

A Forecast Assumptions

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

A.1 External Environment

Economic output

The outlook for the world economy has deteriorated since the April Forecast. There are now even fears of a possible second round of global recession. The main source of uncertainty is development in the euro zone, though unconvincing growth of the US economy and the current slowdown in China and other major economies, such as Brazil and India, also give rise to concerns.

The **US economy** grew by 0.5% QoQ (*as forecast*) in Q1 2012. This growth, founded especially on increasing household consumption, is not strong enough, however, to create a sufficient number of new jobs. Gains in jobs gradually declined, and in May unemployment again rose to 8.2%. The prospects for the economy are uncertain, and consumer confidence diminished at the end of May after several months of improvement. Stock markets, too, were ruled by anxiety. The Dow Jones Index, which had passed the 13,000 points mark in April, dropped by as much as 900 points in May and is ranging around 12,500 points. The negative situation on the real estate market continues to be a factor in the unstable recovery (according to the Federal Reserve, household assets decreased by 39% between 2007 and 2010 especially due to the decrease in real estate values). Moreover, growth in consumer expenditures among less-indebted households is due in part to higher prices for oil and other energy.

In the pre-election political context, potential further stimulation of the economy can be expected – mainly from the Federal Reserve. Basic interest rates remain unchanged, and the Fed had previously announced that it will keep them “at zero” until the end of 2014. While it had been expected that the Fed could bolster the slowing economy with another round of quantitative easing, at its meeting on 20 June it decided in favour of more modest support. The Fed will prolong the so-called Operation Twist programme by six months (originally it should have ended in June), the goal of which is to achieve a flatter yield curve. It is debatable, however, whether such action will suffice in mitigating the negative tendencies in the US economy.

Further uncertainty looms at the end of the year, when temporary tax relief will expire, and thus automatic

cuts in state expenditures should be initiated. The term “fiscal cliff” has come into use for such situation, and it is presumed that this could significantly reduce growth in 2013. To make a change, however, would require Congressional consensus, which is not very probable before the November elections.

For 2012, we retain the growth estimate for the US economy at 2.2%. For 2013, we estimate growth of 2.4% (*versus 2.5%*).

After a QoQ decrease of 0.3% in Q4 2011, the **euro zone** remained flat QoQ in Q1 2012 (*versus a decrease of 0.2%*). The economy was, in effect, driven only by exports, while the positive contribution of household consumption was negated by the impacts of restrictive fiscal policy. Marked differences exist between the performances of individual economies. Germany remains the driving force, and in many EA countries growth is weak. The French economy is stagnating, and seven EA countries, including the large economies of Italy and Spain, are in recession.

The German economy delivered a positive surprise in Q1 with QoQ growth of 0.5% (*versus a decrease of 0.1%*). Growth was driven not only by exports, but household consumption also contributed significantly. The decline in the leading indicators (ZEW and Ifo indices) and drop in industrial production in April indicate, however, that German growth could be moderated to a certain degree.

The rise in unemployment in the EA offers a grim perspective, increasing to 11.0% in April. At the same time, the distribution is very uneven: On one end of the scale is Spain (24.3%), followed by Greece (21.7% in February), Portugal (15.2%), Ireland (14.2%) and Slovakia (13.7%). In Germany, on the other hand, the unemployment rate gradually fell to 5.4%. In certain euro zone countries, the high rate of unemployment among people under 24 is a particular problem (especially in Spain).

The **Polish economy** continues to grow dynamically, recording a 0.8% QoQ gain (*versus 0.5%*) in Q1 2012. The unemployment rate remained at 9.9% level in April. Growth is currently driven mainly by infrastructure investments and strong domestic consumption. For 2012, in connection with decreased

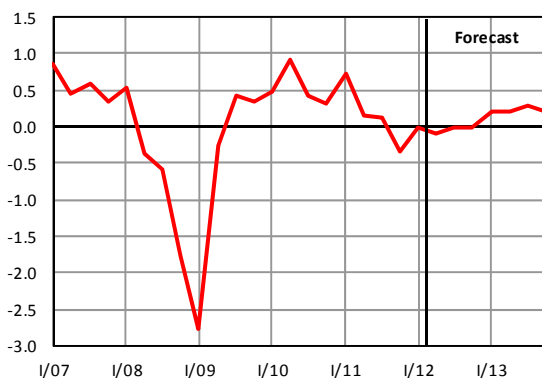
government spending we expect a more significant slowdown of economic growth, which should not exceed 3%.

The **Slovak economy** expanded by 0.7% QoQ (*versus* 0.2%) in Q1 2012. Growth is driven almost exclusively by exports, especially of automobiles. In the past two quarters, household consumption switched from decline to stagnation. The unemployment rate remains high (currently the fifth highest in the euro zone). Growth in 2012 will likely depend strongly on the situation in Germany and also will be influenced by the new government's fiscal policy.

We have maintained the estimate of economic decline for the EA12 in 2012 at 0.3%. For 2013, we have adjusted the growth estimate to 0.6% (*versus* 0.7%).

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

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



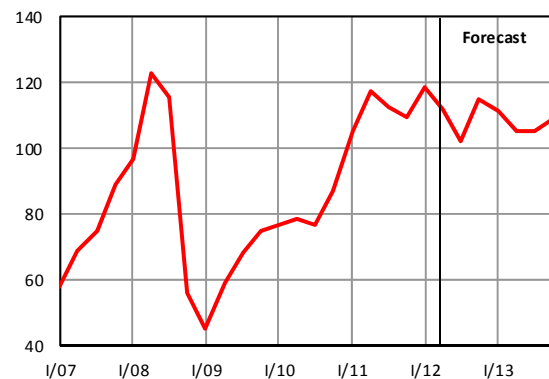
Commodity prices

The price of Brent crude oil reached USD 111.0 per barrel in 2011 and USD 118.5 in Q1 2012 (*versus* USD 117). In the course of Q2, the price fell significantly to approximately USD 90 (*versus* USD 115). Contrary to the previous forecast, pressure for a drop in prices increased. In addition to slowing in a number of economies (China, India, Brazil) and global stagnation, arguments for a decrease also include the possible end of the commodity cycle. With the closing of positions on derivatives markets, it is also apparent that the impact of price speculation is diminishing. Together with the strengthening of the dollar, record high oil reserves in the US added to the pressure for decrease in oil prices.

The possibility of a price increase is supported in particular by lingering concerns regarding future production in a number of countries. Although anxiety concerning the geopolitical unrest in the Near East (such as the sanctions against Iran) has temporarily eased, we still face the risk of escalation.

Graph A.1.2: **Dollar Prices of Brent Crude Oil**

in USD per barrel



We have decreased the forecast for the price of Brent crude oil to USD 112 per barrel for 2012 (*versus* USD 115). There are significant risks to the forecast towards further decline in prices.

Debt crisis in the euro zone

The moderate alleviation of tensions in the euro zone brought about by successful completion of the "voluntary" write-off of part of the Greek debt (i.e. the private sector involvement) and massive liquidity injection provided to banks by the ECB through two extraordinary longer-term refinancing operations (LTROs) unfortunately proved to be temporary. Among the main factors behind the repeated escalation of the crisis in the euro zone can be included the political uncertainty regarding the future direction of Greece as well as the condition and prospects of the Spanish banking sector.

Questions related to the future direction of Greece, or, more precisely, whether or not it will remain in the euro zone (the term "grexit" has been coined to denote Greece's possible departure from the euro zone), were raised by the results of the early parliamentary elections held 6 May. In fact, the post-election distribution of power resulted in the gradual collapse of all attempts to assemble a government that would have a sufficient mandate to carry out austerity measures and reforms, the implementation of which requires an emergency programme. The appointed caretaker government at least led the country to the next elections, which took place on 17 June.

An important aspect of the May elections was the very strong position of parties rejecting the previous policy of austerity measures and structural reforms (in particular, SYRIZA – the Coalition of the Radical Left). At the same time, international creditors sent a clear message that the provision of further financial assistance will be dependent on fulfilment of the

conditions of the emergency programme (in that respect, Greece already received on 10 May a definite warning from the EFSF, which of the initially planned financial injection of over EUR 5.2 billion has released only 4.2 billion). The situation literally created a breeding ground for speculation about Greece's subsequent continuance in the monetary union. Moreover, a number of polls prior to the June elections had predicted victory for SYRIZA. Considering the bonus of 50 parliamentary seats for the winner of the elections (from a total of 300 Members of Parliament), such polls only intensified speculation about a possible "grexit".

The June elections, however, were won by New Democracy, whose leader, A. Samaras, in the process of negotiating the formation of a government managed to secure the support of PASOK and the Democratic Left (these parties have a combined 179 seats). The new Greek government is apparently attempting to negotiate a slight relaxation of the conditions of the current emergency programme with the "Troika" (i.e. representatives of the IMF, ECB and European Commission). Given the current situation (in Q1 2012, GDP recorded a YoY drop of more than 6% and the unemployment rate surpassed 20%), rigorous implementation of the planned austerity measures would intensify the Greek economic slump. From that perspective, at minimum spreading the fiscal tightening over a longer time horizon appears desirable. European leaders are divided on this issue. From Germany, however, a rather unequivocal "nein" may be heard towards any proposals for relaxing the conditions for providing financial assistance. Regardless of how the new Greek government's negotiations with international creditors turn out, from this point Greece will constitute one of the main risks to further developments in the euro zone and for the entire EU.

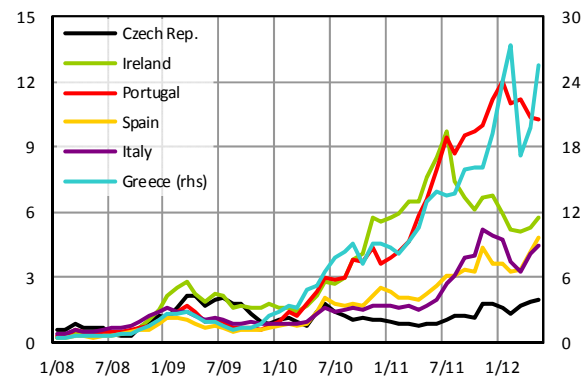
Further developments in Spain constitute a no less significant risk factor (with high potential for the contagion to spread to the EA/EU). This fourth-largest economy in the euro zone is facing a technical recession (QoQ decline in GDP of 0.3% in Q4 2011 and in Q1 2012), which probably will be deepened by efforts to reduce the general government deficit from an estimated 8.9% of GDP in 2011 to 5.3% of GDP this year and then to 3% in 2013. Even more alarming is the situation on the labour market (see above), which poses a considerable danger not only for the real economy, but also for the banking sector. The high rate of unemployment may lead to further decline in the quality of banks' credit portfolios. At present, the ratio

of loans in default (EUR 153 billion) to total loans is rising sharply and already reached 8.7% in April – the highest it has been since 1994.

