# **A Forecast Assumptions**

### A.1 External Environment

In comparison with the last forecast, the outlook for global economic growth has barely changed; however, uncertainties regarding future growth still persist. A relatively favourable outlook stems from the expected recovery in developed economies, which could drive global economic growth in the years of the outlook. Economic growth in developing economies has slowed slightly owing to a decrease in domestic demand, but it continues to retain its high dynamics. While in some countries growth rates remain high, in others capital outflow in connection with changes in the Fed's policies has highlighted domestic imbalances and underlined the necessity of structural reforms.

Fears of a significant slowdown of the Chinese economy have receded; however, risks related to vulnerability of the local financial market persist. In addition to the government stimulus, a considerable growth in bank lending at the beginning of 2013 contributed to economic performance; nonetheless, banking sector liberalization is still lagging behind and the loan market is considerable distorted. Efforts continue to transform the model of economic growth to one that is sustainable, based on domestic demand, and to gradually liberalize the economic environment. The revision of growth models will also be needed in other large developing economies; the favourable external conditions of growth, such as low interest rates and the inflow of foreign capital, are turning out to be temporary.

Uncertainty related to the outlook is highlighted by the recent outbreak of geopolitical tensions in Ukraine. Although Russia and Ukraine are not important export markets for the Czech Republic, any eventual escalation of tension accompanied by the introduction of Western sanctions could represent a considerable negative growth impulse.

#### **USA**

Domestic demand continues to be the primary driver of **American** economic growth. Economic growth of 0.7% (*versus 0.5%*) QoQ in Q4 2013 was mainly driven by household consumption and fixed investment. Inventory growth, which probably continues to occur due to expectations of a continued boom, also contributed, though to a lesser extent. Consistent with the forecast, growth also slowed due to the shutdown of government institutions at the beginning of October

2013, when the crisis over discussions on increasing the debt ceiling culminated.

Improving sentiment can still be seen on the financial markets, where conditions are easing and loan activities recovering. Growth in the price of real estate and other assets should slow down in 2014 due to a gradual rise in mortgage interest rates; as such the related positive impact on household wealth will decrease. The favourable situation continues to be seen on stock markets – the Dow Jones index again exceeded 16,000 points after its sharp weakening at the turn of January and February 2014.

performance remains supported by the accommodative monetary policy, although in January 2014 the Fed finally started to gradually limit the extent of the third wave of quantitative easing. In January, February and April, the Fed decreased its original monthly purchase of securities, previously amounting to USD 85 billion a month, by USD 10 billion each month. The Fed's last decision to limit the extent of quantitative easing was fully in line with market expectations and reflects the satisfactory results of the American economy, in particular a better than expected labour market outlook. The Fed also stated that it will no longer consider the unemployment rate a decisive indicator, and that when deciding on an increase in interest rates, it will consider a wider range of indicators related to the labour market and inflation.

The unemployment rate reached 6.7% in February 2014, thus declining by 1.0 pp compared to February 2013. However, the declining unemployment rate is accompanied by falling rate of participation, which remains a long-term problem.

In 2013, GDP growth slowed to 1.9% (*versus 1.8%*) due to the impact of consolidation measures. In 2014, GDP could increase by 2.8% (*versus 2.7%*), with private consumption and investment as the main drivers of growth. Barriers to growth relating to short-term uncertainty in fiscal policy were temporarily averted. Discussion around the medium-term plan for fiscal consolidation should focus primarily on the unsustainable growth of social expenditure. For 2015 we expect growth to accelerate slightly to 3.0% (*versus 3.1%*).

#### ΕU

The economy is gradually recovering, both in the EA12 and the EU as a whole. In the euro zone, a QoQ growth of GDP of 0.3% (*versus 0.2%*) was recorded in Q4 2013, representing growth of 0.5% (*versus 0.4%*) in a YoY comparison.

Although the situation in individual EA12 countries continues to differ considerably, a gradual growth of domestic demand can be seen in the EA12 as a whole. Improving sentiment on the financial markets, in industry and in services can be observed. In many cases, however, recovery continues to be hampered by the structural problems of economies and their low level of competitiveness.

ECB monetary policy remains highly accommodative. At its meeting in March, the bank decided in line with expectations to keep rates at the current level. The main reference rate remains at 0.25% and the deposit rate at zero. The ECB confirmed that its monetary policy would remain pro-growth for an extended period and that the closing of the output gap would be very slow. The ECB also stated that it is ready to take other extraordinary measures where necessary. Voices on the ECB Monetary Policy Committee are also calling ever louder for the further easing of monetary policy. If the bank decides to act, the most probable scenario is a slight decrease in the main rate and a decrease in the deposit rate to negative values. Officially, however, the bank is assessing inflation risks as balanced and considers inflation expectations to be firmly anchored. The ECB expects gradual economic recovery during 2014 and expects inflation to return to its target in the medium-term.

The situation on the labour market in the EU28 as a whole has stabilized. In February, the unemployment rate in the EU28 reached 10.6%, in the EA12 11.9%. Considerable differences still persist among individual countries. The worst situation is in Greece, where the unemployment rate (reaching 27.5% in December 2013) is more than 22 pp higher than in Austria. Of the EU28 countries for which data for February were available as of the cut-off date, the unemployment rate was highest in Spain (25.6%), Croatia (17.6%) and Cyprus (16.7%). In contrast, the lowest unemployment rate was in Austria (4.8%) and Germany (5.1%).

For the whole of 2013, GDP of the EA12 decreased by 0.4% (*in line with the forecast*). In 2014, private demand should strengthen due to expected improvement in consumer and business sentiment and the continuing stabilization of the banking sector. Private investment and consumption should replace

net exports as the principal driver of growth. However, the short-term outlook continues to be associated with a certain degree of uncertainty. We assume that GDP of the EA12 will increase by 1.1% in 2014 (*versus 0.9%*), and we expect its growth to accelerate to 1.5% (*unchanged*) in 2015.

We expect the relatively favourable development in Germany to continue. In Q4 2013, GDP increased by 0.4% QoQ (versus 0.3%). Net exports and gross fixed capital formation in particular contributed positively to growth, while a decline in inventories had the opposite impact. The ECB's low rates are still positively affecting the economy. Household consumption has been strengthening due to the very good labour market situation. Together, these factors are positively influencing the real estate market. A positive expectation in the business sphere is indicated by the Ifo index, while the growing GfK index is documenting increased consumer confidence. The expected strengthening in the performance of developed economies and the high competitiveness of German firms should also contribute to growth in 2014. Keeping favourable conditions on the credit markets will be crucial. In 2013, the German economy grew by 0.5% (in line with the estimate). We expect GDP to grow by 1.7% in 2014 (versus 1.6%), and we expect growth to accelerate slightly to 1.8% in 2015 (versus 1.9%).

