

## 2 Economic Outlook

The Czech economy emerged from recession in mid-2009, and it is currently in a phase of not very dynamic recovery. The Convergence Programme's macroeconomic scenario was drawn up to be conservative trying to balance the possible positive and negative deviations in economic development while drawing upon the current state of knowledge.

### 2.1 World Economy and Technical Assumptions

The recovery of the world economy continues, equity markets are rising, as are industrial output and world trade. From a global viewpoint, growth is highly uneven. It remains high in the large developing economies, including China and India, while it is much weaker in developed economies.

The EU27 economy returned to moderate GDP growth of 1.8% in 2010 after a deep decline in 2009. Germany, which is the Czech Republic's main trading partner, enjoys the major share in that growth. Current development in the EU is characterised by marked disparities in economic output and, for example, in unemployment rates. This unevenness makes the determination of appropriate economic policies (including monetary policy) difficult. Among the risks, there is also the possibility of complications in the financial sector and high government indebtedness in a number of countries.

Commodity prices have risen significantly in all the major groups. This involves, therefore, not just the price of oil, whose rise was caused by political unrest in a number of producing countries, but also food, metals and other raw materials. Among the causes we may mention high demand, growing investments in commodity derivatives, geopolitical factors and also, for food prices, weather fluctuations. Oil prices will therefore apparently remain high – in the vicinity of USD 100/barrel for Brent crude. The increase in com-

modity prices will be reflected in the Czech economy by deterioration in the terms of trade.

Our assumption of EU27 growth differs only slightly from the European Commission's Common Assumptions on the External Environment.<sup>2</sup> On the other hand, the difference between the EC (2011b) and our estimate of oil prices is substantial. For 2011, our estimate of Brent oil prices is lower by about USD 18. The reason is that in our opinion the impact of the stated extraordinary events will probably pass over next several months and prices will lose their high risk premium. In the medium-term horizon, the pressure on oil prices could be mitigated by wider use of less energy-intensive technologies.

A conservative exchange rate assumption with stability around 1.3 EUR/USD was chosen. The koruna should continue to strengthen against the euro, and in 2014 it should reach the level of approximately 22.2 CZK/EUR. The assumption on the development of short-term interest rates is consistent with fulfilling the CNB's inflation target.

<sup>2</sup> We received the preliminary version of the "Common Assumptions on Development of External Environment" on 31 March 2011, which was after we had completed the work on the Macroeconomic Forecast upon which this scenario is based. We could not reflect the next version from 11 April 2011 for the same reason. Therefore, the CP was supplemented by a sensitivity analysis for certain macroeconomic indicators based on exogenous variables.

**Table 2.1: Exogenous Assumptions of the Scenario**

		2010	2011	2012	2013	2012
USD/EUR exchange rate	annual average	1.32	1.31	1.30	1.30	1.30
CZK/EUR exchange rate	annual average	25.3	24.1	23.5	22.8	22.2
Government bond yield to maturity 10Y	in % p.a.	3.7	4.1	4.3	4.3	4.3
PRIBOR 3M	in % p.a.	1.3	1.3	2.0	2.6	3.0
GDP EU27	real growth in %	1.8	1.8	2.1	2.3	2.3
Oil prices	Brent, USD/barrel	79.7	95.0	95.5	96.8	93.3

Source: CNB (2011), Eurostat (2011), IMF (2011). MF CR calculations.

### 2.2 Cyclical Developments and Current Prospects

#### 2.2.1 GDP and the Demand Side

From the fourth quarter of 2008 to the second quarter of 2009, the Czech economy was hit by a recession,

during which real GDP decreased by approximately 5%. The economy has been gradually coming out of this deep decline since the third quarter of 2009. The recovery is relatively slow, however, and growth rates

are lagging behind the dynamics of 2005–2007. The peak level of economic output seen in the third quarter of 2008 will probably not be reached until the end of 2011.

