

C Forecast of the Development of Macroeconomic Indicators

Sources of tables and graphs: CZSO, Ministry of Labour and Social Affairs

C.1 Economic Output

Latest development of GDP

In Q2 2013, real GDP³ decreased by 1.3% YoY (*versus 1.9%*); in a QoQ comparison this represented growth of 0.6% (*versus stagnation*). The economy has emerged from a recession lasting since Q4 2011. Nonetheless, considering the still deeply negative output gap, such observation is of a purely formal character.

From the perspective of expenditures on GDP, the aforementioned QoQ growth of GDP was driven by foreign trade balance and change in inventories and valuables. The positive development in foreign trade balance was driven by an unexpected recovery of the European economy as well as weak domestic demand, which hampered imports. Any real-time interpretation of the development of the change in inventories and valuables is more or less a speculation, considering the frequency and extent of revisions of this item.

From YoY perspective, the aforementioned real decline in GDP resulted from a negative development of gross capital formation, involving both a real decrease of gross fixed capital formation and a negative YoY change in inventories and valuables. The contribution of household consumption was positive, but low. Hence, domestic demand continues to be very weak.

A slight improvement of economic activity in Q2 2013 can also be documented by the development of gross value added, which increased by 0.4% QoQ, i.e. less than GDP. Gross value added fell by 0.8% YoY in real terms. From this perspective, the unexpectedly high QoQ increase in GDP can be partially interpreted as a consequence of the volatility of the balance of net taxes in relation to stockpiling cigarette tax stamps during a change in the excise tax rate.

As part of expenditures on final consumption, household consumption increased by 0.1% (*versus a decrease of 0.9%*), while government consumption increased by 1.8% YoY (*versus 0.3%*). Both a decrease in gross fixed capital formation of 5.0% (*versus 5.2%*) and a decline in inventories and valuables with a contribution to GDP growth of -2.1 pp (seasonally adjusted) contributed to a strong YoY decrease of gross capital formation of 14.0% (*versus 7.7%*).

In Q2 2013, exports also increased by 0.5% (*versus a decrease of 0.3%*) while imports went down by 1.7% (*versus 0.8%*) in real terms.

Real household consumption increased YoY in Q2 2013, yet after a QoQ growth in Q1 2013 it fell by 0.1% QoQ. Considering the structure, the YoY real increase in household consumption was caused by a growth of expenditure on durable goods and on services. We should remember, however, that expenditures on durable goods are very volatile.

In the aforementioned period, gross fixed capital formation saw a real deterioration both in a QoQ and YoY comparison. There was simultaneously a further YoY real decline in all key types of investment. By simply observing investment development it is clear that domestic demand continues to be very weak.

Foreign trade contributed 1.6 pp (seasonally adjusted) to GDP growth, amid an improvement in the terms of trade. In Q2 2013, real gross domestic income thus decreased relatively less than GDP, specifically by 0.5% (*versus 1.9%*).

In nominal terms, GDP increased by 0.2% (*versus a decrease of 1.5%*) in Q2 2013.

Considering the GDP income structure, compensation of employees increased by 0.4% (*versus 1.0%*) in Q2 2013, with the total wage bill increasing by 0.1% (*versus 1.0%*). At the same time, the gross operating surplus and mixed income increased by 0.8% (*versus a decrease of 4.5%*). Taking into account inflation dynamics, however, the aforementioned nominal growth continued to represent a negative impulse for the development of households' real disposable income.

Between publishing the quarterly national accounts on 3 September 2013 and the preliminary report of the annual national accounts for 2012 on 1 October 2013 (the latter is also reflected in the modification of the quarterly national accounts) there were certain shifts in the GDP structure. Considering the fact that the set of data of 3 September 2013 entered as a data source in the preparation of the macroeconomic framework of the draft state budget for 2014, we consider it important to point out these changes, which are summarized in Table C.1.1.

³ QoQ changes referred to in the text are expressed using seasonally adjusted data; in all other cases seasonally unadjusted data is used.

Table C.1.1: Revision of GDP and its Components

YoY growth rates in %, differences in p.p.