Rating agencies did not help the situation in Spain either. Since release of the last Macroeconomic Forecast, Spain has been awaiting rating cuts from all three major agencies. The first came at the end of April from S&P, which reduced Spain's credit rating by two grades (from A to BBB+) with negative outlook. Next followed Fitch, which on 7 June cut Spain's rating by three grades (from A to BBB, negative outlook). Moody's then did the same just under a week later (from A3 to Baa3).

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 banking sector is also struggling with profound problems influenced by the burst of the real estate bubble. Despite several attempts, these have yet to be resolved.¹ On Saturday, 9 June, therefore, Spain's government declared its intention to apply to the euro zone for financial assistance to recapitalise banks. On the very same day, the ministers of finance of the euro zone expressed their willingness to provide this financial support. According to current information, which for the time being is relatively incomplete and not very detailed, EFSF/ESM would provide financial assistance (the conditions of which should be agreed within 3–4 weeks from the official request for assistance, which Spain submitted on 25 June) of up to EUR 100 billion to the Spanish Fund for Orderly Bank Restructuring (FROB), which would then use the resources to recapitalise certain banks. This operation would result in growth of Spain's debt by approximately 10% of GDP (if the financial assistance reached EUR 100 billion). Combined with possible senior ESM status, this should in future create pressure on growth in state bond yields. For a short period,

¹ For example, the partial nationalisation of Bankia, one of the largest banks in the country, took place.

yields on 10-year Spanish government bonds exceeded 7% in mid-June, which is unsustainable for Spain from a long-term perspective.

Available estimates as to the costs of recapitalising the Spanish banking sector vary a good deal. According to the IMF, augmenting the capital of Spanish banks will require EUR 37 billion. Moody's, however, estimates the costs of recapitalisation to be EUR 50 billion (up to EUR 100 billion in the adverse scenario), while Fitch estimates EUR 60 billion (in the worst case scenario, it likewise anticipates EUR 100 billion). The amount of financial aid to Spanish banks should be specified based on analyses conducted by strategy consultants Roland Berger and Oliver Wyman. According to findings of top-down stress tests, in a basic scenario recapitalisation of the Spanish banking sector should require EUR 16–26 billion. In a worst case scenario, those costs are estimated at EUR 51–62 billion.

Tensions in the euro zone remain at an uncomfortably high level, despite the relatively positive outcome of the repeated parliamentary elections in Greece.

Although the risk of a “grexit” declined (for the next year or two, however, Greece's departure from the euro zone cannot be entirely ruled out), on the other hand Spain's problems in connection with the state of its banking sector have intensified. Furthermore, on 25 June Cyprus, whose financial sector is characterised by high exposure to Greece (for example, Cypriot banks suffered considerable losses due to writing off part of Greece's debt), applied for financial assistance from euro zone bailout funds. The danger of further escalation of the problems in the euro zone thus persists, as does the risk for the spread of contagion to other EA/EU countries – the Czech Republic not excluded. Czech banks' high level of resistance to severely negative (external) shocks, as proven by the findings of stress tests carried out by CNB and published in June 2012 in the Report on Financial Stability 2011/2012, is at least positive news.

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

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|-----------------|-----------------|
| | | | | | | | | | <i>Forecast</i> | <i>Forecast</i> |
| USA | 3.5 | 3.1 | 2.7 | 1.9 | -0.3 | -3.5 | 3.0 | 1.7 | 2.2 | 2.4 |
| China | 10.1 | 11.3 | 12.7 | 14.2 | 9.6 | 9.2 | 10.4 | 9.1 | 8.2 | 7.8 |
| EU27 | 2.5 | 2.0 | 3.3 | 3.2 | 0.3 | -4.3 | 2.0 | 1.5 | -0.2 | 0.6 |
| EA12 | 2.2 | 1.7 | 3.2 | 2.9 | 0.3 | -4.2 | 1.9 | 1.5 | -0.3 | 0.6 |
| Germany | 1.2 | 0.7 | 3.7 | 3.3 | 1.1 | -5.1 | 3.7 | 3.1 | 0.8 | 1.3 |
| France | 2.5 | 1.8 | 2.5 | 2.3 | -0.1 | -2.7 | 1.5 | 1.7 | 0.2 | 0.8 |
| United Kingdom | 3.0 | 2.1 | 2.6 | 3.5 | -1.1 | -4.4 | 2.1 | 0.7 | 0.2 | 1.3 |
| Austria | 2.6 | 2.4 | 3.7 | 3.7 | 1.4 | -3.8 | 2.3 | 3.1 | 0.6 | 1.4 |
| Hungary | 4.8 | 4.0 | 3.9 | 0.1 | 0.9 | -6.8 | 1.3 | 1.7 | -1.3 | 1.0 |
| Poland | 5.3 | 3.6 | 6.2 | 6.8 | 5.1 | 1.6 | 3.9 | 4.4 | 2.7 | 2.9 |
| Slovakia | 5.1 | 6.7 | 8.3 | 10.5 | 5.9 | -4.9 | 4.2 | 3.3 | 2.0 | 2.9 |
| Czech Republic | 4.7 | 6.8 | 7.0 | 5.7 | 3.1 | -4.7 | 2.7 | 1.7 | -0.5 | 1.0 |

Graph A.1.4: **Real Gross Domestic Product**

YoY growth in %, seasonally unadjusted data

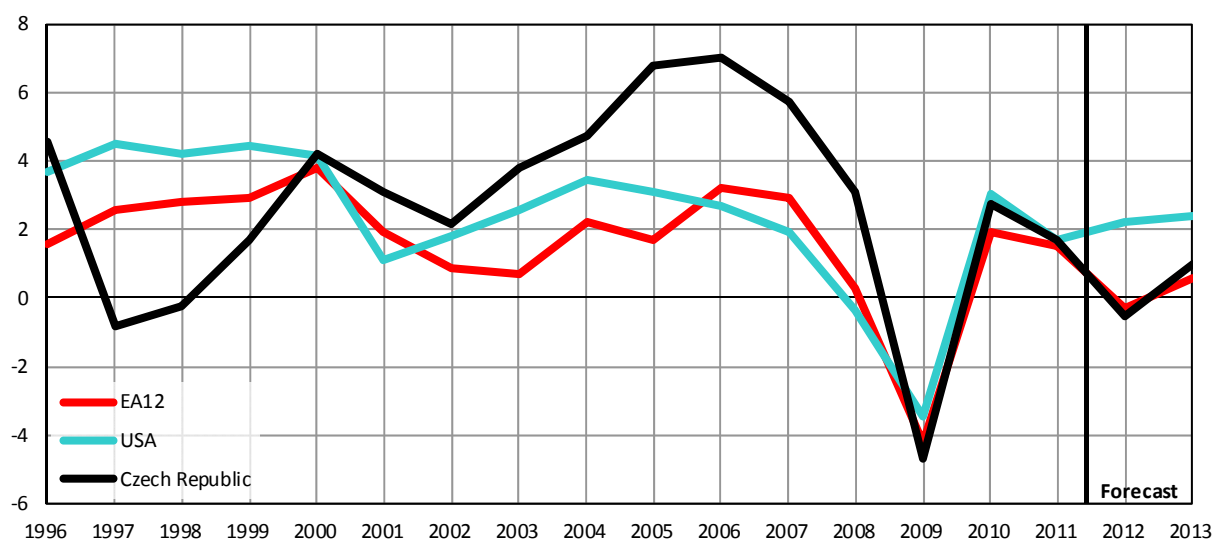


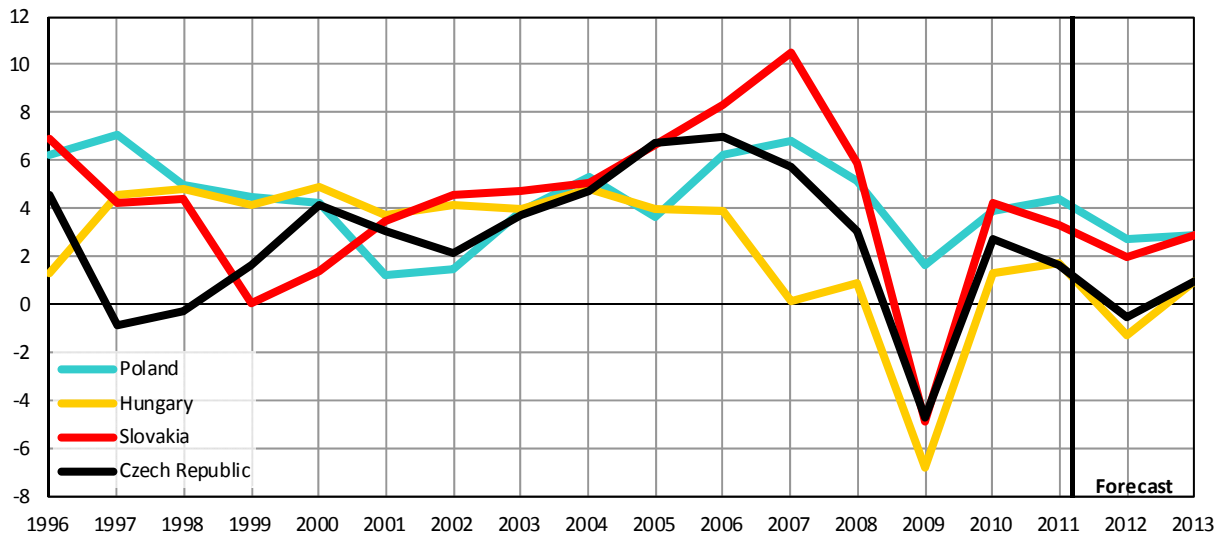
Table A.1.2: **Real Gross Domestic Product – quarterly**

