

## INFLATION REPORT / III

2012



## INFLATION REPORT / III

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In 1998, the Czech National Bank switched to inflation targeting. In the inflation targeting regime, the central bank's communication with the public plays a significant role. One of the core elements of this communication is the publishing of quarterly Inflation Reports. Section II of the Inflation Report contains a description of the Czech National Bank's new quarterly macroeconomic forecast, and section III presents its assessment of past economic and monetary developments.

The inflation forecast and the assumptions underlying it are published with the aim of making monetary policy as transparent, comprehensible, predictable and therefore credible as possible. The Czech National Bank is convinced that credible monetary policy effectively influences inflation expectations and minimises the costs of maintaining price stability. Maintaining price stability is the Czech National Bank's primary objective.

The forecast for the Czech economy is drawn up by the CNB's Monetary and Statistics Department. The forecast for inflation at the "monetary policy horizon" (about 12–18 months ahead) is of greatest relevance to the decision-making on the current interest rate settings.

The forecast is the key, but not the only, input to the Bank Board's decision-making. At its meetings during the quarter, the Bank Board discusses the current forecast and the balance of risks and uncertainties surrounding it. The arrival of new information since the forecast was drawn up and the possibility of asymmetric assessment of the risks of the forecast and divergent views of some board members on the development of the external environment or the linkages between the various indicators within the Czech economy mean that the Bank Board's final decision need not correspond to the message of the forecast.

This Inflation Report was approved by the CNB Bank Board on 9 August 2012 and contains the information available as of 20 July 2012. Unless stated otherwise, the sources of the data contained in this Inflation Report are the CZSO or the CNB. All the Inflation Reports published to date are available on the [CNB website](#). Underlying data for the tables and charts presented in the text of this Inflation Report, minutes of Bank Board meetings, and time series of selected economic and monetary indicators (available in the ARAD database) are published at the same internet address.



|   |           |
|---|-----------|
| <b>FOREWORD</b>   | <b>3</b>  |
| <b>CONTENTS</b>   | <b>5</b>  |
| <b>I. SUMMARY</b>   | <b>6</b>  |
| <b>II. THE FORECAST, ITS CHANGES AND RISKS</b>                                      | <b>8</b>  |
| <b>II.1 External assumptions of the forecast</b>                                    | <b>8</b>  |
| <b>II.2 The forecast</b>  | <b>10</b> |
| <b>II.3 Comparison with the previous forecast</b>                                   | <b>20</b> |
| <b>II.4 Alternative scenarios and sensitivity analyses</b>                          | <b>23</b> |
| II.4.1 Lower external demand sensitivity scenario                                   | 23        |
| II.4.2 Exchange rate sensitivity scenario   | 24        |
| <b>II.5 Forecasts by other entities</b>   | <b>25</b> |
| <b>III. CURRENT ECONOMIC DEVELOPMENTS</b>   | <b>27</b> |
| <b>III.1 Inflation</b>  | <b>27</b> |
| III.1.1 Fulfilment of the inflation target  | 27        |
| III.1.2 Current inflation   | 29        |
| <b>III.2 Import prices and producer prices</b>                                      | <b>32</b> |
| III.2.1 Import prices   | 32        |
| III.2.2 Producer prices   | 33        |
| <b>III.3 Demand and output</b>  | <b>36</b> |
| III.3.1 Domestic demand   | 36        |
| III.3.2 Net external demand   | 38        |
| III.3.3 Output  | 39        |
| III.3.4 Potential output and estimate of the cyclical position of the economy       | 41        |
| <b>III.4 The labour market</b>  | <b>43</b> |
| III.4.1 Employment and unemployment   | 43        |
| III.4.2 Wages and productivity  | 44        |
| <b>III.5 Financial and monetary developments</b>                                    | <b>46</b> |
| III.5.1 Money   | 46        |
| III.5.2 Credit  | 47        |
| BOX 1 The Bank Lending Survey   | 49        |
| III.5.3 Interest rates  | 50        |
| III.5.4 The exchange rate   | 53        |
| III.5.5 Economic results of non-financial corporations                              | 54        |
| III.5.6 Financial position of corporations and households                           | 55        |
| III.5.7 The property market   | 57        |
| <b>III.6 Balance of payments</b>  | <b>59</b> |
| III.6.1 The current account   | 59        |
| III.6.2 The capital account   | 60        |
| III.6.3 The financial account   | 60        |
| <b>III.7 The external environment</b>   | <b>62</b> |
| III.7.1 The euro area   | 62        |
| III.7.2 The United States   | 65        |
| III.7.3 The exchange rate of the euro against the dollar and other major currencies | 65        |
| BOX 2 The CZK/USD exchange rate at a time of uncertainty                            | 66        |
| III.7.4 Prices of oil and other commodities   | 67        |
| BOX 3 Easy monetary policy and commodity prices                                     | 69        |
| <b>CHARTS IN THE TEXT</b>   | <b>72</b> |
| <b>TABLES IN THE TEXT</b>   | <b>75</b> |
| <b>ABBREVIATIONS</b>  | <b>76</b> |
| <b>BOXES AND ANNEXES CONTAINED IN INFLATION REPORTS</b>                             | <b>77</b> |
| <b>GLOSSARY</b>   | <b>80</b> |
| <b>KEY MACROECONOMIC INDICATORS</b>   | <b>84</b> |

CHART I.1

## FULFILMENT OF THE INFLATION TARGET

**Headline inflation was above the upper boundary of the tolerance band in 2012 Q2**  
(annual percentage changes)

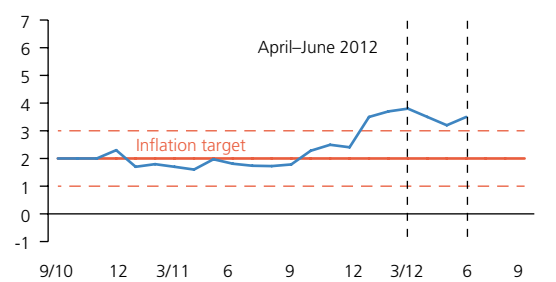


CHART I.2

## HEADLINE INFLATION FORECAST

**Headline inflation will fall to the CNB's target in late 2012/early 2013 and fluctuate slightly above it in 2013 owing to tax changes**  
(annual percentage changes)

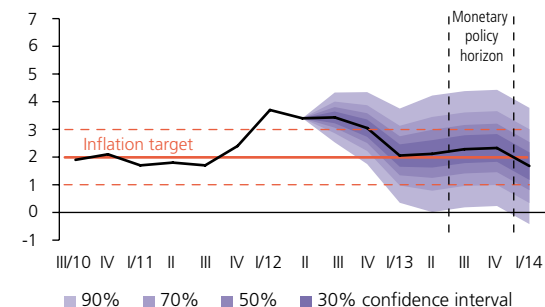
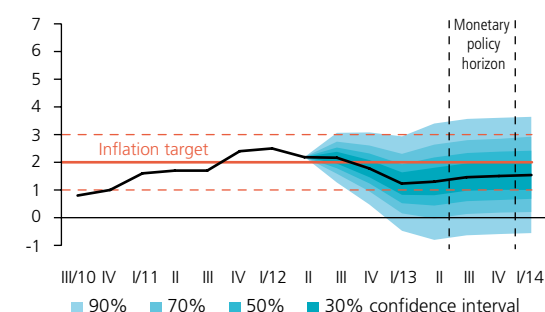


CHART I.3

## MONETARY-POLICY RELEVANT INFLATION FORECAST

**Monetary-policy relevant inflation will decline below the target at the end of this year and will remain there at the monetary policy horizon**  
(annual percentage changes)



## I. SUMMARY

Czech GDP declined in 2012 Q1, with contributions from all components except net exports. Headline inflation is above the upper boundary of the tolerance band and monetary-policy relevant inflation is slightly above the CNB's target. Tax changes, commodity prices and the past exchange rate depreciation are the sources of inflation. By contrast, the domestic economy is dampening inflation. GDP will decline this year owing to a marked slowdown in external demand and generally subdued domestic demand amid continuing fiscal consolidation. Real economic activity will recover slightly in 2013. Headline inflation will fall to the CNB's target in late 2012/early 2013 and fluctuate slightly above it at the monetary policy horizon owing to tax changes. Monetary-policy relevant inflation will decline below the target at the end of this year and stay in the lower half of the tolerance band until the end of 2014. The impacts of tax changes on inflation expectations and wages are not expected to be significant. Consistent with the forecast is a decline in market interest rates in the next few quarters, followed by a rise in rates in 2014.

The **Czech economy** contracted by 0.7% year on year in 2012 Q1, with net exports being the only source of growth. The contributions of the other components were negative (household consumption and investment in inventories most of all). The forecast assumes a moderation of the year-on-year decline in GDP to -0.4% in 2012 Q2.

In 2012 Q2, headline inflation was above the upper boundary of the tolerance band (see Chart I.1) and monetary-policy relevant inflation was slightly above the CNB's target. Tax changes, commodity prices and the gradual pass-through of the past weaker exchange rate to prices are the sources of inflation. Negative adjusted inflation excluding fuels still reflects the anti-inflationary effect of the domestic economy.

**Economic growth in the effective euro area<sup>1</sup>** remained at 1.7% in 2012 Q1, but will decrease significantly by the end of this year. Growth of 0.7% is expected for 2012 as a whole. This positive figure reflects higher growth in the Czech Republic's major trading partners compared to the average for the euro area, which, as a whole, is recording a modest recession. The low outlook for 3M EURIBOR rates takes into account the easing of ECB monetary policy and the contraction in euro area economic activity. This – together with the continuing debt crisis in the euro area – is reflected in the outlook for the euro-dollar exchange rate, which remains close to its current weak value. Oil prices are expected to follow a slightly downward path based on the relatively low level following their recent decline.

According to the forecast, headline inflation will fall to the CNB's target in late 2012/early 2013. It will be slightly above the inflation target in 2013 due to an increase in both VAT rates by 1 percentage point, and will fall slightly below the target after the tax effect drops out in early 2014 (see Chart I.2). **Monetary-policy relevant inflation**, i.e.

<sup>1</sup> The euro area effective indicators proxy for the effect of the euro area on the Czech economy. For more details, see the Glossary and the Box *Effective indicators of external developments* published in the July 2006 Inflation Report.



inflation adjusted for the first-round effects of changes to indirect taxes, will decline below the target at the end of this year and will stay in the lower half of the tolerance band around the CNB's target until the end of 2014, i.e. also at the monetary policy horizon (see Chart I.3). The overall upward pressures on prices will moderate in the quarters ahead as the inflationary effect of import prices weakens. Anti-inflationary pressures from the domestic economy will fade out in early 2013. However, no significant inflationary impulses are expected until the end of the forecast horizon, owing to weak domestic demand and low wage growth. The forecast assumes full pass-through of the tax increases to prices, whereas the second-round effects on inflation expectations and wages are not expected to be significant. Adjusted inflation excluding fuels will turn slightly positive in the rest of this year and increase further in 2013. By contrast, growth in administered prices and food and fuel prices will slow.

Consistent with the forecast is a decline in market **interest rates** in the next few quarters, followed by a rise in rates in 2014 (see Chart I.4). Low growth in domestic economic activity and wages, reflecting a considerable slowdown in external demand and restrictive domestic fiscal policy, and a low interest rate level abroad are pushing interest rates downwards over the forecast horizon. These anti-inflationary factors are only partly offset by the currently elevated inflation, pressures from import prices and the outlook for administered prices at the start of the forecast horizon. Interest rates do not react to the temporary rise in headline inflation above the target caused by the first-round effects of the changes to indirect taxes. The forecast expects the **koruna-euro exchange rate** to appreciate very slowly (see Chart I.5). In the short term, the exchange rate is affected by the current increased uncertainty stemming from the escalation of the euro area debt crisis. Growth in nominal net exports thanks to an external demand recovery and improved terms of trade will foster appreciation of the koruna in the longer term.

A marked slowdown in external demand and generally subdued domestic demand amid continuing fiscal consolidation will lead to a 0.9% decline in the **Czech economy** this year (see Chart I.6). Net exports will be the only component to make a positive contribution to economic growth; the other components will slow it. Next year, GDP growth will reach 0.8% as external demand gradually recovers. Growth will be fostered by all expenditure components except government consumption. On the **labour market**, the aforementioned economic developments will cause total employment to decrease and the unemployment rate to increase. Total employment will return to growth, albeit insignificant, at the end of 2013. The broadly flat wage growth in the business sector will reflect the contraction of the Czech economy this year and the next. Wage growth will pick up slightly in 2014 as economic activity recovers more significantly. Wages in the non-business sector will be roughly flat.

At its monetary policy meeting on 2 August 2012, the Bank Board decided by a majority vote **to leave interest rates unchanged**. The risks of the new forecast were assessed as being broadly balanced. The adoption of additional fiscal measures in 2014 (beyond those already incorporated in the forecast) is a downside risk. On the other hand, higher world prices of energy and agricultural commodities are an upside risk.

CHART I.4

## INTEREST RATE FORECAST

Consistent with the forecast is a decline in market interest rates in the next few quarters, followed by a rise in rates in 2014 (3M PRIBOR in %)

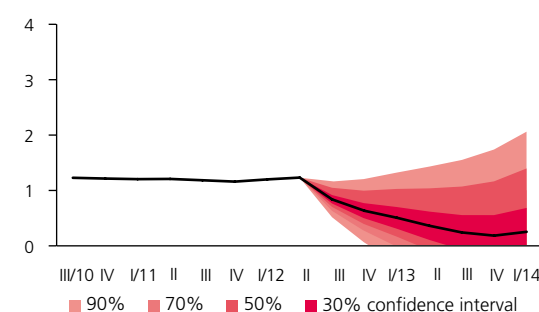


CHART I.5

## EXCHANGE RATE FORECAST

The nominal exchange rate will appreciate very slowly (CZK/EUR)

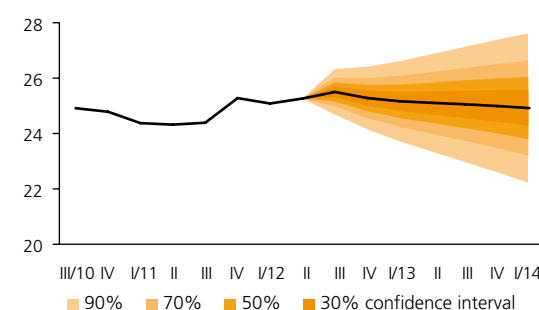


CHART I.6

## GDP GROWTH FORECAST

GDP will decline this year and recover slightly next year (annual percentage changes; seasonally adjusted)

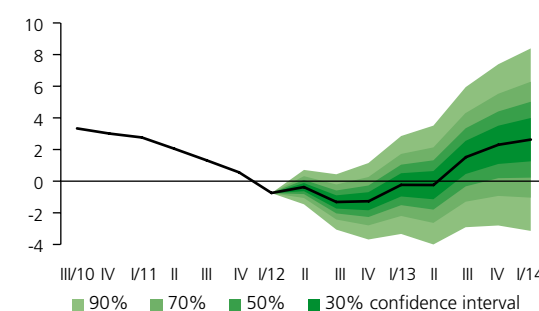
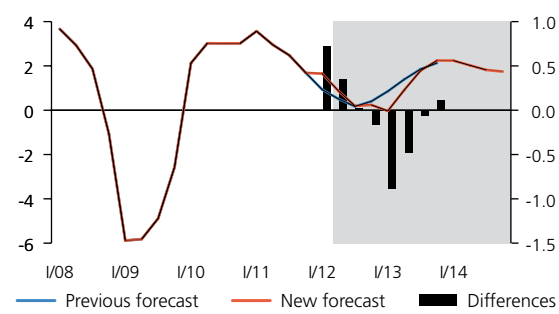


CHART II.1.1

## EFFECTIVE GDP IN THE EURO AREA

Economic growth in the effective euro area is expected to slow sharply in 2012

(annual percentage changes; differences in percentage points – right-hand scale)



## II. THE FORECAST, ITS CHANGES AND RISKS

## II.1 EXTERNAL ASSUMPTIONS OF THE FORECAST

Economic growth in the effective euro area will slow sharply this year but is expected to recover in the next two years. A decline in industrial commodity prices and a downturn in economic activity are reflected in the outlook for slowing annual producer price inflation. Consumer price inflation will also decrease owing to the above factors, although rising indirect taxes will act in the opposite direction. The 3M EURIBOR path expected by the market reflects the lowering of the ECB's refinancing and discount rates in July in reaction to the escalating debt crisis and slowing economic growth in the euro area, and is lower than in the previous forecast. Continuing nervousness on the financial markets shifts the outlook for the dollar-euro exchange rate towards the current significantly weakened values of the euro. The price of Brent crude oil is expected to follow a gradual downward trend from a much lower initial level than in the previous forecast.

The **outlook for the effective indicator of euro area GDP** foresees a sharp slowdown in economic growth to 0.7% this year, i.e. 2 percentage points lower than in 2011 (see Chart II.1.1).<sup>2</sup> Continued fiscal consolidation will significantly dampen domestic demand in individual member countries. By contrast, higher price competitiveness of export-oriented economies as a result of a weaker euro should act against a slowdown in economic activity. A renewed pick-up in economic growth in the effective euro area is expected in 2013, when the rate of growth should reach 1.2%. A further rise to 2% is foreseen for 2014. Given the continuing debt crisis, the risks to economic growth in the euro area for this year and the next remain tilted to the downside.

A decline in prices of industrial commodities accompanied by a slowdown in economic activity is reflected in the outlook for the **effective indicator of producer prices in the euro area** (see Chart II.1.2). The outlook for this year is 2.4%, down by 3.6 percentage points from 2011. The effect of lower prices of industrial inputs compared to the previous forecast is most apparent in late 2012/early 2013. Industrial producer price inflation in the euro area is expected to average 1.9% next year and rise to 2.3% in 2014.

Despite the expected sizeable downturn in economic activity, the outlook for growth in the **effective indicator of consumer prices in the euro area** this year is just 0.2 percentage points lower than the actual figure for 2011, i.e. 2.5% (see Chart II.1.3). The effect of

CHART II.1.2

## EFFECTIVE PPI IN THE EURO AREA

Producer price inflation will fall owing to subdued economic activity and lower prices of industrial commodities

(annual percentage changes; differences in percentage points – right-hand scale)

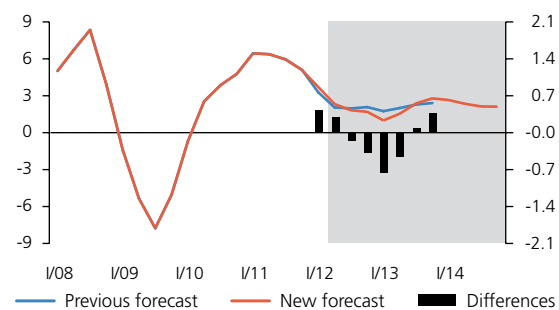
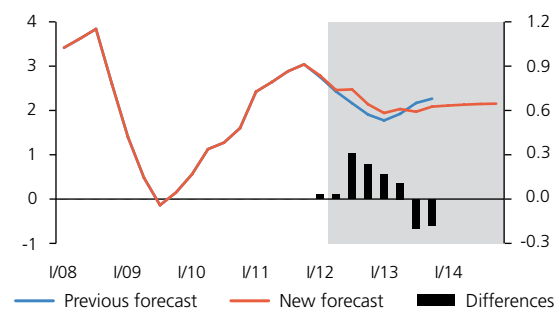


CHART II.1.3

## EFFECTIVE CPI IN THE EURO AREA

Effective inflation should decrease towards 2% in the coming two years

(annual percentage changes; differences in percentage points – right-hand scale)



2 The outlooks for euro area GDP, PPI and CPI and the dollar-euro exchange rate are based on the July Consensus Forecasts (CF). The outlooks for the 3M EURIBOR and Brent crude oil are derived from prices of market contracts as of 9 July 2012. The outlook is indicated by the grey areas in the charts. This convention is used throughout this Report.

subdued demand is offset by rising indirect taxes. The forecast for consumer price inflation in 2012 also reflects high fuel prices in the first half of the year, the recent increase in agricultural commodity prices and the continuing depreciation of the euro. The outlook for consumer price inflation in the effective euro area next year remains at 2%. In 2014, inflation is expected to increase slightly to 2.1%.

The expected **3M EURIBOR** path reflects the lowering of the ECB's refinancing rate from 1% to 0.75% and the discount rate from 0.25% to zero (on 5 July). The ECB thus reacted to the deepening debt crisis in the euro area, the clear downturn in economic activity and the subsiding inflation pressures. The market outlook has therefore shifted downwards over the entire forecast horizon (see Chart II.1.4). Compared to the previous year, 3M EURIBOR rates are expected to fall by 0.7 percentage point to 0.7% on average this year. Foreign rates should stay below this level until the end of 2014. CF analysts expect the 3M EURIBOR rate to be at 0.7% in mid-2013, a figure 0.2 percentage point higher than the market outlook for this period.

The outlook for the **euro-dollar exchange rate** reflects continuing nervousness on the financial markets linked with the escalation of the euro area debt crisis (see Chart II.1.5), which has affected the dollar-euro rate in recent months. The forecast thus expects the average value of the euro to depreciate from USD 1.39 to USD 1.27 this year. The euro is expected to stay at weaker levels in 2013 and 2014 (USD 1.24 and USD 1.25 respectively). The risks going forward are still on both sides. A further escalation of the euro area debt crisis could foster a weaker euro, whereas the dollar could depreciate in the event of lower growth of the US economy or another round of quantitative easing by the Fed.

The outlook for the **Brent crude oil price** based on market futures reflects the decline observed in past months (see Chart II.1.6). The average price of Brent crude oil should thus be USD 106 a barrel this year. The gradual downward path of expected prices based on the current relatively low level means a further decline in the average price to USD 96 a barrel in 2013 and USD 94 a barrel in 2014. Compared to the previous forecast, this means a downward revision of about 14% over the entire forecast horizon. The marked lowering of the outlook reflects the recent fall in oil prices, caused mainly by expected slower growth of the world economy, the stronger exchange rate of the dollar and the escalation of the euro area debt crisis amid a temporary decrease in tensions in the Middle East. The downward revision of the Brent crude oil price path according to market outlooks is also in line with the expectations of CF analysts, who reduced their expectations of the price of WTI oil by 12% to USD 95 a barrel at the one-year horizon.

CHART II.1.4

**3M EURIBOR**

**The further easing of ECB monetary policy and downturn in economic activity are reflected in a very low interest rate outlook**

(in %; differences in percentage points – right-hand scale)

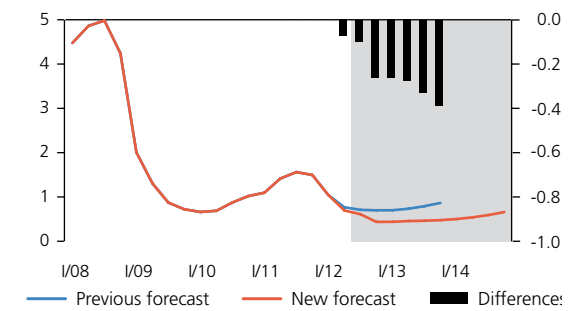


CHART II.1.5

**EURO-DOLLAR EXCHANGE RATE**

**The euro-dollar exchange rate is expected to stay close to its current weakened values over the entire forecast horizon**

(USD/EUR; differences in % – right-hand scale)

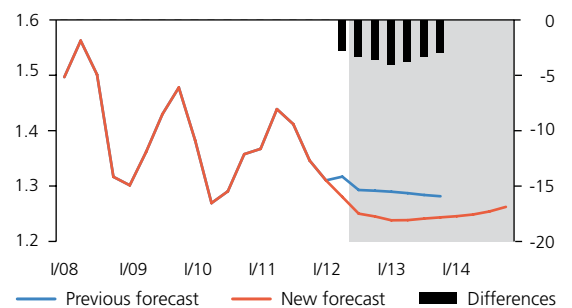


CHART II.1.6

**PRICE OF BRENT CRUDE OIL**

**The market outlook lies below USD 100 a barrel over the entire forecast horizon**

(USD/barrel; differences in % – right-hand scale)

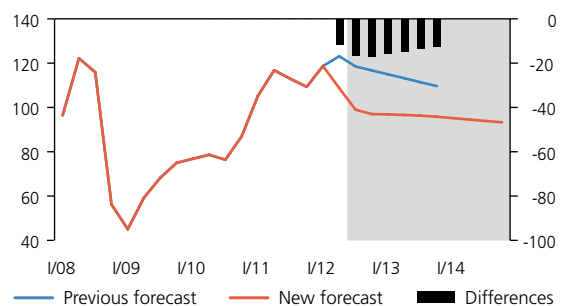


CHART II.2.1

## HEADLINE INFLATION AND MONETARY-POLICY RELEVANT INFLATION

Headline inflation will fall to the CNB's target in late 2012/early 2013, while monetary-policy relevant inflation will decline below the target and remain there at the monetary policy horizon

(annual percentage changes)

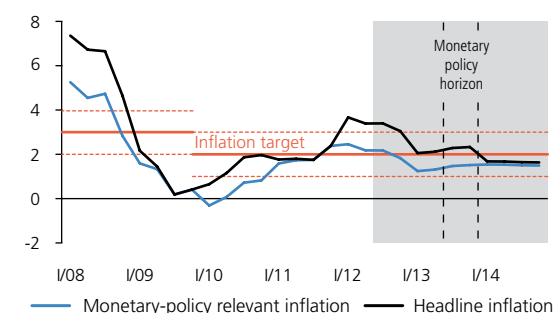


CHART II.2.2

## ADMINISTERED PRICES AND FUEL PRICES

Administered price inflation will slow, while fuel prices will fall temporarily in year-on-year terms

(annual percentage changes; fuel prices excluding first-round effects of indirect tax changes)

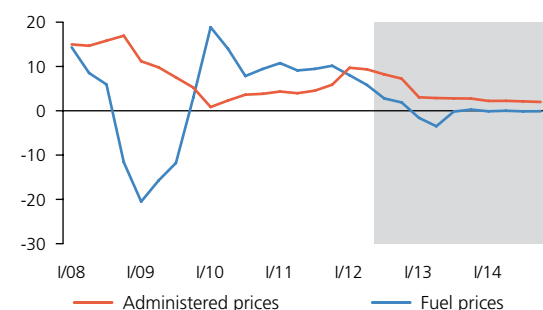


TABLE II.2.1

## FORECAST OF ADMINISTRATIVE EFFECTS

The growth of administered prices will be due mainly to rising energy prices

(annual percentage changes; impacts in percentage points)

|   | 2011   |      | 2012     |      | 2013     |      | 2014     |      |
|---|--------|------|----------|------|----------|------|----------|------|
|   | actual |      | forecast |      | forecast |      | forecast |      |
| Administered prices – total <sup>a)</sup>                     | 7.0    | 1.22 | 6.2      | 1.17 | 2.7      | 0.51 | 2.0      | 0.37 |
| of which (main changes):                                      |        |      |          |      |          |      |          |      |
| regulated rents   | 7.7    | 0.12 | 12.0     | 0.14 | 5.0      | 0.06 | 2.0      | 0.02 |
| electricity   | 4.8    | 0.17 | 4.2      | 0.18 | 3.3      | 0.15 | 2.0      | 0.09 |
| natural gas   | 22.2   | 0.55 | 3.4      | 0.10 | 1.0      | 0.03 | 1.8      | 0.05 |
| heat  | 1.9    | 0.05 | 8.5      | 0.18 | 2.9      | 0.06 | 2.0      | 0.04 |
| healthcare  | 7.0    | 0.15 | 8.0      | 0.14 | 2.6      | 0.05 | 2.0      | 0.04 |
| First-round impacts of tax changes in non-administered prices |        | 0.00 |          | 0.99 |          | 0.70 |          | 0.14 |

a) Including effects of indirect tax changes

## II.2 THE FORECAST

Headline inflation was 3.4% and monetary-policy relevant inflation 2.2% on average in 2012 Q2. Tax changes, commodity prices and the gradual pass-through of the past weaker exchange rate to prices are the sources of inflation. Negative adjusted inflation excluding fuels reflects the anti-inflationary effect of the domestic economy. Headline inflation will fall to the CNB's target in late 2012/early 2013 and monetary policy-relevant inflation will decline below the target. Owing to tax changes, headline inflation will be slightly above the inflation target at the monetary policy horizon and monetary-policy relevant inflation will stay in the lower half of the tolerance band. The inflationary effect of import prices will weaken in the near future. Anti-inflationary pressures from the domestic economy will fade out at the start of next year. A marked slowdown in external demand and generally subdued domestic demand amid continuing fiscal consolidation will lead to a 0.9% decline in GDP this year. Next year, in connection with a gradual external demand recovery, GDP growth will reach 0.8%. Consistent with the forecast is a decline in market interest rates in the next few quarters, followed by a rise in rates in 2014.

Annual **headline inflation** was 3.4% on average in 2012 Q2. Monetary-policy relevant inflation, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, stood at 2.2% in the same period, i.e. slightly above the target. Headline inflation will fall to the target in late 2012/early 2013 and monetary policy-relevant inflation will decline below the target (see Chart II.2.1). Headline inflation will be slightly above the inflation target next year due to an increase in both VAT rates by 1 percentage point, and will fall slightly below the target after the tax effect drops out in early 2014. Monetary-policy relevant inflation will be in the lower half of the tolerance band throughout next year, i.e. at the monetary policy horizon, owing to the disappearance of the current cost pressures and the generally subdued economic activity.

Annual **administered price inflation** fell to 9.4% on average in 2012 Q2. The forecast expects it to continue moderating gradually until the end of this year, partly due to base effects (see Chart II.2.2). Administered price inflation will slow markedly in early 2013, mainly because of lower growth in prices of energy for households, regulated rents and prices in transport and health care (see Table II.2.1). In connection with an expected strong decline in global natural gas prices, the forecast expects a year-on-year fall in prices of gas for households in the first half of next year. On the other hand, electricity prices will be affected by the announced reduction of state support for renewable sources. In January 2013, administered prices will also be affected by a VAT increase. Annual administered price inflation will thus be around 3% overall in 2013.

Changes to **indirect taxes** contributed about 1.2 percentage points to annual consumer price inflation on average in 2012 Q2. The impact of the increase in the reduced VAT rate from 10% to 14% in

January this year was about 1.1 percentage point. A “harmonisation increase” in excise duties on cigarettes, with a contribution to inflation of 0.1 percentage point, took place at the same time. Owing to frontloading, this measure affected cigarette prices with a lag, mostly during Q2. The forecast assumes an increase in both VAT rates by one percentage point as of January 2013. The overall first-round effect of this change will be about 0.7 percentage point. At the same time, excise duties on cigarettes will see another “harmonisation increase” with a contribution to inflation of around 0.1 percentage point. A similar change in excise duties is also expected for January 2014. The forecast assumes full pass-through of the above changes to the respective prices, whereas the second-round effects on inflation expectations and wages are not expected to be significant.

Annual **net inflation** slowed further to 1% on average in 2012 Q2 (see Chart II.2.3). All its components recorded a slowdown except for adjusted inflation excluding fuels, which turned less negative. Net inflation will remain broadly stable on average in the coming period, as rising adjusted inflation excluding fuels on the one hand and a gradual moderation of annual food and fuel price inflation on the other hand will offset each other. The effect of fading domestic anti-inflationary pressures, together with a renewed pick-up in import prices, will predominate only in 2013 H2. Net inflation will thus rise to about 1.4% and stay there in 2014.

Annual **adjusted inflation excluding fuels** shifted to less negative values again in 2012 Q2 (see Chart II.2.3). The depreciation of the koruna, fostering significant growth in import prices, was largely offset by weak domestic economic activity, which kept sellers' margins and domestic cost pressures at low levels. The forecast expects adjusted inflation excluding fuels to turn slightly positive in the rest of this year. It will continue to increase steadily in 2013 to around 1.3%, where it will remain in 2014. This will reflect fading anti-inflationary pressures from the domestic economy, a gradual recovery in sellers' margins and later also a modest rise in inflation pressures from import prices.

Annual **food price inflation** (excluding the first-round effects of tax changes) fell to 2.5% on average in 2012 Q2, owing, among other things, to base effects and a partial reversal of the previous surge in egg prices. Annual food price inflation will rise slightly above 3% in the period ahead and then slow gradually to below 2% in 2013 H2 (see Chart II.2.4). This trend will reflect initially the decline in agricultural producer prices observed in the first half of this year and, in the longer term, their renewed annual growth. In 2014, food prices will rise by around 2%.

Annual **fuel price inflation** slowed considerably in 2012 Q2 owing to a decline in world oil prices, although this decline was partly offset by sizeable annual depreciation of the koruna-dollar exchange rate. The forecast assumes a further slight decline in annual growth in fuel prices and a switch to an annual decline at the start of next year. Given the expected continued fall in oil prices on world markets, fuel price

CHART II.2.3

## NET INFLATION AND ADJUSTED INFLATION EXCLUDING FUELS

**Adjusted inflation excluding fuels will increase steadily**  
(annual percentage changes)

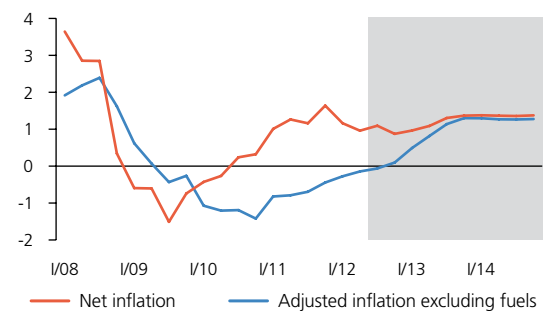


CHART II.2.4

## FOOD PRICES AND AGRICULTURAL PRODUCER PRICES

**Food price inflation will slow slightly, despite renewed growth in agricultural producer prices**  
(annual percentage changes)

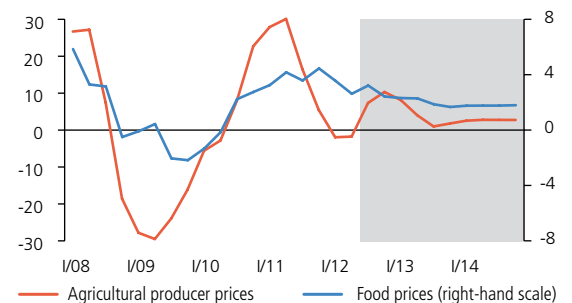


CHART II.2.5

## FUEL PRICES AND OIL PRICES

**The falling outlook for oil prices will result in a temporary decline in fuel prices next year**  
(annual percentage changes)

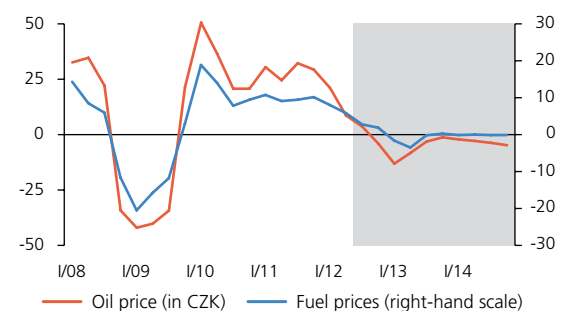
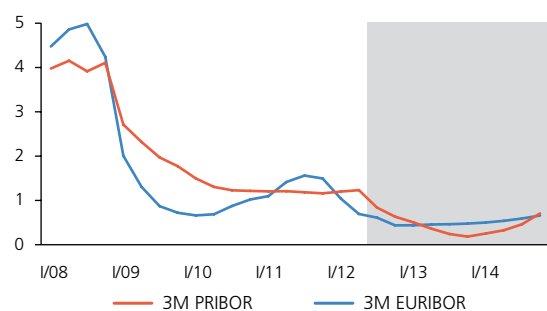


CHART II.2.6

## INTEREST RATE FORECAST

Consistent with the forecast is a decline in market interest rates in the next few quarters, followed by a rise in rates in 2014

(3M PRIBOR and 3M EURIBOR in %)



inflation will decline to about -4% during 2013 (see Chart II.2.5). The assumed stabilisation of prices on the world oil market, together with very slow appreciation of the koruna-dollar exchange rate, will then result in broadly flat fuel prices in 2014.

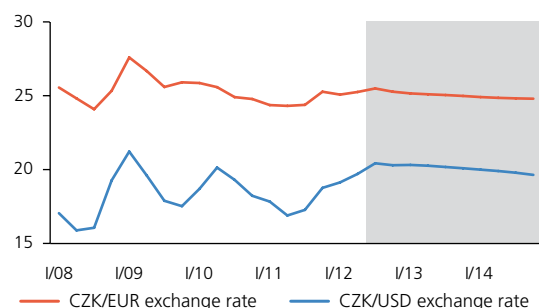
**Interest rates** on the Czech money market were flat in 2012 Q2, decreasing only at the end of the quarter after the repo rate was lowered. Rates with maturities longer than one year were mostly decreasing. Consistent with the forecast is a decline in market interest rates in the next few quarters, followed by a rise in rates in 2014 (see Chart II.2.6). Low growth in domestic economic activity and wages, reflecting a considerable slowdown in external demand and restrictive domestic fiscal policy, and a low interest rate level abroad are pushing interest rates downwards over the forecast horizon. These anti-inflationary factors are only partly offset by the currently elevated inflation, pressures from import prices and the outlook for administered prices at the start of the forecast horizon. Interest rates do not react to the temporary rise in headline inflation above the target caused by the first-round effects of the changes to indirect taxes, to which the escape clause mechanism applies as usual.

CHART II.2.7

## EXCHANGE RATE FORECAST

The nominal exchange rate of the koruna against the euro is appreciating very gradually over the forecast horizon

(CZK/EUR and CZK/USD)



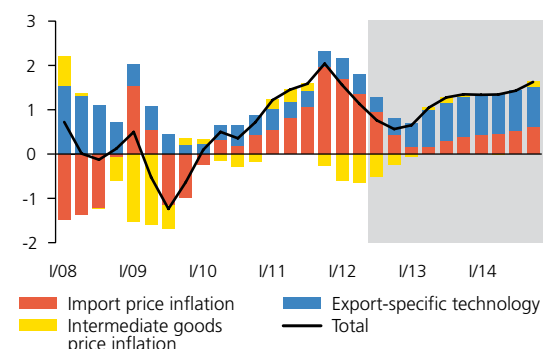
The exchange rate of the **koruna against the euro** depreciated in 2012 Q2. The current increased uncertainty stemming from the escalation of the euro area debt crisis is also affecting the short-term exchange rate forecast for 2012 Q3, which is set at an average level of CZK 25.5/EUR (see Chart II.2.7). The forecast expects the exchange rate to appreciate very slowly in the longer term, aided by growth in nominal net exports thanks to an external demand recovery and improved terms of trade. In light of the outlook for a roughly stable exchange rate of the euro against the dollar according to CF (see section II.1), this also implies an outlook for very slow appreciation of the koruna-dollar exchange rate.

CHART II.2.8

## COSTS IN THE CONSUMER SECTOR

Inflation pressures will ease significantly in the near future as the inflationary effect of import prices decreases

(quarterly percentage changes; contributions in percentage points; annualised)



Quarterly growth in **nominal marginal costs in the consumer goods sector** decreased in 2012 Q2. Import prices remain inflationary as a result of the past exchange rate depreciation and rising world prices of commodities, although their effect is gradually weakening (see Chart II.2.8). By contrast, pressures from the domestic economy, approximated by intermediate goods price inflation, are anti-inflationary owing to persisting weak domestic demand and still relatively low wage growth adjusted for one-off effects (see section III.4). The estimated evolution of export-specific technology is linked to the persisting difference in the evolution of prices of tradables and non-tradables (the Balassa-Samuelson effect), which for some time now has been contributing less markedly to inflation than in the pre-crisis period.

The overall upward pressures on prices in the consumer sector will moderate in the quarters ahead. The inflationary effect of import prices will weaken further in the second half of this year and will temporarily almost disappear in 2013 H1 owing to a moderation of inflation abroad and renewed gradual exchange rate appreciation. The anti-inflationary effect of the domestic economy will fade out



in early 2013, but no major inflationary pressures will emerge in the domestic economy until the end of the forecast horizon. The gradual return of export-specific technology growth to its long-run level reflects the assumption of trend appreciation of the equilibrium real exchange rate.

**Nominal marginal costs in the intermediate goods sector** continued to fall in 2012 Q2, although the decline slowed somewhat. Nominal wage growth in the business sector adjusted for one-off effects remained relatively low and was partly offset by continuing – albeit slow – growth in labour-augmenting technology. In addition, the estimated price of capital continued to decrease (see Chart II.2.9), reflecting subdued economic activity and weak investment activity. Domestic cost pressures will remain subdued at the forecast horizon thanks to low wage growth, which will pick up slightly but will be largely founded on labour-augmenting technology growth. The negative contribution of the price of capital to the rise in costs, reflecting weak external demand and low capital goods prices, will abate gradually at the forecast horizon.

The estimated gap in **profit mark-ups in the consumer goods sector** stayed negative in 2012 Q2, as cost pressures from import prices outweighed the effect of higher consumer prices (see Chart II.2.10). The forecast assumes a negative gap until mid-2013, as weak demand coupled with generally subdued economic activity will prevent any rapid recovery in margins. Together with a gradual recovery in economic activity abroad and domestic demand, margins should return to their long-term levels in 2013 H2.

Whole-economy **labour productivity** fell slightly further in 2012 Q2. In the second half of this year, its rate of decline will increase to about -1%. After stagnating in early 2013, productivity growth will recover thanks to renewed growth in economic activity together with an only gradual increase in employment. It will reach 2.5% at the start of 2014 and will stay close to this level for the whole of 2014.<sup>3</sup>

Annual growth in the average nominal **wage in the business sector** was broadly flat (after seasonal adjustment) at 3.2%<sup>4</sup> in 2012 Q1 and was partially increased by one-off effects. Wages in the business sector maintained the same growth rate in 2012 Q2; this short-term prediction takes into account the relatively high wage growth in industry observed in May 2012. Following a slight slowdown in the next few quarters, wage growth will start to pick up gradually in 2013 Q3 as economic activity recovers. Wage growth will reach 4% at the end of the forecast horizon. The average wage in the business sector will rise by just over 3% in 2012 as a whole and in 2013, and accelerate to 3.8% in 2014 (see Chart II.2.11).

