

C Forecast of the Development of Macroeconomic Indicators

At the end of September 2011, the CZSO conducted an extraordinary revision of annual national accounts which introduced a method of tracing economic transactions in accordance with the current requirements of Eurostat. The impacts of this revision on the time series of basic macroeconomic indicators are described in detail in Chapter E.

Quarterly national accounts will not be revised until December 2011 prior to the publication of data on the third quarter of 2011. **This Forecast** (with the exception of Chapter A.2 – Fiscal Policy) is therefore based on non-revised national accounts data.

C.1 Economic Output

After QoQ growth of 0.9% in the first quarter of 2011, seasonally adjusted real GDP increased only by a slight 0.1% (*versus 0.3%*) in the second quarter of 2011. This represents YoY growth² of 2.2% (*in accordance with the forecast*).

Although economic output in the second quarter was essentially the same as that in the July forecast, future development is very uncertain. Economic growth likely will be hindered by pessimism and fears concerning the impacts of the debt crisis in the euro zone as well as potential problems in the banking system and their overflowing into the real economy. The Czech economy could thus be on the verge of recession at the turn of 2011 and 2012 (see Graph C.1.2).

For 2011, we expect growth to slow to 2.1% (*versus 2.5%*), while for 2012 we anticipate further deceleration of growth dynamics to 1.0% (*versus 2.5%*). There are significant risks of downward deviations.

The worsening terms of trade, although less serious than expected in July, led **real gross domestic income** (RGDI), which reflects the income situation of the Czech economy, to grow more slowly than GDP did. In the second quarter of 2011, RGDI increased YoY by only 0.9% (*versus a decrease of 0.7%*). The income situation of Czech economic entities, therefore, lags behind output growth. RGDI should increase by 0.9% (*versus stagnation*) in 2011 and by 0.3% (*versus 2.3%*) in 2012. Whereas in 2011 the faster rate of RGDI growth (in comparison with the July forecast) was mostly in relation to development in the terms of trade, the change in the rate of growth in 2012 is caused by the expected lower economic growth.

The development in the terms of trade is also causing higher growth in **nominal GDP** (which is a key variable for fiscal forecasts) than originally expected. In the second quarter of 2011, YoY growth of 1.9% (*versus 0.5%*) was recorded. We expect an increase in nominal GDP by 2.1% (*versus 1.7%*) for 2011 and by 2.8% (*versus 5.2%*) for 2012.

Regarding the **income structure of GDP**, we have change the growth prognosis for profitability of the business sector downwards versus the July forecast, with continuing risks of downward deviations. In the second quarter of 2011, the gross operating surplus decreased by 0.5% YoY (*versus 1.5%*). For 2011, growth of 1.5% (*versus 1.0%*) can be expected, and in 2012 the operating surplus could increase by as much as 2.0% (*versus 5.6%*).

Expenditures on GDP

In 2011 and 2012, the positive values of economic growth should be maintained especially by foreign trade and, to a lesser degree, by fixed capital formation. Consumption among households should continue to fall under the influence of their unfavourable income situations. Fiscal consolidation measures will also contribute to this decline. Government consumption should decrease in conjunction with the adopted stabilisation measures. It is also necessary to anticipate that stocks rebuilding after the recession will come to an end.

The QoQ drop in seasonally adjusted **household consumption** slowed from 0.5% in the first quarter of 2011 to 0.2% in the second quarter of 2011. This means real household expenditures on final consumption dropped 0.6% YoY (*versus growth of 0.1%*) in the second quarter of 2011. Household consumption is pressed down by an unfavourable income situation, especially the decrease in the wage bill in part of the public sector. In the coming quarters, consumers' apprehensions from the debt crisis in the euro zone and the ensuing economic turbulence will also act against growth. For 2011, we expect a decrease in household consumption of around 0.6% (*versus growth of 0.5%*). In 2012, moreover, the decrease in consumption will be deepened by the increase of the reduced VAT rate from 10% to 14%. This is one of the reasons we expect a decrease in consumption by 0.5% (*versus growth of 2.0%*).