The situation in France is less favourable. In Q4 2013, GDP increased by 0.3% QoQ (in line with the estimate); however, similarly as in Q2 2013, this growth was a consequence of extraordinary factors. For the first time since the end of 2011, a QoQ increase in gross fixed capital formation has been recorded. This could herald investment recovery, which could occur in 2014 thanks to favourable conditions on the financial markets and improvement of confidence among entrepreneurs. Household consumption should also have a pro-growth impact, to which the stabilization in the labour market and a decrease in the savings rate should contribute. A tense fiscal situation limits room for further support of the economy. In 2013, GDP grew by 0.3% (versus 0.2%). In 2014, economic growth could accelerate to 0.9% (unchanged), while in Q1 2014 we expect the growth rate to slow down as a consequence of the extraordinary factors at the end of 2013. In 2015, GDP growth could further accelerate to 1.4% (unchanged).

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



Source: Eurostat, own calculations

In Q4 2013, the GDP of **Poland** increased by 0.6% QoQ (versus 0.4%). The main source of growth remains exports, although growth in private consumption also contributed. The unemployment rate continues to fall, which is driving up consumer confidence. Consumer confidence, together with a low inflation rate, should contribute to a recovery in domestic demand during 2014. The central bank should leave monetary policy rates, which have been kept at a historical minimum of 2.50% since mid-2013, at the present level at least until the end of Q3 2014. GDP grew by 1.5% (versus 1.4%) in 2013, while in 2014 we forecast GDP growth of 2.5% (versus 2.1%). Recovery in the euro zone should in particular have a positive impact. However, growth will be hampered by fiscal tightening and the labour market situation. In spite of its recent decline, the unemployment rate remains high. In 2015, growth could accelerate to 2.8% (versus 2.7%).

The GDP of **Slovakia** increased in Q4 2013 by 0.4% QoQ (*in line with the estimate*). After a long period, growth in domestic demand had a positive impact on economic development, especially growth in gross fixed capital formation and government consumption. In 2014, we expect export performance to strengthen as a consequence of the improving outlook of the external environment and further recovery of domestic demand thanks to the improving labour market situation and low inflation rate. In 2013, the economy grew by 0.9% (*versus 0.8%*). We are slightly increasing the estimate for 2014 to 2.2% (*versus 2.1%*), while GDP growth in 2015 could accelerate to 2.9% (*versus 2.8%*).

#### **Business Cycle Indicators in the EU**

The composite confidence indicator published for the EU by the European Commission continued to rise in Q1 2014. All components of the indicator saw an improvement compared to the previous quarter. The most striking change in the respondents' assessment

was seen in the service, retail and consumer sectors. For Q1 2014, the composite indicator signals a slight acceleration of QoQ growth of EU's GDP. however, given the aforementioned uncertainties, the central scenario of the forecast expects the growth rate of Q4 2013 to be maintained.

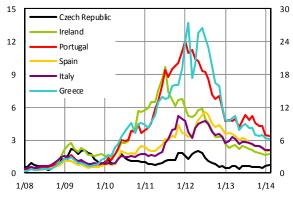
In Q1 2014, the composite confidence indicator improved in Germany, France, Slovakia and Italy. Confidence growth slowed considerably in the Slovak and French economies. By contrast, in the south of the euro zone, with Italy ahead of the pack, confidence has been rising considerably, which points to a probable continuation of recovery. Confidence in the German economy is still strengthening. However, this is exclusively a result of the improving assessment of the current situation. On the other hand, corrections are being made in terms of expectations regarding future development.

For Q1 2014, the composite leading indicator signals stabilization of the relative cyclical component of GDP in Germany and the EU as a whole. This is consistent with a continuation of economic growth approximately at the level of potential output growth.

#### Situation in the Troubled Economies of the Euro Zone

Data published in the last few months have confirmed that economic activity in the euro zone periphery states (except for Cyprus) has been recovering or stabilizing gradually. Market sentiment towards the euro zone periphery continued to improve slightly (see Graph A.1.2). Nonetheless, it would be premature to consider the crisis in the euro zone over.

Graph A.1.2: **Spreads over German Bonds**The difference between yields of 10Y gov. bonds of the respective country and yields of 10Y German bonds, in pp, monthly averages



Source: Eurostat

Greek GDP fell by 2.3% YoY in Q4 2013. In a YoY comparison, economic output has been falling for 22 quarters in a row; however, during 2013 the rate of decline slowed considerably. Unemployment rate stopped increasing, but considering its current level of

more than 27% (reaching nearly 60% in the 15–24 age group), unemployment represents a serious economic and social problem even in the long run. A breakthrough occurred in negotiations between the Greek government and the EC, ECB and IMF representatives held as a part of the 4th assessment of the bailout programme. After more than six months the negotiations were finally concluded, but the release of another tranche of financial aid will depend on approval of the agreed measures. The Greek government has only a narrow majority in the Parliament; moreover, finding sufficient support for some measures will be very difficult.

Ireland's full return to the primary market for government bonds after exiting its bailout programme at the end of 2013 was apparently successful. This year's auctions of government bonds (scheduled bond auctions were resumed) and treasury bills met with strong demand and secondary market bond yields are at a historical low. According to preliminary data<sup>2</sup>, GDP decreased by 2.3% QoQ in Q4 2013 (whereas a slight growth was expected). However, this estimate will almost certainly be revised several times. Nonetheless, a number of other indicators suggest that the Irish economic recovery continues.

The Portuguese economy is also recovering gradually. Since Q2 2013 (inclusive), GDP has been increasing in a QoQ comparison and the labour market situation has also been improving gradually – the unemployment rate has been slowly decreasing, while employment has been growing. Portugal should exit the bailout programme already in mid-2014. It is not certain if the exit will pass off entirely smoothly, but improving market sentiment towards the euro zone periphery, showing itself in a decrease in yields on government bonds and solid demand during auctions of government bonds and treasury bills, gives reason for cautious optimism.

A risk for future development on the euro zone periphery is the quality of banks' balance sheets. According to IMF data (Financial Soundness Indicators), the ratio of non-performing loans to total loans has been increasing in all countries of the euro zone periphery, exceeding even 30% in Greece in Q3 2013 (it was just below 25% in Ireland in the same period). A number of negative surprises could spring from the comprehensive assessment of banks that is being conducted by the ECB in preparation of assuming

responsibility for bank supervision as part of the Single Supervisory Mechanism. In the case of Greece, recently published results of stress tests of local banks conducted by the Bank of Greece have already provided some hints. Within the time horizon of the stress tests (until the end of 2016), Greek banks will need to increase their capital by EUR 6.4 billion (and by EUR 9.4 billion in theadverse scenario) so that Core Tier 1 capital ratio does not fall below 8.0% (below 5.5% in the adverse scenario).

For the Czech Republic, a small open economy with strong business links to the EA countries, any eventual escalation of the crisis in the euro zone would mean a decrease in foreign demand for its exports. This could have an indirect impact on investment activity and final consumption expenditure. However, a highly resilient financial sector and credible fiscal policy, which is reflected in the low yields on government bonds, remain the Czech Republic's strength.