3 Labour productivity will thus decrease by 0.7% on average this year and switch to growth of 1.1% in 2013, rising to 2.4% in 2014.

4 Without seasonal adjustment, the average wage increased by 3.6%.

CHART II.2.9

#### COSTS IN THE INTERMEDIATE GOODS SECTOR

**Gradually accelerating wages will be offset by growth in labour productivity and a low price of capital**

(quarterly percentage changes; contributions in percentage points; annualised)

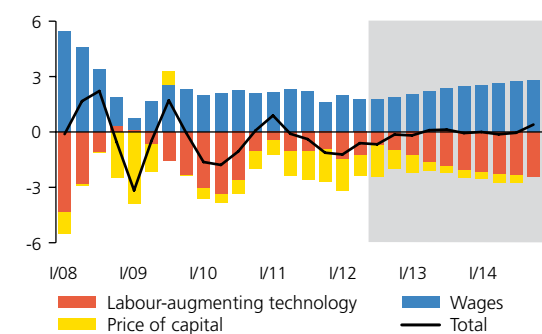


CHART II.2.10

#### GAP IN PROFIT MARK-UPS IN THE CONSUMER SECTOR

**The gap in profit mark-ups will be negative until mid-2013**

(percentages)

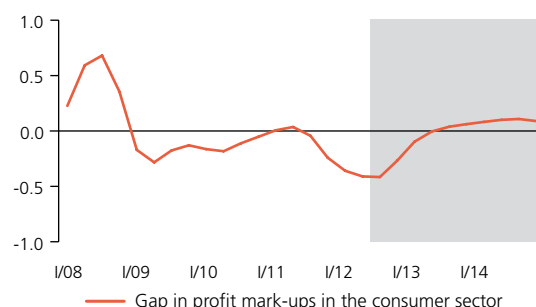


CHART II.2.11

#### AVERAGE NOMINAL WAGE

**Wage growth in the business sector will start to pick up gradually in 2013 H2, while wages in the non-business sector will be virtually flat**

(annual percentage changes; business sector – seasonally adjusted; non-business sector – seasonally unadjusted)

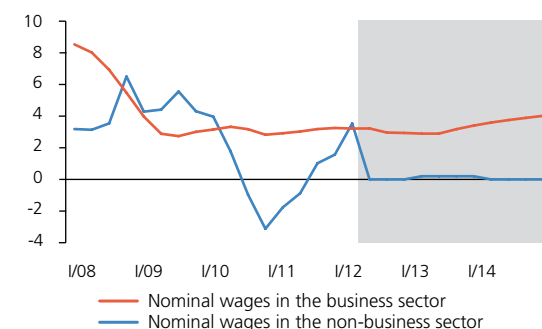
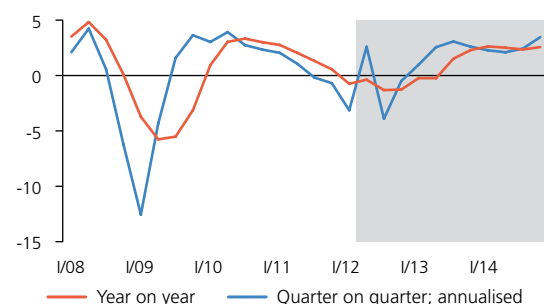


CHART II.2.12

## GDP GROWTH FORECAST

## GDP will decline this year

(percentage changes; seasonally adjusted)



Continuing consolidation of public budgets will affect the nominal average **wage in the non-business sector**. The forecast expects government austerity measures to be reflected in a flat average wage in the remainder of the year, implying average wage growth of 0.8% for the whole of 2012. In 2013, the average wage in the non-business sector will rise by around 0.2% due to wage growth in certain professions.<sup>5</sup> The forecast assumes flat nominal wages in 2014 as a result of continued fiscal consolidation.

**Real GDP** recorded a year-on-year decline of 0.7% and a quarter-on-quarter decline of 0.8% in 2012 Q1 (see Chart II.2.12). The decline was due to most components of demand, household consumption and inventories in particular. Net exports were the only component to make a significantly positive contribution.

The forecast expects **economic activity in 2012 Q2** to drop by 0.4% year on year (see Chart II.2.13). The short-term forecast for household consumption partly offsets the unexpectedly marked decline in 2012 Q1, expecting a fall of 1.7%, although this means an increase in quarter-on-quarter terms. Government investment and consumption probably contributed negatively to GDP growth. Therefore, only net exports will record a continuing positive contribution to economic activity in year-on-year terms.

Real GDP will decrease by 0.9% overall in **2012**, with all expenditure components except net exports declining. Falling real household consumption will be affected by the increase in the reduced VAT rate introduced in January 2012 coupled with weak growth in nominal disposable income, reflecting subdued growth in wages and salaries. Government real consumption will edge down because of continuing austerity measures. The decline in investment reflects the developments observed in 2012 Q1 combined with weak external demand and generally low economic activity. Despite low growth in external demand, net exports will make a positive contribution to growth in economic activity, partly because of subdued domestic demand in its import-extensive components (consumption and investment).

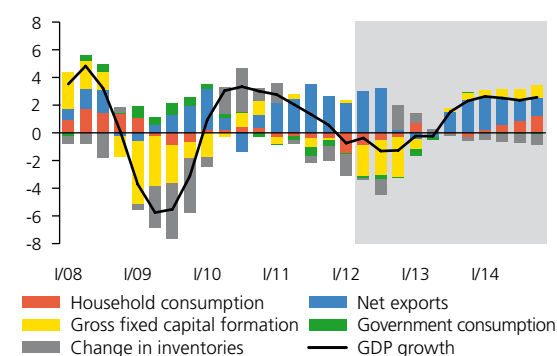
In **2013**, GDP will increase by 0.8%. In addition to a low but gradually recovering outlook for effective external GDP and still subdued domestic demand, growth in economic activity will be affected by fiscal consolidation measures. They will primarily affect household consumption, which will grow only slightly next year. Investment will also grow next year as a result of a slight increase in external demand and investment growth in the government sector. The contribution of net exports will remain positive overall. Government consumption will be the only component to make a negative contribution to GDP growth in 2013.

CHART II.2.13

## ANNUAL GDP GROWTH STRUCTURE

## Only net exports will contribute positively to GDP growth in 2012, while domestic demand will decrease

(annual percentage changes; contributions in percentage points; seasonally adjusted)



<sup>5</sup> Government officials and judges.



GDP will grow by 2.5% in **2014** after the previous years' dampening effects subside. The forecast assumes a continuing recovery in external demand and a less restrictive effect of fiscal policy. Household consumption will start to rise again and the contribution of net exports will also increase. Growth in investment activity will be only slightly higher than in 2013. Real government consumption will again be the only component to make a negative contribution to GDP growth.

**Total employment** recorded a weak year-on-year increase in 2012 Q1. However, it will return to a decline in Q2 owing to a continued contraction of economic activity. Total employment will start to edge up again at the start of 2014 as the economy recovers (see Chart II.2.14).<sup>6</sup> Employment in the non-business sector will edge down in 2012 and will then be flat. In the private sector, the number of entrepreneurs will continue to rise in the near future, while the number of employees will decline. As from 2014, by contrast, the number of entrepreneurs will drop and the number of employees will rise.

The forecast assumes that the seasonally adjusted **general unemployment rate** edged up to 7% in 2012 Q2. The unemployment rate will gradually increase this year owing to a decline in total employment and growth in the labour force, reaching 7.4% at the end of the year (see Chart II.2.14). Given an only slight recovery in economic activity in 2013, the unemployment rate will be broadly flat. It will fall more significantly in 2014, when employment will increase and the labour force will decline for demographic reasons. Similar developments can be expected in the seasonally adjusted **total registered unemployment rate**, which will gradually increase to 9% at the end of 2012. Next year, it will come down from this level only marginally.

Having dropped in 2011 and especially in 2012 Q1, real **household consumption** will remain subdued in the remainder of this year and in 2013 (see Chart II.2.15). The overall decline in real household consumption this year (of 1.5%) will reflect weak nominal disposable income growth linked with subdued labour market developments. Real consumption will also be hindered by higher inflation, mainly as a result of this year's VAT increase. Subdued consumer demand is also indicated by the available leading indicators, such as a low consumer confidence indicator and a decline in retail sales (see section III.3). Household consumption will rise slightly in 2013 in a situation of gradually accelerating nominal wage growth and a sharp slowdown in inflation (despite a further VAT increase). The growth rate of consumption will continue to rise in 2014 as a result of a continued recovery in economic activity and a resulting further pick-up in growth in the volume of wages amid a further pronounced decline in inflation.

CHART II.2.14

## LABOUR MARKET FORECAST

**Total employment will fall until end-2013, and the unemployment rate will rise**

(annual percentage changes in employment; general unemployment rate in percentages; seasonally adjusted)

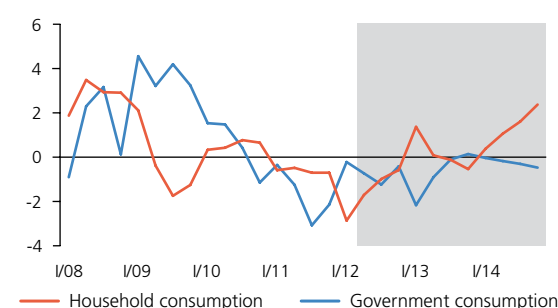


CHART II.2.15

## REAL HOUSEHOLD AND GOVERNMENT CONSUMPTION

**Household consumption will recover in 2014, while government consumption will mostly fall**

(annual percentage changes; seasonally adjusted)



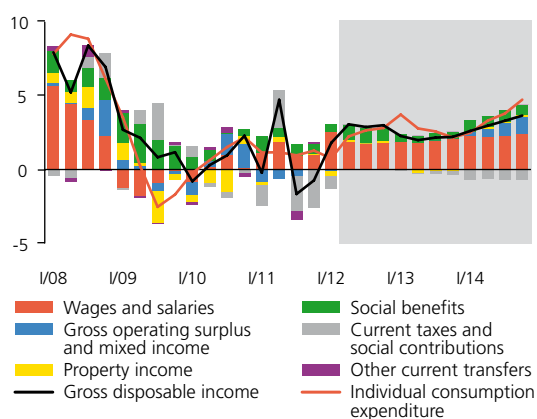
<sup>6</sup> Total employment will fall by 0.2% this year and the next and switch to modest growth of 0.2% in 2014.

CHART II.2.16

## NOMINAL DISPOSABLE INCOME

Disposable income will rise steadily owing to rising wages and salaries and social benefits

(annual percentage changes; contributions in percentage points)



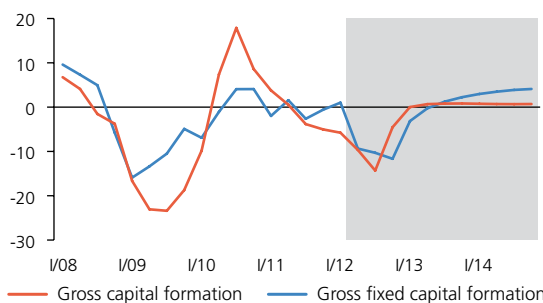
The subdued nominal household consumption over the forecast horizon can be largely associated with subdued growth in **gross disposable income**. Its growth should be flat until the end of this year. The most important component of disposable income, i.e. the volume of wages and salaries, will increase at a broadly stable rate in the near future, but its growth rate will start to rise gradually next year in connection with the gradual economic recovery and the labour market developments described above (see Chart II.2.16). Another significant component of disposable income, social benefits, should also record positive contributions over the entire forecast horizon, but its growth will be hampered as from 2013 by a slower increase in pensions. Social and health insurance premium payments and taxes paid will increase in the second half of 2013 as the labour market situation improves. The contribution of gross operating surplus and mixed income will start to grow in 2014. Overall, gross disposable income will increase by 2.4% and 2.7% in 2013 and 2014 respectively.

CHART II.2.17

## GROSS CAPITAL FORMATION

Gross capital formation will fall sharply in the near future and rise gradually in 2013

(annual percentage changes; seasonally adjusted)



The forecast expects the **saving rate** to fall gradually from its current level of just above 10% over the entire forecast horizon. Its profile will reflect the labour market conditions and subdued growth in disposable income. The forecast for the saving rate also contains the approved pension reform, including the “second pillar” of pension insurance (see Box 1 *Pension system reform* in Inflation Report IV/2011). Savings will be boosted by funds transferred from the pay-as-you-go system to the fund pillar.<sup>7</sup>

Real **government consumption** has been decreasing since the end of 2010 owing to government austerity measures. The forecast expects this trend to continue over almost the entire forecast horizon because of expenditure cuts aimed at meeting government’s budgetary objectives.

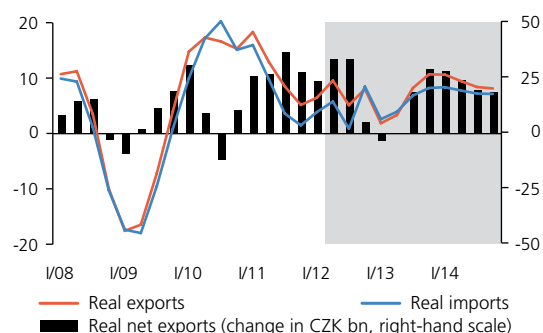
**Gross capital formation** recorded a year-on-year decline of 5.8% in 2012 Q1, due mainly to changes in inventories. Negative annual growth should continue until the end of this year. Fixed investment is expected to rise in 2013 H2, with the contribution of change in inventories turning positive at the end of this year. Replenishment of inventories should be fostered mainly by new orders from abroad, as inventories have recently been used largely for exports. Replenishment of stocks of materials and work in progress in the near future is also indicated by a joint survey conducted by the CNB and the Confederation of Industry. Overall, gross capital formation will fall by 8.7% year on year in 2012. It will increase by 0.6% in 2013 and by 0.7% in 2014 as economic activity gradually recovers (see Chart II.2.17).

CHART II.2.18

## REAL EXPORTS AND IMPORTS

Export and import growth will be mostly moderate until mid-2013, and the contribution of net exports to GDP growth will remain positive over almost the entire horizon

(annual percentage changes; annual changes in CZK billions; seasonally adjusted)



<sup>7</sup> The additional 2% of the assessment base paid into the second pillar will probably be transferred within the framework of household savings. This is a consequence of the assumption of greater take-up among higher-income households.

Year-on-year growth in real **exports of goods and services** picked up in 2012 Q1. However, the expected slowdown in external demand will be reflected in lower quarter-on-quarter export growth until the end of this year. According to the forecast, exports will increase by 7.3% on average in 2012. This partly reflects good trade balance results in 2012 H1. Growth in exports will increase again in 2013 Q2 in line with external demand (see Chart II.2.18).

Real **imports of goods and services** also recorded an increase in growth (to 3.9%), amid faster growth in exports of goods and services in 2012 Q1. Despite a decline in domestic private and government consumption and investment, imports of goods and services will rise by 4.7% on average this year and by 5.4% next year. Growth in imports of goods and services will rise further to 7.6% in 2014, mainly because of a recovery in import-intensive exports.

**Net exports** made a positive contribution to annual GDP growth in 2012 Q1 (2.1 percentage points). The forecast expects positive contributions of net exports over the entire forecast horizon with the exception of 2013 H1. Larger contributions will be recorded by net exports in 2012 (2.1 percentage points on average for the year as a whole). In subsequent years, the contributions will decline (to 0.8 percentage point in 2013 and 1.7 percentage points in 2014) as the domestic components of demand recover.

The balance of payments forecast expects the **current account** deficit to fall quite considerably in 2012 relative to the 2011 outcome and to decline further in 2013 and 2014 (see Table II.2.3). In relative terms, this means a decline in the deficit from 2.9% of GDP in 2011 to 2.1% this year and 1.4% next year. The expected decrease in the current account deficit in 2012 is due to an assumed sizeable increase in the trade surplus. The rising surplus is associated on the one hand with a year-on-year decline in total domestic demand, slowing growth in imports, and on the other hand with a slight increase in external demand, fostering growth in exports. By contrast, unfavourable terms of trade will continue to foster a lower trade surplus in 2012. Owing to an expected decline in commodity prices, the trade surplus will increase again next year. The higher expected trade surplus is also aided by an assumption of a faster recovery in external demand than in domestic demand. The services balance should decline somewhat this year because of fast growth in expenditure on other services (in particular, export-related intermediation services and business, professional and technical services). The overall surplus should rise again in 2013, approximately to the 2011 level, owing to a very moderate improvement in all the sub-balances. The income deficit will widen this year as a result of higher direct investment earnings of non-residents and an increase in net interest expenditure. These two factors will slightly increase the income deficit in 2013, too. Current transfers should remain broadly balanced, since the lower net drawdown of EU funds in 2012 than in 2011 will primarily affect the capital account. It will also be affected by a decline in the prices of, and trading in, emission permits on the European market.

TABLE II.2.2

## FORECASTS OF SELECTED VARIABLES

## Real disposable income will not rise until 2014

(annual percentage changes unless otherwise indicated)

|  | 2011<br>actual | 2012<br>forec. | 2013<br>forec. | 2014<br>forec. |
|--|----------------|----------------|----------------|----------------|
| Real gross disposable income of households         | -1.3           | -1.0           | -0.3           | 0.5            |
| Total employment                                   | 0.3            | -0.2           | -0.2           | 0.2            |
| Unemployment rate (in per cent) <sup>a)</sup>      | 6.8            | 7.1            | 7.3            | 7.0            |
| Labour productivity                                | 1.4            | -0.7           | 1.1            | 2.4            |
| Average nominal wage                               | 2.4            | 2.7            | 2.6            | 3.1            |
| Average nominal wage in business sector            | 2.9            | 3.2            | 3.1            | 3.8            |
| Current account deficit (ratio to GDP in per cent) | -2.9           | -2.1           | -1.4           | -1.1           |
| M2   | 3.4            | 6.4            | 6.2            | 6.0            |

a) ILO methodology, 15–64 years

TABLE II.2.3

## BALANCE OF PAYMENTS FORECAST

## A rising trade surplus will reduce the current account deficit

(CZK billions)

|                                      | 2011<br>actual | 2012<br>forec. | 2013<br>forec. | 2014<br>forec. |
|--------------------------------------|----------------|----------------|----------------|----------------|
| A. CURRENT ACCOUNT                   | -109.1         | -80.0          | -55.0          | -45.0          |
| Trade balance                        | 94.0           | 160.0          | 190.0          | 215.0          |
| Balance of services                  | 66.3           | 60.0           | 65.0           | 70.0           |
| Income balance                       | -271.9         | -300.0         | -310.0         | -330.0         |
| Current transfers                    | 2.5            | 0.0            | 0.0            | 0.0            |
| B. CAPITAL ACCOUNT                   | 14.7           | 8.0            | 23.0           | 18.0           |
| C. FINANCIAL ACCOUNT                 | 90.8           | 80.0           | 60.0           | 30.0           |
| Direct investment                    | 75.2           | 80.0           | 85.0           | 90.0           |
| Portfolio investment                 | 5.8            | 40.0           | 15.0           | -20.0          |
| Financial derivatives                | -3.0           |                |                |                |
| Other investment <sup>a)</sup>       | 9.8            | -40.0          | -40.0          | -40.0          |
| D. ERRORS AND OMISSIONS              | -10.7          |                |                |                |
| E. CHANGE IN RESERVES (- = increase) | -17.2          |                |                |                |

a) forecast excluding operations of banking sector

The current account deficit will be financed by a slight **capital account** surplus (due to drawdown of EU funds and in 2013 also to sales of frequencies for telecommunications) and above all by a **financial account** surplus (due mainly to net inflows of direct and portfolio investment). The net inflow of direct investment will be slightly higher in 2012 and 2013 than in 2011 owing to expected growth in reinvested earnings. The net inflow of capital into equity and other capital will be close to zero in both years. The slight improvement in the overall balance in 2013 is due to a lower volume of expected disinvestment in the Czech Republic. In the area of portfolio investment, foreign issues of government bonds and bonds of state-controlled companies are the main factor of the expected year-on-year increase in the net capital inflow this year. The forecast expects a slightly higher net outflow of capital for the other items. The lower portfolio investment balance in 2013 is due mainly to an assumption of lower drawdown of foreign funds by the government (around EUR 1 billion).

TABLE II.2.4

## FISCAL FORECAST

The deficit-to-GDP ratio will decrease further in 2013 and 2014 as fiscal consolidation continues

(% of nominal GDP)

|   | 2011<br>actual | 2012<br>forec.     | 2013<br>forec. | 2014<br>forec. |
|---|----------------|--------------------|----------------|----------------|
| Government revenue                              | 40.3           | 40.4               | 41.2           | 41.2           |
| Government expenditure                          | 43.4           | 43.7               | 43.6           | 43.1           |
| of which:                                       |                |                    |                |                |
| interest payments                               | 1.4            | 1.5                | 1.5            | 1.6            |
| GOVERNMENT BUDGET BALANCE                       | -3.1           | -3.3 <sup>f)</sup> | -2.4           | -1.9           |
| of which:                                       |                |                    |                |                |
| primary balance <sup>a)</sup>                   | -1.7           | -1.7               | -0.8           | -0.3           |
| one-off measures <sup>b)</sup>                  | -0.2           | 0.0 <sup>f)</sup>  | -0.3           | -0.4           |
| ADJUSTED BUDGET BALANCE <sup>c)</sup>           | -2.9           | -3.3               | -2.1           | -1.5           |
| Cyclical component (ESCB method) <sup>d)</sup>  | -0.1           | -0.7               | -0.9           | -0.7           |
| Structural balance (ESCB method) <sup>d)</sup>  | -2.8           | -2.6               | -1.2           | -0.8           |
| Fiscal stance in pp (ESCB method) <sup>e)</sup> | 1.9            | 0.2                | 1.4            | 0.4            |
| Cyclical component (EC method) <sup>d)</sup>    | 0.0            | -0.6               | -0.5           | 0.1            |
| Structural balance (EC method) <sup>d)</sup>    | -2.9           | -2.7               | -1.5           | -1.6           |
| Fiscal stance in pp (EC method) <sup>e)</sup>   | 1.5            | 0.2                | 1.1            | -0.1           |
| Government debt                                 | 41.2           | 43.9               | 45.0           | 45.0           |

a) government budget balance minus interest payments

b) Impact of the pension reform included for economic reasons in 2013 and 2014.

c) Adjusted for one-off measures; CNB estimate.

d) CNB estimate

e) Year-on-year change in structural balance (positive value indicates fiscal restriction, negative value fiscal expansion).

f) If property settlement with churches comes into force in 2012, it will have a one-off negative impact on the government budget balance of 1.5% of GDP.

The future macroeconomic developments described above are reflected in the **government finance** outlook for 2012–2014 (see Table II.2.4). The fiscal forecast takes into account the increase in the reduced VAT rate from 10% to 14% at the start of 2012 and increases in the two VAT rates of 1 percentage point, i.e. to 15% and 21% respectively, at the start of 2013. The 2013 forecast also incorporates other budget consolidation measures that have been approved by the government and the Chamber of Deputies of the Czech Parliament (these measures formed part of the alternative scenario in the previous forecast). The forecast also includes the effect of the pension reform to be launched in 2013.

The forecast for **2012** expects a slight increase in the general government deficit to 3.3% of GDP, due mainly to weak collection of indirect taxes connected with subdued domestic demand and overall economic activity. Moreover, the forecast expects broadly flat government investment, reflecting problems with the drawdown of money from European funds. The effect of fiscal policy will be restrictive this year, with an estimated impact on real GDP growth of around -0.3 percentage point.

The government deficit should fall to 2.4% of GDP in **2013** owing to consolidation measures of almost 1.3% of GDP.<sup>8</sup> A rise of 1 percentage point in both VAT rates, a lower increase in pensions, stagnation of salaries of government sector employees and restriction of flat-rate expenditure allowances for the self-employed will be the biggest contributors to the decrease in the government deficit. The package of restrictive fiscal measures will slow economic growth by about 0.8 percentage point next year. It will affect the economy both through the price effect stemming from the increase in the two VAT rates and through lower nominal disposable income, with

<sup>8</sup> The forecast incorporates measures passed by the Chamber of Deputies of the Czech Parliament and passed on to the Senate.

both factors reducing real household consumption. According to the forecast, real government consumption will also decline next year, while government investment will resume its (relatively sizeable) growth. The forecast also foresees a gradually emerging shortfall of CZK 12 billion in social security revenue in 2013 connected with the launch of the pension reform (for details see Box 1 *Pension system reform* in Inflation Report IV/2011).

In **2014**, the continuing impact of the consolidation measures of 2013 (especially the lower increase in pensions and the expected stagnation of salaries in the government sector), coupled with a recovery in domestic demand and overall economic activity, will lead to a further decline in the general government deficit to 1.9% of GDP. The forecast expects the impact of the partial transfer of pension savings contributions into the second pillar of the pension system to amount to CZK 15 billion in 2014. The effect of fiscal policy on GDP growth in 2014 will be slightly restrictive, at around 0.2 percentage point.

The general government **structural deficit** fell below 3% of GDP in 2011 and a further decline below 2% of GDP in 2014 is expected in connection with the consolidation measures (adjusted for the effect of the pension reform). The expected evolution of the general government deficit will cause general government debt to stabilise at 45% of GDP in 2013–2014.

The definitive approval of the law on church property restitutions represents a **risk to the fiscal forecast** towards a higher deficit in 2012.<sup>9</sup> The additional consolidation measures announced by the Government in April 2012 and subsequently incorporated into this year's update of the Czech Republic's convergence programme, which have yet to be specified in sufficient detail, are a risk in the direction of a lower deficit and more restrictive fiscal policy in 2014. Another risk is the potential non-payment of subsidies from EU funds, which would be reflected in a revision of past government sector finances under ESA 95 methodology and probably also in future government investment or other non-mandatory expenditure.

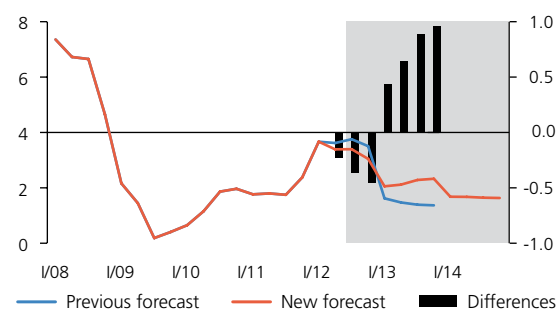
<sup>9</sup> A law relating to property settlement between the state and churches, providing financial compensation to churches of CZK 59 billion in addition to restitutions in kind, was approved by the Chamber of Deputies of the Czech Parliament and passed on to the Senate. The impact of the financial compensation will be taken into account in the forecast following its final approval. In the national account statistics, the admission of churches' claims by the law will be reflected in a one-off increase in the general government deficit of around 1.5% of GDP under ESA 95 methodology. The compensation will be exempted from the calculation of the structural deficit and will not affect the calculation of the fiscal position (and fiscal impulse).

CHART II.3.1

## CHANGE IN THE HEADLINE INFLATION FORECAST

The forecast for headline inflation is lower until the end of this year, but has moved upwards next year as a result of tax changes

(annual percentage changes; differences in pp – right-hand scale)



## II.3 COMPARISON WITH THE PREVIOUS FORECAST

The forecasts for headline and monetary-policy relevant inflation until the end of 2012 have both been reduced by comparison with the previous prediction. The outlooks for net inflation and administered prices have both been revised downwards. In 2013, however, headline inflation is higher as a result of tax changes. The interest rate path is lower in particular in the longer run compared to the previous prediction, owing to a lower outlook for foreign interest rates and the incorporation of fiscal consolidation measures for 2013. The GDP growth rate has been revised downwards, as the new forecast includes the budget consolidation measures for 2013 in addition to the more subdued domestic demand in early 2012. The expected growth rate of nominal wages in the business sector is slightly higher this year, but lower in 2013.

Compared to the previous prediction, the forecast for annual **headline inflation** is lower for 2012 H2 but higher for next year (see Chart II.3.1). The upward revision of headline inflation in 2013 is due to a change in indirect taxes, as the new forecast assumes a rise of 1 percentage point in both VAT rates, whereas the baseline scenario of the previous forecast assumed harmonisation of both rates at 17.5%. The new forecast also assumes an increase in excise duty on cigarettes in 2013, which will also contribute slightly to higher headline inflation. Administered price inflation and net inflation will be lower this year and the next, and the **monetary-policy relevant inflation** forecast has also been lowered.

Expected **administered price inflation** is lower than in the previous forecast, mainly as a result of a marked reduction in the outlook for world prices of natural gas over the entire forecast horizon, which will be only partly offset by a weaker koruna-dollar exchange rate. Lower regulated rents and weaker price growth in health care act in the same direction in 2012. The revised assumptions regarding both VAT rates in 2013 (see above) foster higher prices of electricity and natural gas, which are subject to the basic VAT rate, but on the other hand depress growth in prices of heat, transport and other regulated items subject to the reduced VAT rate. Overall, the effect of the VAT change on administered prices in 2013 is therefore only slightly higher than in the previous forecast. Higher electricity prices will also be fostered by the announced reduction of state support for renewable sources.

Compared to the previous forecast, annual **net inflation** is lower in both 2012 and 2013 (see Chart II.3.2). In 2012 this is due chiefly to lower fuel prices, reflecting a drop in world prices of oil, and to lower adjusted inflation excluding fuels. Compared to the previous forecast, the effect of subdued domestic inflation pressures coupled with a weaker Balassa-Samuelson effect will outweigh the inflationary effect of import prices on net inflation. Moreover, the new forecast expects zero immediate second-round effects of the VAT change next year, whereas the previous forecast had expected positive effects.

CHART II.3.2

## CHANGE IN THE NET INFLATION FORECAST

The forecast for net inflation is lower this year and the next

(annual percentage changes; differences in pp – right-hand scale)

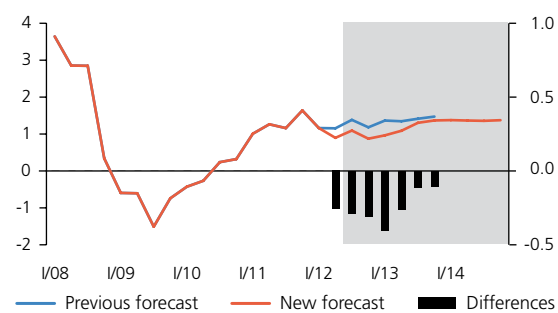
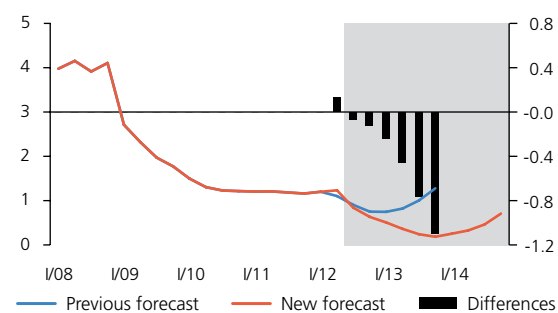


CHART II.3.3

## CHANGE IN THE INTEREST RATE PATH

The market interest rate path has been revised downwards

(3M PRIBOR in %; differences in pp – right-hand scale)





Turning to the **foreign environment**, by comparison with the assumptions of the previous forecast, the 3M EURIBOR path is lower over the entire forecast horizon in response to the continuing euro area debt crisis and the cut in ECB rates (see section II.1). The expected growth rate of external demand is slightly higher in 2012 and lower in 2013. The annual growth rates of foreign producer prices have been revised down until mid-2013 and are slightly higher thereafter.

The forecast for domestic market **interest rates** is lower than in the previous prediction, with the deviation increasing as the horizon lengthens (see Chart II.3.3).<sup>10</sup> Lower rates are being fostered mainly by the foreign environment, which is dominated by a revision of the future path of interest rates in the euro area, and the effect of domestic fiscal policy, which includes negative contributions from government consumption and consolidation measures in 2013. At the start of the forecast horizon, a lower outlook for administered price inflation and the short-term inflation forecast also contribute to lower rates. Counteracting these factors in the direction of higher rates are the initial state, due mainly to a higher growth rate of wages and low investment activity, and the short-term exchange rate forecast (see Chart II.3.4).

The forecast for the nominal **exchange rate of the koruna against the euro** has been revised towards weaker levels over the entire forecast horizon (see Chart II.3.5). This revision is due to the weaker exchange rate observed in 2012 Q2 and the short-term exchange rate prediction for 2012 Q3. In the longer run, the exchange rate appreciates similarly as in the previous forecast, but at a higher level.

The forecast for annual **GDP growth** has been revised downwards (see Chart II.3.6), as the new forecast includes the budget consolidation measures for 2013 in addition to the more subdued domestic demand in early 2012. It is also affected by a revision of the external demand outlook (see above).

The new forecast expects lower growth in **household consumption** in 2012 and 2013. This year, the change is due mainly to markedly slower consumption growth in 2012 Q1. Next year, household consumption will be affected by fiscal consolidation, including a rise of 1 percentage point in both VAT rates. The growth rate of **gross capital formation** is also lower than in the previous prediction, reflecting subdued economic activity and weak investment data for 2012 Q1.

The forecast for **exports and imports** is affected by the high growth rates of foreign trade turnover in 2012 H1. The contribution of net exports to GDP will be higher this year than in the previous forecast, as import growth – unlike export growth – is being dampened by

<sup>10</sup> By comparison with the alternative scenario of the previous forecast, the change in interest rates is negligible until mid-2013.

CHART II.3.4

#### DECOMPOSITION OF CHANGES IN THE INTEREST RATE FORECAST

Lower rates are being fostered mainly by the foreign environment and by fiscal policy  
(3M PRIBOR; percentage points)

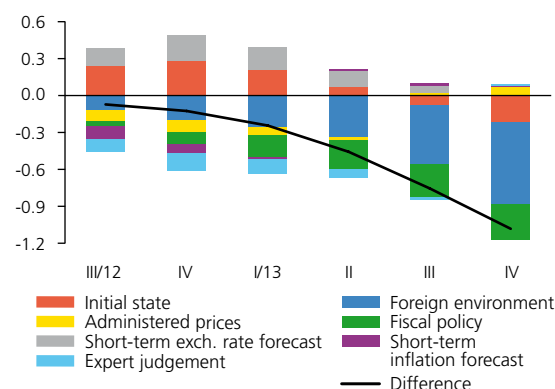


CHART II.3.5

#### CHANGE IN THE EXCHANGE RATE FORECAST

The exchange rate forecast is substantially weaker over the entire forecast horizon  
(CZK/EUR; differences in CZK – right-hand scale)

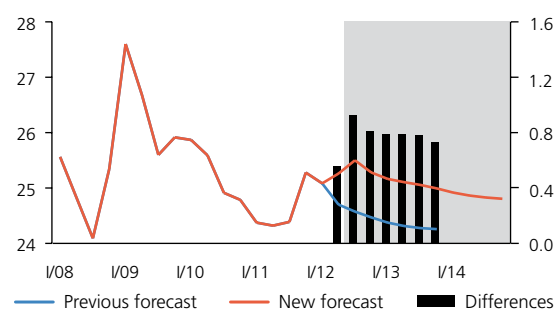


CHART II.3.6

#### CHANGE IN THE GDP FORECAST

The GDP growth forecast has been revised significantly downwards compared to the previous prediction  
(annual percentage changes; differences in pp – right-hand scale; seasonally adjusted)

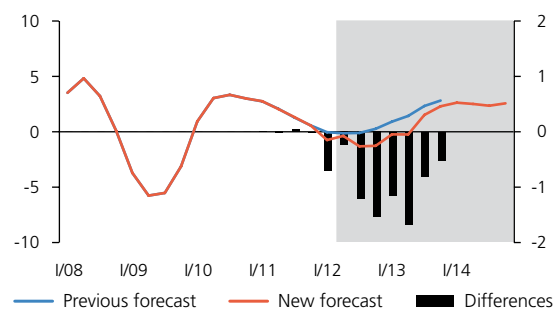
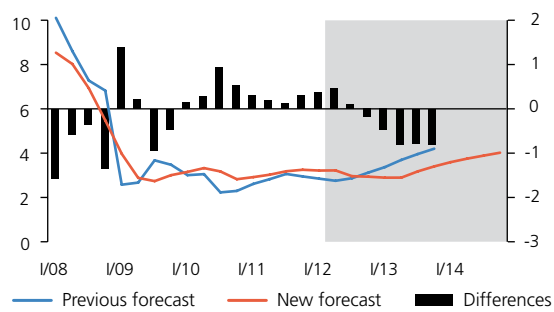


CHART II.3.7

## CHANGE IN THE NOMINAL WAGE FORECAST

**The business-sector nominal wage forecast is slightly higher this year but lower next year**

(annual percentage changes; differences in pp – right-hand scale; seasonally adjusted)



lower household consumption and investment. The growth rates of exports and imports in 2013 are slightly below the previous forecast as a result of a lower external demand outlook and, in the case of imports, more subdued domestic economic activity.

The forecast for average **nominal wage growth** in the business sector is slightly higher this year than in the previous forecast owing to the higher value observed in 2012 Q1 and to recent wage developments in industry (see Chart II.3.7). By contrast, wage growth will be 0.7 percentage point lower next year as a result of weaker economic activity.



## II.4 ALTERNATIVE SCENARIOS AND SENSITIVITY ANALYSES

A risk of less favourable evolution of GDP abroad owing to escalation of the euro area debt crisis was identified during the preparation of the forecast. This led to the preparation of a sensitivity scenario with an unchanged outlook for 3M EURIBOR rates but with a deeper downturn in external demand and inflation and a weaker euro than in the baseline scenario of the forecast. The sensitivity scenario results in a more significant cooling of domestic economic activity and a weaker exchange rate of the koruna, to which monetary policy responds with higher interest rates than in the baseline scenario. An exchange rate sensitivity scenario was also prepared as usual.

### II.4.1 Lower external demand sensitivity scenario

The preparation of this sensitivity scenario was **motivated** by the risk of developments in economic activity abroad being less favourable than indicated by the July Consensus Forecasts outlook. It cannot be ruled out that the market outlook for euro area interest rates already incorporates this risk, as it remains very low over the entire forecast horizon and at the same time it is lower than the CF analysts' outlook. Therefore, an alternative outlook for foreign variables corresponding to the current market outlook for 3M EURIBOR interest rates was simulated using the NiGEM model.<sup>11</sup> The results are similar as in the alternative "euro area stagnation" scenario prepared as part of Inflation Report IV/2011.<sup>12</sup>

The sensitivity scenario captures a more sizeable **contraction in euro area effective GDP** over almost the entire forecast horizon. More specifically, it expects the growth rate of economic activity abroad to be almost 0.5 percentage point lower this year and the next compared to the baseline scenario of the forecast. It is based on the assumption that the slowdown in economic activity relative to the baseline scenario will occur mainly as a result of stronger fiscal restriction, greater risk aversion and lower lending growth in individual member countries, with a dampening effect on household consumption and investment. On the other hand, net exports will be supported by higher price competitiveness owing to a weakening of the euro over the entire outlook. The weaker exchange rate of the euro against the dollar this year is also reflected in slightly higher growth in consumer and producer prices. In 2013, however, subdued economic activity will foster a sharp slowdown in those prices. The outlook for the Brent crude oil price responds to the fall in demand from the euro area countries by declining marginally. In these circumstances,

TABLE II.4.1

#### LOWER EXTERNAL DEMAND SENSITIVITY SCENARIO – EXTERNAL VARIABLES

The current market outlook for 3M EURIBOR interest rates is consistent with a significant cooling of external economic activity

(deviations from baseline scenario)

|        | Effective<br>PPI inflation<br>(in pp) | 3M EURIBOR<br>(in pp) | Effective<br>GDP<br>(in pp) | Exchange<br>rate<br>USD/EUR<br>(in %) |
|--------|---------------------------------------|-----------------------|-----------------------------|---------------------------------------|
| II/12  | 0.2                                   | 0.0                   | -0.5                        | 0.0                                   |
| III/12 | 0.2                                   | 0.0                   | -0.4                        | -1.7                                  |
| IV/12  | 0.2                                   | 0.0                   | -0.7                        | -1.7                                  |
| I/13   | 0.2                                   | 0.0                   | -1.0                        | -1.7                                  |
| II/13  | -0.1                                  | 0.0                   | -0.8                        | -1.8                                  |
| III/13 | -0.3                                  | 0.0                   | -0.5                        | -1.8                                  |
| IV/13  | -0.4                                  | 0.0                   | -0.1                        | -1.6                                  |
| I/14   | -0.6                                  | 0.0                   | 0.0                         | -1.5                                  |
| II/14  | -0.5                                  | 0.0                   | 0.1                         | -1.4                                  |
| III/14 | -0.6                                  | 0.0                   | -0.3                        | -1.3                                  |
| IV/14  | -0.6                                  | 0.0                   | -0.1                        | -1.1                                  |

11 NiGEM is a global multi-country model enabling us to simulate the complete response of foreign variables to exogenous and endogenous shocks.

12 In this case, the scenario is only a sensitivity scenario, not a fully fledged alternative scenario. This means that the domestic economy only responds to changes in foreign outlooks, i.e. no other accompanying effects, such as impacts on administered prices, the supply side of the economy, etc., are incorporated.

TABLE II.4.2

**LOWER EXTERNAL DEMAND SENSITIVITY SCENARIO – THE DOMESTIC ECONOMY**

The lower external demand is strongly reflected in domestic GDP and wages; the exchange rate is weaker despite higher domestic interest rates

(deviations from baseline scenario)

|        | CPI inflation<br>(in pp) | 3M PRIBOR<br>(in pp) | GDP<br>(in pp) | Nominal<br>exchange<br>rate<br>(CZK/EUR) | Nominal<br>wage<br>(in pp) |
|--------|--------------------------|----------------------|----------------|--|----------------------------|
| III/12 | 0.0                      | 0.2                  | 0.0            | 0.0                                      | -0.1                       |
| IV/12  | 0.0                      | 0.4                  | -0.4           | 0.2                                      | -0.3                       |
| I/13   | 0.0                      | 0.7                  | -0.9           | 0.4                                      | -0.5                       |
| II/13  | 0.0                      | 0.6                  | -1.2           | 0.5                                      | -0.6                       |
| III/13 | 0.1                      | 0.5                  | -0.7           | 0.6                                      | -0.6                       |
| IV/13  | 0.1                      | 0.4                  | 0.0            | 0.7                                      | -0.5                       |
| I/14   | 0.2                      | 0.3                  | 0.1            | 0.8                                      | -0.3                       |
| II/14  | 0.2                      | 0.2                  | 0.2            | 0.9                                      | -0.1                       |
| III/14 | 0.2                      | 0.0                  | -0.4           | 0.9                                      | 0.0                        |
| IV/14  | 0.2                      | -0.3                 | -0.3           | 0.9                                      | 0.2                        |

the ECB's response in the NiGEM model corresponds to the current market outlook for interest rates. The simulation results are shown in Table II.4.1 in the form of deviations from the assumptions of the baseline scenario of the forecast.