The economic dynamics are partially limited by the fiscal consolidation currently underway, which reduces domestic demand and shifts the main source of growth to the goods and services balance. According to the expected scenario, however, real GDP growth should start to accelerate from 2012 towards 4.0% in 2014.

During the recession, household consumption was a stabilising component of GDP. During 2010–2012 however, it was, is and will be influenced by fiscal measures, especially by an increase of both VAT rates by 1 percentage point in 2010, a decrease in the wage bill in the general government sector in 2011, and an increase of the reduced VAT rate from 10% to 14% in 2012.

The consolidation of public finances during 2011–2013 will lead to a sustained decrease of real government consumption. Both the decrease of employment in the general government sector and a reduction in the purchase of goods and services will be reflected here.

Following a significant slump in investment activities during 2008–2010, their dynamics should gradually recover. There should be a positive impact from implementing structural reforms, reinforcement of confidence in future economic development, gradual growth in capacity utilisation, and accelerated drawing of investment grants from structural funds and the Cohesion Fund. Renewed inflow of foreign direct investment can be expected, and we expect new capacities will continue to be primarily export oriented.

The contribution of the goods and services balance in constant prices to GDP growth reached 1.0 percentage point in 2010. Foreign demand should continue in contributing to economic growth. Due to recovery of domestic demand, however, foreign trade's contribution should gradually decrease from 1.8 percentage points in 2011 to 0.2 percentage points in 2014.

Convergence in the relative level of GDP per capita compared with the EU27 average at purchasing power parity (Chart 2.2) more or less halted with the onset of the recession. Along with a recovery of more dynamic growth, the Czech Republic's relative level should again start to increase and reach approximately 85% in 2014.

**Table 2.2: Economic Output**

(level in CZK billion, increases in %, contributions to growth in percentage points)

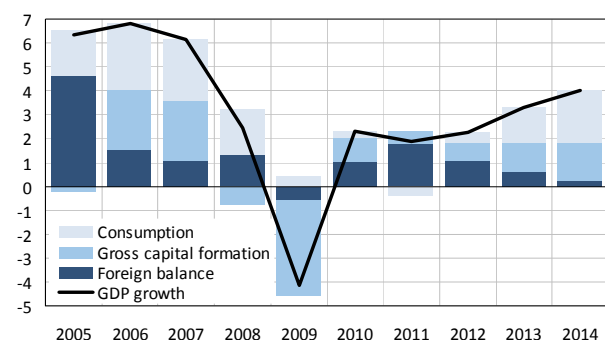
	ESA Code	2010 Level	2010	2011	2012	2013	2014
			Rate of change				
<b>1. Real GDP</b>	B1*g	<b>3710</b>	<b>2.3</b>	<b>1.9</b>	<b>2.3</b>	<b>3.3</b>	<b>4.0</b>
<b>2. Nominal GDP</b>	B1*g	<b>3670</b>	<b>1.2</b>	<b>1.3</b>	<b>5.0</b>	<b>4.9</b>	<b>5.9</b>
<b>Components of real GDP</b>							
<b>3. Private consumption expenditure</b>	P.3	<b>1845</b>	<b>0.5</b>	<b>0.7</b>	<b>1.9</b>	<b>3.3</b>	<b>4.2</b>
<b>4. Government consumption expenditure</b>	P.3	<b>801</b>	<b>0.3</b>	<b>-3.4</b>	<b>-2.5</b>	<b>-1.3</b>	<b>0.1</b>
<b>5. Gross fixed capital formation</b>	P.51	<b>777</b>	<b>-4.6</b>	<b>0.7</b>	<b>3.2</b>	<b>5.6</b>	<b>7.2</b>
<b>6. Changes in inventories and net acquis. of valuables (% GDP)</b>	P.52+P.53	<b>48</b>	<b>1.3</b>	<b>1.7</b>	<b>1.7</b>	<b>1.7</b>	<b>1.7</b>
<b>7. Exports of goods and services</b>	P.6	<b>2959</b>	<b>18.0</b>	<b>12.2</b>	<b>10.8</b>	<b>10.7</b>	<b>11.5</b>
<b>8. Imports of goods and services</b>	P.7	<b>2720</b>	<b>18.0</b>	<b>10.6</b>	<b>10.1</b>	<b>10.7</b>	<b>12.0</b>
<b>Contributions to real GDP growth</b>							
<b>9. Final domestic demand</b>		-	<b>-0.7</b>	<b>-0.3</b>	<b>1.1</b>	<b>2.6</b>	<b>3.7</b>
<b>10. Changes in inventories and net acquis. of valuables</b>	P.52+P.53	-	<b>2.0</b>	<b>0.4</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>
<b>11. External balance of goods and services</b>	B.11	-	<b>1.0</b>	<b>1.8</b>	<b>1.1</b>	<b>0.6</b>	<b>0.2</b>