		2012	2013 H1
GDP	Oct 2013	-1.0	-2.1
<i>constant prices</i>	Sep 2013	-1.2	-2.1
	<i>difference</i>	0.2	0.0
Private consumption expenditure	Oct 2013	-2.1	-0.7
<i>constant prices</i>	Sep 2013	-2.7	-0.2
	<i>difference</i>	0.5	-0.4
Government consumption exp.	Oct 2013	-1.9	1.5
<i>constant prices</i>	Sep 2013	-1.2	1.2
	<i>difference</i>	-0.7	0.3
Gross fixed capital formation	Oct 2013	-4.5	-5.7
<i>constant prices</i>	Sep 2013	-2.7	-5.8
	<i>difference</i>	-1.8	0.1
Exports of goods and services	Oct 2013	4.5	-2.4
<i>constant prices</i>	Sep 2013	4.0	-1.4
	<i>difference</i>	0.4	-1.0
Imports of goods and services	Oct 2013	2.3	-3.3
<i>constant prices</i>	Sep 2013	2.3	-2.1
	<i>difference</i>	0.0	-1.2
GDP	Oct 2013	0.6	-0.5
<i>current prices</i>	Sep 2013	0.2	-0.8
	<i>difference</i>	0.4	0.3
Compensation of employees	Oct 2013	1.8	-0.1
<i>current prices</i>	Sep 2013	1.5	0.1
	<i>difference</i>	0.4	-0.3
Gross operating surplus and mixed income	Oct 2013	-1.2	-0.1
<i>current prices</i>	Sep 2013	-1.6	-1.5
	<i>difference</i>	0.5	1.4

GDP forecast

The forecast for GDP and its expenditure components is influenced by risk factors similar to those in the July Forecast; nonetheless, medium-term external risks have decreased.

Based on the data on the development of individual GDP expenditure components, the sources of gross value added and business cycle indicators, we assume that the relatively strong QoQ increase in real GDP in Q2 2013 will not repeat in Q3 2013 or Q4 2013. As in the last forecast, we expect the economy to recover slowly in H2 2013. For the whole of 2013, we forecast a decrease in real GDP of 1.0% (*versus 1.5%*); in 2014 GDP is expected to increase by 1.3% (*versus 0.8%*). With respect to the structure of expenditures on GDP, the change in the forecast for 2014 results from an increase in the contribution of gross domestic expenditure to GDP growth. We assume that as a

consequence of the planned support for several investment in infrastructure, the announced wage increases in certain segments of the government sector and their possible effect on the wage bill in the private sector, the development of gross fixed capital formation and household consumption will be slightly better than in the July Forecast. The positive contribution of the foreign trade balance has remained unchanged.

In H1 2013, household consumption was also negatively influenced by the development of households' real disposable income in consequence of tensions on the labour market as well as the resulting restricted pressure on the growth of nominal wages. We expect that this factor will also have an effect in H2 2013 and forecast an increase in household consumption of only 0.2% (*versus a decrease of 0.8%*), whereby the difference arises in particular from an increase in the dynamics of nominal wages. At the same time, we expect stagnation of the gross savings rate at 10.5%⁴. In 2014, we forecast an increase in household consumption of 0.9% (*versus 0.4%*). In addition to the aforementioned reasons, the change in the forecast is also caused by a modification of the inflation rate forecast.

We expect government consumption to grow by 0.8% (*versus 0.5%*) in 2013 and by 0.2% (*versus a decrease of 0.9%*) in 2014. The change in the forecast in 2014 reflects the draft state budget.

We understand the decrease in gross fixed capital formation to be the result of weak domestic demand and the low dynamics of internal resources for financing investment projects. This is discernible from the development of gross operating surplus, and the low contribution of government investment. In 2013, we forecast a decrease in real gross capital formation of 7.9% (*versus 5.7%*), with a decline in investment in fixed capital of 4.8% (*versus 4.3%*). The main modification to the July Forecast is based on a more pessimistic view of the development of change in inventories and valuables. For 2014, we forecast an increase in gross capital formation of 0.9% (*versus 1.3%*), while gross fixed capital formation should decrease by 0.8% (*versus 0.6%*).

In 2013, the negative contribution of gross domestic expenditure to GDP growth will be mitigated by the positive contribution of foreign trade. We predict a

⁴ The gross household savings rate for 2012 was decreased by the aforementioned data revision from 11.2% to 10.8%. Thus the statement that low consumer confidence was reflected in a big increase in the savings rate becomes more relative. In H1 2013, there was even a YoY decrease in the savings rate of 0.3 pp.

negligible decrease in real exports in 2013 of 0.1% (*versus 1.1%*) and a decrease in imports of 0.9% (*versus 1.4%*). This improvement of the forecast of the foreign trade contribution is based on the quicker recovery of the economies of our main trading partners.