#### **Commodity Prices**

In Q1 2014, the average price of **Brent** crude oil was 108.3 USD/barrel (*versus 107 USD*). In 2014, the price should continue to fall slightly, in particular due to expanding production capacities, the increasing substitution of imports into the USA and Canada by domestic production, and a low inflation rate. In 2014, the average price of Brent crude oil for the whole year could reach USD 105 per barrel (*versus 104 USD*). In 2015, growth in supply should exceed growth in global demand and the price should further drop to USD 101 per barrel (*unchanged*).





Source: U. S. Energy Information Administration, own calculations

<sup>&</sup>lt;sup>2</sup> Seasonal adjustment in the case of Ireland does not include correction for the impact of a different number of working days (Q3 had by 2 working days more than Q4)

Table A.1.1: Real Gross Domestic Product – yearly

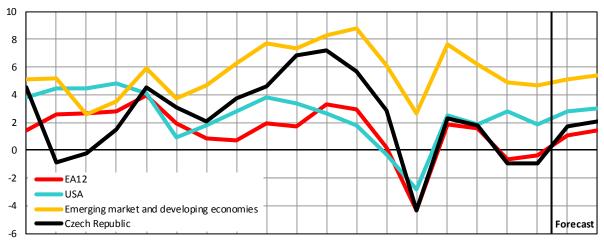
growth rate, in %, seasonally adjusted data (except for the Czech Republic)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
									Forecast	Forecast
World	5.3	5.4	2.8	-0.6	5.2	3.9	3.1	3.0	3.7	3.9
USA	2.7	1.8	-0.3	-2.8	2.5	1.8	2.8	1.9	2.8	3.0
China	12.7	14.2	9.6	9.2	10.4	9.3	7.7	7.7	7.4	7.2
EU28	3.5	3.2	0.3	-4.5	2.0	1.7	-0.4	0.1	1.6	1.8
EA12	3.3	2.9	0.2	-4.4	1.9	1.6	-0.6	-0.4	1.1	1.5
Germany	3.9	3.4	8.0	-5.1	3.9	3.4	0.9	0.5	1.7	1.8
France	2.7	2.2	-0.2	-3.1	1.6	2.0	0.0	0.3	0.9	1.4
United Kingdom	2.8	3.4	-0.8	-5.2	1.7	1.1	0.3	1.9	2.5	2.4
Austria	3.8	3.7	0.9	-3.5	1.9	2.9	0.7	0.4	1.4	1.8
Hungary	3.9	0.1	0.8	-6.7	1.0	1.6	-1.7	1.2	1.9	1.8
Poland	6.2	6.8	5.0	1.6	3.9	4.5	2.0	1.5	2.5	2.8
Slovakia	8.3	10.5	5.8	-4.9	4.4	3.0	1.8	0.9	2.2	2.9
Czech Republic	7.0	5.7	3.1	-4.5	2.5	1.8	-1.0	-0.9	1.7	2.0

Source: CZSO, Eurostat, IMF, NBS China, own calculations

## Graph A.1.4: Real Gross Domestic Product

YoY growth rate, in %, seasonally adjusted data



1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Source: Eurostat, IMF, own calculations

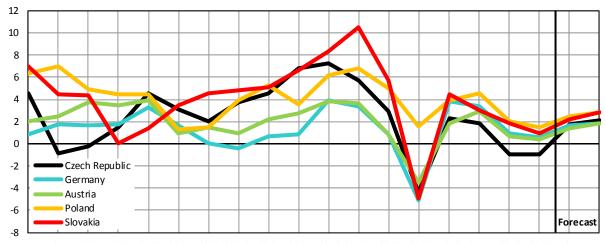
Note: Emerging market and developing economies comprising 154 countries (according to the IMF's classification)

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

		201	.3			201	4	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Estimate	Forecast	Forecast	Forecast
USA Qoo	0.3	0.6	1.0	0.7	0.6	0.7	0.7	0.7
Yo	1.3	1.6	2.0	2.6	2.9	3.0	2.7	2.7
China Qoo	1.6	1.9	2.2	1.8	1.7	1.8	1.6	1.6
Yo	7.8	7.8	7.9	7.7	7.8	7.7	7.1	6.9
EU28 Qoo	-0.1	0.4	0.3	0.4	0.4	0.4	0.4	0.5
Yo	-0.7	-0.1	0.2	1.1	1.5	1.5	1.6	1.7
EA12 Qoo	-0.2	0.3	0.1	0.3	0.3	0.2	0.3	0.4
Yo	-1.2	-0.6	-0.3	0.5	1.0	0.9	1.1	1.2
Germany Qoo	0.0	0.7	0.3	0.4	0.4	0.4	0.5	0.4
Yo	-0.3	0.5	0.6	1.4	1.8	1.5	1.7	1.7
France Qoo	-0.1	0.6	0.0	0.3	0.2	0.2	0.3	0.2
Yo	-0.4	0.5	0.3	0.8	1.0	0.7	1.0	0.9
United Kingdom Qoo	0.5	0.8	0.8	0.7	0.6	0.6	0.5	0.5
Yo	0.7	2.0	1.9	2.8	2.9	2.7	2.4	2.2
Austria Qoo	0.1	0.0	0.2	0.3	0.4	0.4	0.6	0.5
Yo	0.5	0.3	0.4	0.5	0.9	1.3	1.7	1.9
Hungary Qoo	1.1	0.3	0.8	0.5	0.4	0.4	0.4	0.5
Yo	-0.1	0.6	1.7	2.7	2.1	2.2	1.7	1.7
Poland Qoo	0.4	0.6	0.7	0.6	0.6	0.7	0.6	0.7
Yo	0.8	1.3	1.8	2.2	2.4	2.5	2.5	2.6
Slovakia Qoo	0.3	0.3	0.3	0.4	0.6	0.7	0.7	0.8
Yo	0.7	0.8	0.9	1.4	1.6	2.0	2.4	2.8
Czech Republic Qoo	-1.3	0.3	0.3	1.8	-0.5	0.3	0.4	0.5
Yo	-2.3	-1.6	-1.0	1.2	2.0	2.1	2.1	0.7

Source: Eurostat, NBS China, own calculations

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

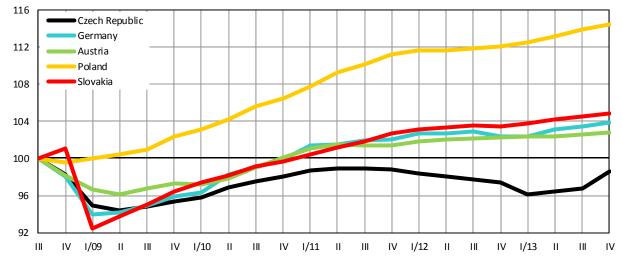


1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Source: Eurostat, own calculations

Graph A.1.6: **Real Gross Domestic Product** – Czech Republic and the neighbouring states