Government expenditure on final consumption in the second quarter of 2011 fell by 1.4% (*versus 2.6%*) in real terms. In accordance with adopted stabilisation

² Data without seasonal adjustment are presented in the remaining text, unless stated otherwise.

measures and the approved consolidation strategy, government institutions are expected to behave thriftily regarding both employment and purchases of goods and services. Government consumption should decrease by 1.2% (*versus 2.4%*) in 2011. We expect consumption expenditure to continue to decline in 2012 by 0.5% (*versus 2.1%*).

Gross fixed capital formation increased YoY by 3.5% (*versus 1.9%*) in the second quarter of 2011. Purchases of vehicles especially contributed to the increase in investments, as these rose by 10.3%. Purchases of machinery other than vehicles also increased, and that by 14.8%. Construction investments in non-residential buildings fell by 1.7%, while investments in housing decreased YoY by 0.2%.

The willingness of foreign investors to make new investments or to reinvest profit from business undertakings in the Czech Republic will also depend on the situations in their home countries. Pessimism and apprehension regarding the impacts of the debt crisis will likely prevail. Infrastructure investments with contributions from EU funds, on the other hand, should have a positive effect. New investments could also be stimulated by low interest rates. We expect

C.2 Prices

Consumer prices

The YoY growth in consumer prices reached 1.8% (*versus 2.5%*) in September, with a contribution of 0.8 p.p. from administrative provisions.

That difference between reality and the forecast was caused especially by the food and non-alcoholic beverages sector, where price levels declined from June to August. The volatility of food prices is a factor which disproportionately increases the difficulty of inflation forecasts relative to its importance in the consumer basket.

Fuel prices remain close to historical highs, even though presumptions about the development of dollar prices of oil and the CZK/USD exchange rate result in no additional pressure for its growth.

Even in the remaining part of 2011, prices which are at least partially regulated will significantly affect the growth of consumer prices. We estimate their contribution to YoY growth of CPI at 1.1 p.p. (*versus 0.9 p.p.*) in December 2011. The rise in natural gas prices and fee for a hospital stay will contribute 0.1 p.p. each.

gross fixed capital formation to increase by 2.1% (*versus 1.9%*) for 2011. For 2012, we expect growth of around 1.4% (*versus 3.2%*).

The contribution of **change in inventories** to YoY GDP growth in the second quarter of 2011 on seasonally adjusted data was 0.4 p.p. We expect a contribution of 0.5 p.p. (*versus 0.4 p.p.*) for 2011 and zero contribution (*versus 0.2 p.p.*) for 2012.

The contribution of **foreign trade** to YoY GDP growth on seasonally adjusted data reached 1.7 p.p. for the second quarter of 2011. The external balance has so far been influenced by the ongoing recovery in trading-partner countries accompanied by concurrent limited growth in domestic demand. We anticipate a foreign trade contribution of 1.7 p.p. (*versus 1.9 p.p.*) for 2011 and 1.0 p.p. (*versus 1.1 p.p.*) for 2012. Deceleration in the export volume growth rate could be offset by a levelling off in domestic consumption.

All estimated figures in this chapter are based on predefined assumptions about the development of the external environment. Lower-than-expected growth of the euro zone or even a drop in its economic level would mean deceleration of growth or decrease in the Czech economy's output, respectively.

The YoY inflation rate should increase through the end of the year, reaching 2.6% (*versus 3.0%*) in December. Part of the inflation impulse resulting from the increase in the reduced VAT rate from January 2012 will most likely have an effect already in the last two months of this year.³ We estimate the **average inflation rate in 2011** to be 1.9% (*versus 2.3%*).

In 2012, inflation will be significantly affected by administrative measures, which will account for approximately three quarters of the growth in consumer prices. The presumed increase of the reduced VAT rate from 10% to 14% as from the beginning of 2012 will represent an impact on CPI in the amount of 1.1 p.p., and we expect it to be fully reflected in consumer prices. We estimate the impact of the increase in the excise tax on cigarettes and tobacco to be 0.1 p.p. Among prices which are at least partially regulated, electricity prices will contribute the most to the increase in CPI (contribution of 0.2 p.p.). These are affected, however, by considerable

³ This effect can only be differentiated from normal price fluctuations with difficulty, and therefore it cannot be reported as an influence of administrative measures.

uncertainty related to the difficulty in estimating the limit of proceeds from the state budget designated for paying additional costs connected to production of electricity from renewable sources. Heating prices will have a similar contribution (0.2 p.p.). Impacts from changes in regulated prices will typically be concentrated in January, in terms of timing, and in housing, as regards consumer basket categories. We estimate a total contribution of administrative measures to the YoY growth in consumer prices of 2.2 p.p. (*versus 2.3 p.p.*) in December 2012.

