Although the rate of decrease again slowed, economic output has now been shrinking for 20 quarters in a row. The unemployment rate continues to rise: it already reached 27.9% in June (up by 3.3 pp YoY) and even exceeded 60% in the age group 15–24. It is becoming evident that the financial support provided to Greece in the second bailout programme will not be sufficient (Greece is unlikely to succeed in restoring full access to the primary government bond market by the end of 2014). This has already been fairly openly acknowledged by some top European representatives.

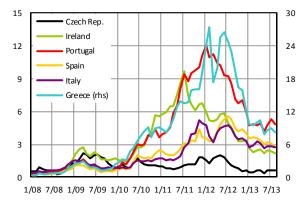
In contrast, there's a real chance that Ireland will exit its bailout programme in December this year. Yields on 10-year government bonds do not exceed 4% (the last time they were below this limit was in 2007). This year's auctions of treasury bills and bonds also imply that the transition to full market financing will not be accompanied with any significant complications. Moreover, of the countries on the periphery of the euro zone, the Irish economy is in the best condition. From Q3 2012 to Q1 2013 Ireland underwent a shallow recession, but its GDP increased by 0.4% QoQ in Q2 2013. The unemployment rate, which was slowly decreasing during this recession, stood at 13.6% in August (down by 1.1 pp YoY).

The prospects that Portugal will orderly exit its bailout programme (in mid-2014), however, are not so good.

The yield on 10-year government bonds still exceeds 6%. Implementation of the bailout programme has already been complicated several times by the Constitutional Court, which rejected some approved austerity measures. Risk can also emanate from political support for the bailout programme (in July, Portugal went through a minor government crisis) and future economic development. GDP increased by 1.1% QoQ in Q2 2013, but this growth merely terminated (technically) a recession which had lasted 2.5 years, during which GDP decreased cumulatively by more than 7%. The unemployment rate has started to decrease, but it still remains above 16%.

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



The quickly deteriorating economic situation in Cyprus could bring problems in the implementation of the Cypriot bailout programme, but any impact of the developments in Cyprus on other EA or EU states should be minimal. The Cypriot economy makes up only 0.2% of the euro zone's GDP.

Political situation in Italy could pose a risk for further development of the crisis in the euro zone. Tensions on the financial markets could also be caused by the developments in the Spanish banking system. Its restructuring is basically going as originally planned, although negative surprises cannot not be completely excluded, given the overall situation of the Spanish economy.

Should the crisis in the eurozone escalate, the Czech Republic would experience a decrease in foreign demand for its exports, owing to its strong trade links to the EA countries. This would have an indirect effect on investment activity and final consumption expenditures. However, the advantage of the Czech Republic remains its highly resilient financial sector and credible fiscal policy.

Table A.1.1: Real Gross Domestic Product – yearly

growth in %, seasonally adjusted data (except for the Czech Republic)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
									Forecast	Forecast
World	4.6	5.3	5.4	2.8	-0.6	5.2	3.9	3.2	2.9	3.6
USA	3.4	2.7	1.8	-0.3	-2.8	2.5	1.8	2.8	1.8	2.9
China	11.3	12.7	14.2	9.6	9.2	10.4	9.3	7.8	7.8	8.2
EU28	2.2	3.4	3.2	0.3	-4.5	2.0	1.7	-0.4	-0.1	1.2
EA12	1.8	3.3	2.9	0.2	-4.4	1.9	1.6	-0.6	-0.4	1.0
Germany	0.8	3.9	3.4	0.8	-5.1	3.9	3.4	0.9	0.6	1.8
France	1.9	2.7	2.2	-0.2	-3.1	1.6	2.0	0.0	0.3	1.0
United Kingdom	3.2	2.8	3.4	-0.8	-5.2	1.7	1.1	0.1	1.2	2.0
Austria	2.8	3.8	3.7	0.9	-3.5	1.9	2.9	0.6	0.5	1.7
Hungary	4.1	3.9	0.1	0.7	-6.7	1.3	1.6	-1.8	0.3	1.3
Poland	3.6	6.2	6.8	5.0	1.6	3.9	4.5	2.0	1.2	2.0
Slovakia	6.7	8.3	10.5	5.8	-4.9	4.4	3.2	2.0	0.9	2.2
Czech Republic	6.8	7.0	5.7	3.1	-4.5	2.5	1.8	-1.0	-1.0	1.3

Graph A.1.4: Real Gross Domestic Product

YoY growth in %, seasonally adjusted data

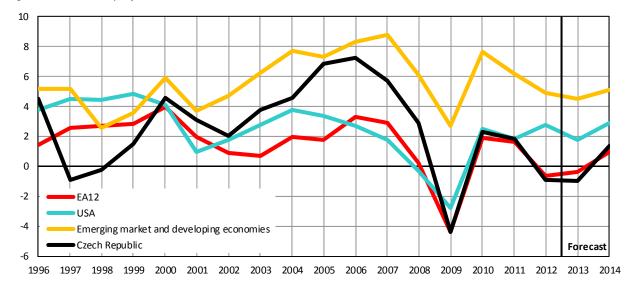
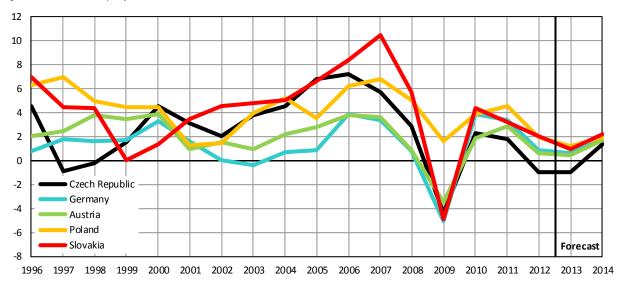