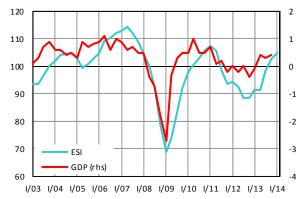
Q3 2008=100, seasonally adjusted data



Source: Eurostat, own calculations

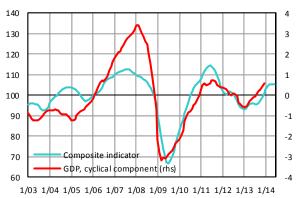
Graph A.1.7: **ESI and GDP Growth in the EU** 

indicator – quarterly averages, QoQ growth in %, sa data



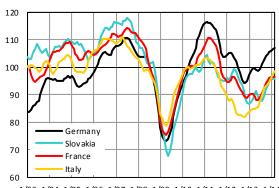
Source: EC, Eurostat

Graph A.1.9: **Composite Leading Indicator** – EU monthly data, 2005=100, cyclical component in % of trend GDP



Source: EC, Eurostat, own calculations

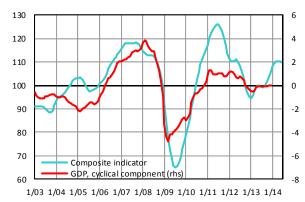
Graph A.1.8: **ESI in Selected Trading Partner Countries** *3-month moving averages* 



1/03 1/04 1/05 1/06 1/07 1/08 1/09 1/10 1/11 1/12 1/13 1/14

Source: EC

A.1.10: **Composite Leading Indicator** – Germany monthly data, 2005=100, cyclical component in % of trend GDP



Source: EC, Eurostat, own calculations

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

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
										Forecast	Forecast
Crude oil Brent	USD/barrel	65.1	72.4	96.9	61.5	79.6	111.3	111.6	108.6	105	101
	growth in %	19.6	11.1	34.0	-36.5	29.3	39.9	0.3	-2.6	-3.5	-4.1
Crude oil Brent index (in CZK)	2005=100	112.5	111.5	123.9	88.4	116.1	150.4	167.0	162.5	161	155
	growth in %	12.5	-0.9	11.1	-28.6	31.4	29.5	11.0	-2.7	-0.6	-4.2
Wheat	USD/t	191.7	255.2	325.9	223.4	223.7	316.2	313.3	312.2	250	244
	growth in %	25.8	33.1	27.7	-31.5	0.1	41.4	-0.9	-0.3	-20.0	-2.3
Wheat price index (in CZK)	2005=100	118.3	140.2	150.7	117.1	116.4	152.8	168.1	167.2	138	134
	growth in %	18.3	18.4	7.5	-22.3	-0.6	31.3	10.0	-0.5	-17.6	-2.4

Source: IMF, U. S. Energy Information Administration, own calculations

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

			201	3			201	4	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Crude oil Brent	USD/barrel	112.4	102.6	110.2	109.2	108.1	106	104	102
	growth in %	-5.3	-4.8	0.5	-0.8	-3.8	2.9	-6.1	-6.6
Crude oil Brent index (in CZK)	2005=100	166.6	155.1	164.5	163.7	165.7	163	160	157
	growth in %	-4.1	-4.6	-2.2	0.1	-0.5	5.0	-2.9	-3.8
Wheat price	USD/t	321.4	313.8	305.9	307.8	291	232	235	241
	growth in %	15.3	16.7	-12.5	-13.5	-9.4	-26.1	-23.2	-21.8
Wheat price index (in CZK)	2005=100	170.5	169.9	163.4	165.1	160	128	130	133
	growth in %	16.7	17.0	-14.9	-12.7	-6.3	-24.5	-20.6	-19.4

Source: IMF, U. S. Energy Information Administration, own calculations

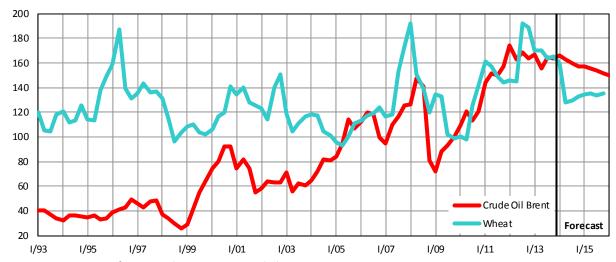
Graph A.1.11: **Dollar Prices of Oil** *USD/barrel* 



Source: U. S. Energy Information Administration, own calculations

**Graph A.1.12: Koruna Indices of Prices of Selected Commodities** 

index 2005=100



Source: IMF, U. S. Energy Information Administration, own calculations

# A.2 Fiscal Policy

According to the CZSO's preliminary estimates, the government sector balance ended in a deficit of 1.4% of GDP in 2013. Compared to the original MoF assumption of January 2014, the estimate has improved by 1.1 pp. This very positive result is the sum of several factors.

On the revenue side, it involves revenues of accrual taxes, which were nearly 0.2% of GDP higher compared to expectations. The change in the rates of tobacco taxes has had a marked impact here following significant stockpiling at the end of 2013 and a high cash collection in the first two months of 2014 (cash fulfilment has reached nearly half the amount budgeted for the whole year). Because of accrualization methods, however, this collection represents income of 2013. Another important factor on the revenue side is the development of social security contributions, which were 0.2% of GDP higher compared to the expectations.

On the expenditure side, the most important factor was government sector investments, which were lower by nearly 0.4% of GDP compared to the assumptions. Compared to the January estimate, the CZSO has revised its quarterly accounts. The original decrease in investment assigned to projects financed by the EU, and therefore without any major impact on the balance, was corrected to a decrease in domestic investment projects in particular. The decrease in these investments was largely responsible for a surplus of local budgets of 0.4% of GDP, which was their best result for the last 17 years. To a slightly lesser extent, the decrease in investment was also apparent at the central level, in particular at the Road and Motorway Directorate. A more favourable development, by approximately 0.1% of GDP, compared to expectations was also seen in social allowances. The same level also applied to investment expenditure to other sectors of the national economy.

Thanks to the economic result for 2013, the structural balance (the balance adjusted for the effect of the business cycle and one-off and temporary measures) reached –0.3% of GDP. Since joining the EU, the Czech Republic has so met the medium-term budgetary objective for the first time. This target is defined as a structural deficit of 1% of GDP. Fiscal effort, i.e. a YoY change in the structural balance, was 1.3 pp in 2013, i.e. the same level as in 2011 and 2012.

In 2014, we expect the government sector deficit to increase to 1.8% of GDP. Considering the gradually

closing output gap, the structural deficit will probably deepen by 1 pp to 1.3% of GDP in 2014. This change must be treated with caution, since the excellent result of last year is largely a consequence of several factors that economically cannot be fully attributed to 2013 and cannot be evaluated as clearly positive from the perspective of future development. The first factor is the aforementioned stockpiling of tobacco products, which has increased the collection of 2013 to the detriment of 2014.