growth in %, seasonally adjusted data

| | | 2011 | | | | 2012 | | | |
|----------------|-----|------|------|-----|------|------|----------|----------|----------|
| | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | | | | | | Forecast | Forecast | Forecast |
| USA | QoQ | 0.1 | 0.3 | 0.5 | 0.7 | 0.5 | 0.7 | 0.4 | 0.5 |
| | YoY | 2.2 | 1.6 | 1.5 | 1.6 | 2.0 | 2.4 | 2.3 | 2.1 |
| China | QoQ | 2.2 | 2.3 | 2.4 | 1.9 | 1.8 | 2.0 | 2.0 | 1.9 |
| | YoY | . | . | . | 9.1 | 8.7 | 8.3 | 7.9 | 7.9 |
| EU27 | QoQ | 0.7 | 0.2 | 0.2 | -0.3 | 0.0 | -0.1 | 0.0 | 0.1 |
| | YoY | 2.5 | 1.6 | 1.4 | 0.8 | 0.1 | -0.2 | -0.4 | 0.0 |
| EA12 | QoQ | 0.7 | 0.1 | 0.1 | -0.3 | 0.0 | -0.1 | 0.0 | 0.0 |
| | YoY | 2.4 | 1.6 | 1.3 | 0.7 | -0.1 | -0.3 | -0.4 | -0.1 |
| Germany | QoQ | 1.3 | 0.3 | 0.6 | -0.2 | 0.5 | 0.0 | 0.2 | 0.1 |
| | YoY | 4.6 | 2.9 | 2.7 | 2.0 | 1.2 | 0.9 | 0.5 | 0.8 |
| France | QoQ | 0.9 | 0.0 | 0.3 | 0.1 | 0.0 | -0.1 | 0.0 | 0.2 |
| | YoY | 2.4 | 1.6 | 1.5 | 1.2 | 0.3 | 0.3 | 0.0 | 0.1 |
| United Kingdom | QoQ | 0.2 | -0.1 | 0.6 | -0.3 | -0.3 | 0.3 | 0.2 | 0.3 |
| | YoY | 1.5 | 0.4 | 0.4 | 0.7 | -0.1 | 0.2 | -0.1 | 0.5 |
| Austria | QoQ | 0.8 | 0.5 | 0.0 | -0.1 | 0.3 | 0.1 | 0.2 | 0.3 |
| | YoY | 4.2 | 4.0 | 2.5 | 1.2 | 0.7 | 0.4 | 0.5 | 0.9 |
| Hungary | QoQ | 1.4 | -0.2 | 0.0 | 0.0 | -1.2 | 0.0 | -0.1 | 0.1 |
| | YoY | 2.4 | 1.7 | 1.5 | 1.2 | -1.4 | -1.2 | -1.3 | -1.2 |
| Poland | QoQ | 1.2 | 1.1 | 0.9 | 1.0 | 0.8 | 0.3 | 0.2 | 0.3 |
| | YoY | 4.6 | 4.5 | 4.0 | 4.3 | 3.8 | 3.0 | 2.3 | 1.6 |
| Slovakia | QoQ | 0.9 | 0.8 | 0.7 | 0.8 | 0.7 | 0.2 | 0.0 | 0.1 |
| | YoY | 3.5 | 3.4 | 3.2 | 3.4 | 3.2 | 2.5 | 1.8 | 1.0 |
| Czech Republic | QoQ | 0.5 | 0.3 | 0.0 | -0.2 | -0.8 | 0.5 | 0.1 | 0.1 |
| | YoY | 2.8 | 2.1 | 1.3 | 0.6 | -0.7 | -0.6 | -0.4 | -0.1 |

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

YoY growth in %, seasonally unadjusted data



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

Q3 2008=100, seasonally adjusted data

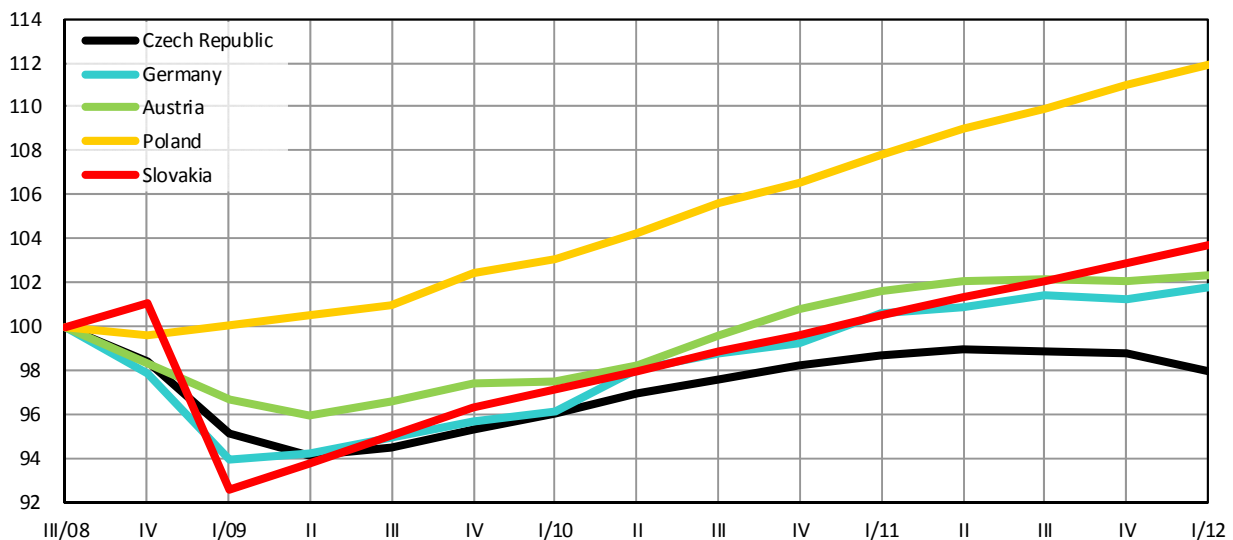


Table A.1.3: **Prices of Commodities** – yearly

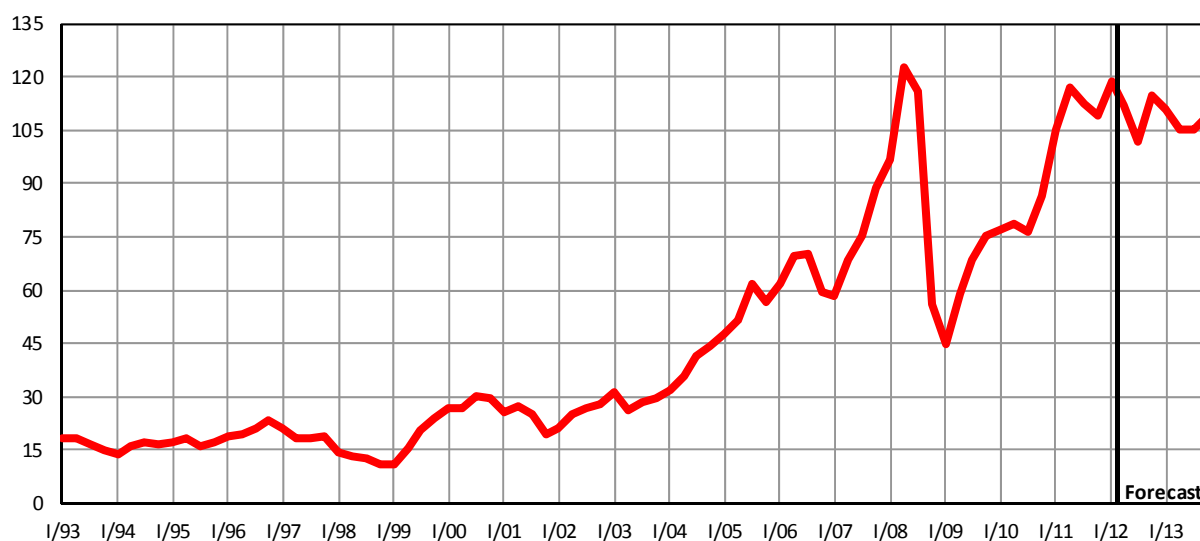
spot prices

| | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---------------------------------------|--------------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|------------|
| | | <i>Forecast Forecast</i> | | | | | | | | | |
| Crude oil Brent | <i>USD/barrel</i> | 38.3 | 54.4 | 65.4 | 72.7 | 97.7 | 61.9 | 79.6 | 111.0 | 112 | 108 |
| | <i>growth in %</i> | 33.0 | 42.0 | 20.1 | 11.2 | 34.4 | -36.7 | 28.7 | 39.3 | 0.8 | -3.9 |
| Crude oil Brent index (in CZK) | <i>2005=100</i> | 75.5 | 100.0 | 113.3 | 113.3 | 127.9 | 90.5 | 116.7 | 150.6 | 171 | 166 |
| | <i>growth in %</i> | 21.1 | 32.4 | 13.3 | -0.1 | 12.9 | -29.3 | 29.0 | 29.0 | 13.4 | -2.5 |
| Wheat | <i>USD/t</i> | 156.9 | 152.4 | 191.7 | 255.2 | 326.0 | 223.6 | 223.7 | 316.2 | . | . |
| | <i>growth in %</i> | 7.3 | -2.8 | 25.8 | 33.1 | 27.7 | -31.4 | 0.1 | 41.4 | . | . |
| Wheat price index (in CZK) | <i>2005=100</i> | 110.4 | 100.0 | 118.7 | 141.9 | 152.4 | 116.7 | 117.1 | 153.3 | . | . |
| | <i>growth in %</i> | -2.2 | -9.4 | 18.7 | 19.6 | 7.3 | -23.4 | 0.3 | 30.9 | . | . |

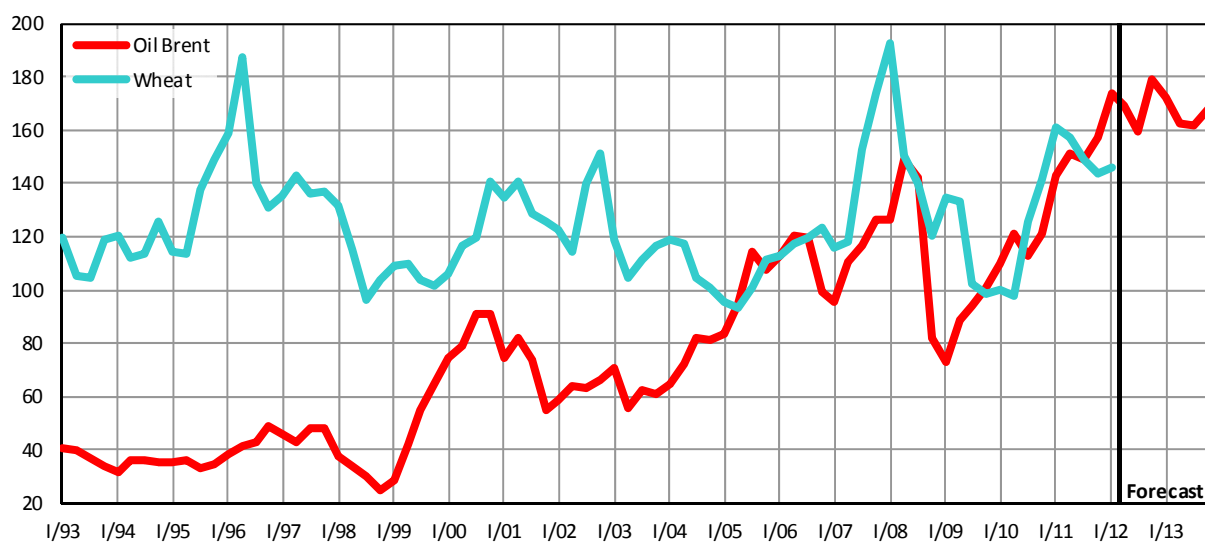
Table A.1.4: **Prices of Commodities – quarterly**
spot prices

| | | 2011 | | | | 2012 | | | |
|---------------------------------------|-------------|--------------|--------------|--------------|--------------|--------------|------------|------------|------------|
| | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | | | | | Estimate | Forecast | Forecast | |
| Crude oil Brent | USD/barrel | 104.9 | 117.1 | 112.5 | 109.3 | 118.5 | 112 | 102 | 115 |
| | growth in % | 36.8 | 48.9 | 47.3 | 25.9 | 13.0 | -4.4 | -9.3 | 5.2 |
| Crude oil Brent index (in CZK) | 2005=100 | 143.2 | 151.5 | 148.7 | 157.1 | 173.6 | 169 | 159 | 179 |
| | growth in % | 30.3 | 24.8 | 31.8 | 29.5 | 21.3 | 11.5 | 7.1 | 14.0 |
| Wheat price | USD/t | 330.5 | 339.0 | 315.6 | 279.7 | 278.8 | . | . | . |
| | growth in % | 68.9 | 91.0 | 32.7 | -1.4 | -15.6 | . | . | . |
| Wheat price index (in CZK) | 2005=100 | 161.3 | 156.8 | 149.2 | 143.8 | 146.1 | . | . | . |
| | growth in % | 60.9 | 60.1 | 18.7 | 1.4 | -9.4 | . | . | . |