Table A.1.2: Real Gross Domestic Product – quarterly

growth in %, seasonally adjusted data

		201	2			20	13	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast
USA QoQ	0.9	0.3	0.7	0.0	0.3	0.6	0.7	0.8
YoY	3.3	2.8	3.1	2.0	1.3	1.6	1.6	2.4
China QoQ	1.6	1.9	2.1	2.0	1.6	1.9	2.0	2.0
YoY	8.3	7.8	7.6	7.8	7.8	7.8	7.7	7.7
EU28 QoQ	0.0	-0.3	0.0	-0.4	-0.1	0.3	0.2	0.2
YoY	0.1	-0.3	-0.5	-0.7	-0.8	-0.2	0.0	0.6
EA12 Q0Q	-0.1	-0.3	-0.1	-0.5	-0.2	0.3	0.2	0.2
YoY	-0.2	-0.6	-0.8	-1.0	-1.2	-0.6	-0.3	0.4
Germany QoQ	0.7	-0.1	0.2	-0.5	0.0	0.7	0.5	0.4
YoY	1.3	1.1	0.9	0.3	-0.3	0.5	0.8	1.6
France QoQ	0.0	-0.3	0.2	-0.2	-0.1	0.5	0.2	0.2
YoY	0.4	0.1	0.0	-0.3	-0.5	0.4	0.4	0.8
United Kingdom QoQ	0.0	-0.5	0.6	-0.3	0.4	0.7	0.5	0.4
YoY	0.6	0.0	0.0	-0.2	0.2	1.3	1.2	2.0
Austria QoQ	0.4	0.2	0.1	-0.1	0.1	0.1	0.4	0.5
YoY	0.8	0.5	0.7	0.6	0.3	0.1	0.5	1.1
Hungary QoQ	-1.5	-0.5	0.0	-0.5	0.6	0.1	0.2	0.2
YoY	-1.3	-1.7	-1.7	-2.5	-0.5	0.1	0.3	1.1
Poland QoQ	0.3	0.0	0.4	0.1	0.2	0.5	0.4	0.4
YoY	3.5	2.1	1.7	0.8	0.7	1.2	1.2	1.5
Slovakia QoQ	0.4	0.3	0.2	0.1	0.2	0.3	0.3	0.4
YoY	2.9	2.3	1.9	1.0	0.8	0.8	0.9	1.2
Czech Republic QoQ	-0.4	-0.4	-0.3	-0.3	-1.3	0.6	0.4	0.6
YoY	-0.3	-0.9	-1.2	-1.4	-2.3	-1.3	-0.6	0.3

Graph A.1.5: **Real Gross Domestic Product** – Czech Republic and the neighbouring states *YoY growth in %, seasonally adjusted data* 



Graph A.1.6: **Real Gross Domestic Product** – Czech Republic and the neighbouring states Q3 2008=100, seasonally adjusted data

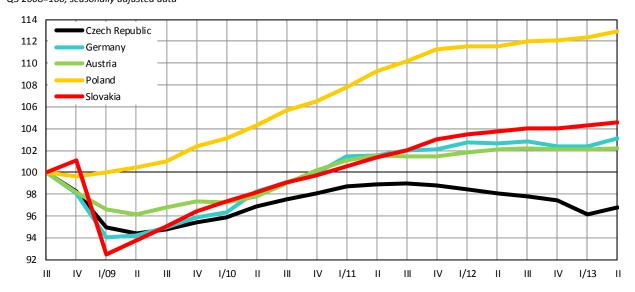


Table A.1.3: **Prices of Selected Commodities** – yearly *spot prices* 

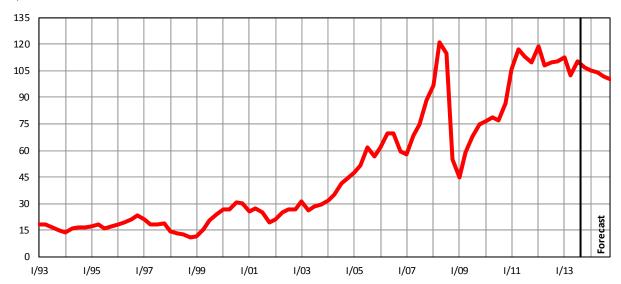
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
										Forecast	Forecast
Crude oil Brent	USD/barrel	54.5	65.1	72.4	96.9	61.5	79.6	111.3	111.6	108	103
	growth in %	42.6	19.6	11.1	34.0	-36.5	29.3	39.9	0.3	-3.1	-4.9
Crude oil Brent index (in CZK)	2005=100	100.0	112.5	111.5	123.9	88.4	116.1	150.4	167.0	162	156
	growth in %	33.7	12.5	-0.9	11.1	-28.6	31.4	29.5	11.0	-2.9	-3.7
Wheat	USD/t	152.4	191.7	255.2	325.9	223.4	223.7	316.2	313.3	297	253
	growth in %	-2.8	25.8	33.1	27.7	-31.5	0.1	41.4	-0.9	-5.3	-14.8
Wheat price index (in CZK)	2005=100	100.0	118.3	140.2	150.7	117.1	116.4	152.8	168.1	159	138
	growth in %	-9.5	18.3	18.4	7.5	-22.3	-0.6	31.3	10.0	-5.2	-13.7

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

			201	2			201	3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
									Forecast
Crude oil Brent	USD/barrel	118.7	107.7	109.6	110.1	112.4	102.6	110.2	107
	growth in %	12.6	-7.9	-3.2	0.7	-5.3	-4.8	0.5	-2.9
Crude oil Brent index (in CZK)	2005=100	173.8	162.6	168.2	163.6	166.6	155.1	164.5	163
	growth in %	20.9	7.5	12.5	4.1	-4.1	-4.6	-2.2	-0.5
Wheat price	USD/t	278.8	269.0	349.5	355.7	321.4	313.8	305.9	245
	growth in %	-15.6	-20.7	10.7	27.2	15.3	16.7	-12.5	-31.1
Wheat price index (in CZK)	2005=100	146.1	145.2	192.0	189.1	170.5	169.9	163.4	133
	growth in %	-9.4	-7.4	28.6	31.5	16.7	17.0	-14.9	-29.5