In the sensitivity scenario, the evolution of effective external demand passes through to the **domestic economy**, adversely affecting all the components of GDP (except government expenditure). The fall in export growth compared to the baseline scenario of the forecast is a response to the fall in external demand, but is dampened by a weaker outlook for the koruna exchange rate, which improves the price competitiveness of exporters. Growth in gross capital formation also falls in expectation of the onset of a phase of substantially lower economic activity. Owing to slower wage growth and adverse labour market developments, household consumption is lower than in the baseline scenario. Imports also decrease by comparison with the baseline scenario, moderating the fall in GDP. A larger depreciation of the exchange rate due to deteriorating net exports is dampened by domestic monetary policy in the form of a higher 3M PRIBOR compared to the baseline scenario. The more subdued economic activity and slower wage growth have a downward effect on inflation, while the weaker exchange rate has the opposite effect. Overall, the deviations of headline inflation from the baseline scenario are therefore insignificant. Table II.4.2 summarises the results of the simulation of the impacts on the domestic economy, also expressed as deviations from the baseline scenario.

**II.4.2 Exchange rate sensitivity scenario**

TABLE II.4.3

**EXCHANGE RATE SENSITIVITY SCENARIO**

Exchange rate depreciation leads to temporarily higher inflation and faster GDP growth than in the baseline scenario; interest rates increase

(deviations from baseline scenario)

|        | CPI inflation<br>(in pp) | 3M PRIBOR<br>(in pp) | GDP<br>(in pp) | Nominal<br>exchange<br>rate<br>(CZK/EUR) |
|--------|--------------------------|----------------------|----------------|--|
| III/12 | 0.0                      | 0.0                  | 0.1            | 0.8                                      |
| IV/12  | 0.1                      | 0.3                  | 0.2            | 0.2                                      |
| I/13   | 0.1                      | 0.3                  | 0.1            | 0.0                                      |
| II/13  | 0.2                      | 0.2                  | 0.0            | 0.0                                      |
| III/13 | 0.2                      | 0.2                  | -0.2           | 0.0                                      |
| IV/13  | 0.2                      | 0.0                  | -0.3           | 0.0                                      |
| I/14   | 0.0                      | -0.1                 | -0.2           | 0.1                                      |
| II/14  | 0.0                      | 0.0                  | -0.1           | 0.0                                      |
| III/14 | 0.0                      | -0.1                 | 0.0            | 0.1                                      |
| IV/14  | 0.0                      | 0.0                  | 0.0            | 0.1                                      |

The sensitivity scenario quantifies the impacts of a **different exchange rate path**. This standard sensitivity scenario assumes a deviation of the nominal exchange rate of  $\pm 3\%$  from the baseline scenario in the first quarter of the forecast. Interest rates in that quarter are the same as in the baseline scenario. The exchange rate is thus CZK 24.7/26.3 to the euro in 2012 Q3, compared to CZK 25.5 in the baseline scenario.

The table shows the results of the depreciation scenario, expressed as deviations from the baseline scenario of the forecast (see Table II.4.3). The scenario of a stronger nominal exchange rate leads to the same results but with the opposite sign.

Exchange rate depreciation improves producers' price competitiveness and, via higher net exports, leads to higher GDP growth compared to the baseline at the start of the forecast horizon. It also results in higher import prices and temporarily stronger inflation pressures. The market interest rate path is therefore higher than in the baseline scenario in the next few quarters. However, GDP growth then slows slightly below the baseline in response to tighter monetary policy and an exchange rate correction and returns to the baseline scenario at the end of the forecast horizon.

## II.5 FORECASTS BY OTHER ENTITIES

*Analysts' inflation expectations increased slightly at the one-year horizon and were flat at the three-year horizon. They are currently slightly above the inflation target of 2% at both horizons. The analysts expect GDP growth to decline this year and to edge up next year. The majority of them also expect the koruna to appreciate and the CNB's key rates to be flat in the following 12 months. Almost all the analysts were expecting stable key rates before the CNB Bank Board meeting in August. The market rate outlook is slightly falling, but is above the path consistent with the new forecast over the entire forecast horizon.*

**Inflation expected by financial market analysts** at the one-year horizon rose moderately in 2012 Q2, probably in response to the announced increase in both VAT rates from January 2013. Expectations of business managers have long been fairly stable and fell only negligibly in June 2012. Thus, the one-year inflation expectations of both groups of respondents are about 0.5 percentage point above the CNB's target of 2% (see Table II.5.1). The analysts' inflation expectations at the three-year horizon were flat, slightly above the target of 2%.

The indicator of **inflation perceived by households** has been rising gradually from negative values over the last two years and turned slightly positive in late 2011/early 2012 (see Chart II.5.1). This means that households on average felt that prices rose moderately over the last 12 months. This indicator decreased slightly at the end of 2012 Q2. The indicator of **expected inflation** has long been positive. This suggests that the number of respondents who expect prices to rise more rapidly over the next 12 months is higher than the number of those who expect prices to stay the same or increase more slowly than in the recent past (although the largest group has long comprised respondents who expect moderate price growth). The indicator of expected inflation also went down slightly in 2012 Q2.

**Both the FMIE and CF analysts** expect GDP to decline this year (see Table II.5.1 and Table II.5.2). Next year the economy should expand by around 1%, and wage growth should also accelerate slightly. Compared to the average koruna exchange rate so far in July 2012, the analysts participating in both the FMIE and the CF expect the exchange rate to be stronger at the one-year horizon (by 4% and 1.2% respectively). Before the August CNB Bank Board meeting, nine analysts participating in the FMIE survey were expecting key interest rates to remain unchanged at this meeting and one analyst was expecting them to go down by 0.25 percentage point. Most of the analysts also expect rates to remain flat at the current level at the one-year horizon. Their estimates for the repo rate lie in the range of 0.25–1.00%. The forecasts for interest rates including market rates have shifted downwards since the start of this year.

TABLE II.5.1

### EXPECTED INDICATORS OF FMIE AND CORPORATIONS

**Inflation expectations are slightly above the CNB's target**  
(at 1Y; annual percentage changes unless otherwise indicated)

|                               | 3/12 | 4/12 | 5/12 | 6/12 | 7/12 |
|-------------------------------|------|------|------|------|------|
| FMIE:                         |      |      |      |      |      |
| CPI                           | 2.2  | 2.4  | 2.5  | 2.5  | 2.5  |
| CPI, 3Y horizon               | 2.2  | 2.2  | 2.2  | 2.1  | 2.2  |
| Real GDP in 2012              | 0.1  | 0.2  | 0.0  | -0.5 | -0.6 |
| Real GDP in 2013              | 2.0  | 1.9  | 1.8  | 1.3  | 1.2  |
| Nominal wages in 2012         | 2.6  | 2.8  | 2.7  | 2.8  | 2.8  |
| Nominal wages in 2013         | 3.3  | 3.4  | 3.6  | 3.2  | 2.9  |
| CZK/EUR exchange rate (level) | 24.1 | 23.9 | 24.2 | 24.4 | 24.4 |
| 2W repo rate (in per cent)    | 0.9  | 0.9  | 0.7  | 0.5  | 0.6  |
| 1Y PRIBOR (in per cent)       | 1.9  | 2.0  | 1.8  | 1.6  | 1.6  |
| Corporations:                 |      |      |      |      |      |
| CPI                           | 2.6  |      |      | 2.5  |      |

CHART II.5.1

### PERCEIVED AND EXPECTED INFLATION

**The inflation expectations of households fell slightly in 2012 Q2**  
(source: European Commission Business and Consumer Survey)

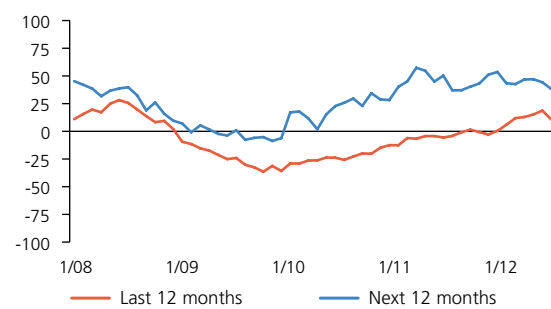


TABLE II.5.2

### CF EXPECTED INDICATORS

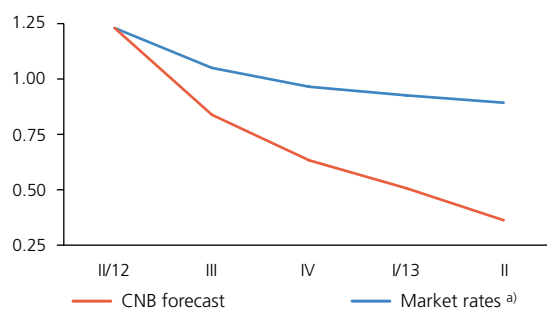
**The analysts expect the economy to contract this year**  
(at 1Y; annual percentage changes unless otherwise indicated)

|                               | 3/12 | 4/12 | 5/12 | 6/12 | 7/12 |
|-------------------------------|------|------|------|------|------|
| Real GDP in 2012              | 0.1  | 0.2  | -0.1 | -0.5 | -0.7 |
| Real GDP in 2013              | 1.9  | 1.9  | 1.9  | 1.3  | 1.1  |
| Nominal wages in 2012         | 2.8  | 2.9  | 2.8  | 3.0  | 2.9  |
| Nominal wages in 2013         | 3.4  | 3.5  | 3.6  | 3.1  | 3.0  |
| CZK/EUR exchange rate (level) | 24.6 | 24.6 | 24.6 | 25.0 | 25.1 |
| 3M PRIBOR (in per cent)       | 1.2  | 1.3  | 1.2  | 1.1  | 1.1  |

CHART II.5.2

## FRA RATES VERSUS THE CNB FORECAST

The FRA rate outlook is above the rates forecasted by the CNB (percentages)



a) for 2012 Q2 and 2012 Q3 the 3M PRIBOR and for 2012 Q4–2013 Q2 the average values of the FRA 3\*6, 6\*9 and 9\*12 rates for the last 10 trading days as of 20 July 2012

**Compared to the CNB's new forecast**, the analysts expect slightly higher real GDP growth (or a less sizeable decline) in both 2012 and 2013. Inflation expected at the one-year horizon is slightly above the CNB forecast. The exchange rate prediction at the one-year horizon differs from the CNB forecast only in the case of the FMIE analysts, who expect the exchange rate to be 2.7% stronger, while the CF outlook for the exchange rate is in line with the CNB forecast. The analysts' expectations regarding the 2W repo rate and market rates at the one-year horizon are above the 3M PRIBOR path consistent with the baseline scenario of the CNB forecast.

Chart II.5.2 provides a **comparison of expected 3M market rates** derived from FRA quotations and the interest rate path consistent with the new CNB forecast. The current market outlook is slightly falling, but is above the path consistent with the forecast over the entire horizon (the longer the horizon, the wider the deviation).

### III. CURRENT ECONOMIC DEVELOPMENTS

#### III.1 INFLATION

Annual headline inflation was 3.5% in June 2012 and was thus above the upper boundary of the tolerance band around the CNB's inflation target. At 2.2%, monetary-policy relevant inflation was slightly above the target. The fall in annual inflation in 2012 Q2 was due to administered and market prices except for adjusted inflation excluding fuels, which shifted to less negative figures. Market prices were strongly affected by a persisting absence of inflationary pressures from the domestic economy amid low domestic demand. A relatively fast increase in import prices of final products for the consumer market, caused mainly by depreciation of the exchange rate, had the opposite effect on prices.

##### III.1.1 Fulfilment of the inflation target

**Headline inflation** was noticeably above the CNB's inflation target in 2012 Q2 (see Chart III.1.1), while monetary-policy relevant inflation was slightly above the target. This section of the Inflation Report briefly analyses the contribution of the CNB's monetary policy to this situation.

In order to assess the effect of monetary policy on the fulfilment of the inflation target one needs **to analyse retrospectively the forecasts** and the Bank Board's decisions based thereon in the past. To assess the fulfilment of the inflation target in 2012 Q2, we have to examine above all the period roughly from October 2010 to June 2011 (referred to as the "key period"), as monetary policy is focused on hitting the inflation target at the 12–18 month horizon. For the sake of clarity, the analysis of the accuracy of the forecasts is limited here to a comparison of the Inflation Report I/2011 forecast with subsequent inflation.

The **Inflation Report I/2011 forecast** expected headline inflation to fluctuate close to the 2% inflation target over the whole forecast horizon (see Chart III.1.1). The effects of changes to indirect taxes made at the start of 2010 were expected to unwind gradually in 2011 H1. Inflation pressures from the domestic economy were insignificant at the start of the forecast horizon despite the ongoing economic recovery. Import prices (except for the direct impact of global commodity prices) also had a roughly neutral effect, as an appreciating exchange rate offset growth in foreign producer prices. Inflationary pressures from the domestic economy were expected to build up gradually over the forecast horizon owing to faster wage growth and a gradual rise in margins. These pressures were expected to be partly offset by gradual exchange rate appreciation, which, with regard to import prices, was expected to outweigh the effect of rising prices abroad. Import prices were therefore expected to have an anti-inflationary effect until the start of 2012.

CHART III.1.1

#### FORECAST VERSUS ACTUAL INFLATION

**Inflation was well above the IR I/2011 forecast in 2012 Q2**  
(annual percentage changes)

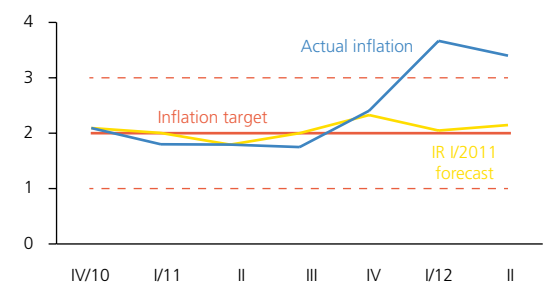


TABLE III.1.1

#### FULFILMENT OF THE INFLATION FORECAST

**Administered prices and the VAT change fostered significantly higher inflation, while adjusted inflation excluding fuels was lower than forecasted**  
(annual percentage changes; contributions in percentage points)

|   | IR I/2011<br>forecast | 2012 Q2<br>outturn | Contribution<br>to total<br>difference <sup>b)</sup> |
|---|-----------------------|--------------------|--|
| CONSUMER PRICES                                     | 2.1                   | 3.4                | 1.3  |
| Breakdown into contributions:                       |                       |                    |  |
| administered prices                                 | 4.1                   | 9.4                | 0.9  |
| first-round impacts of<br>changes to indirect taxes | 0.1                   | 0.9                | 0.9  |
| food prices <sup>a)</sup>                           | 1.4                   | 2.5                | 0.3  |
| fuel prices <sup>a)</sup>                           | 2.8                   | 5.8                | 0.1  |
| adjusted inflation excl.<br>fuels <sup>a)</sup>     | 1.7                   | -0.2               | -0.9   |

a) excluding the first-round effects of changes to indirect taxes

b) Owing to rounding, the sum of the contributions is not necessarily equal to the total difference; the contributions are also affected by a change in the consumer basket weights made in January 2012.

TABLE III.1.2

## FULFILMENT OF THE EXTERNAL ASSUMPTIONS

## External factors fostered higher domestic inflation

(annual percentage changes unless otherwise indicated)

|  |   | I/11  | II/11 | III/11 | IV/11 | I/12  | II/12 |
|--|---|-------|-------|--------|-------|-------|-------|
| GDP in euro area <sup>a), b), c)</sup> | p | 3.1   | 2.2   | 1.8    | 1.9   | 2.1   | 2.3   |
|  | o | 3.6   | 2.9   | 2.5    | 1.7   | 1.7   | -     |
| PPI in euro area <sup>b), c)</sup>     | p | 4.0   | 2.9   | 2.5    | 2.2   | 2.2   | 2.3   |
|  | o | 6.4   | 6.4   | 5.9    | 5.1   | 3.7   | 2.3   |
| 3M EURIBOR<br>(percentages)            | p | 1.0   | 1.1   | 1.3    | 1.4   | 1.5   | 1.6   |
|  | o | 1.1   | 1.4   | 1.6    | 1.5   | 1.0   | 0.7   |
| USD/EUR exchange rate<br>(levels)      | p | 1.32  | 1.31  | 1.31   | 1.32  | 1.33  | 1.32  |
|  | o | 1.37  | 1.44  | 1.41   | 1.35  | 1.31  | 1.28  |
| Brent crude oil price<br>(USD/barrel)  | p | 94.2  | 95.6  | 95.9   | 96.1  | 96.2  | 96.1  |
|  | o | 105.2 | 116.8 | 112.9  | 109.3 | 118.7 | 108.7 |

p – prediction, o – outturn

a) at constant prices

b) seasonally adjusted

c) effective indicator as defined in the IR I/2011 forecast

Headline **inflation in reality** was roughly in line with the forecast over most of the forecast horizon, but was much higher than expected as from the start of 2012. This deviation was due to much higher administered price inflation (including the effect of the VAT change), with energy prices and regulated rents recording stronger growth. A no less important factor behind this deviation was the increase in the reduced VAT rate from 10% to 14% in January 2012, which had not been predicted in the IR I/2011 forecast. Food and fuel price inflation was also slightly higher than expected. By contrast, adjusted inflation excluding fuels, which remained negative owing mainly to subdued domestic inflation pressures, had a strongly anti-inflationary effect (see Table III.1.1).

**External economic factors** contributed significantly to domestic inflation. External economic activity initially showed a stronger-than-forecasted recovery and then, in late 2011/early 2012, recorded an unexpected decline. At the same time, world oil prices and international production prices rose more quickly than forecasted. Foreign interest rates were initially rather higher than predicted, but fell significantly below the expected level at the start of 2012 (see Table III.1.2). Overall, external developments thus mostly fostered higher domestic inflation in the segment of market and administered prices.

TABLE III.1.3

## FULFILMENT OF THE FORECAST FOR KEY VARIABLES

## Domestic economic activity rose approximately in line with the forecast in 2011, but real GDP fell in early 2012

|   |   | I/11 | II/11 | III/11 | IV/11 | I/12 | II/12 |
|---|---|------|-------|--------|-------|------|-------|
| 3M PRIBOR<br>(percentages)                            | p | 1.3  | 1.3   | 1.3    | 1.4   | 1.6  | 1.9   |
|   | o | 1.2  | 1.2   | 1.2    | 1.2   | 1.2  | 1.2   |
| CZK/EUR exchange rate<br>(levels)                     | p | 24.5 | 24.3  | 24.1   | 24.0  | 23.9 | 23.8  |
|   | o | 24.4 | 24.3  | 24.4   | 25.3  | 25.1 | 25.3  |
| Real GDP <sup>a)</sup><br>(annual perc. changes)      | p | 2.5  | 1.9   | 1.3    | 0.6   | 1.8  | 2.6   |
|   | o | 2.7  | 2.1   | 1.3    | 0.6   | -0.7 | -     |
| Nominal wages <sup>b)</sup><br>(annual perc. changes) | p | 2.8  | 3.2   | 4.0    | 4.6   | 4.9  | 5.1   |
|   | o | 3.3  | 3.2   | 2.7    | 2.6   | 3.6  | -     |

p – prediction, o – outturn

a) seasonally adjusted

b) in the business sector

Domestic **interest rates and the exchange rate** also differed from the forecast. Interest rates remained stable over the entire horizon under review and in the end deviated from the forecast, which had expected them to rise gradually. The exchange rate was initially close to the forecast. In late 2011, however, the koruna depreciated significantly owing to the escalation of the euro area debt crisis. The koruna remained at weaker levels also in 2012 H1 (see Table III.1.3).

Based on the CNB's current knowledge of the workings of the Czech economy and its current knowledge of the actual economic situation, the **developments since the forecast under review was drawn up** can be summed up in the following way. Domestic GDP growth was roughly in line with the forecast in 2011, with faster growth abroad counteracted by more subdued domestic demand. In early 2012, however, GDP growth fell well below the forecast owing to a greater-than-expected decline in external demand growth and a further weakening of domestic demand. Wage growth was more subdued than forecasted. Owing to the above factors, combined with high administered price inflation and the VAT change effective as from January 2012, headline inflation was well above the target in 2012 Q2. The low domestic interest rates reflected, in addition to subdued domestic inflationary pressures, easy global monetary policy and a worsening external outlook due to the escalation of the euro area debt crisis.

In addition to the forecast, an assessment of the risks associated with this forecast is important for the Bank Board's decisions on **monetary policy rates**. At its meetings between October 2010 and June 2011, the Bank Board assessed the risks of the forecasts mostly as being

balanced or on the upside (although only for headline inflation due to the expected VAT change, to whose first-round effects monetary policy does not react). Market interest rates remained stable over the entire period under review and in the end deviated slightly from the forecasts, which had expected them to rise gradually at the end of 2011. Headline inflation was slightly below the CNB's target initially, but rose markedly above it in late 2011 and especially in early 2012, primarily because of the increase in the reduced VAT rate. Monetary-policy relevant inflation returned gradually to the target from below, moving above it – probably temporarily – in late 2011/early 2012. From this perspective, based on current knowledge, it seems that the monetary policy pursued from October 2010 to June 2011 was roughly appropriate.

### III.1.2 Current inflation

Following a significant increase at the start of 2012, **annual inflation**<sup>13</sup> fell somewhat in Q2 (see Chart III.1.2). At 3.5% in June, it was 0.3 percentage point lower than in March. The slowdown in consumer price inflation was due to both administered and market prices, except for adjusted inflation excluding fuels, which turned slightly less negative (see Chart III.1.3).

Turning to the **structure of annual inflation**, inflation continued to be affected in 2012 Q2 mainly by administrative factors, i.e. the impacts of changes to indirect taxes and administered prices. Administrative factors accounted for about three-quarters of annual consumer price inflation in June (see Chart III.1.4). The effect of market prices was slightly lower than in the previous quarter.

Owing to an increase in the reduced VAT rate and a harmonisation increase in excise duties on cigarettes at the start of this year, changes to **indirect taxes** contributed about 1 percentage point to annual market price inflation in June. The overall first-round effect on inflation including administered prices was about 1.3 percentage points. **Monetary-policy relevant inflation**, i.e. inflation adjusted for the first-round effects of indirect taxes, was therefore well below annual headline inflation again and stood at 2.2% in June (see Chart III.1.2).

As in the previous quarter, **administered prices** made the biggest contribution to annual inflation (see Chart III.1.4). However, their year-on-year growth slowed to 8.6% at the end of 2012 Q2. This change was due to base effects, which strongly reflected a rise in prices of natural gas for households in June last year. Regulated rents, heat prices and administered prices in health care went up in 2012 Q2. However, the year-on-year growth in administered prices was due primarily to changes made to most regulated items at the

CHART III.1.2

#### INFLATION

**Inflation decreased in 2012 Q2**  
(annual percentage changes)

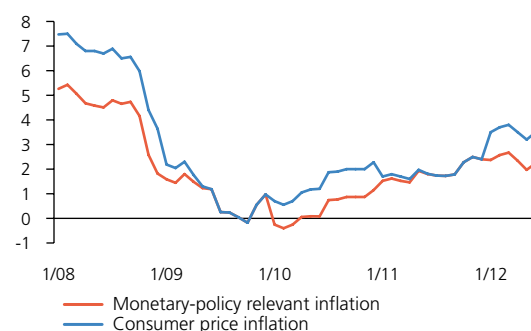


CHART III.1.3

#### INFLATION COMPONENTS

**Most components of inflation contributed to the decrease in inflation in 2012 Q2**  
(annual percentage changes; excluding indirect tax changes except administered prices)

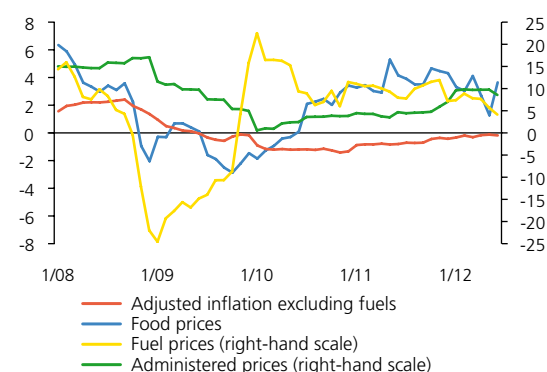
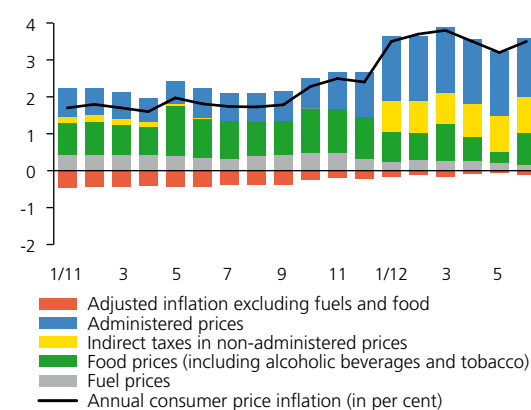


CHART III.1.4

#### STRUCTURE OF INFLATION

**Indirect taxes, administered prices and food prices contributed the most to inflation**  
(annual percentage changes; contributions in percentage points)



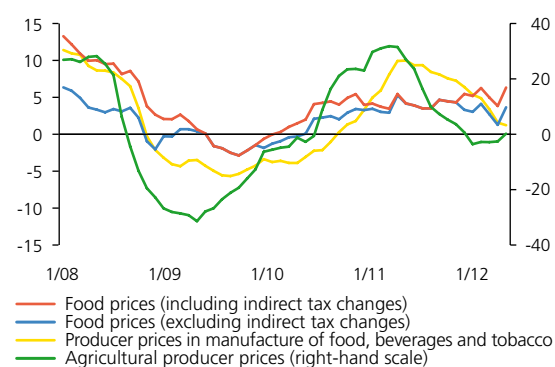
<sup>13</sup> Measured by year-on-year growth in consumer prices.



CHART III.1.5

## FOOD PRICES

**Food price inflation was very volatile, but generally went down**  
(annual percentage changes)



start of 2012, when these prices were also affected by VAT changes. The following text assesses the evolution of the main components of inflation adjusted for the tax changes.

**Market price** inflation, as measured by net inflation, remained volatile in 2012 Q2. This was due above all to substantial changes in food price inflation, as fuel price growth slowed gradually and adjusted inflation excluding fuels showed only very slow changes toward less negative values. Annual market price inflation moderated further in 2012 Q2, falling by 0.2 percentage point compared to March, to 1.2% in June. This primarily indicated an absence of inflationary pressures from the domestic economy, whose effect was not outweighed even by relatively fast growth in import prices of final products for the consumer market caused by substantial depreciation of the koruna.

Annual **food price** inflation (adjusted for changes to indirect taxes) moderated in 2012 Q2 to 3.6% in June; on average it was 1 percentage point lower than in the previous quarter. The volatility of food prices during the quarter (see Chart III.1.5) was a result of large price fluctuations of some commodities, most notably a partial correction of the sharp increase in egg prices recorded in March at the start of Q2. This increase had resulted from a decrease in the supply of eggs on the domestic market (after suppliers that were not compliant with European poultry breeding directives were banned from the domestic market).<sup>14</sup> At the end of 2012 Q2, renewed growth in food prices was fostered by a surge in potato prices.

A continuing annual decline in agricultural producer prices in April and May and slowing price growth in the food industry to very low levels (see Chart III.1.5) had a downward effect on food prices. The depreciation of the koruna acted in the opposite direction via rising import prices of food and energy commodities. Overall, annual food price inflation including the effect of the increased VAT reached 6.3% in June.

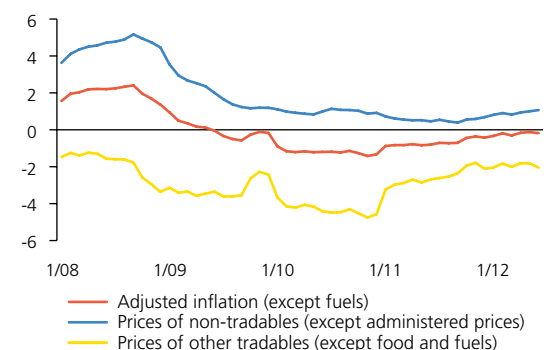
**Fuel prices** also rose more slowly in 2012 Q2 than in the previous quarter (by 4.1% in June; see Chart III.1.3), owing to a significant slowdown of growth in world oil prices and their subsequent decline in Q2.<sup>15</sup> However, their impact on koruna prices of fuels was partly offset by accelerating depreciation of the koruna-dollar exchange rate, which reached 21% in June.

**Adjusted inflation excluding fuels**, comprising prices of products with a high degree of processing and services, stayed negative in 2012 Q2 (see Chart III.1.6). The negative values moderated only slightly compared to March (to -0.2% in June). As regards structure, prices of nontradable commodities<sup>16</sup> recorded faster growth, although

CHART III.1.6

## ADJUSTED INFLATION EXCLUDING FUELS

**The annual decline in prices within adjusted inflation moderated in 2012 Q2**  
(annual percentage changes)



14 Annual growth in egg prices decreased from 124% in March to 62.9% in April.

15 The annual decline in dollar prices of oil deepened significantly in June 2012, to 16%.

16 Excluding administered prices.



still only of 1.1% year on year. The persisting low growth in these prices and a year-on-year decline in prices of tradable commodities of around 2% continued to indicate a strong effect of subdued domestic demand. This outweighed the effect of the year-on-year depreciation of the koruna against the euro, which was observed in the rate of growth of import prices of industrial consumer goods.

By international comparison, consumer prices as measured by the **HICP** rose faster in the Czech Republic than on average in the EU countries for the second consecutive quarter (see Chart III.1.7). According to Eurostat's latest estimate, annual HICP growth in the Czech Republic slowed to 3.8% in June, while the average figure for the EU countries was 2.6% in the same period. Annual HICP inflation in the Czech Republic remained higher than CPI inflation, due mainly to the inclusion in the national price index of the effect of imputed rent, which is not included in the HICP.

CHART III.1.7

**HICP**

**Annual HICP inflation in the Czech Republic was higher than the EU average**

(annual percentage changes; source: Eurostat)

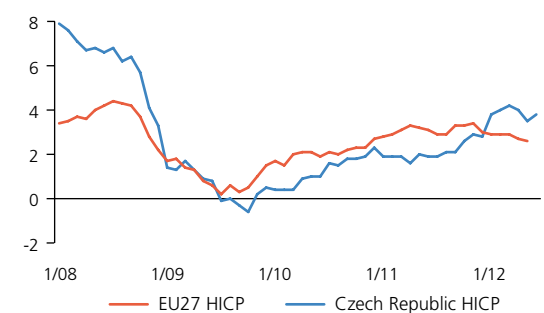


CHART III.2.1

## IMPORT PRICES AND PRODUCER PRICES

Import price inflation rose to 6% in May, whereas industrial producer price inflation slowed further  
(annual percentage changes)

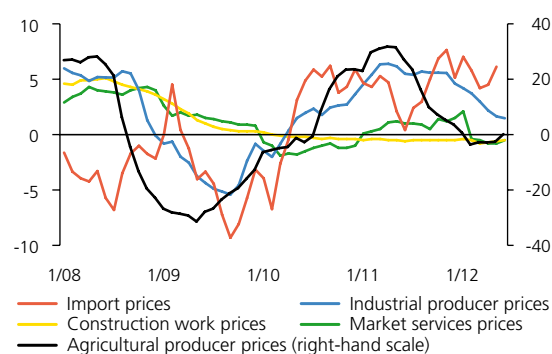


CHART III.2.2

## IMPORT PRICES

Import price inflation was driven by prices of imported energy commodities and commodities with a high degree of processing  
(annual percentage changes; contributions in percentage points)

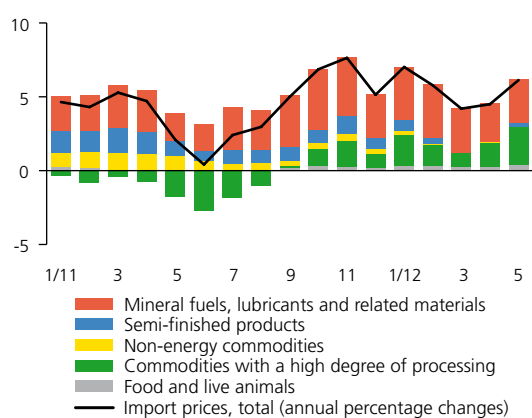
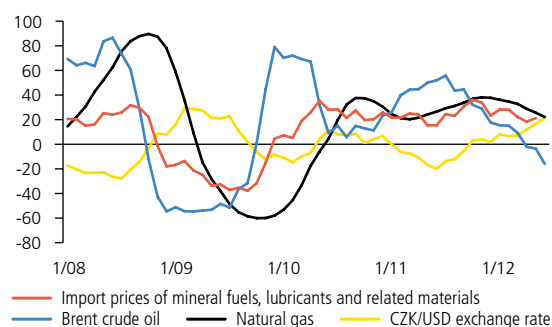


CHART III.2.3

## MINERAL FUELS

The slowdown in world prices of energy commodities was offset by annual depreciation of the koruna-dollar exchange rate  
(annual percentage changes)



## III.2 IMPORT PRICES AND PRODUCER PRICES

The downward trend in import price inflation halted in May 2012 owing to depreciation of the koruna. Slowing growth in prices of key commodities on world markets helped to reduce the rate of growth of import prices of commodities and semi-finished products, but was largely offset by the depreciation. Import prices of energy commodities thus continued to show high growth rates despite a year-on-year decline in world oil prices. At the same time, import prices of products with a high degree of processing recorded much faster growth due to the exchange rate trend. Annual producer price inflation slowed further in 2012 Q2, whereas agricultural producer prices switched from a year-on-year decline back to slight growth. Prices of construction work and market services continued to fall modestly amid persisting weak demand.

## III.2.1 Import prices

In the first two months of 2012 Q2, the annual rise in **import prices** continued to be driven mostly by import prices of energy commodities and products with a high degree of processing (see Chart III.2.2). According to the latest CZSO data, annual import price inflation picked up again (to 6.1% in May), chiefly thanks to a marked depreciation of the koruna.

Prices of imported **mineral fuels** remained the biggest contributor to annual import price inflation in the first two months of 2012 Q2 (see Chart III.2.2). This was mainly due to still fast growth in world natural gas prices. Although annual growth in natural gas prices slowed further in 2012 H1 from the high values reached at the end of 2011 (around 40%), it was still very high in May (26% year on year). By contrast, world oil prices have been falling slightly year on year since April (by 2.1%). In May, the decline accelerated to -3.4%. Although world oil prices were falling year on year and the growth rate of natural gas prices decreased markedly, import prices of mineral fuels still rose quite fast (by 21.2% year on year in May). This was due to strong annual depreciation of the koruna-dollar exchange rate<sup>17</sup> (see Chart III.2.3).

The effect of the depreciation (of the koruna-dollar rate in particular) was also reflected in prices in some other import categories. Annual growth in import prices of **chemicals** and related products picked up again in April and May (to 5.1%; see Table III.2.1). However, the strongest growth was recorded for **food** prices (of 6.4% in May). Annual growth in import prices of **semi-finished products** was only modest and prices of **non-energy commodities** recorded a year-on-year decrease in May after rising insignificantly in April.

<sup>17</sup> The koruna-dollar exchange rate weakened by 16.6% in May.

From the perspective of domestic producers, prices of imported **energy inputs** showed slower growth on average in April and May than in 2012 Q1. Annual growth in import prices of some other commodities, semi-finished products and foods increased because of the weakening exchange rate, but for most commodities it did not on average exceed the growth rate observed in 2012 Q1. Overall, their contribution to total annual import price inflation was insignificant (see Chart III.2.2). A clear effect of the depreciation was observed in import prices of **high-value-added commodities**.<sup>18</sup> This was reflected in an increase in their contribution to annual import price inflation in 2012 Q2 (see Chart III.2.2). In May, import price growth in this category exceeded 4%.

### III.2.2 Producer prices

#### Industrial producer prices

The moderation of annual **industrial producer price inflation** observed since the end of 2011 continued into 2012 Q2. Annual industrial producer price inflation decreased by a further 1.5 percentage points compared to March, to 1.5% in June (see Chart III.2.4).

A more detailed analysis of the factors and **structure of industrial producer price inflation** suggested that the slowdown was a result of a further reduction in the intensity of cost factors. In particular, the contribution of prices of imported energy commodities decreased significantly. Their annual growth slowed further despite the sharp weakening of the koruna against the euro. The effect of imported non-energy commodities and semi-finished products was by now only weak. Most imported inputs thus recorded a further reduction in cost pressures on prices of producers at the early stages of the production chain (see Chart III.2.4 and Chart III.2.5). Growth in producer prices in the energy category decreased as well. At the same time, producer price inflation in the food industry continued to slow gradually, reflecting with a lag the evolution of prices of agricultural inputs.

The biggest contribution to the fall in annual industrial producer price inflation in 2012 Q2 came from the **manufacture of coke and refined petroleum products**. As a result of the strongly slowing rise in world oil prices and their subsequent decline, their contribution to overall industrial producer price inflation fell to 0.4 percentage point (see Chart III.2.4). Annual producer price inflation in this industry was in single digits and stood at 4.7% in June. Annual producer price inflation in the **food industry** also slowed significantly (to 1.2% in June, with a contribution of just 0.2 percentage point to industrial producer price inflation), owing mainly to clearly weakening growth, or a decline, in prices of agricultural inputs of domestic

TABLE III.2.1

#### STRUCTURE OF IMPORT PRICE INFLATION

Prices rose in most import categories, and most of all in the case of imported energy commodities

(annual percentage changes)

|   | 2/12 | 3/12 | 4/12 | 5/12 |
|---|------|------|------|------|
| IMPORTS, TOTAL                                    | 5.8  | 4.2  | 4.5  | 6.1  |
| of which:   |      |      |      |      |
| food and live animals                             | 5.1  | 3.6  | 3.8  | 6.4  |
| beverages and tobacco                             | 10.1 | 10.1 | 10.6 | 9.4  |
| crude materials inedible, except fuels            | 3.7  | 0.2  | 2.3  | -0.6 |
| mineral fuels and related products                | 28.1 | 22.1 | 18.4 | 21.2 |
| animal and vegetable oils                         | 4.9  | 0.3  | 3.5  | 2.2  |
| chemicals and related products                    | 3.6  | 2.6  | 3.5  | 5.1  |
| manufactured goods classified chiefly by material | 1.7  | -0.2 | 0.1  | 1.2  |
| machinery and transport equipment                 | 1.6  | 1.1  | 2.5  | 4.5  |
| miscellaneous manufactured articles               | 3.7  | 2.5  | 3.2  | 4.3  |

CHART III.2.4

#### INDUSTRIAL PRODUCER PRICES

Industrial producer prices went up only slightly in 2012 Q2

(annual percentage changes; contributions in percentage points)

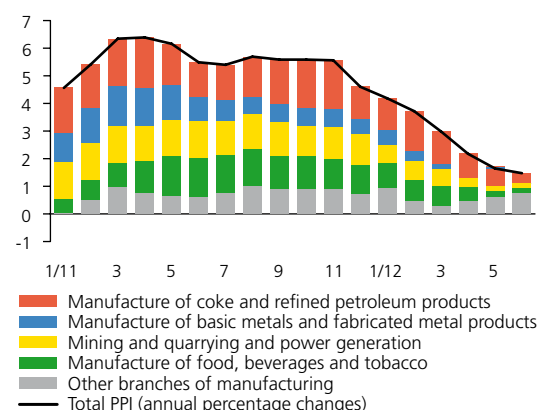
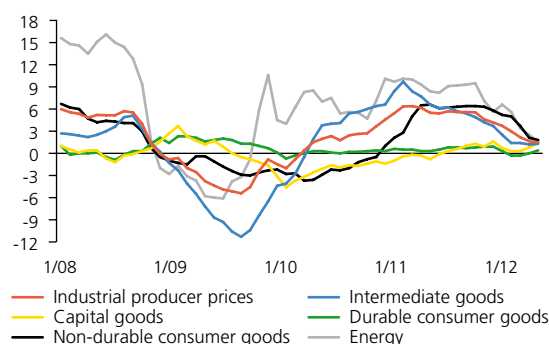


CHART III.2.5

#### PRODUCER PRICES BY MAIN INDUSTRIAL GROUPINGS

Producer price inflation moderated further in most of the main industrial categories

(annual percentage changes)



<sup>18</sup> This category contains machinery, transport equipment and miscellaneous manufactured articles. Their prices are affected mainly by the koruna-euro exchange rate, which depreciated by 3.8% year on year in May.