Note: Real levels are in 2009 prices. Changes in inventories and net acquisition of valuables on the sixth row express change in inventories as a percent of GDP in current prices. The increase of the change in inventories and net acquisition of valuables is also calculated from real values.

Sources: CZSO (2011a), MF CR (2011a).

**Chart 2.1: Decomposition of GDP Growth**

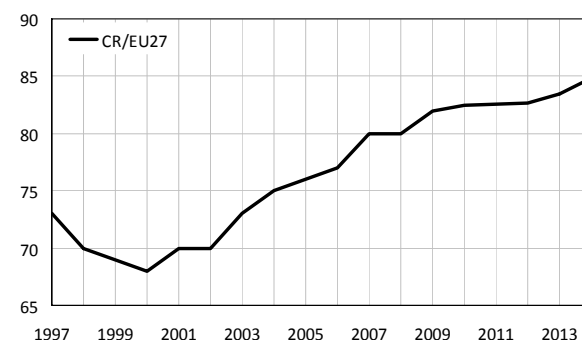
(contribution to growth in percentage points)



Source: CZSO (2011a), MF CR (2011a). MF CR calculations.

**Chart 2.2: GDP per Capita**

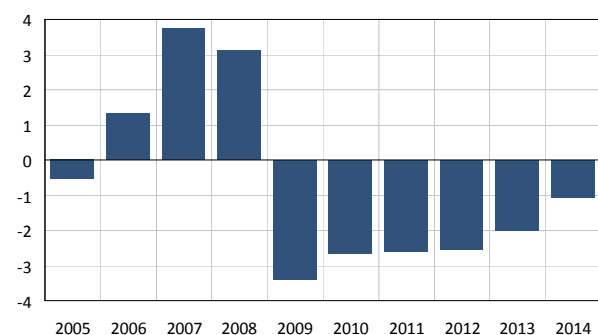
(calculated in purchase power parity, EU27=100)



Source: CZSO (2011a), Eurostat (2011), MF CR (2011a). MF CR calc.

**Chart 2.3: Output Gap**

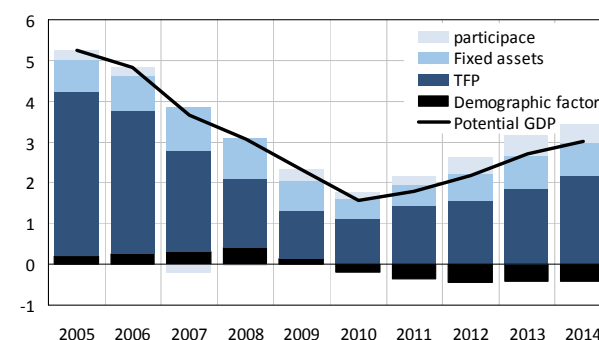
(in % of potential product)



Source: MF CR calculations.

**Chart 2.4: Growth of Potential Product**

(contributions to growth in percentage points)



Source: MF CR calculations.

### 2.2.2 Potential Product and Position within the Business Cycle

Under the present conditions, with the level of economic output changing abruptly, it is difficult to distinguish between the effects of the deepening output gap and that of the slowdown in potential GDP growth. The results of decompositions show great instability, and it is necessary to approach them with considerable caution.