Although the current forecast is, in contrast to the previous one, based on the presumption of a weaker CZK/EUR exchange rate, due to the expected slowdown in economic growth, the estimate of **average inflation rate in 2012** was decreased to 3.2% (*versus 3.5%*) with December 2012 inflation at 2.4% YoY (*versus 2.9%*). Due to the expected continuing decline of household consumption spending, the possibilities of price growth will be very limited.

The positive contribution of market YoY inflation should decrease during 2012. If GDP grows more slowly than predicted in the next year, even negative contributions from the market growth of prices should not be ruled out in late 2012.

C.3 Labour Market

The labour market has so far reflected the improving economic situation at the start of the year with a standard lag. Employment is rising, unemployment is slightly decreasing, and growing participation is compensating for the decrease in the working-age population.

Employment

According to the Labour Force Survey (LFS), employment rose YoY in the second quarter of 2011 by 0.6% (*versus 0.3%*).

The YoY increase of employee numbers in the secondary sector continued mainly due to the manufacturing industry (79 thousand). On the other hand, the number of persons employed in construction continued to decline. The number of employees in the tertiary sector decreased especially due to the government sector (central government institutions), while the number of employees in the primary sector remained basically the same.

The increase in the category of entrepreneurs and self-employed perceptibly slowed to 0.7% (*versus 1.7%*) YoY

In the outlook for 2013 and 2014, inflation will return to the CNB's inflation target. We anticipate that as from the beginning of 2013 VAT rates will be unified at 17.5%, which will be reflected in a total impact on CPI of -0.2 p.p.

Deflators

The aggregate price level in the economy has increased only moderately. The **gross domestic expenditure deflator**, which is a comprehensive indicator of domestic inflation, grew by 1.1% YoY (*versus 1.3%*) in the second quarter of 2011. It should increase by 1.2% (*versus 1.7%*) in 2011 and by 2.5% (*versus 3.0%*) in 2012, due primarily to acceleration in consumer inflation.

The value of the **implicit GDP deflator** fell by 0.4% (*versus 1.6%*) in the second quarter of 2011. Unlike the gross domestic expenditure deflator, it was driven downward by the 1.6% decline (*versus 3.3%*) in the terms of trade. We expect stagnation in the deflator (*versus a decline of 0.8%*) for 2011 and growth of 1.7% (*versus 2.6%*) for 2012.

due to further deceleration in growth among self-employed persons (1.5% YoY) and only a slight increase in employers. After a two-year decline and stagnation in the last quarter, number of wage earners increased by 0.5% YoY.

The **employment rate** (15–64 years of age) increased by 0.8 p.p. to 65.7%, which is the highest figure since the fourth quarter of 2008. In its composition, steady growth in the age category of 55–59 years (by 2.8 p.p. to 69.4%) in particular can be perceived positively. Employment in the category of 25–29 years also visibly increased (by 1.6 p.p. to 74.3%).

Economic activity rate (15–64 years) increased YoY by 0.6 p.p. to 70.5%. With a decreasing population in the given age category, however, the labour supply remained basically unchanged in the second quarter of 2011.

Development in the category of 55–64 years was interesting. Due to the extension of the retirement age, the rise in employment is accelerating. Growth in the number of early retirements accelerated, apparently particularly among persons with lower incomes. This

was probably due to the effects of the so-called small pension reform (reinforcing the importance of earned income when calculating pensions). However, this effect was more than compensated by stagnation in the number of people with a full non-decreased old age pension (see Graph A.6.5)

In light of the current development, we have slightly increased the forecast for growth in employment to 0.4% (*versus 0.2%*) in 2011. For 2012, however, we assume a YoY decrease in employment by 0.2% (*versus growth by 0.4%*) due to the slowdown in GDP growth and in part also to the announced further decline in the number of employees in state administration.

At the same time, we expect a gradual decrease in hours worked per employee due to the presumed effort of companies to retain skilled employees.

