INFLATION REPORT / III

2010

CNB CZECH NATIONAL BANK

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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. The Inflation Report contains the Czech National Bank's assessment of past economic and monetary developments and a description of its new quarterly forecast.

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 or 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.

Some changes in content have been introduced in this Inflation Report. First, the order of the sections is different. In line with the principles of modern communication, the Report describes first the CNB forecast in section II and then current economic developments in section III. Second, the description of the forecast in section II is more detailed. Among other things, it has been enriched with a detailed comparison of the new forecast with the previous one. Greater emphasis is also placed on the CNB forecast in the Summary of the Report, i.e. in section I. Third, the individual parts of section III have been rearranged and their analytical coverage has been extended. All these changes are aimed at making the Report more reader-friendly and at further enhancing the transparency of the CNB's decision-making process. Together with these changes, the Inflation Report has been merged with a non-public document called the Situation Report on Economic and Monetary Developments to form a single document that is discussed by the Bank Board and serves as a fundamental input for its monetary policy decisions. The published Inflation Report is concurrently a subset of the merged document, covering more than 90% of its content. The public can now thus also learn, for example, about the sensitivity scenarios, which describe and quantify the risks to the baseline scenario of the forecast and which could have influenced the Bank Board's monetary policy decision. The full internal document will be published with a lag of six years, as before.

The discontinuation of the hard-copy version of the Inflation Report and the aforementioned changes in content have led to a reassessment of the extent of the additions and annexes to the Report. Starting with this Report, the minutes of the Bank Board meeting will no longer be included and will only be available on the CNB website. For the same reason, the number of statistical tables annexed to the Report has been reduced significantly. From now on, only a table of key macroeconomic indicators will be published. The overwhelming majority of the data from the discontinued statistical tables remains available to the public through the ARAD time series system accessible from the CNB website.

This Inflation Report was approved by the CNB Bank Board on 12 August 2010 and contains the information available as of 23 July 2010.

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 at http://www.cnb.cz. Underlying data for the tables and charts in the text of this Inflation Report are published at the same internet address.

CHART I.1

FULFILMENT OF THE INFLATION TARGET

Headline inflation edged up in 2010 Q2, moving above the lower boundary of the tolerance band around the 2% inflation target
(annual percentage changes)

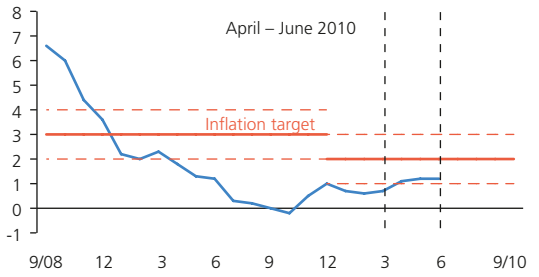


CHART I.2

THE HEADLINE INFLATION FORECAST

Headline inflation is rising at the forecast horizon and will get just above the inflation target at the end of this year, mainly because of tax changes already implemented
(annual percentage changes)

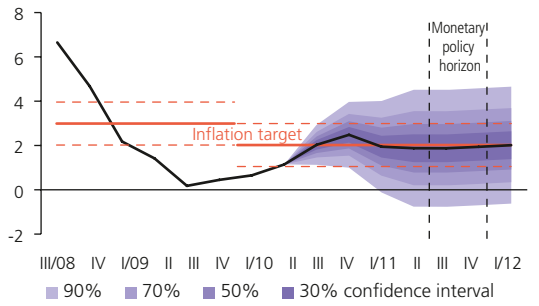
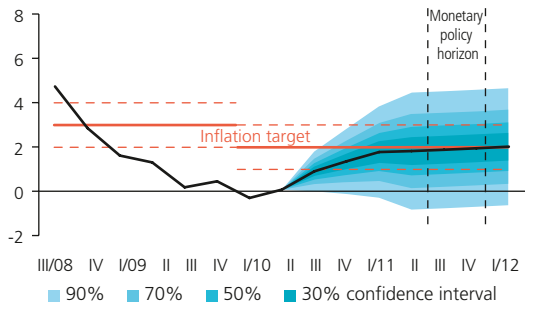


CHART I.3

THE MONETARY-POLICY RELEVANT INFLATION FORECAST

Monetary-policy relevant inflation is close to the CNB's inflation target at the monetary policy horizon
(annual percentage changes)



I. SUMMARY

The Czech economy emerged from recession and will continue to show modest annual growth in the reminder of 2010. Weakening household consumption will slightly dampen the rate of growth, whereas net exports and the replenishment of recession-squeezed inventories will increase it. Inflation will rise gradually in 2010 H2 and will be close to the target next year. Consistent with the forecast is stability of market interest rates close to their current levels initially, followed by a gradual rise in rates as from 2011 H2.

In 2010 Q1 the Czech economy clearly emerged from recession, growing by 1.1% and recording its first positive annual growth since 2008. A further pick-up in annual growth is expected in Q2. This will be supported by replenishment of inventories, which shrank considerably last year, and by rising government consumption. Foreign trade turnover and industrial production rebounded strongly. Labour demand is responding to the economic recovery with a lag and employment is continuing to fall sharply. The impacts of the economic crisis on the labour market are gradually shifting from industry to the market services sector. However, the latest data for Q2 indicate a modest fall in the registered unemployment rate.

Headline inflation is currently rising and is in the lower half of the tolerance band around the inflation target (see Chart I.1). Growth in regulated prices, changes to indirect taxes and a fading decline in food prices contributed to the rise in inflation in Q2. Fuel prices continued to rise rapidly, but their annual rate of growth declined. Conversely, adjusted inflation excluding fuels remained strongly negative. The evolution of inflation has recently reflected an absence of inflation pressures from the domestic economy and a previous strongly anti-inflationary effect of import prices, although the latter are already rising. From the future inflation perspective, producers' still squeezed margins are playing an important role at present. The emerging economic recovery can be expected to enable firms to gradually return profit margins to their long-term levels, which, in turn, will help inflation return to the target.

The **outlook for the external environment** indicates a continued recovery in the euro area, although this will not be even and will slow at the end of this year. Expected interest rate growth in the euro area is only very moderate. The euro-dollar exchange rate weakened sharply until the start of June. This depreciation affected its outlook but was followed by a correction. According to the July 2010 Consensus Forecast outlook, the exchange rate should be fluctuating just above USD 1.20/EUR until the end of 2012. A further gradual rise in oil and petrol prices is assumed, owing to an expected gradual reduction in spare extraction capacity.

According to the forecast, **headline inflation** will continue rising and will temporarily get just above the inflation target (see Chart I.2) owing, among other things, to tax changes already implemented. From

the beginning of 2011, headline inflation will be close to the inflation target. Nominal costs of firms will start rising slowly as a result of faster growth in wages and a recovery in economic activity, whereas import prices will become anti-inflationary again because of a gradual appreciation of the koruna. In addition, consumer prices will increase somewhat faster than costs, enabling firms to gradually increase their margins to the usual level.

Monetary-policy relevant inflation, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, is rising at the forecast horizon (see Chart I.3). It will hit the target in 2011 H2, when the present interest rate settings affect inflation the most. By that time, the effects of the changes to indirect taxes will have disappeared and monetary-policy relevant inflation will be the same as headline inflation.

Consistent with the forecast is stability of market **interest rates** close to their current levels initially, followed by a gradual rise in rates as from 2011 H2 (see Chart I.4). According to the forecast, the **exchange rate of the koruna** against the euro will appreciate gradually, owing mainly to a slightly positive interest rate differential and favourable evolution of the output balance (see Chart I.5).

The **economy** will continue to grow steadily at rates below 2% this year and the next, but in 2012 the growth will pick up appreciably. However, the forecast does not yet include the effects of the planned consolidation of public budgets. Domestic economic growth will be dampened in 2010 H2 by falling household consumption, which is being affected by continued unfavourable labour market developments and the impacts of fiscal austerity measures (see Chart I.6). Conversely, replenishment of inventories along with growing government consumption and net exports will increase GDP. Fixed investment will remain subdued as a result of still low capacity utilisation. As from 2011, the factors supporting economic growth will also include rising household consumption.

The **labour market** will respond to the economic recovery with the usual lag. Although the year-on-year decline in employment will moderate, annual growth in employment will not emerge until 2011 H2. The general unemployment rate should peak in the next few quarters and then fall gradually. The currently subdued wage growth will start recovering along with economic activity in 2011.

At its meeting in August, the Bank Board decided unanimously **to leave interest rates unchanged**. The balance of the risks to the forecast was assessed as being moderately anti-inflationary overall. In particular, the exchange rate and the planned fiscal consolidation are acting in this direction. By contrast, commodity prices were identified as an upside risk to inflation.

CHART I.4

THE INTEREST RATE FORECAST

Consistent with the forecast is stability of market interest rates close to their current levels initially, followed by a gradual rise in rates as from 2011 H2
(3M PRIBOR, %)

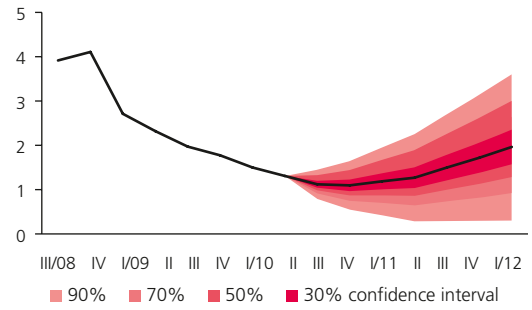


CHART I.5

THE EXCHANGE RATE FORECAST

The nominal exchange rate of the koruna is gradually appreciating at the forecast horizon
(CZK/EUR)

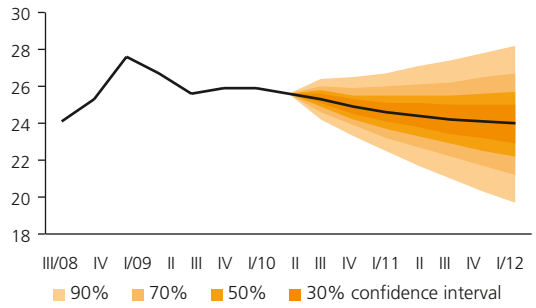


CHART I.6

THE GDP GROWTH FORECAST

The economy will continue to grow steadily at rates below 2% this year and the next, but in 2012 the growth will pick up appreciably
(annual percentage changes; seasonally adjusted)

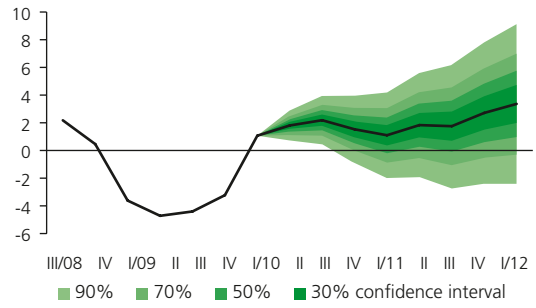


CHART II.1.1

EFFECTIVE GDP IN THE EURO AREA

The economic recovery will remain sluggish, but the outlook is changing towards a less pronounced W

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

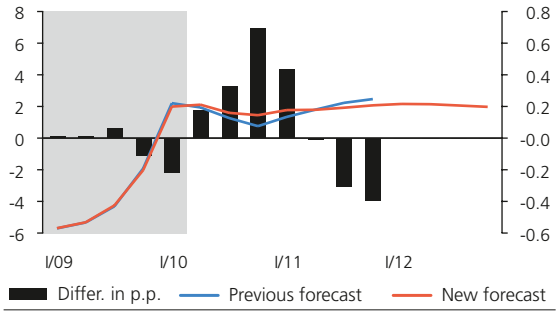


CHART II.1.2

EFFECTIVE PPI IN THE EURO AREA

The outlook for industrial producer price inflation increased owing to commodity prices

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

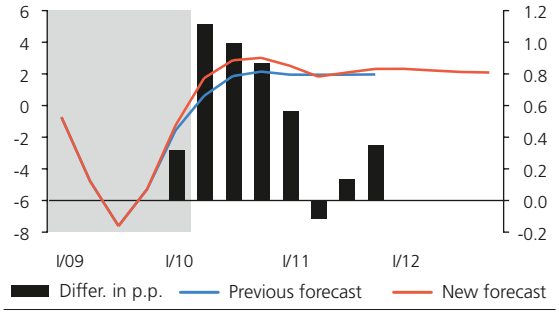
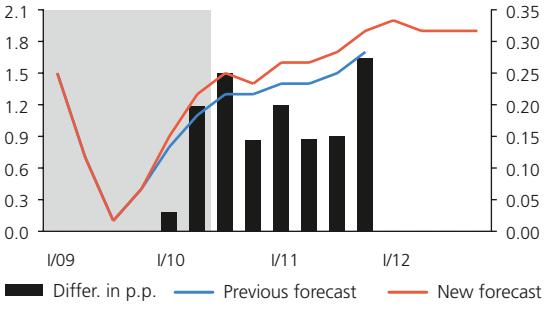


CHART II.1.3

EFFECTIVE CPI IN THE EURO AREA

Inflation will rise to the upper boundary of the ECB's definition of price stability of 2%

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



II. THE FORECAST AND THE CHANGES AND RISKS TO IT

II.1 EXTERNAL ASSUMPTIONS OF THE FORECAST

Annual growth in GDP is expected in the effective euro area this year, but this growth will slow down slightly at the end of the year. Despite a rising outlook for producer and consumer prices, the expected growth in interest rates in the euro area is only very slow. The euro-dollar exchange rate has been revised towards weaker euro values over the entire forecast horizon because of Greece's debt problems and expected stronger economic growth in the United States; however, the euro has recently appreciated. The outlook for oil prices reflects the expected gradual reduction of spare extraction capacity in the remainder of this year causing a further gradual rise in the price to just above USD 80 per barrel.

The outlook for economic activity in the effective euro area still suggests a continuing sluggish recovery (see Chart II.1.1).[1] The estimate for this year is influenced mainly by an improving outlook for economic growth in Germany. This optimistic view stems from rising industrial production and a growing trade surplus as a result of a weaker euro and renewed global demand for German goods. Concerns about economic growth as a result of the Greek fiscal crisis are currently subsiding somewhat. Expected economic growth in Slovakia and Italy has also been revised upwards. These three countries represent two-thirds of effective GDP, which is expected to increase by 1.8% in 2010, 1.9% in 2011 and 2.1% in 2012. The distribution of effective GDP growth across the individual quarters has changed slightly, so the asymmetric W shape (from the point of view of annual growth) is smoother than in the previous forecast.

The increased **outlook for growth in the effective indicator of external producer prices** in the euro area is due to the same factors that are stimulating economic growth in the euro area. Global economic growth and positive expectations led to a surge in industrial raw material and oil prices in Q1 (see Chart II.1.2). Accordingly, producer prices for the first time in a long time recorded annual growth in Germany in April (and again in May). Nevertheless, further developments are expected to reflect the renewed decline in raw material prices in 2010 Q2. Overall, **growth in the effective indicator of producer prices** was revised upwards by 0.8 percentage points this year and prices are therefore expected to increase on average by 1.6%. Growth of 2.2% is then expected in both 2011 and 2012.