CHART III.2.6

## PRICES OF METALS AND REFINED PETROLEUM PRODUCTS

Producer prices in manufacture of coke and refined petroleum products and in manufacture of metals respond to movements in import prices of the main inputs with a short lag (annual percentage changes)

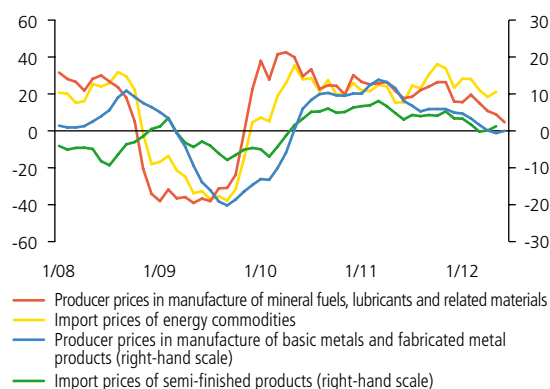


CHART III.2.7

## AGRICULTURAL PRODUCER PRICES

Agricultural producer prices increased only slightly in June (annual percentage changes)

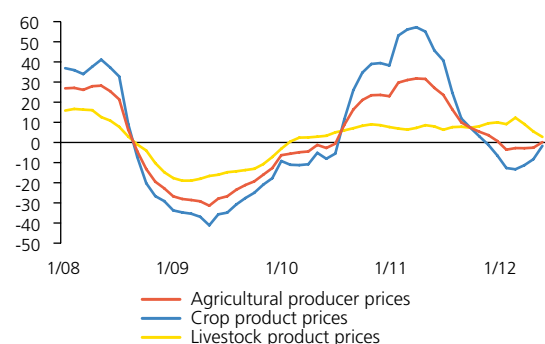
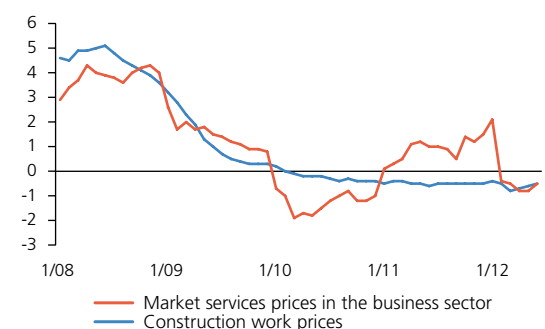


CHART III.2.8

## OTHER PRICE CATEGORIES

Prices of construction work and prices of market services are falling (annual percentage changes)



origin. The contribution of the **manufacture of basic metals and fabricated metal products** to annual producer price inflation was zero in June (see Chart III.2.6).

Annual inflation in the **electricity, gas and steam industry** was roughly at the same low level as in the previous quarter (1.7% in June). The rate of growth of prices in the water supply and sewerage-related services industry was also almost the same as in Q1 (8% in June). However, mining and quarrying recorded a rapid price decline in 2012 Q2, reaching 5.8% in June. Overall, the contribution of these industries to annual industrial producer price inflation thus decreased considerably in 2012 Q2, to only 0.2 percentage point in June.

Producer price inflation in the **other branches of manufacturing**, comprising the manufacture of high-value-added products, picked up gradually, but remained subdued. Their contribution to overall annual industrial producer price inflation in June was roughly double that recorded in March, reaching 0.8 percentage point (see Chart III.2.4). Prices of chemicals, chemical products, rubber and plastic products and transport equipment rose, while prices of electrical equipment fell slightly.

**Agricultural producer prices**

The modest year-on-year decline in **agricultural producer prices** continued into April and May 2012, but turned into marginal growth in June (of 0.2%). This was due above all to crop product prices (see Chart III.2.7). Their annual decline slowed gradually further during Q2, to -1.7% in June. By contrast, annual growth in livestock product prices slowed considerably in the same period (by almost 10 percentage points compared to March, to 2.8% in June).

The prevailing modest annual decline in agricultural producer price inflation in the first half of this year was due to factors operating in 2011, in particular much better weather conditions and the related return of some traditional exporters to world markets. In addition, the domestic harvest last year was well above average from the longer-term perspective. Overall, these factors outweighed the long-term upward trend in demand for food, driven mainly by emerging countries. At the start of 2012, prices of livestock products were also affected by a sudden rise in egg prices due to stricter veterinary rules in the EU and a related shortfall in production.

**Other producer prices**

Amid persisting low construction investment demand, **prices of construction work** continued to show a slight annual decline (of 0.5% in June; see Chart III.2.8). Prices of materials and products consumed in construction still showed modest growth in June (1.3%).

The weak domestic demand was still also apparent in **prices of market services**, which recorded a continuing modest annual decline in 2012 Q2 (of 0.5% in June). This was due largely to prices of advertising services and market research, which recorded an annual

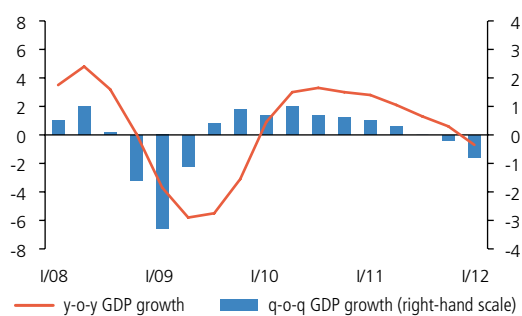
decline of 4.1% in May. It then moderated to 0.9% in June. Prices of architectural and engineering services also continued falling (by 2.7% in June), mainly reflecting persisting low demand for construction investment. Prices of services in real estate area, telecommunications and some other services decreased to a lesser extent. Prices in the other branches under review continued to show only modest growth in Q2.

CHART III.3.1

## GROSS DOMESTIC PRODUCT

## GDP declined in 2012 Q1

(annual and quarterly percentage changes at constant prices; seasonally adjusted data)



## III.3 DEMAND AND OUTPUT

Real GDP fell by 0.7% year on year in 2012 Q1.<sup>19</sup> In quarter-on-quarter terms, GDP declined by 0.8%. The annual decline was due most of all to household consumption and inventories, whereas fixed investment rose slightly in Q1. Amid a persisting lead of export growth over import growth, net exports had a pro-growth effect, albeit to a lesser extent than in the previous quarter. On the supply side, manufacturing was the biggest contributor to GDP growth, although its positive contribution shrank significantly. Gross value added decreased in a number of other industries (construction, trade and some services in particular). The estimated output gap opened deeper into negative territory in 2012 Q1.

CHART III.3.2

## STRUCTURE OF ANNUAL GDP GROWTH

## Net exports contributed positively to real GDP developments, while most components of domestic demand contributed negatively

(contributions in percentage points; seasonally adjusted data)

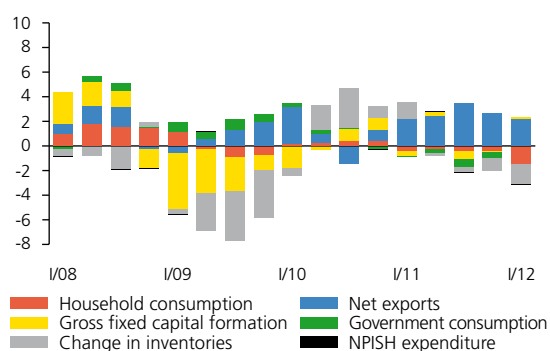
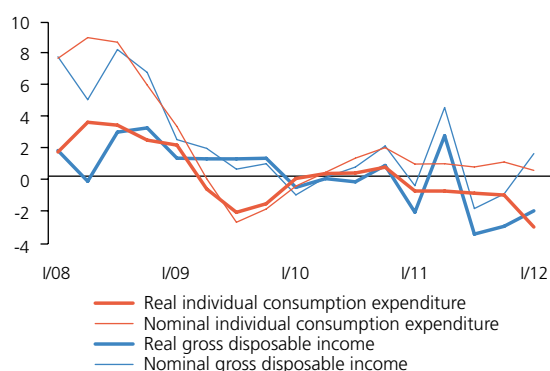


CHART III.3.3

## HOUSEHOLD CONSUMPTION EXPENDITURE

## The falling household consumption was affected by real disposable income

(annual percentage changes)



## III.3.1 Domestic demand

**Domestic demand** continued to fall year on year in 2012 Q1 and the decline deepened further. This was due most of all to a stronger decline in household consumption (see Chart III.3.2) and a still significantly negative year-on-year change in inventories. The negative contribution of government expenditure to final consumption was insignificant. By contrast, fixed investment increased slightly.

## Final consumption

**Household consumption** decreased significantly in 2012 Q1. Its annual decline deepened by more than 2 percentage points compared to 2011 Q4, reaching -2.9% (see Chart III.3.3). The decline in consumption – observed since the start of 2011 – was again linked mainly with ongoing fiscal consolidation and recently also with the stagnating labour market and increasing uncertainty surrounding future economic developments. Falling household consumption was observed in most monitored categories of consumer goods, i.e. non-durable and durable goods and services. Only real expenditure on semi-durable goods increased slightly year on year in Q1.

**Nominal gross disposable income**, which is the main source of financing of households' consumption expenditure, increased again in 2012 Q1 (by 1.8%). Its growth was fostered primarily by faster growth in wages and salaries, which was mostly due to extraordinary factors (see section III.4). Other current transfers and social benefits also recorded positive contributions to annual disposable income growth, but these contributions were insignificant given their low growth rates (see Chart III.3.4). By contrast, the relatively high-weight business income (gross operating surplus and mixed income) continued to record a modest annual decline. Property income decreased slightly as well. The biggest negative contributions were again recorded for payments of taxes and social contributions.

19 The assessment of GDP expenditure and sources is based on seasonally adjusted data from the quarterly national accounts.

Nonetheless, the **real purchasing power** of disposable income decreased again year on year in 2012 Q1 (see Chart III.3.3), as it was reduced even more by annual inflation than in the previous quarter.<sup>20</sup> However, the real decline in gross disposable income in Q1 (-1.8%) was lower than that at the end of 2011, thanks to an increase in nominal terms. The main cause of the deeper decline in household consumption in Q1 can thus be seen in cautious behaviour of households due to significant economic uncertainty.

The **gross saving rate** reflected the restrained consumption behaviour of households. It is likely that the modest decline in the saving rate in 2011 H2 was a reaction by households to the rapidly falling real purchasing power of their income, as they were no longer able to generate savings at the previous level if they wanted to maintain their current level of consumption. A return of the household saving rate to the 10% level in 2012 Q1 amid a more favourable trend in income then signalled that households were interested in creating financial reserves in an environment of persisting uncertainty on the labour market and expectations of further restrictive fiscal measures. At the same time, households continued to reduce the financing of their consumption expenditure via consumer credit (see section III.5.2).

The latest available **leading indicators** do not yet suggest any noticeable recovery in household consumption in the period ahead. The seasonally adjusted real retail sales data including the automotive segment for May decreased year on year. Sales of motor vehicles fell, whereas other retail sales showed modest growth thanks to rising sales of non-food products. Sales of food decreased, however. The latest results of the June CZSO business survey do not indicate any noticeable change in the cautious consumption behaviour of households either, as the consumer confidence indicator remains on a downward trend, approaching the record lows of 1998 and 1999. This trend primarily reflects households' worsening expectations regarding the overall economic situation and unemployment.

The year-on-year decline in real **government final consumption expenditure** moderated to 0.2% in 2012 Q1. The continuing decline is a result of the implementation of government austerity measures.

### Investment

The evolution of investment in 2012 Q1 reflected the persisting substantial uncertainty regarding future demand. **Fixed investment** rose slightly year on year (by 1%), but this increase was due to base effects. By contrast, it decreased considerably in quarter-on-quarter terms (by 8.6%).

<sup>20</sup> The year-on-year household consumption deflator reached 2.1% in 2011 Q4 and increased to 3.7% in 2012 Q1, mainly on account of the pass-through of the increased VAT to consumer prices and a rise in administered prices.

CHART III.3.4

### DISPOSABLE INCOME

**Households' nominal gross disposable income rose modestly, aided mainly by wages and salaries**

(annual percentage changes; contributions in percentage points; current prices)

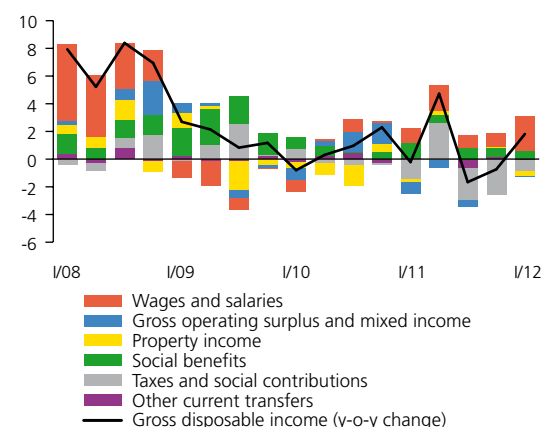


CHART III.3.5

### SAVING RATE AND CONSUMER CONFIDENCE INDICATOR

**The gross saving rate returned to the 10% level**

(percentages; basic index; year 2005 = 100; seasonally adjusted data)

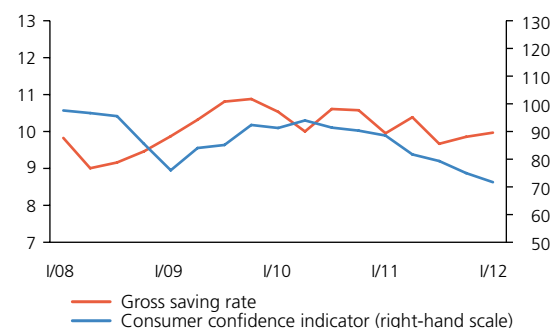


CHART III.3.6

### FIXED CAPITAL FORMATION

**Fixed investment increased slightly**

(annual percentage changes; contributions in percentage points; constant prices)

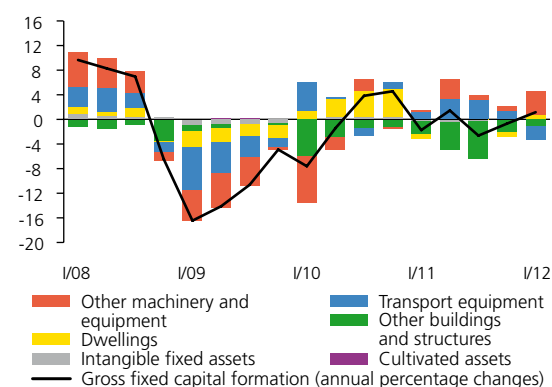




TABLE III.3.1

## INVESTMENT BY SECTOR

Investment went up slightly only in non-financial corporations and nonprofit institutions

(constant prices; CNB calculation)

|   | II/11 | III/11 | IV/11 | I/12  |
|---|-------|--------|-------|-------|
| Annual percentage changes                   |       |        |       |       |
| Non-financial corporations                  | 10.3  | 3.7    | 7.0   | 4.0   |
| Households                                  | -1.8  | -2.9   | -8.1  | -1.6  |
| General government                          | -19.1 | -17.9  | -11.4 | -4.3  |
| Financial corporations                      | -30.0 | -31.5  | -29.5 | -14.0 |
| Nonprofit institutions serving households   | 7.0   | 1.9    | 4.3   | 3.4   |
| Share in total fixed investment in per cent |       |        |       |       |
| Non-financial corporations                  | 62.5  | 59.3   | 60.3  | 62.5  |
| Households                                  | 21.5  | 23.3   | 22.4  | 20.7  |
| General government                          | 14.1  | 15.5   | 15.3  | 15.1  |
| Financial corporations                      | 1.6   | 1.6    | 1.7   | 1.5   |
| Nonprofit institutions serving households   | 0.2   | 0.2    | 0.2   | 0.3   |

CHART III.3.7

## INVESTMENT IN DWELLINGS

Investment in dwellings and housing completions rose in 2012 Q1

(annual percentage changes)

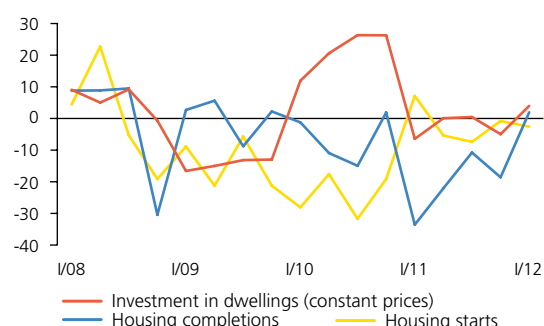
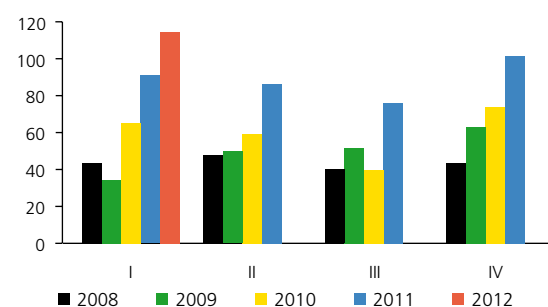


CHART III.3.8

## NET EXPORTS

Net exports increased significantly year on year again in 2012 Q1

(CZK billions; constant 2005 prices; seasonally adjusted data)



However, in the **non-financial corporations** sector, which accounts for more than 60% of total investment, fixed investment continued rising, albeit more slowly than in the previous quarter (by 4% year on year; see Table III.3.1). This growth was driven by investment in machinery and equipment, whereas investment in buildings and structures has been falling since the outbreak of the financial crisis. According to the latest business survey conducted by the CNB and the Confederation of Industry in March, the outlook for investment growth in non-financial corporations is rather more optimistic than in the previous quarter. This is evidenced by the fact that the balance of the expected change in investment expenditure turned positive at the 6-month horizon and the positive balance at the 12-month horizon increased.

The year-on-year fall in investment in the **household sector** slowed sharply (to -1.6%). Investment in dwellings, which accounts for a large proportion of total household investment, rose again in 2012 Q1 (by 4% year on year; see Chart III.3.7) after fluctuating between declines and stagnation in 2011. Leading indicators<sup>21</sup> are not yet providing any convincing signs of a recovery in housing demand in the period ahead. The still negative or only slightly positive year-on-year changes in these indicators indicate a cautious approach of developers and households to investment in dwellings, mainly because of uncertainty regarding future economic developments and the situation on the labour market. The decline in investment in the **government sector** (of 4.3% year on year) in 2012 Q1 was probably due largely to problems with the drawdown of EU funds. The biggest fall in investment was recorded in the financial institutions sector, whose effect on total investment, however, is less significant.

The negative contribution of change in **inventories** to GDP growth deepened again in 2012 Q1 (to 1.6 percentage points; see Chart III.3.2). According to the latest business survey conducted by the CNB and the Confederation of Industry in June, there was a surplus of corporations expecting stocks of raw and ancillary materials and semi-finished products and work in progress to rise year on year in 2012 Q3. This is in line with an expected improvement in these corporations' orders at the 6-month horizon.

## III.3.2 Net external demand

Amid a persisting decline in most components of domestic demand, **net exports of goods and services** were the main source of GDP growth in 2012 Q1 (see Chart III.3.2). Net exports grew for the sixth consecutive quarter in year-on-year terms. In Q1 alone, the surplus was CZK 114.6 billion, up by almost CZK 24 billion on the same period a year earlier. A quarter-on-quarter increase in net exports was also

21 Data on housing starts and completions.



recorded (see Chart III.3.8). As in the previous quarters, the year-on-year growth in net exports was due mainly to the trade surplus and, to a lesser extent, to an increase in the services surplus in Q1.

Annual growth in foreign trade turnover was again faster than in the previous quarter (see Chart III.3.9). However, the lead of export growth over import growth narrowed further (to 2.6 percentage points), as the annual growth rate of imports increased faster than that of exports. **Total exports** grew by 6.5% in Q1, their growth rate rising by 1.3 percentage points on the previous quarter. This positive result was achieved despite flat annual external demand growth in the Czech Republic's major trading partner countries and persisting uncertainty about future economic developments. This outcome was primarily due to solid competitiveness of some engineering sectors.

A marked pick-up in annual growth in **total imports** in 2012 Q1 (of 2.4 percentage points compared to the previous quarter, to 3.9%) was associated mainly with rising imports of intermediate consumption goods for export production. The other categories with regard to use were affected by weakening domestic demand, reflected in slowing annual growth, or a decline, in imports.

### III.3.3 Output

The gradual slowdown in year-on-year growth in **gross value added** at basic prices observed during 2011 changed into a modest decline of 0.2% in 2012 Q1 (see Chart III.3.10). As in the previous quarters, the continuing fall in growth in gross value added was a result of slowing growth in gross value added in manufacturing and falling value added in construction, wholesale and retail trade and some services (see below). By contrast, value added in other services rose slightly. The weakening domestic and external demand thus continued to affect the output of individual industries with varying intensity.

In 2012 Q1, the biggest positive contributions to annual value added growth at basic prices were again created in **manufacturing**, whose production is largely exported. However, the positive contribution of this industry shrank considerably to 0.6 percentage point in Q1, amid weak demand and still fast growing prices of some significant production inputs (see Chart III.3.10). Value added in the other branches of industry<sup>22</sup> was more or less flat. The overall contribution of industry to the annual growth in gross value added was thus less than 1 percentage point in 2012 Q1.

22 The mining and energy supply sectors.

CHART III.3.9

#### EXPORTS AND IMPORTS

**Foreign trade turnover accelerated slightly in 2012 Q1, while exports continued to rise faster than imports**

(annual percentage changes; percentage points; constant prices; seasonally adjusted data)



CHART III.3.10

#### CONTRIBUTIONS OF BRANCHES TO GVA GROWTH

**Gross value added declined modestly in year-on-year comparison in 2012 Q1**

(contributions in percentage points; annual percentage changes)

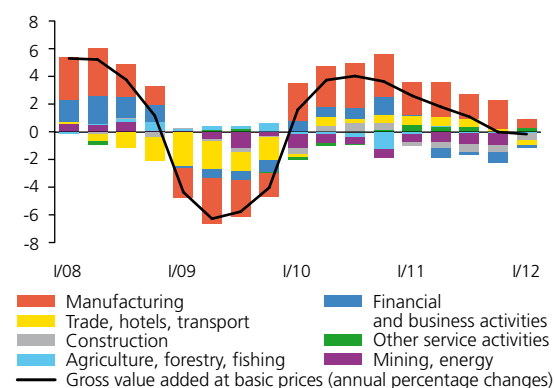


CHART III.3.11

#### INDUSTRIAL PRODUCTION

**The seasonally adjusted volume of industrial production was more or less flat in April and May**

(basic index; year 2005 = 100)

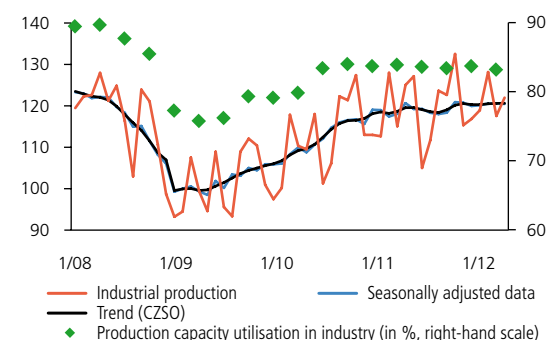


CHART III.3.12

## NEW ORDERS IN INDUSTRY

Growth in new industrial orders is being driven by orders from abroad

(annual percentage changes)

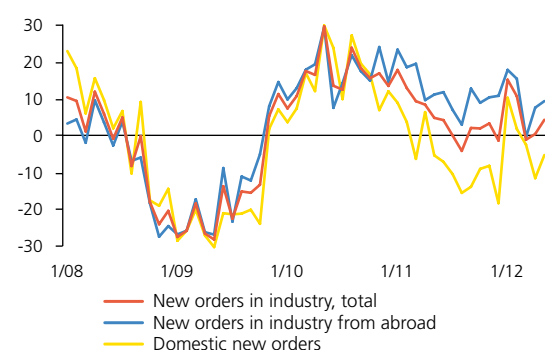


CHART III.3.13

## BARRIERS TO GROWTH IN INDUSTRY

The effect of insufficient demand as a barrier to growth remains dominant and is continuing to increase

(percentages)

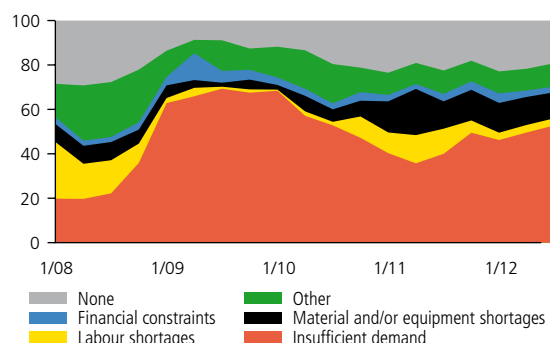
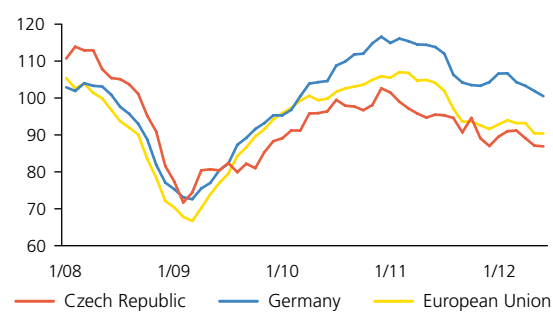


CHART III.3.14

## ECONOMIC SENTIMENT

Economic sentiment worsened both in the Czech Republic and in Germany and the EU as a whole in 2012 Q2

(long-term average = 100; seasonally adjusted data; source: Eurostat)



A closer look at the structure of **industrial production** at the same time suggested that the low demand affected the output of most industries.<sup>23</sup> Growth was maintained primarily in export-oriented industries, although its pace mostly decreased compared to the previous year. This was also indicated by slowing growth in direct export sales at current prices, although it was still quite strong (at 8.4% in 2012 Q1). These results were also consistent with the slowing, but still sizeable, growth in goods exports according to the national accounts (6.7% year on year in real terms).

According to seasonally adjusted data, the annual growth rate of industrial production continued to slow in April 2012. In May, for the first time in more than two years, seasonally adjusted industrial production decreased in year-on-year terms due to a decline in both domestic and external demand (of 0.1%) amid falling domestic and direct export sales.<sup>24</sup> Consistent with these data are the results of the CZSO's July business survey in industry, according to which the effect of insufficient demand as a **barrier to growth in industry** again increased slightly (see Chart III.3.13), while **capacity utilisation** in industry decreased slightly (see Chart III.3.11).

The latest data on **new industrial orders** are rather more optimistic, as – after recording a year-on-year decline in March – they were positive in April and May thanks to a faster growth in orders from abroad. However, domestic orders continued to fall year on year (see Chart III.3.12).

Amid persisting low demand, the contribution of **services and trade** to total gross value added growth remained negative in 2012 Q1 (-0.3 percentage point). This was mostly on account of financial intermediation and insurance, where value added rose quickly in 2011, and also retail and wholesale trade, transport and restaurants and hotels (see Chart III.3.10). Value added continued to grow only in some branches where non-market services predominate.<sup>25</sup> According to CZSO data for May, the overall decline in retail sales<sup>26</sup> does not currently indicate that wholesale and retail trade will make any major contribution to value added growth in 2012 Q2.

The strong annual decline in gross value added in **construction** persisted in 2012 Q1 (-7.4%). This was mostly due to a double-digit fall in civil engineering and a 5.2% decrease in the higher-weight construction engineering. The outlook for construction in the next few months is also unfavourable. The number of building permits issued declined by 15.3% in May and the approximate value of building notifications and permits fell significantly, too. These developments

23 In 2012 Q1, industrial production decreased in real terms in more than one-half of the industries under review.

24 Direct export sales and domestic sales fell by 0.5% and 2.4% respectively year on year.

25 In 2012 Q1, value added continued to grow in public administration and defence, education, health and social care, and scientific, technical and administrative activities.

26 See section III.3.1 for details.

are reflected in a continuing decrease in employment in construction.<sup>27</sup> According to the CZSO's business survey, the expectations of construction businesses are still predominantly pessimistic.

The CZSO's business survey shows that the **overall confidence indicator** decreased in 2012 Q2 after a previous increase. The business confidence indicator worsened, whereas consumer sentiment improved slightly in June following a previous decrease. Nonetheless, the consumer confidence indicator is still at much lower levels than the business confidence indicator. Optimism continued to prevail in businesses operating in the services and trade sectors, whereas the balance of the industrial confidence indicator turned slightly negative in 2012 Q2. An international comparison reveals that economic sentiment in Germany and the EU as a whole worsened in 2012 Q2 (see Chart III.3.14).

### III.3.4 Potential output and estimate of the cyclical position of the economy

The estimated year-on-year growth rate of potential output continued to slow in 2012 Q1 and the output gap opened further into negative values. According to the calculation of the **Cobb-Douglas production function**,<sup>28</sup> the rate of growth of potential output slowed to 1.0%<sup>29</sup> in this period (see Chart III.3.15) and the output gap opened to -1.5% of potential output (see Chart III.3.16). The calculation suggests that the growth rate of potential output will slow further and return to slightly higher levels only in 2013 H2. According to the calculation of the production function, the related output gap should continue to open into negative values until the end of 2012 and start to close gradually in 2013. However, it will not turn positive until 2014 H2.

The breakdown of the **contributions of the individual factors** entering the baseline production function reveals that the slowdown in annual potential output growth in 2012 Q1 was due to a decreasing contribution of capital and aggregate productivity, while the negative contribution of equilibrium employment gradually faded (see Chart III.3.17). The gradually falling contributions of capital and aggregate productivity will affect the path of potential output for the remainder of 2012.

27 For the segment with 50 employees or more.

28 The production function is computed in three ways using different input data. While the first (baseline) variant uses equilibrium employment, the second variant uses total employment. The third variant differs from the baseline variant by using slightly different coefficients  $\alpha$ . Coefficient  $\lambda = 10,000$  is used to filter productivity in the HP filter. The estimates of future potential output and the output gap are based on the CNB's macroeconomic forecast. The inclusion of the forecast helps to reduce the deviation of the HP filter at the end of the data sample.

29 Average of the three calculations.

CHART III.3.15

#### POTENTIAL OUTPUT

The rate of growth of potential output slowed slightly again in 2012 Q1 according to the calculation of the production function  
(annual percentage changes)

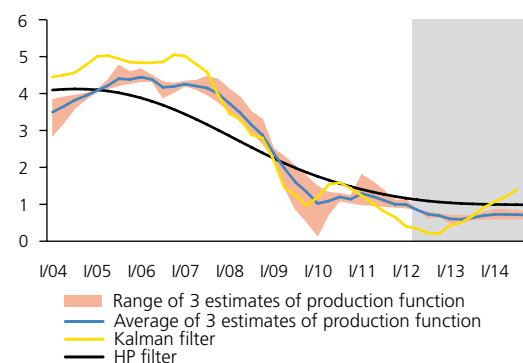


CHART III.3.16

#### OUTPUT GAP

The output gap opened further into negative values in 2012 Q1  
(in % of potential output)

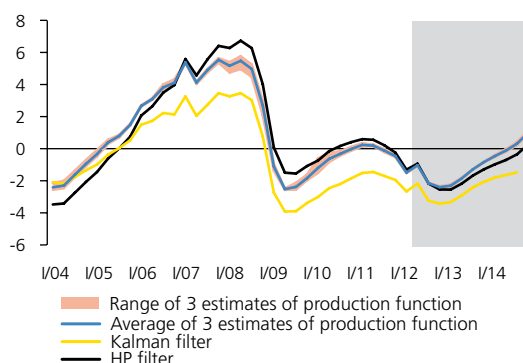
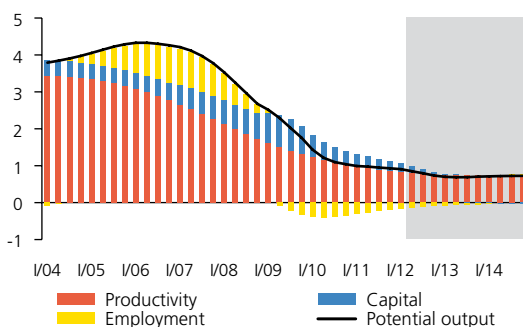


CHART III.3.17

#### CONTRIBUTIONS TO POTENTIAL OUTPUT GROWTH

A fall in the contribution of capital is the main contributor to a slowdown in potential output growth  
(baseline production function; annual percentage changes)



An alternative estimate using the HP filter<sup>30</sup> continues to indicate a slightly higher growth rate of potential output (1.2% in 2012 Q1) than that calculated using the production function. The output gap is similar under both methods in the rest of 2012, but the HP filter suggests slower closure of the output gap in 2013 and 2014. The Kalman filter, which is now calculated using data including the forecast, indicates a lower growth rate of potential output in 2012 Q1 (0.4%) and, by contrast, a greater opening of the output gap into negative values (-2.7% of potential output). The persisting dispersion of the results of the individual methods indicates the degree of uncertainty surrounding the estimates of the current cyclical position of the economy. However, all the methods suggest a continuing slowdown in potential output growth and an opening of the output gap into negative values for the remainder of 2012.

30 The estimate using the HP filter also used coefficient  $\lambda = 10,000$ .

### III.4 THE LABOUR MARKET

The labour market was affected by a gradual weakening of economic activity in 2012 Q1. Total employment was broadly flat year on year. The general unemployment rate edged up quarter on quarter, while the registered unemployment rate has been broadly unchanged recently. Annual growth in the average nominal wage picked up significantly, although mainly because of extraordinary factors. Whole-economy labour productivity switched to an annual decline and unit labour costs increased considerably.

#### III.4.1 Employment and unemployment

**Total employment**<sup>31</sup> increased only slightly in 2012 Q1 (by 0.1%; see Chart III.4.1), following a slight decline at the end of 2011. This meant an increase of 2,500 in the number of employed people in absolute terms. Employment also rose only marginally (by 0.1%) in quarter-on-quarter terms (after seasonal adjustment). This insignificant change in total employment in 2012 Q1 was due to contrary changes in employment in the categories of employees and entrepreneurs. While the number of entrepreneurs recorded a further increase in year-on-year growth (from 1.9% in 2011 Q4 to 3.1%), reaching almost 900,000,<sup>32</sup> the category of employees<sup>33</sup> saw a slight deepening of the annual decline observed in the previous quarter (to -0.6%).<sup>34</sup>

The developments described above were due mainly to the weakening performance of the economy and persisting considerable uncertainties. The contribution of **industry** to the year-on-year change in total employment turned negative amid a sizeable increase in the positive contribution of **market services** (see Chart III.4.2) thanks to a 1.6% year-on-year increase in the number of people employed in this segment (i.e. 26,400 persons). Employment in non-market services was broadly flat, following previous sharp falls due to government austerity measures. A closer look at the structure of employment in services reveals that employees turned to independent business activity if they lost their job, especially in real estate and wholesale and retail trade.

Employment fell in the other sectors of the national economy. The number of employed people in **industry** recorded a year-on-year decline of 0.8% (or 11,000 persons; see Chart III.4.2) in 2012 Q1. Employment was still rising in **manufacturing**, albeit at a significantly slower rate than in 2011 Q4 (up by 0.3%, or 3,600 persons). This trend is likely to continue into 2012 Q2, as according to the latest CZSO data the average registered number of employees increased

CHART III.4.1

#### LABOUR MARKET INDICATORS

**Employment was broadly flat in 2012 Q1, while average nominal wage growth picked up significantly**  
(annual percentage changes)

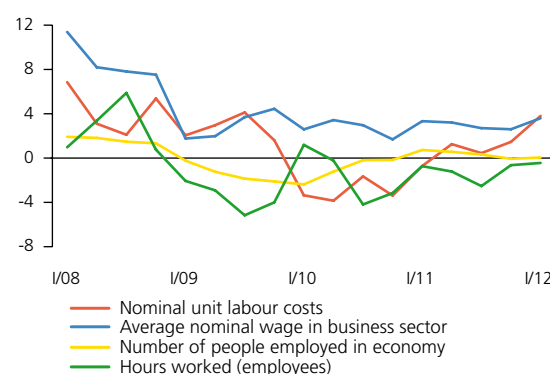
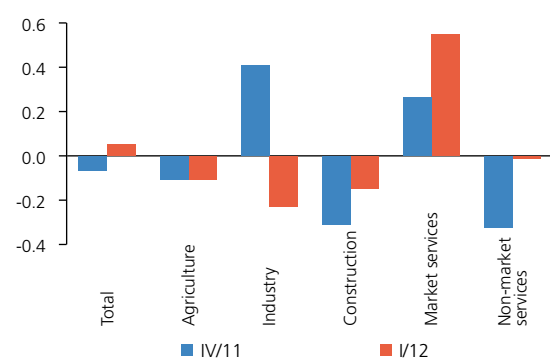


CHART III.4.2

#### EMPLOYMENT BREAKDOWN BY BRANCHES

**The slight growth in employment was driven by market services; employment fell in industry and construction**  
(contributions in percentage points to annual growth; selected branches; source: LFS)



<sup>31</sup> Employment according to the LFS.

<sup>32</sup> Their share in total employment increased to a record high 18.6%.

<sup>33</sup> Including members of production cooperatives.

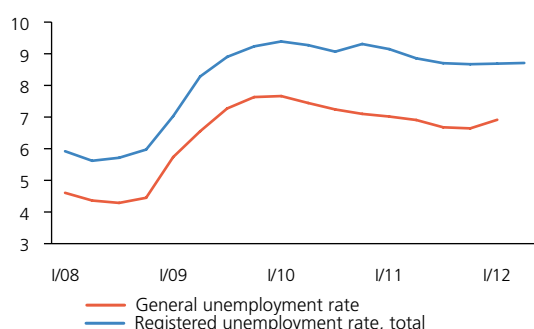
<sup>34</sup> In absolute year-on-year terms, the number of entrepreneurs increased by 26,700 and the number of employees declined by 24,200.

CHART III.4.3

## UNEMPLOYMENT RATE

The registered unemployment rate is flat in quarter-on-quarter comparison

(percentages; seasonally adjusted data; source: MLSA, CZSO)



only by 0.1% year on year in April and was flat in May.<sup>35</sup> The annual decline in employment in **agriculture** was the same as in the previous quarter (-3.6%). By contrast, the annual decrease in **construction** moderated significantly (to -1.7% in 2012 Q1).

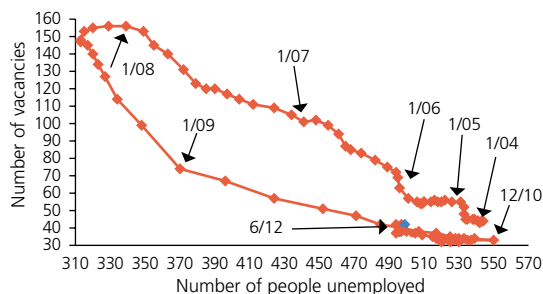
With employment rising only slightly and the labour force remaining unchanged, the **general unemployment rate**<sup>36</sup> decreased by 0.1 percentage point year on year in 2012 Q1. Adjusted for seasonal effects, however, it increased by 0.3 percentage point to 6.9% in quarter-on-quarter terms. The **total registered unemployment rate** (MLSA) showed similar developments, declining by 0.4 percentage point in the same period, to 9.4%. The more pronounced decline in the registered unemployment rate is due to a one-off increase at the start of 2011 caused by legislative changes made in the labour market area.<sup>37</sup> In quarter-on-quarter terms it was flat at 8.7%.<sup>38</sup> It remained at the same level in 2012 Q2 (see Chart III.4.3).

CHART III.4.4

## BEVERIDGE CURVE

The number of vacancies remains low

(seasonally adjusted numbers in thousands)



The **Beveridge curve**<sup>39</sup> indicated no distinct positive changes in demand for labour in terms of vacancies in 2012 Q1. The number of vacancies rose only slightly, while the number of unemployed people was broadly flat. The number of vacancies continued to increase slightly in 2012 Q2, but there was also a rise in the number of unemployed people (see Chart III.4.4).

## III.4.2 Wages and productivity

Contrary to expectations, annual **average nominal wage growth** rose significantly to 3.6% in 2012 Q1. However, with annual inflation rising even more considerably, the average real wage declined by 0.1% (see Table III.4.1). Faster growth in the average nominal wage, following stagnation at 2.4% last year, was observed in both the business and non-business sectors.

The year-on-year increase in average nominal wage growth in the **business sector** in 2012 Q1 (from 2.6% in 2011 Q4 to 3.6%) was due mainly to wages in manufacturing. With average wage growth of 4%, this sector contributed 0.6 percentage point to annual growth in the average wage. The contribution of professional, scientific and technical activities (0.4 percentage point) was also relatively significant.<sup>40</sup> The average wage also continued to rise in most other branches of the business sector,<sup>41</sup> but the rates of growth were very mixed.

TABLE III.4.1

## WAGES, PRODUCTIVITY, UNIT LABOUR COSTS

Average nominal wage growth in the business sector

accelerated noticeably  
(annual percentage changes)

|                                     | II/11 | III/11 | IV/11 | I/12 |
|-------------------------------------|-------|--------|-------|------|
| Average wage in Czech Republic      |       |        |       |      |
| nominal                             | 2.4   | 2.4    | 2.4   | 3.6  |
| real                                | 0.6   | 0.6    | 0.0   | -0.1 |
| Average wage in business sector     |       |        |       |      |
| nominal                             | 3.2   | 2.7    | 2.6   | 3.6  |
| real                                | 1.4   | 0.9    | 0.2   | -0.1 |
| Average wage in non-business sector |       |        |       |      |
| nominal                             | -0.9  | 1.0    | 1.6   | 3.5  |
| real                                | -2.7  | -0.8   | -0.8  | -0.2 |
| Whole-economy labour productivity   | 1.8   | 1.2    | 0.2   | -0.6 |
| Nominal unit labour costs           | 1.3   | 0.4    | 1.5   | 3.8  |

35 Data from corporations with 50 employees or more, excluding agency workers.

36 In the 15–64 age category. Measured by the ILO methodology according to the LFS.

37 For details see the Inflation Report I/2011, section III.4 *The labour market*.

38 Seasonally adjusted data are used for the quarter-on-quarter figures.

39 The Beveridge curve has been affected by legislative changes in effect since 1 January 2012. Since that date, corporations have not been obliged to report the number of vacancies to labour offices.

40 Following a long period of decline, the average wage in this branch recorded an annual increase of 5.3% in 2012 Q1.

41 Except real estate activities, electricity supply and distribution, and education.

According to the CZSO, growth in the average wage in 2012 Q1 was strongly affected by payments of ex gratia (irregular) bonuses. The list of possible factors also includes an increasing share of paid leave, which suggests that employees are taking financially more beneficial leave during short periods of illness. The average wage was also probably affected by the dismissal of employees in sectors with lower average wages than the overall average and by the recruitment of new employees in sectors with average wages exceeding the overall average.

Growth in the average nominal wage also picked up significantly in the **non-business sector** in 2012 Q1 (to 3.5%). This was mostly due to renewed annual growth in the average wage in public administration and defence (of 2.2%), accompanied by a decline in the number of employees. However, wages in the non-business sector continued to decline in real terms.

The continuing gradual slowdown in annual growth in **whole-economy productivity**<sup>42</sup> switched to a decline in 2012 Q1 (of 0.6%; see Chart III.4.5). This was due to a combination of a pronounced fall in GDP and a slight increase in employment. However, productivity continued to be very mixed across sectors. It rose fastest in manufacturing, where continued – albeit slowing – annual growth in value added together with a significant decline in employment resulted in an increase in productivity of 4.3%. Productivity in non-market services also increased slightly (by 2.4%), while the annual decline in productivity in market services deepened to -3.9% amid continued employment growth and falling value added. Productivity in construction also fell more significantly than in the previous quarter owing to a strong decline in value added (by 5.5% year on year).