The economic recession plunged the economy into a deep negative output gap and at the same time led to a significant slowdown in potential GDP growth. According to current calculations,<sup>3</sup> the output gap in 2009 reached a level under -3%. The deep negative output gap in the economy is evident in the low production capacities utilisation, high unemployment rate, and small number of job vacancies.

The most affected component of potential GDP is total factor productivity. Growth of its trend component fell from the high of 4% in 2005 to 1% in 2010. The slump in investments led to moderate decrease in the

growth contribution from capital stock. Moreover, in 2010 the negative effect of demographic development began to express itself for the first time. On the other hand, the contribution of the participation rate during the recession remained positive which is surprising. The resulting growth of the potential product in 2010 dropped below 2%.

We believe that the deceleration of growth of the economic potential already reached its bottom in 2010. The decisive factor should be the contribution of total industrial factor productivity, which should in 2014 surpass 2 percentage points. The contribution of the growth in capital stock should, due to increased investment activity, again reach values around 1 percentage point. The contribution of participation rate should remain positive due to increased motivation to work as a result of structural measures and should compensate for the unfavourable demographic factors. Potential growth should thus in 2014 again reach approximately 3%.

Within the scenario's horizon, real GDP should still hover below the potential product. The output gap should be closing gradually. It is not expected to close fully within the CP horizon, however, and according to this scenario it should still be around -1% in 2014.

<sup>3</sup> Calculations of potential product and the output gap are currently made using the national methodology, also based on the Cobb-Douglas production function.

### 2.2.3 Prices

From a long-term viewpoint, the Czech economy can be characterised as low-inflationary (with the exception of 2008). In 2010, HICP inflation was 1.2% versus 1.6% in the euro zone and 2.1% in the EU27. Lower or comparable inflation is expected to be maintained also in the coming years, especially due to the CNB's high credibility, the highly competitive internal market, the Czech koruna's disposition for appreciation, and moderate growth in unit labour costs.

**Table 2.3: Prices of Goods and Services**

(for HICP 2005=100, for the other indices 2000=100, increases in %)

	2010 Level	2010 Rate of change	2011 Rate of change	2012 Rate of change	2013 Rate of change	2014 Rate of change
1. GDP deflator	122.5	-1.1	-0.5	2.7	1.6	1.8
2. Private consumption deflator	121.5	1.3	2.0	3.2	1.5	2.0
3. HICP	113.7	1.2	2.2	3.4	1.6	2.1
4. Public consumption deflator	140.6	0.5	1.5	2.5	1.8	1.1
5. Investment deflator	104.0	-0.8	0.5	2.2	1.0	1.3
6. Export price deflator (goods and services)	86.0	-1.7	-0.8	0.1	0.3	0.5
7. Import price deflator (goods and services)	82.5	0.5	1.6	0.1	0.1	0.2

Source: CZSO (2011a), Eurostat (2011). MF CR calculations.

**Chart 2.5: Consumer Prices (HICP)**

(y-o-y growth in %)



Source: Eurostat (2011). MF CR calculations.

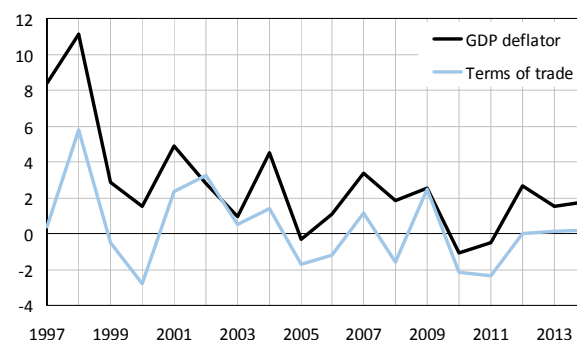
### 2.2.4 Labour Market and Wages

The economic downturn also affected the labour market, with a modest delay. In 2009, the short-term fiscal measures adopted helped mitigate some impacts of the recession. Decrease in employment and increase in the unemployment rate thus culminated only in the first quarter of 2010, after most of these measures had been cancelled at the end of 2009 with the aim of fiscal consolidation. Employment dropped by 0.8% in 2010. For the coming years, we expect only very mod-