The outlook for **consumer price inflation abroad** was close to the ECB's definition of price stability (below but close to 2%). The survey of inflation expectations conducted by the ECB confirms an upward trend in expected inflation but is lower than the CF outlook. **Annual growth**

1 The outlook for external variables, which we take from Consensus Forecasts and from prices of market contracts, was updated on 12 July 2010. The grey areas in the charts divide the known past from the outlook. This convention is used throughout this Report.

in the effective CPI of the euro area is currently expected by the CF to be 0.2 percentage point higher than previously forecasted for 2010 and 2011 (see Chart II.1.3). Consumer prices are expected to increase by 1.3% this year, 1.7% in 2011 and 1.9% in 2012.

The **3M EURIBOR path** is indicating an only gradual and again later return of rates to higher levels (see Chart II.1.4). The rate outlook is thus lower over the entire horizon than assumed in the previous forecast. The expected three-month rate rises to 1.3% at the end of 2011 (the previous forecast had assumed a rise to 1.8%) and 1.8% at the end of 2012. These market expectations are in line with the majority view of the CF analysts. Most of them do not currently expect the ECB's key rate to go up until mid-2011, while in the April CF, which served as the basis for the previous forecast, there had been consensus on a 25 b.p. rise in monetary policy rates in 2011 Q1. The shift towards a later monetary policy tightening is due to inflation pressures being viewed as still low, concerns about the consequences of the Greek public budget crisis for economic growth and also to the planned fiscal tightening. The 3M EURIBOR increased by around 0.1 percentage point after the maturity of the ECB's 12-month refinancing tender expired. The ECB also communicated that it would gradually phase out its 12-month and 6-month refinancing operations and conduct its 3-month operations as variable rate tenders.

The **euro-dollar exchange rate** weakened sharply as from April 2010 owing chiefly to the deepening fiscal crisis in Greece and the lack of market confidence in the planned rescue plan (see Chart II.1.5). Positive reports on economic growth in the USA also played a role. One of the by-products of the current Greek crisis was thus an increase in the competitiveness of export-oriented euro area countries (in particular Germany and the Netherlands). At the start of June, however, the euro-dollar rate saw a reversal in trend. According to the July CF, the dollar-euro rate should reach USD 1.21 at the end of October 2010 and is expected to stay close to this level at the forecast horizon until the end of 2012. It is therefore assumed that the dollar will be around 9% stronger on average than in the previous forecast.[2]

Based on market outlooks for the **price of Brent oil**, gradual growth is expected from the current levels to USD 82 a barrel at the end of 2012 (see Chart II.1.6). The petrol price outlook follows a similar path. Compared to the estimates in the previous forecast this represents a downward revision of 15%, reflecting the observed evolution of prices. The market outlooks for Brent oil prices are roughly in line with the expectations of the CF analysts, who expect WTI oil prices to rise to USD 83 a barrel at the one-year horizon. Underlying the expected rise in oil prices is the expected global economic recovery in 2010 and 2011. In line with that, spare extraction capacity, which rose to record highs during the crisis, will gradually shrink.

2 As concerns about the Greek crisis have recently subsided somewhat and doubts have conversely emerged regarding the robustness of the recovery in the USA, the euro has strengthened to USD 1.30. The July CF did not fully reflect this appreciation.

CHART II.1.4

3M EURIBOR

Interest rate growth in the euro area will be gradual and has again moved further into the future
(in %; differences in p.p. – right-hand scale)

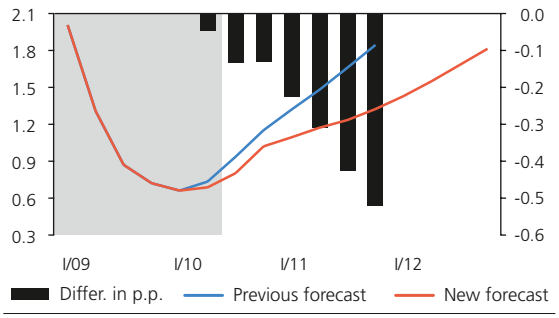


CHART II.1.5

EURO-DOLLAR EXCHANGE RATE

Problems in the euro area and an expected stronger recovery in the USA led to an outlook for a stronger dollar
(USD/EUR; differences in % – right-hand scale)

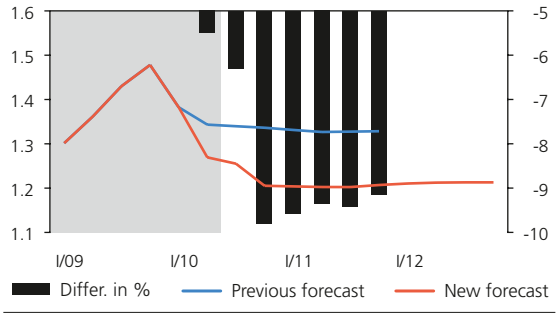


CHART II.1.6

PRICE OF BRENT CRUDE OIL

Together with the expected global recovery, a gradual rise in the price of oil is expected, although at a lower level than in the previous forecast
(USD/barrel; differences in % – right-hand scale)

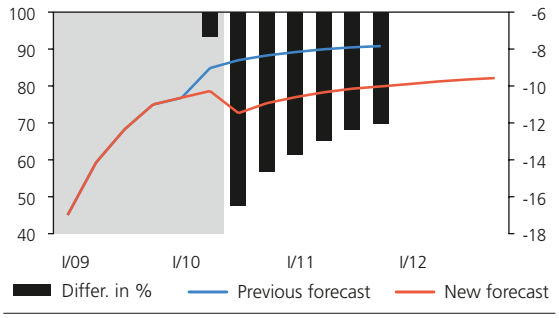


CHART II.2.1

HEADLINE INFLATION AND MONETARY-POLICY RELEVANT INFLATION

Headline inflation will be affected by changes to indirect taxes until the start of 2011
(annual percentage changes)

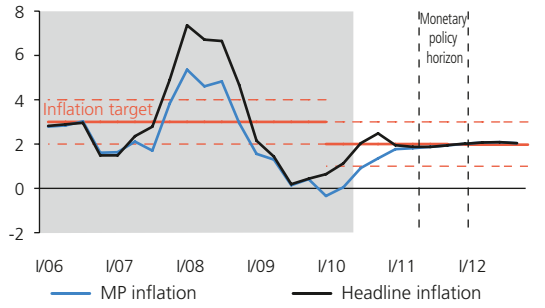


CHART II.2.2

REGULATED PRICES AND FUEL PRICES

Inflation of regulated prices will rise this year as a result of renewed growth in natural gas prices
(annual percentage changes; excluding first-round effects of indirect tax changes)

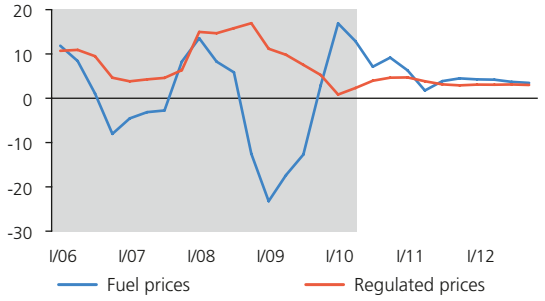


TABLE II.2.1

FORECAST OF IMPACT OF ADMINISTRATIVE MEASURES

The growth in regulated prices in 2011 and 2012 will be due to further growth in regulated rents and a gradual rise in energy prices
(annual percentage changes; impact in p.p.)

	2009 actual		2010 forecast		2011 forecast		2012 forecast	
Regulated prices – total *	5.0	0.96	4.7	0.81	2.9	0.51	3.0	0.53
of which (selected items):								
Regulated rents	27.6	0.56	16.5	0.23	8.5	0.13	9.5	0.16
Electricity	11.4	0.46	-2.5	-0.09	2.0	0.07	3.0	0.10
Natural gas	-11.7	-0.33	10.4	0.25	4.0	0.10	2.0	0.05
Heat	3.9	0.13	4.0	0.09	2.0	0.05	2.0	0.05
Healthcare	-5.2	-0.10	9.0	0.18	2.0	0.04	2.0	0.04
First-round impacts of tax changes		0.00		1.02		0.00		0.00

*) Incl. effects of indirect tax changes

II.2 THE FORECAST

Headline inflation was 1.1% on average in 2010 Q2 and monetary-policy relevant inflation was close to zero. No import cost pressures on consumer prices and domestic inflation pressures are currently visible. At the forecast horizon, headline inflation will get temporarily above the 2% inflation target at the end of 2010, owing mainly to tax changes already implemented. After the tax effects unwind, inflation will be close to the target. Monetary-policy relevant inflation will converge to the inflation target in 2011 H2, i.e. at the monetary policy horizon. This will be fostered by gradually strengthening pressures from the domestic economy linked with a pick-up in the currently low wage growth, which will be partly offset by a renewed anti-inflationary effect of import prices due to appreciation of the exchange rate. By then we expect a more pronounced recovery in economic activity; GDP is expected to grow by 1.6% in 2010, 1.8% in 2011 and almost 3% in 2012. The nominal exchange rate is gradually appreciating at the forecast horizon. Consistent with the forecast is stability of market interest rates close to their current levels initially, followed by a gradual rise in rates as from 2011 H2.

Annual **headline inflation** reached 1.1% in 2010 Q2, whereas the previous forecast had expected 0.9%. Headline annual inflation will rise quickly in the remainder of the year and – with a contribution from changes to indirect taxes already implemented – will temporarily exceed the inflation target at the end of 2010 (see Chart II.2.1). After this effect unwinds, headline inflation will moderate slightly at the start of 2011 and fluctuate close to the inflation target. Monetary-policy relevant inflation, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, increased somewhat from negative values and stood at 0.1% in 2010 Q2. Monetary-policy relevant inflation will gradually rise at the forecast horizon and converge to the inflation target in 2011 H2, i.e. at the current monetary policy horizon. The return of inflation to the target will be fostered by easy monetary policy, with low current and future policy rates offsetting the anti-inflationary pressures from the external environment transmitting via an appreciating exchange rate.

Annual **regulated price inflation** rose to 2.3% in 2010 Q2, owing mainly to growth in natural gas prices and regulated health care items. We expect regulated price inflation to rise further in subsequent quarters as a result of renewed growth in natural gas prices, and then to stabilise at around 3.0% (see Chart II.2.2). Annual regulated price inflation is expected to reach 4.7% at the end of 2010, accounting for about 0.8 percentage point of headline inflation. The growth of around 3% in regulated prices at the end of 2011 and 2012 will contribute 0.5 percentage point to headline inflation (see Table II.2.1). Further growth in regulated rents and a gradual rise in energy prices will be the main sources of growth in regulated prices in 2011 and 2012.

A rise in **indirect taxes** will affect annual inflation throughout 2010 and partly also in 2011. Both VAT rates were raised by 1 percentage

point in January 2010 and excise duties on fuels, spirits, beer and cigarettes were also increased. Overall, we estimate the first-round effects of the tax changes in 2010 at 1.13 percentage points, of which 0.11 percentage point falls to regulated price items and 1.02 percentage point to net inflation items. Owing to subdued demand, the actual effect of the tax changes on inflation will be lower, at about 0.9 percentage point. The forecast scenario does not yet take into account future changes to indirect changes.

Net inflation remained negative in annual terms in 2010 Q2, reaching -0.3%. The anti-inflationary effect of import prices has faded but will return at the end of 2010 owing to gradual appreciation of the koruna. A gradual rise in domestic cost pressures and a steady increase in producers' currently squeezed margins will foster rising inflation, particularly in 2011. Net inflation will thus reach 0.7% year on year in 2010 Q4 and rise to 1.7% in 2011 Q4 and 2.0% in 2012 Q4.

Annual **adjusted inflation excluding fuels** remained negative at a broadly unchanged level in Q2. The current low values of adjusted inflation excluding fuels are in line with the anti-inflationary effects of past external cost pressures (a decline in import prices excluding food and energy), subdued domestic cost pressures and weak domestic demand squeezing businesses' margins. This situation will change in the inflationary direction only gradually, so we do not expect annual adjusted inflation excluding fuels to turn positive until 2011 Q2 (see Chart II.2.3). Adjusted inflation excluding fuels will then continue rising to the 2% level by the end of 2012.

Food prices switched from annual declines to modest year-on-year growth during 2010 Q2. A sharp fall in agricultural producer prices had been observed in the past, but this passed through to final food prices only partially, leading to an increase in margins in the sector of processors and sellers of food.[3] Sellers and producers of food therefore have some room to dampen growth in input prices. Despite this, the forecast expects annual consumer food price inflation to rise in the next few quarters, owing to pronounced growth in agricultural and food commodity prices around the world (see Chart II.2.4). This growth will be only partially offset by appreciation of the nominal exchange rate of the koruna. The forecast is for food price inflation of 3.6% at the end of this year and just below 2% in 2011 and 2012.

Annual **fuel price inflation** moderated in 2010 Q2, but remained relatively high (13.3%). However, the current high annual growth in fuel prices will abate until the start of 2011 (see Chart II.2.5). It will then stay low until the end of the forecast period. This forecast is based on market outlooks for oil and petrol prices and on the expected evolution of the dollar exchange rate.

CHART II.2.3

NET INFLATION AND ADJUSTED INFLATION EXCLUDING FUELS

Adjusted inflation excluding fuels will return to positive values only gradually
(annual percentage changes)

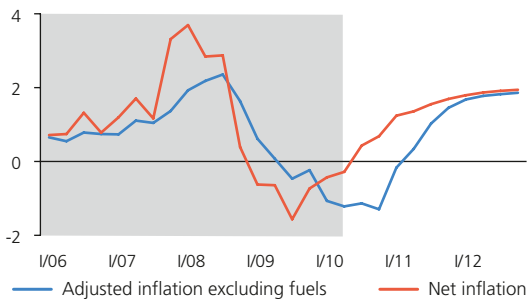
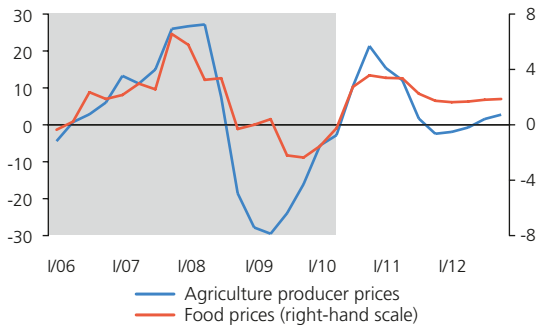


CHART II.2.4

FOOD PRICE INFLATION AND AGRICULTURAL PRODUCER PRICES

Agricultural producer price inflation and food price inflation will rise appreciably during the rest of the year
(annual percentage changes)



3 The sector of processors and sellers of food in this respect differs markedly from the economy as a whole, where, conversely, squeezed margins have been identified.