In these circumstances, **nominal unit labour costs**<sup>43</sup> continued to rise in 2012 Q1. The further pronounced increase in their growth (to 3.8%) was due mainly to faster growth in the volume of wages and salaries (see Chart III.4.6).<sup>44</sup> Nominal unit labour costs increased in all the monitored sectors in Q1, primarily because of a fall in value added in construction (of 7.8%) and market services (of 4.8%). Unit labour costs rose least of all in industry, where a faster rise in wages and salaries was largely offset by an increase in value added.

CHART III.4.5

## WHOLE-ECONOMY PRODUCTIVITY

**Whole-economy productivity declined year on year in 2012 Q1**  
(annual percentage changes)

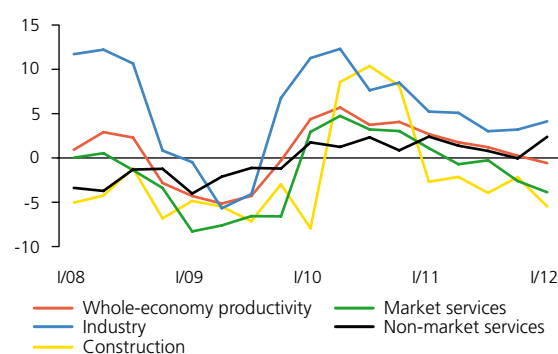
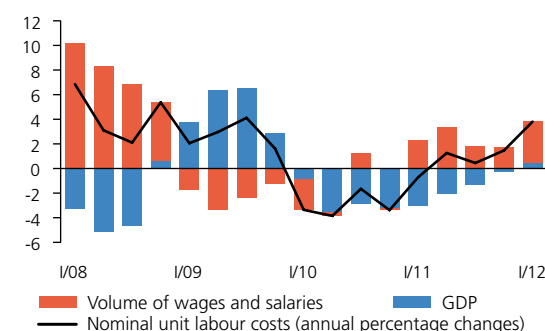


CHART III.4.6

## UNIT LABOUR COSTS

**Nominal unit labour costs rose sharply in 2012 Q1**  
(contributions in percentage points; annual percentage changes)



42 Productivity is calculated on the basis of non-seasonally adjusted data.

43 Nominal unit labour costs are calculated on the basis of non-seasonally adjusted data.

44 A revision of the data on the volume of wages and salaries in 2011 meant a significant upward shift of the nominal unit labour costs path (by 1.2 percentage points on average). Nominal unit labour costs thus increased by 0.6 percentage point in 2011.



CHART III.5.1

## MONETARY AGGREGATES

Money aggregate growth slowed somewhat

(annual percentage changes)

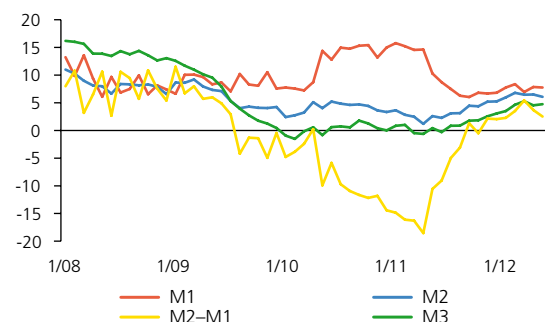


CHART III.5.2

## MAIN COMPONENTS OF M2 AND INTEREST RATE SPREAD

Growth in short-term and long-term deposits decreased

(annual flows in CZK billions; spreads in percentage points)

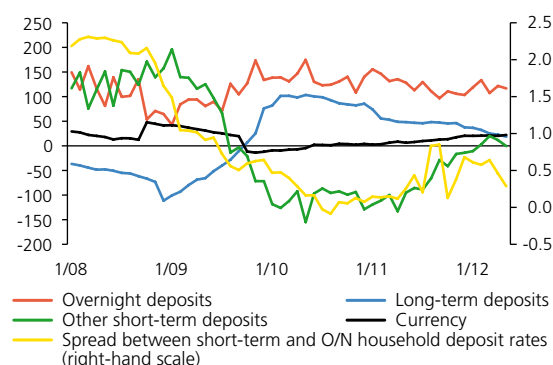
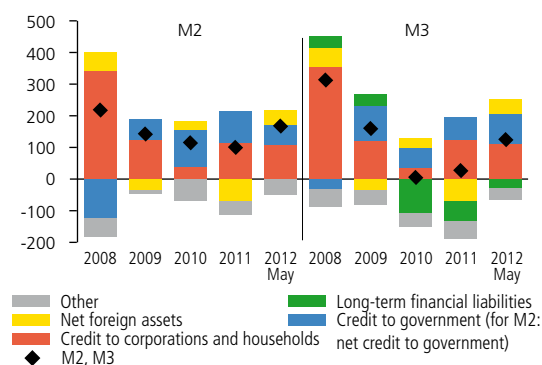


CHART III.5.3

## MONEY CREATION

An increase in net foreign assets is being reflected in faster money growth this year; lower growth in credit to the private sector is acting in the opposite direction

(average annual flows in CZK billions)



Note: Long-term financial liabilities of MFIs comprise time deposits with an agreed maturity of more than two years and redeemable at notice of more than three months as well as issued debt securities with maturity of more than two years.

## III.5 FINANCIAL AND MONETARY DEVELOPMENTS

Annual monetary aggregate growth slowed slightly. The growth rate of loans to corporations and households also declined further, with corporations' demand for investment loans decreasing and households' demand being limited by worse consumer confidence. Owing to the worse economic outlook, credit standards and banks' terms and conditions for approving loans tightened, easing only for house purchase loans. Client interest rates increased slightly for some types of loans but remained close to historical lows. The financial indicators of corporations generally deteriorated. The ratios of corporate and household debt to GDP were almost unchanged. Asking prices of dwellings in Prague rose year on year, but alternative indicators suggest no significant recovery in property prices.

## III.5.1 Money

Following a previous acceleration, the annual growth rate of the **broad monetary aggregates** slowed somewhat in 2012 Q2. The growth rate of M2 reached 6.1% in May (see Chart III.5.1). M3 showed a similar trend – the increase in its annual growth rate (4.7% in May) also halted in Q2.<sup>45</sup> Against the backdrop of subdued economic activity, the slowdown in M2 growth was accompanied by a decrease in the velocity of broad money.

The lower M2 growth was due to the short-term and long-term deposits included in quasi money (see Chart III.5.2). By contrast, the growth rate of highly liquid M1 **transaction money** was flat at 7.8%. The spread between the interest rates on short-term time deposits and overnight deposits shrank because of a decrease in the rate on short-term deposits, which fostered growth in overnight deposits. Other short-term deposits slowed to almost zero. Long-term time deposits fell further amid a continued downward tendency in interest rates in this segment.

Turning to the **creation of money**, net foreign asset growth increased in 2012 compared to 2011, owing mainly to continuing favourable trade balance developments and to issues of corporate bonds and, in Q1, government bonds abroad (see Chart III.5.3). Domestic bank financing of the government increased, gradually equalling the growth in loans to the private sector. By contrast, growth in loans to the private sector slowed further.

Growth in client **deposits** (excluding general government deposits) at banks has recorded a slight year-on-year decline in recent months and stood at 6% in May. The growth rate of household deposits dropped further to 4%, which is around 1 percentage point below

45 M3 growth in the euro area remains subdued, amounting to 2.9% in May.



the end-2011 level (see Chart III.5.4). These deposits and deposits of non-monetary financial institutions fostered lower growth in the broad monetary aggregates. On the other hand, the growth rate of deposits of non-financial corporations showed an upward tendency, reaching 10.4% in May. Deposits in manufacturing and by developers recorded higher growth, while growth in deposits in energy, financial intermediation and insurance slowed.

### III.5.2 Credit

Annual growth in **loans to the private sector** continued to decline gradually in 2012 Q2, reaching 4.4% in May (see Chart III.5.5). The decline in the ratio of loan flows to GDP also continued into 2012 Q1, owing to a decline in flows of loans to households amid slightly higher flows of loans to non-financial corporations (see Chart III.5.6). The ratio of the stock of loans to GDP remained at around 54%.

According to the CNB's new quarterly Bank Lending Survey (see Box 1 *The Bank Lending Survey*), **demand for loans** generally increased in 2012 Q2 (see Table III.5.1). On the supply side, credit standards showed mixed trends, tightening for corporate loans and consumer credit (due mainly to banks' perceptions of the risks relating to the outlooks for industries and the economy as a whole) while easing for house purchase loans due to stronger competition among banks.

In the **euro area**, growth in loans to the private sector slowed to zero as a result of demand factors and also supply factors in some countries. The demand side was affected by the current phase of the business cycle and by increased risk aversion bolstered by the relatively high indebtedness of corporations and households in some euro area countries. On the supply side, the availability of loans was reduced by changes made in the capital positions of some banks to cover potential losses in order to meet the new capital requirements. The impact of the three-year refinancing operations (LTROs) on loans can be expected to take several quarters to materialise and will depend on improvements in the economic outlook, progress with the adjustment of banks' balance sheets and a reduction in the tensions linked with the debt crisis (see the ECB's July 2012 Monthly Bulletin).<sup>46</sup>

Annual growth in **loans to non-financial corporations** declined further in the Czech Republic in Q2, amounting to 4.2% in May. In particular, long-term loans and loans to manufacturing have recently recorded lower growth. Growth in new corporate loans was relatively volatile.

<sup>46</sup> According to the ECB's latest Bank Lending Survey, the tightening of credit standards in the euro area fell substantially in 2012 Q1 compared to the previous period, on account of lower tensions regarding banks' funding and liquidity positions and expected economic activity. Loan demand declined in all segments of the credit market. Banks in the euro area were expecting these tendencies to moderate in Q2 (see the ECB's May 2012 Monthly Bulletin).

CHART III.5.4

#### DEPOSIT STRUCTURE OF M2

**Growth in deposits of households and non-monetary financial institutions decreased**  
(annual percentage changes)

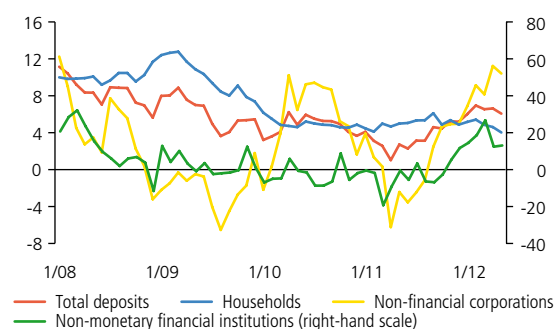


CHART III.5.5

#### LOANS TO CORPORATIONS AND HOUSEHOLDS

**Growth in loans to the private sector continued to decline**  
(annual percentage changes; ratios in %)

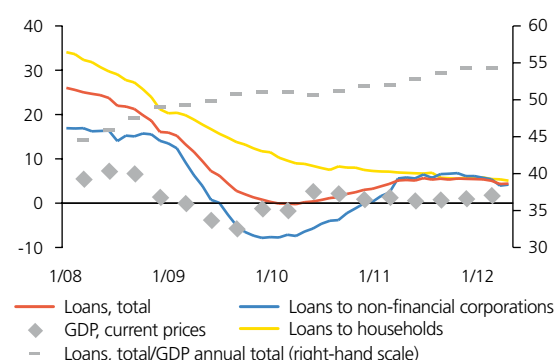


CHART III.5.6

#### LOANS AND GDP

**The ratio of loan flows to GDP declined**  
(ratios in %; annual percentage changes)

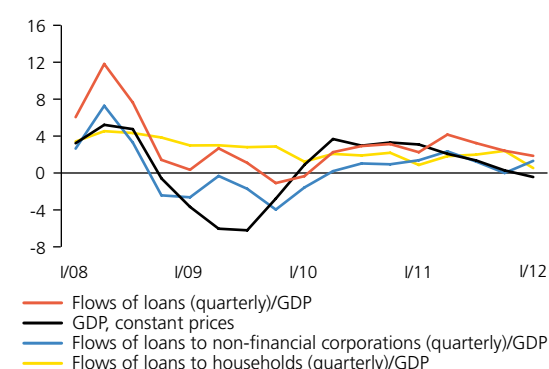
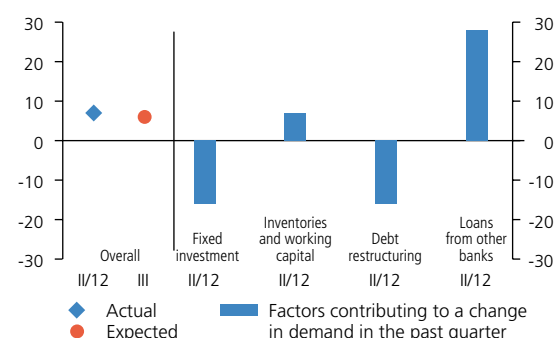


CHART III.5.7

## NON-FINANCIAL CORPORATIONS' DEMAND FOR LOANS

**Corporations' demand for loans for financing investment decreased in Q2 relative to the previous quarter**

(net percentages; positive value = demand growth, negative value = demand decrease)



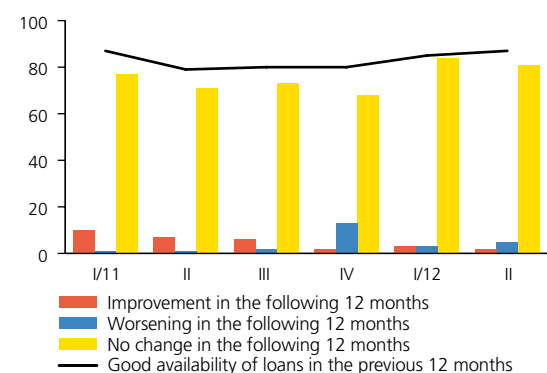
Note: Net percentages are calculated as the difference between the percentage share of loans provided by banks reporting that demand increased and the percentage share of loans provided by banks reporting that demand decreased. The individual responses are thus weighted by the volumes of loans of a given type.

CHART III.5.8

## AVAILABILITY OF LOANS TO NON-FINANCIAL CORPORATIONS

**Loan availability was little changed, with only a small percentage of corporations expecting it to worsen in the following 12 months**

(percentage shares of firms in total number of firms surveyed)



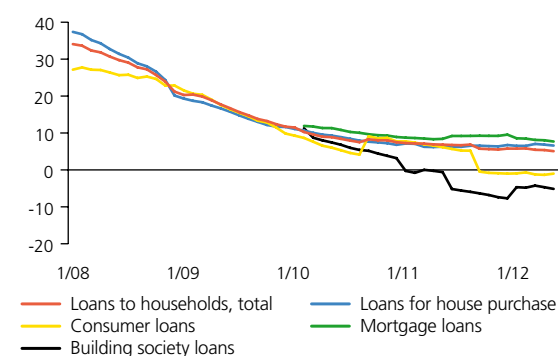
Note: The remaining percentage of corporations reporting about the following 12 months did not take out a loan, hence loan availability cannot be assessed.

CHART III.5.9

## LOANS TO HOUSEHOLDS

**The rate of growth of loans to households from banks slowed further**

(annual percentage changes)



As regards **demand factors**, corporate loans reflected the subdued economic activity according to the CNB's Bank Lending Survey. While demand for loans for financing inventories and working capital increased, demand for loans for financing fixed investment and debt restructuring declined. Growth in demand for loans continued to be influenced by the migration of clients from other banks. Factors relating to the use of alternative forms of financing of corporations (internal resources, issuance of debt securities, etc.) and to the financing of mergers/acquisitions and restructuring of corporations had a neutral effect. Demand should remain broadly unchanged in Q3 according to banks (see Chart III.5.7).

On the **supply side**, the availability of corporate loans remained relatively good in Q2 according to a business survey conducted by the CNB (see Chart III.5.8). According to the CNB's Bank Lending Survey, banks tightened their credit standards for large corporations as a result of worse outlooks for some industries, general economic activity and risks relating to collateral, and partly in connection with higher costs associated with banks' capital position and liquidity position. Turning to the terms and conditions for approving loans, margins on riskier loans recorded the biggest increase (see Table III.5.1). Domestic banks had sufficient primary funds and the client deposit-to-loan ratio increased by 1 percentage point to around 131% in Q2.

Annual growth in **loans to households** also slowed in 2012 Q2, reaching 5.1% in May (see Chart III.5.9). New loans to households slowed year on year in all segments of the credit market.

Turning to **house purchase loans**, growth in mortgages declined by almost 1 percentage point to 7.7% and the decline in building society loans deepened to 5.1%. Following a previous increase (due partly to refinancing of old mortgages – see Inflation Report II/2012), the mortgage market thus showed a downward tendency in growth (see Chart III.5.10). The share of new loans for house purchase with short fixations fell to 26% (the share of loans with floating rates and rates fixed for up to three months being 23%). Loans with fixations of over one year and up to five years account for the largest share (53%). Investment in housing switched to slight growth at both current and constant prices. The ratio of mortgages to gross disposable income remained around 33%. According to the CNB's Bank Lending Survey, growth in demand for loans for house purchase was due to migration of clients from other banks and a fall in other sources of financing – mainly building society loans in favour of mortgage loans (see Chart III.5.11). By contrast, weaker consumer confidence and higher non-housing related consumption expenditure by households had an adverse effect and the outlook for the housing market had a neutral effect. On the supply side, banks eased their credit standards and their terms and conditions for approving loans. According to the latest Hypoindex data, the number of mortgages switched from an annual decline to weak growth (0.8%) in June 2012.

Bank **consumer credit** continues to show a slight decline (see Chart III.5.9). Bank consumer credit recorded a year-on-year decline of 1% (or a slight increase of around 1% when adjusted for non-transaction effects). On the other hand, loans from non-banks (i.e. leasing and hire-purchase companies) dropped by 5.7%. Overall, according to the CNB's Bank Lending Survey, lower consumer confidence had an effect, amid increased demand due to migration of clients from other banks and higher spending on durable goods (cars, furniture, etc.). Banks tightened their credit standards mainly as a result of a worse outlook for economic activity, but margins decreased in this segment of the credit market.

The ratio of **non-performing loans** to total loans remained elevated in all segments of the credit market compared to the pre-crisis period. While it gradually declined to 7.9% for non-financial corporations, it increased to 5.2% for households. In recent months, however, annual growth in non-performing loans has been accelerating, or the previous deepening of the decline has halted, in all segments of the credit market, loans to households in particular.

#### BOX 1

##### The Bank Lending Survey

In July 2012, the Czech National Bank published the results of the first round of its **new quarterly Bank Lending Survey**. The main aim of the survey is to obtain qualitative information about developments on the bank credit market.

The new survey captures banks' perceptions about past and expected changes in the **supply of and demand for loans**. Just under 20 banks (including foreign bank branches), accounting for more than 90% of the domestic bank credit market, take part in the survey. The structured questionnaire contains 17 questions focusing on banks' credit policy and on non-financial corporations' and households' demand for loans as perceived by banks.

Similar surveys (called Bank Lending Survey or Senior Loan Officers Opinion Survey) have been conducted in many countries for years. The standardised and regularly repeating set of questions allows for international comparison. As shown by Bondt et al. (2010),<sup>47</sup> data obtained from the survey may also be a relevant **leading indicator** of loans and economic activity.

The **results of the first round of the survey** reveal that in 2012 Q2 banks tightened credit standards overall for corporate loans and consumer credit, while easing them slightly for

CHART III.5.10

#### NEW LOANS FOR HOUSE PURCHASE

**The rate of growth of new loans for house purchase slumped**  
(new business; annual percentage changes; interest rate in %)

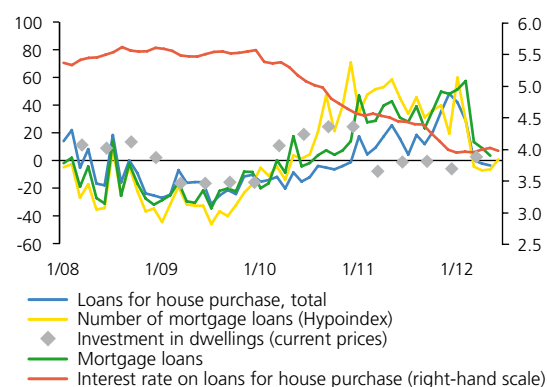
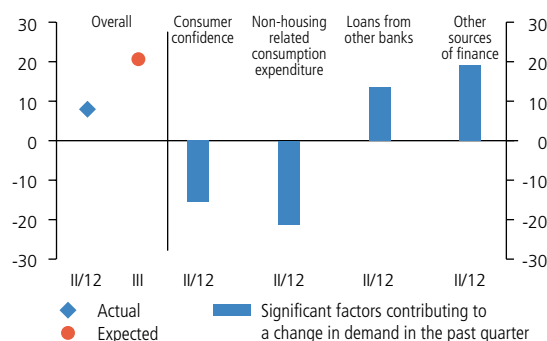


CHART III.5.11

#### DEMAND FOR LOANS FOR HOUSE PURCHASE

**The growth in demand for loans for house purchase in Q2 was due to migration of clients from other banks and other factors**  
(net percentages; positive value = demand growth, negative value = demand decrease)



Note: Net percentages are calculated as the difference between the percentage share of loans provided by banks reporting that demand increased and the percentage share of loans provided by banks reporting that demand decreased. The individual responses are thus weighted by the volumes of loans of a given type.

47 "The Euro Area Bank Lending Survey Matters: Empirical Evidence for Credit and Output Growth," Bondt et al., 2010, ECB Working Paper No. 1160.

TABLE III.5.1

**CHANGES IN BANKS' CREDIT CONDITIONS**

**Terms and conditions on the credit supply side generally tightened in Q2, except in the case of house purchase loans**

(net percentages; positive value = tightening of standards/conditions or demand growth, negative value = easing of standards/conditions or demand decrease)

|                                     | Supply                                |                          |                                | Demand           |
|-------------------------------------|---------------------------------------|--------------------------|--------------------------------|------------------|
|                                     | Credit terms and conditions: of which |                          |                                | Demand for loans |
|                                     | Credit standards                      | Average margin for loans | Banks' margin on riskier loans |                  |
| Loans to non-financial corporations |                                       |                          |                                |                  |
| II/12 actual                        | 14                                    | 6                        | 23                             | 7                |
| III/12 expected <sup>a)</sup>       | 18                                    |                          |                                | 6                |
| Loans for house purchase            |                                       |                          |                                |                  |
| II/12 actual                        | -25                                   | -34                      | 13                             | 8                |
| III/12 expected <sup>a)</sup>       | 10                                    |                          |                                | 21               |
| Consumer credit                     |                                       |                          |                                |                  |
| II/12 actual                        | 10                                    | -29                      | -15                            | 26               |
| III/12 expected <sup>a)</sup>       | 0                                     |                          |                                | -29              |

Note: Net percentages are calculated as the difference between the percentage share of loans provided by banks reporting that standards/conditions have been tightened (or demand increased) and the percentage share of loans provided by banks reporting that standards/conditions have been eased (or demand decreased). The individual responses are thus weighted by the volumes of loans of a given type.

a) Banks' expectations for III/12 reported in the II/12 survey.

house purchase loans.<sup>48</sup> Demand for bank loans increased (see Table III.5.1). In 2012 Q3, banks overall expect a tightening of standards and a rise in demand for corporate loans (although not across the board) and loans for house purchase. By contrast, a decline in demand is expected for consumer credit.

A detailed report on the results of the survey, including aggregate data and charts, will be published four times a year on the CNB website:

([http://www.cnb.cz/en/bank\\_lending\\_survey/index.html](http://www.cnb.cz/en/bank_lending_survey/index.html)).

**III.5.3 Interest rates****Monetary policy interest rates**

The monetary policy decision-making of the CNB Bank Board in 2012 Q2 was based on the macroeconomic forecast published in the previous Inflation Report. Consistent with this forecast and its assumptions was a decline in market interest rates in the remainder of this year, followed by a rise in rates as from 2013 H2. At the May Bank Board meeting, the risks to the previous forecast were assessed as being on the upside and **key interest rates** were left unchanged. At its meeting in June, the Bank Board assessed the risks to the forecast as being tilted towards higher headline inflation and lower monetary-policy relevant inflation amid a lower outlook for interest rates in the spirit of an alternative scenario capturing planned fiscal measures. Accordingly, the Bank Board decided by a majority vote to lower the CNB two-week repo rate and the Lombard rate by 0.25 percentage point, while leaving the discount rate unchanged. The two-week repo rate was set at 0.50%, the discount rate at 0.25% and the Lombard rate at 1.50% with effect from 29 June 2012 (see Chart III.5.12).

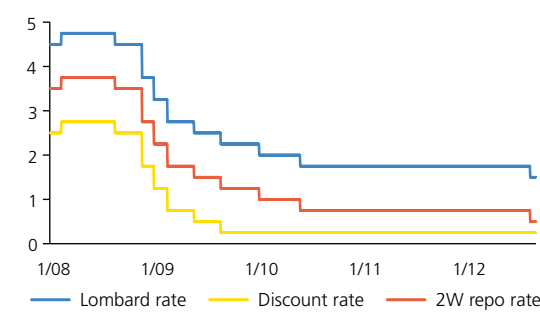
At its monetary policy meeting on 2 August 2012, the Bank Board decided by a majority vote **to leave interest rates unchanged**. The risks of the new forecast were assessed as being broadly balanced. The adoption of additional fiscal measures in 2014 (beyond those already incorporated in the forecast) is a downside risk. On the other hand, higher world prices of energy and agricultural commodities are an upside risk.

CHART III.5.12

**CNB KEY RATES**

**The CNB lowered the two-week repo rate and the Lombard rate in June 2012**

(percentages)



<sup>48</sup> The results of the survey are expressed in terms of the net percentage (i.e. the difference between the market share of banks that tightened credit standards/conditions or indicated growth in demand and those that eased credit standards/conditions or indicated a decline in demand). The replies of each bank are weighted by its market share in the relevant segment of the credit market.

### Financial market interest rates

**Money market interest rates** were virtually unchanged in 2012 Q2, falling by 0.15 to 0.20 percentage point only at the end of June when the repo rate was lowered (see Chart III.5.13). **FRA derivative rates** decreased at all maturities in May (by as much as 0.4 percentage point). This was due to several factors: the publication of a declining interest rate path consistent with the previous CNB forecast (including its alternative scenario), the result of the voting at the Bank Board meeting in May and the subsequent communications of some board members about a possible lowering of key rates. Macroeconomic data confirming a downturn in the Czech economy and a declining outlook for euro area interest rates acted in the same direction. FRA rates partially reversed their previous fast decline during June but dropped again slightly in July. The end-July market outlook for the 3M FRA rates is slightly declining, but is above the path consistent with the baseline scenario of the new forecast over the entire horizon; the deviation increases as the horizon lengthens (see sections I and II).

**Interest rates with longer maturities** recorded a relatively large decline as a result of developments abroad, where the flight of investors to safe instruments led to almost daily breaking of historical lows (nominal yields on bonds with shorter maturities were in fact temporarily negative in some countries). In addition to persisting high risk aversion and uncertainty related to further developments in the euro area, the decline in rates was fostered by macrodata published in major economies confirming a slowdown in global growth. IRS rates fell by as much as 0.6 percentage point in April and May, with the largest declines being observed for the longest maturities. A partial reversal was recorded in June, but rates with longer maturities decreased again slightly in July.

The average **3M PRIBOR** was 1.2% in 2012 Q2, i.e. slightly higher than expected by the previous forecast. Money market interest rates continued to be influenced by the credit premium. The spread between the 3M PRIBOR and 2W repo rate increased slightly, averaging 0.49 percentage point in 2012 Q2. The spread increased again slightly after the repo rate was lowered at the end of June.

The positively sloped **PRIBOR yield curve** has been virtually unchanged since the start of the year and shifted to a lower level only after the repo rate was lowered at the end of June. The spread between the 1Y PRIBOR and the 2W PRIBOR was unchanged at 0.9 percentage point. The **IRS yield curve** shifted to a lower level in 2012 Q2 and its positive slope moderated. In June, the average 5Y–1Y spread was 0.4 percentage point and the 10Y–1Y spread 0.8 percentage point. The IRS yield curve was flat in July.

Short-term **interest rate differentials** vis-à-vis the two main world currencies (PRIBOR/CZK–EURIBOR/EUR, or LIBOR/USD) reflected the lowering of key rates in the Czech Republic and the euro area and developments on foreign markets. With US money market rates broadly flat, the differentials vis-à-vis dollar rates declined slightly, while

CHART III.5.13

### MARKET INTEREST RATES

Interest rates with shorter and longer maturities decreased (percentages)

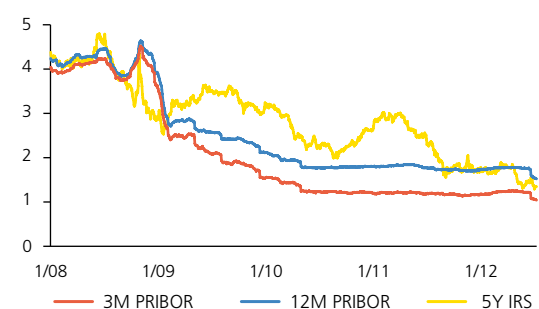


CHART III.5.14

### INTEREST RATE DIFFERENTIALS

Interest rate differentials vis-à-vis the euro and the dollar were positive in recent months (percentage points)

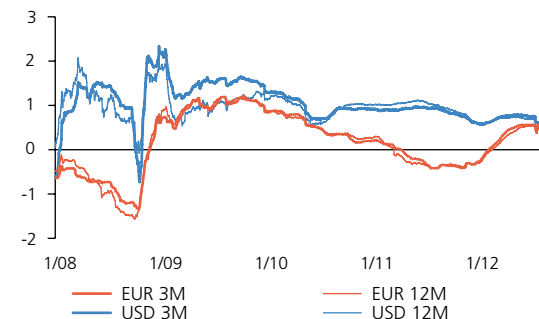


CHART III.5.15

### GOVERNMENT BOND YIELD CURVE

The government bond yield curve shifted downwards (percentages)

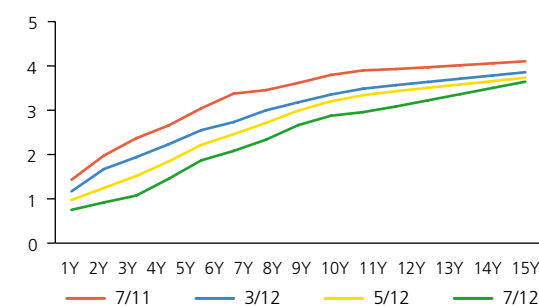


CHART III.5.16

## INTEREST RATES ON LOANS TO CORPORATIONS

Interest rates on corporate loans increased slightly in the case of large loans

(new business; percentages)

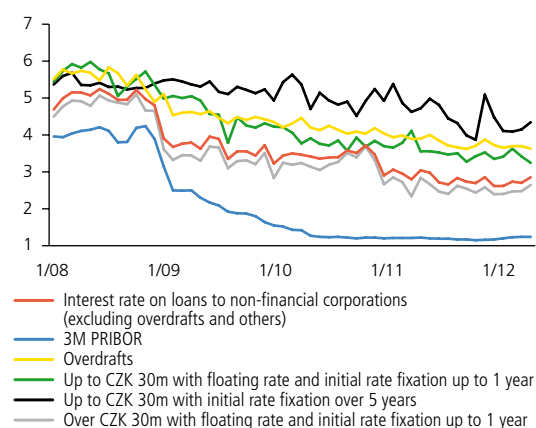


CHART III.5.17

## INTEREST RATES ON LOANS FOR HOUSE PURCHASE

Rates on loans for house purchase were flat or slightly falling

(new business; percentages)

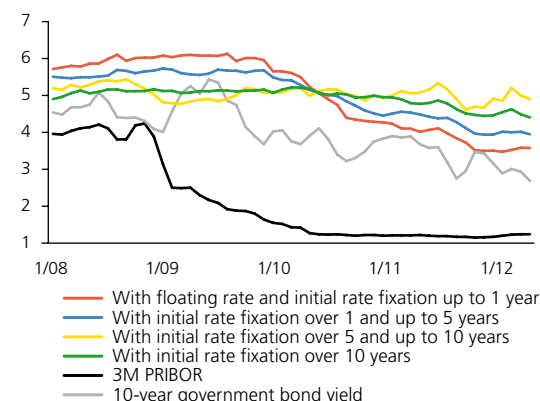
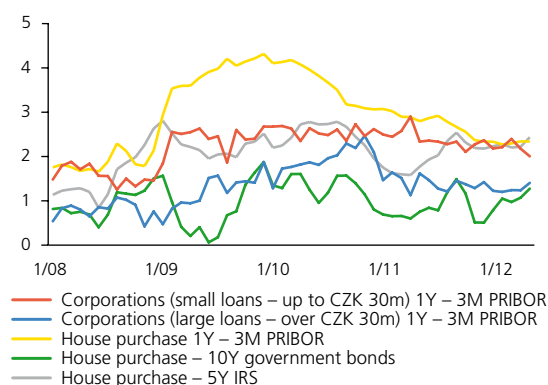


CHART III.5.18

## CLIENT AND MARKET INTEREST RATE SPREADS

The spread between client and market rates increased for large corporate loans and house purchase loans

(percentage points)



those vis-à-vis euro rates increased slightly (see Chart III.5.14). The 3M PRIBOR–3M EURIBOR interest rate differential was 0.5 percentage point on average in 2012 Q2. On 20 July, it was 0.6 percentage point.

Six auctions of fixed coupon bonds and seven auctions of variable coupon bonds have been held on the primary **government bond market** since April. The total volume of bonds issued was CZK 57.3 billion. Demand exceeded supply in all the auctions – strongly so in some auctions. This means that the Ministry of Finance had no problems subscribing government bonds in the primary market even in an environment of increased risk aversion and, moreover, with lower yields. The Ministry of Finance also issued a second issue of state saving bonds of CZK 15.3 billion; at the same time, the set of subscribers of these bonds was substantially expanded. Fitch Ratings confirmed the Czech Republic's main rating at A+ with a stable outlook at the start of May. In July, Moody's confirmed its rating of the Czech Republic's liabilities at A1, again with a stable outlook. The government bond yield curve shifted downwards in 2012 Q2 as a result of the foreign bond market situation, while its positive slope remained approximately unchanged (see Chart III.5.15).

## Client interest rates

The **interest rate on new loans to non-financial corporations** increased slightly in Q2, reaching 2.9% in May (see Chart III.5.16). Short-term rates with fixations of up to one year edged up for large loans, while declining for small loans. Rates with longer fixations also rose slightly, following a previous decrease. Rates on large loans, extended usually to large corporations, reflected a slight increase in risk premia amid flat money market rates. The spread between short-term client and market rates increased somewhat for these loans (see Chart III.5.18), while shrinking further for small loans. The rate on corporate loans has long been broadly at the end-2011 level and is still close to record-low levels. In the euro area, by contrast, interest rates on corporate loans declined slightly owing to a decrease in the rate on small loans, while rates on large loans increased like in the Czech Republic. Rates on corporate loans are around 3% in the euro area.

The **interest rate on loans for house purchase** for households remained at 4% in May, following a slight increase observed in previous months (see Chart III.5.17). The spread between short-term client and market rates remained unchanged following a previous decline (see Chart III.5.18). By contrast, the spread between the average rate on loans for house purchase and the long-term financial market rate increased on account of a fall in long-term market rates. From the longer-term perspective, rates are slightly higher for all fixations than at the end of 2011. According to new Hypoindex data, the mortgage rate declined again slightly in June 2012. This decline continued in July, when some banks responded to the CNB's June repo rate cut. In the euro area, rates on loans for house purchase declined and were slightly lower than those in the Czech Republic (ranging between 3% and 4%).



The **interest rate on consumer credit** fluctuated just above 14% in Q2. Rates on overdrafts and revolving loans (also around 14%) and on credit card debt (around 24%) showed similar developments. Banks tightened their credit standards in Q2, but the average margin and the margin on riskier loans both declined. These rates remain significantly higher than in the euro area, where they are 6–8% (and around 17% for credit card debt).

**Interest rates on deposits** were almost unchanged in Q2, except for the rate on deposits with agreed maturity, which declined especially at short-term maturities after increasing in 2011. The rate on these deposits of households decreased to 0.9% (the analogous rate for total time deposits is 1.1%). The rate on deposits with long-term maturity also went down slightly. Interest rates on overnight deposits of households and on deposits redeemable at notice remained at 0.7% and 2% respectively. The average rate on household deposits was 1.1%. Rates on corporate deposits stayed at a lower level (0.4%).

**Real client interest rates**<sup>49</sup> decreased or became more negative during 2012 Q2 owing to a rise in expected inflation. Real rates on new loans were 3.9% in May, while real rates on time deposits were -0.7% (see Chart III.5.19).

### III.5.4 The exchange rate

The average **exchange rate of the koruna against the euro** was CZK 25.3 in 2012 Q2. This represents a year-on-year depreciation of 3.9% and a quarter-on-quarter depreciation of 0.7% (see Chart III.5.20). The koruna's appreciation trend against the euro, visible since the start of 2012, halted in mid-April and the koruna started to depreciate again from around CZK 24.6 to around CZK 25.9 at the end of June. This took it back to the levels observed at the end of 2011. In the first half of July, the koruna gradually appreciated to CZK 25.4 (see Chart III.5.20). Regardless of the July correction, the koruna's depreciation in the period under review (from the start of 2012 Q2 to mid-July) ranked as one of the largest among the convertible currencies (behind the Romanian lei).

Like most European currencies except the British pound, the koruna depreciated significantly against the dollar in Q2 owing to a renewed escalation of the debt crisis in Europe. In particular, there were growing concerns about the ability of Spain and Italy to continue to finance their government debt through the financial markets and a surging lack of confidence in the Spanish banking sector. The koruna's depreciation against the euro was probably caused by market concerns about the Czech economy's heavy dependence on falling European demand. The depreciation of the koruna against other regional currencies (the Polish zloty and the Hungarian forint) with less favourable fundamentals

CHART III.5.19

#### EX ANTE REAL RATES

Ex ante real interest rates on new loans and deposits fell (percentages)

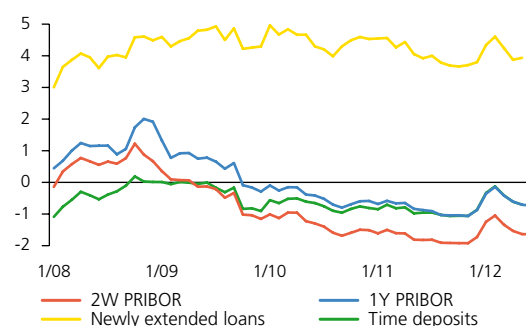
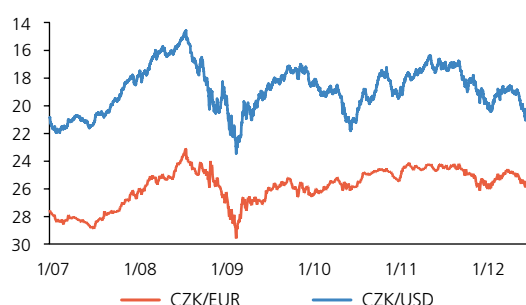


CHART III.5.20

#### CZK/EUR AND CZK/USD EXCHANGE RATES

The koruna depreciated against both the euro and the dollar in 2012 Q2



<sup>49</sup> Ex ante real interest rates: nominal interest rates are deflated by the consumer price inflation expected by financial market analysts.

CHART III.5.21

## KEY FINANCIAL INDICATORS

The main financial indicators improved in 2012 Q1

(annual percentage changes)

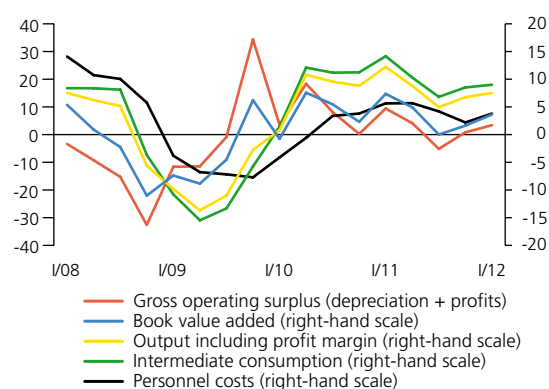


TABLE III.5.2

## PERFORMANCE INDICATORS OF CORPORATIONS

The material cost-output ratio continued to increase and the personnel cost-output ratio kept decreasing

(annual percentage changes)

|   | 2011 Q1     | 2012 Q1     | Annual percentage changes |
|---|-------------|-------------|---------------------------|
| Output incl. profit margin (CZK billions) <sup>a)</sup> | 1,305.6     | 1,403.8     | 7.5                       |
| Personnel costs (CZK billions)                          | 190.4       | 197.6       | 3.8                       |
| Intermediate consumption (CZK billions)                 | 947.4       | 1,032.6     | 9.0                       |
| Book value added (CZK billions)                         | 358.2       | 371.2       | 3.6                       |
| Sales (CZK billions)                                    | 1,664.7     | 1,800.3     | 8.2                       |
|   | Percentages | Percentages | Annual changes in pp      |
| Ratio of personnel costs to value added <sup>a)</sup>   | 53.1        | 53.2        | 0.1                       |
| Material cost-output ratio <sup>a)</sup>                | 72.6        | 73.6        | 1.0                       |
| Personnel cost-output ratio <sup>a)</sup>               | 14.6        | 14.1        | -0.5                      |
| Ratio of book value added to output <sup>a)</sup>       | 27.4        | 26.4        | -1.0                      |

a) CNB calculation

(such as external and internal imbalances, international reserves and the banking sector situation) can probably be explained by a negative interest rate differential. The effect of other domestic factors on the exchange rate remained marginal in the period under review.

The average **exchange rate of the koruna against the dollar** was CZK 19.7 in 2012 Q2. This represents a year-on-year depreciation of 16.7% and a quarter-on-quarter depreciation of 3.1%. The koruna's depreciation trend against the dollar has been apparent since September 2011, when the koruna weakened from around CZK 16.5 to around CZK 20.3 at the end of 2011. Later, the koruna, along with other European currencies, appreciated to CZK 18.5 at the end of March 2012 thanks to a decline in risk aversion on financial markets in the context of massive provision of liquidity to European banks by the ECB. However, once this effect subsided, the koruna gradually depreciated back to CZK 20.7 to the dollar in mid-July.