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



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



A.2 Fiscal Policy

Currently, the general government deficit is estimated to reach 3.2% of GDP in 2012. The resulting deficit should thus be 0.1 p.p. higher, compared with 2011. However, given the anticipation of a more negative output gap in 2012, fiscal effort should reach 0.6 p.p.

The core reason behind the upward revision of the deficit is a drop in estimated tax revenues, mainly in consumption taxes (almost 0.5% of GDP), which is explained by a downward change in the household consumption forecast. On the contrary, given improved expectations about dynamics of the total wage bill, direct taxes are expected to develop slightly more favourably (impact of almost 0.2% of GDP). According to current information, the expenditure side is likely to witness a minor drop in some items, particularly because of the lower need to co-finance European projects.

Growth of the revenue side is expected to slow down to 1.3% in 2012, even though tax revenues might grow marginally faster.

As far as tax revenues are concerned, we forecast growth in the value added tax. The reason for this is the increase in the reduced VAT rate from 10% to 14%, which should outweigh the downward change in the household consumption forecast. Excise taxes are expected to decline by 2.5% this year. Although rates have increased, a drop in real household and government consumption is forecast for 2012. Moreover, this year's collection is affected by the stockpiling from the end of 2011.

Revenues from personal income tax should decline moderately. This is primarily due to raising the child credit by CZK 1,800 annually to compensate for increasing the reduced VAT rate. Corporate income tax revenues should rise, even though legislative changes in this area were purely marginal. Direct taxes are still being positively affected by the introduction of taxation of incomes from lotteries, with an expected collection of more than CZK 8.2 billion in 2012. This tax will be abolished in 2013 and replaced with a gambling tax.

Following a two-year decline, expenditures of the government sector are expected to grow by 1.5% in 2012, with final consumption expenditures falling by 1.6%, however. Intermediate consumption (in particular operating expenditures for running of the government apparatus) will contribute most to the decrease in final consumption. The main reason is the government-approved partial spending freeze of CZK 23.6 billion for this year. Unlike in 2011, wage expenditures within the government sector are expected to go up by approximately 0.7%. Social benefits in kind (especially health insurance companies' costs for health care) will likely decrease by 1.1%.

According to current conservative estimates, interest payments for servicing the government debt will rise by 11%. This reflects both higher overall indebtedness and conditions on international markets. The development of these payments must be closely monitored, as financial markets are quite volatile and the current debt crisis is far from resolved.

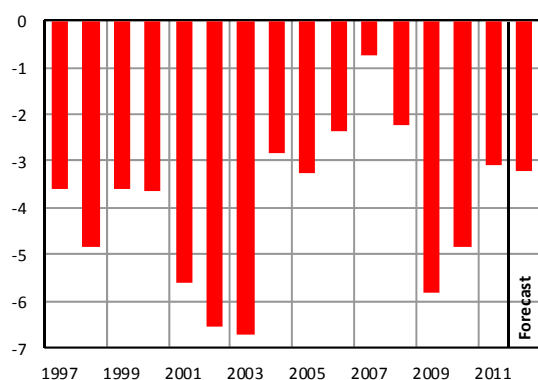
An increase of 4.0% is expected for social benefits, in particular among monetary social security benefits. The record-breaking increase in the number of pensioners from the second half of last year and continued moderate growth over the course of this year should be fully reflected in this area.

In the social area, only slight adjustments were approved this year, with a marginal negative impact on the government sector. In particular, these adjustments concern an increase of the subsistence minimum, amendment of the Social Services Act, and amendment of the Act on State Social Support. Therefore, growth in cash social assistance benefits is expected.

Regarding government investments, we forecast moderate improvement after two consecutive sharp declines. It can be expected that a considerable portion of previously postponed investment activities will be carried out sooner or later. Due to a slight decrease in investment grants on the revenue side, investment growth is expected to stem from national sources.

Graph A.2.1: Net Lending/Borrowing

in % of GDP



Graph A.2.2: Government Debt

in % of GDP

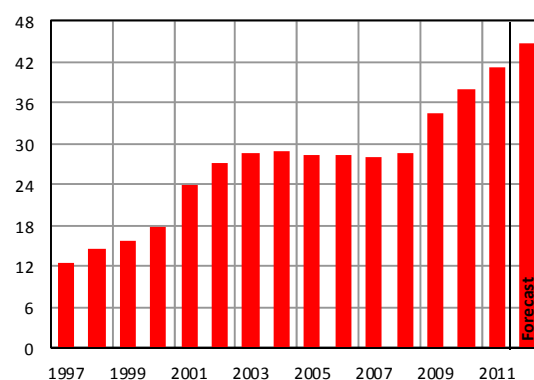


Table A.2.1: Net Lending/Borrowing and Debt

| | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--|-----------------|------|------|------|------|-------|-------|-------|-------|---------|----------|
| | | | | | | | | | | Prelim. | Forecast |
| General government balance ¹⁾ | bill. CZK | -180 | -83 | -101 | -80 | -27 | -86 | -218 | -182 | -118 | -124 |
| | % GDP | -6.7 | -2.8 | -3.2 | -2.4 | -0.7 | -2.2 | -5.8 | -4.8 | -3.1 | -3.2 |
| Cyclical balance | % GDP | -0.6 | -0.6 | -0.1 | 0.6 | 1.2 | 1.0 | -1.1 | -0.6 | -0.3 | -0.8 |
| Cyclically adjusted balance | % GDP | -6.1 | -2.2 | -3.1 | -3.0 | -1.9 | -3.3 | -4.8 | -4.3 | -2.8 | -2.5 |
| One-off measures | % GDP | -0.3 | -0.7 | -1.2 | -0.2 | -0.3 | -0.1 | 0.3 | 0.0 | -0.1 | -0.3 |
| Structural balance | % GDP | -5.8 | -1.5 | -1.9 | -2.8 | -1.6 | -3.2 | -5.1 | -4.3 | -2.7 | -2.1 |
| Fiscal effort ²⁾ | percent. points | 0.1 | 4.3 | -0.4 | -0.8 | 1.1 | -1.5 | -1.9 | 0.8 | 1.6 | 0.6 |
| Interest expenditure | % GDP | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.3 | 1.4 | 1.4 | 1.5 |
| Primary balance | % GDP | -5.7 | -1.8 | -2.2 | -1.3 | 0.4 | -1.2 | -4.6 | -3.5 | -1.7 | -1.7 |
| Cyclically adjusted primary balance | % GDP | -5.0 | -1.1 | -2.1 | -1.9 | -0.8 | -2.2 | -3.5 | -2.9 | -1.4 | -0.9 |
| General government debt | bill. CZK | 768 | 848 | 885 | 948 | 1 023 | 1 104 | 1 286 | 1 437 | 1 568 | 1 714 |
| | % GDP | 28.6 | 28.9 | 28.4 | 28.3 | 27.9 | 28.7 | 34.4 | 38.1 | 41.2 | 44.6 |
| Change in debt-to-GDP ratio | percent. points | 1.5 | 0.4 | -0.5 | -0.1 | -0.3 | 0.8 | 5.7 | 3.7 | 3.1 | 3.4 |

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.

¹⁾ Balance in EDP methodology, i.e. general government net lending (+)/borrowing (-) including interest derivatives.

²⁾ Change in structural balance.

A.3 Monetary Policy and the Financial Sector

Monetary policy

The primary monetary policy instrument is the interest rate for **2W repo operations**, which was reduced by 0.25 p.p. to 0.50% on 28 June. At present, the **interest-rate spread** is thus –0.5 p.p. between the Czech Republic and the EMU and 0.25 to 0.50 p.p. relative to the US. Interest spreads thus continue at very low levels and therefore do not constitute a fundamental cause for great fluctuations in the exchange rate.

Financial sector and interest rates

The average value for **3M PRIBOR** held at 1.2% in Q2 2012 (*consistent with the forecast*). We expect a value of 1.1% (*versus 1.2%*) for the whole of 2012. The rate should remain at that level on average also in 2013.

Looking at the quarterly averages, long-term interest rates can be evaluated as stable. Given macroeconomic stability and credible fiscal policy, the Czech Republic's ratings are at a good investment-grade: AA– with S&P, Moody's A1 and Fitch A+.

The CNB carried out another round of stress tests of the Czech banking sector, the results of which were published in June in the Report on Financial Stability 2011/2012. The stress tests confirmed Czech banks' high resilience to even large negative shocks. Even in extremely stressed scenarios (the scenario *Europe in depression* with loss of confidence accompanied by losses from exposures of the five largest banks to their parent groups), capital adequacy for the entire sector remained above the regulatory minimum of 8%, even if some banks required the addition of capital. The necessary injection of capital, however, did not exceed 1% of GDP.

On the interbank market, the volume of deposit operations based on a selective measurement in April 2012 further decreased slightly versus the previous quarter. This was caused especially by a decline in overnight operations between residents. The volume of derivative operations (interest rate swaps) fell by almost half versus January. Forward rate agreements (FRAs), on the other hand, rose by more than half.

The level of uncertainty on the interbank market, as measured by the spread between the 2W repo rate and 2W or 3M PRIBOR, remained stable.

We expect the **yields to maturity of 10-year government bonds** to average 3.4% in 2012 and 3.5% in 2013 (*unchanged in both cases*). The spread between Czech and German bonds will once again depend on developments regarding the debt crisis in the euro zone (its escalation has the tendency to push German bond yields down).