CHART II.2.5

FUEL PRICE INFLATION AND OIL PRICES

The current high growth in fuel prices will gradually abate
(annual percentage changes)

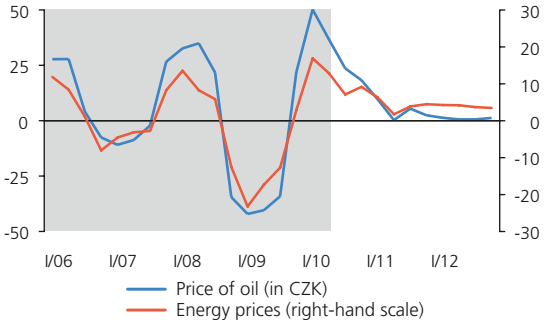


CHART II.2.6

THE INTEREST RATE FORECAST

Consistent with the forecast is stability of domestic market interest rates close to their current levels initially, followed by a gradual rise in rates as from 2011 H2
(3M PRIBOR and 3M EURIBOR in %)

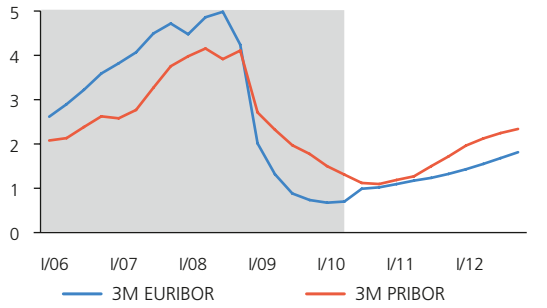
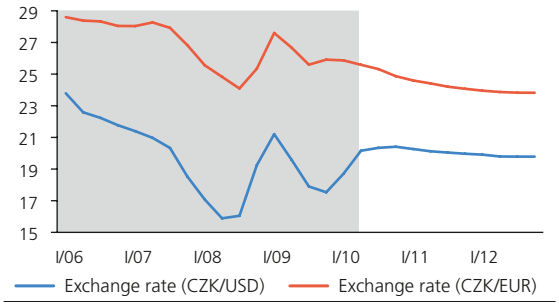


CHART II.2.7

THE EXCHANGE RATE FORECAST

The nominal exchange rate of the koruna against the euro is gradually appreciating at the forecast horizon
(CZK/EUR and CZK/USD)



Interest rates on the financial market continued falling in 2010 Q2, among other things in response to the unexpected lowering of monetary policy interest rates in May. Consistent with the forecast is stability of market interest rates close to their current levels initially, followed by a gradual rise in rates as from 2011 H2 (see Chart II.2.6).

The **koruna-euro exchange rate** was influenced the most in Q2 by short-term investors' sentiment, whereas domestic fundamentals played only a minor role. The short-term forecast for 2010 Q3 assumes an average exchange rate of CZK 25.3 to the euro. The exchange rate continues to appreciate gradually over the forecast horizon (see Chart II.2.7). This is due above all to a lower outlook for foreign interest rates, which will result in a positive interest rate differential over most of the forecast period and a favourable output balance outlook. The appreciation of the exchange rate will restore the anti-inflationary effect of import prices, especially during 2011.

The inflation forecast described above and the interest rate path consistent with it reflect an assessment of the current economic situation and its outlook. Based on the observed data, we estimate that quarterly growth in **nominal marginal costs in the consumer goods sector** will be slightly positive in 2010 Q2. In the previous period, import prices were anti-inflationary owing to the moderate appreciation of the exchange rate and falling prices abroad. In 2010 Q2 the exchange rate appreciation effect is now offset by rising external inflation, so the effect of import prices is currently roughly neutral or slightly inflationary. Similarly, pressures from the domestic economy, approximated by intermediate goods price inflation, are not contributing strongly to nominal marginal cost growth in the consumer goods sector (see Chart II.2.8). 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).

At the start of the forecast horizon nominal marginal cost growth in the consumer sector is moderate. Domestic inflation pressures are not strong in 2010 H2, reflecting weak domestic demand and low cost pressures from the intermediate goods sector. The effect of import prices will become anti-inflationary again at the end of 2010 and in 2011 despite expected growth in euro area prices, as the impact of the strengthening exchange rate will prevail. In 2011 and 2012, the forecast expects inflation pressures from the domestic economy to re-emerge gradually as external demand rebounds.

Nominal marginal costs in the intermediate goods sector edged down quarter on quarter in 2010 Q2. The subdued costs in this sector are a result of low nominal wage growth (adjusted for one-off and statistical factors) and growth in labour-augmenting technology. A slightly negative contribution of the price of capital reflects the currently subdued economic activity. Domestic cost pressures will start to contribute to net inflation growth at the end of 2011, when a more robust recovery in economic activity and wage growth will take place. The evolution of the price of capital reflects

the nature of the asymmetric W-shaped recovery and at the short end of the forecast will also foster low cost pressures, although those pressures will gradually build up thereafter (see Chart II.2.9).

From the future perspective, we assess the overall inflation pressures – proxied by the **gap in profit mark-ups in the consumer goods sector** – as being slightly inflationary in 2010 Q2. This view is consistent with the squeezing of producers' profit margins in 2008–2009 below their long-term level. The gap in profit mark-ups in the consumer sector is therefore negative at the beginning of the forecast horizon (see Chart II.2.10). It will increase gradually at the forecast horizon, helping inflation to return towards the target. Margins will return to their long-term level not only through a gradual increase in prices, but also as a result of slow growth in costs, which will largely reflect low wage growth rates.

Whole-economy **labour productivity** again declined much more moderately in 2009 Q4 and recorded a year-on-year increase in 2010 Q1 for the first time since the recession started. This was aided in particular by a continuing decrease in employment amid a recovery in economic activity as expressed by annual GDP growth. At the long end of the forecast we expect significantly positive growth in labour productivity, stemming from the lead of GDP growth over the recovery in employment.

Annual growth in **nominal unit wage costs** turned into annual decline in 2010 Q1, mainly because of a lower volume of wages and salaries amid a recovery in GDP growth. Growth in nominal unit wage costs will remain negative in 2010 as a result of declining employment and slowing wage growth. In 2011 it will return to slightly positive figures.

Following an upswing in 2009 H2, the rate of growth of the average **nominal wage in the business sector** declined significantly again in 2010 Q1, to 2% year on year. Current data point to a fading effect of structural changes on the labour market and a lower sickness rate this year. These factors had led to a pick-up in nominal wage growth, particularly in 2009 H2. Tax optimisation at the close of 2009 had also fostered growth in the average wage in this period. The forecast is for average wage growth in the business sector of 2.5% year on year in 2010. Up-to-date information on collective bargaining from the Czech-Moravian Confederation of Trade Unions supports the assumption of a slowdown in wage growth this year.[4] By contrast, average wage growth will increase in 2011–2012, thanks mainly to a more robust recovery in economic activity and growth in exports (see Chart II.2.11). Average wage growth in the business sector will reach 3.4% in 2011 and rise further in 2012.

4 Most of the higher-level collective agreements signed so far preserve wages at the 2009 level or contain a year-on-year wage increase of less than 2%. Higher-level collective agreements cover roughly 15% of employees, while 40% of employees are covered by collective bargaining.

CHART II.2.8

COSTS IN THE CONSUMER SECTOR

Pressures from the domestic economy will be partly offset by a renewed anti-inflationary effect of import prices due to appreciation of the exchange rate

(quarterly percentage changes; contributions in p.p.; annualised)

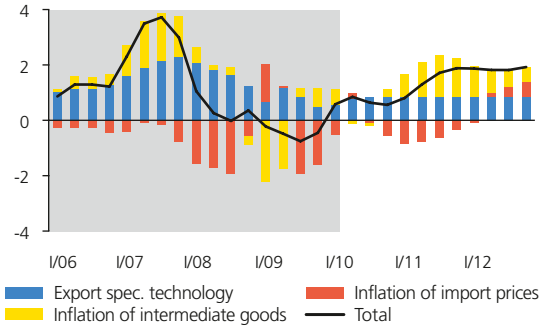


CHART II.2.9

COSTS IN THE INTERMEDIATE GOODS SECTOR

Domestic cost pressures will start to contribute to growth in intermediate goods prices as from the end of 2010

(quarterly percentage changes; contributions in p.p.; annualised)

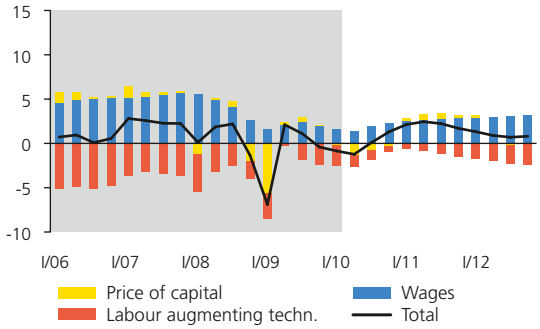


CHART II.2.10

GAP IN PROFIT MARK-UPS IN THE CONSUMER SECTOR

The gap in profit mark-ups in the consumer sector is increasing at the forecast horizon

(percentages)

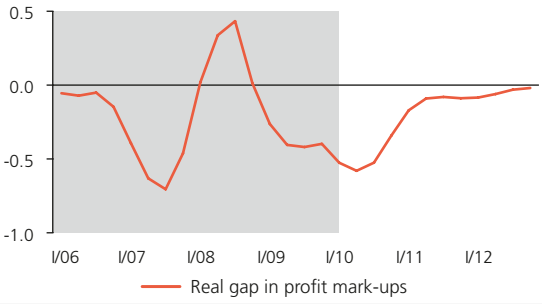


CHART II.2.11

NOMINAL WAGE FORECAST

Nominal wage growth will slow sharply this year
(annual percentage changes; seasonally adjusted)

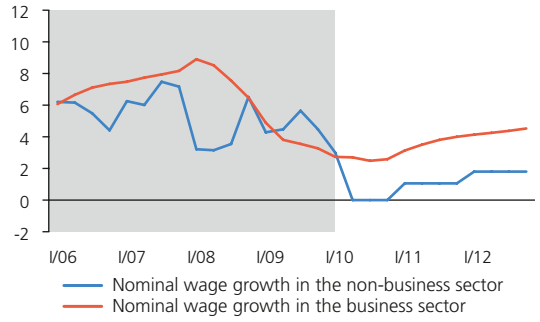


CHART II.2.12

STRUCTURE OF ANNUAL GDP GROWTH

Net exports were the biggest contributor to annual GDP growth and government consumption also made a positive contribution
(annual percentage changes; contributions in p.p.; seasonally adjusted)

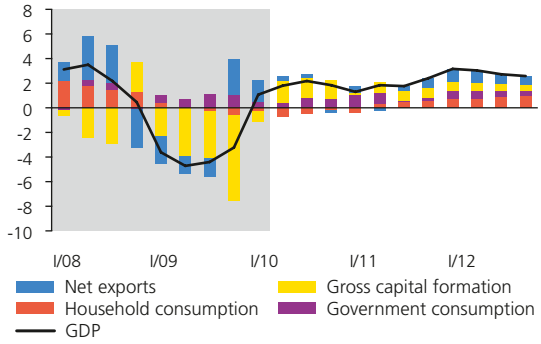
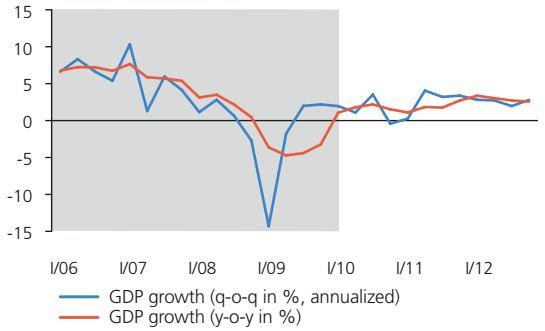


CHART II.2.13

GDP GROWTH FORECAST

The recovery will be only moderate in the next few quarters and more robust in 2011 and 2012
(year-on-year and quarter-on-quarter percentage changes; annualised; seasonally adjusted)



The average **wage in the non-business sector** will rise by only 0.6% this year, owing to the austerity measures adopted by the government last year. In 2011, average wage growth in the non-business sector will rise to 1.1%, but will remain much lower than in the business sector as a result of continuing wage restrictions. In the years ahead, wages in the non-business sector will be surrounded by considerable uncertainty acting towards even lower growth or even a decline, owing to potential further government spending cuts.

In 2010 Q1, real GDP rose by 1.1% year on year, the first positive figure recorded since 2008. The previous forecast had expected a slightly better result (1.8%). Net exports were the biggest contributor to annual GDP growth and government consumption also made a positive contribution. The contribution of gross investment was slightly negative, but was much more favourable than at the end of last year, chiefly as a result of higher additions to inventories. Revisions to the national accounts data for 2009 mainly affected investment and net exports. Investment was revised upwards for last year overall; its growth rate was increased in 2009 H1 and decreased in 2009 H2. By contrast, net exports were revised downwards in 2009 H1 and upwards in 2009 H2 (see Chart II.2.12).

Quarter-on-quarter growth in **economic activity** probably slowed slightly in 2010 Q2 (see Chart II.2.13). This was due above all to a quarterly decline in household consumption and investment. The new forecast expects annual GDP growth to reach 1.8% in Q2 and 1.6% in 2010 as a whole, i.e. slightly above the previous forecast. GDP growth will accelerate to 1.8% in 2011 and reach almost 3% in 2012. GDP growth in 2010 and 2011 will be stimulated by investment activity related to gradual restocking of inventories, which recorded a sharp decline during the recession. Government consumption will also have a positive impact on GDP growth. In 2010–2012, net exports will also record a positive contribution on average, due to a gradual strengthening of external demand. This year, a decline in household consumption – linked with the current drop in employment, the slowdown in wage growth and the fiscal measures adopted last year – will act in the opposite direction. Household consumption will recover somewhat in 2011.

On the **labour market**, the sharp slowdown in economic activity was gradually followed by a decline in labour demand and a related drop in employment and rise in unemployment. The observed developments suggest that employment[5] recorded its largest year-on-year declines in 2010 Q1 and that a moderate change in trend will emerge in Q2 (see Chart II.2.14). Data for Q2 also indicate a slight decrease in the seasonally adjusted total registered unemployment rate.

As a result of the continuing economic recovery, the annual decline in **employment** will start to moderate gradually (in quarter-on-quarter terms

5 According to both the Labour Force Survey and the national accounts.

it is already moderating) and will switch to annual growth in 2011 H2. A partial recovery in employment will occur thanks to a recovery in export-oriented industrial production. By contrast, the services sector, which has a larger weight and significantly slowed the decline in employment last year, will be hit by the recession with a lag this year.

The forecast for the general **unemployment** rate reflects the evolution of employment. In 2010 and 2011 we expect an annual decrease in the hitherto rising labour force as a result of an increased number of retirements and small inflows of new employees. The general unemployment rate should peak in the next few quarters and then fall gradually (see Chart II.2.15). Registered unemployment in 2010 Q2 is already indicating a turnaround.

The labour market developments will lead to a further annual drop in **household consumption** in 2010. This will be affected by both the continuing decline in employment and the slowdown in annual average wage growth. The fiscal measures adopted to reduce budget deficits will also have a negative impact on the growth rate of real disposable income. Household consumption will return to annual growth in the course of 2011 (see Chart II.2.16).

The cyclical pattern of household consumption is influenced to the largest degree by the evolution of total wages and salaries. The slowdown in average wage growth amid still falling employment will result in a decline in the volume of wages in 2010 (see Chart II.2.17). A recovery in average wage growth and a slowing decline in employment will not start to make positive contributions to annual growth in wage income until 2011. Social benefits are another significant component of income. As a result of the economic recession and the related increase in unemployment, they will continue to make positive contributions to gross **disposable income** growth. The contribution of the operating surplus and mixed income relating to the profits of small businesses will be slightly positive at the forecast horizon. Thus, gross disposable income growth will start to pick up pace in 2011, creating conditions for a recovery in consumption. Because of the temporarily lower income, households will smooth consumption by reducing their saving rate this year; it will gradually return to its previous levels in 2011. The smoothing of consumption will therefore be reflected in faster growth in consumption expenditure than in gross disposable income in 2010 and, by contrast, in consumption growth lagging behind income in 2011–2012.