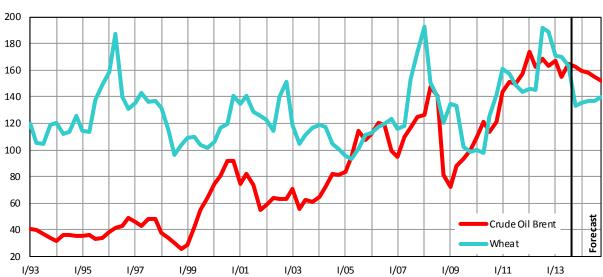
# Graph A.1.7: Dollar Prices of Oil

USD/barrel



**Graph A.1.8: Koruna Indices of Prices of Selected Commodities** 

index 2005=100



# A.2 Fiscal Policy

Last year, the government sector balance ended up in a deficit of 4.4% of GDP. Compared to 2011, this was a significant worsening; however, the result was affected by two one-off measures (financial compensation to churches and the non-refunded EU fund inflows) totalling CZK 71 billion. Had it been adjusted for these measures, the deficit would have been 0.6 pp lower than in 2011, i.e. 2.6% of GDP. Owing to the considerably deeper negative output gap in 2012, the improvement in balance is even more noticeable in structural terms. This development was supported by a number of discretionary changes (e.g. an increase in the VAT reduced rate by 4 pp) and the austerity policy, in particular in intermediate consumption of the government sector. Last but not least, the result also reflected a drop in investment expenditure, which was partially caused by a reduction in expenditure on projects co-financed by the EU (impact on the balance only in the amount of national financing).

In 2013, we expect the government sector deficit to reach 2.9% of GDP. Compared to the last year's deficit adjusted for the aforementioned one-offs, this would mean a deterioration. This worse YoY result should be caused in particular by the deepening negative output gap, which is further lowering tax revenues. The government sector balance adjusted for the cycle and one-off and temporary measures should be similar to that in 2012, i.e. approximately 1.5% of GDP.

Compared to the July Forecast, the deficit estimate for 2013 has been increased by 0.1 pp. On the revenue side, the estimate for tax revenues has been decreased by 0.2% of GDP (lower growth is expected both for the taxes on production and imports as well as for the income taxes). Social security contributions are expected in approximately the same amount as in the previous forecast, although the difference in funds transferred to the fully-funded pension pillar is significant. While the original estimates expected approximately CZK 6 billion, the actual amount will probably be relatively negligible — only in the order of hundreds of millions. Finally, we are maintaining our assumption about the amount of accrual income subsidies from the EU.

On the expenditure side, the largest change has occurred in the area of social expenditures, where the assumption regarding social transfers paid has been conservatively increased. The main reason is the more marked increase in benefits of assistance in material need (in particular allowance for living and supplement for housing). Foster care benefits are also higher, due

to an amendment to the Act on Social and Legal Protection of Children. In total, social benefits should increase by 4.3% compared to the previous year. Based on the development in the first two quarters of this year, the estimate for growth of the total wage bill in the government sector has also been changed; we are now forecasting a growth of 2% (against the original forecast of virtual stagnation).

Compared to the original estimate, savings on the expenditure side occurred primarily in intermediate consumption, where the CZSO revised the 2012 figures downwards and the last year's drop was thus even more pronounced. Social benefits in kind (payments of health insurance companies for health care) are also expected to be lower; this reflects a decrease in health care costs and, to a lesser extent, also administrative savings by health insurance companies. The estimate for interest costs has also been reduced, since this year these will probably even decrease. The main reason is the use of the funds obtained through bond issues in recent years; the deficit is financed by drawing down the government's accounts.

The current deficit forecast includes revenues from the sale of emission allowances of CZK 1.7 billion (not included in the original estimate) as well as an estimate of non-refunded EU fund inflows of CZK 1.6 billion (not considered in the previous forecast). The sale of LTE licences is not included in the forecast since this will probably be income next year. The forecast is drawn up conservatively, and we regard any possible risk towards further deterioration as very low.

We expect that in relative terms the government sector debt will decrease slightly to 46.1% of GDP. The main reason is the use of reserves of funds obtained through issuing bonds in recent years. The good result of cash performance of the state budget is also having a very favourable effect; in particular money from the EU cohesion policy funds is bringing additional liquidity. In terms of debt structure, the principal change is a decrease in treasury bills.

Compared to previous data, the CZSO has revised the general government sector debt for 2009–2012. Hedged debt instruments denominated in foreign currency are now valued using the contractual exchange rate of the respective derivative; this has resulted in an increase in the government debt level in recent years by CZK 13–16 billion.

In accordance with the draft state budget, the budget for state funds for 2014 and with updating amounts of

the medium-term expenditure framework, the government sector deficit for 2014 is estimated at 2.9% of GDP. The deficit should comprise, in particular, the

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

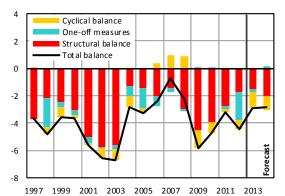
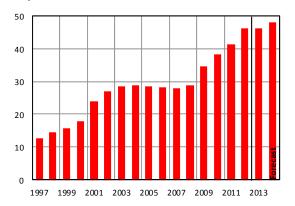


Table A.2.1: Net Lending/Borrowing and Debt

state budget balance and structurally it should act slightly in a stimulating way. The general government sector debt should increase by 1.9 pp to 47.9% of GDP.

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



		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
									Prelim.	Forecast	Forecast
General government balance 1)	% GDP	-3.2	-2.4	-0.7	-2.2	-5.8	-4.7	-3.2	-4.4	-2.9	-2.9
		-101	-80	-27	-86	-218	-179	-122	-170	-112	-112
Cyclical balance	% GDP	-0.3	0.4	1.0	0.9	-1.4	-0.8	-0.2	-0.6	-1.2	-1.0
Cyclically adjusted balance	% GDP	-2.9	-2.7	-1.7	-3.1	-4.4	-3.9	-3.0	-3.8	-1.7	-1.8
One-off measures	% GDP	-1.5	-0.7	-0.3	-0.1	0.0	0.0	-0.2	-2.1	-0.2	0.2
Structural balance	% GDP	-1.4	-2.0	-1.4	-3.0	-4.5	-4.0	-2.8	-1.7	-1.5	-2.0
Fiscal effort <sup>2)</sup>	percent. points	-0.1	-0.6	0.6	-1.6	-1.5	0.5	1.2	1.0	0.2	-0.5
Interest expenditure	% GDP	1.1	1.1	1.1	1.0	1.3	1.3	1.4	1.5	1.4	1.5
Primary balance	% GDP	-2.2	-1.3	0.4	-1.2	-4.5	-3.4	-1.8	-3.0	-1.5	-1.4
Cyclically adjusted primary balance	% GDP	-1.9	-1.7	-0.6	-2.1	-3.2	-2.6	-1.6	-2.4	-0.3	-0.3
General government debt	% GDP	28.4	28.3	27.9	28.7	34.6	38.4	41.4	46.2	46.1	47.9
Change in debt-to-GDP ratio	percent. points	-0.5	-0.1	-0.3	0.8	5.9	3.8	3.0	4.8	-0.1	1.9
		885	948	1 023	1 104	1 299	1 454	1 583	1 775	1 775	1880

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.