Interest rates for loans to non-financial corporations remained level at 3.9% in Q1 2012. Rates for loans to households dropped slightly to 6.6%. Rates for households' deposits stagnated at 1.2%, while rates for non-financial corporations' deposits increased by 0.1 p.p. to 0.6%.

The stock of households' deposits recorded YoY growth of 5.3% (versus 4.5% in the same period of 2011) in Q1 2012, while the volume of deposits of non-financial corporations grew markedly by 10.5% (versus growth of 1.2% in the same period of the previous year). The stock of loans to households grew by 5.7% YoY (versus 7.1% in the same period of 2011) in Q1 2012, and the volume of loans to non-financial corporations increased by 4.8% (versus 0.1% in Q1 2011). The slowing in the growth rate of household indebtedness thus continues.

The situation concerning loans in default is improving, as in Q1 their share in total loans reached 5.0% for households (0.4 p.p. less YoY) and 8.1% for non-financial corporations (0.7 p.p. less YoY). The ratio of loans to household deposits in the Czech Republic in the long term fluctuates at just over 60% and is approximately one-third lower than in the euro zone. We may note an even more distinct difference between the Czech Republic and the euro zone in the ratio of loans to non-financial corporations' deposits. In the Czech Republic this ratio is currently at a level of 120%, whereas in the euro zone it is 280–290%.

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

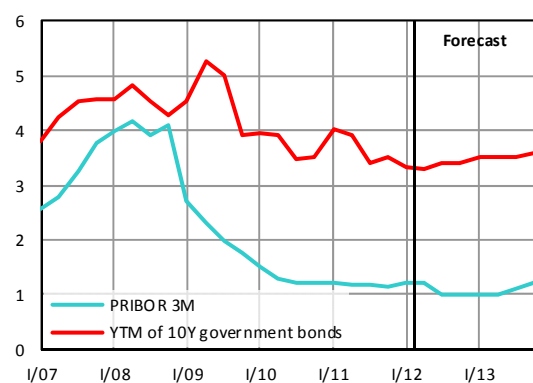
| | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|-------------|------|------|------|------|------|------|------|------|----------|----------|
| | | | | | | | | | | Forecast | Forecast |
| Repo 2W rate CNB (end of period) | in % p.a. | 2.50 | 2.00 | 2.50 | 3.50 | 2.25 | 1.00 | 0.75 | 0.75 | . | . |
| Main refinancing rate ECB (end of period) | in % p.a. | 2.00 | 2.25 | 3.50 | 4.00 | 2.50 | 1.00 | 1.00 | 1.00 | . | . |
| Federal funds rate (end of period) | in % p.a. | 2.25 | 4.25 | 5.25 | 4.25 | 0.25 | 0.25 | 0.25 | 0.25 | . | . |
| PRIBOR 3M | in % p.a. | 2.36 | 2.01 | 2.30 | 3.09 | 4.04 | 2.19 | 1.31 | 1.19 | 1.1 | 1.1 |
| YTM of 10Y government bonds | in % p.a. | 4.75 | 3.51 | 3.78 | 4.28 | 4.55 | 4.67 | 3.71 | 3.71 | 3.4 | 3.5 |
| Households (CR, unless stated otherwise) | | | | | | | | | | | |
| – interest rates on loans | in % p.a. | 8.09 | 7.53 | 6.93 | 6.63 | 6.81 | 7.00 | 7.00 | 6.83 | . | . |
| – loans | growth in % | 31.8 | 32.6 | 32.1 | 31.7 | 28.9 | 16.3 | 8.7 | 6.5 | . | . |
| – deposits | growth in % | 6.0 | 5.2 | 7.3 | 10.6 | 9.4 | 10.5 | 5.4 | 5.0 | . | . |
| – share of non-performing loans | in % | 4.8 | 4.2 | 3.7 | 3.2 | 3.0 | 3.7 | 4.8 | 5.3 | . | . |
| – loans to deposits ratio | in % | 26 | 33 | 40 | 48 | 57 | 60 | 61 | 62 | . | . |
| – loans to deposits ratio (Eurozone) | in % | 91 | 94 | 99 | 99 | 94 | 89 | 90 | 90 | . | . |
| Non-fin. corporations (CR, unless stated otherwise) | | | | | | | | | | | |
| – interest rates on loans | in % p.a. | 4.51 | 4.27 | 4.29 | 4.85 | 5.59 | 4.58 | 4.10 | 3.93 | . | . |
| – loans | growth in % | 3.3 | 10.3 | 13.9 | 16.7 | 17.5 | 0.2 | -6.5 | 3.3 | . | . |
| – deposits | growth in % | 10.5 | 4.5 | 10.9 | 13.2 | 5.3 | -1.7 | 4.8 | 0.9 | . | . |
| – share of non-performing loans | in % | 7.8 | 5.7 | 4.5 | 3.8 | 3.6 | 6.2 | 8.6 | 8.5 | . | . |
| – loans to deposits ratio | in % | 108 | 113 | 117 | 120 | 134 | 137 | 123 | 126 | . | . |
| – loans to deposits ratio (Eurozone) | in % | 294 | 290 | 292 | 296 | 315 | 315 | 294 | 286 | . | . |

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

| | | 2011 | | | | 2012 | | | |
|---|-------------|------|------|------|------|----------|----------|----------|-----|
| | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | | | | | | | | |
| | | | | | | Estimate | Forecast | Forecast | |
| Repo 2W rate CNB (end of period) | in % p.a. | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.50 | . | . |
| Main refinancing rate ECB (end of period) | in % p.a. | 1.00 | 1.25 | 1.50 | 1.00 | 1.00 | 1.00 | . | . |
| Federal funds rate (end of period) | in % p.a. | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | . | . |
| PRIBOR 3M | in % p.a. | 1.20 | 1.21 | 1.18 | 1.16 | 1.20 | 1.2 | 1.0 | 1.0 |
| YTM of 10Y government bonds | in % p.a. | 4.03 | 3.90 | 3.40 | 3.50 | 3.34 | 3.3 | 3.4 | 3.4 |
| Households (CR, unless stated otherwise) | | | | | | | | | |
| – interest rates on loans | in % p.a. | 6.95 | 6.88 | 6.80 | 6.69 | 6.59 | . | . | . |
| – loans | growth in % | 7.1 | 6.8 | 6.4 | 5.6 | 5.7 | . | . | . |
| – deposits | growth in % | 4.5 | 4.9 | 5.6 | 5.1 | 5.3 | . | . | . |
| – share of non-performing loans | in % | 5.3 | 5.3 | 5.3 | 5.1 | 5.0 | . | . | . |
| – loans to deposits ratio | in % | 62 | 62 | 62 | 63 | 62 | . | . | . |
| – loans to deposits ratio (Eurozone) | in % | 90 | 90 | 90 | 90 | 88 | . | . | . |
| Non-fin. corporations (CR, unless stated otherwise) | | | | | | | | | |
| – interest rates on loans | in % p.a. | 4.00 | 3.99 | 3.88 | 3.87 | 3.87 | . | . | . |
| – loans | growth in % | 0.1 | 3.3 | 4.4 | 5.3 | 4.8 | . | . | . |
| – deposits | growth in % | 1.2 | -3.6 | -0.1 | 6.0 | 10.5 | . | . | . |
| – share of non-performing loans | in % | 8.8 | 8.5 | 8.4 | 8.2 | 8.1 | . | . | . |
| – loans to deposits ratio | in % | 126 | 128 | 130 | 120 | 119 | . | . | . |
| – loans to deposits ratio (Eurozone) | in % | 290 | 285 | 286 | 284 | 287 | . | . | . |

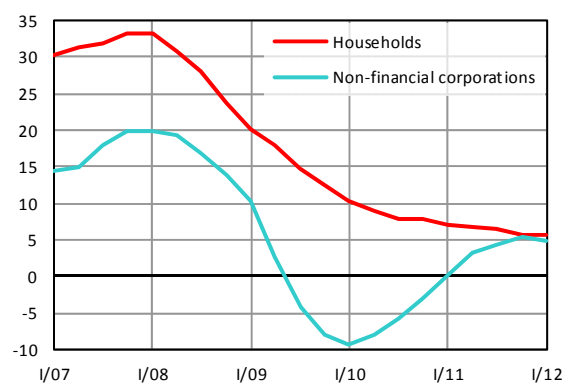
Graph A.3.1: Interest Rates

in % p.a.



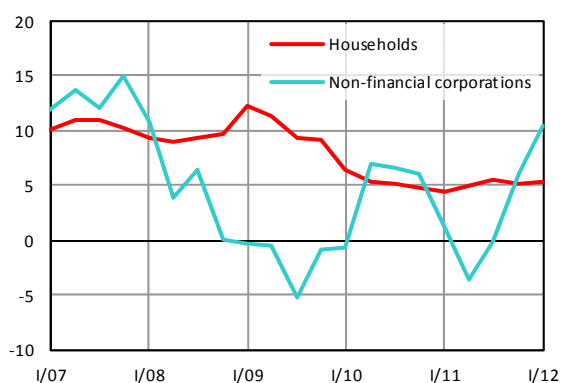
Graph A.3.2: Loans to Households and Firms

YoY growth in %



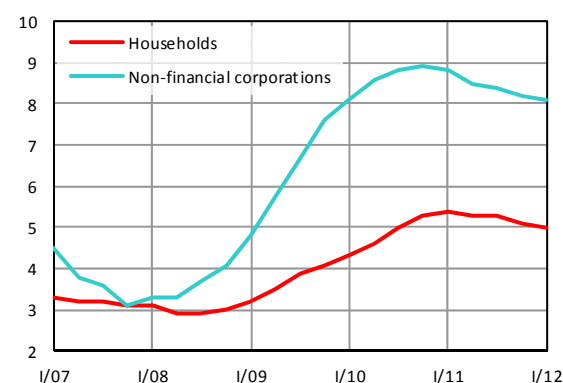
Graph A.3.3: Deposits of Households and Firms