C.2 Prices

Consumer prices

The YoY growth of consumer prices reached 1.0% (*versus 1.5%*) in September. This was predominantly caused by administrative measures, of which 0.9 pp reflect the increase in indirect taxes and 0.3 pp reflect the impact of changes in regulated prices. Market influences thus decreased YoY inflation. The continuing disinflation is not in line with the July Forecast, and the contributions of both market and administrative influences have a share in the forecast error.

With respect to the contribution of individual divisions of the consumer basket to YoY inflation in September, the largest came from food and non-alcoholic beverage prices (0.7 pp), which have been showing the highest YoY dynamics (4.6% in September) of all divisions of the consumer basket right from the beginning of the year.

In Q4 2013, administrative measures will probably continue to be the determining influence in YoY inflation; we estimate their contribution to the December YoY growth of consumer prices of 1.2% (*versus 1.8%*) to be 1.1 pp (*versus 1.3 pp*). The **average inflation rate** should reach 1.4% (*versus 1.6%*) in 2013.

The year 2014 should be marked with very low inflation, the forecast for which we have decreased, compared to the July forecast, in particular due to new information on the contributions of administrative influences.

The major element regarding the revision is the different assumption regarding the development of regulated prices, in particular electricity prices. If we ignore the hypothetical rent of owners, which is a specific item, the electricity subindex is the biggest individual item in the consumer basket, and will be affected by considerable price changes that should be made at the beginning of next year in three main parts of the total electricity price, excl. VAT. The non-regulated price of power electricity will very probably fall markedly in relation to price development at energy exchanges; the distribution price will most probably be decreased by the Energy Regulation Office in line with its price decision; and a ceiling of CZK 495/MWh (the contribution is CZK 583/MWh this year)

We expect that in 2014 exports will grow in real terms by 3.3% (*versus 2.9%*) and imports by 2.7% (*versus 2.4%*).

has been set out in new legislative measures for the contribution to renewable energy sources that is paid by consumers.

Based on the aforementioned facts and assumptions, we expect that the contribution of administrative measures to the YoY growth of consumer prices will be 0.1 pp (*versus 0.6 pp*) in December, of which –0.5 pp should account for electricity and 0.2 pp for an increase in excise taxes on cigarettes. Administrative measures should even decrease the YoY inflation in H1 2014 (see Graph C.2.2).

Total YoY inflation in H1 2014 should be very low, even far below the lower limit of the tolerance band of the CNB's inflation target. However, we do not assume that the Czech economy will be exposed to risks of any longer term deflationary development. It follows from the CNB's and the EC's surveys of inflation expectations that economic entities do not expect decreasing price levels. On the contrary, low inflation should have a positive impact on household consumption.

In connection with the aforementioned facts, we assume the **average inflation rate** in 2014 to reach only 0.7% (*versus 1.4%*), with December YoY growth of 1.4% (*versus 1.8%*).

The inflation forecast also reflects information that was not known at the closing date of the macroeconomic framework of the state budget for 2014 (for example, the consumer price index for September 2013 and the notification from several electric energy distributors of a significant decrease in power electricity prices). Considering the assumptions previously made (see Chapter A.3), when forecasting inflation, the risk of a CNB intervention to depreciate the Czech koruna could not be taken into account.

Deflators

Gross domestic expenditure deflator, a comprehensive indicator of domestic inflation, grew by 0.7% (*versus 0.3%*) YoY in Q2 2013.

In 2013, the gross domestic expenditure deflator could grow by 0.8% (*versus 0.6%*); for 2014 we predict the deflator to grow by 0.6% (*versus 1.1%*).

The **implicit GDP deflator** grew by 1.6% YoY (*versus 0.4%*) in Q2 2013. The substantial difference from the forecast was due to a relatively strong improvement (growth) of the terms of trade of 1.2% (*versus 0.1%*).

C.3 Labour Market

The labour market in the past recession behaved remarkably flexibly, even if such behaviour was not standard from the macroeconomic perspective. In line with expectations, the number of registered unemployed persons increased, although not too significantly. At the same time, however, in particular thanks to an increase in the number casual jobs undertaken due to an immediate need to raise income, employment was increasing (measured by the number of persons).

Employment

According to the Labour Force Survey (LFS), **employment** grew by 1.3% YoY (*versus 0.7%*) in Q2 2013, in particular thanks to a continuing increase in the tertiary sector. The secondary sector continued to decline, mainly in manufacturing and construction.