We expect inflation expectations in the coming years to remain firmly rooted in the vicinity of the CNB's inflation target. The increased world prices of fuel commodities and food represent a risk in the near term. Changes in indirect taxes, and especially VAT with a contribution of 1.2 percentage point, will contribute to an assumed one-off spike in inflation exceeding 3% in 2012.

**Chart 2.6: GDP Deflator and Terms of Trade**

(y-o-y change in %)



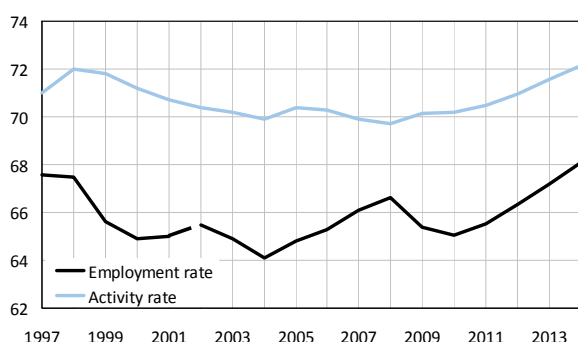
Source: CZSO (2011a). MF CR calculations.

erate increase of employment growth by up to 0.7% in 2014, which should correspond to the intensity of economic recovery and the possibilities for growth in labour productivity.

The unemployment rate reached 7.3% in 2010, thus rising by almost 3 percentage points compared to 2008. In view of the economic recovery, new legislative adjustments, and improving structural characteristics of the labour market, we expect it to decrease gradually to 5.5% in the coming years.

**Chart 2.7: Employment and Participation Rates**

(in %)

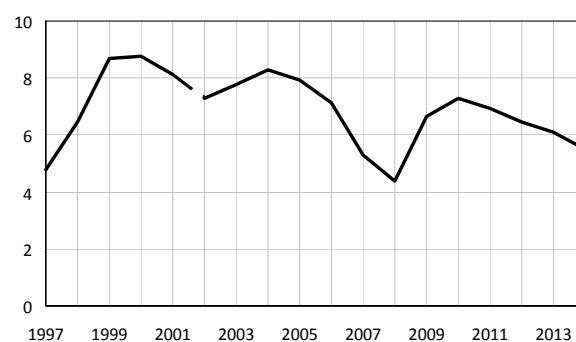


Note: The employment rate from the Labour Force Survey is not comparable between 2001 and 2002 due to changes in methodology.  
Source: CZSO (2011c). MF CR calculations.

The decrease in compensation of employees (the sum of the wage bill and social security contributions paid by employers) of 1.6% in 2009 was replaced already the next year by modest growth of 1.1%, which was due especially to growth in social security contributions resulting from the increase in maximum premium assessment base as well as from moderate growth of average wages in the business sector.

**Chart 2.8: Unemployment Rate**

(in %)



Note: The unemployment rate from the Labour Force Survey is not comparable between 2001 and 2002 due to changes in methodology.  
Source: CZSO (2011c). MF CR calculations.

In view of the adopted austerity measures in the budget sector, oriented especially toward decreasing wages and employment in a large part of the central government sector, we expect the wage bill to grow by just 2.1% in 2011. In the following years, compensation of employees could grow by an average 5.2%, which would be similar to growth dynamic of nominal GDP.