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 limit interest rate for **2W** (two-week) **repo operations**. Since November 2012, it has been at a historic and technical low of 0.05%, and in spite of the current economic recovery it will probably remain at this level. The **interest-rate spread** between the Czech Republic and the EA remained at -0.45 pp at the end of Q3 2013, while relative to the US it was at -0.20 to 0.05 pp.

For some time now the possibility of foreign exchange interventions by the CNB, which should contribute to a depreciation of the koruna, has been discussed. With regard to the gradual improvement in macroeconomic development, however, this possibility is becoming less likely, but it cannot be excluded completely. This risk is not included in the central scenario.

#### Financial sector and interest rates

In Q3 2013, the **3M** (3-month) **PRIBOR** interbank market rate averaged 0.45% (*in line with the forecast*). For the whole of 2013, as well as for 2014, we forecast an average value of 0.5% (*unchanged for both years*).

Uncertainty on the interbank market, measured by the spread between the 3M PRIBOR and the 2W repo rate, remains stable at values of around 0.40 pp.

Thanks to the credibility of fiscal policy, long-term interest rates should stay low; however, a slight correction of the current unprecedentedly low levels can be expected. Considering the fact that the Czech Republic's rating remains stable at a good investment level — Standard & Poor's AA—, Moody's A1, Fitch Ratings A+ (with a stable outlook from all these agencies) — it is possible to expect further successful issues of government bonds.

We expect that the **yield to maturity on 10-year government bonds** will average 2.1% (*versus 2.0%*) this year and 2.4% (*versus 2.2%*) in 2014.

In July 2013, the CNB conducted another bank lending survey, which concluded that in Q2 2013, the banks tightened credit standards for all sectors of the credit market. For Q3 2013, further tightening of credit standards for loans to non-financial corporations were expected, with a converse relaxation of standards for housing loans. Banks did not expect any change in credit standards for consumer loans.

In Q2 2013, interest rates on deposits decreased slightly to 1.0% for household deposits and 0.4% for corporate deposits. Interest rates on loans to both households and non-financial corporations continued to fall (see Table A.3.2). The growth rate of household indebtedness remains low. Growth of total loans to households is basically driven exclusively by housing loans; the volume of consumer loans has recently been flat. Loans to non-financial corporations are stagnating, which, given the ongoing increase in firms' deposits, implies weak investment activity.

The situation concerning non-performing loans remains stabilized. In Q2 2013, their share stood at 5.2% for households (unchanged YoY) and increased slightly to 7.6% for non-financial corporations (down 0.3 pp YoY). We can conclude that the recent economic recession had no significant adverse effect on NPLs.

At the end of September 2013, the Prague Stock Exchange's PX index was slightly above 950 points, i.e. a comparable value against the same period of 2012.

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

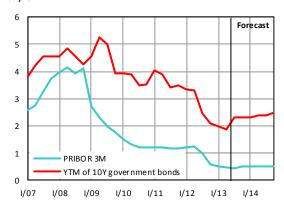
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
										Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	2.00	2.50	3.50	2.25	1.00	0.75	0.75	0.05		
Main refinancing rate ECB (end of period)	in % p.a.	2.25	3.50	4.00	2.50	1.00	1.00	1.00	0.75		
Federal funds rate (end of period)	in % p.a.	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	0.5
YTM of 10Y government bonds	in % p.a.	3.51	3.78	4.28	4.55	4.67	3.71	3.71	2.80	2.1	2.4
Households – MFI (CR, unless stated otherw.	ise)										
-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	d 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

			2012	2			201	13	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
								Estimate	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	0.75	0.50	0.50	0.05	0.05	0.05	0.05	
Main refinancing rate ECB (end of period)	in % p.a.	1.00	1.00	0.75	0.75	0.75	0.50	0.50	
Federal funds rate (end of period)	in % p.a.	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
PRIBOR 3 M	in % p.a.	1.20	1.23	0.98	0.59	0.50	0.46	0.45	0.5
YTM of 10Y government bonds	in % p.a.	3.34	3.31	2.46	2.09	1.98	1.88	2.3	2.3
Households – MFI (CR, unless stated otherwi	ise)								
-interest rates on loans	in % p.a.	6.59	6.51	6.42	6.31	6.21	6.09		
-loans	growth in %	5.6	5.1	4.5	4.1	3.7	3.9		
-loans without housing loans	growth in %	3.9	1.5	0.6	-0.3	-0.4	0.1		
-deposits	growth in %	5.5	4.4	4.2	4.4	4.1	3.5		
-share of non-performing loans	in %	5.0	5.2	5.2	5.2	5.2	5.2		
-loans to deposits ratio	in %	64	64	65	65	64	65		
-loans to deposits ratio (Eurozone)	in %	88	88	87	86	85	84		
Non-financial firms – MFI (CR, unless stated	d otherwise)								
-interest rates on loans	in % p.a.	3.87	3.86	3.67	3.37	3.27	3.23		
-loans	growth in %	4.1	1.9	2.0	1.9	2.3	0.3		
-deposits	growth in %	7.8	11.6	8.3	5.2	4.8	1.9		
-share of non-performing loans	in %	8.1	7.9	7.6	7.5	7.4	7.6		
-loans to deposits ratio	in %	125	120	124	118	122	119		
-loans to deposits ratio (Eurozone)	in %	282	280	274	257	257	253		

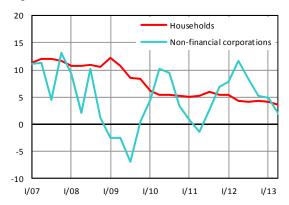
## Graph A.3.1: Interest Rates

in % p.a.