Annual growth in real **government consumption** slowed considerably in 2010 Q1, to 2.0%. The forecast is for a further weakening to 1.6% in 2010 Q2. At the forecast horizon, real government consumption will continue to record a positive contribution to annual GDP growth, but its growth will slow on average compared to 2009. The real slowdown in government consumption growth is partly linked with faster growth in the government consumption deflator, which can be explained mainly by the evolution of prices and wages at the forecast horizon. Nominal government consumption growth at the forecast horizon will be somewhat lower than in previous years.

CHART II.2.14

AGGREGATE EMPLOYMENT

Employment recorded its largest year-on-year declines in 2010 Q1
(annual percentage changes)

CHART II.2.15

THE GENERAL UNEMPLOYMENT RATE

The unemployment rate should peak in the next few quarters and then fall gradually
(percentages; seasonally adjusted)

CHART II.2.16

REAL HOUSEHOLD AND GOVERNMENT CONSUMPTION

Consumption will fall this year and early next year owing to labour market developments
(annual percentage changes)

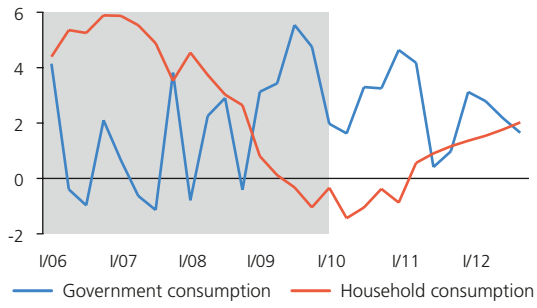


CHART II.2.17

NOMINAL DISPOSABLE INCOME

Gross disposable income will rise as from next year mainly because of renewed growth in wages and salaries
(percentages; contributions in percentage points)

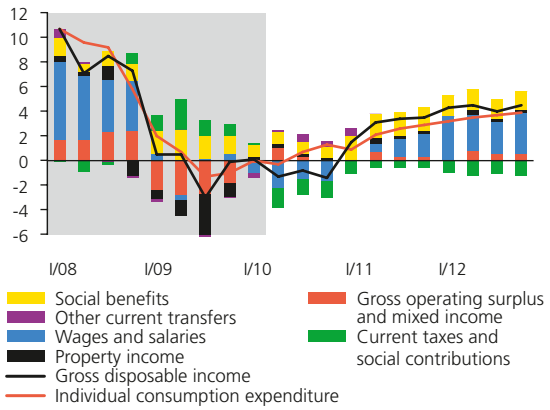


CHART II.2.18

GROSS CAPITAL FORMATION

Total investment will rise in 2010 owing to renewal of inventories
(annual percentage changes)

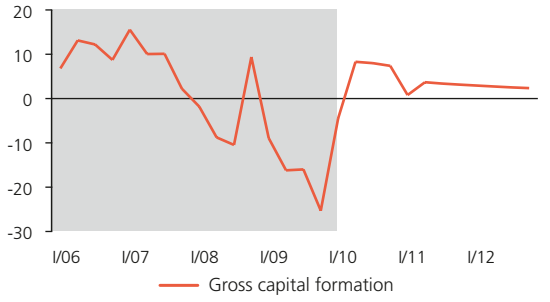
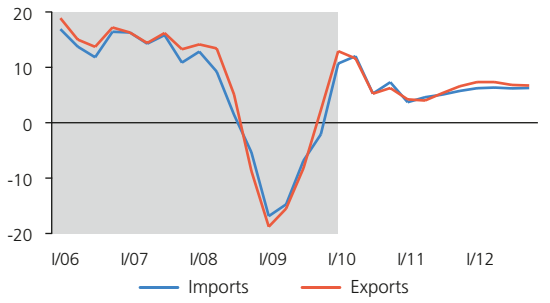


CHART II.2.19

GROWTH OF REAL EXPORTS AND IMPORTS

Export and import growth will slow again in 2010 H2 owing to the evolution of external demand
(annual percentage changes)



Gross capital formation fell by 4.5% year on year in 2010 Q1. This represents a significant improvement on the previous quarter and a less marked decline also by comparison with the previous forecast (-6.0%). It was aided in particular by annual growth in additions to inventories, whereas fixed investment continued to decline in year-on-year terms at roughly the same pace as in the previous quarter. We expect gross capital formation to grow by 8.3% year on year in 2010 Q2. Following a pick-up in investment in H1 we expect only moderate investment activity in more distant periods (see Chart II.2.18). We assume that higher additions to inventories stemming from the recovery in demand will foster an initial pick-up in aggregate investment. Fixed investment will be subdued in 2010 owing to still low capacity utilisation.

Real **exports of goods and services** picked up significantly in 2010 Q1 in annual (12.9%) as well as quarterly terms (3.0%). At the beginning of the forecast horizon we expect continuing growth in real exports, in line with the trend observed in the monthly data available for Q2. However, this growth will slow again in the second half of the year as a result of the external demand outlook (see Chart II.2.19). Exports will not accelerate again until the end of 2011.

Owing to stronger growth in import-intensive exports in 2010 Q1, real **imports of goods and services** also recorded rapid growth (10.7%). The forecasted profile of higher growth at the beginning of the forecast horizon and a subsequent slowdown and rebound during 2011 is influenced most strongly by exports, which contain a high proportion of imported intermediate products. As regards the other GDP components, investment is also relatively import intensive, but it will stimulate import growth to a lesser extent. By contrast, an annual decline in household consumption this year and subdued growth in 2011 will hinder imports.

Amid faster export and import growth, the contribution of **net exports** to annual GDP growth was positive in 2010 Q1 (1.9 percentage points), although slightly less so than in the previous quarter (see section III.6 *The balance of payments*). At the forecast horizon, however, the contribution of net exports will be shrinking, although it will be slightly positive on average. A more marked recovery in the contribution of net exports will occur at the end of next year.

As regards the **balance of payments** forecast for 2010 and 2011, the **current account** deficit is higher than in 2009, up from roughly 1% of GDP to 1.9% of GDP and 1.7% of GDP respectively (see Table II.2.2). The increase in the current account deficit in 2010 will be caused by a decrease in the output surplus at current prices. This will be due to price developments, especially annual growth in world commodity prices, which will have a stronger impact on the trade balance than the positive effect of external demand growth. In 2011 the current account deficit should fall as a result of relatively strong growth in the output surplus (external demand growth exceeding

growth in domestic demand for imports, with the evolution of commodity prices being more favourable for the trade balance than in 2010). However, a large part of the increase in the output surplus will be offset by a rise in the income deficit (due above all to growth in non-residents' direct investment income, and to a much smaller extent to compensation of employees and portfolio investment income).

In 2010 and 2011, the current account deficit will be funded by a surplus on **direct investment**, almost exclusively in the form of reinvested earnings, while the inflow of investment in new facilities will be negligible. External financing of fiscal deficits, including a net inflow of funds from the EU, will be an important source of capital inflow in 2010 and 2011. This inflow represents more than CZK 100 billion a year, with a slightly falling tendency in 2011. As regards private capital, a net outflow is expected in 2010 and 2011. In 2010 it will be associated chiefly with a rise in credit exposure and a drop in liabilities of the business sector vis-à-vis non-residents. In 2011 it will be related above all to renewed interest of residents in foreign shares and a further decline in corporate liabilities.

The future economic developments described above are reflected in the **government finance** outlook for 2010–2012 (see Table II.2.3). Since the new government/parliament has so far passed none of the announced consolidation measures and these measures have not yet been made available as specific official material proposals or even as bills of legislation, the current fiscal forecast – just like the entire baseline scenario of the forecast – is as usual based on a scenario of unchanged fiscal policy (i.e. it does not take into account any additional budgetary measures beyond those adopted in previous years).

In 2010, the forecast assumes a decline in the **general government deficit** to 5.4% of GDP compared to 2009, as a result of the coming into effect of fiscal austerity measures approved last year, which will be reflected in a sharp decline in the structural deficit. The restrictive effects of fiscal policy on GDP this year stem from this. However, the impact of the austerity measures on the government balance will be dampened this year by the unfavourable effect of the business cycle on tax revenues, so the reduction in the total deficit will not be that pronounced this year. Unless more measures are adopted, the deficit will rise again to 6.0% of GDP in 2011, as some of the austerity measures have been approved for 2010 only. At the same time, the current phase of the business cycle and labour market developments will still be negatively affecting public budgets mainly through the channel of lower direct taxes, including social and health insurance, but also through the channel of lower indirect taxes and higher social expenditure. Compared to the previous fiscal forecast, the total deficits are little changed in 2010–2011.

In 2012 we expect the general government deficit to decline slightly to 5.7% of GDP owing to improved macroeconomic conditions, which will be reflected in an improvement in the cyclical component of government finance. The general government **structural deficit** will

TABLE II.2.2

BALANCE OF PAYMENTS FORECAST

The current account deficit will increase in 2010
(CZK billions)

	2008 actual	2009 actual	2010 forec.	2011 forec.
A. CURRENT ACCOUNT	-22.9	-37.0	-70.0	-60.0
Trade balance	102.7	180.6	205.0	250.0
Balance of services	65.9	27.0	-35.0	-45.0
Income balance	-174.3	-230.9	-225.0	-250.0
Current transfers	-17.2	-13.7	-15.0	-15.0
B. CAPITAL ACCOUNT	30.4	41.0	38.0	38.0
C. FINANCIAL ACCOUNT	92.4	125.8	59.0	95.1
Direct investment	36.3	26.4	75.0	75.0
Portfolio investment	-9.1	113.8	135.0	55.0
Financial derivatives	-14.0	-7.7	.	.
Other investment [a]	45.9	-37.4	-38.0	-15.0
D. ERRORS AND OMISSIONS	-26.4	-38.4	.	.
E. CHANGE IN RESERVES (- = increase)	-40.1	-60.6	-45.0	-45.0

a) excluding operations of banking sector

TABLE II.2.3

FISCAL FORECAST

Given unchanged fiscal policy the government deficit will remain high
(% of GDP)

	2009 actual	2010 forec.	2011 forec.	2012 forec.
Government revenue	40.2	41.8	41.2	40.9
Government expenditure	46.1	47.1	47.2	46.7
of which: interest payments	1.3	1.5	1.5	1.6
GOVERNMENT BUDGET BALANCE	-5.9	-5.4	-6.0	-5.7
of which:				
primary balance [a]	-4.6	-3.9	-4.5	-4.2
one-off measures	0.3	-0.2	-0.2	-0.2
ADJUSTED BUDGET BALANCE [b]	-6.2	-5.2	-5.8	-5.6
Cyclical component (ESCB method) [c]	0.1	-0.5	-1.0	-0.7
Structural balance (ESCB method) [c]	-6.4	-4.7	-4.8	-4.8
Fiscal stance in p.p. (ESCB method) [d]	-2.1	1.7	-0.2	0.0
Cyclical component (EC method) [c]	-0.8	-0.7	-0.5	0.0
Structural balance (EC method) [c]	-5.4	-4.5	-5.3	-5.6
Fiscal stance in p.p. (EC method) [d]	-1.4	1.0	-0.9	-0.3
Government debt	35.3	38.8	42.1	44.8

a) government budget balance minus interest payments
b) adjusted for one-off measures; CNB estimate
c) CNB estimate
d) year on year change in structural balance (positive value indicates fiscal restriction, negative value fiscal expansion)

Table II.2.4

FORECAST OF SELECTED VARIABLES

Gross disposable income growth will start rising in 2011, fostering a recovery in consumption
(annual percentage changes, unless otherwise indicated)

	2009 actual	2010 forec.	2011 forec.	2012 forec.
Real gross disposable income of households	-1.8	-1.2	1.2	2.4
Total employment	-1.4	-1.8	-0.5	0.5
Unemployment rate (in per cent)[a]	6.7	8.2	8.2	7.4
Labour productivity	-3.0	3.5	2.4	2.4
Average nominal wage	4.0	2.2	2.9	4.0
Average nominal wage in business sector	3.8	2.5	3.4	4.5
Current account deficit (ratio to GDP in per cent)	-1.0	-1.9	-1.4	-
M2	6.2	4.6	7.1	7.6

a) ILO methodology

be around 5% of GDP in 2010–2012. According to the CNB forecast, the expected general government deficit will result in a substantial increase in government debt from 35.3% of GDP in 2009 to 44.8% of GDP in 2012.

The new government's above-mentioned plans regarding **consolidation measures** present a risk to the forecast in the direction of a considerably lower government deficit for 2011 and 2012. The consolidation should ensure that the government deficit reduction path contained in the Czech Republic's February 2010 convergence programme is at least maintained.

II.3 COMPARISON WITH THE PREVIOUS FORECAST

Compared to the previous forecast, the forecast for headline inflation is slightly higher for 2010 and the interest rate path is lower at the longer end of the forecast. The higher outlook for inflation is due to a slightly higher outlook for regulated prices. The forecast for net inflation is little changed at the shorter end and has shifted slightly downwards at the longer end. A change in the external outlook is creating appreciation pressures on the exchange rate and a marked decline in domestic interest rates over the entire forecast horizon; these pressures are more than offset by other factors at the start of the forecast period only. Annual GDP growth is broadly in line with the previous forecast. Wage growth has been revised at the shorter end of the forecast only. The exchange rate is slightly stronger than in the previous forecast.

The forecast for annual **headline inflation** is slightly above the previous forecast over its entire horizon (see Chart II.3.1). The higher forecast for headline inflation is due to a slightly higher outlook for regulated price inflation (see Chart II.3.2), which is only partly offset by lower net inflation. The higher outlook for regulated prices is due to a higher outlook for natural gas prices.

The small overall downward revision of the **net inflation** forecast for 2010 reflects a low expected level of net inflation for 2010 Q3 (see Chart II.3.3). The external outlook is acting in the same direction.

The decline in the short-term forecast for net inflation compared to the previous forecast slightly increases the overall future inflation pressures – proxied by the **gap in profit mark-ups in the consumption sector** – at the short end of the forecast. As inflation will not rise as quickly, producers' margins will remain more squeezed, despite a slightly smaller increase in nominal costs. As in the previous forecast, margins return gradually to their long-term level at the longer end of the forecast.

A revision to the **external outlook** gains importance in 2011. Slightly higher external demand and a higher outlook for producer price inflation in the euro area than in the previous forecast, amid a markedly lower interest rate path, are creating appreciation pressures on the exchange rate. This is leading to a future anti-inflationary effect of import prices, which had not been expected by the previous forecast.