Another major difference is the development of investment expenditure of the government sector, where growth is expected of more than 28% compared to 2013. An increase should be seen above all in investments co-financed from EU funds; the assumption expects drawing down 95% of the allocation for the programming period 2007–2013 before the end of 2015. This assumption is supported by the fact that contracts are already signed for most of this investment expenditure by the respective managing body of the operational programme. Similar amount of investment should also continue in 2015. This is the last year when it is possible to implement expenditures from the 2007–2013 programming period. This high increase in investment obviously makes demands on Czech financing, which here accounts for more than 0.2% of GDP and fully impacts on the government sector deficit. As far as investments from purely Czech sources are concerned, their stagnation can be assumed in 2014 since demands on government sector budgets for co-financing investments paid from EU funds will stop growth in domestic investment. With a less conservative forecast, even their slight decrease can be expected.

For 2014, we expect nominal government consumption to grow by 1.7%, mainly due to a very slight increase in both employee compensation of 1.9% and low growth in intermediate consumption of 1.5%.

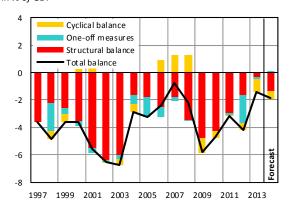
At present we can regard the forecast risks as balanced. If the assumption regarding full use of the allocation from EU structural funds for the last programming period is not fulfilled, it would mean savings on the Czech financing of these projects. On the revenue side, the development of tax incomes stands for the risk, whereby in the case of less favourable economic development there could be tax shortcomings.

Despite the considerable increase in investment activity compared to 2013 and the stockpiling of cigarette tax stamps last year, the general government

sector deficit will probably not exceed 2% of GDP in 2014.

A detailed analysis of general government sector development in 2013, an analysis of the Notifications

Graph A.2.1: Decomposition of the Government Balance in % of GDP

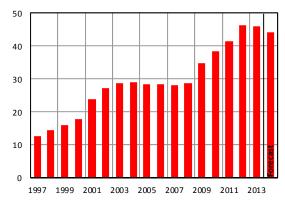


Source: CZSO, own calculations

Table A.2.1: Net Lending/Borrowing and Debt

of Government Deficit and Debt in 2014 and the forecast of fiscal policy until 2017 will be included of this year's April Update of the Convergence Programme of the Czech Republic.

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



Source: CZSO, own calculations

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
										Prelim.	Forecast
General government balance 1)	% GDP	-3.2	-2.4	-0.7	-2.2	-5.8	-4.7	-3.2	-4.2	-1.4	-1.8
	bill. CZK	-101	-80	-27	-86	-218	-179	-122	-162	-56	-73
Cyclical balance	% GDP	0.0	0.9	1.3	1.3	-1.1	-0.5	-0.1	-0.5	-1.0	-0.6
Cyclically adjusted balance	% GDP	-3.3	-3.3	-2.0	-3.5	-4.7	-4.2	-3.1	-3.7	-0.5	-1.2
One-off measures	% GDP	-1.5	-0.7	-0.3	-0.1	0.0	0.0	-0.2	-2.1	-0.2	0.1
Structural balance	% GDP	-1.8	-2.5	-1.8	-3.4	-4.8	-4.3	-2.9	-1.6	-0.3	-1.3
Fiscal effort <sup>2)</sup>	percent. points	-0.1	-0.8	8.0	-1.7	-1.3	0.5	1.3	1.3	1.3	-1.0
Interest expenditure	% GDP	1.1	1.1	1.1	1.0	1.3	1.3	1.4	1.5	1.4	1.4
Primary balance	% GDP	-2.2	-1.3	0.4	-1.2	-4.5	-3.4	-1.8	-2.7	-0.1	-0.5
Cyclically adjusted primary balance	% GDP	-2.2	-2.2	-1.0	-2.5	-3.4	-2.9	-1.8	-2.2	0.9	0.1
General government debt	% GDP	28.4	28.3	27.9	28.7	34.6	38.4	41.4	46.2	46.0	44.0
	bill. CZK	885	948	1 023	1 104	1 299	1 454	1 583	1 775	1 788	1 768
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	-2.1

Source: CZSO, own calculations

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, Financial Sector and Exchange Rates

#### **Monetary Policy**

In November 2012, the CNB cut the limit interest rate for **2W** (two-week) repo operations to 0.05%, whereby the main monetary policy instrument reached not only a historical low, but chiefly the zero lower bound. Nonetheless, disinflation continued due to the negative output gap, development on the labour market and other factors (e.g. commodity prices). Monetary-policy relevant inflation, i.e. inflation adjusted for first-round effects of changes to indirect taxes, reached only 0.1% in October 2013. To prevent long-term undershooting of the inflation target and to accelerate the return to a situation when it will again be able to use its standard instrument, the CNB Bank Board decided on 7 November 2013 to use the exchange rate as another monetary policy instrument. According to the CNB's announcement, foreign exchange interventions against the Czech koruna aimed at keeping the CZK/EUR exchange rate close to 27 CZK/EUR will be conducted in such volume and for so long as will be necessary for fulfilling the inflation target. We assume that foreign exchange interventions will influence inflation almost exclusively through the so-called direct channel, i.e. through import prices.

A technical assumption was made in this forecast that the CNB will abandon using the exchange rate as a monetary policy instrument in mid-2015. As far as the current volume of foreign exchange interventions is concerned, this can be inferred from the statistics for CNB foreign exchange trading. These statistics show that in November 2013 the CNB purchased foreign currency worth EUR 7.5 billion, while the volume of interventions was zero in the following months. Market expectations apparently maintained the koruna exchange rate at a relatively stable level.

#### **Financial Sector and Interest Rates**

In Q1 2014, the **3M** (3-month) **PRIBOR** interbank market rate averaged 0.37% (*consistent with the forecast*). In both 2014 and 2015, the 3M rate should average 0.4% (*in both cases unchanged*).

Thanks to relatively stable fiscal development, long-term interest rates should remain low. However, their gradual slight increase can be expected due to an expected decrease in the risk aversion of investors. The Czech Republic's rating has remained at a good investment level – Standard & Poor's AA–, Moody's A1, Fitch Ratings A+ (all still with a stable outlook). We expect that the yield to maturity on 10-year government bonds for convergence purposes reached

2.3% (*unchanged*) in Q1 2014. We are leaving the forecast for 2014 at 2.4%; in 2015 long-term interest rates should increase slightly to 2.6% (*versus 2.5%*).

Client interest rates continue to decrease slowly. In Q4 2013, interest rates on deposits of households decreased by 0.1 pp QoQ to 0.9%, while rates on deposits of firms stagnated at 0.4%. Rates on loans to households fell by 0.2 pp QoQ to 5.8% and rates on loans to non-financial corporations decreased by 0.1 pp to 3.1%. Household indebtedness continues to expand at a slow pace. The growth of total loans to households is driven especially by housing loans. In fact, the volume of consumer loans has been stagnating recently, while growth of other loans (e.g. loans to sole traders) has accelerated. Loans to non-financial corporations have been in decline for the last few quarters, which implies that investment activity is suppressed.