YoY growth in %



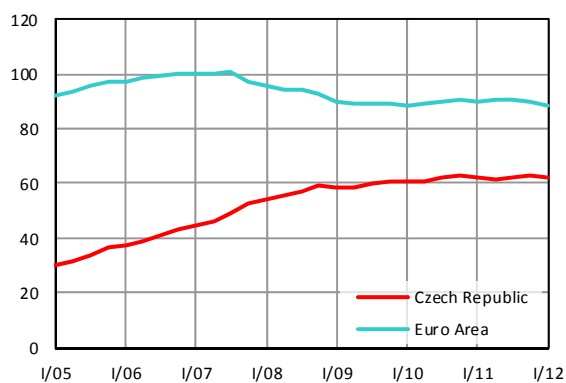
Graph A.3.4: Non-performing Loans

ratio of non-performing to total loans, in %



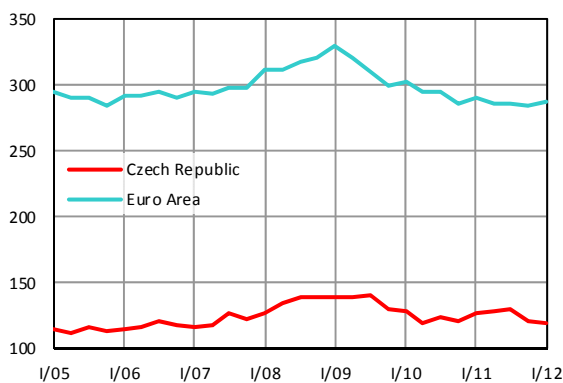
Graph A.3.5: Households – Loans to Deposits Ratio

in %



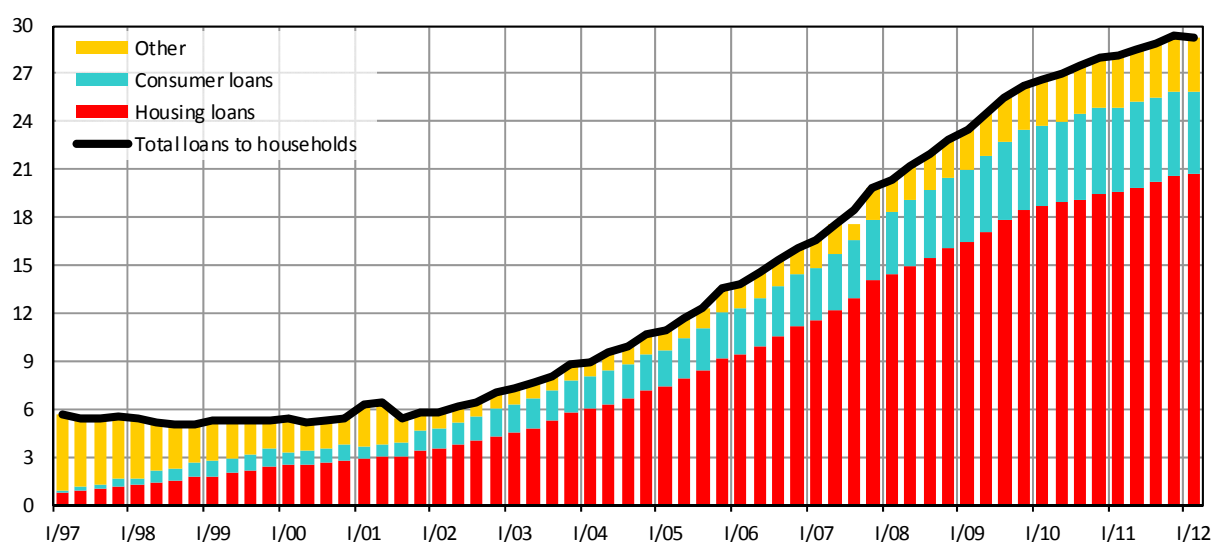
Graph A.3.6: Firms – Loans to Deposits Ratio

in %



Graph A.3.7: **Ratio of Bank Loans to Households to GDP**

yearly moving sums, in %



A.4 Exchange Rates

After rather fierce depreciation in the last quarter of the previous year due to escalation of the debt crisis in the euro zone, the Czech koruna returned to moderate strengthening, though this lasted only to mid-March 2012. The uncertain political and economic situation in the euro zone contributed to a rise in risk aversion that was demonstrated, among other ways, by the koruna's return to depreciation. That period was associated with relatively high volatility.

In connection with the negative interest rate differential versus the euro zone, YoY weakening of the exchange rate in recent quarters, and uncertainty concerning future developments, the nominal and real exchange rates should be below the long-term trend for the entire forecast horizon. The average rate should reach **25.3 CZK/EUR** in 2012, while appreciation of ca 1.2% per year should resume thereafter. Should the situation in the euro zone worsen, considerable

exchange rate fluctuations in both directions are not out of the question.

Graph A.4.1: **Exchange Rate CZK/EUR**

quarterly averages

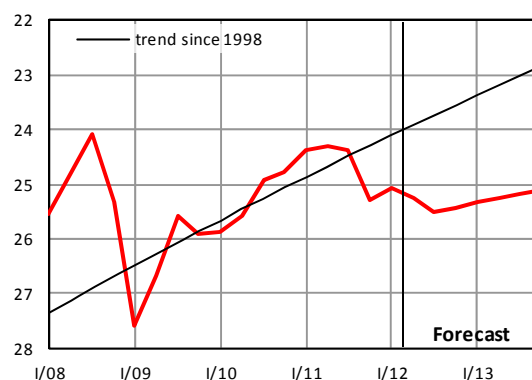


Table A.4.1: Exchange Rates – yearly

| | | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|---------------------|-------|-------|-------|-------|-------|-------|----------|----------|---------|---------|
| | | | | | | | | Forecast | Forecast | Outlook | Outlook |
| Nominal exchange rates: | | | | | | | | | | | |
| CZK / EUR | average | 28.34 | 27.76 | 24.96 | 26.45 | 25.29 | 24.59 | 25.3 | 25.2 | 24.9 | 24.6 |
| | appreciation in % | 5.1 | 2.1 | 11.3 | -5.6 | 4.6 | 2.8 | -2.9 | 0.4 | 1.2 | 1.2 |
| CZK / USD | average | 22.59 | 20.31 | 17.06 | 19.06 | 19.11 | 17.69 | 19.9 | 20.2 | 19.9 | 19.7 |
| | appreciation in % | 6.0 | 11.3 | 19.0 | -10.5 | -0.3 | 8.0 | -11.1 | -1.4 | 1.2 | 1.2 |
| NEER | average of 2010=100 | 88.2 | 90.6 | 101.2 | 98.0 | 100.0 | 103.1 | 99 | 99 | 100 | 102 |
| | appreciation in % | 4.8 | 2.7 | 11.7 | -3.2 | 2.1 | 3.1 | -4.0 | 0.2 | 1.2 | 1.2 |
| Real exchange rate to EA12 ¹⁾ | average of 2010=100 | 89.7 | 92.5 | 102.8 | 98.0 | 100.0 | 100.8 | 98 | 98 | 99 | 100 |
| | appreciation in % | 3.8 | 3.1 | 11.2 | -4.7 | 2.0 | 0.8 | -2.3 | 0.0 | 0.6 | 0.8 |
| REER | average of 2010=100 | 86.4 | 88.8 | 102.3 | 98.2 | 100.0 | 102.4 | . | . | . | . |
| (Eurostat, CPI deflated, 36 countries) | appreciation in % | 5.1 | 2.9 | 15.1 | -4.0 | 1.8 | 2.4 | . | . | . | . |

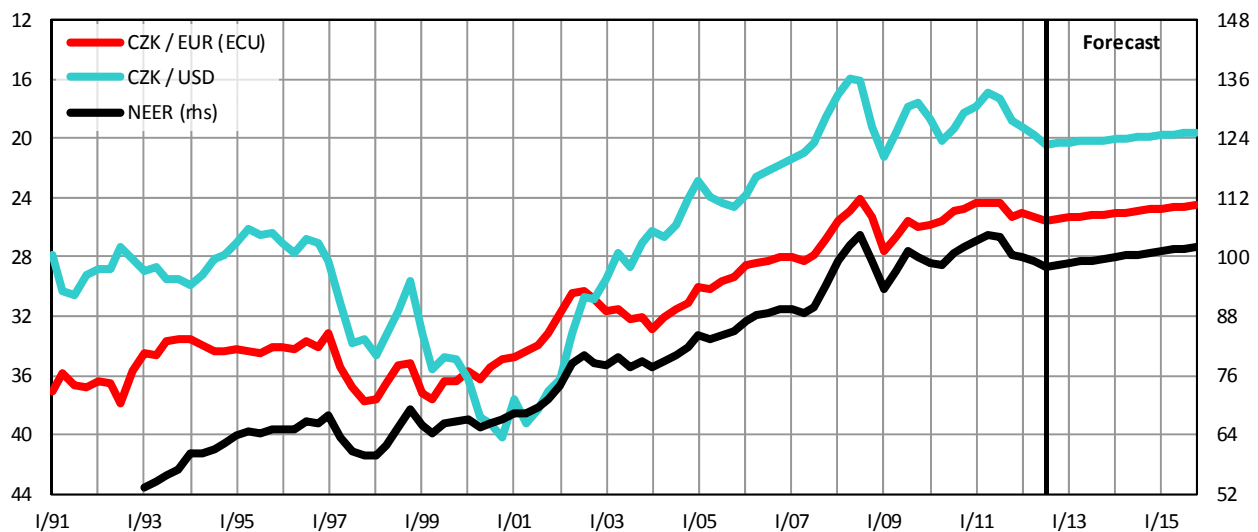
¹⁾ Deflated by GDP deflators.

Table A.4.2: Exchange Rates – quarterly

| | | | 2011 | | | | 2012 | | | |
|--|---------------------|--|-------|-------|-------|-------|----------|----------|----------|----------|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | | | | | | Estimate | Forecast | Forecast | Forecast |
| Nominal exchange rates: | | | | | | | | | | |
| CZK / EUR | average | | 24.37 | 24.32 | 24.39 | 25.28 | 25.08 | 25.3 | 25.5 | 25.4 |
| | appreciation in % | | 6.1 | 5.2 | 2.2 | -1.9 | -2.8 | -3.7 | -4.4 | -0.6 |
| CZK / USD | average | | 17.83 | 16.90 | 17.27 | 18.78 | 19.14 | 19.7 | 20.4 | 20.3 |
| | appreciation in % | | 5.0 | 19.3 | 11.7 | -2.8 | -6.9 | -14.4 | -15.3 | -7.7 |
| NEER | average of 2010=100 | | 103.4 | 104.3 | 104.0 | 100.6 | 100.2 | 99 | 98 | 98 |
| | appreciation in % | | 4.9 | 6.0 | 2.9 | -1.6 | -3.2 | -4.8 | -5.7 | -2.2 |
| Real exchange rate to EA12 | | | | | | | | | | |
| | average of 2010=100 | | 100.8 | 101.6 | 101.6 | 98.9 | 98.9 | 98 | 98 | 99 |
| | appreciation in % | | 3.0 | 2.2 | 0.2 | -2.5 | -1.8 | -3.1 | -4.0 | -0.4 |
| REER | | | | | | | | | | |
| | average of 2010=100 | | 103.1 | 103.2 | 103.3 | 99.7 | . | . | . | . |
| (Eurostat, CPI deflated, 36 countries) | | | | | | | | | | |
| | appreciation in % | | 4.3 | 4.5 | 2.1 | -1.4 | . | . | . | . |