The forecast for market **interest rates** is slightly higher in 2010 but subsequently below the previous forecast (see Chart II.3.4). A revision of the external outlook and a change in the starting conditions are the two most important contradictory factors changing the implied path of domestic interest rates at the forecast horizon (see Chart II.3.5). The external outlook exerts upward pressure on the koruna's exchange rate, and monetary policy responds to this with a lower path of domestic interest rates. In particular, a lower outlook for interest rates in the euro area has a dominant effect here. The short-term inflation

CHART II.3.1

CHANGE IN THE HEADLINE INFLATION FORECAST

The headline inflation forecast is slightly higher owing to a higher outlook for regulated prices
(annual percentage changes; differences in p.p. – right-hand scale)

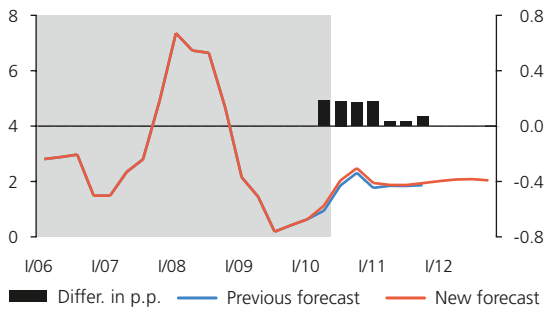


CHART II.3.2

CHANGE IN THE REGULATED PRICE FORECAST

The regulated price forecast is higher owing to a rise in natural gas prices
(annual percentage changes; differences in p.p. – right-hand scale)

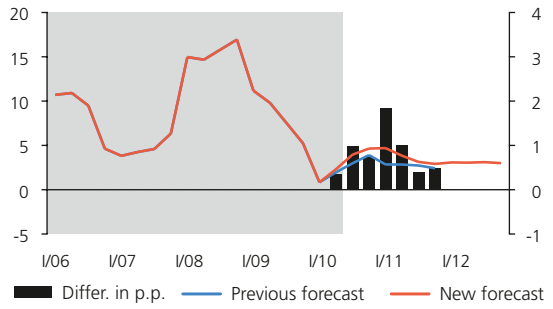


CHART II.3.3

CHANGE IN THE NET INFLATION FORECAST

The change in the net inflation forecast is insignificant
(annual percentage changes; differences in p.p. – right-hand scale)

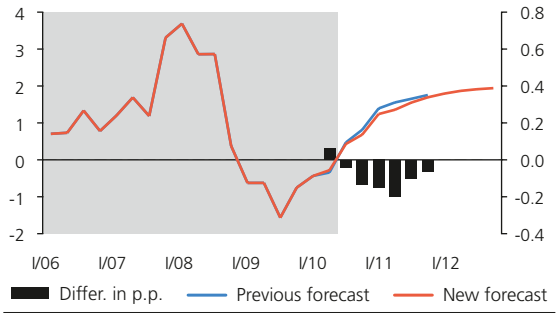


CHART II.3.4

INTEREST RATES PATH

A larger change in the interest rate forecast is apparent at the longer end of the forecast
(in %, differences in p.p.; right-hand scale)

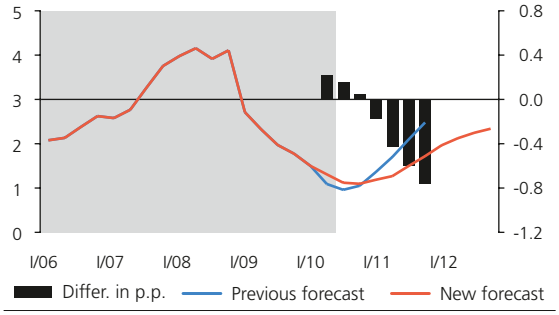


CHART II.3.5

DECOMPOSITION OF THE INTEREST RATE CHANGE

A lower outlook for interest rates in the euro area has a dominant effect on the change in rates in the longer term
(3M PRIBOR in %; percentage points)

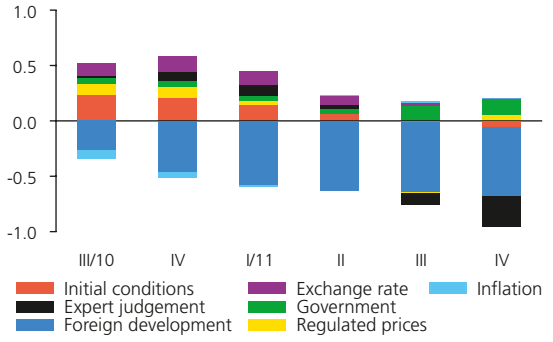
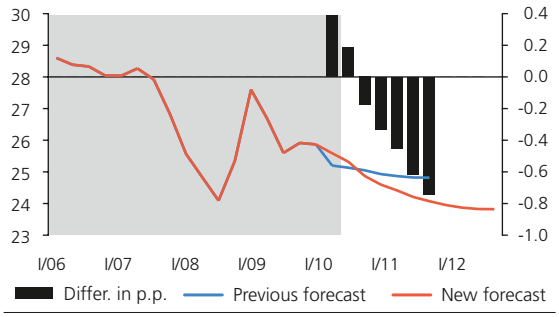


CHART II.3.6

CHANGE IN THE EXCHANGE RATE FORECAST

A change in the external outlook raises the exchange rate path over the entire reference period
(CZK/EUR; differences in CZK – right-hand scale)



forecast also slightly reduces rates in the initial quarters of the forecast. The starting conditions act in the opposite direction, with the higher external and domestic inflation observed in 2010 Q2 being the most influential of these. The higher rates are also due to a weaker koruna exchange rate and to a higher outlook for regulated prices.

The forecast for the nominal **exchange rate of the koruna against the euro** has been revised upwards, with the exception of 2010 Q3 (see Chart II.3.6). As mentioned earlier, a change in the external outlook raises the exchange rate path over the entire reference period and is the most important factor of the change in its forecast. The short-term forecast for the exchange rate for 2010 Q3 is the only important depreciation factor. However, this is interpreted as a short-term deviation and is expected to be quickly offset and act towards appreciation in the subsequent period.

The forecast for annual **GDP** growth is broadly in line with the previous forecast (see Chart II.3.7), as the effects of changes in the starting conditions, the new external outlook and the expert adjustments made offset each other. A slight revision was made to the growth rates of the individual GDP components. The components of domestic demand – i.e. consumption and investment – contribute more significantly to GDP growth, while net exports contribute less. This revision is due mainly to the currently observed trends in investment and net exports.

Compared to the previous forecast, growth in private **household consumption** is only slightly higher, both in quarter-on-quarter and year-on-year terms. The increased outlook is due mainly to surprisingly high data on consumption in 2010 Q1.

The forecast for the growth rate of **investment** in quarter-on-quarter terms is higher than in the previous forecast. This revision is due to the current data on total investment, in particular the high growth in inventories.

The growth rates of **exports and imports** have been revised upwards in quarter-on-quarter terms at the start of the forecast; from 2010 Q4 onwards their outlook is below the previous forecast. This copies the change in the outlook for external demand and the change in the GDP growth structure. The contribution of net exports to GDP growth is lower. Higher domestic demand is the source of higher imports, while exports are lower in response to the lower outlook for external demand.

The forecast for **nominal wage** growth in quarter-on-quarter terms is little changed from the previous forecast, i.e. low and only gradually rising growth rates are still expected. Wage growth has been reduced in year-on-year terms in 2010 Q2 and Q3 (see Chart II.3.8). This change is due to a different seasonal adjustment of wages which is more consistent with the fundamental view of the labour market. Previous expert adjustments of the CZSO's nominal wage time series due to tax optimisation remained unaffected.

CHART II.3.7

CHANGE IN THE GDP FORECAST

The forecast for annual GDP growth is broadly in line wih the previous forecast

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

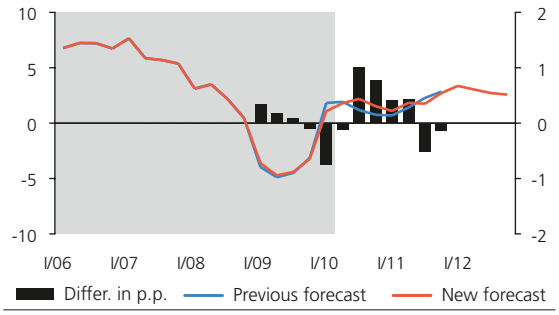
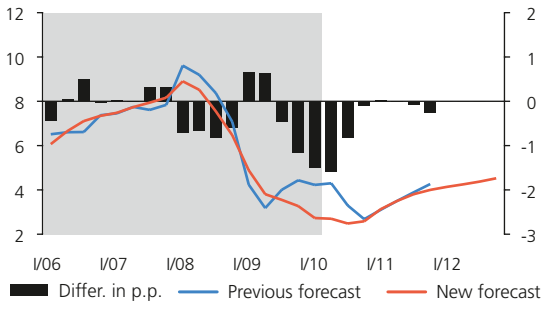


CHART II.3.8

CHANGE IN THE NOMINAL WAGE FORECAST

The change in the nominal wage forecast is insignificant

(annual percentage changes; differences in p.p. – right-hand scale, seasonally adjusted)



II.4 SENSITIVITY ANALYSES

No significant risk leading to the creation of a fully-fledged alternative scenario was identified in the forecasting process. As usual the exchange rate sensitivity scenario was drawn up. A sensitivity scenario for foreign interest rates and a fiscal consolidation scenario were also analyzed. The last-mentioned scenario, together with the current exchange rate developments, shifts the balance of forecast risks downwards.

II.4.1 Exchange rate sensitivity scenario

The sensitivity scenario quantifies the impacts of a **different exchange rate path**. This sensitivity scenario assumes a deviation of the nominal exchange rate of ±3% from the baseline scenario in the first quarter of the forecast, amid the same interest rates as in the first quarter of the baseline scenario. The exchange rate is thus CZK 26.1/EUR and CZK 24.6/EUR respectively, compared to CZK 25.3/EUR in the baseline scenario.

The table shows the results of the appreciation scenario, expressed in deviations from the baseline scenario of the forecast (see Table II.4.1). The scenario of a 3% depreciation of the nominal exchange rate leads to the same results but with the opposite sign.

The appreciation of the exchange rate leads to a decline in import prices in the initial period of the forecast and hence to lower inflation. The implied interest rate path is therefore lower than in the baseline scenario. The appreciation of the exchange rate will also reduce exporters' price competitiveness, leading initially to a decline in GDP growth compared to the baseline scenario. However, GDP growth will gradually rise in response to the monetary policy easing.

Table II.4.1

EXCHANGE RATE SENSITIVITY SCENARIO

The exchange rate appreciation leads initially to a decline in GDP growth compared to the baseline scenario. However, GDP growth gradually rises in response to the monetary policy easing
(deviations from baseline scenario)

	CPI inflation (y-o-y in %)	3M PRIBOR (% p.a.)	GDP (y-o-y in %)	Nominal exchange rate (CZK/EUR)
III/10	0.0	0.0	-0.1	-0.7
IV/10	-0.1	-0.3	-0.1	-0.3
I/11	-0.1	-0.4	-0.2	-0.1
II/11	-0.2	-0.3	-0.1	0.0
III/11	-0.2	-0.1	0.0	0.0
IV/11	-0.1	0.0	0.1	-0.1
I/12	-0.1	0.0	0.1	-0.1
II/12	0.0	0.1	0.0	-0.1
III/12	0.0	0.0	0.0	-0.1
IV/12	0.0	0.0	0.0	0.0

II.4.2 Sensitivity scenario for foreign interest rates

The market outlooks for 3M EURIBOR foreign interest rates were shifted towards a later and more gradual rise compared to the previous forecast. However, it is appropriate to consider whether the revisions to the market outlooks for rates, attributed to accumulated bad news, were not exaggerated. The presented sensitivity scenario thus quantifies the impacts of potential **faster growth in foreign interest rates as from 2011 Q3** compared to the rate level in the baseline scenario. The higher path of foreign interest rates enters the simulation as expected. Domestic rates therefore increase gradually from 2010 Q4. The interest rate differential increases with respect to the baseline scenario until the end of 2011, but is lower from 2012 (see Table II.4.2). This change has a minimal impact on inflation. The change in the outlook for foreign rates shifts the forecast for the koruna-euro exchange rate to a more depreciated level compared to the baseline scenario.

Tab. II.4.2

SENSITIVITY SCENARIO FOR FOREIGN INTEREST RATES

The faster growth in foreign interest rate implies a gradual increase in domestic rates and a weaker koruna compared to the baseline scenario
(deviations from baseline scenario)

	CPI inflation (y-o-y in %)	3M PRIBOR (% p.a.)	GDP (y-o-y in %)	Nominal exchange rate (CZK/EUR)	3M EURIBOR (% p.a.)
III/10	0.0	0.0	-0.1	0.0	0.0
IV/10	0.0	0.1	-0.1	0.2	0.0
I/11	0.0	0.3	-0.2	0.3	0.0
II/11	0.1	0.4	-0.1	0.4	0.0
III/11	0.0	0.6	0.0	0.5	0.5
IV/11	0.1	0.7	0.1	0.5	0.9
I/12	0.1	0.7	0.0	0.5	1.1
II/12	0.1	0.8	0.1	0.5	1.3
III/12	0.1	0.7	0.0	0.5	1.4
IV/12	0.2	0.6	0.0	0.4	1.5

II.4.3 Fiscal policy sensitivity scenario

This sensitivity scenario quantifies the **effect of a fiscal consolidation** in 2011–2012 which ensures that the general government deficit moves along a path compliant with the convergence programme or with the commitments arising from the excess deficit procedure (a deficit of 4.8% for 2011 and 4.2% for 2012, i.e. 1.2 and 1.5 percentage points lower compared to the forecast). Compared to the baseline scenario we consider several changes. The most significant change is a reduction of the nominal rates of growth of government consumption from 4.1% to 1.3% in 2011 and from 4.3% to 3.0% in 2012. Real government consumption is thus lowered by 2 percentage points in 2011 and 1.3 percentage points in 2012. Compared to the baseline scenario of the forecast, real household consumption growth is also reduced to capture the fall in social transfers to households and in non-business sector wages. The final change consists in a "harmonisation increase" in taxes on cigarettes at the beginning of 2012, when the estimated effect on headline inflation is approximately 0.12 percentage point.

In the sensitivity scenario simulation, the outlook for nominal and real government consumption is as usual captured as being unexpected. The decline in consumption is expressed primarily by expected negative shocks to household consumption and to a small extent by change in technology. The simulated scenario does not assume any additional effects of restrictive fiscal policy such as crowding-out of investment and effects on household consumption and the risk premium.

The sensitivity scenario implies a lower market interest rate path than the baseline scenario (see Table II.4.3). Slower GDP growth (by roughly half a percentage point on average in 2011) follows from the lower government and household consumption. The slightly lower inflation is a result of lower domestic demand, which outweighs the effect of the higher excise duty on cigarettes and the slightly weaker nominal exchange rate of the koruna than in the baseline scenario, which is consistent with lower domestic interest rates.

TABLE II.4.3

FISCAL POLICY SENSITIVITY SCENARIO

The sensitivity scenario implies a lower market interest rate path than the baseline scenario and slower GDP growth
(deviations from baseline scenario)

	CPI inflation (y-o-y in %)	3M PRIBOR (% p.a.)	GDP (y-o-y in %)	Nominal exchange rate (CZK/EUR)	Government consumption (y-o-y in %)	Household consumption (y-o-y in %)
III/10	0.0	0.0	0.0	0.0	0.0	-0.1
IV/10	0.0	-0.1	0.0	0.0	0.0	-0.2
I/11	0.0	-0.1	-0.2	0.0	-0.6	-0.2
II/11	0.0	-0.1	-0.4	0.0	-1.5	-0.3
III/11	0.0	-0.2	-0.6	0.1	-2.4	-0.2
IV/11	-0.1	-0.2	-0.7	0.1	-3.3	-0.1
I/12	-0.1	-0.2	-0.7	0.1	-3.3	0.0
II/12	-0.1	-0.2	-0.4	0.1	-2.3	0.0
III/12	-0.1	-0.1	-0.1	0.1	-0.7	0.0
IV/12	0.0	0.0	0.2	0.0	0.9	0.0

II.5 FORECASTS BY OTHER ENTITIES

Inflation expectations are just above the 2% inflation target at the one-year horizon. At the three-year horizon they have long been fluctuating around 2.5%. The analysts expect slight growth in GDP in 2010 and appreciation of the koruna exchange rate and an increase in the CNB's key rates in the following 12 months. All the analysts were expecting stable key rates before the CNB Bank Board meeting in August.