## III.5.5 Economic results of non-financial corporations

In the monitored segment of **non-financial corporations with 50 employees or more**,<sup>50</sup> the main monitored indicators improved in 2012 Q1. Faster year-on-year growth in sales and output fostered stronger growth in book value added (see Chart III.5.21). The gross operating surplus was also more favourable (up by 3.4% year on year), although personnel costs grew considerably faster than total output compared to the previous quarter.

The growth in output continued to be accompanied by faster growth in intermediate consumption in 2012 Q1, which was reflected in a year-on-year rise in the **material cost-output ratio**<sup>51</sup> (of 1 percentage point; see Table III.5.2). Its growth was more moderate than in the previous quarter, a fact also positively reflected in growth in value added and profit. This trend was due mainly to continued – albeit slowing – growth in import prices of energy commodities, whose impact on the material cost-output ratio was most apparent in the electricity, gas, heat and air-conditioned air supply industry.

By contrast, the **personnel cost-output ratio**<sup>52</sup> continued to fall year on year (by 0.5 percentage point, see Table III.5.2), albeit more moderately than in 2011 Q4. This was due to the above-mentioned sizeable increase in growth of personnel costs, which was accompanied by a smaller rise in output growth.<sup>53</sup> Personnel costs grew faster in Q1 amid a decline in the number of employees and a concurrent pick-up in average wage growth for the reasons explained in detail in section III.4.

50 The segment of corporations with 50 employees or more consisted of more than 9,300 non-financial corporations at the end of 2012 Q1.

51 The material cost-output ratio defined as the ratio of intermediate consumption to output.

52 The personnel cost-output ratio defined as the ratio of personnel costs to output.

53 Annual growth in personnel costs rose by 1.6 percentage points in 2012 Q1 compared to 2011 Q4, while output grew by 0.8 percentage point.



Data for the narrower **segment of large corporations** (with 250 employees or more<sup>54</sup>) indicate similar trends in the main financial indicators as in the larger segment of corporations. As in 2011, faster growth was recorded for output and intermediate consumption as well as total sales compared to the wider segment of corporations. Employment also slowed, but maintained modest growth.

### III.5.6 Financial position of corporations and households

The financial flows of corporations and households in 2012 Q1 were affected quite significantly by non-transaction factors in addition to transactions.<sup>55</sup> Growth in **external financing** of corporations turned into a year-on-year decline of 3.6% in 2012 Q1 (see Chart III.22). This was fostered by a decrease in debt securities, quoted shares and other accounts payable amid almost zero growth in loans. Long-term loans declined, while the growth rate of short-term loans increased. Total corporate financing, which additionally includes shareholders' equity in the form of unquoted shares and other equity, also fell in Q1 (by 2.1%). The slowdown in external financing growth in recent quarters was due mainly to other accounts payable relating to the time mismatch between transactions and payments. Trade credits recorded subdued growth. The share of market-based financing of corporations via securities in external financing stayed at around 19%. The ratio of debt financing of corporations in the form of loans, debt securities issued and other accounts payable to equity fell from 102% to 99% as a result of a decrease in debt and a modest increase in equity.

Weak annual growth in **total loans to corporations** reflected lower growth in loans from domestic banks and from other (non-bank) financial institutions, almost unchanged loans from abroad and a small decline in loans from domestic non-financial corporations (see Chart III.5.23).<sup>56</sup>

**Financial investment by corporations** also recorded an annual decline of 5% in Q1. The share of investment in debt securities and equity decreased due to revaluation. By contrast, the growth rate of liquid financial assets of corporations in the form of currency in circulation and deposits increased. The share of financial investment by corporations in total financial investment in the economy was little changed (at around 21%).

<sup>54</sup> The segment of corporations with 250 employees or more consisted of almost 1,700 non-financial corporations at the end of 2012 Q1.

<sup>55</sup> The 2011 Q4 data were revised upon the publication of the financial accounts data for 2012 Q1.

<sup>56</sup> Corporations received most of their loans from domestic banks (56%) and a smaller part from other (i.e. non-bank) financial institutions (13%), from abroad (19%) and from other (i.e. non-financial) corporations (12%).

CHART III.5.22

#### FINANCING OF NON-FINANCIAL CORPORATIONS

**Total financial liabilities of corporations declined**  
(contributions to external financing in percentage points; annual percentage changes)

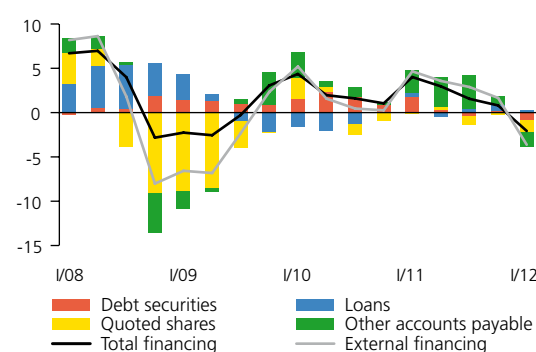


CHART III.5.23

#### DOMESTIC AND FOREIGN CORPORATE LOANS

**Total loans from domestic and foreign entities recorded almost zero growth**  
(annual percentage changes)

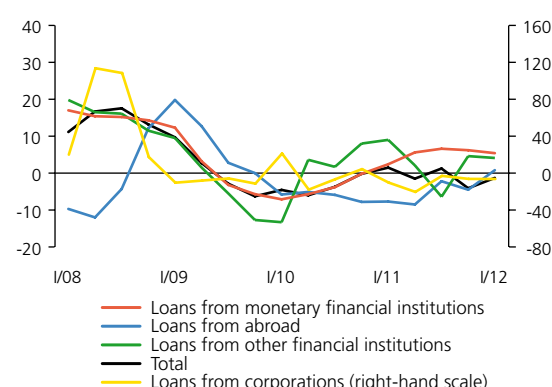


TABLE III.5.3

#### FINANCIAL INDICATORS OF CORPORATIONS

**The acid-test ratio and solvency of corporations decreased year on year**

|   | II/11                               | III/11 | IV/11 | I/12  | I/12            |
|---|-------------------------------------|--------|-------|-------|-----------------|
|   | Annual percentage changes           |        |       |       | CZK billions    |
| Corporations total <sup>a)</sup>        |                                     |        |       |       |                 |
| Equity (shares and other equity issued) | 2.1                                 | -1.4   | -0.6  | -1.5  | 4,100.8         |
| Loans                                   | -1.5                                | 1.2    | 2.0   | 0.8   | 1,507.6         |
| Debt securities                         | 4.9                                 | -6.4   | 2.8   | -13.4 | 273.5           |
| Quoted shares                           | 2.1                                 | -7.2   | -1.7  | -9.4  | 632.1           |
| Other accounts payable                  | 7.1                                 | 7.9    | 2.2   | -3.4  | 2,326.9         |
| Total financing <sup>1)</sup>           | 3.0                                 | 1.6    | 0.8   | -2.1  | 8,208.9         |
| Financial assets                        | 2.7                                 | 2.5    | -2.4  | -5.0  | 4,514.1         |
| Corporations total <sup>a)</sup>        |                                     |        |       |       |                 |
|   | Annual changes in percentage points |        |       |       | Indicators in % |
| Acid-test ratio <sup>2)</sup>           | 6.0                                 | 15.4   | 6.1   | -10.9 | 159.0           |
| Solvency indicator <sup>3)</sup>        | -1.2                                | -2.2   | -5.1  | -3.8  | 109.9           |
| Financial leverage <sup>4)</sup>        | 0.7                                 | 4.3    | -2.1  | -3.2  | 110.1           |

a) CNB calculation

1) Total financial liabilities

2) Short-term fin. assets/short-term fin. liabilities (debt securities and loans)

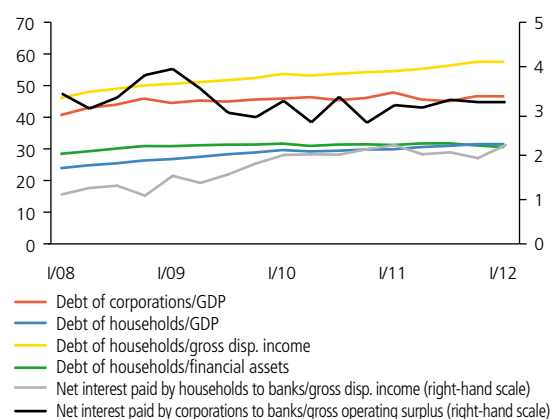
3) Total financial assets/liabilities excluding shares and other equity

4) Total financial assets/shares and other equity issued

CHART III.5.24

## DEBT AND NET INTEREST PAYMENTS

The ratios of corporate and household debt to GDP were almost unchanged, while the interest burden of households increased (percentages)



As regards the financial position, the **debt of non-financial corporations** (loans and debt security issuance) remained at around 47% of GDP in Q1. In the euro area, this ratio has gradually declined to 78% since 2010. The net interest burden on corporations resulting from bank loans relative to gross operating surplus was also flat at 3.2% (see Chart III.5.24). Following a previous increase, net interest payments are close to their long-term average.

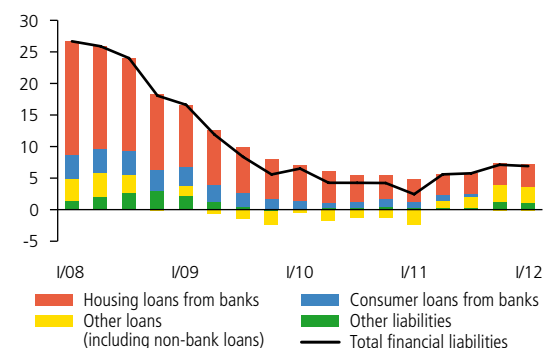
The **financial indicators of non-financial corporations** point to a year-on-year decline in the acid-test ratio due to stronger growth in short-term liabilities compared to assets. Solvency and leverage also fell (see Table III.5.3). According to a CZSO business survey, however, the financial difficulties of corporations are substantially smaller than at the start of 2009 (see section III.3).

The difference between corporations' **internal funds** (gross savings, i.e. profit and depreciation) and their investment expenditure (i.e. gross capital formation) decreased but remained positive in Q4, reaching 0.4% of gross value added on an annual basis. Investment decreased, as – to a lesser extent – did the gross savings of corporations.

CHART III.5.25

## FINANCING OF HOUSEHOLDS

Growth in overall financing of households slowed slightly (contributions in percentage points; annual percentage changes)



The annual growth rate of overall **financing of households** by banks and non-bank institutions edged down to 6.9% in 2012 Q1 (see Chart III.5.25). Following previous increases, household debt remained at around 58% of nominal gross disposable income (in the euro area this indicator was also flat at just under 100%). The ratio of household debt to GDP in the Czech Republic was similarly unchanged, and the ratio of household debt to financial assets fell slightly; both ratios were just above 30% (compared to about 66% of GDP in the euro area). Following a previous decline, the net interest burden on households rose to 2.2% owing to an increase in interest paid (see Chart III.5.24).

At the aggregate level, households' solvency (as measured by the ratio of financial assets to liabilities) and acid-test ratio (as measured by the ratio of selected short-term financial assets to short-term loans) increased year on year compared to the previous quarter. The **debt burden** (repayments of principal and interest) rose to around 6% of net money income (monthly average per person) in Q1, up by 0.7 percentage point on the previous period. According to new data from the CZSO's household budget statistics on the breakdown of households by income group, the debt burden recorded the highest increases in 2011 relative to 2008 in the lowest income deciles and in the highest income decile.

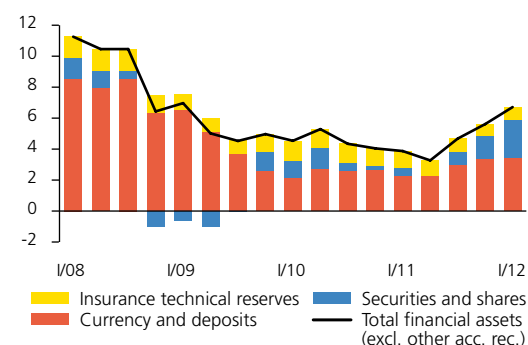
The growth rate of **financial investment by households** (excluding other accounts payable) rose to 6.7% in Q1 (see Chart III.5.26). The contribution of investment in securities increased in particular, mainly on account of revaluation of unquoted shares. Investment in currency and deposits was still the biggest contributor to the growth

CHART III.5.26

## FINANCIAL INVESTMENTS OF HOUSEHOLDS

The financial assets of households grew; their higher rate of growth was due mainly to revaluation

(contributions in percentage points; annual percentage changes; excluding other accounts receivable)



Note: The financial investments given in the chart do not include other accounts receivable, connected usually with the time mismatch between transaction and payment. This is due to a methodological change in reporting made in 2012 Q1 in the sole traders sector.

in household financial assets. However, its contribution and that of investment in insurance technical reserves were almost unchanged. The structure of financial assets was also almost unchanged.<sup>57</sup>

### III.5.7 The property market

According to CZSO data, **asking prices of older apartments** rose for the second consecutive quarter, owing mainly to a relatively sizeable increase recorded in Prague (4.5% quarter on quarter). This represents a rise of 8.5% compared to the end of 2011. Asking prices in Prague thus recorded annual growth for the first time since 2009 (up by 7.8%; see Chart III.5.27). However, alternative data sources do not confirm such rapid price increases. According to the Institute for Regional Information, for example, apartment prices in Prague declined further. Asking prices of apartments in the Czech Republic excluding Prague also continued to fall (by 0.8% quarter on quarter and 4.1% year on year).

By contrast, **transaction prices of older apartments** from tax returns data, for which the CZSO slightly reduced its overall estimate for 2011 H1<sup>58</sup> and published new estimates for H2, rose more rapidly outside Prague than in Prague in 2011. However, annual growth in the two regions converged at the end of 2011 and is only slightly positive (see Chart III.5.27). Transaction prices obtained on the basis of a CZSO survey in estate agencies<sup>59</sup> confirm the doubts about rapid growth in property prices in 2012 H1. New data for Prague in 2012 Q1 indicate a year-on-year price decline of 3.1% for older apartments and 2.6% for new apartments. Prices of older apartments outside Prague fell by 5.0% year on year.

The rise in asking prices of apartments is also out of line with a renewed decline in the **number of property market transactions**. The number of proceedings on entry of ownership rights in the cadastre fell by 11.7% year on year in 2012 Q2. The number of proceedings on entry of ownership rights to houses and apartments fell even more markedly (see Chart III.5.28). Following two years of growth, the number of mortgages for property purchase also decreased (Fincentrum Hypoindex data; see also section III.5.2). On the other hand, the number of apartments sold in development projects in Prague increased by 17.2% year on year in 2012 Q2 (Ekospol data for projects with more than 50 apartments), so far not showing

CHART III.5.27

#### TRANSACTION AND ASKING PRICES OF APARTMENTS

**Asking prices of apartments in Prague rose year on year in 2012 Q2, but alternative indicators do not suggest a significant recovery**

(annual percentage changes; source: CZSO, Institute for Regional Information)

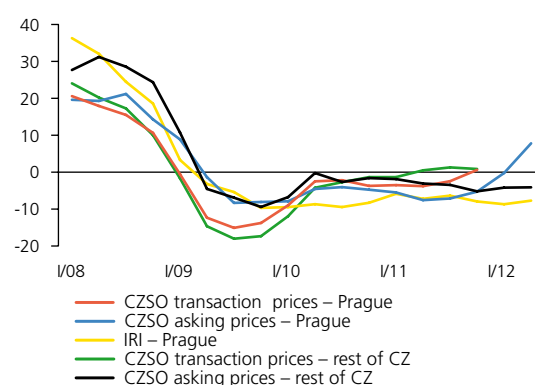
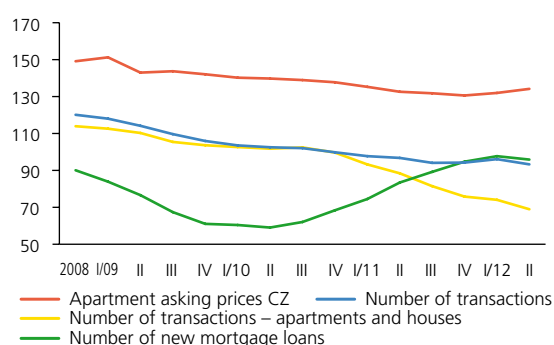


CHART III.5.28

#### NUMBERS OF TRANSACTIONS IN THE PROPERTY MARKET

**The number of transactions in the property market recorded a renewed decline**

(2006 average = 100; numbers of transactions as one-year moving sums; source: CZSO, COSMC, Fincentrum Hypoindex)



57 Currency in circulation and deposits make up 55%, debt securities 2%, shares 21%, shares in investment funds 4%, shares in pension funds 6%, reserves in insurance companies 8% and other assets 4% of the financial assets of households.

58 A decrease of 0.1% for the Czech Republic as a whole and a decrease of 0.7% for Prague, but an increase of 0.1% for the Czech Republic excluding Prague.

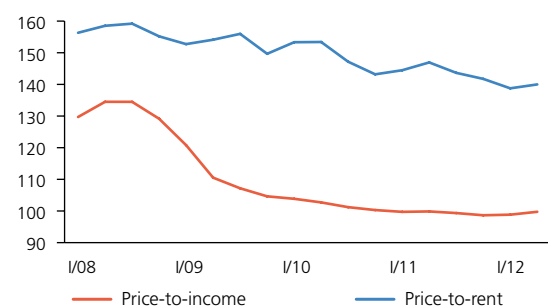
59 These prices differ from the transaction price index based on prices from property transfer tax returns, which is the source of data for Chart III.5.27. They are published with a shorter lag and the survey also includes information on prices of new apartments. On the other hand, the CZSO survey does not cover property transactions outside estate agencies, its structure is less detailed and its time series is shorter (the oldest data are from 2008).

CHART III.5.29

## APARTMENT PRICE SUSTAINABILITY INDICATORS

The property price sustainability indicators increased modestly, but remain low

(2000–2007 average = 100; source: CZSO, Institute for Regional Information)



much evidence of the expected “frontloading” effect relating to the increase in VAT on new property introduced at the beginning of this year. However, the number of completed but unsold apartments in these projects is rising (up by 6.2% quarter on quarter).

The property price sustainability indicators increased modestly in 2012 Q2. Both the **price-to-income ratio** and the **price-to-rent ratio** increased by 0.9% quarter on quarter (see Chart III.5.29). However, both indices remain relatively low and thus indicate no risk of property price overvaluation. Therefore, a slight decline or stagnation appears to be the most probable scenario for property transaction prices in the near future, owing mainly to subdued domestic economic activity.

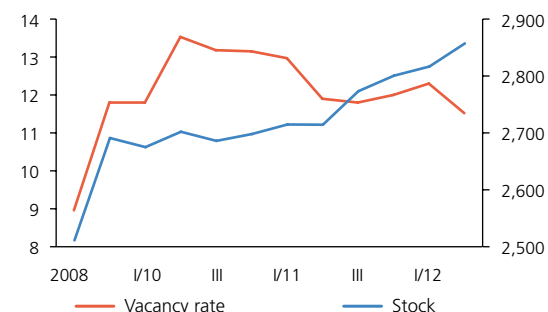
Following a recovery in the **commercial property sector** in 2011, growth in the total volume of investment transactions moderated in 2012 Q1. However, rental demand remained relatively high. Gross take-up of office space totalled 150,200 m<sup>2</sup> in 2012 H1, down by only 12.8% from the all-time high recorded in 2011 H1 and up by 54% on the same period in 2010. However, the share of renegotiations rebounded (from 29.7% in 2011 to 43.2% in 2012 H1). Net absorption remained positive (85,900 m<sup>2</sup> in 2012 H1), so the vacancy rate fell by 0.5 percentage point from the end of 2011 to 11.5% despite renewed growth in new construction (76,200 m<sup>2</sup>). It is now roughly 2 percentage points below the peak observed in mid-2010 (see Chart III.5.30). By contrast, the vacancy rate increased for other types of commercial property; for example, for industrial property it rose from 6.7% at the end of 2011 to 7.3% at the end of 2012 Q1.<sup>60</sup>

CHART III.5.30

## SITUATION IN THE OFFICE PROPERTY MARKET

New supply of office space continued to recover, but the vacancy rate fell

(vacancy rate in %; stock in thousands of m<sup>2</sup>; source: Jones Lang LaSalle, Prague Research Forum)



<sup>60</sup> However, this still represents a decrease in the vacancy rate of a sizeable 11.5 percentage points from the record high seen in 2009 Q2.

### III.6 BALANCE OF PAYMENTS

In 2012 Q1, the balance of payments was characterised by a high goods and services surplus, linked with a rise in the trade surplus. However, its effect on the current account was largely offset by a change in the income deficit resulting from an increase in direct investment income debits. On the financial account, portfolio investment recorded the largest surplus owing to government bond issues on foreign markets. However, this surplus, together with a net inflow of direct investment and a financial derivatives surplus, was almost offset by a net outflow of other investment, due chiefly to a rise in short-term deposits and loans from monetary financial institutions to non-residents.

#### III.6.1 The current account

The **current account** recorded a surplus of CZK 35.5 billion in 2012 Q1. In year-on-year terms, the surplus was up by almost CZK 13 billion. The rise in the overall surplus was due solely to trade balance developments (see Chart III.6.1). The annual moving ratio of the current account deficit to GDP fell for the third consecutive quarter, to 2.5%.

The **trade surplus** increased by more than CZK 33 billion year on year to CZK 66.9 billion in 2012 Q1. The increase in the trade surplus was due almost entirely to developments in real terms. Although the annual growth rate of external demand was unchanged from the previous quarter, annual nominal growth in goods exports picked up pace, reaching almost 11%. Export growth was significantly influenced by annual depreciation of the koruna and solid competitiveness of some engineering sectors. Goods imports grew at a similar pace as in the previous quarter (just below 6%). The effects of the koruna depreciation, the high import intensity of exports and high energy input prices, fostering a rise in imports, were offset by a deepening decline in total domestic demand. Turning to the commodity structure, growth in the machinery and transport equipment surplus was again the biggest contributor to the increase in the overall surplus (see Chart III.6.2). The year-on-year rise in the trade surplus observed in the previous quarter continued during 2012 Q2. The surplus for April–May increased by CZK 9.5 billion.

In 2012 Q1, the **services surplus** fell slightly year on year to CZK 13 billion (see Chart III.6.3). The surplus was due to travel and transport, whose surpluses edged up in year-on-year terms owing to faster growth in credits than in debits (especially in business travel and road transport). By contrast, other services ended in a deficit stemming from a sizeable merchandising deficit. At the same time, the shift of other services from surplus to deficit had the largest impact on the year-on-year evolution of the overall surplus.

CHART III.6.1

#### CURRENT ACCOUNT

The current account deficit decreased in 2012 Q1, owing to a rising trade surplus

(annual moving totals in CZK billions)

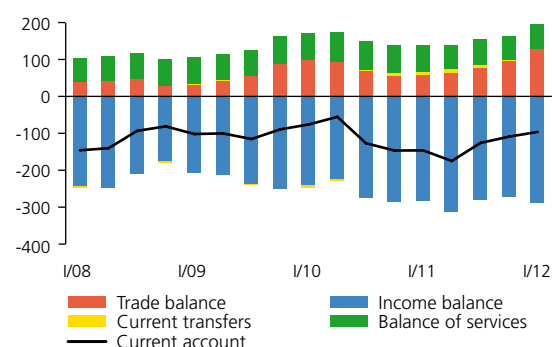


CHART III.6.2

#### TRADE BALANCE

The year-on-year change in the trade balance was affected most strongly in 2012 Q1 by growth in the machinery surplus (accumulation since start of year in CZK billions; change of ownership principle)

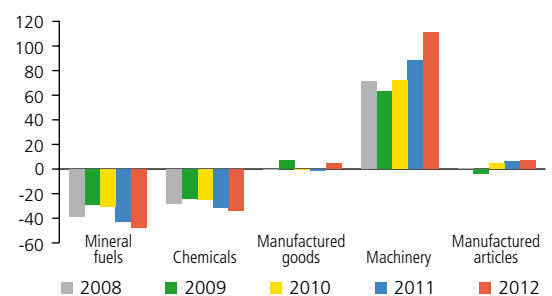


CHART III.6.3

#### BALANCE OF SERVICES

Travel and transport contributed to the services surplus in 2012 Q1

(CZK billions)

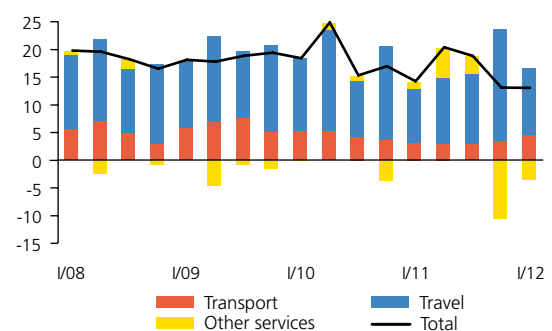
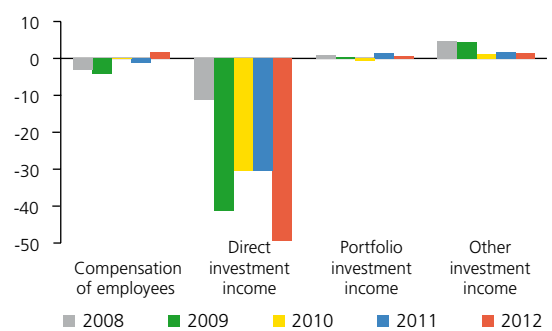


CHART III.6.4

## INCOME BALANCE

Within the income balance, the direct investment income deficit increased in particular in 2012 Q1  
(accumulation since start of year in CZK billions)



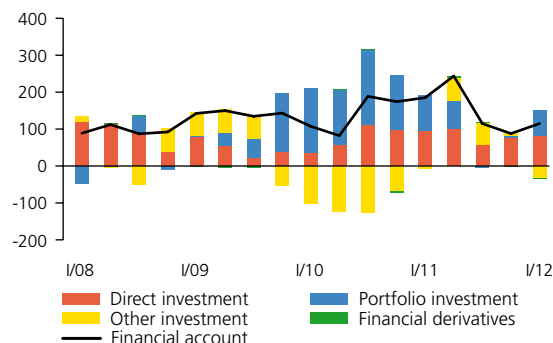
In contrast to the goods and services surplus, the **income balance** showed a deficit of CZK 45.6 billion, representing a year-on-year increase of more than CZK 17 billion. The direct investment income deficit (of CZK 49.4 billion) was again the largest component of the overall balance (see Chart III.6.4). It was linked chiefly with estimated reinvested earnings in the Czech Republic and with income in the form of dividends paid to non-residents. The year-on-year increase in the overall surplus was due above all to a higher direct investment income deficit resulting primarily from higher dividend payments. By contrast, portfolio investment income and other investment income, including income on CNB international reserves and interest on bank deposits, recorded slight surpluses. Compensation of employees also ended in a modest surplus.

**Current transfers** recorded only a slight surplus of CZK 1.3 billion in 2012 Q1, down by CZK 2 billion from a year earlier. The government transfers surplus reached CZK 6 billion, due almost exclusively to a surplus on transfers between the Czech Republic and the EU budget (CZK 6.2 billion). However, it was largely offset by a deficit on transfers of other sectors. The year-on-year decline in the overall surplus was linked mainly with higher government transfers to the EU budget.

CHART III.6.5

## FINANCIAL ACCOUNT

The financial account surplus increased in 2012 Q1, owing mainly to a sharp rise in the net inflow of portfolio investment  
(annual moving totals in CZK billions)



## III.6.2 The capital account

The **capital account** also ended in a modest surplus of CZK 0.6 billion, almost unchanged from a year earlier. In the absence of capital transfers from/to EU institutions, the overall surplus was associated mainly with net credits from trading in emission allowances.

## III.6.3 The financial account

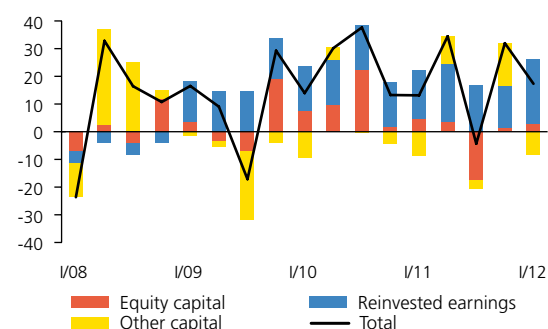
The **financial account** ended 2012 Q1 in a modest surplus of CZK 2.2 billion (see Chart III.6.5). This was mainly due to net inflows of portfolio and direct investment as well as a surplus on financial derivatives. However, these surpluses were almost fully offset by a net outflow of other investment.

**Direct investment** recorded a net surplus of CZK 17.3 billion in 2012 Q1 (see Chart III.6.6), up by around CZK 4 billion year on year owing to a stronger inflow of investment into the Czech Republic compared to the investment outflow abroad. The overall gross inflow was CZK 26.3 billion and was linked chiefly with estimated reinvested earnings. Its year-on-year increase was also linked with a rise in reinvested earnings (to almost CZK 29 billion).<sup>61</sup> Reinvested earnings were also the largest component of direct investment of

CHART III.6.6

## DIRECT INVESTMENT

The net inflow of direct investment in 2012 Q1 was mainly a result of earnings reinvested in the Czech Republic  
(CZK billions)



<sup>61</sup> The rise in the gross inflow was partly due to a year-on-year change in credit relations, with domestic subsidiaries providing less funds than a year earlier to their foreign parent companies.



domestic corporations abroad. With regard to industries, the foreign capital inflow (excluding reinvestment) was channelled primarily into manufacture of motor vehicles. Capital outflows abroad went mainly to wood and paper manufacture and printing.

Similarly to the previous quarter, **portfolio investment** recorded a net inflow of CZK 25.3 billion (see Chart III.6.7). Government bond issuance on foreign markets was the largest operation in 2012 Q1, with purchases by foreign investors reaching CZK 45 billion. It was also the biggest contributor to the annual change in portfolio investment flows, which exceeded CZK 65 billion. A slight increase in securities holdings by non-residents also occurred in the case of domestic shares. Total purchases also dominated domestic investors' transactions in foreign securities. They were connected mainly with an increase in bond holdings, whereas interest in share purchases was relatively moderate.

Settlement of **financial derivatives** was almost unchanged year on year, recording a net inflow of CZK 3.3 billion.

By contrast, **other investment** saw a net outflow of funds totalling CZK 43.7 billion. The overall deficit was due chiefly to a net outflow of CZK 24.6 billion in the corporate sector, linked mainly with export credits provided to non-residents. A net capital outflow was also recorded by the monetary financial institutions sector, owing to strong growth in short-term deposits and loans abroad. Other investment in the government sector also ended in a small deficit associated with repayment of foreign loans, especially from the EIB. The marked year-on-year deterioration of the overall other investment deficit in 2012 Q1 was due mainly to a change in the short-term position of monetary financial institutions.

The CNB's **international reserves** totalled CZK 799.1 billion at the end of 2012 Q2, representing a quarter-on-quarter increase of almost CZK 2 billion due mainly to valuation changes. In dollar terms, by contrast, the reserves fell by USD 3.8 billion to USD 39.2 billion in the same period (see Chart III.6.8). The CNB's international reserves covered almost 42% of all external debt liabilities of domestic entities at the end of 2012 Q1.

CHART III.6.7

## PORTFOLIO INVESTMENT

**Portfolio investment recorded a net inflow in 2012 Q1, owing mainly to issuance of government bonds abroad**  
(CZK billions)

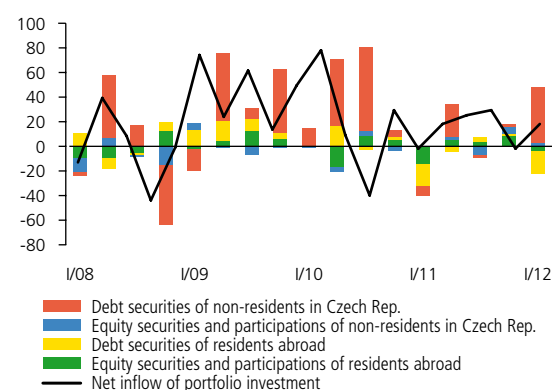
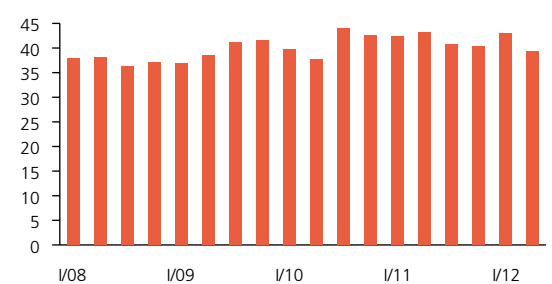


CHART III.6.8

## CNB INTERNATIONAL RESERVES

**The CNB's international reserves decreased in dollar terms in 2012 Q2 compared to the previous quarter**  
(USD billions, end of quarter)



### III.7 THE EXTERNAL ENVIRONMENT

The outlook for economic growth in the euro area worsened further, especially for 2013, when only a weak recovery is expected in the wake of this year's modest recession. The economic situation in the USA also started to deteriorate as a result of subdued consumer demand. Consumer price inflation is falling more sharply on the other side of the Atlantic, as in Europe indirect tax increases and a weakening euro are counteracting the decline in energy prices. The single European currency depreciated above all during May, when the financial and political crisis in the southern euro area countries escalated. A worsening economic outlook and strengthening US dollar led to a marked drop in prices of oil and industrial commodities during 2012 Q2. At the end of June, a high-level EU summit partly calmed the financial and commodity markets. Thereafter, the oil price regained some of its previous losses. However, high food commodity prices are currently the main risk to inflation.

#### III.7.1 The euro area

**Euro area GDP** was flat in quarter-on-quarter terms in 2012 Q1 after falling by 0.3% in the previous quarter<sup>62</sup>. This was mainly a result of household consumption shifting from decline to stagnation. By contrast, the decline in fixed investment deepened. Economic growth shifted from 0.7% year on year in 2011 Q4 to stagnation in 2012 Q1 (see Chart III.7.1), mainly as a result of a deterioration in fixed investment and inventories.

According to the July CF, the annual decline in economic activity should deepen to -0.5% in Q2. This is suggested by a drop in industrial production and retail turnover in the first two months of Q2 (of 2.6% and 2.5% respectively on average) and stagnation of the PMI index in industry at the low level of 45.1%. Unemployment rose further to 11.1% in May.

**For 2012 as a whole**, the July CF expects GDP to fall by 0.5%. Weak growth of the same magnitude is expected in 2013. Compared to the April CF, the new forecast represents a worse outlook, in particular for next year, with deeper declines in investment and industrial production. The estimate of the future evolution of unemployment has also worsened. The uncertainty of the forecast is being increased above all by developments in some southern euro area countries. Although political parties acknowledging the validity of the agreements with the "Troika" (the IMF, the EC and the ECB) won the elections in Greece on 17 June, compliance with those agreements remains very difficult for the new government and it has already asked for some obligations to be postponed by two years. On 25 June, Cyprus requested financial assistance for its entire economy. This request will probably be met. The assistance is not expected to exceed EUR 10 billion.

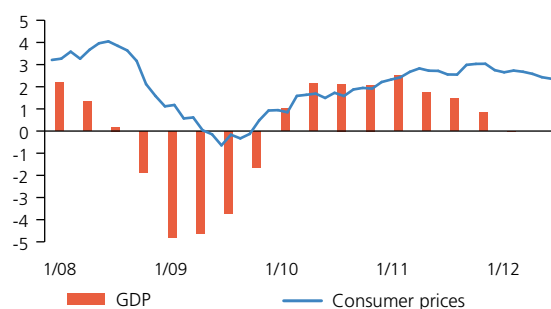
<sup>62</sup> In this section, unlike in sections I and II, where they are given in effective terms, developments in the euro area are described using the figures officially published by Eurostat and national statistical offices.

CHART III.7.1

#### GDP AND INFLATION IN THE EURO AREA

**GDP growth slowed further in 2012 Q1, while inflation decreased in Q2**

(annual percentage changes; source: Datastream)





In June, **annual inflation in the euro area** was flat at 2.4%, falling by 0.2 percentage point on average in Q2 from the previous quarter. The outlook is for a continuing decline, due mainly to slowing growth in energy prices. The July CF expects inflation to drop to 2% at the end of this year and below this level in 2013 Q1.

At the end of June, the **ECB** decided to further relax its requirements for collateral accepted against the loans it provides to commercial banks. It will thus allow the use of a broader range of mortgage-backed securities. At its meeting on 5 July the Governing Council cut the key ECB interest rate by 0.25 percentage point to 0.75% and the deposit rate to zero. The reason was an expected economic downturn in the euro area this year and an only very modest expected recovery next year. According to the Council, inflation pressures also remained weak, as confirmed by low annual M3 growth (2.9%) and growth in loans to the private sector (0.4%).

A **crucial EU summit** took place in Brussels at the end of June. Politicians agreed at the summit that centralised banking supervision for euro area countries would be established and transferred under the responsibility of the ECB. Following its creation, it will be possible to recapitalise troubled banks directly from the new ESM (European Stability Mechanism) without increasing the debt of the euro area country concerned. However, this fund has yet to be established, as it has not been approved by all the countries. For the time being, Spanish banks will therefore receive aid from the temporary European Financial Stability Facility (EFSF), which will lend the necessary funds to the Spanish government. The ESM will not have preference over other creditors in the event of bankruptcy, as this would have an adverse effect on standard bonds. According to the outcome of the summit, the EFSF and ESM will purchase bonds of troubled countries in their primary and secondary markets, and purchases of a country's bonds must not exceed one-fifth of the total debt already issued. In addition, a pact for growth will be adopted. This will include measures to support economic growth to the tune of EUR 120 billion (1% of EU GDP).

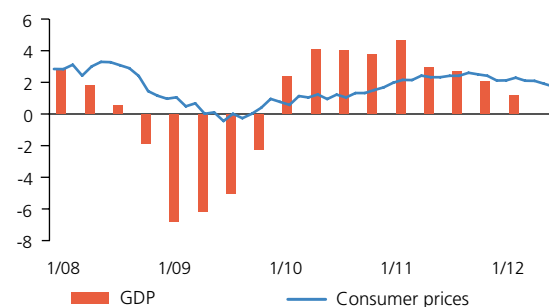
A **Eurogroup meeting** took place on 9 July, at which euro area ministers of finance agreed that Spain should receive EUR 30 billion for its banks by the end of July. Spain asked for assistance on 25 June but has yet to specify the total amount it will need for its troubled banks. The ministers also agreed to extend the deadline for meeting the 3% threshold for Spain's state budget by 12 months, i.e. to 2014.

After declining by 0.2% quarter on quarter in 2011 Q4, the **German economy** grew by 0.5% in the following quarter. The return to growth was fostered mainly by net exports. Domestic demand had a slightly negative overall impact on the German economy as a result of a fall in fixed investment and inventories, which was only partly offset by a slight increase in household and government consumption. Annual GDP growth of 1.2% (see Chart III.7.2) was driven chiefly by domestic demand, which was supported by a favourable labour

CHART III.7.2

#### GDP AND INFLATION IN GERMANY

**Economic growth is slowing and inflation fell below 2%**  
(annual percentage changes; source: Datastream)



market situation. Although unemployment remains low (6.6% in June), an annual decrease in both industrial production and new industrial orders suggests a slowdown in economic activity in the first two months of Q2.

The latest **leading indicators** for June and July also indicate weaker economic performance. The Ifo and ZEW indicators continue to fall, while the PMI in industry and the OECD composite indicator remain below the long-term average. However, the outlook for economic activity for the entire year has improved. The July CF increased its economic growth estimate by 0.2 percentage point compared to April, to 0.9%. The new outlooks from Deutsche Bundesbank and the IMF are also more favourable, expecting the German economy to grow at 1%. According to these institutions, the risks to the forecast consist mainly in Germany being hit by a possible escalation of the European debt crisis via real and financial channels.

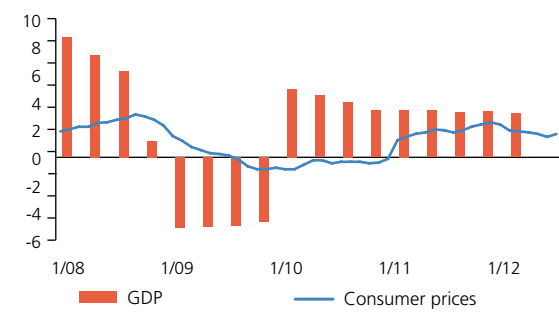
According to the national CPI, annual **inflation in June** fell by 0.2 percentage point to 1.7%. Its decrease of 0.1 percentage point compared to May was due to a drop in prices of petroleum products. The July CF lowered its inflation outlook for this year to 2.0%. This is in line with the new forecasts of Deutsche Bundesbank and the IMF, which expect inflation to remain between 1.9% and 2.1%.

CHART III.7.3

#### GDP AND INFLATION IN SLOVAKIA

**GDP maintained a stable rate of growth in 2012 Q1, while inflation has fallen since the start of the year**

(annual percentage changes; source: Datastream)



In 2012 Q1, quarterly GDP growth in **Slovakia** slowed slightly from 0.8% to 0.7%, mainly as a result of fixed investment switching from growth to decline. The **annual GDP growth rate** also fell (by 0.4 percentage point to 3%; see Chart III.7.3). This slowdown was also linked with lower investment growth. The rate of economic growth can also be expected to slow in Q2. Industrial production growth weakened in April, as did retail turnover in April and May. The unemployment rate stood at 13.6% for the third consecutive month, falling by 0.1 percentage point on average from the previous quarter. Despite weaker economic performance, however, Slovakia will remain among the fastest-growing countries in the euro area. In 2012 as a whole, the Slovak economy will grow by 1.9% according to the June CF; the forecast was revised upwards by 0.8 percentage point compared to April. The June CF left its prediction for economic growth next year almost unchanged at 2.4%.