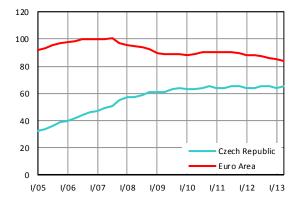


Graph A.3.3: Deposits

YoY growth in %

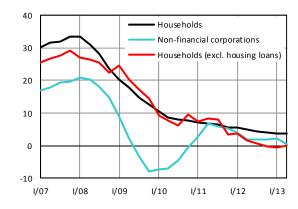


Graph A.3.5: Loans to Deposits Ratio – Households



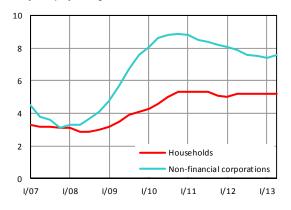
## Graph A.3.2: Loans

YoY growth in %



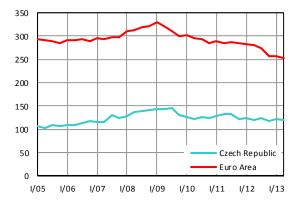
Graph A.3.4: Non-performing Loans

ratio of non-performing to total loans, in %

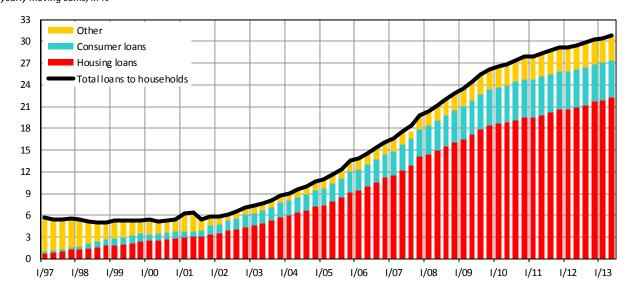


Graph A.3.6: Loans to Deposits Ratio – Firms

in %



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



# A.4 Exchange Rates

The weak growth of the Czech economy and a negative interest-rate differential towards the EA resulted in the long-term appreciation of the CZK/EUR exchange rate coming to a halt in 2011. Having weakened in 2012 (on average by 2.2% YoY), the koruna depreciated on average by a further 2.4% in Q1–Q3 2013. Verbal interventions by the CNB aimed at easing monetary conditions also contributed to this development (see Chapter A.3).

Considering the absence of appreciation pressures on the CZK/EUR exchange rate, we have made a technical assumption that the exchange rate shall remain stable at the average level prevalent in Q2 2013 and Q3 2013 (25.8 CZK/EUR) in both the forecast and outlook horizon. If the debt crisis in the euro zone escalates,

considerable movements of the exchange rate in either direction cannot be excluded.

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
								Forecast	Forecast	Outlook	Outlook
Nominal exchange rates:											
CZK / EUR	average	27.76	24.96	26.45	25.29	24.59	25.14	25.8	25.8	25.8	25.8
	appreciation in %	2.1	11.3	-5.6	4.6	2.8	-2.2	-2.4	-0.3	0.0	0.0
CZK / USD	average	20.31	17.06	19.06	19.11	17.69	19.59	19.6	19.9	19.9	19.9
	appreciation in %	11.3	19.0	-10.5	-0.3	8.0	-9.7	-0.2	-1.2	0.0	0.0
NEER	average of 2010=100	90.6	101.2	98.0	100.0	103.1	99.5	98	98	98	98
	appreciation in %	2.7	11.7	-3.2	2.1	3.1	-3.5	-1.6	-0.2	0.0	0.0
Real exchange rate to EA12 <sup>1)</sup>	average of 2010=100	92.1	102.5	98.0	100.0	100.7	98.8	96	94	94	93
	appreciation in %	3.1	11.3	-4.4	2.1	0.7	-1.9	-2.9	-1.5	-0.6	-1.0
REER	average of 2010=100	88.7	102.2	98.1	100.0	102.4	100.1				
(Eurostat, CPI deflated, 37 countries)	appreciation in %	2.9	15.1	-4.0	2.0	2.4	-2.2				

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

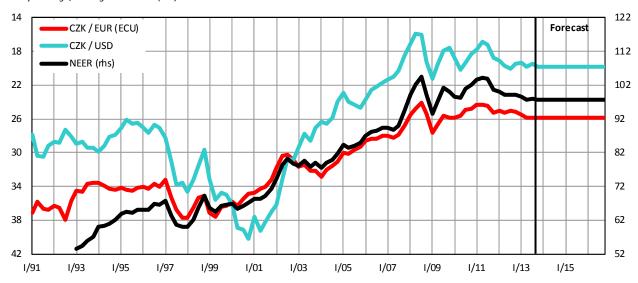
Table A.4.2: Exchange Rates – quarterly

			201	.2			20	13	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast	Forecast
Nominal exchange rates:									
CZK / EUR	average	25.08	25.26	25.07	25.17	25.57	25.83	25.85	25.8
	appreciation in %	-2.8	-3.7	-2.7	0.4	-1.9	-2.2	-3.0	-2.6
CZK / USD	average	19.14	19.73	20.07	19.42	19.37	19.78	19.52	19.9
	appreciation in %	-6.9	-14.3	-13.9	-3.3	-1.2	-0.3	2.8	-2.3
NEER	average of 2010=100	100.2	99.2	99.3	99.2	98.4	97.6	97.8	98
	appreciation in %	-3.2	-4.8	-4.5	-1.3	-1.7	-1.7	-1.4	-1.6
Real exchange rate to EA12 1)	average of 2010=100	98.6	98.4	99.0	99.1	96.9	96.5	95	95
	appreciation in %	-1.8	-3.1	-2.6	0.1	-1.7	-2.0	-4.1	-3.8
REER	average of 2010=100	101.4	99.9	99.7	99.3	99.6	98.5		
(Eurostat, CPI deflated, 37 countries)	appreciation in %	-1.7	-3.3	-3.5	-0.5	-1.7	-1.4		

Deflated by GDP deflators.