Inflation expected by financial market analysts[6] at the one-year horizon increased slightly during 2010 Q2 and was just above the 2% inflation target valid from January 2010. Business managers also expected inflation to be at roughly the same level (see Table II.5.1). The analysts increased their forecast slightly further in the July survey. Inflation expectations were unchanged in both sets of respondents at the three-year horizon, remaining around half a percentage point above the CNB's inflation target.

The indicator of **inflation perceived by households** has long been negative (see Chart II.5.1).[7] This means that households on average felt that prices tended not to rise over the last 12 months. The indicator of expected inflation was briefly negative in 2009 H2, but returned to positive territory at the start of 2010. This suggests that the number of respondents who expect prices to rise more rapidly over the next 12 months is slightly higher than the number of those who expect prices to stay the same or increase more slowly than in the past.

Both the FMIE and CF analysts expect GDP to increase modestly this year and to pick up pace in 2011 (see Tables II.5.2 and II.5.3). The unemployment rate is not expected to rise further, but wage growth will be slower in 2010 than in 2009. Compared to the value at the end of July, the mostly domestic respondents in the FMIE survey and the mostly foreign respondents in the CF survey expect the exchange rate of the koruna to be stronger by around 2.2% and 1.1% respectively at the one-year horizon. The interest rate forecasts shifted downwards after the CNB lowered its key rates in May. Before the CNB Bank Board meeting in August, all the analysts were expecting no changes in key rates at this meeting. The analysts expect rates to rise at the one-year horizon compared to the current level. Their estimates for the repo rate lie in the range of 1.00% to 1.75%.

Compared to the CNB's new forecast, the analysts expect approximately the same real GDP growth figure in 2010 and slightly higher inflation at the one-year horizon. In the analysts' predictions

TABLE II.5.1

FMIE AND CORPORATIONS' INFLATION EXPECTATIONS

Inflation expectations at the one-year horizon are just above the CNB's target
(annual percentage changes in consumer price index)

	3/10	4/10	5/10	6/10	7/10
Financial market, 1Y horizon	2.1	2.1	2.2	2.2	2.3
Financial market, 3Y horizon	2.5	2.5	2.7	2.5	2.5
Corporations, 1Y horizon	2.0			2.1	
Corporations, 3Y horizon	2.5			2.5	

CHART II.5.1

PERCEIVED AND EXPECTED INFLATION

Despite rising slightly, the inflation expectations of households for the next year are still low
(source: European Commission Business and Consumer Survey)

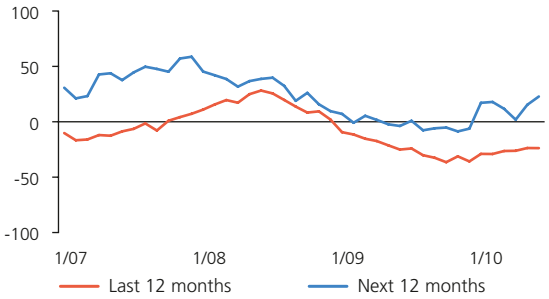


TABLE II.5.2

OTHER FMIE EXPECTED INDICATORS

The financial market expects modest GDP growth in 2010
(at 1Y unless otherwise indicated)

	3/10	4/10	5/10	6/10	7/10
Real GDP in 2010[a)]	1.5	1.7	1.8	1.7	1.7
Real GDP in 2011[a)]	2.6	2.5	2.7	2.4	2.4
Nominal wages in 2010[a)]	2.3	2.3	2.4	2.3	2.4
Nominal wages in 2011[a)]	4.2	4.2	4.1	3.6	3.6
CZK/EUR exchange rate[b)]	24.7	24.6	24.5	24.6	24.6
2W repo rate[c)]	1.7	1.7	1.4	1.3	1.3
1Y PRIBOR[c)]	2.8	2.6	2.4	2.2	2.3

a) year-on-year changes in per cent
b) level
c) in per cent

6 The CNB monitors the expectations of financial market analysts regarding key macroeconomic indicators and the inflation expectations of business managers by means of statistical surveys. Tables II.5.1 and II.5.2 show average values from these surveys.

7 The CNB draws on the qualitative assessment of past and future inflation by households collected as part of the European Commission Business and Consumer Survey (see Box 2 in the July 2007 Inflation Report).

the exchange rate is slightly weaker at the one-year horizon than in the CNB forecast (by 1.7% for the FMIE analysts and by 2.9% for the CF analysts). The analysts' expectations regarding the 2W repo rate at the one-year horizon are slightly higher than the level implied by the 3M PRIBOR rate path consistent with the CNB forecast, assuming a gradual decline in the credit premium on the interbank market (see section II.2).

Chart II.5.2 provides a **comparison of expected 3M market rates** and the interest rate path consistent with the baseline scenario of the CNB forecast. The outlook for FRA rates is slightly above the forecasted rates over the entire horizon.

TABLE II.5.3

CF EXPECTED INDICATORS

The CF analysts expect a weaker exchange rate than the FMIE analysts

(at 1Y unless otherwise indicated)

	3/10	4/10	5/10	6/10	7/10
Real GDP in 2010[a)]	1.5	1.5	1.6	1.6	1.6
Real GDP in 2011[a)]	2.7	2.6	2.6	2.6	2.6
Nominal wages in 2010[a)]	2.6	2.6	2.7	2.5	2.5
Nominal wages in 2011[a)]	4.3	4.3	4.3	4.1	3.8
CZK/EUR exchange rate[b)]	25.2	24.6	24.2	24.9	24.9
3M PRIBOR[c)]	2.2	2.1	1.9	1.7	1.8

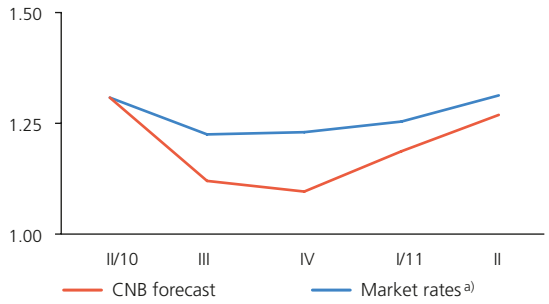
a) year-on-year changes in per cent
b) level
c) in per cent

CHART II.5.2

FRA RATES AND CNB FORECAST

The outlook for FRA rates is slightly above the forecasted rates

(percentages)



a) for 2010 Q2 and 2010 Q3 the 3M PRIBOR and for 2010 Q4–2011 Q2 the average values of the FRA 3*6 rates for the last 10 trading days as of 23 July 2010

III. CURRENT ECONOMIC DEVELOPMENTS

III.1 INFLATION

Annual headline inflation reached 1.2% in June and was thus within the tolerance band around the 2% target valid since the beginning of 2010 (slightly above its lower boundary). Monetary-policy relevant inflation, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, stood at 0.1% in June. The movement of inflation below the target was a result of the previous impacts of the global economic and financial crisis, which even the easier monetary policy was unable to offset fast enough. The rise in annual inflation in 2010 Q2 was mostly due to faster growth of regulated prices and greater impacts of changes to indirect taxes. At the same time, the decline in market prices, as measured by net inflation, moderated further and by now was only modest; market prices continued to be strongly affected by low demand and mostly falling import prices.

CHART III.1.1

FORECAST VERSUS ACTUAL INFLATION

Inflation was below the IR I/2009 forecast as from the end of 2009
(annual percentage changes)

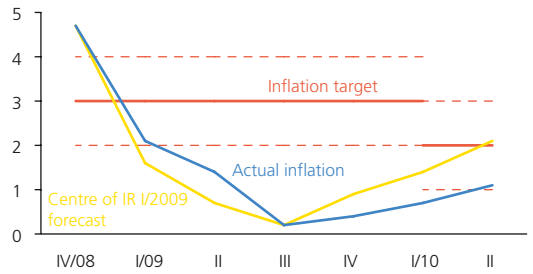


TABLE III.1.1

FULFILMENT OF THE INFLATION FORECAST

Adjusted inflation contributed the most to the lower inflation
(annual percentage changes; contributions in percentage points; 2010 Q2)

	IR I/2009 forecast	2010 Q2 outturn	Contribution to total difference [b)]
CONSUMER PRICES	2.1	1.1	-1.0
Breakdown into contributions:			
regulated prices	3.2	2.3	-0.2
first-round impacts of changes to indirect taxes	0.0	1.0	1.0
food prices[a)]	1.7	-0.2	-0.5
fuel prices[a)]	9.0	13.3	0.1
adjusted inflation excl. fuels[a)]	1.6	-1.2	-1.5

a) excluding the first-round impacts of changes to indirect taxes
b) owing to rounding, the sum of the contributions need not be equal to the total difference

III.1.1 Fulfilment of the inflation target

Headline inflation was slightly above the lower boundary of the tolerance band around the CNB's inflation target in 2010 Q2 (see Chart III.1.1). 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 2010 Q2, we have to examine above all the period roughly from October 2008 to June 2009 (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/2009 forecast with subsequent inflation.

The **Inflation Report I/2009 forecast** expected headline inflation to fall below the lower boundary of the tolerance band around the 3% inflation target at the beginning of 2009 and then on to almost zero. Inflation was expected to fall owing to the fading of inflationary price shocks that had occurred in late 2007 and early 2008 and to an expected decline in prices of food and energy-producing materials. The subsequent rise in inflation was expected to be caused by inflationary pressures due to a weaker exchange rate, which would be only partially offset by anti-inflationary domestic factors in the form of a sharp fall in nominal wage growth. The forecast predicted that headline inflation would be approximately at the new 2% inflation target in mid-2010 (see Chart III.1.1).

Headline **inflation in reality** was slightly higher than forecasted in 2009 H1 and then conversely lower. The deviation of actual inflation

from the forecast in 2010 Q2 was mostly due to adjusted inflation excluding fuels, which was affected by falling import prices and by declining domestic demand amid a contraction in economic activity. Food prices were also lower than forecasted. In the inflationary direction, by contrast, the forecast could not have captured the changes to indirect taxes valid since 1 January 2010, since they were not decided on until 2009 H2 (see Table III.1.1).

The divergence of domestic inflation from the forecast was due in large part to **external economic factors**. Owing to the global financial and economic crisis, external demand, inflation and interest rates were significantly lower throughout 2009 than assumed in the forecast and therefore acted strongly in the anti-inflationary direction. Only oil prices acted in the opposite direction (see Table III.1.2).

Real interest rates and the exchange rate both differed substantially from the expectations of the forecast in the key period. Real interest rates were easier throughout the period, given lower nominal rates and initially higher inflation. The exchange rate was weaker than forecasted throughout the period, most of all in 2009 H1 (see Table III.1.3). It thus partially dampened the impacts of the global crisis on the Czech economy.

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. The unexpectedly strong external economic contraction spilled over to the domestic economy mainly via the export channel. The monetary policy response to the changing situation involved a sharper reduction in monetary policy rates than forecasted in Inflation Report I/2009 (see Table III.1.3). The forecast of a rapidly falling inflation path to almost zero values materialised. However, as a result of a greater decline in import prices and a global downturn in demand, inflation did not return to the inflation target tolerance band until 2010 Q2.

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 2008 and June 2009 (see the relevant minutes) the Bank Board initially assessed the risks of the forecasts as being on the downside and later as being roughly balanced. However, owing to an unexpected increase in the 3M PRIBOR – 2W repo rate spread, the Board's decisions did not prevent the monetary conditions from being tighter at the end of 2008 than forecasted in Inflation Report IV/2008. Conversely, market interest rates were lower than forecasted during 2009 H1 owing to a sharp decline in monetary policy rates. Nevertheless, both headline inflation and monetary policy inflation were below the inflation target from the beginning of 2009 onwards. From this perspective, based on current knowledge, it seems that monetary policy should have been even easier.

Table III.1.2

FULFILMENT OF THE EXTERNAL ASSUMPTIONS

External economic developments fostered sharply lower economic growth, interest rates and inflation in the domestic economy

(annual percentage changes unless otherwise indicated)

		I/09	II/09	III/09	IV/09	I/10	II/10
GDP in euro area[a), b), c)]	p	-2.4	-2.2	-1.8	0.3	0.7	0.8
	o	-5.7	-5.3	-4.3	-2.0	2.0	-
PPI in euro area[b), c)]	p	3.9	1.0	-1.2	-0.1	0.8	1.8
	o	-0.7	-4.8	-7.6	-5.3	-1.2	1.7
3M EONIA swap	p	1.7	1.2	1.3	1.3	1.6	2.0
(percentages)	o	1.1	0.7	0.4	0.4	0.4	0.4
USD/EUR exchange rate	p	1.36	1.32	1.32	1.33	1.33	1.33
(levels)	o	1.30	1.36	1.43	1.48	1.38	1.27
Brent crude oil price	p	46.0	49.6	53.6	56.4	58.8	61.1
(USD/barrel)	o	45.0	59.3	68.3	75.0	76.8	78.6

p – prediction, o – outturn
a) at constant prices
b) seasonally adjusted
c) effective indicator as defined in the IR I/2009 forecast

Table III.1.3

FULFILMENT OF THE FORECAST FOR KEY VARIABLES

The forecast had not predicted the sharp slowdown in domestic economic activity in 2009

		I/09	II/09	III/09	IV/09	I/10	II/10
3M PRIBOR	p	3.1	2.8	2.8	2.9	2.9	2.6
(percentages)	o	2.7	2.2	2.0	1.8	1.5	1.3
CZK/EUR exchange rate	p	26.8	25.7	25.4	25.4	25.4	25.5
(levels)	o	27.6	26.7	25.6	25.9	25.9	25.6
Real GDP [a)]	p	0.7	-0.3	-0.9	-0.7	0.4	0.7
(annual perc. changes)	o	-3.6	-4.7	-4.4	-3.2	1.1	-
Nominal wages [b)]	p	5.2	4.7	3.3	2.7	1.9	2.3
(annual perc. changes)	o	2.6	2.9	4.2	5.2	2.0	-

p – prediction, o – outturn
a) seasonally adjusted
b) in the business sector

CHART III.1.2

INFLATION

Annual inflation increased in 2010 Q2
(annual percentage changes)

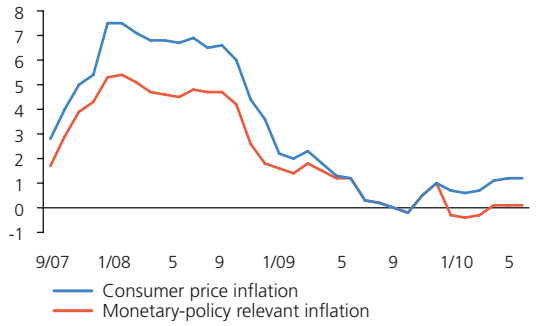


CHART III.1.3

INFLATION COMPONENTS

Regulated prices and food prices contributed to the increase in inflation in 2010 Q2
(annual percentage changes; excluding indirect tax changes)

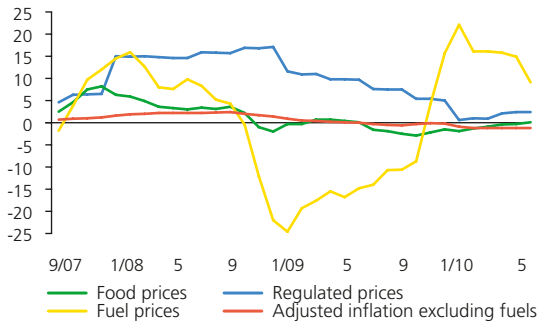
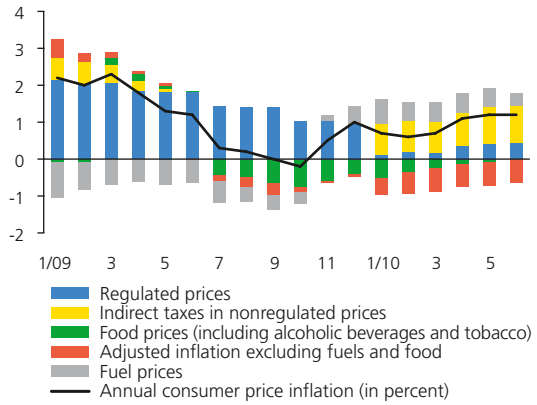


CHART III.1.4

STRUCTURE OF INFLATION

Indirect taxes and fuels were the biggest contributors to inflation in 2010 H1
(annual percentage changes; contributions in percentage points)



III.1.2 Current inflation

Annual inflation[8] increased in 2010 Q2. At 1.2%, inflation in June was 0.5 percentage point lower than in March (see Chart III.1.2). This increase was due mainly to regulated prices, the lagged effect of a rise in excise duties on cigarettes and also food prices. These effects were partially offset by a slowdown in annual fuel price inflation.