The number of employees increased considerably by 2.4% (*versus 0.8%*), probably again due to an increase in flexible forms of work, enabling employers to employ persons casually (both formally and informally) according to their current orders. Such change in the form of employment can be seen in a decrease in the number of active employees by 1.2% (full-time equivalent).

Future development in this area is extraordinarily uncertain. The labour supply will probably remain high (see the economic activity below). The demand will depend both on the intensity of economic recovery and the economic situation of the business sphere in relation to the need to increase labour productivity.

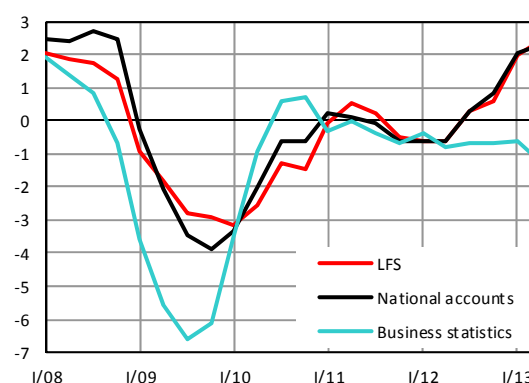
Unfavourable economic conditions have been seen in the continuing decrease in the number of employers (since mid-2011).

With regard to the situation on the labour market, after taking into account the result of H1 2013, we expect an increase in employment of 1.2% (*versus 0.5%*) in 2013. For 2014, we expect gradual

The GDP deflator could increase by 1.2% (*versus 0.6%*) in 2013; for 2014 we predict a growth of 0.5% (*versus 0.9%*). For the time being, we do not expect that the strong growth in terms of trade seen in H1 2013 will repeat within the forecast horizon.

rationalization of the number of employees. The approved increase in jobs in the government sector (in the armed forces, labour offices and financial control) should contribute to an increase in employment of 0.4% (*versus a decrease of 0.2%*).

Graph C.3.1: **Employment** – different statistics
YoY change in %, business statistics in full-time equivalent



Since mid-2010, growth of the **employment rate** of the population aged 15–64 has been accelerating, irrespective of economic output. In Q2 2013, it increased by 1.3 pp YoY to 67.8% (*versus 67.4%*).

The increase in the employment rate was the most significant in the age category of 55–64 years and for persons with a university degree. According to the CZSO's most recent surveys, this trend can be expected to continue.

The **economic activity rate** (15–64 year-olds) grew by 1.7 pp YoY to 73.0% (*versus 72.7%*) in Q2 2013. This growth reflects in particular the increased motivation of households to compensate by formal and informal gainful activities for an actual (or expected) decrease in real disposable income.

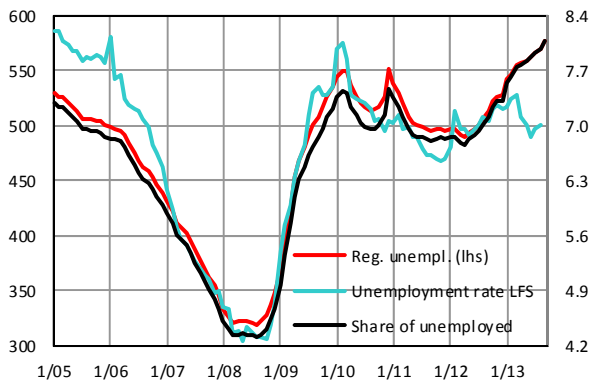
In addition to an increase in work activity, a change in the demographic structure has contributed considerably (and will continue to contribute considerably in the next few years) to an increase in the participation rate (see Chapter B.1).

Unemployment

Various indicators of unemployment provide a rather contradictory view of its development (see Graph C.3.2).

Graph C.3.2: Indicators of Unemployment

seasonally adjusted data, registered unemployment in thousands of persons, unemployment rate (LFS) and share of the unemployed aged 15–64 (Ministry of Labour and Social Affairs) in %



The tendency for the **seasonally adjusted registered unemployment** to grow was confirmed in Q3 2013. Considering the length and depth of the recession, the increase in unemployment is not critical, but since March 2013 the level of seasonally adjusted unemployment has been exceeding the historical maxima.

The fact that unemployment growth (including long-term unemployment) is more pronounced in lower age categories poses a new problem. The higher than usual number of new job applicants among graduates suggests that they are more poorly prepared to actively enter the labour market. A major social problem is the increase in the average duration of registered unemployment, already approaching 12 months.