**Table 2.4: Employment and Compensation of Employees**

(price levels in common prices, increases in %)

	ESA Code	2010	2010	2011	2012	2013	2014
		Level	Rate of change				
1. Employment, persons		5185	-0.8	0.1	0.5	0.6	0.7
2. Employment, hours worked		9.9	0.1	1.0	0.9	0.6	0.3
3. Unemployment rate (%)		7.3	7.3	6.9	6.5	6.1	5.5
4. Labour productivity, persons		715	3.1	1.7	1.8	2.7	3.3
5. Labour productivity, hours worked		375	2.2	0.8	1.4	2.7	3.7
6. Compensation of employees	D.1	1625	1.1	2.1	4.4	4.5	5.9
7. Compensation per employee		391	3.3	3.1	4.3	4.3	5.4

Note: Employment is based on the Czech concept in the national accounts definition. Unemployment rate is from the SNA methodology. Labour productivity was calculated as real GDP (in 2009 prices) per employed person or hour worked.

Source: CZSO (2011a, 2011c). MF CR calculations.

## 2.3 External Transactions and Sectoral Balances

In accordance with the requirements of the “Code of Conduct”, this chapter is prepared using the national accounts methodology. Based on the relationship between investments and savings, this allows a complete disaggregation of surplus or deficit in external transactions to the individual economic sectors. This differs from the analogous, more usually employed methodology of the current account of the balance of payments in its accrualisation, its categorisation of some items, and in the fact that it contains additional items, such as capital transfers.

In September 2011, the Czech Statistical Office will conduct a revision of national accounts in accordance with Eurostat requirements. The revised data will follow foreign trade according to changes in ownership. This means there will be netting out of transactions conducted by non-residents, which have a considerable share in the turnover of trade in goods in

the Czech Republic. Therefore, it is necessary to understand the following data only as indicators of possible trends.

In 2008, for the first time in the history of the Czech Republic, a moderate surplus in the net lending balance was achieved. This continued in 2009. Within the scenario’s horizon, a balanced or slightly deficit out-

come can be expected. This should be caused by a surplus on the goods and services balance, a deficit balance for primary incomes (outflow of dividends for foreign-owned companies) and transfers, and a surplus balance of capital transfers, especially due to investment subsidies from the EU budget.

From a sector balances viewpoint, consolidation of government finances should meet with the gradually decreasing private sector surplus from the unusually high level of 6.5% of GDP in 2009.

**Table 2.5: Net Lending/Borrowing**  
(in % of GDP)

	2010	2011	2012	2013	2014
<b>Balance of goods and services</b>	<b>4.8</b>	<b>4.5</b>	<b>5.3</b>	<b>5.8</b>	<b>5.9</b>
mineral fuels (SITC 3)	-3.7	-4.4	-4.1	-3.9	-3.7
<b>Balance of primary income and transfers</b>	<b>-7.1</b>	<b>-6.9</b>	<b>-7.1</b>	<b>-7.6</b>	<b>-8.1</b>
primary income	-6.6	-6.6	-6.9	-7.4	-8.0
transfers	-0.5	-0.3	-0.2	-0.2	-0.2
<b>Capital transfers</b>	<b>1.9</b>	<b>1.8</b>	<b>1.8</b>	<b>1.7</b>	<b>1.6</b>
<b>Net lending/borrowing vis-a-vis ROW (B.9)</b>	<b>-0.2</b>	<b>-0.6</b>	<b>0.0</b>	<b>-0.1</b>	<b>-0.6</b>
<b>Net lending/borrowing of the private sector</b>	<b>4.5</b>	<b>3.5</b>	<b>3.5</b>	<b>2.8</b>	<b>1.3</b>
<b>Net lending/borrowing of general government (EDP B.9)</b>	<b>-4.7</b>	<b>-4.2</b>	<b>-3.5</b>	<b>-2.9</b>	<b>-1.9</b>

Source: CZSO (2011a). MF CR calculations.

## 2.4 Growth Implications of Major Structural Reforms

By their nature, the intended reforms are systematic measures mostly supporting the supply side of the economy and are of a long-term character. Their objective is to support growth of potential product and employment over the medium and long term with expenditure savings in public budgets.

In the horizon of the CP's macroeconomic scenario, their positive influence is expected to be limited. Therefore, it is currently impossible to more precisely quantify the effects of the main reform measures on economic growth and employment.