The rise in annual inflation in 2010 Q2 was affected to a significant extent by **administrative factors**, i.e. higher annual growth of regulated prices and larger effects of changes to indirect taxes. These changes accounted for roughly 0.4 percentage point of the total increase in inflation.

Regulated prices, whose annual growth accelerated in Q2 (from 0.9% in March to 2.4% in June; see Chart III.1.3), mainly reflected an April increase in prices of natural gas for households of 3.3% and increases in payments for prescription of medicines and fees for hospital treatment. However, the current annual growth in regulated prices chiefly reflected rapid growth in regulated rents (of 18.8% in June), reflecting the process of convergence of regulated rents to their market level, as well as an increase in health care prices (of 8.6% in June).

Indirect taxes were increased with effect from 1 January 2010 as part of measures to reduce the state budget deficit. These measures included increases in both VAT rates of 1 percentage point and a rise in excise duties on fuels, beer, spirits and cigarettes. These tax changes have been affecting inflation since the start of 2010. The only exception was cigarettes, where the rise in excise duty did not show up in inflation until Q2[9], when, according to the CNB's estimate, its overall impact on inflation was less than 0.2 percentage point. Overall, the June annual inflation figure of 1.2% was affected by first-round effects of the changes to indirect taxes totalling 1.1 percentage point (see Chart III.1.4). Monetary policy-relevant inflation was therefore only 0.1%. The following text assesses the evolution of the main components of inflation excluding the effect of tax changes.

The annual decline in **market prices, as measured by net inflation**, moderated further in 2010 Q2, reaching -0.3% in June. Market prices continued to be significantly affected by the low level of domestic demand. Households' consumption expenditure continued to decline moderately. The decline in market prices was also fostered by the anti-inflationary effect of mostly falling prices of imported production inputs for businesses and final products for the consumer market.

The slowdown in the decline in market prices was mainly due to **food prices**, whose annual decline moderated further, switching to slightly

8 As measured by annual growth in consumer prices.
9 Increases in excise duties on cigarettes usually manifest themselves with a longish lag, owing to the selling off of stocks taxed at the lower level.

positive figures at the close of Q2 (0.1% in June; see Chart III.1.5). Their evolution reflected an ongoing moderation of the annual decline in agricultural producer prices and food import prices.

Unlike food prices, annual **adjusted inflation excluding fuels** remained strongly negative in 2010 Q2, staying unchanged compared to the previous quarter (-1.2% in June; see Chart III.1.6). Both its segments recorded only modest changes in prices. Annual growth in prices of non-tradable commodities, consisting mainly of services, increased slightly in June (from 0.9% in March to 1% in June) following quite a long period of gradual moderation. This minor change was mainly due to an increase in annual growth in prices of package holidays. However, prices of non-food tradable commodities excluding fuels kept following the previous quarters' trend, as their annual decline deepened further from -4.2% in March to -4.4% in June. This was due mainly to a further decrease in consumer prices of transport equipment, whose import and producer prices continued declining.

Fuel prices, which are affected primarily by world oil prices, were again the fastest growing component of inflation in 2010 Q2. However, their annual growth has been slowing sharply since January (from 16.1% in March to 9.1% in June excluding tax changes; see Chart III.1.3), despite the fact that fuel prices have been rising constantly in month-on-month terms since the start of the year (by 9.7% overall up to June). This is due to base effects, a factor that is also apparent in the annual growth of world oil prices and petrol prices on ARA exchanges as expressed in koruna (i.e. including the effect of the dollar-koruna exchange rate). Including the effect of indirect tax increases, fuel prices rose by 14.3% year on year in June.

Turning to the major categories of the consumer basket, prices in the health category rose the fastest in Q2 (by 7% in June including the effect of tax changes). However, their contribution to annual inflation was not the largest (see Chart III.1.7). The biggest contributor to annual inflation was the non-alcoholic beverages and tobacco category, where the effect of increases in indirect taxes was visible, and the housing category, mainly because of very fast growth in regulated rents. A marked contribution to annual inflation was also recorded in the transport category, owing to the growth in fuel prices. In the other consumer basket categories the effect of prices on inflation was less significant.

By international comparison, consumer prices as measured by the **HICP** grew more slowly in the Czech Republic in 2010 Q2 than on average in the EU countries. According to Eurostat, HICP growth during Q2 was around 1% in the Czech Republic and roughly 1 percentage point higher on average in the EU countries.

CHART III.1.5

FOOD PRICES

Food prices rose very slightly in 2010 Q2
(annual percentage changes)

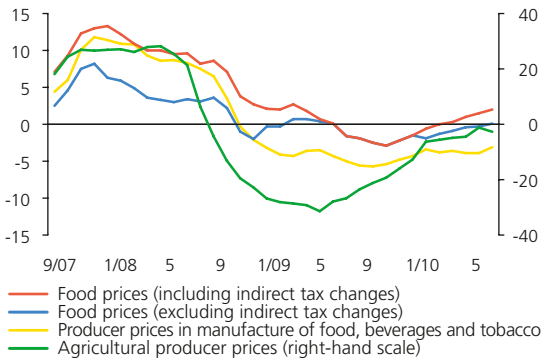


CHART III.1.6

ADJUSTED INFLATION EXCLUDING FUELS

Annual adjusted inflation excluding fuels remained negative in 2010 Q2, stagnating at the previous quarter's level
(annual percentage changes)

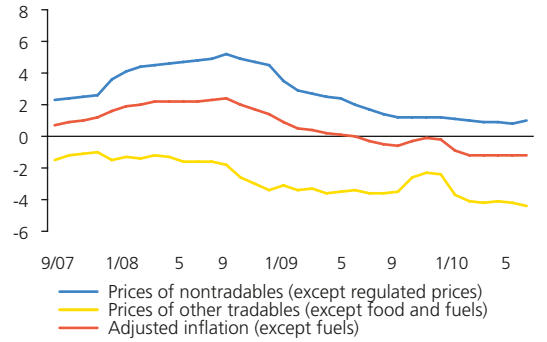


CHART III.1.7

CONSUMER BASKET PRICES

Prices in the housing and alcoholic beverages and tobacco categories were the biggest contributors to annual inflation
(June 2010; contributions in percentage points, including changes to indirect taxes)

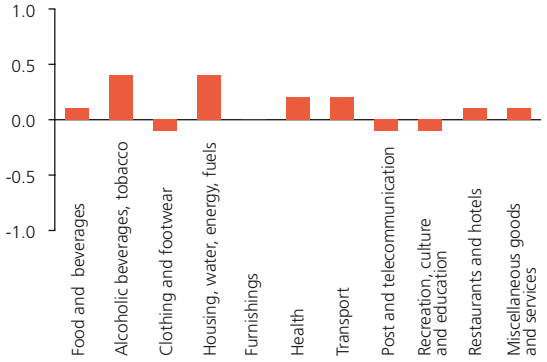


CHART III.2.1

IMPORT PRICES AND PRODUCER PRICES

Import prices and industrial producer prices saw renewed growth in 2010 Q2
(annual percentage changes)

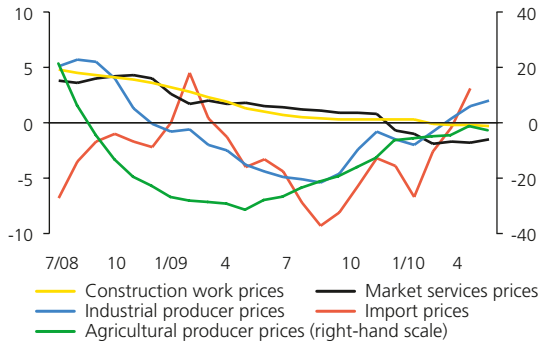


CHART III.2.2

IMPORT PRICES

Energy-producing materials contributed significantly to the renewed growth in import prices
(annual percentage changes; contributions in percentage points)

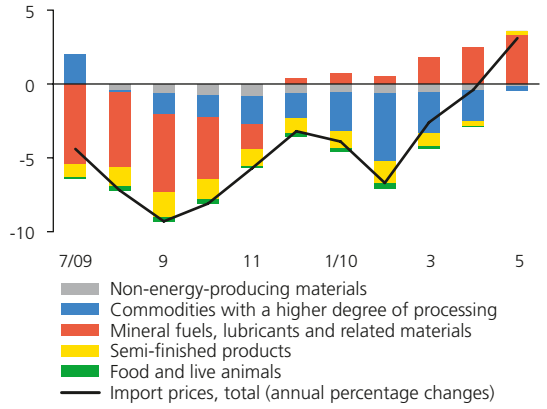
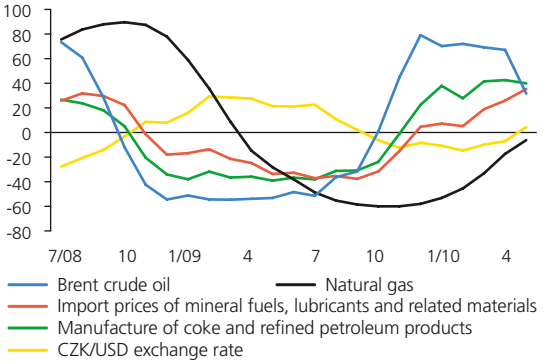


CHART III.2.3

MINERAL FUELS

Natural gas prices also contributed to the faster growth in prices of energy-producing materials
(annual percentage changes)



III.2 IMPORT PRICES AND PRODUCER PRICES

After a year-long decline, import prices started rising again owing to continued rapid annual growth in prices of imported energy-producing materials and an upswing in prices of imported semi-manufactures (metals) and chemicals. In most categories, however, import prices kept falling year on year, albeit more slowly than in the previous quarter. The growth in prices of energy-producing materials and semi-manufactures was reflected most of all in prices of producers at the early stages of the production chain. Overall, industrial producer prices thus increased in 2010 Q2; however, prices of higher-value-added products kept falling. The decline in agricultural producer prices was only moderate. Prices of construction work and market services also continued falling amid low domestic demand.

III.2.1 Import prices

After a year-long decline, **import prices** in May saw renewed annual growth, which reached 3.1% (see Chart III.2.2). This major change was due mainly to import prices of mineral fuels, which started accelerating sharply in March, and to a weakening annual decline in import prices of commodities with a higher degree of processing.

In May 2010, annual growth in import prices of **mineral fuels** rose to 35.4%; the previous November they had still been falling sharply year on year (see Chart III.2.3). The reversal in trend shown by import prices of these commodities at the end of the year was linked with renewed annual growth in oil prices on world markets, which fluctuated around 70% between January and April this year and then slowed to 31.6% in May. In addition, the annual decline in world prices of natural gas, which follow oil prices with a lag, moderated rapidly in Q2 and was only around one-fifth (-6.2%) in May compared to March. The year-on-year appreciation of the koruna-dollar exchange rate only partly dampened the impact of prices of energy-producing materials on domestic prices. The year-on-year depreciation of the koruna's exchange rate in May then fostered more rapid price growth. The contribution of import prices of mineral fuels to the overall growth in import prices was thus very significant in May, standing at 3.3 percentage point (see Chart III.2.2).

The rapidly growing prices of oil subsequently passed through to prices of imported **chemicals** (see Table III.2.1). After a decline lasting more than one year, import prices of **semi-manufactures** also saw renewed growth due to rising world prices of commodities (particularly metals) during Q1 and also due to the exchange rate.

However, the main factor in overall import price inflation was a weakening annual decline in prices of **commodities with a high degree of processing**, whose negative contribution was 4.2 percentage points lower in May than in February (see Chart III.2.2). This change was due to import prices of machinery and transport equipment and miscellaneous manufactured articles; the annual decline in their import prices had been above 8% in February, but according to the latest data it was only

modest in May (see Table III.2.1) The sharp slowdown in the decline in import prices in these categories was probably due mainly to slower year-on-year appreciation of the exchange rate.

Food import prices, which were affected by renewed growth in world prices of food commodities and by the exchange rate, moved in the same direction. According to the latest data for May their annual fall was moderate at 0.3%. A significantly slower annual decline (3.6% in May) was also observed for prices of **non-energy-producing commodities**, whose impact on import prices was thus negligible, as in the case of food.

III.2.2 Producer prices

Industrial producer prices

2010 Q2 saw renewed annual growth in **industrial producer prices**, which stood at 2% in June (see Chart III.2.4). This was due mainly to rapid growth in prices of some significant inputs in foreign markets, which strongly affected prices of producers at the early stages of the production chain. Conversely, prices in most other branches of manufacturing continued falling, indicating strong competition in the market amid still low demand despite the modest economic recovery. In these conditions, businesses did not raise their prices or margins and created room for profit generation by cutting their wage costs instead.

The highest price growth was recorded in the **manufacture of coke and refined petroleum products**, as oil prices on world markets continued to show rapid annual growth. This passed through to prices of primary-oil-processing businesses with a short lag (see Chart III.2.3). Subsequently, inflation also rose in the **chemical industry**, where many producers are heavily dependent on oil products (see Chart III.2.6). Annual inflation in both these industries slowed markedly in June in line with slower growth in world oil prices. However, it remained high.