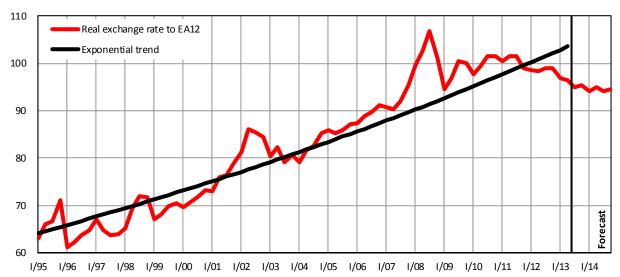
**Graph A.4.2: Nominal Exchange Rates** 

quarterly average, average 2010=100 (rhs)



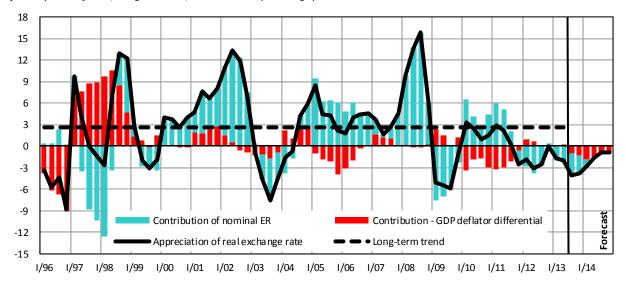
Graph A.4.3: Real Exchange Rate to EA12

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

On 13 August 2013, Jiří Rusnok's Cabinet, appointed by the President of the Czech Republic on 10 July 2013, resigned after losing confidence vote.

On 28 August 2013, the Chamber of Deputies was dissolved by the President of the Czech Republic, whereby discussions concerning all non-approved legislation was terminated (among others, the Act on Immovable Property Acquisition Tax, the Act on Change in Taxation Acts in Connection with the Recodification of Private Substantive Law, the Act on Building Savings, the amendment to the Act on Savings and Loan Cooperatives or the Act on Budgetary Responsibility). Some of these acts, though slightly modified, were later passed by the Senate in the form of statutory measures.

#### **Business environment**

On 2 August 2013, an amendment to the Act on Insurance and Financing Exports with State Support, which should boost exports, came into effect. According to the new legal regulation, commercial banks are allowed to grant loans to Czech exporters with interest rates fixed throughout the period of their drawdown and repayment. If the interest rate on the interbank market increases during this period, the difference will be paid by the state to the bank. If the interest rate decreases, the difference will be returned by the banks to the state. The loan rate will be fixed based on the CIRR rate (Commercial Interest Reference Rate) published by the OECD, which is considered to be the minimum rate not representing prohibited public support to private entities.

A draft of statutory measure amending the Act on Public Procurement was approved by the Senate on 10 October 2013. The draft retains the limit for public contracts at the current amount of CZK 3 million excl. VAT and cancels the institute of persons with special competences. Last but not least, it introduces a new mechanism for the new or repeated awarding of those public contracts, where there was only one bid left or delivered to a contracting entity for assessment. The draft is expected to become effective on 1 January 2014.

### Taxes

Due to a comprehensive change in private law under the new Civil Code, on 10 October 2013 the Senate passed a draft statutory measure on a change in tax legislation related to the private law recodification. The statutory measure introduces a number of factual and terminological changes, as well as necessary changes in connection with establishing the Single Collection Point, the full launch of which is expected on 1 January 2015.

Major changes include extending the time-limit for the exemption of income of natural persons from the sale of securities from 6 months to 3 years, while an annual limit of CZK 100,000 will be introduced for the exemption of income from the sale of securities that are not part of a business property. The limit for the exemption of income from occasional activities or the occasional lease of movables not performed by an entrepreneur will be increased from CZK 20,000 to CZK 30,000. Income not subject to public insurance premiums (contract for work) will form a separate

taxable amount collected by withdrawal at a special rate, while the limit for monthly income will be increased from CZK 5,000 to CZK 10,000. Tax relief in respect of children will be limited to residents from the EU, Norway and Iceland. Deduction from the tax base will also be allowed for the acquisition of research and development results from research organizations. The maximum limit for the deduction of gifts for public benefit purposes will be increased to 15% for natural entities and unified at 10% for legal entities. In order to support exports, opportunities to include the value of outstanding receivables in tax costs will be extended, up to the amount of received insurance payments. The statutory measure is scheduled to come into effect from 1 January 2014.

In connection with the comprehensive change in private law, on 9 October 2013 the Senate passed the draft statutory measure on immovable property acquisition tax that should result in reducing the administrative burden of tax payers and the state. The draft cancels the Act on Inheritance Tax, Gift Tax and Real Estate Transfer Tax, while preserving the taxation of paid real estate transfers in the form of taxing the acquisition of immovable property. In the case of common transactions based on contracts of sale and contracts of exchange, the assignor remains the tax payer; nonetheless, the contracting parties will also be allowed to select the assignee as the payer. In other cases, the payer is the assignee. The draft will also decrease the number of cases in which submission of an expert opinion is obligatory according to valuation regulations on the ascertained prices of immovable assets, and will generally restrict the amount of written materials payers will be obliged to attach to their tax returns. The statutory measure should come into effect from 1 January 2014.

### Financial markets

On 19 August 2013, an amendment to the Act on Investment Companies and Investment Funds came into effect. This should help make conducting business activities on the Czech capital market more attractive. The main changes include extending the group of admissible legal forms for investment funds, and

introducing separate regulation of the manager's and administrator's duties. The manager will perform their own portfolio management and related risk management, while the administrator will deal only with administrative activities related to investment fund management.

#### **Labour Market**

On 1 August 2013, an amendment to the Employment Act came into effect, which should contribute to liberalizing fixed-term employment contracts. In the case of serious operational reasons or because of the special nature of the work (culture, or seasonality in agriculture and construction), the amendment allows unlimited repeated fixed-term employment, i.e. the period of 3 years will not have to be met from the termination of the previous fixed-term employment relationship. For persons older than 18 years, the amendment also shortens the entitlement to rest between shifts from 12 to 11 hours.

### **Energy industry**

An amendment to the Act on Supported Energy Sources that came into effect on 2 October 2013 should result in a decrease in financial burden both for electricity consumers and the state budget. At the same time, it should increase the predictability of future price levels. According to the new legal regulation, support for electricity production from renewable sources put into operation after 1 January 2014 will be terminated. Support will only be maintained for power plants put into operation until 31 December 2014, provided a building permit was granted to them before the amendment came into effect.