The situation concerning non-performing loans has been stable, in spite of the impacts of the economic recession. In Q4 2013 their share stood at 5.1% for households (QoQ stagnation, 0.1 pp less YoY) and decreased to 7.2% for non-financial corporations (0.2 pp less QoQ, 0.3 pp less YoY).

In the second half of March 2014, the Prague Stock Exchange's PX Index ranged from 950 to 1,000 points, which represents values comparable with the same period of 2013 and the previous quarter. In the past few weeks, increased volatility has been recorded due to the Ukrainian crisis.

#### **Exchange Rates**

Over the last two years, the CZK/EUR exchange rate ranged in a relatively narrow band from 24.7 to 25.9 CZK/EUR, with a tendency to depreciate.

There was a sharp change at the beginning of November 2013 when the CNB announced that it would keep the exchange rate close to 27 CZK/EUR. The koruna weakened by nearly 7% before the end of 2013, whereupon the exchange rate fluctuated around the level of 27.50 CZK/EUR without exhibiting much volatility. For the whole of 2013, the CZK exchange rate weakened by 3.2%.

In order to forecast the CZK/EUR exchange rate level, arbitrary assumptions had to be made regarding the date when the CNB will abandon using the extraordinary exchange rate instrument as well as the exit strategy to be employed. Based on available information, we have made a technical assumption of

exchange rate stability at a level of 27.25 CZK/EUR for the period until the end of Q2 2015. Subsequently, the koruna should again start strengthening against EUR, but at a more moderate pace than that of a long-term trend. We assume that the convergence of the Czech economy to the economic level of the euro zone will be renewed.

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

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
										Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	2.50	3.50	2.25	1.00	0.75	0.75	0.05	0.05		
Main refinancing rate ECB (end of period)	in % p.a.	3.50	4.00	2.50	1.00	1.00	1.00	0.75	0.25		
Federal funds rate (end of period)	in % p.a.	5.25	4.25	0.25	0.25	0.25	0.25	0.25	0.25		
PRIBOR 3M	in % p.a.	2.30	3.09	4.04	2.19	1.31	1.19	1.00	0.46	0.4	0.4
YTM of 10Y government bonds	in % p.a.	3.78	4.28	4.55	4.67	3.71	3.71	2.80	2.11	2.4	2.6
Households – MFI (CR, unless stated otherw	ise)										
-interest rates on loans	in % p.a.	6.93	6.63	6.81	7.00	7.00	6.83	6.46	6.03		
-loans	growth in %	32.1	31.7	28.9	16.3	8.7	6.5	4.9	4.0		
-loans without housing loans	growth in %	28.3	27.3	25.3	19.1	8.3	6.8	1.4	0.5		
-deposits	growth in %	7.3	10.6	9.4	10.5	5.4	5.0	4.7	3.2		
- share of non-performing loans	in %	3.7	3.2	3.0	3.7	4.8	5.3	5.2	5.2		
-loans to deposits ratio	in %	40	48	57	60	61	62	65	65		
-loans to deposits ratio (Eurozone)	in %	99	99	94	89	90	90	87	84		
Non-financial firms – MFI (CR, unless stated	d otherwise)										
-interest rates on loans	in % p.a.	4.29	4.85	5.59	4.58	4.10	3.93	3.69	3.19		
-loans	growth in %	13.9	16.7	17.5	0.2	-6.5	3.3	2.5	0.1		
-deposits	growth in %	10.9	13.2	5.3	-1.7	4.8	0.9	8.2	4.4		
- share of non-performing loans	in %	4.5	3.8	3.6	6.2	8.6	8.5	7.7	7.4		
-loans to deposits ratio	in %	117	120	134	137	123	126	122	117		
-loans to deposits ratio (Eurozone)	in %	292	296	315	315	294	286	273	248		

Source: CNB, ECB, Fed, own calculations

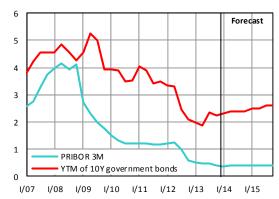
Table A.3.2: Interest Rates, Deposits and Loans – quarterly

			2013	3			201	.4	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	0.05	0.05	0.05	0.05	0.05			
Main refinancing rate ECB (end of period)	in % p.a.	0.75	0.50	0.50	0.25	0.25			
Federal funds rate (end of period)	in % p.a.	0.25	0.25	0.25	0.25	0.25	•		•
PRIBOR 3M	in % p.a.	0.50	0.46	0.46	0.41	0.37	0.4	0.4	0.4
YTM of 10Y government bonds	in % p.a.	1.98	1.88	2.35	2.24	2.3	2.4	2.4	2.4
Households – MFI (CR, unless stated otherw	vise)								
-interest rates on loans	in % p.a.	6.21	6.09	5.96	5.83				
-loans	growth in %	3.7	3.9	4.1	4.2				
-loans without housing loans	growth in %	-0.4	0.1	0.7	1.7				
-deposits	growth in %	4.2	3.6	2.7	2.4				
-share of non-performing loans	in %	5.2	5.2	5.1	5.1				
-loans to deposits ratio	in %	64	65	66	66				
-loans to deposits ratio (Eurozone)	in %	85	84	84	84		•		
Non-financial firms – MFI (CR, unless state	ed otherwise)								
-interest rates on loans	in % p.a.	3.27	3.23	3.17	3.09				
-loans	growth in %	2.3	0.2	-1.2	-0.9				
-deposits	growth in %	4.8	1.9	4.7	6.1				
-share of non-performing loans	in %	7.4	7.6	7.4	7.2				
-loans to deposits ratio	in %	119	119	117	111				
-loans to deposits ratio (Eurozone)	in %	256	252	245	237				

Source: CNB, ECB, Fed, own calculations

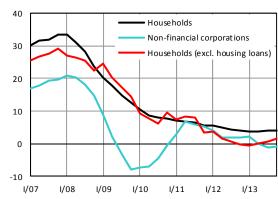
Graph A.3.1: Interest Rates

in % p.a.



Source: CNB, own calculations

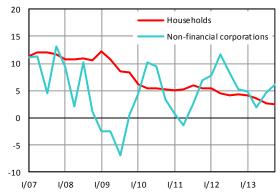
Graph A.3.2: **Loans** *YoY growth rate, in %* 



Source: CNB, own calculations

## Graph A.3.3: Deposits

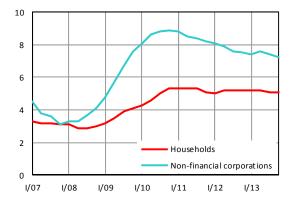
YoY growth rate, in %



Source: CNB, own calculations

## Graph A.3.4: Non-performing Loans

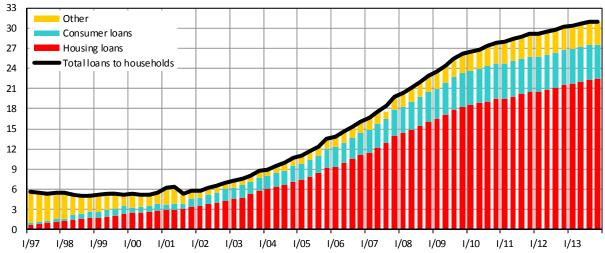
ratio of non-performing to total loans, in %