Unemployment

Registered unemployment dropped markedly in the second and third quarters of 2011 by ca 0.5 p.p. YoY. The number of job seekers decreased at a greater rate MoM in the second quarter.

The internationally comparable unemployment rate according to LFS reached 6.7% (*versus 6.5%*) in the second quarter of 2011. Its YoY decrease was 0.4 p.p. Given the previous and expected development of employment and the economic situation, we expect the LFS unemployment rate to stagnate at 6.9% for 2011 and 2012 (*versus 6.7% in 2011 and 6.4% in 2012*).

Wages

Regarding wages, the decelerating impact of administrative decisions continued to be evidenced by further decline in average nominal wage in the state-run sector.

The **wage bill** (NA, domestic concept) increased by 2.5% YoY (*versus 2.2%*) in the second quarter of 2011, along with growth in production and employment in the private sector.

For 2011, we expect an increase in the wage bill of 2.3% (*no change*) and an increase of 2.7% (*versus 4.4%*) for 2012. We also expect a certain effect from the announced VAT increase in the business sector. In addition to the lower economic output, austerity measures in the budget will continue to forestall higher growth, though to a lesser extent than in 2011 due to a reinforcement of wages and salaries in select sectors.

The **average nominal wage** determined using registered statistics (full-time equivalent) grew by 2.5% (*versus 2.2%*) YoY in the second quarter.

In the business sector, its YoY increase was 3.2%. We do not expect faster future growth of wages in this sector, however, and especially in industry, due to the rather pessimistic expectations of economic development in the forthcoming period.

In the non-business sector, the average nominal wage continued to decrease YoY (by 0.9%) along with a further drop in employee numbers. The decrease was again driven by the public administration and defence sectors (by 3.2%). Due to the continuing austerity measures, this trend will continue even despite the increase in certain sectors.

On the basis of signals from the business sector and known intents and decisions regarding public sector salaries for the forthcoming period, and contrary to the previous forecast, the increase in average nominal wages is expected to abate in this period. We anticipate growth by 2.2% (*versus 2.3%*) for 2011 and by only 2.7% (*versus 4.0%*) in 2012. Given the presumed inflation rate of 3.2%, this will mean a 0.5% decrease in real terms for the total average wage.

C.4 External Relations

(a balance of payments perspective)

Along with the publication of figures for the second quarter of 2011, CNB also published the balance of payments for 2005–2010 and the first quarter of 2011 under the new methodology for national data. Due to this revision, the ratio indicator of the current account deficit as a proportion of GDP increased in 2007 and 2008 (by approximately 1.2 p.p. and 1.6 p.p., respectively), while for other years it decreased. In 2010, the current account/GDP ratio decreased due to this change by 0.6 p.p. The changes affected most of all the balance of services and current transfers (a difference of +0.3 p.p.). In the first quarter of 2011, the revision meant an improvement in the ratio of the current account deficit to GDP by approximately 0.5 p.p. These changes influenced the accuracy of the comparison of previous forecasts with reality. Nevertheless, we publish the originally forecast data.

The external imbalance, expressed as the **ratio of the current account balance to GDP**, reached -3.5% (*versus* -3.7%) in annual terms in the second quarter of 2011 and worsened by 1.8 p.p. YoY. Apart from the balance of current transfers (up by 0.3 p.p.), all components of the current account worsened: the trade balance by 0.9 p.p., income balance by 0.8 p.p., and balance of services by 0.4 p.p.

World trade continued to grow more slowly in the first quarter of 2011. After the strong growth in export markets⁴ by 11.5% in 2010, its rate slowed somewhat in the first two quarters of 2011 to 11.0% and 8.1%, respectively. For 2011 we expect export markets growth of 7.6% (*versus* 7.2%), while for 2012 we anticipate a more significant slowdown to 3.8% (*versus* 6.9%). Similarly, we anticipate a somewhat lower growth rate for Czech imports and exports by the end of 2012 in comparison to past periods (by 17.6% for exports and by 20.1% in imports in annual terms). We estimate that the **trade balance** will reach 1.8% of GDP (*versus* 0.6%) in 2011 and 1.9% of GDP (*versus* 1.1%) in 2012 at lower growth rates for the export and import volumes.