Following a decrease in May, **inflation** in Slovakia returned to the same level as in April (3.7%). Even so, it fell by 0.4 percentage point in Q2 compared to Q1, thanks mainly to slower growth in energy prices. According to the June CF, inflation in Slovakia will continue to fall during the second half of this year and should not exceed 3% for 2012 as a whole. It is expected to decline by a further 0.2 percentage point to 2.8% next year.

### III.7.2 The United States

Quarterly **GDP growth in the USA** slowed to 1.9% during Q1 (in annualised terms). By contrast, annual GDP growth accelerated slightly, reaching 2% (see Chart III.7.4). The growth was driven above all by private consumption, exports and investment in housing construction. By contrast, the contribution of government expenditure was negative, and a rise in imports also contributed to the GDP slowdown. As regards the components of GDP, investment in private inventories and fixed investment recorded the largest slowdowns.

**The indicators for 2012 Q2** point to a further weakening of US economic growth due to lower external and domestic demand. Industrial production rose in June following a decline in May, but its overall growth rate in Q2 slowed to 0.5%. Unemployment edged up to 8.2% in May and growth in jobs outside agriculture slowed in Q2. Demand for new housing is continuing to recover gradually. Retail sales fell for the third consecutive month in June in nominal terms, partly because of a drop in spending on fuels thanks to cheaper oil. Consumer demand is being dampened this year by only slightly rising disposable income, which declined in the previous three quarters of 2011. Uncertainty about the fiscal situation (the level of taxes and government expenditure and above all the risk that the government's debt ceiling will not be raised in time) is fostering worse consumer sentiment. The consumer confidence index (University of Michigan) is at its lowest level in seven months, and other leading indicators are also pointing to a worsening of the economic climate. The predictions of the Fed, the IMF and CF were revised downwards slightly.

Annual **consumer and producer price inflation** went down in 2012 Q2 owing to falling energy prices. Consumer price inflation excluding food and energy reached 2.2% in June, while headline inflation was below the target at 1.7%. The Fed is maintaining its key interest rate at 0–0.25% and has repeated that the rate will remain within this range at least until the end of 2014. Yields on ten-year government bonds declined almost to 1.5% during Q2, partly on account of changes in risk aversion and partly owing to Operation Twist, which was extended by the Fed at its June meeting. CF expects consumer price inflation in the USA to be in line with the target of 2% in 2012.

### III.7.3 The exchange rate of the euro against the dollar and other major currencies

The **exchange rate of the euro against major world currencies** weakened further in 2012 Q2 as a result of uncertainty surrounding the political and economic situation in the euro area (see Chart III.7.5). The rating downgrade of Spain in April and political instability in Greece sparked concerns about the ability of the governments of these countries to improve their public finances. The problems in Spain (losses of commercial banks, overindebted Spanish regions) became fully apparent in June, increasing the pressure to resolve the situation

CHART III.7.4

#### GDP AND INFLATION IN THE USA

**Annual GDP growth picked up in 2012 Q1 amid falling inflation**

(annual percentage changes; source: Datastream)

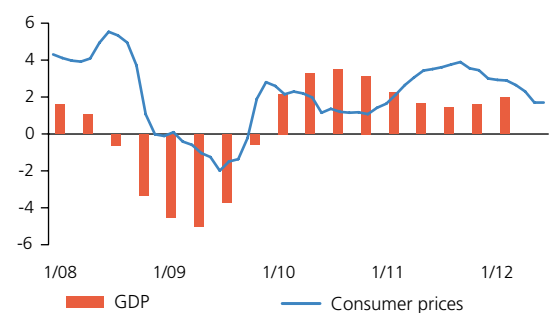


CHART III.7.5

#### EURO EXCHANGE RATE AGAINST MAJOR CURRENCIES

**At the two-year horizon, the euro is expected to appreciate only against the Japanese yen**

(January 2008 = 100; source: Datastream, outlook from CF)

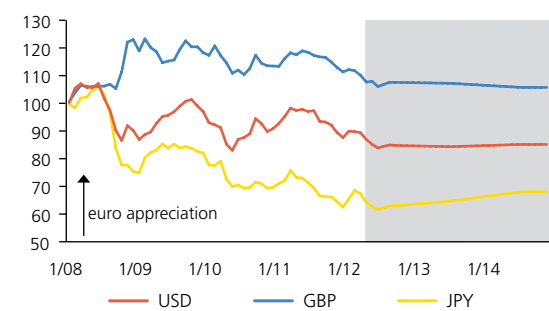
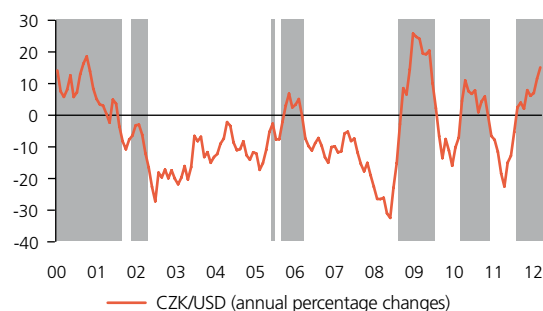


CHART 1 (Box)

## THE KORUNA-DOLLAR EXCHANGE RATE

The depreciation of the koruna against the dollar in the last three years has been accompanied by appreciation of the dollar against the euro

(annual percentage changes; source: CNB calculation based on Datastream data)



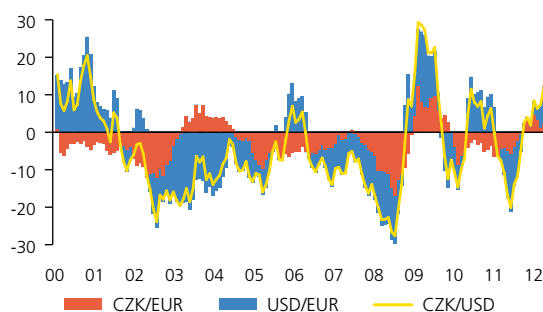
Note: Monthly averages. Grey shading indicates periods of appreciation of dollar against euro. Positive values mean year-on-year depreciation of koruna.

CHART 2 (Box)

## CONTRIBUTIONS TO YEAR-ON-YEAR CHANGES IN THE KORUNA-DOLLAR EXCHANGE RATE

In some periods the CZK/EUR rate ran counter to the CZK/USD rate

(Source: CNB calculation based on Datastream data)



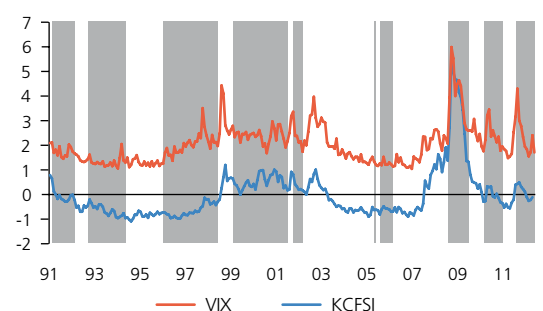
Note: Monthly averages. Positive values mean year-on-year depreciation of koruna.

CHART 3 (Box)

## FINANCIAL STRESS IN THE USA AND PERIODS OF APPRECIATION OF THE DOLLAR-EURO RATE

The dollar appreciated against the euro in periods of financial stress

(Source: CNB calculation based on Datastream data)



Note: Weekly averages. VIX – CBOE Volatility Index, KCFSI – Kansas City Financial Stress Index. Grey shading indicates periods of appreciation of dollar against euro.

of the euro area banking sector. Eventually, this motivated European politicians to propose new measures in the form of a banking union and the possibility of providing financial assistance to banks directly from the EMU's rescue funds. At the end of June, Spain was forced to apply for financial assistance for its banking sector and the exchange rate of the euro fell to USD 1.24, a year-on-year weakening of more than 14%. The depreciation of the euro against the pound was more moderate (10% year on year), as concerns also exist in the United Kingdom as to the extent to which the debt crisis will affect the economy. The euro was more than 15% weaker year on year against the Japanese yen at the end of June.

The euro continued to depreciate against the main currencies **in the first half of July 2012**, reaching a two-year low against the US dollar in the second week of July. Recent macroeconomic data confirm a marked slowdown in euro area growth. The European Central Bank cut its key interest rate by 0.25 percentage point to a historical low of 0.75% and decreased the deposit rate to zero.

The **July CF** expects the euro to remain at about USD 1.25 until mid-2014 and only then start to appreciate gradually in line with the long-term forecast. The euro should strengthen against the Japanese yen in the next two years, but is expected to depreciate against the pound.

## BOX 2

## The CZK/USD exchange rate at a time of uncertainty

This box aims to show the degree of symmetry of movements between the CZK/EUR and CZK/USD exchange rates relative to the USD/EUR currency pair, including the factors underlying those movements.

The koruna has been weakening recently against the US dollar (see Chart 1) amid appreciation of the dollar against the euro. A breakdown of the annual change in the CZK/USD exchange rate into the contributions of the changes in the USD/EUR and the CZK/EUR rates reveals that the strengthening of the dollar against the euro accounts for the lion's share of the koruna's depreciation against the dollar. Moreover, the koruna has recently also weakened against the euro, as it has in some other periods, for example at the peak of the financial crisis. On the other hand, several periods can be identified in which the CZK/EUR rate ran counter to the CZK/USD rate.

One possible explanation for a period of strengthening of the dollar is a rise in risk aversion around the world, assuming that the dollar has safe haven status. When risk aversion is high, investors prefer safe assets in very liquid currencies such as the Swiss franc or the Japanese yen. When the potential profitability of investment into these safe currencies is restricted (e.g. the

minimum exchange rate of the Swiss franc or the Japanese interventions in 2011), demand for the US dollar as a very liquid and credible alternative increases.<sup>63</sup>

There are many risk aversion indicators which are very close to financial stress measures.<sup>64</sup> However, no global indicator reflecting the portfolio composition of international investors is available. Uncertainty is therefore proxied by a financial stress indicator for the USA. It largely mirrors global sentiment, as the transmission of financial stress between countries has increased substantially, especially since 2009.

It can be observed over the last three years that an increase in stress is accompanied by appreciation of the dollar, supporting the safe dollar haven hypothesis (see Chart 3). However, financial stress also affects the CZK/EUR currency pair. Chart 4 indicates that the koruna appreciates against the euro when stress rises moderately in the euro area,<sup>65</sup> whereas a sharp rise in stress causes the koruna to depreciate. In the event of moderate stress, the koruna can react as a safe regional currency, but in a crisis there is an outflow of capital abroad, i.e. into safe global currencies. Therefore, the koruna can depreciate simultaneously against both the euro and the dollar, as can be observed since the onset of the euro area debt crisis.

### III.7.4 Prices of oil and other commodities

The **price of Brent crude oil** fell sharply for almost the whole of 2012 Q2, diving from USD 125 a barrel in early April to below USD 90 a barrel in the second half of June (see Chart III.7.6). This was the lowest figure since December 2010, and the oil price stabilised for about a week after reaching it. At the end of June, however, it increased sharply, moving close to USD 100 a barrel in just three days. It remained at this level in early July and then rose slightly. The average **koruna price of oil** peaked in March 2012 (at CZK 14.7 a litre) and has fallen by around CZK 2 a litre since then. In the second half of this year, annual growth in the koruna price is expected to fluctuate around zero with a slightly downward trend. Low world prices of oil will be offset by a weak exchange rate of the koruna against the dollar (see Chart III.7.7).

63 The literature shows that at times of uncertainty the Swiss franc and the Japanese yen appreciate even against the US dollar. Nonetheless, the dollar still functions as the second-best option in uncertain times, especially in relation to emerging market currencies; for details see Marion Kohler, 2010, "Exchange Rates During Financial Crises," BIS Quarterly Review, Bank for International Settlements, March.

64 An overview is given, for example, by Virginie Coudert and Mathieu Gex, 2008, "Does Risk Aversion Drive Financial Crises? Testing the Predictive Power of Empirical Indicators," Journal of Empirical Finance, Vol. 15(2), pp. 167–184, March.

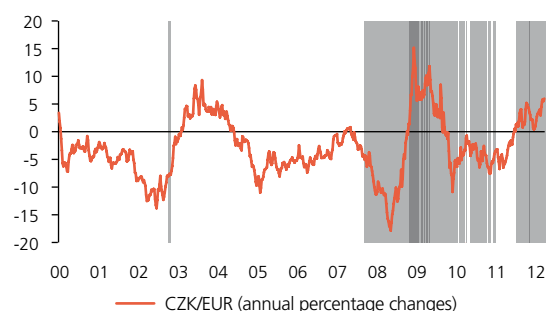
65 More details on the indicator of financial stress in the euro area can be found in Global Economic Outlook, August 2011, CNB, pp. 20–21.

CHART 4 (Box)

#### YEAR-ON-YEAR CHANGE IN THE KORUNA-EURO RATE AND PERIODS OF FINANCIAL STRESS IN THE EURO AREA

**High stress in the euro area causes the koruna to depreciate against the euro**

(Source: CNB calculation based on Datastream data)



Note: Grey zone – stress in euro area. Weekly averages. Positive values mean year-on-year depreciation of koruna.

CHART III.7.6

#### OIL AND NATURAL GAS PRICES IN USD

**The price of Brent crude oil fell below USD 100 a barrel during 2012 Q2**

(oil in USD/barrel; gas in USD/1,000 m<sup>3</sup> – right-hand scale; source: IMF, Bloomberg)

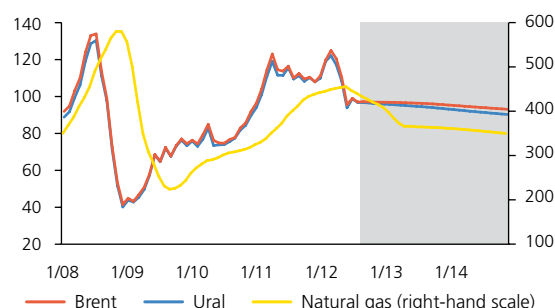
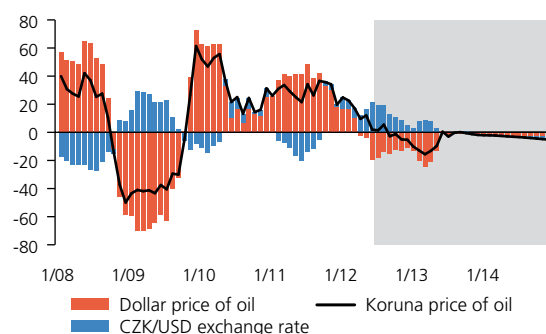


CHART III.7.7

#### DECOMPOSITION OF KORUNA OIL PRICE GROWTH

**The effect of a lower world oil prices on koruna oil prices will be offset by a weak koruna-dollar exchange rate in 2012 H2**

(Brent crude oil in CZK/litre – annual percentage changes; contributions of dollar price of Brent crude oil and CZK/USD exchange rate in percentage points; source: Bloomberg, CNB calculation)



A rise in extraction in Saudi Arabia and a worsening global outlook, due mainly to economic developments in the euro area periphery, were the **main factors pushing the price of oil downwards** in April. The price decline accelerated in early May as worse-than-expected data came in from China in addition to Europe and the USA. The strengthening dollar also played a large role in the decline in prices of oil (and other commodities), as the euro responded negatively to the worsening political situation in Greece and later to the rating downgrade of Spanish banks by Moody's. Oil prices continued to fall sharply in June, when the problems of the Spanish banking sector escalated and the Fed then published a less favourable outlook for the US economy. The pressure to sell on commodity markets was intensified by hedge funds and other institutional investors, who were disposing of their long futures positions (see Box 3) in a situation where growth in global oil stocks was signalling sufficient supply of oil to the market.

The high-level EU summit at the end of June brought a **turnaround**, with politicians agreeing on a stimulation of the European economy and on a mechanism for providing support to the banking sector. The outcome of the summit was received surprisingly positively, generating new optimism and interest in risky assets in the markets. The oil price was also supported by a strike by Norwegian oil workers and Iran's renewed considerations of blocking the Strait of Hormuz. Preliminary IEA figures also revealed that the rise in industrial inventories of oil and petroleum products in OECD countries halted in June, and speculators started to return to the markets.

**Market outlooks based on Brent oil futures** as of the survey date of the July CF are shown in Chart III.7.6. The downward slope of the futures curve moderated compared to the previous forecast, indicating that the market is currently adequately supplied with oil. The oil price should therefore fall gradually towards USD 93 a barrel at the end of 2014. Despite the seemingly calm scenario for expected price developments, the uncertainty of the forecast is currently very high. This is evidenced among other things by the extremely wide spread of the forecasts issued by renowned institutions. These forecasts currently range from around USD 50 to USD 150 a barrel depending on whether the analysts put more emphasis on the global economic slowdown or on the unstable political situation in the Middle East.<sup>66</sup>

The **EIA measures the uncertainty about future developments** in the price of WTI oil using the implied volatility derived from option prices, which rose considerably in early June. Rising premia on put options and increasing number of put options relative to call options indicate that concerns about a drop in oil prices are increasing. The probability distribution based on June calculations by the EIA predicts that the price of a September contract for WTI oil will be between

<sup>66</sup> However, the large dispersion is also partly due to the different dates on which the individual forecasts were created.



USD 60 and USD 110 a barrel. This currently corresponds to a Brent oil price range of around USD 75–125 a barrel. The centre of this range is in line with the price currently regarded as optimal by most OPEC countries (including Saudi Arabia). Their trading strategy will thus also steer the price of oil towards this level. However, OPEC's relatively low reserve capacity is a potential risk, as part of the extraction capacity will remain unused owing to the embargo on Iranian oil.

The **non-energy commodity price index** decreased in 2012 Q2, owing mainly to a decline in prices of industrial metals (see Chart III.7.8). Their prices are currently flat, but food prices started to rise sharply in mid-June as cereal, maize and soy harvests in the USA are at risk from the extremely dry and hot weather there. Weak cereal harvests are also expected in Russia and Ukraine on account of dry weather. The overall index thus fell back to the March level.

### BOX 3

#### Easy monetary policy and commodity prices

This box aims to analyse the factors affecting commodity prices over the last 15 years, including the hypothesis that the influence of financial institutions on commodity markets is rising. A marked rise in the number of open traded positions<sup>67</sup> on commodity futures markets (of 270% on average) has been visible since around 2004 across the entire commodity spectrum (see Chart 1). From the investor perspective, a large shift of funds has been apparent among large financial institutions and long-term commodity funds<sup>68</sup> (see Chart 2), which invest in a wide range of commodity futures and subsequently create "commodity baskets" containing various portfolios from selected types of commodities.<sup>69</sup>

Most commodity funds hold long positions in the expectation that prices will go up in the long run. As each futures contract is time-limited, regular "rollover" takes place, meaning that futures which are almost due are sold before expiration and replaced by contracts with longer maturities. As can be seen in Chart 1, contract rollover started to be used on a larger scale in 2004. Unlike the number of open positions, however, the physical volume of sugar, maize, coffee and other commodities has not risen exponentially. Exchange traded funds (ETFs) make investing in commodities accessible to small investors by reducing their trading costs and leverage. More small investors

<sup>67</sup> Positions (contracts) are expressed in different physical units. A single contract always represents a fixed number of units of the given commodity (for example, the size of a single contract for WTI oil corresponds to 1,000 barrels).

<sup>68</sup> For details, see also Global Economic Outlook, May 2012, CNB, p. 12. These mutual funds also include exchange traded funds (ETFs), whose portfolios may contain futures for certain commodities. The shares of such funds thus follow the prices of the commodities contained in the portfolio.

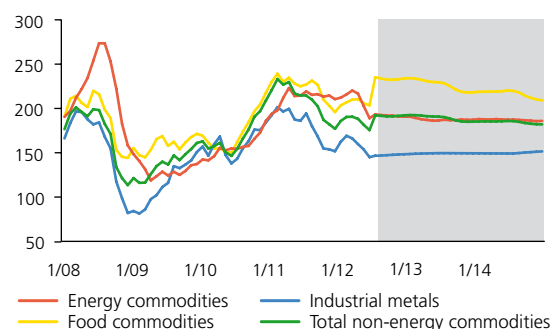
<sup>69</sup> This also partly explains why prices have not gone up equally across all commodities.

CHART III.7.8

#### COMMODITY PRICES

**The non-energy commodity index fell in 2012 Q2 on account of industrial metals prices, but sharp growth in food commodity prices returned it to the March level**

(year 2005 = 100; source: Bloomberg)



Note: The structure of the non-energy commodity indices corresponds to the composition of the Economist's commodity indices; the energy commodity index consists of Brent crude oil (0.4), coal (0.4) and natural gas (0.2).

CHART 1 (Box)

#### NUMBER OF OPEN FUTURES CONTRACTS BY COMMODITY

**The number of traded positions started to rise sharply across the entire commodity market spectrum in 2004**

(millions of contracts; source: U.S. Commodity Futures Trading Commission – CFTC, CNB calculation)

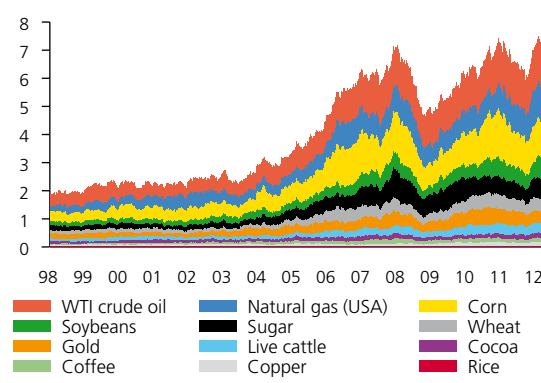
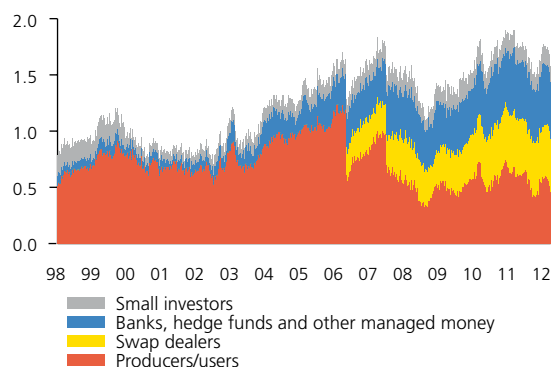


CHART 2 (Box)

**BREAKDOWN OF LONG AND SHORT WTI OIL POSITIONS BY CATEGORY OF MARKET PARTICIPANT**

**A rise in the positions of banks and other financial institutions has been observed since 2004**

(millions; source: U.S. Commodity Futures Trading Commission – CFTC, CNB calculation)



Note: On 13 June 2006 the CFTC removed swap dealers from the “producers/users” category and now gives them separately for reasons of greater transparency. For these dealers it is not known for which market participant and which side of the position they are trading and whether the client is a trader with a real commodity at all.

can thus contribute to commodity price developments by purchasing shares in a fund.

Easy monetary policy in advanced countries may also have played a significant role in the greater interest of portfolio managers in commodity markets. Very low yields on traditional instruments and an expected negative relationship between real interest rates and commodity prices led to transfers of investment capital from financial instruments with low fixed yields towards commodity contracts promising potentially higher yields. This could indeed have caused commodity prices to rise. The hypothesis that the influence of large financial institutions on commodity markets is rising is also supported by Chart 2, which shows the breakdown of WTI oil futures holdings by category of market participants. While producers and processors had the largest share of positions on the WTI oil market in the previous period, a marked rise in the positions of banks and funds managing large amounts of money (“large investors”) can be observed from 2004 onwards. Small investors play a marginal role on commodity futures markets.





|               |   |    |
|---------------|---|----|
| Chart I.1     | Fulfilment of the inflation target                        | 6  |
| Chart I.2     | Headline inflation forecast                               | 6  |
| Chart I.3     | Monetary-policy relevant inflation forecast               | 6  |
| Chart I.4     | Interest rate forecast                                    | 7  |
| Chart I.5     | Exchange rate forecast                                    | 7  |
| Chart I.6     | GDP growth forecast                                       | 7  |
| Chart II.1.1  | Effective GDP in the euro area                            | 8  |
| Chart II.1.2  | Effective PPI in the euro area                            | 8  |
| Chart II.1.3  | Effective CPI in the euro area                            | 8  |
| Chart II.1.4  | 3M EURIBOR  | 9  |
| Chart II.1.5  | Euro-dollar exchange rate                                 | 9  |
| Chart II.1.6  | Price of Brent crude oil                                  | 9  |
| Chart II.2.1  | Headline inflation and monetary-policy relevant inflation | 10 |
| Chart II.2.2  | Administered prices and fuel prices                       | 10 |
| Chart II.2.3  | Net inflation and adjusted inflation excluding fuels      | 11 |
| Chart II.2.4  | Food prices and agricultural producer prices              | 11 |
| Chart II.2.5  | Fuel prices and oil prices                                | 11 |
| Chart II.2.6  | Interest rate forecast                                    | 12 |
| Chart II.2.7  | Exchange rate forecast                                    | 12 |
| Chart II.2.8  | Costs in the consumer sector                              | 12 |
| Chart II.2.9  | Costs in the intermediate goods sector                    | 13 |
| Chart II.2.10 | Gap in profit mark-ups in the consumer sector             | 13 |
| Chart II.2.11 | Average nominal wage                                      | 13 |
| Chart II.2.12 | GDP growth forecast                                       | 14 |
| Chart II.2.13 | Annual GDP growth structure                               | 14 |
| Chart II.2.14 | Labour market forecast                                    | 15 |
| Chart II.2.15 | Real household and government consumption                 | 15 |
| Chart II.2.16 | Nominal disposable income                                 | 16 |
| Chart II.2.17 | Gross capital formation                                   | 16 |
| Chart II.2.18 | Real exports and imports                                  | 16 |
| Chart II.3.1  | Change in the headline inflation forecast                 | 20 |
| Chart II.3.2  | Change in the net inflation forecast                      | 20 |
| Chart II.3.3  | Change in the interest rate path                          | 20 |
| Chart II.3.4  | Decomposition of changes in the interest rate forecast    | 21 |
| Chart II.3.5  | Change in the exchange rate forecast                      | 21 |
| Chart II.3.6  | Change in the GDP forecast                                | 21 |
| Chart II.3.7  | Change in the nominal wage forecast                       | 22 |
| Chart II.5.1  | Perceived and expected inflation                          | 25 |
| Chart II.5.2  | FRA rates versus the CNB forecast                         | 26 |
| Chart III.1.1 | Forecast versus actual inflation                          | 27 |
| Chart III.1.2 | Inflation   | 29 |
| Chart III.1.3 | Inflation components                                      | 29 |
| Chart III.1.4 | Structure of inflation                                    | 29 |
| Chart III.1.5 | Food prices   | 30 |
| Chart III.1.6 | Adjusted inflation excluding fuels                        | 30 |
| Chart III.1.7 | HICP  | 31 |
| Chart III.2.1 | Import prices and producer prices                         | 32 |
| Chart III.2.2 | Import prices   | 32 |
| Chart III.2.3 | Mineral fuels   | 32 |
| Chart III.2.4 | Industrial producer prices                                | 33 |

|                |   |    |
|----------------|---|----|
| Chart III.2.5  | Producer prices by main industrial groupings        | 33 |
| Chart III.2.6  | Prices of metals and refined petroleum products     | 34 |
| Chart III.2.7  | Agricultural producer prices                        | 34 |
| Chart III.2.8  | Other price categories                              | 34 |
| Chart III.3.1  | Gross domestic product                              | 36 |
| Chart III.3.2  | Structure of annual GDP growth                      | 36 |
| Chart III.3.3  | Household consumption expenditure                   | 36 |
| Chart III.3.4  | Disposable income                                   | 37 |
| Chart III.3.5  | Saving rate and consumer confidence indicator       | 37 |
| Chart III.3.6  | Fixed capital formation                             | 37 |
| Chart III.3.7  | Investment in dwellings                             | 38 |
| Chart III.3.8  | Net exports   | 38 |
| Chart III.3.9  | Exports and imports                                 | 39 |
| Chart III.3.10 | Contributions of branches to GVA growth             | 39 |
| Chart III.3.11 | Industrial production                               | 39 |
| Chart III.3.12 | New orders in industry                              | 40 |
| Chart III.3.13 | Barriers to growth in industry                      | 40 |
| Chart III.3.14 | Economic sentiment                                  | 40 |
| Chart III.3.15 | Potential output                                    | 41 |
| Chart III.3.16 | Output gap  | 41 |
| Chart III.3.17 | Contributions to potential output growth            | 41 |
| Chart III.4.1  | Labour market indicators                            | 43 |
| Chart III.4.2  | Employment breakdown by branches                    | 43 |
| Chart III.4.3  | Unemployment rate                                   | 44 |
| Chart III.4.4  | Beveridge curve                                     | 44 |
| Chart III.4.5  | Whole-economy productivity                          | 45 |
| Chart III.4.6  | Unit labour costs                                   | 45 |
| Chart III.5.1  | Monetary aggregates                                 | 46 |
| Chart III.5.2  | Main components of M2 and interest rate spread      | 46 |
| Chart III.5.3  | Money creation                                      | 46 |
| Chart III.5.4  | Deposit structure of M2                             | 47 |
| Chart III.5.5  | Loans to corporations and households                | 47 |
| Chart III.5.6  | Loans and GDP                                       | 47 |
| Chart III.5.7  | Non-financial corporations' demand for loans        | 48 |
| Chart III.5.8  | Availability of loans to non-financial corporations | 48 |
| Chart III.5.9  | Loans to households                                 | 48 |
| Chart III.5.10 | New loans for house purchase                        | 49 |
| Chart III.5.11 | Demand for loans for house purchase                 | 49 |
| Chart III.5.12 | CNB key rates                                       | 50 |
| Chart III.5.13 | Market interest rates                               | 51 |
| Chart III.5.14 | Interest rate differentials                         | 51 |
| Chart III.5.15 | Government bond yield curve                         | 51 |
| Chart III.5.16 | Interest rates on loans to corporations             | 52 |
| Chart III.5.17 | Interest rates on loans for house purchase          | 52 |
| Chart III.5.18 | Client and market interest rate spreads             | 52 |
| Chart III.5.19 | Ex ante real rates                                  | 53 |
| Chart III.5.20 | CZK/EUR and CZK/USD exchange rates                  | 53 |
| Chart III.5.21 | Key financial indicators                            | 54 |
| Chart III.5.22 | Financing of non-financial corporations             | 55 |
| Chart III.5.23 | Domestic and foreign corporate loans                | 55 |
| Chart III.5.24 | Debt and net interest payments                      | 56 |
| Chart III.5.25 | Financing of households                             | 56 |

|                |  |    |
|----------------|--|----|
| Chart III.5.26 | Financial investments of households            | 56 |
| Chart III.5.27 | Transaction and asking prices of apartments    | 57 |
| Chart III.5.28 | Numbers of transactions in the property market | 57 |
| Chart III.5.29 | Apartment price sustainability indicators      | 58 |
| Chart III.5.30 | Situation in the office property market        | 58 |
| Chart III.6.1  | Current account                                | 59 |
| Chart III.6.2  | Trade balance                                  | 59 |
| Chart III.6.3  | Balance of services                            | 59 |
| Chart III.6.4  | Income balance                                 | 60 |
| Chart III.6.5  | Financial account                              | 60 |
| Chart III.6.6  | Direct investment                              | 60 |
| Chart III.6.7  | Portfolio investment                           | 61 |
| Chart III.6.8  | CNB international reserves                     | 61 |
| Chart III.7.1  | GDP and inflation in the euro area             | 62 |
| Chart III.7.2  | GDP and inflation in Germany                   | 63 |
| Chart III.7.3  | GDP and inflation in Slovakia                  | 64 |
| Chart III.7.4  | GDP and inflation in the USA                   | 65 |
| Chart III.7.5  | Euro exchange rate against major currencies    | 65 |
| Chart III.7.6  | Oil and natural gas prices in USD              | 67 |
| Chart III.7.7  | Decomposition of koruna oil price growth       | 67 |
| Chart III.7.8  | Commodity prices                               | 69 |

|               |   |    |
|---------------|---|----|
| Table II.2.1  | Forecast of administrative effects                                | 10 |
| Table II.2.2  | Forecasts of selected variables                                   | 17 |
| Table II.2.3  | Balance of payments forecast                                      | 17 |
| Table II.2.4  | Fiscal forecast   | 18 |
| Table II.4.1  | Lower external demand sensitivity scenario – external variables   | 23 |
| Table II.4.2  | Lower external demand sensitivity scenario – the domestic economy | 24 |
| Table II.4.3  | Exchange rate sensitivity scenario                                | 24 |
| Table II.5.1  | Expected indicators of FMIE and corporations                      | 25 |
| Table II.5.2  | CF expected indicators  | 25 |
| Table III.1.1 | Fulfilment of the inflation forecast                              | 27 |
| Table III.1.2 | Fulfilment of the external assumptions                            | 28 |
| Table III.1.3 | Fulfilment of the forecast for key variables                      | 28 |
| Table III.2.1 | Structure of import price inflation                               | 33 |
| Table III.3.1 | Investment by sector  | 38 |
| Table III.4.1 | Wages, productivity, unit labour costs                            | 44 |
| Table III.5.1 | Changes in banks' credit conditions                               | 50 |
| Table III.5.2 | Performance indicators of corporations                            | 54 |
| Table III.5.3 | Financial indicators of corporations                              | 55 |

|           |  |              |  |
|-----------|--|--------------|--|
| BIS       | Bank for International Settlements               | IEA          | International Energy Agency  |
| CF        | Consensus Forecasts                              | Ifo          | Ifo Institute Business Climate Index   |
| CFTC      | Commodity Futures Trading Commission             | ILO          | International Labour Organization  |
| CNB       | Czech National Bank                              | IMF          | International Monetary Fund  |
| COSMC     | Czech Office for Surveying, Mapping and Cadastre | IPP          | industrial producer price index  |
| CPI       | consumer price index                             | IRI          | Institute for Regional Information   |
| CZK       | Czech koruna                                     | IRS          | interest rate swap   |
| CZSO      | Czech Statistical Office                         | JPY          | Japanese yen   |
| ECB       | European Central Bank                            | LFS          | Labour Force Survey  |
| EFSF      | European Financial Stability Facility            | LIBOR        | London Interbank Offered Rate  |
| EIB       | European Investment Bank                         | LTRO         | Long-term refinancing operation  |
| EMU       | Economic and Monetary Union                      | M1, M2, M3   | monetary aggregates  |
| ERM II    | Exchange Rate Mechanism                          | MLSA         | Ministry of Labour and Social Affairs  |
| ESA 95    | European System of National Accounts             | NiGEM        | National Institute's Global Econometric Model  |
| ESCB      | European System of Central Banks                 | OECD         | Organisation for Economic Cooperation and Development  |
| ESM       | European Stability Mechanism                     | OPEC         | Organization of the Petroleum Exporting Countries  |
| ETF       | Exchange Trade Fund                              | PMI          | Purchasing Managers Index  |
| EU        | European Union                                   | pp           | percentage points  |
| EUR       | euro   | PPI          | producer price index   |
| EURIBOR   | Euro Interbank Offered Rate                      | PRIBOR       | Prague Interbank Offered Rate  |
| Fed       | US central bank                                  | (1W, 1M, 1Y) | (one-week, one-month, one-year)  |
| FMIE      | Financial Market Inflation Expectations          | repo rate    | repurchase agreement rate  |
| FRA       | forward rate agreement                           | USD          | US dollar  |
| GBP       | pound sterling                                   | VAT          | value added tax  |
| GDP       | gross domestic product                           | WTI          | West Texas Intermediate  |
| GVA       | gross value added                                | ZEW          | The Centre for European Economic Research in Mannheim (Zentrum für Europäische Wirtschaftsforschung) |
| HICP      | Harmonised Index of Consumer Prices              |              |  |
| HP filter | Hodrick-Prescott filter                          |              |  |

|   |         |              |
|---|---------|--------------|
| Price indices used for the evaluation of inflation  | (Box)   | April 1998   |
| Analysis of the money supply trend  | (Box)   | July 1999    |
| Revisions to the statistical data on GDP  | (Box)   | July 1999    |
| Measuring the inflation expectations of the financial market  | (Annex) | October 1999 |
| Oil prices and their impact on inflation  | (Box)   | July 2000    |
| The effect of oil price changes on the balance of trade   | (Box)   | October 2000 |
| The methodological framework for evaluating wage developments relative to inflation   | (Box)   | January 2001 |
| The CNB's monetary policy rates   | (Box)   | April 2001   |
| The setting of the inflation target for 2002–2005   | (Annex) | April 2001   |
| Harmonisation of the reserve requirements with European Central Bank standards  | (Annex) | April 2001   |
| Escape clauses pertaining to the new inflation target   | (Annex) | July 2001    |
| Changes in economic growth forecasts in the eurozone, Germany, the USA and Japan for 2001 and 2002  | (Annex) | October 2001 |
| Strategy for dealing with the exchange rate effects of capital inflows from privatisation of state property and from other foreign exchange revenues of the state | (Annex) | January 2002 |
| Assessment of fulfilment of the CNB's net inflation target in December 2001   | (Annex) | January 2002 |
| Prediction of external variables  | (Box)   | April 2002   |
| Estimated capital flows in 2002 and 2003 and their effect on the exchange rate  | (Box)   | April 2002   |
| The Balassa–Samuelson effect  | (Annex) | April 2002   |
| The CNB changes its type of inflation forecast  | (Box)   | July 2002    |
| An assessment of the effect of the August floods on Czech economic growth   | (Box)   | October 2002 |
| The financial conditions of the Czech Republic's accession to the EU  | (Box)   | January 2003 |
| Implications of the unexpectedly slow growth in regulated prices  | (Box)   | January 2003 |
| The Czech Republic and the euro – Draft accession strategy  | (Annex) | January 2003 |
| Fiscal consolidation and its effect on economic growth  | (Annex) | January 2003 |
| Price deregulation in the period of transformation of the Czech economy of the Czech economy  | (Box)   | April 2003   |
| Revisions to the March 2003 GDP figures   | (Box)   | April 2003   |
| Credit to households  | (Box)   | July 2003    |
| The withdrawal of 10- and 20-heller coins and its possible impact on prices   | (Box)   | July 2003    |
| Indirect taxes and the inflation forecast   | (Box)   | July 2003    |
| Changes to the methodology for surveying inflation expectations   | (Box)   | July 2003    |
| ERM II and the exchange-rate convergence criterion  | (Annex) | July 2003    |
| Use of the output gap indicator at the CNB  | (Box)   | October 2003 |
| Monetary policy in the CNB's macroeconomic forecast   | (Box)   | October 2003 |
| The Czech Republic's euro-area accession strategy   | (Annex) | October 2003 |
| Short-run food price prediction methods   | (Box)   | January 2004 |
| Monetary conditions   | (Box)   | April 2004   |
| The CNB's inflation target from January 2006  | (Annex) | April 2004   |
| The CNB has fully integrated into the European System of Central Banks  | (Annex) | July 2004    |
| The exchange rate in the CNB's forecasting system   | (Box)   | July 2004    |
| Indicators of households' financial situation   | (Box)   | October 2004 |
| GDP data revision   | (Box)   | October 2004 |
| Petrol prices and their impact on inflation in the Czech Republic   | (Box)   | October 2004 |
| Assessment of the fulfilment of the Maastricht convergence criteria and the degree of alignment of the Czech economy with the euro area                           | (Annex) | January 2005 |
| The structure of lending  | (Box)   | January 2005 |
| Uncertainty regarding the evolution of public finances in 2005 and 2006   | (Box)   | January 2005 |
| Inflation expectations in the CNB's modelling system  | (Box)   | January 2005 |
| The transmission of external cost shocks into domestic prices in 2003–2005  | (Box)   | April 2005   |
| The effect of the exchange rate on inflation  | (Box)   | April 2005   |
| The Czech National Bank's position on the revision of the Stability and Growth Pact   | (Annex) | April 2005   |
| The effect of EU accession on prices and inflation expectations   | (Box)   | July 2005    |
| Foreign trade in the first year after the Czech Republic's accession to the EU  | (Box)   | July 2005    |
| Financial flows between the Czech Republic and the European Union   | (Box)   | July 2005    |
| The effect of world energy prices on consumer prices  | (Box)   | October 2005 |
| The performance of large non-financial corporations 1998–2004   | (Box)   | October 2005 |



|  |         |              |
|--|---------|--------------|
| Potential output in the CNB's forecasting system   | (Box)   | October 2005 |
| Fiscal policy in the CNB's modelling system  | (Box)   | January 2006 |
| Assessment of the fulfilment of the Maastricht Convergence criteria  |         |              |
| and the degree of economic alignment of the Czech Republic with the euro area  | (Annex) | January 2006 |
| Implications of household debt for consumption   | (Box)   | April 2006   |
| Effective indicators of external developments  | (Box)   | July 2006    |
| Oil and petrol prices in the CNB forecast  | (Box)   | July 2006    |
| The role of monetary aggregates in the CNB's forecasts   | (Box)   | October 2006 |
| Assessment of the fulfilment of the Maastricht convergence criteria  |         |              |
| and the degree of economic alignment of the Czech Republic with the euro area  | (Annex) | October 2006 |
| Employment of foreign nationals  | (Box)   | January 2007 |
| The extension of the core prediction model to include the effect of real wages   | (Box)   | January 2007 |
| The new consumer basket as from January 2007   | (Box)   | April 2007   |
| Financing of non-financial corporations  | (Box)   | April 2007   |
| The application of escape clauses to indirect tax changes  | (Box)   | April 2007   |
| The CNB's new inflation target and changes in monetary policy communication  | (Annex) | April 2007   |
| The relationship between interest rates and the structure of new loans for house purchase  | (Box)   | July 2007    |
| The CNB's new approach to the monitoring of inflation expectations of households in the Czech Republic                           | (Box)   | July 2007    |
| The causes, course and impacts of the current turmoil in global financial markets  | (Box)   | October 2007 |
| Household debt by income group in 2006 and its impact on consumption   | (Box)   | October 2007 |
| The causes of the sharp growth in world prices of cereals  | (Box)   | October 2007 |
| Fiscal measures and their impact on the economy in 2008  | (Box)   | October 2007 |
| The Czech Republic's updated euro-area accession strategy  | (Annex) | October 2007 |
| Changes in the conduct and communication of monetary policy  | (Box)   | I/2008       |
| Publication of the forecast-consistent interest rate path and the use of fan charts  | (Box)   | I/2008       |
| The quarterly financial accounts statistics – New statistics at the CNB  | (Box)   | I/2008       |
| Changes to the CNB's core prediction model   | (Box)   | I/2008       |
| Assessment of the fulfilment of the Maastricht convergence criteria  |         |              |
| and the degree of economic alignment of the Czech Republic with the euro area  | (Annex) | I/2008       |
| The new g3 structural model  | (Box)   | II/2008      |
| Joint agreement between the Czech Government and the Czech National Bank and Updated strategy                                    |         |              |
| for dealing with the exchange rate effects of foreign exchange revenues of the state   | (Annex) | II/2008      |
| The sectoral and production structure of the g3 model  | (Box)   | III/2008     |
| The withdrawal of 50-heller coins and its possible impact on prices  | (Box)   | III/2008     |
| The impact of the still fast growing world prices of energy-producing materials on inflation in the Czech Republic               | (Box)   | IV/2008      |
| Pricing in the g3 model  | (Box)   | IV/2008      |
| Publication of a numerical exchange rate forecast  | (Box)   | I/2009       |
| The exchange rate path in the g3 model   | (Box)   | I/2009       |
| Assessment of the fulfilment of the Maastricht convergence criteria and the degree of economic alignment                         |         |              |
| of the Czech Republic with the euro area   | (Annex) | I/2009       |
| Transmission of financial market interest rates to client interest rates   | (Box)   | II/2009      |
| Proxying external developments after Slovakia's entry to the euro area   | (Box)   | II/2009      |
| Monetary policy in the g3 model  | (Box)   | II/2009      |
| Analysts' forecasts in financial market inflation expectations questionnaires: A look back at the past ten years                 | (Box)   | II/2009      |
| Unconventional monetary policy of selected central banks   | (Box)   | III/2009     |
| Financing and financial investment of corporations and households  | (Box)   | III/2009     |
| The impact of the recession on public finances in the Czech Republic   | (Box)   | III/2009     |
| Investment in housing during the business cycle  | (Box)   | IV/2009      |
| The effect of regulated prices and other administrative measures on inflation in 2008–2009 and their expected future development | (Box)   | IV/2009      |
| Exit strategies from unconventional monetary policy instruments planned by selected central banks                                | (Box)   | I/2010       |
| Uncertainties surrounding the calculation of potential output  | (Box)   | I/2010       |
| Revision of the quarterly financial accounts   | (Box)   | I/2010       |
| Differences in client interest rates in the Czech Republic and the euro area   | (Box)   | I/2010       |
| Assessment of the fulfilment of the Maastricht convergence criteria  |         |              |
| and the degree of economic alignment of the Czech Republic with the euro area  | (Annex) | I/2010       |

|  |         |          |
|--|---------|----------|
| Assessment of the accuracy of the outlooks for effective GDP and CPI in the euro area – comparison of forecasts                      | (Box)   | II/2010  |
| Revisions to the expenditure components of GDP   | (Box)   | II/2010  |
| Business and consumer sentiment in the current phase of the economic cycle according to CZSO and CNB indicators                      | (Box)   | II/2010  |
| The January 2010 consumer basket update  | (Box)   | II/2010  |
| The effect of new photovoltaic power station installations on economic activity  | (Box)   | IV/2010  |
| An analysis of household consumption   | (Box)   | IV/2010  |
| Property-market-related loans in the current phase of the business cycle   | (Box)   | IV/2010  |
| Forecasts for general government debt and debt service, and sensitivity analyses   | (Box)   | I/2011   |
| Price-setting behaviour in the Czech Republic (micro data evidence) in relation to the pricing mechanism in the g3 forecasting model | (Box)   | II/2011  |
| The relationship between the Brent crude oil price and the dollar exchange rate  | (Box)   | II/2011  |
| The impacts of changes to VAT rates on the budget and inflation and their components in 2012 and 2013                                | (Box)   | III/2011 |
| Labour market developments during the economic recession and the subsequent recovery   | (Box)   | III/2011 |
| The debt situation in Italy  | (Box)   | III/2011 |
| Publication of the Graph of Risks to the Inflation Projection (GRIP)   | (Annex) | III/2011 |
| Pension system reform  | (Box)   | IV/2011  |
| The credit rating of the Czech Republic  | (Box)   | IV/2011  |
| Germany – the Czech Republic's main trading partner  | (Box)   | IV/2011  |
| The pass-through of VAT to food prices at the end of 2011  | (Box)   | I/2012   |
| Extraordinary revision of the quarterly national accounts  | (Box)   | I/2012   |
| An analysis of the impacts of fiscal measures in the Czech Republic in 2001–2011   | (Box)   | I/2012   |
| Revision of the consumer basket  | (Box)   | II/2012  |
| Factors affecting retail fuel prices   | (Box)   | II/2012  |
| The Bank Lending Survey  | (Box)   | III/2012 |
| The CZK/USD exchange rate at a time of uncertainty   | (Box)   | III/2012 |
| Easy monetary policy and commodity prices  | (Box)   | III/2012 |

This glossary explains some terms frequently used in the Inflation Report. A more detailed glossary can be found on the CNB website ([www.cnb.cz/en/general/glossary/index.html](http://www.cnb.cz/en/general/glossary/index.html)).