Source: CNB, own calculations

Graph A.3.5: Ratio of Bank Loans to Households to GDP

yearly moving sums, in %



Source: CNB, CZSO, own calculations

Table A.3.3: Exchange Rates – yearly

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
								Forecast	Forecast	Outlook	Outlook
Nominal exchange rates:											
CZK / EUR	average	24.96	26.45	25.29	24.59	25.14	25.98	27.3	27.2	26.8	26.4
	appreciation in %	11.3	-5.6	4.6	2.8	-2.2	-3.2	-4.8	0.5	1.4	1.5
CZK / USD	average	17.06	19.06	19.11	17.69	19.59	19.57	20.1	20.1	19.9	19.6
	appreciation in %	19.0	-10.5	-0.3	8.0	-9.7	0.1	-2.9	0.1	1.4	1.5
NEER	average of 2010=100	101.2	98.0	100.0	103.1	99.5	97.3	93	93	95	96
	appreciation in %	11.7	-3.2	2.1	3.1	-3.5	-2.2	-4.5	0.4	1.4	1.5
Real exchange rate to EA12 <sup>1)</sup>	average of 2010=100	102.4	97.9	100.0	100.7	98.8	96.0	92	93	94	95
	appreciation in %	11.3	-4.4	2.1	0.7	-1.9	-2.8	-4.3	0.8	1.0	1.5
REER	average of 2010=100	102.7	98.9	100.0	102.0	99.2					
(Eurostat, CPI deflated, 37 countries)	appreciation in %	14.9	-3.7	1.1	2.0	-2.8					

Source: CNB, Eurostat, own calculations

1) Deflated by GDP deflators.

Table A.3.4: Exchange Rates – quarterly

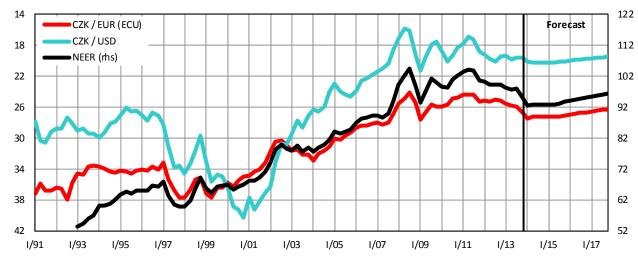
			201	13			20:	14	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Estimate	Forecast	Forecast	Forecast
Nominal exchange rates:									
CZK / EUR	average	25.57	25.83	25.85	26.66	27.44	27.3	27.3	27.3
	appreciation in %	-1.9	-2.2	-3.0	-5.6	-6.8	-5.2	-5.1	-2.2
CZK / USD	average	19.37	19.78	19.52	19.59	20.04	20.2	20.2	20.2
	appreciation in %	-1.2	-0.3	2.8	-0.9	-3.3	-2.0	-3.3	-2.9
NEER	average of 2010=100	98.4	97.6	98.0	95.1	92	93	93	93
	appreciation in %	-1.7	-1.7	-1.3	-4.1	-6.1	-4.7	-5.1	-2.3
Real exchange rate to EA12 1)	average of 2010=100	97.0	96.4	96.2	94.4	91	92	92	93
	appreciation in %	-1.5	-2.0	-2.7	-4.7	-6.5	-5.0	-4.6	-1.3
REER	average of 2010=100	98.5	97.3	97.4					
(Eurostat, CPI deflated, 37 countries)	appreciation in %	-2.1	-1.8	-1.4					

Source: CNB, Eurostat, own calculations

1) Deflated by GDP deflators.

**Graph A.3.6: Nominal Exchange Rates** 

quarterly averages, average 2010=100 (rhs)



Source: CNB, own calculations

Graph A.3.7: Real Exchange Rate to EA12

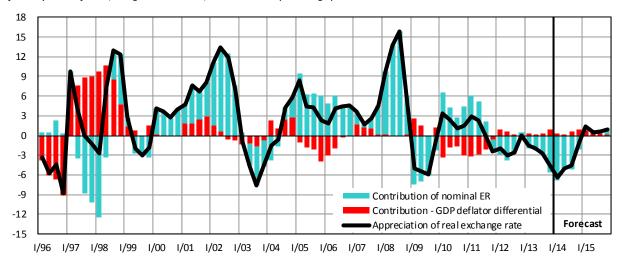
quarterly averages, deflated by GDP deflators, average 2010=100



Source: CNB, Eurostat, own calculations

Graph A.3.8: Real Exchange Rate to EA12

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



Source: CNB, Eurostat, own calculations

## A.4 Structural Policies

On 12 February 2014, the coalition government (i.e. the parties ČSSD, ANO 2011 political movement and KDU-ČSL) approved its policy statement, defining 10 priority areas:

- Development of conditions for free enterprises, kick-starting of sustainable economic growth, increasing competitiveness, job creation.
- Effective utilization of EU funds.
- Stocktaking and reconstruction of the state, rationalization of state's economic management.
- Fight against corruption, serious economic crime and usury.
- Development of public services in education, health, social system, transport and security.
- Development of civil society.
- Active membership of the EU and NATO.
- Adoption of civil service law.
- Effective use of information and communication technologies in public administration.
- Strengthening of parliamentary control of the Czech Republic's intelligence service.

#### **Financial Markets**

On 22 January 2014, the government approved the bill amending certain acts in connection establishment and supervision of access to the business of banks, savings banks and credit unions as well as securities dealers, implementing the EU Directive on the access to the activity of credit institutions and the prudential supervision of them in the Czech law. The new legal regulation introduces capital reserves the holding of which can be required by the CNB from banks, cooperative savings banks and investment firms in order to strengthen the capital resources and limit systemic risks. Simultaneously, the responsibility for supervision of the liquidity of branches of the Member States banks will be transferred from the supervisory authority of the host state to the supervisory authority of the home state. Last but not least, the act introduces changes in penalties, remuneration or corporate governance. The act should come into effect on 1 April 2014, and some selected parts of it on 1 January 2015 and 1 January 2016.

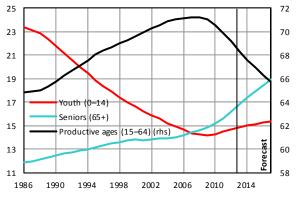
# A.5 Demographic Trends

At the beginning of 2014, 10.512 million people lived in the Czech Republic. During 2013, the number of Czech inhabitants decreased by 4 thousand people, i.e. the first population decrease since 2002.

The slight prevalence of the number of deaths over the births (by 2 thousand) was roughly in line with the expectation of the central variant of the CZSO's Demographic Projection 2013. In contrast, a negative balance in registered migration, recorded for only the second time in the history of the independent Czech Republic, was an unpleasant surprise. Weak economic output clearly diminishes the attractiveness of the Czech market for foreign employees.