In view of the oil price scenario, we assume the current high prices of raw materials will remain high over the course of 2011 and 2012, thus increasing the fuels balance deficit (SITC 3). Its ratio to GDP reached -3.8%

in 2010, and we expect it to deepen further to ca -4.8% in 2011 and 2012 (*estimate almost unchanged*).

The **balance of services** surplus decreased by 0.4 p.p. YoY to 1.8% of GDP (*versus* 1.9%) in the second quarter of 2011. Since the recession subsided, revenues and expenditures in the balance of services have been increasing since the middle of last year. Expenditures have grown faster than revenues, and thus this item's overall surplus has decreased. Considering the rather unfavourable outlook for the world economy's development, we expect stagnation or a slight drop in the balance of services for the rest of 2011 and in 2012 (to ca 1.9% [*versus* 2.0%] in 2011 and to 1.8% of GDP [*versus* 2.1%] in 2012).

The deficit in the **income balance**, which includes foreign investors' reinvested and repatriated profits, showed a weak growth tendency, with both revenues and expenditures increasing. The rise in the deficit was caused especially by growth in the outflow of investment income in the item "foreign direct investments", which consist primarily of reinvested profits. The balance of compensation of employees continues to improve due to domestic industrial enterprises' low demand for employing foreigners. We expect this trend to continue in 2011, and we estimate a slight increase in the income deficit to 7.1% of GDP (*versus* 6.7%) in 2011 and to 7.3% of GDP (*versus* 7.0%) in 2012.

Within this context, we estimate that the current account balance as a proportion of GDP will reach -3.1% (*versus* -3.9%). The forecast for 2012 is -3.3% of GDP (*versus* -3.6%). A current account deficit of this size presents no risk of macroeconomic imbalance.

⁴ *Weighted average growth in goods imports by the seven most important trade partner countries (Germany, Slovakia, Poland, Austria, France, United Kingdom and Italy).*

C.5 International Comparisons

Comparisons for the period up to and including 2010 are based on Eurostat statistics. Since 2011, our own calculations are used on the basis of real exchange rates. To maintain consistency throughout the Macroeconomic Forecast, no revised data was used for the Czech Republic (see Chapter E) and the results thus may be slightly undervalued compared to other monitored economies.

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 exchange rate conversion for countries that use currency units other than the euro. Using updated Eurostat data, purchasing power parity of the Czech Republic in 2010 was CZK 17.87/PPS in comparison to the EU27 or CZK 16.92/EUR in comparison to the EA12.

As a result of the economic crisis, per capita GDP adjusted using **current purchasing power parity** fell in 2009 in the Czech Republic and in other Central European countries. The only exception was Poland, which was not hit by recession. By contrast, recession hit the Baltic countries and Slovenia especially hard, as their relative economic levels compared to the EA12 also decreased. Last year, the economic recession continued only in Greece, while in the other monitored economies economic recovery led to GDP growth. The relative economic level compared to the EA12 fell not only in Greece, however, but also in the Czech Republic and Slovenia.

In 2010, per capita GDP of the Czech Republic reached ca PPS 19,500, corresponding to 73% of the EA12 economic output. The relative economic level of the Czech Republic compared to the EA12 decreased by 2 p.p. against the previous year and, according to Eurostat data, fell below the level of Portugal. It is necessary, however, to view this data simply as preliminary, since based on a revision of annual national accounts it can be expected that the relative level of the Czech Republic has been higher than that of Portugal since 2006.

An alternative way of calculating GDP per capita by means of the current **exchange rate** takes into account the market valuation of the currency and ensuing differences in price levels. In the case of the Czech Republic, this indicator amounted to ca EUR 13,800 in 2010, i.e. nearly half of the EA12 level (49%). Due to growth recovery and gradual appreciation of the exchange rate, the pre-crisis level of 2008 should be surpassed as early as this year.

The comparative price level of GDP in the Czech Republic reached 67% of the EA12 average in 2010. Depreciation of the real exchange rate was reflected in a YoY drop in the price level by 4 p.p. in 2009, which significantly helped to boost the competitiveness of the Czech economy. Much faster exchange rate depreciation was seen in Poland, where decline of the relative price level reached almost 12 p.p. and thus helped Poland to avoid economic recession.

The comparative price level of Czech GDP grew already by 3 p.p. last year and should continue to rise gradually, led by productivity growth and growth in the Czech economy's competitiveness due to factors not related to price.