In order to interpret the **unemployment rate according to the LFS**, it is necessary to take into consideration the definition of the unemployed person, i.e. someone who did not work even one hour during the reference week, was actively seeking employment and was able to start working within 14 days. By this definition, many registered unemployed persons can be considered as employed thanks to the possibility of gainful activities limited by time and remuneration. Under the conditions of an increase in the number of part-time and casual jobs, it is obvious that unemployment according to the LFS shows lower dynamics.

The LFS unemployment rate reached 6.7% (*versus* 7.2%) in Q2 2013. In a YoY comparison this represented stagnation. However, the sudden sharp QoQ decrease of 0.3 pp on seasonally adjusted data, the exact cause

of which we are not able to identify, is of course surprising (see Graph C.3.2).

As a consequence of the lower than expected increase in the number of unemployed persons according to the LFS in Q2 2013, we forecast only a slight increase in the unemployment rate to 7.1% (*versus* 7.5%) in 2013 and to 7.3% (*versus* 7.6%) in 2014, when the seasonally adjusted unemployment rate should peak.

Wages

In contrast to the previous two quarters, the wage increase in Q2 2013 was no longer influenced by legislative or administrative changes. Generally, the cautious behaviour of enterprises and institutions in terms of remuneration has not changed. Higher income (functional) categories have continued to contribute to a moderate growth of wages.

In Q2 2013, the **average nominal wage** (business statistics, full-time equivalent) increased by 1.2% (*versus* 1.0%). In the business sphere, influenced by the current situation on the market, the average wage increased by 1.1% in nominal terms (a decrease of 0.4% in real terms), mainly due to an increase in the share of extraordinary bonuses (except for the industry and transport segments); the influence of overtime work further decreased. In the non-business sphere, the average nominal salary increased by 1.9% (by 0.4% in real terms). The rise in public administration and education that contributed considerably to this increase was limited however to Q2 2013, as it resulted in particular from bonuses paid out to employees with higher incomes.

Taking into account the data for Q2 2013 in combination with the changed outlook for the economic situation has resulted in a modification of the estimate for a YoY growth of the nominal wage in 2013 of 0.9% (*versus* 0.8%). We are not changing our forecast for 2014 of 2.3%, since in addition to a quicker growth of the wage bill we also expect higher employment dynamics.

In Q2 2013, **wage bill** (national accounts methodology, domestic concept) increased by only 0.1% (*versus* 1.0%). This wage bill stagnation is a consequence of the difficult income situation of the business sphere following the recession.

For 2013, we expect a slight increase in the wage bill of 0.8% (*versus* 0.7%). For 2014, in the context of both a slow gradual improvement in the economic situation and the government decision to increase funds for salaries in the budgetary sphere by 2%, we assume a growth in the wage bill of 2.5% (*versus* 2.1%).

C.4 External Relations

(balance of payments methodology)

In Q2 2013, the external imbalance, expressed as a ratio of the current account balance to GDP, reached in annual terms -2.0% (*versus* -2.3%), thus deteriorating by 0.5 pp YoY. The income balance deficit deepened by 2.4 pp; on the other hand, the trade balance surplus increased by 1.5 pp. The balance of transfers improved by 0.3 pp, the balance of services by 0.1 pp.

Export markets⁵, whose dynamics have been decreasing for two years in connection with the deteriorated external environment, decreased by 0.2% in Q1 2013. In Q2 2013, growth was again recorded, even if for the time being it is somewhat symbolic (0.2%). This improvement has not been reflected in foreign demand: exports to the most important partner countries are generally stagnant. We forecast a change to a gradual recovery of foreign trade and more significant growth of export markets not sooner than at the end of 2013. In 2013, export markets are expected to grow by 0.6% (*versus a decrease of 1.3%*). For 2014, we anticipate again seeing a slight recovery in the global economy, accompanied with a growth of export markets of 2.7% (*versus 2.2%*). Export performance, indicating a change in the share of the volume of Czech goods on foreign markets, should decline by 0.8% (*versus an increase of 0.1%*) this year, but it could grow again by approximately 0.7% (*versus 0.8%*) next year.

For H2 2013, with an improvement in the external environment and gradual growth of domestic demand, we expect an increase in the volume of foreign trade in goods. We estimate that the trade balance surplus will reach 4.7% of GDP (*versus 4.0%*) in 2013 and 5.0% of GDP (*versus 4.1%*) in 2014.