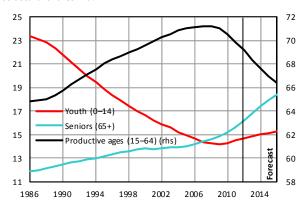
The amendment also sets out the maximum fee paid by consumers for supported energy sources, i.e. CZK 495/MWh; the remaining amount of required funds will be claimed directly from the state budget. Last but not least, from 1 January 2014 the amendment prolongs the solar tax for the whole life of solar power plants put into operation in 2010 and with output exceeding 30 kW.

# A.6 Demographic Trends

At the beginning of July 2013, 10.513 million people lived in the Czech Republic. Compared to the beginning of the year, the number of inhabitants decreased by 3 thousand. This decline was caused by a combination of negative natural increase (mainly due to a YoY decline in the birth rate) and nearly zero net migration.

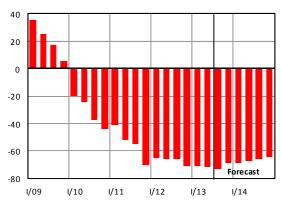
According to the central variant of CZSO's new Demographic Projection, in the next few years the Czech Republic should reach its post-WWII population peak. The long-term tendencies of population change in the Czech Republic in relation to legislation postponing the statutory retirement age are described in Box A.6.

Graph A.6.1: **Age Groups** structural shares in %



In terms of the age structure, the proportion of the population aged 15-64 has been sharply decreasing since 2008, and will almost certainly decline further (see Graph A.6.1). Persons born at the end of the 1990s, when the birth rate was very low, exceed the lower age limit of this group, while the population-strong generation born after WWII is gradually being classified as senior citizens.

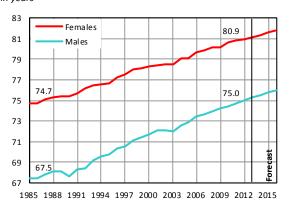
Graph A.6.2: **Czech Population Aged 15–64** based on LFS, YoY increases of quarterly averages, in thousands



In absolute terms, the working-age population is decreasing by approximately 70 thousand people a year (see Graph A.6.2), or by 1.0% in relative terms. The economic impacts of this situation are described in more detail in Chapter B.1.

In contrast, the structural proportion of persons over 64 years in the total population reached 16.8% at the beginning of 2013, and increases by 0.5 pp annually. Both the number and the share of seniors in the population are significantly rising due to demographic structure and the further continuation of the intensive process of increasing life expectancy.

Graph A.6.3: Life Expectancy in years



In H1 2013, as in 2012, stagnation in the number of old-age pensioners continued. However, we suppose this to be a temporary matter compensating for the unprecedented increase in 2011 (see Graph A.6.5), when potential future pensioners optimized the opportunity to retire during a period when rules for determining pension payments were changed.

The number of pensioners with reduced pensions after early retirement continues to rise, while the number of pensioners entitled to full pension has been decreasing YoY since Q2 2012.

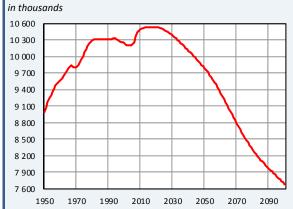
#### Box A.6: CZSO's Demographic Projection 2013

After four years, the CZSO published the new Population Projection of the Czech Republic in July 2013. The new projection's basic input data is the population of the Czech Republic by gender and age units as of 1 January 2013, derived from the results of the Census of Population and Housing in 2011. In contrast to the previous projection, in the Projection 2013 the projected period is extended by further 35 years until 2100, specifically until 1 January 2101. The Projection depicts the complete future of practically all generations living today. The Projection has been drawn up in all three standard variants (low, central and high). The central variant is considered to be the most probable; nonetheless, its results must be interpreted not as a forecast, but rather as defining the centre of the range of expected development as given by the extreme variants.

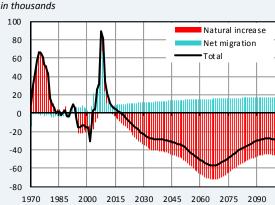
The aim of the projection is to outline the direction of future population development and in particular point out those changes in the age composition which are inevitable and that will be most sharply evident in the case of the Czech Republic. However, this projection – an objective feature of which is its uncertainty – cannot foresee the sudden effects of external influences, for example deep economic crises, the attractiveness of international migration, changes in system of social measures, the direction and extent of progress in health care or epidemics of illnesses, all of which can influence in the short- or medium-term the mortality rate, birth rate or migration flows. Therefore, it is always necessary to understand that the results of the projection are conditional and to interpret them in relation to the input parameters.

With regard to the basic trends of the individual components of future population development, the new projection does not differ much from those examined by the last projection of 2009. The projection foresees a further decrease in the mortality rate, positive net migration in the long term and, in its central and high variants, an increase in the birth rate

Graph 1: Total Population

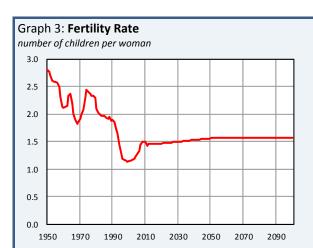


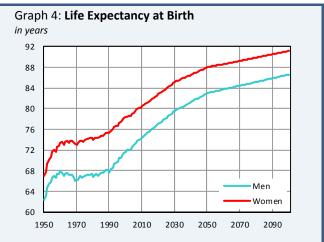
Graph 2: Yearly Population Change



The basic output from the Population Projection is the size of population and its composition by gender and age disaggregated to individual years. In 1994–2002, after decades of growth, the number of inhabitants of the Czech Republic decreased, mostly as a consequence of natural changes. In 2003, the situation was reversed and the number of inhabitants again started increasing thanks to the positive balance of foreign migration. Since 2006, the number of new-born children has exceeded the number of persons dying; in spite of this, the increase in total number of inhabitants is mainly a result of the positive balance in foreign migration, which has nonetheless considerably decreased in recent years.