The number of inhabitants of the Czech Republic is very close to its post-WWII **population peak**. It is not clear yet whether the peak was already reached at the beginning of 2013 (in line with the low variant of the CZSO's Projection) or whether the central variant will prove correct with a very slight increase in the population in the near future. Beyond the outlook horizon we can in all likelihood expect a long-term decrease in the number of inhabitants of the Czech Republic.

Graph A.5.1: **Age Groups** structural shares in %



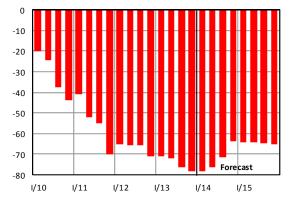
Source: CZSO, own calculations

Non-fulfilment of the expected positive migration balance will probably be reflected in a deepening of the lasting decline of the structural proportion of the **population aged 15–64** (see Graph A.5.1). It will add to the natural development, whereby persons born at the turn of the millennium, when the birth rate was very low, are now exceeding the lower age limit of this group, while the population-strong generation born after WWII is gradually being classified as senior citizens.

In absolute terms, the working-age population is decreasing by approximately 70–80 thousand people

a year (see Graph A.5.2), i.e. by approximately 1% a year. The economic impacts of this situation are described in more detail in Chapter B.1.

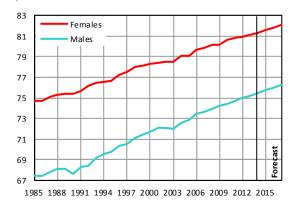
Graph A.5.2: **Czech Population Aged 15–64** based on LFS, YoY increases of quarterly averages, in thousands



Source: CZSO, own calculations

In contrast, the structural proportion of **persons over 64 years** in the total population reached 16.8% at the beginning of 2013, and is increasing by 0.5 pp annually. The number of seniors in the population is significantly rising due to demographic structure and further continuation of the intensive process of increasing life expectancy and, in the outlook horizon, i.e. at the beginning of 2017, it should reach approximately 2 million people.

Graph A.5.3: Life Expectancy in years



Source: CZSO

In such situation it is quite a paradox that the number of **old-age pensioners** has been stagnant since the beginning of 2012. In their structure, the number of pensioners with reduced pensions after early retirement is continuing to rise quite dynamically (by 19 thousand YoY at the end of 2013), while the number of pensioners entitled to a full pension has decreased YoY by 20 thousand. The share of reduced pensions has already reached 23.7%, compared to 19.0% at the end of 2009. A certain decoupling is occurring between

that proportion of potential pensioners (probably better qualified with secure jobs) who are postponing their retirement and another section of the population

which is increasingly taking advantage of early retirement.

Table A.5.1: Demography in thousands of persons (unless stated otherwise)

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Population (January 1)		10 201	10 468	10 507	10 407	10 505	10 516	10 512	Forecast 10 518	Outlook 10 522	
Population (January 1)	growth in %	0.9	0.8	0.4	-0.2	0.2	0.1	0.0	0.1	0.0	0.0
A constructions (Income 1)	growar iii 70	0.5		0.4	0.2	0.2	0.1	0.0	0.1		0.0
Age structure (January 1):		1 477	1 480	1 494	1 522	1 541	1 560	1 5 7 9	1 594	1 606	1 616
(0–14)	growth in %	-0.2	0.2	1.0	1.8	1.3	1.2	1.2	0.9	0.8	0.6
(15.64)	growth in %	7 <b>391</b>	7 <b>431</b>	7 414	7 328	7 263	7 188	7 106	7 042	6 977	6 911
(15–64)	growth in %	0.9	0.5	-0.2	-1.2			-1.1	-0.9	-0.9	
(CF and many)	growth in %	1 <b>513</b>	1 <b>556</b>	-0.2 <b>1 599</b>	1 637	-0.9 <b>1 701</b>	-1.0 <b>1 768</b>	-1.1 1 828	-0.9 <b>1 882</b>	-0.9 <b>1 939</b>	-0.9 <b>1 997</b>
(65 and more)	growth in %	2.1	2.9	2.7	2.4	3.9	3.9	3.4	3.0	3.0	
	growth in %										3.0
Old-age pensioners (January 1) <sup>1)</sup>		2 061	2 102	2 147	2260	2340	2341	2 340	2 355	2 380	2 403
	growth in %	1.8	2.0	2.1	•	3.5	0.1	0.0	0.6	1.0	1.0
Old-age dependency ratios (January 1	, in %):										
Demographic 2)		20.5	20.9	21.6	22.3	23.4	24.6	25.7	26.7	27.8	28.9
Under current legislation 3)		35.9	36.1	36.6	37.4	37.8	38.3	38.9	39.4	40.0	40.6
Effective 4)		41.5	41.8	43.6	45.9	47.9	47.6	47.2	47.5	47.9	48.2
Fertility rate		1.497	1.492	1.493	1.427	1.450	1.460	1.45	1.45	1.45	1.46
Population increase		86	39	-20	19	11	-4	6	4	2	1
Natural increase		15	11	10	2	0	-2	-3	-5	-7	-9
Live births		120	118	117	109	109	107	104	102	100	98
Deaths		105	107	107	107	108	109	107	107	107	107
Net migration		72	28	16	17	10	-1	9	9	9	9
Immigration		78	40	31	23	30	30				
Emigration		6	12	15	6	20	31		•		
Census difference		х	х	-46	х	х	х	х	х	х	х

Source: Czech Social Security Administration, CZSO, own calculations

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

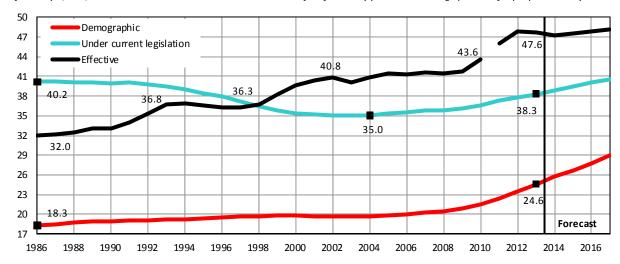
Demographic dependency: ratio of people in senior ages (65 and more) to people in productive age (15–64).

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

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

## **Graph A.5.4: Dependency Ratios**

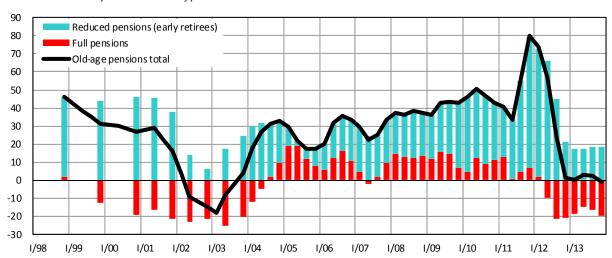
As of January 1, in %, inconsistent between 2010 and 2011 due to transfer of disability pensions to old-age pensions for people over 64 years



Source: CZSO, own calculations

## Graph A.5.5: Old-Age Pensioners

absolute increase over a year in thousands of persons



Source: Czech Social Security Administration, CZSO, own calculations

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