The deficit in the fuel balance (SITC 3) reached 4.9% (*versus 4.8%*) of GDP in annual terms for Q2 2013.

With regard to crude oil prices, we assume that in the course of 2013 and 2014 prices of fuel will decrease and the deficit in the fuel balance will slightly fall. We estimate it will reach 4.8% of GDP (*versus 4.7%*) in 2013 and 4.6% of GDP (*versus 4.4%*) in 2014.

In the course of H1 2013, incomes and expenditure of all components of the balance of services increased. After more than two years the active balance increased slightly. The biggest factor in this development was the sharp increase in incomes from so-called other services. The total surplus in the services balance in Q2 2013 increased in annual terms by 0.1 pp to 1.5% of GDP (*versus 1.4%*). This year, the surplus in the services balance could remain at 1.5% of GDP (*versus 1.4%*), while in 2014 it could increase slightly to 1.6% of GDP (*versus 1.5%*).

The income balance deficit, which includes the reinvested and repatriated earnings of foreign investors, deepened in Q2 2013 in annual terms by 2.4 pp YoY and reached 8.0% of GDP (*consistent with the forecast*). It was caused by a considerable increase in the outflow of investment income in the form of dividends paid out to foreign owners of domestic direct investments. The balance of compensations to employees nonetheless improved, although this has considerably less impact on the total income balance. We expect the income balance deficit to deepen further, even if only slightly. This year, it could reach 8.1% of GDP (*versus 8.2%*) and 8.2% of GDP (*versus 8.3%*) in 2014.

Under the given circumstances, we assume that there will be an improvement in the current account balance in 2013 to -1.7% of GDP (*versus* -2.3%); we expect to see a current account deficit of 1.4% of GDP (*versus 2.4%*) in 2014. A current account deficit at this level poses no risk in terms of macroeconomic imbalances.

⁵ Weighted average of the increase in the import of goods for the six most important trading partners (Germany, Slovakia, Poland, France, United Kingdom and Austria).

C.5 International Comparisons

Comparisons for the period up to and including 2012 are based on Eurostat statistics. Since 2013, our own calculations have been used on the basis of real exchange rates.

Using the purchasing power parity method, comparisons of economic output for individual countries within the EU are made in PPS (purchasing power standards). PPS is an artificial currency unit expressing a quantity of goods that can be bought on average for one euro on EU27 territory after converting the exchange rate for countries using currency units other than the euro. Using updated Eurostat data, the purchasing power parity of the Czech Republic in 2012 was CZK 18.03/PPS compared to the EU27, or CZK 17.31/EUR compared to the EA12.

In 2009, as a result of the recession GDP per capita adjusted by **current purchasing power parity** declined in all monitored countries, with the exception of Poland. While most states have gradually recovered from the crisis, in Greece the absolute economic level has continued to fall for the fifth year in a row. A slight decrease also occurred in Croatia in 2010, in Portugal in 2011 and 2012 and in Slovenia in 2012. In addition to the decrease in the absolute level, the relative economic level vis-à-vis the EA12 countries also declined in these countries. The biggest decline was observed in Greece, whose relative level was more than 16 pp lower than in 2009. In contrast, the economic level is increasing most quickly, compared to the average of the EA12 countries, in the Baltic States. However, in 2013 and 2014 the speed of real convergence is expected to slow down slightly.

In the Czech Republic, the economic level measured by GDP per capita adjusted by current purchasing power parity was approximately 20,300 PPS in 2012, corresponding to 73% of economic output in the EA12. Since 2010, the Czech Republic has been experiencing

stagnation in its relative economic level. This period succeeded the period of convergence during 2000–2007, when the country's relative economic level vis-à-vis the EA12 countries increased by 13 pp. With regard to GDP dynamics, the relative economic level of the Czech Republic vis-à-vis the EA12 should not change either in 2013 or 2014.

GDP per capita, when adjusted for the **exchange rate**, takes into account the market valuation of the currency and the ensuing differences in price levels. In the case of the Czech Republic, this indicator was approximately EUR 14,600 in 2012, i.e. half the level of the EA12. Because of the expected depreciation of the koruna toward the euro, in 2013 we are forecasting a slight decrease in both absolute and relative levels.

When comparing price levels, the **comparative price level of GDP** in the Czech Republic decreased by 1 pp in 2012, thus reaching 69% of the EA12 average. The expected slight decrease in the price level by a further 2 pp in 2013 should help maintain the competitiveness of the Czech economy.