If the assumptions made for future development of the birth rate, mortality and migration are accurate, in the next few years the number of inhabitants of the Czech Republic will reach its post WWII maximum, followed by a decline in population in the not too distant future. According to the central variant, the number of inhabitants of the Czech Republic should decrease to 7.6 million by 2100, which in the contemporary territory of Czech Republic would correspond to the population around 1870.

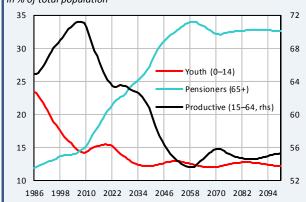




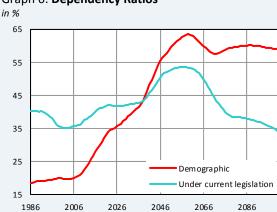
The assumption of birth rate development in the new projection is less optimistic compared to the previous one. In 2012, the total birth rate reached 1.45 children per woman and was lower than in 2008 (1.50 children per woman). The central variant of the projection includes the assumption of a gradual but slight increase in the birth rate to a value of 1.56, with, in the initial period of the projection, the continuation of the current trend of a rising average age of mothers. The long-term low birth rate (see Graph 3), far below a value ensuring zero natural increase (2.04), must inevitably be reflected in a decrease in the size of the population.

The assumptions regarding life expectancy are similar to those in the previous projection. In the central variant, life expectancy is expected to increase from the current 75.0 years for men and 80.9 years for women to 79.5/85.1 years in 2030, and later, rising at a reduced rate, to 83.0/88.0 years in 2050. By the end of the projection period, life expectancy would increase to 86.6 years for men and to 91.1 years for women.

Graph 5: **Age Structure** *in % of total population* 



**Graph 6: Dependency Ratios** 



Pronounced changes in the population's age structure will have serious economic consequences. The population in the age category 15–64 years reached its peak in 2009 at the level of 7.431 million persons. Since then, it has been decreasing by approximately 70,000 persons annually. According to the central variant of the projection, this decrease should temporarily cease as late as around 2022. As a minimum response to such development, the economic environment must maintain the conditions for a further increase in the participation rate on the labour market, similarly as at present.

The pension system faces pressures from an ageing population. In addition to other parametric modifications, gradual postponement of the statutory retirement age without any defined upper limit appears to be the most important. The graph showing developments in the dependency ratio under current legislation (ratio of the number of people entitled to standard old-age pension to the number of persons older than 14 years without such entitlement) shows that under current conditions the system can be covered financially, with minor problems, approximately until 2040. When the extremely strong age groups born after 1975 retire, however, after 2040 this system will be exposed to a sharp increase in the legislative dependency ratio. Considering the fact that during this period children born in the next few years will be entering the labour market, the application of suitable structural policies or a suitably focused stimulation of the birth rate could mitigate this predictable problem.

Table A.6.1: Demography

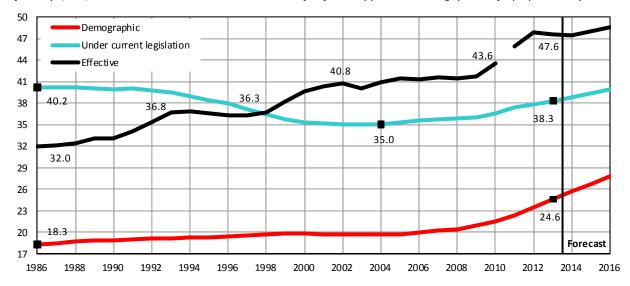
in thousands of persons

	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	10 524	10 530	10 534
growth in %	0.4	0.9	0.8	0.4	-0.2	0.2	0.1	0.1	0.1	0.0
Age structure (January 1):										
(0–14)	1 480	1 477	1 480	1 494	1 522	1 541	1 560	1 578	1 594	1 606
growth in %	-1.5	-0.2	0.2	1.0	1.8	1.3	1.2	1.1	1.0	0.8
(15–64)	7 325	7 391	7 431	7 414	7 328	7 263	7 188	7 118	7 053	6 988
growth in %	0.4	0.9	0.5	-0.2	-1.2	-0.9	-1.0	-1.0	-0.9	-0.9
(65 and more)	1 482	1513	1 5 5 6	1 599	1 637	1 701	1 768	1 828	1 882	1 939
growth in %	1.8	2.1	2.9	2.7	2.4	3.9	3.9	3.4	3.0	3.0
Old-age pensioners (January 1) <sup>1)</sup>	2 024	2 061	2 102	2 147	2260	2340	2341	2 352	2 380	2 408
growth in %	2.0	1.8	2.0	2.1	•	3.5	0.1	0.5	1.2	1.2
Old-age dependency ratios (January 1, in %):										
Demographic <sup>2)</sup>	20.2	20.5	20.9	21.6	22.3	23.4	24.6	25.7	26.7	27.8
Under current legislation 3)	35.8	35.9	36.1	36.6	37.4	37.8	38.3	38.8	39.3	39.9
Effective 4)	41.6	41.5	41.8	43.6	45.9	47.9	47.6	47.4	48.0	48.5
Fertility rate	1.438	1.497	1.492	1.493	1.427	1.45	1.45	1.45	1.45	1.45
Population increase	94	86	39	-20	19	11	8	6	4	2
Natural increase	10	15	11	10	2	0	-1	-3	-5	-7
Live births	115	120	118	117	109	109	107	104	102	100
Deaths	105	105	107	107	107	108	107	107	107	107
Net migration	84	72	28	16	17	10	9	9	9	9
Immigration	104	78	40	31	23	30				
Emigration	21	6	12	15	6	20		•	•	•
Census difference	х	х	х	-46	х	x	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.

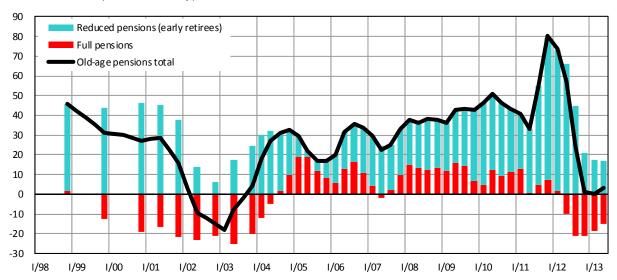
## Graph A.6.4: Dependency Ratios

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.