**Adjusted inflation excluding fuels:** The increase in prices of non-food items of the consumer basket excluding items with administered prices, indirect tax changes and fuels.

**Administered prices:** A sub-category of the consumer basket consisting of items with price ceilings (set at either central or local level), prices regulated on a cost-plus basis (items whose prices may only reflect economically justified costs and a reasonable profit) and administratively fixed fees. The selection of these items is based on the Price Bulletin of the Czech Ministry of Finance.

**Balance of payments:** Records economic transactions with other countries (i.e. between residents and non-residents) over a particular period. The basic structure of the balance of payments includes the current account, the capital and financial accounts and the change in CNB international reserves.

**Consensus Forecasts:** A regular monthly publication issued by Consensus Economics bringing together the forecasts of hundreds of prominent economists and analytical teams regarding future world developments. The CNB uses these predictions in its macroeconomic forecast when forming assumptions regarding the future development of the external environment.

**Covered bond:** A bond collateralised (backed) by long-term assets, usually mortgage loans or public sector loans. The issuers are mostly banks and the issuance of covered bonds is subject to strict legislative rules. Compared to standard bonds, this type of bond has lower credit risk thanks to higher coverage (known as dual recourse), which gives the covered bond holder a preferential claim on the issuer's receivables underlying the mortgage loans or public sector loans and likewise a claim on the issuer. If the issuer defaults, the holder therefore has a preferential right to the assets backing the covered bond.

**Current account:** Records exports and imports of goods and services, income from capital, investment and labour and unrequited transfers.

**Cyclical component of the general government balance:** Expresses the effect of the business cycle on the general government fiscal balance.

**Discount rate:** A monetary policy rate which as a rule represents the floor for short-term money market interest rates. The CNB applies it to the excess liquidity which banks deposit with the CNB overnight under the deposit facility.

**Disinflation:** A decline in inflation.

**Effective euro area indicators:** Proxy for the effect of economic activity (effective GDP) and inflation (effective producer prices and consumer prices) in the euro area on the Czech economy. The weights used in the calculation are the shares of the individual euro area economies in the foreign trade turnover of the Czech Republic.

**Effective exchange rate:** Shows the appreciation (index > 100) or depreciation (index < 100) of the national currency against a basket of selected currencies for a certain time period relative to a base period. The weights applied in the basket are the shares of major trading partners in foreign trade turnover.

**Escape clause:** Excuses the central bank from its obligation to hit the inflation target. In the flexible inflation targeting regime, it is applied in the event of large shock changes in exogenous factors (particularly supply-side shocks, e.g. indirect tax changes) that are completely or largely outside the purview of central bank monetary policy.

**Euro area:** The territory of all Member States of the European Union that have adopted the euro as a single currency pursuant to the Treaty Establishing the European Community.

**Financial account:** Records transactions connected with the creation, liquidation and change in ownership of the financial assets and liabilities of the government, the banking and corporate sectors and other entities vis-à-vis the rest of the world. It consists of direct investment, portfolio investment, other investment and financial derivatives transactions.

**Fiscal stance:** The annual change in the general government structural balance (in percentage points). A positive figure indicates fiscal restriction and a negative figure indicates fiscal expansion.

**Food prices:** In CNB documents, the term food prices refers to the consolidated category of prices of food and non-alcoholic beverages and prices of alcoholic beverages and tobacco.

**General government balance:** Revenues minus expenditures of the general government sector. A negative government balance is called a general government deficit and a positive government balance is called a general government surplus.

**General government primary balance:** The general government balance net of interest payments (i.e. debt service).

**General government structural balance:** The cyclically adjusted general government balance adjusted for extraordinary one-off operations. It captures the structural configuration of fiscal policy.

**Goods and services balance:** The sum of the trade balance and the services balance.

**Gross Domestic Product (GDP):** The key indicator of economic development. It represents the sum of the value added by all economic sectors. In terms of use it consists of expenditure on final consumption (consumption of households, the government and non-profit institutions), gross capital formation (fixed investment and changes in inventories) and foreign trade (net exports of goods and services).

**Inflation:** Commonly, inflation is considered to be recurring growth of most prices in the economy. It means a decrease in the real value (i.e. purchasing power) of a given currency relative to the goods and services which consumers buy – if there is inflation in the economy, consumers need ever more currency units of the given country to buy the same basket of goods and services. In practice, inflation is measured by the increment of the consumer price index.

**Inflation pressures:** Proxied in the CNB's modelling system by the real marginal cost gap in the consumer goods sector. Total inflation pressures are divided into domestic inflation pressures (in the intermediate goods sector) and imported inflation pressures (in the import price sector).

**Inflation rate:** The increase in the average (basic) consumer price index for the last 12 months relative to the average for the previous 12 months.

**Inflation target:** The level of consumer price inflation that the CNB endeavours to achieve, set publicly and well in advance.

**Lombard rate:** A monetary policy interest rate which provides a ceiling for short-term interest rates on the money market. The CNB applies it to the liquidity which it provides to banks overnight under the lending facility.

**Monetary aggregates:** Represent the amount of money in the economy covered in the monetary survey. According to the national definition, they are calculated from the monetary liabilities of resident monetary financial institutions to other resident sectors in the Czech Republic (households, non-financial corporations and financial institutions excluding the general government). Monetary aggregates differ according to the degree of liquidity of the individual components. The narrow monetary aggregate M1 comprises currency in circulation and overnight deposits. The broad monetary aggregate M2 comprises M1 plus total deposits with agreed maturity and redeemable at notice and repurchase agreements. The broad monetary aggregate M3 (harmonised with EU standards) comprises currency in circulation, overnight deposits, deposits with agreed maturity of up to two years, deposits redeemable at notice of up to three months, repurchase agreements, money market fund shares/units and issued debt securities with maturity of up to two years.

**Monetary conditions:** Represent the combined effect of interest rates (the interest rate component of the monetary conditions) and the exchange rate (the exchange rate component) on the economy. These are the key variables through which monetary policy can affect economic activity and, through it, inflation. Interest rates and the exchange rate do not necessarily affect the economy in the same direction.

**Monetary policy horizon:** The time horizon which monetary policy-makers focus on when making decisions and which takes into account the monetary policy transmission lag. This horizon is about 12–18 months ahead.

**Monetary policy interest rates:** Short-term interest rates associated with monetary policy-making. They comprise the two-week repo rate, the discount rate and the Lombard rate.

**Monetary-policy relevant inflation:** Inflation to which monetary policy reacts. It is defined as headline inflation adjusted for the first-round effects of changes to indirect taxes.

**Money market:** The part of the financial markets which is used to obtain short-term loans and where debt instruments maturing in less than one year are traded. T-bills are typical securities traded on this market. Within this market the CNB carries out its repo operations.

**Net inflation:** Consumer price inflation net of administered prices and adjusted for the first-round effects of changes to indirect taxes. Net inflation consists of food price inflation, fuel price inflation and adjusted inflation excluding fuels. Until the end of 2001, the CNB's inflation targets were set in terms of net inflation. Since 2002, the CNB has targeted headline inflation, using net inflation for analytical purposes only.

**Nominal costs in the consumption sector:** These comprise output prices in the intermediate goods sector and import sector, as final consumption goods are produced using inputs from these sectors. They also include "export-specific technology", which approximates the productivity differential between the tradables sector and the non-tradables sector and its price effect, known as an analogy to the Balassa-Samuelson effect.

**Nominal costs in the intermediate goods sector:** Co-determined by prices of production factors, i.e. labour costs and the price of capital. In addition to these components, they are determined by "labour-augmenting technology". This technology can be understood as a concept similar to total factor productivity, e.g. in the Cobb-Douglas production function.

**Nominal unit labour costs:** The labour costs needed to produce a unit of output. Nominal unit labour costs are calculated as the ratio of the nominal volume of wages and salaries to GDP at constant prices.

**Price-to-income ratio:** The ratio of the price of an apartment (68 m<sup>2</sup>) to the sum of the annual wage in a given region over the last four quarters. Higher values of this indicator usually mean that apartments are overpriced.

**Price-to-rent ratio:** Indicator of sustainability of apartment prices, calculated as the ratio of the price of the apartment to the annual rent. The price-to-rent ratio is the inverse of the rent return. Higher values of this indicator usually mean that apartments are overpriced.

**Producers' margins:** The inverse of producers' real marginal costs in the relevant sector. Growth in producers' nominal costs without corresponding growth in the price of production causes a decline in the profit margin, i.e. an increase in real marginal costs. If prices in the sector were perfectly flexible, the price at any given moment would comprise a constant margin over marginal nominal costs. In the consumer sector, a gap in profit mark-ups represents a deviation from the long-term margin level.

**Property asking prices:** Property sale asking prices in estate agencies. Asking prices should be higher than transaction prices. Property asking prices in the Czech Republic are published, for example, by the CZSO and the Institute for Regional Information (IRI). Formerly also referred to as property supply prices in CNB publications.

**Property transaction prices:** Prices based on Ministry of Finance statistics from property transfer tax returns and published by the CZSO. These prices are the closest to actual market prices in terms of methodology, but are published with a time delay. Formerly also referred to as property transfer prices in CNB publications.

**Repo rate:** The CNB's key monetary policy rate, paid on commercial banks' excess liquidity as withdrawn by the CNB in two-week repo tenders.

**Technological growth:** The situation where the volume of production rises without an increase in the production factors of labour or capital. Growth in technology thus causes the real volume of production to rise given a constant price of production, or the output price to fall relative to input prices given a constant real volume of production.

**Unemployment rate:** The ratio of the number of unemployed persons to the total labour force. We distinguish between the general unemployment rate, as determined by the CZSO according to International Labour Organisation methodology, and the registered unemployment rate, as determined by the Ministry of Labour and Social Affairs.

## KEY MACROECONOMIC INDICATORS

|   |                                      | years   |         |         |         |         |         |         |         |                |                |                |
|---|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------------|----------------|----------------|
|   |                                      | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012           | 2013           | 2014           |
| <b>DEMAND AND SUPPLY</b>  |                                      |         |         |         |         |         |         |         |         |                |                |                |
| <i>Gross domestic product</i>                                     |                                      |         |         |         |         |         |         |         |         |                |                |                |
| GDP   | CZK bn, constant p., seas. adjusted  | 2,915.1 | 3,114.1 | 3,339.3 | 3,530.3 | 3,632.5 | 3,467.6 | 3,557.0 | 3,616.2 | <b>3,582.7</b> | <b>3,612.5</b> | <b>3,703.3</b> |
| GDP   | %, y-o-y, real terms, seas. adjusted | 4.6     | 6.8     | 7.2     | 5.7     | 2.9     | -4.5    | 2.6     | 1.7     | <b>-0.9</b>    | <b>0.8</b>     | <b>2.5</b>     |
| Household consumption   | %, y-o-y, real terms, seas. adjusted | 3.1     | 3.0     | 4.4     | 4.1     | 3.0     | -0.4    | 0.5     | -0.6    | <b>-1.5</b>    | <b>0.2</b>     | <b>1.4</b>     |
| Government consumption  | %, y-o-y, real terms, seas. adjusted | -3.3    | 1.6     | -0.6    | 0.4     | 1.2     | 3.8     | 0.6     | -1.7    | <b>-0.6</b>    | <b>-0.8</b>    | <b>-0.2</b>    |
| Gross capital formation   | %, y-o-y, real terms, seas. adjusted | 6.4     | 4.4     | 10.9    | 15.4    | 1.3     | -20.5   | 5.6     | -1.3    | <b>-8.7</b>    | <b>0.6</b>     | <b>0.7</b>     |
| Exports of goods and services                                     | %, y-o-y, real terms, seas. adjusted | 13.2    | 11.8    | 14.2    | 11.2    | 3.6     | -9.7    | 16.0    | 11.1    | <b>7.3</b>     | <b>6.0</b>     | <b>9.2</b>     |
| Imports of goods and services                                     | %, y-o-y, real terms, seas. adjusted | 9.6     | 6.0     | 11.1    | 12.8    | 2.4     | -11.4   | 15.7    | 7.5     | <b>4.7</b>     | <b>5.4</b>     | <b>7.6</b>     |
| Net exports   | CZK bn, constant p., seas. adjusted  | -17.7   | 85.2    | 156.4   | 139.3   | 175.1   | 198.7   | 237.8   | 354.7   | <b>451.0</b>   | <b>495.5</b>   | <b>586.3</b>   |
| <i>Coincidence indicators</i>                                     |                                      |         |         |         |         |         |         |         |         |                |                |                |
| Industrial production   | %, y-o-y, real terms                 | 10.4    | 3.9     | 8.3     | 10.6    | -1.8    | -13.6   | 10.3    | 6.5     | -              | -              | -              |
| Construction output   | %, y-o-y, real terms                 | 8.8     | 5.2     | 6.0     | 7.1     | 0.0     | -0.9    | -7.1    | -3.5    | -              | -              | -              |
| Receipts in retail sales  | %, y-o-y, real terms                 | 3.8     | 8.1     | 10.8    | 10.0    | 2.7     | -4.7    | 1.3     | 1.8     | -              | -              | -              |
| <b>PRICES</b>   |                                      |         |         |         |         |         |         |         |         |                |                |                |
| <i>Main price indicators</i>                                      |                                      |         |         |         |         |         |         |         |         |                |                |                |
| Inflation rate  | %, end-of-period                     | 2.8     | 1.9     | 2.5     | 2.8     | 6.3     | 1.0     | 1.5     | 1.9     | -              | -              | -              |
| Consumer Price Index  | %, y-o-y, average                    | 2.8     | 1.9     | 2.5     | 2.8     | 6.4     | 1.1     | 1.5     | 1.9     | <b>3.4</b>     | <b>2.2</b>     | <b>1.7</b>     |
| Regulated prices (18.70%)*  | %, y-o-y, average                    | 3.5     | 5.7     | 9.3     | 4.8     | 15.6    | 8.4     | 2.6     | 4.7     | <b>8.6</b>     | <b>2.9</b>     | <b>2.1</b>     |
| Net inflation (81.30%)*   | %, y-o-y, average                    | 1.8     | 0.7     | 0.4     | 1.7     | 2.4     | -0.9    | 0.0     | 1.3     | <b>1.1</b>     | <b>1.2</b>     | <b>1.4</b>     |
| Food prices (including alcoholic beverages and tobacco) (24.58%)* | %, y-o-y, average                    | 2.8     | 0.0     | -0.2    | 3.8     | 3.0     | -0.9    | 0.9     | 3.9     | <b>2.9</b>     | <b>2.0</b>     | <b>1.8</b>     |
| Adjusted inflation excluding fuels (53.32%)*                      | %, y-o-y, average                    | 1.2     | 0.7     | 0.6     | 0.7     | 2.0     | 0.0     | -1.2    | -0.7    | <b>-0.1</b>    | <b>0.9</b>     | <b>1.3</b>     |
| Fuel prices (3.39%)*  | %, y-o-y, average                    | 4.5     | 7.8     | 3.7     | -0.3    | 4.3     | -11.1   | 11.8    | 9.9     | <b>4.6</b>     | <b>-1.3</b>    | <b>-0.1</b>    |
| Monetary-policy inflation (excluding tax changes)                 | %, y-o-y, average                    | 2.0     | 1.8     | 2.3     | 2.2     | 4.4     | 0.9     | 0.4     | 1.9     | <b>2.2</b>     | <b>1.4</b>     | <b>1.5</b>     |
| GDP deflator  | %, y-o-y, seas. adjusted             | 4.0     | -0.3    | 0.5     | 3.3     | 1.9     | 2.0     | -1.7    | -0.8    | <b>2.1</b>     | <b>2.1</b>     | <b>1.7</b>     |
| <i>Partial price indicators</i>                                   |                                      |         |         |         |         |         |         |         |         |                |                |                |
| Producer prices   | %, y-o-y, average                    | 5.5     | 3.1     | 1.5     | 4.1     | 4.5     | -3.1    | 1.2     | 5.6     | <b>1.9</b>     | <b>1.0</b>     | <b>1.7</b>     |
| Agricultural prices   | %, y-o-y, average                    | 9.6     | -9.8    | 1.3     | 16.4    | 10.8    | -24.3   | 5.6     | 20.0    | <b>3.5</b>     | <b>3.7</b>     | <b>2.7</b>     |
| Construction work prices  | %, y-o-y, average                    | 3.7     | 3.0     | 2.9     | 3.9     | 4.5     | 1.3     | -0.2    | -0.5    | -              | -              | -              |
| Brent crude oil   | %, y-o-y, average                    | 32.7    | 42.1    | 18.6    | 12.6    | 34.3    | -36.6   | 28.7    | 39.5    | <b>-5.0</b>    | <b>-8.7</b>    | <b>-2.2</b>    |
| <b>LABOUR MARKET</b>  |                                      |         |         |         |         |         |         |         |         |                |                |                |
| Average monthly wage  | %, y-o-y, nominal terms              | 6.3     | 5.0     | 6.6     | 7.2     | 7.8     | 3.3     | 2.2     | 2.4     | <b>2.7</b>     | <b>2.6</b>     | <b>3.1</b>     |
| Average monthly wage  | %, y-o-y, real terms                 | 3.4     | 3.0     | 4.0     | 4.3     | 1.4     | 2.3     | 0.7     | 0.5     | <b>-0.6</b>    | <b>0.4</b>     | <b>1.5</b>     |
| Number of employees   | %, y-o-y                             | -0.2    | 2.0     | 1.1     | 1.8     | 1.6     | -2.2    | -2.2    | 0.0     | <b>-0.9</b>    | <b>-0.4</b>    | <b>0.2</b>     |
| Unit labour costs   | %, y-o-y                             | 3.7     | 0.6     | 0.2     | 2.4     | 4.3     | 2.7     | -3.1    | 0.6     | <b>2.8</b>     | <b>1.3</b>     | <b>0.8</b>     |
| Unit labour costs in industry                                     | %, y-o-y                             | 1.2     | -7.2    | -7.2    | 2.4     | -3.3    | 0.1     | -7.9    | 0.5     | -              | -              | -              |
| Aggregate labour productivity                                     | %, y-o-y                             | 5.1     | 4.6     | 5.6     | 3.5     | 0.8     | -3.5    | 4.5     | 1.4     | <b>-0.7</b>    | <b>1.1</b>     | <b>2.4</b>     |
| ILO general unemployment rate                                     | %, average, age 15–64                | 8.4     | 8.0     | 7.2     | 5.4     | 4.4     | 6.7     | 7.4     | 6.8     | <b>7.1</b>     | <b>7.3</b>     | <b>7.0</b>     |
| Registered unemployment rate                                      | %, average                           | 10.0    | 9.5     | 8.6     | 7.0     | 5.8     | 8.3     | 9.3     | 8.9     | <b>8.8</b>     | <b>8.9</b>     | <b>8.6</b>     |
| <b>PUBLIC FINANCE</b>   |                                      |         |         |         |         |         |         |         |         |                |                |                |
| Public finance deficit (ESA95)                                    | CZK bn, current p.                   | -82.9   | -101.1  | -79.2   | -26.7   | -85.0   | -217.7  | -180.7  | -117.5  | <b>-126.2</b>  | <b>-94.2</b>   | <b>-78.6</b>   |
| Public finance deficit / GDP**                                    | %, nominal terms                     | -2.8    | -3.2    | -2.4    | -0.7    | -2.2    | -5.8    | -4.8    | -3.1    | <b>-3.3</b>    | <b>-2.4</b>    | <b>-1.9</b>    |
| Public debt (ESA95)   | CZK bn, current p.                   | 847.8   | 885.4   | 948.1   | 1,023.4 | 1,104.3 | 1,285.6 | 1,436.6 | 1,567.8 | <b>1,691.3</b> | <b>1,784.6</b> | <b>1,863.8</b> |
| Public debt / GDP**   | %, nominal terms                     | 28.9    | 28.4    | 28.3    | 27.9    | 28.7    | 34.4    | 38.1    | 41.2    | <b>43.9</b>    | <b>45.0</b>    | <b>45.0</b>    |
| <b>EXTERNAL RELATIONS</b>   |                                      |         |         |         |         |         |         |         |         |                |                |                |
| <i>Current account</i>  |                                      |         |         |         |         |         |         |         |         |                |                |                |
| Trade balance   | CZK bn, current p.                   | -13.4   | 48.6    | 59.3    | 46.9    | 25.7    | 87.3    | 53.8    | 94.0    | <b>159.9</b>   | <b>190.0</b>   | <b>215.0</b>   |
| Trade balance / GDP   | %, nominal terms                     | -0.5    | 1.6     | 1.8     | 1.3     | 0.7     | 2.3     | 1.4     | 2.5     | <b>4.1</b>     | <b>4.8</b>     | <b>5.2</b>     |
| Balance of services   | CZK bn, current p.                   | 16.6    | 37.9    | 49.0    | 59.2    | 73.9    | 73.9    | 75.3    | 66.3    | <b>60.0</b>    | <b>65.0</b>    | <b>70.0</b>    |
| Current account   | CZK bn, current p.                   | -147.5  | -30.9   | -67.1   | -156.9  | -81.3   | -89.3   | -146.6  | -109.1  | <b>-79.5</b>   | <b>-55.0</b>   | <b>-45.0</b>   |
| Current account / GDP   | %, nominal terms                     | -5.0    | -1.0    | -2.0    | -4.3    | -2.1    | -2.4    | -3.9    | -2.9    | <b>-2.1</b>    | <b>-1.4</b>    | <b>-1.1</b>    |
| <i>Foreign direct investment</i>                                  |                                      |         |         |         |         |         |         |         |         |                |                |                |
| Direct investment   | CZK bn, current p.                   | 101.8   | 279.6   | 90.3    | 179.1   | 36.3    | 37.7    | 95.0    | 75.2    | <b>80.0</b>    | <b>85.0</b>    | <b>90.0</b>    |
| <i>Exchange rates</i>   |                                      |         |         |         |         |         |         |         |         |                |                |                |
| CZK/USD   | average                              | 25.7    | 24.0    | 22.6    | 20.3    | 17.1    | 19.1    | 19.1    | 17.7    | <b>19.9</b>    | <b>20.2</b>    | <b>19.8</b>    |
| CZK/EUR   | average                              | 31.9    | 29.8    | 28.3    | 27.8    | 25.0    | 26.5    | 25.3    | 24.6    | <b>25.3</b>    | <b>25.1</b>    | <b>24.9</b>    |
| CZK/EUR   | %, y-o-y, real (CPI euro area), avg. | 0.0     | -6.3    | -5.1    | -2.2    | -12.5   | 5.4     | -4.6    | -1.9    | <b>1.9</b>     | <b>-1.0</b>    | <b>-0.4</b>    |
| CZK/EUR   | %, y-o-y, real (PPI euro area), avg. | -2.9    | -5.6    | -1.5    | -3.7    | -8.7    | 4.1     | -3.1    | -2.4    | <b>3.3</b>     | <b>0.2</b>     | <b>-0.3</b>    |
| <i>Foreign trade prices</i>                                       |                                      |         |         |         |         |         |         |         |         |                |                |                |
| Prices of exports of goods  | %, y-o-y, average                    | 3.6     | -1.5    | -1.2    | 1.3     | -4.6    | 0.2     | -1.0    | 1.7     | <b>3.6</b>     | <b>1.3</b>     | <b>1.3</b>     |
| Prices of imports of goods  | %, y-o-y, average                    | 1.6     | -0.5    | 0.2     | -1.0    | -3.3    | -3.5    | 2.0     | 4.3     | <b>4.7</b>     | <b>-0.2</b>    | <b>0.4</b>     |
| <b>MONEY AND INTEREST RATES</b>                                   |                                      |         |         |         |         |         |         |         |         |                |                |                |
| M2  | %, y-o-y, average                    | 7.7     | 5.3     | 8.9     | 11.2    | 8.4     | 6.2     | 4.0     | 3.4     | <b>6.4</b>     | <b>6.2</b>     | <b>6.0</b>     |
| 2W repo rate  | %, end-of-period                     | 2.50    | 2.00    | 2.50    | 3.50    | 2.25    | 1.00    | 0.75    | 0.75    | -              | -              | -              |
| 3M PRIBOR   | %, average                           | 2.4     | 2.0     | 2.3     | 3.1     | 4.0     | 2.2     | 1.3     | 1.2     | <b>1.0</b>     | <b>0.3</b>     | <b>0.4</b>     |

\* in brackets are constant weights in actual consumer basket

\*\* CNB calculation

– data are not available / forecasted / released

data in bold = CNB forecast



| 2010  |       |        |       | 2011  |       |       |       | 2012  |       |       |       | 2013  |       |       |       | 2014  |       |       |       |
|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| QI    | QII   | QIII   | QIV   | QI    | QII   | QIII  | QIV   | QI    | QII   | QIII  | QIV   | QI    | QII   | QIII  | QIV   | QI    | QII   | QIII  | QIV   |
| 878.6 | 887.1 | 893.1  | 898.3 | 902.8 | 905.2 | 904.8 | 903.3 | 896.1 | 901.9 | 892.9 | 891.8 | 894.0 | 899.7 | 906.5 | 912.3 | 917.5 | 922.3 | 927.8 | 935.8 |
| 0.9   | 3.0   | 3.3    | 3.0   | 2.8   | 2.1   | 1.3   | 0.6   | -0.7  | -0.4  | -1.3  | -1.3  | -0.2  | -0.2  | 1.5   | 2.3   | 2.6   | 2.5   | 2.4   | 2.6   |
| 0.3   | 0.4   | 0.7    | 0.7   | -0.7  | -0.5  | -0.7  | -0.7  | -2.9  | -1.7  | -1.0  | -0.6  | 1.4   | 0.1   | -0.1  | -0.5  | 0.4   | 1.1   | 1.6   | 2.4   |
| 1.5   | 1.5   | 0.4    | -1.1  | -0.4  | -1.2  | -3.1  | -2.1  | -0.2  | -0.7  | -1.2  | -0.4  | -2.2  | -0.9  | -0.1  | 0.1   | 0.0   | -0.2  | -0.3  | -0.5  |
| -9.9  | 7.4   | 17.9   | 8.6   | 3.8   | 0.5   | -3.8  | -5.0  | -5.8  | -9.7  | -14.3 | -4.5  | 0.0   | 0.7   | 0.8   | 0.8   | 0.7   | 0.7   | 0.7   | 0.7   |
| 14.8  | 17.3  | 16.7   | 15.3  | 18.4  | 12.9  | 8.5   | 5.2   | 6.5   | 9.6   | 5.1   | 8.1   | 1.9   | 3.4   | 8.3   | 10.7  | 10.7  | 9.5   | 8.4   | 8.2   |
| 10.0  | 17.2  | 20.3   | 15.1  | 16.0  | 9.8   | 3.6   | 1.5   | 3.9   | 5.8   | 0.9   | 8.5   | 2.6   | 4.0   | 6.9   | 8.3   | 8.4   | 7.8   | 7.2   | 7.2   |
| 65.2  | 59.2  | 39.6   | 73.8  | 91.0  | 86.1  | 76.2  | 101.4 | 114.6 | 119.9 | 109.9 | 106.6 | 111.6 | 119.8 | 128.5 | 135.6 | 139.9 | 143.7 | 148.4 | 154.2 |
| 6.9   | 11.5  | 10.7   | 11.8  | 12.1  | 8.7   | 3.2   | 2.4   | 2.9   | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| -22.7 | -8.3  | -2.8   | -2.1  | 5.9   | -5.2  | -9.0  | -0.8  | -9.4  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| -0.2  | 2.1   | 1.6    | 1.5   | 5.3   | 1.1   | 0.5   | 0.9   | 1.2   | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| 0.7   | 0.6   | 1.1    | 1.5   | 1.7   | 1.9   | 1.8   | 1.9   | 2.4   | 2.7   | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| 0.7   | 1.1   | 1.9    | 2.1   | 1.7   | 1.8   | 1.7   | 2.4   | 3.7   | 3.4   | 3.4   | 3.0   | 2.1   | 2.1   | 2.3   | 2.3   | 1.7   | 1.7   | 1.6   | 1.6   |
| 0.8   | 2.3   | 3.6    | 3.8   | 4.4   | 4.0   | 4.5   | 5.9   | 9.7   | 9.4   | 8.2   | 7.3   | 3.0   | 2.9   | 2.8   | 2.8   | 2.2   | 2.2   | 2.1   | 2.0   |
| -0.5  | -0.3  | 0.3    | 0.4   | 1.0   | 1.2   | 1.2   | 1.7   | 1.3   | 1.0   | 1.1   | 0.9   | 1.0   | 1.1   | 1.3   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   |
| -1.4  | -0.2  | 2.3    | 2.8   | 3.2   | 4.1   | 3.6   | 4.5   | 3.5   | 2.5   | 3.2   | 2.4   | 2.3   | 2.3   | 1.9   | 1.7   | 1.8   | 1.8   | 1.8   | 1.8   |
| -1.1  | -1.2  | -1.2   | -1.3  | -0.8  | -0.8  | -0.7  | -0.4  | -0.3  | -0.2  | -0.1  | 0.1   | 0.5   | 0.8   | 1.1   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   |
| 18.1  | 13.3  | 7.0    | 8.7   | 10.8  | 9.1   | 9.5   | 10.2  | 8.0   | 5.8   | 2.8   | 1.9   | -1.6  | -3.5  | -0.2  | 0.3   | -0.1  | 0.0   | -0.1  | -0.1  |
| -0.3  | 0.1   | 0.8    | 1.0   | 1.6   | 1.7   | 1.7   | 2.4   | 2.5   | 2.2   | 2.2   | 1.8   | 1.2   | 1.3   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   |
| -2.6  | -1.0  | -0.8   | -2.4  | -1.7  | -1.5  | -0.6  | 0.8   | 2.1   | 1.9   | 2.7   | 1.8   | 1.9   | 2.5   | 1.6   | 2.2   | 1.8   | 1.7   | 1.6   | 1.6   |
| -1.4  | 1.3   | 2.2    | 3.0   | 5.4   | 6.0   | 5.6   | 5.2   | 3.6   | 1.8   | 1.3   | 0.9   | 0.1   | 0.5   | 1.4   | 1.8   | 2.0   | 1.7   | 1.5   | 1.5   |
| -5.6  | -2.8  | 8.2    | 22.7  | 27.9  | 30.1  | 16.6  | 5.4   | -1.9  | -1.8  | 7.4   | 10.3  | 8.2   | 4.0   | 1.0   | 1.8   | 2.5   | 2.8   | 2.8   | 2.7   |
| 0.0   | -0.2  | -0.3   | -0.4  | -0.4  | -0.5  | -0.5  | -0.5  | -0.6  | -0.6  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| 70.5  | 35.9  | 11.9   | 15.8  | 36.7  | 49.0  | 48.0  | 26.2  | 13.2  | -7.2  | -13.5 | -11.2 | -18.1 | -10.4 | -1.5  | -1.2  | -1.7  | -2.2  | -2.5  | -2.6  |
| 2.8   | 3.1   | 2.2    | 0.7   | 2.4   | 2.4   | 2.4   | 2.4   | 3.6   | 2.6   | 2.4   | 2.4   | 2.4   | 2.4   | 2.6   | 2.8   | 2.9   | 3.1   | 3.2   | 3.3   |
| 2.1   | 1.9   | 0.3    | -1.4  | 0.7   | 0.6   | 0.6   | 0.0   | -0.1  | -0.7  | -0.9  | -0.6  | 0.3   | 0.3   | 0.4   | 0.5   | 1.2   | 1.4   | 1.5   | 1.6   |
| -3.3  | -2.7  | -1.4   | -1.6  | -0.2  | 0.4   | 0.1   | -0.5  | -0.6  | -1.1  | -1.1  | -0.6  | -0.7  | -0.6  | -0.2  | 0.1   | 0.2   | 0.3   | 0.2   | 0.2   |
| -3.4  | -3.9  | -1.7   | -3.4  | -0.7  | 1.3   | 0.4   | 1.5   | 3.8   | 1.9   | 2.6   | 3.1   | 1.9   | 2.1   | 0.9   | 0.6   | 0.6   | 0.8   | 1.0   | 0.9   |
| -11.0 | -10.4 | -5.4   | -5.2  | -0.5  | 1.2   | 1.3   | 0.3   | 1.2   | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| 4.4   | 5.7   | 3.7    | 4.1   | 2.7   | 1.8   | 1.2   | 0.2   | -0.6  | -0.2  | -0.9  | -1.0  | 0.2   | 0.1   | 1.7   | 2.3   | 2.5   | 2.3   | 2.2   | 2.5   |
| 8.2   | 7.2   | 7.1    | 7.0   | 7.3   | 6.8   | 6.6   | 6.5   | 7.2   | 6.9   | 7.2   | 7.2   | 7.6   | 7.2   | 7.3   | 7.1   | 7.4   | 6.9   | 6.9   | 6.7   |
| 10.1  | 9.1   | 8.8    | 9.1   | 9.8   | 8.7   | 8.4   | 8.5   | 9.4   | 8.5   | 8.4   | 8.8   | 9.7   | 8.8   | 8.6   | 8.7   | 9.4   | 8.5   | 8.3   | 8.3   |
| -     | -     | -      | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| -     | -     | -      | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| -     | -     | -      | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| -     | -     | -      | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| 31.0  | 22.9  | -4.5   | 4.4   | 33.7  | 29.3  | 7.9   | 23.2  | 66.9  | 35.0  | 25.0  | 33.0  | 59.0  | 46.0  | 37.0  | 48.0  | 65.0  | 52.0  | 43.0  | 55.0  |
| 3.6   | 2.4   | -0.5   | 0.4   | 3.8   | 3.0   | 0.8   | 2.3   | 7.4   | 3.6   | 2.6   | 3.3   | 6.5   | 4.6   | 3.7   | 4.6   | 6.8   | 5.0   | 4.1   | 5.0   |
| 18.3  | 24.8  | 15.3   | 16.9  | 14.2  | 20.3  | 18.8  | 13.0  | 13.0  | 18.0  | 17.0  | 12.0  | 13.0  | 19.0  | 19.0  | 14.0  | 14.0  | 20.0  | 21.0  | 15.0  |
| 22.3  | -28.1 | -106.4 | -34.5 | 22.7  | -56.8 | -57.6 | -17.4 | 35.5  | -25.0 | -73.0 | -17.0 | 29.0  | -37.0 | -51.0 | 4.0   | 34.0  | -39.0 | -50.0 | 10.0  |
| 2.6   | -2.9  | -11.1  | -3.5  | 2.6   | -5.9  | -6.0  | -1.7  | 4.0   | -2.6  | -7.5  | -1.7  | 3.2   | -3.7  | -5.1  | 0.4   | 3.6   | -3.7  | -4.8  | 0.9   |
| 13.9  | 30.2  | 37.6   | 13.3  | 13.1  | 34.5  | -4.3  | 32.0  | 17.3  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| 18.7  | 20.1  | 19.3   | 18.2  | 17.8  | 16.9  | 17.3  | 18.8  | 19.1  | 19.7  | 20.4  | 20.3  | 20.3  | 20.3  | 20.2  | 20.1  | 20.0  | 19.9  | 19.8  | 19.6  |
| 25.9  | 25.6  | 24.9   | 24.8  | 24.4  | 24.3  | 24.4  | 25.3  | 25.1  | 25.3  | 25.5  | 25.3  | 25.2  | 25.1  | 25.1  | 25.0  | 24.9  | 24.9  | 24.8  | 24.8  |
| -6.3  | -4.1  | -3.2   | -4.8  | -5.2  | -4.1  | -1.0  | 2.6   | 2.0   | 2.9   | 3.6   | -0.8  | 0.2   | -0.7  | -2.0  | -1.4  | -0.6  | -0.5  | -0.4  | -0.2  |
| -5.6  | -2.9  | -1.0   | -2.7  | -4.9  | -4.6  | -1.8  | 1.9   | 3.0   | 4.4   | 5.1   | 0.8   | 1.2   | 0.5   | -0.8  | -0.2  | -0.3  | -0.3  | -0.3  | -0.1  |
| -6.5  | -0.3  | 2.2    | 1.0   | 0.8   | -0.1  | 1.6   | 4.6   | 4.0   | 3.9   | 4.9   | 1.8   | 1.7   | 1.4   | 0.7   | 1.3   | 1.4   | 1.3   | 1.2   | 1.3   |
| -4.4  | 2.5   | 5.8    | 4.7   | 4.7   | 2.4   | 3.5   | 6.5   | 5.7   | 5.7   | 5.6   | 1.8   | 0.3   | -0.5  | -0.6  | 0.1   | 0.4   | 0.5   | 0.4   | 0.4   |
| 2.8   | 4.8   | 4.7    | 3.8   | 3.0   | 2.0   | 3.6   | 4.9   | 6.4   | 6.3   | 6.9   | 5.9   | 5.9   | 6.7   | 5.8   | 6.6   | 6.4   | 6.2   | 5.9   | 5.6   |
| 1.00  | 0.75  | 0.75   | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.75  | 0.50  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| 1.5   | 1.3   | 1.2    | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 0.8   | 0.6   | 0.5   | 0.4   | 0.2   | 0.2   | 0.3   | 0.3   | 0.5   | 0.7   |

**Issued by:**

CZECH NATIONAL BANK  
Na Příkopě 28  
115 03 Praha 1  
CZECH REPUBLIC

**Contact:**

COMMUNICATIONS DEPARTMENT  
Tel.: +420 22441 3494  
Fax: +420 22441 2179

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