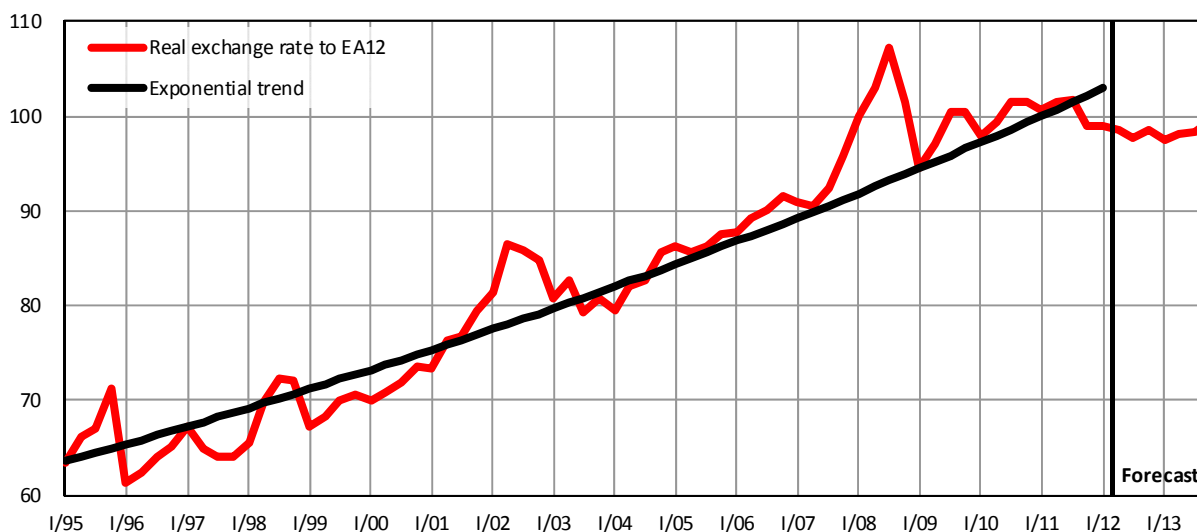
Graph A.4.2: Nominal Exchange Rates

quarterly average, average 2010=100 (rhs)



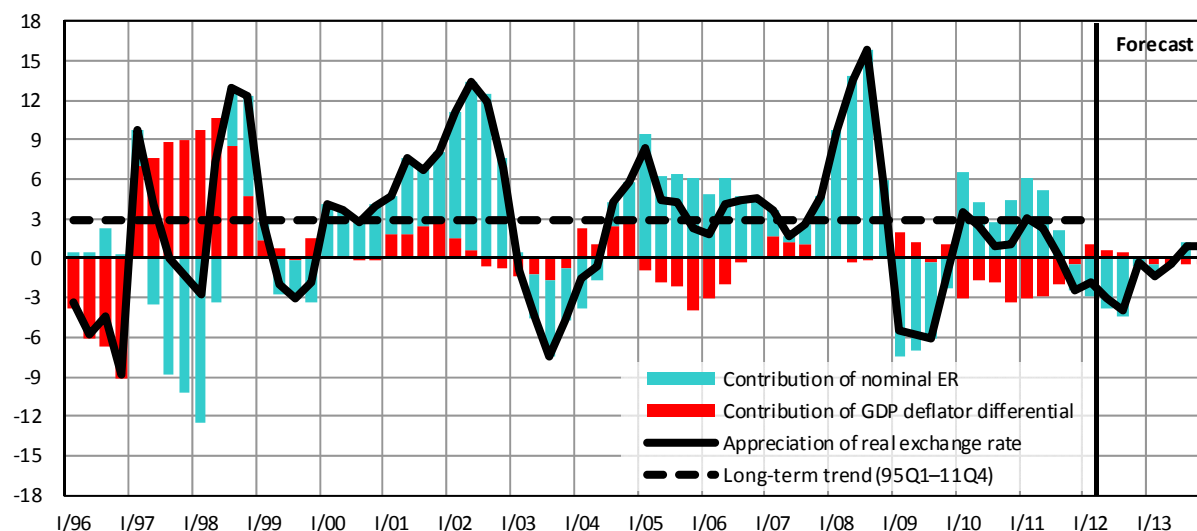
Graph A.4.3: **Real Exchange Rate to EA12**

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

Business environment

Essential public administration registers were launched on 1 July 2012 in order to improve the quality and efficiency of the public administration. The previous system of uncoordinated, and in some cases outdated or overlapping, databases administered by various authorities was replaced with four basic information registers (register of inhabitants; register of legal entities, entrepreneurs, and public enterprises; register of land identification, addresses and real estate; and register of public enterprises' undertakings and of certain rights and obligations). The main benefit of the basic registers consists in reduced time demands when dealing with the public administration, improved protection of personal data and expansion of public

administration services. Data taken from registers – the so-called reference data – has the status of being current, guaranteed and valid without the need for further verification. All reference data are entered only once and are updated at a single location. Thus, changes made in one register are also reflected in the other registers. Individuals and entrepreneurs will therefore not need repeatedly to provide documentation for the reference data and, at the same time, will know what reference data about them are maintained and who uses them.

An amendment to the act on investment incentives came into force on 12 July 2012, the goal of which is to attract to the Czech Republic firms specialising in sophisticated technologies and services. While the

basic parameters of investment incentives remain unchanged, the amendment introduces the possibility to draw investment incentives also for companies operating in research and development as well as strategic or telecommunications services. Moreover, the period for receiving income tax incentives was extended from 5 years to 10.

The amendment to the trade licensing act that came into force on 30 June 2012 also reduces the administrative burden on entrepreneurs. That amendment extends the range of services offered by central registration offices, simplifies the administrative process of moving, and abolishes the obligation to designate a place of business with a special number.

Taxes

In order to strengthen the revenues side of the state budget, and thereby gradually reduce the public finances deficit, the government approved on 23 May 2012 draft legislation to amend taxation, insurance and other legislation related to decreasing public budget deficits. According to the draft legislation, as from 2013 lump-sum cost deductions for personal income taxes will be limited to CZK 800,000 for activities included under the 40% deduction and to CZK 600,000 for the 30% deduction. At the same time, persons benefiting from deductions will not be able to apply the tax benefit for child support or the credit for a spouse. Furthermore, the real estate transfer tax will be increased from 3% to 4%, entitlement to an excise tax refund on diesel fuel for agricultural purposes will be abolished, and the withholding tax on income of non-residents from countries with which the Czech Republic has not concluded an agreement on preventing double taxation will be increased from 15% to 35%.

During 2013–2015, a 7% surcharge on the personal income tax will be temporarily introduced for incomes exceeding 48 times the average monthly wage, the basic income tax deduction for working pensioners will be abolished, and the maximum assessment base for health insurance premiums will be cancelled. During this period, the two VAT rates will be increased to 21% and 15%, respectively.

An amendment to the act on excise taxes approved by the government on 19 June 2012 divides the increase in the excise tax on cigarettes, originally planned for 1 January 2014, between 2013 and 2014.

For the purpose of preventing tax evasion, the government approved an amendment to the VAT act on 26 June 2012. The main change is the introduction of an obligation for taxpayers, with the exception of individuals with turnover up to CZK 6 billion, to file electronically. The amendment comes into force on 1 January 2013, and the provisions relating to electronic filing one year later.

Financial markets

On 30 May 2012, the government approved draft legislation on increasing the transparency of joint-stock companies. This bill should contribute to making commercial relationships more transparent and reducing the room for possible corruption, as it imposes limitations on anonymous ownership of bearer shares. The draft legislation places the obligation on joint-stock companies with bearer shares in documentary form to transform those shares either through physical custody at a bank, book entry, or changing the shares to registered ones. For the purposes of paying dividends, shareholders holding registered shares in documentary form will then be obliged to open an account at a banking institution thus allowing for verification of the shareholder's identity conducted by an independent company and monitoring the flow of dividends and other pecuniary considerations in favour of the given shareholder.

An amendment to the act on building society savings approved by the government on 18 April 2012 should ensure that government expenditures intended for financial support to housing were actually used for that purpose. The amendment introduces special-purpose state assistance payments for housing needs or for provision in old age. The possibility to use state aid to pay university tuition is anticipated for the future. The amendment also expands the range of building society savings providers to include universal banks. The amendment is expected to take effect on 1 January 2014 and will also apply to contracts concluded prior to this date.

Energy industry and environmental protection

On 9 May 2012, the Chamber of Deputies voted to override the veto of the President and to approve a law on subsidised energy sources, combining within a single regulation support for renewable sources, secondary sources, and combined heat and electricity production from renewable sources. The legislation's objective is effectively to achieve the binding target for the proportion of energy from renewable sources in gross final consumption at 13.5% in 2020. If as of

30 May of a given year the Energy Regulatory Office determines that the target set in the National Action Plan for a certain type of source has already been achieved, then it will not stipulate any aid for production of electricity from that source for the following two years. Measures will apply only for new parties interested in connecting power plants to the network. Moreover, electricity from solar radiation produced during 2013 in facilities put into operation in 2009 and 2010 will be obliged to make tax payments in amounts of up to 28% of the awarded subsidies. The law will come into effect on 1 January 2013.

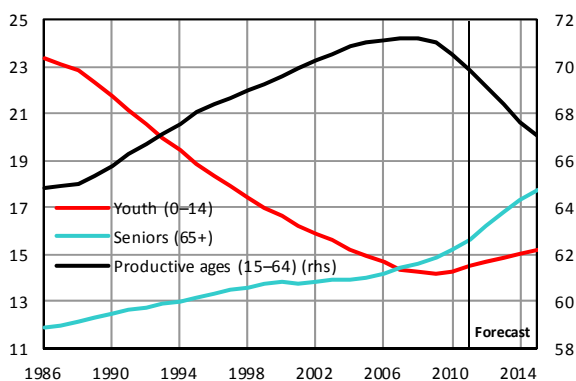
The aim of an amendment to the law on climate protection signed by the President on 29 May 2012 is to maintain climate quality at levels that do not pose

A.6 Demographic Trends

According to preliminary figures, the Czech Republic had 10.508 million inhabitants at the end of March 2012. The population increased by 2 thousand inhabitants during Q1 2012. The positive migration balance reached 4 thousand, and the mortality rate exceeded the birth rate by 2 thousand. All of these figures are very similar to the developments in Q1 2011.

Graph A.6.1: **Groups by Age**

structure in per cent



CZSO published the age structure of the population compatible with the results of the 2011 census. In accordance to our assumptions, the total undercount of 46 thousand (the difference between the balance of population changes based on the previous census and the results of the 2011 census) was reflected in a decline in the number of inhabitants aged 15–64. The largest undercount was recorded among people aged 24–29, at around 2.5% of the respective age group. The most likely explanation is unreported emigration, though likely only temporary (e.g. study, work).

health risks. The amendment reduces the administrative burden and strengthens incentives for those who reduce emissions beyond the scope established by law. Fees for atmospheric pollution remain in place and will be gradually increased from 2017 to 2021. Henceforth, only those firms whose fees for emission of harmful substances exceed CZK 50,000 will be obliged to pay those fees. Municipalities will be able to define low-emission zones in polluted areas, spas and localities in protected areas, and an industrial plant in the process of introducing new operations will have to put old ones out of operation so that there will not be an increase of emissions in the given area. The amendment comes into effect on 1 September 2012 and selected parts thereafter on 1 January 2013.

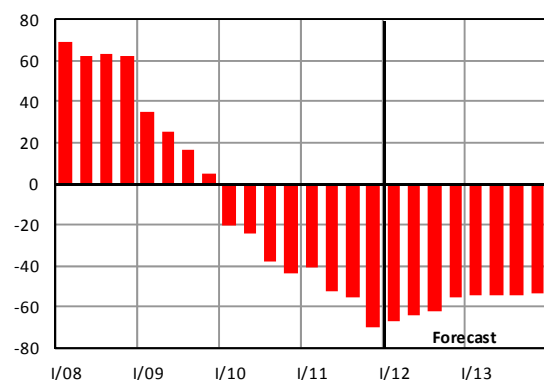
Nevertheless, the Czech population has still an economically favourable age structure, and especially in comparison to Western European countries. At the start of 2011, the structural proportion of the population in the age group of 15–64 years was 69.9%, versus 66.2% in the EA12.

The decline in the working-age population is, however, partially compensated by effects within the age structure of the labour force, as proportions of age groups with high or growing participation are increasing. The extension of the retirement age has the same effect.

Immigration could be another positive factor, but its extent in the last two years was below the middle variant of CZSO's demographic projection.

Graph A.6.2: **Czech Population Aged 15–64**

YoY increases of quarterly averages, in thousands



Note: This graph does not reflect the results of the 2011 census

The continuing ageing of the population, which is accelerating sharply in this decade (see Graph A.6.1), has been confirmed. The structural proportion of persons over 64 years of age in the total population reached 16.2% at the start of 2012 and should increase to nearly 20% by 2020. Both the number and proportion of seniors in the population are rising considerably due to the demographic structure and further continuation of the intensive process of increasing life expectancy and have a negative impact on the state budget balance.

Graph A.6.3: Life Expectancy

in years

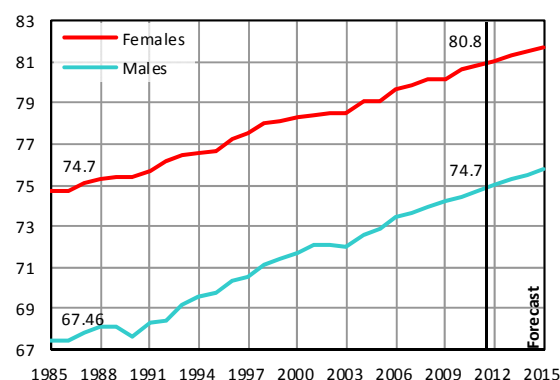


Table A.6.1: Demography

in thousands of persons

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | | | Forecast | | | | Forecast | Outlook | Outlook |
| Population (January 1) | 10 251 | 10 287 | 10 381 | 10 468 | 10 507 | 10 487 | 10 505 | 10 539 | 10 571 | 10 601 |
| <i>growth in %</i> | 0.3 | 0.4 | 0.9 | 0.8 | 0.4 | -0.2 | 0.2 | 0.3 | 0.3 | 0.3 |
| Age structure (January 1): | | | | | | | | | | |
| (0–14) | 1 501 | 1 480 | 1 477 | 1 480 | 1 494 | 1 522 | 1 541 | 1 563 | 1 587 | 1 611 |
| <i>growth in %</i> | -1.7 | -1.5 | -0.2 | 0.2 | 1.0 | 1.8 | 1.3 | 1.4 | 1.5 | 1.5 |
| (15–64) | 7 293 | 7 325 | 7 391 | 7 431 | 7 414 | 7 328 | 7 263 | 7 207 | 7 154 | 7 105 |
| <i>growth in %</i> | 0.5 | 0.4 | 0.9 | 0.5 | -0.2 | -1.2 | -0.9 | -0.8 | -0.7 | -0.7 |
| (65 and more) | 1 456 | 1 482 | 1 513 | 1 556 | 1 599 | 1 637 | 1 701 | 1 768 | 1 830 | 1 885 |
| <i>growth in %</i> | 1.5 | 1.8 | 2.1 | 2.9 | 2.7 | 2.4 | 3.9 | 3.9 | 3.5 | 3.0 |
| Old-age pensioners (January 1)¹⁾ | 1 985 | 2 024 | 2 061 | 2 102 | 2 147 | 2 260 | 2 340 | 2 390 | 2 422 | 2 453 |
| <i>growth in %</i> | 1.0 | 2.0 | 1.8 | 2.0 | 2.1 | . | 3.5 | 2.1 | 1.3 | 1.3 |
| Old-age dependency ratios (January 1, in %): | | | | | | | | | | |
| Demographic ²⁾ | 20.0 | 20.2 | 20.5 | 20.9 | 21.6 | 22.3 | 23.4 | 24.5 | 25.6 | 26.5 |
| Under current legislation ³⁾ | 35.6 | 35.8 | 35.9 | 36.1 | 36.6 | 37.4 | 37.8 | 37.8 | 38.2 | 38.7 |
| Effective ⁴⁾ | 41.3 | 41.6 | 41.5 | 41.8 | 43.6 | 45.9 | 47.6 | 48.8 | 49.5 | 49.9 |
| Fertility rate | 1.328 | 1.438 | 1.497 | 1.492 | 1.493 | 1.42 | 1.52 | 1.53 | 1.54 | 1.55 |
| Population increase | 36 | 94 | 86 | 39 | -20 | 19 | 33 | 32 | 31 | 29 |
| Natural increase | 1 | 10 | 15 | 11 | 10 | 2 | 8 | 7 | 6 | 4 |
| Live births | 106 | 115 | 120 | 118 | 117 | 109 | 114 | 113 | 112 | 110 |
| Deaths | 104 | 105 | 105 | 107 | 107 | 107 | 106 | 106 | 106 | 106 |
| Net migration | 35 | 84 | 72 | 28 | 16 | 17 | 25 | 25 | 25 | 25 |
| Immigration | 68 | 104 | 78 | 40 | 31 | 23 | . | . | . | . |
| Emigration | 33 | 21 | 6 | 12 | 15 | 6 | . | . | . | . |
| Census difference | x | x | x | x | -46 | x | x | x | x | x |

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

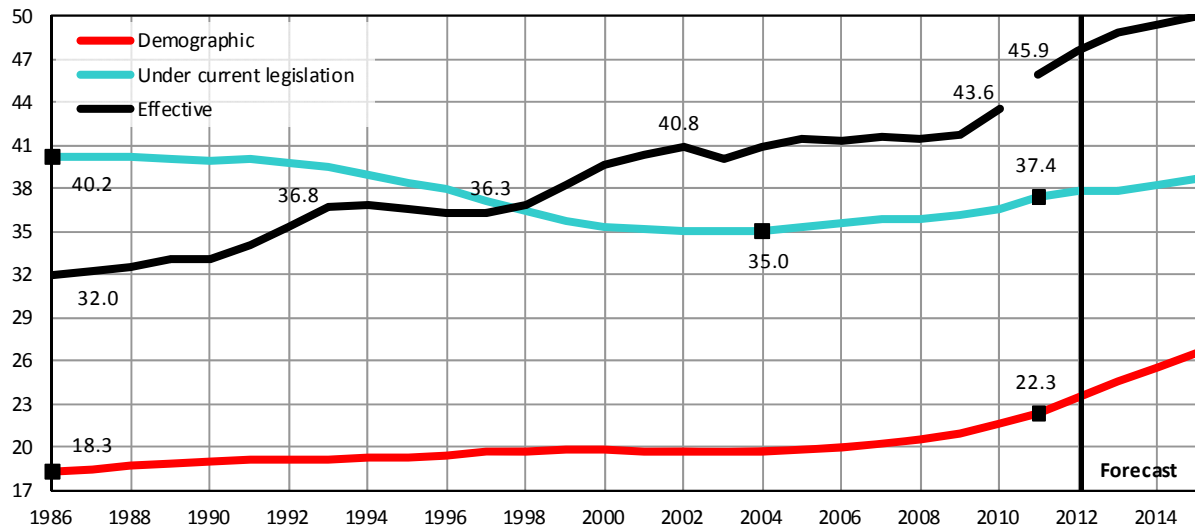
²⁾ Demographic dependency: ratio of people in senior ages (65 and more) to people in productive age (15–64).

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.

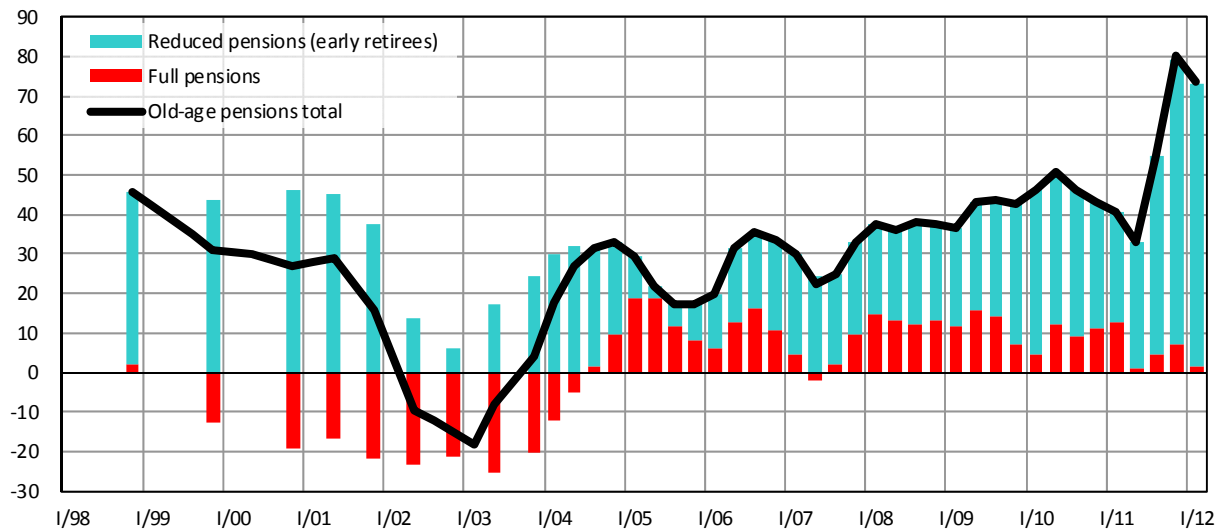
Graph A.6.4: Dependency Ratios

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.