Industrial producer prices were significantly affected by renewed annual growth in prices in the **manufacture of basic metals**, where producer prices have been rising year on year since May (by 6% in June) after a more than one year long decline connected with prices of imported semi-manufactures (based on metals; see Chart III. 2.5). Following a protracted annual decline, prices in **mining** also recorded growth in Q2 (of 10% in June)[10], although their contribution to industrial producer price inflation was less significant. The renewed price growth in the above-mentioned industries was probably due to increased world demand for energy-producing and non-energy-producing materials.

Prices in **other branches of manufacturing**, consisting mostly of producers of higher-value-added products, were mostly falling year on year in Q2, although in the majority of these branches the decline

10 Particularly in the categories of coal and lignite and crude petroleum and natural gas.

TABLE III.2.1

STRUCTURE OF IMPORT PRICES DEVELOPMENT

Prices continued falling year on year in most import categories
(annual percentage changes)

	2/10	3/10	4/10	5/10
IMPORTS, TOTAL	-6.7	-2.6	-0.4	3.1
of which:				
food and live animals	-7.4	-3.1	-1.5	-0.3
beverages and tobacco	-8.5	-5.4	-4.6	-2.9
crude materials inedible, except fuels	-19.8	-15.8	-13.2	-3.6
mineral fuels and related products	5.2	18.9	25.9	35.4
animal and vegetable oils	-17.5	-11.4	-11.5	-9.7
chemicals and related products	-5.9	-3.1	-1.6	0.2
manufactured goods classified chiefly by material	-7.0	-4.3	-1.3	1.5
machinery and transport equipment	-8.1	-4.6	-3.2	-0.1
miscellaneous manufactured articles	-8.4	-6.3	-6.0	-2.8

CHART III.2.4

INDUSTRIAL PRODUCER PRICES

Industrial producer prices recorded renewed annual growth
(annual percentage changes; contributions in percentage points)

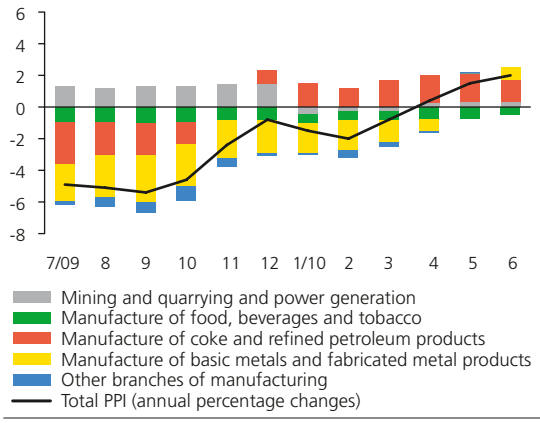


CHART III.2.5

METAL PRICES

An upturn in world metal prices affected producer prices in the basic metals category
(annual percentage changes)

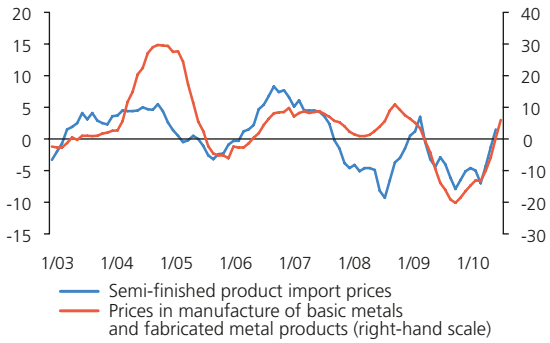


CHART III.2.6

MANUFACTURING

Many branches of manufacturing recorded slower price declines
(annual percentage changes; selected branches)

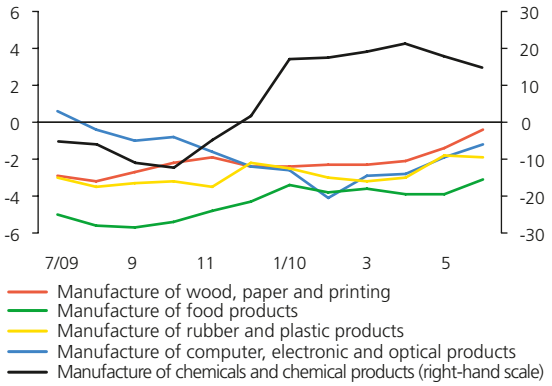


CHART III.2.7

AGRICULTURAL PRODUCER PRICES

The decline in agricultural producer prices was moderate in 2010 Q2
(annual percentage changes)

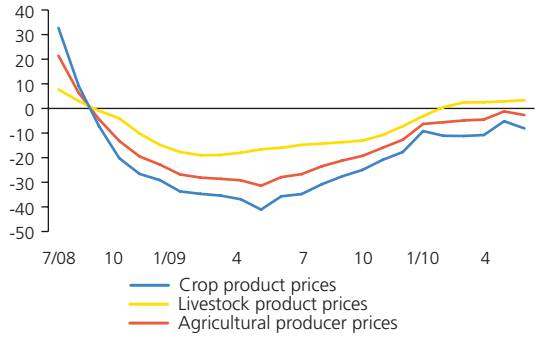
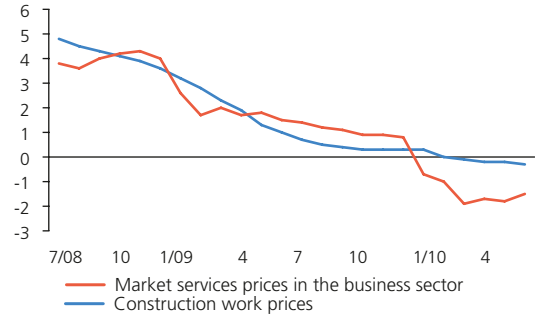


CHART III.2.8

OTHER PRICE CATEGORIES

Prices of construction work and market services kept declining year on year in 2010 Q2
(annual percentage changes)



moderated (see Chart III.2.6). Producer prices also remained on the decline in **the electricity, gas and steam industry** (down by 1.1% year on year in June). This was due mainly to lower demand for electricity in the European market as a result of the previous contraction in economic activity on both the domestic and Europe scale.

Agricultural producer prices

The gradual moderation of the annual decline in **agricultural producer prices**, observed since May 2009, culminated in only a weak annual fall of 1.2% in May 2010. In June, the decline deepened partially to -2.7% (see Chart III.2.7). This path was observed for both crop and livestock product prices. Since February 2010, livestock product prices have been showing growth, which reached 3.3% in June. Crop product prices continued falling in Q2, but at a slower pace than in the previous quarter (by 8.1% in June).

The gradual trend towards a slowing decline in **agricultural producer prices** in the Czech Republic, observed since 2009 H2, was linked mainly with an upswing in growth in agricultural prices on world markets. From the long-term perspective these prices were low last year and were being pushed upwards by an expected increase in demand for food products connected with the emerging economic recovery worldwide. The short-term growth factors included a worse cereal harvest in the southern hemisphere in late 2009 and early 2010 and in recent months deteriorating prospects for the harvests of some major exporters in the northern hemisphere owing to bad weather conditions.

Other producer prices

Prices of construction work and market services continued to indicate persisting weak domestic demand in 2010 Q2. As Chart III.2.8 shows, the gradual downward trend in annual **construction work price inflation** switched to a decline in March, and this decline strengthened slightly in Q2 (to -0.3% in June). The main cause of this long-term trend can be seen in weakening demand for construction investment, particularly in the non-financial corporations and household sectors. However, prices of materials and products consumed in construction switched to annual growth in May, and this growth increased to 2% in June. This change was probably fostered by the upswing in world prices of non-energy-producing materials (see above).

The annual decline in **prices of market services in the business sector** also continued, reaching 1.5% in June. Compared to March, however, it eased by 0.4 percentage point. This was due to an upswing in prices in several service categories, for example transport services and legal, accounting and information services. Prices of employment services showed the fastest growth. In many services, however, prices continued to decline year on year. The biggest falls were recorded for advertising services and market research, where prices had conversely been rising rapidly the previous year. Prices in programming and consultancy also declined year on year again in Q2.

III.3 DEMAND AND OUTPUT

2010 Q1 saw renewed annual real GDP growth, which reached 1.1%.[11] *In quarter-on-quarter terms, GDP growth continued at the same 0.5% rate as in the previous quarter. The largest contributor to the GDP growth was net exports, whose surplus increased appreciably in year-on-year terms. The decline in final consumption expenditure did not deepen any further. Gross capital formation kept falling, but the decline slowed markedly owing to a change in additions to inventories. On the demand side, the economic recovery was due chiefly to manufacturing.*

III.3.1 Domestic demand

The year-on-year decline in **domestic demand** slowed markedly in 2010 Q1. This change was fostered significantly by a sizeable annual change in additions to inventories resulting in a positive contribution to demand growth (see Chart III.3.2). Growth in demand was also fostered by government consumption, which, however, increased more slowly than in the previous quarter. Fixed investment and household consumption continued to decline, although this decline weakened compared to the previous quarter.

Final consumption

Amid high unemployment and flat nominal disposable income, **household consumption** remained subdued in 2010 Q1. Household consumption expenditure kept falling year on year (by 0.5%). However, this decline eased partially and was 0.7 percentage point less severe than in 2009 Q4 (see Chart III.3.3). Declines continued to be observed in most monitored categories of household consumption expenditure. Only expenditure on non-durable goods recorded a modest rise again (see Chart III.3.4).

The continuing real decline in household consumption expenditure in Q1 was again due chiefly to subdued **household income**. As Chart III.3.3 shows, the slightly falling nominal gross disposable income in the previous two quarters switched to stagnation in Q1. Owing to inflation, however, real disposable income maintained a moderate year-on-year decline of 0.4%.

The shift of **nominal disposable income** towards more favourable values was due mainly to renewed modest growth in property income and a pronounced slowdown in gross operating surplus and mixed income compared to the previous quarter. However, amid a persisting adverse labour market situation, compensation of employees – containing the main component of household income, i.e. wages

11 The assessment of the evolution of GDP expenditure and GDP sources is based on seasonally adjusted data from the CZSO's national accounts.

CHART III.3.1

GROSS DOMESTIC PRODUCT

GDP grew in both annual and quarterly terms in 2010 Q1
(annual and quarterly percentage changes at constant prices; seasonally adjusted data)

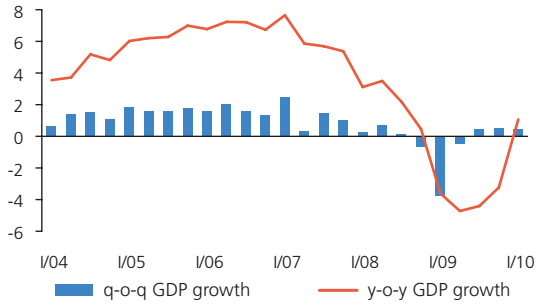


CHART III.3.2

STRUCTURE OF ANNUAL GDP GROWTH

Foreign trade made the largest contribution to the GDP growth
(contributions in percentage points)

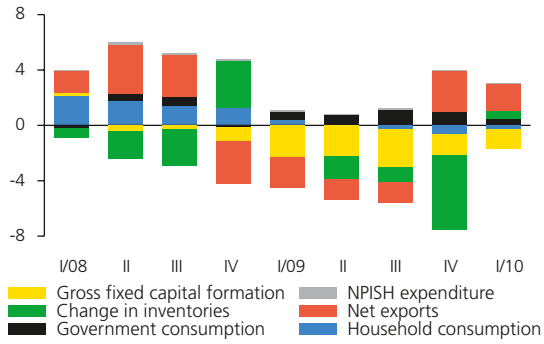


CHART III.3.3

HOUSEHOLD CONSUMPTION EXPENDITURE

The real decline in household consumption expenditure eased in 2010 Q1
(annual percentage changes)

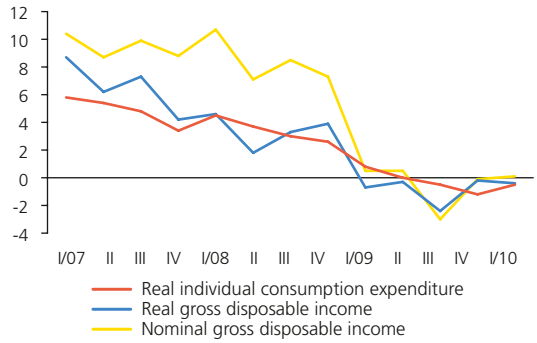


CHART III.3.4

STRUCTURE OF CONSUMPTION

Household expenditure fell in most monitored categories in 2010 Q1

(annual changes in CZK billions; constant 2000 prices)

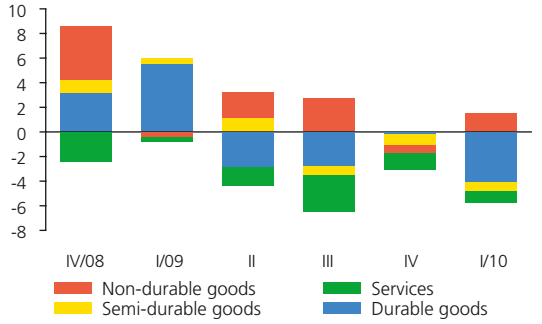


CHART III.3.5

DISPOSABLE INCOME

The fall in wage income was partly offset by social benefit income

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

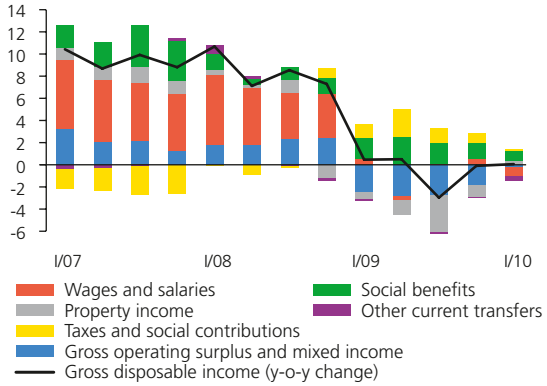
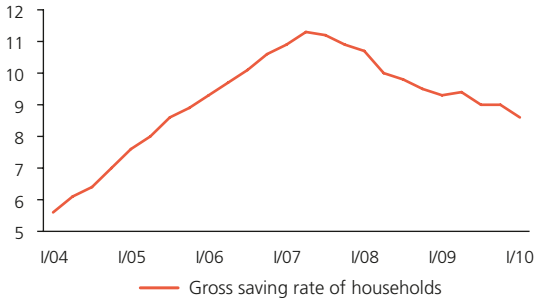


CHART III.3.6

GROSS SAVING RATE

With incomes weakening, households smoothed consumption by reducing their saving rate

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



and salaries – recorded a deepening year-on-year decline in Q1 (see Chart III.3.5). It thus indicated persisting downward pressures on wage costs in the business sector amid still low demand and mostly falling prices. The fall in wage income continued to be partially offset by social benefit income, whose growth rate, however, slowed to roughly half of the Q4 figure. The fall in taxes and social contributions on the household current expenditure side, affected by previous legislative changes, continued at the same time.

As Chart III.3.6 shows, in the downward phase of the cycle households were offsetting the impact of their declining income on consumption expenditure by **saving** less from their disposable income. In 2010 Q1, the gross saving rate of households was still considerably lower than in the pre-crisis period. The rate of growth of consumer credit moderated further, affected by prudent behaviour of households and banks at a time of still uncertain prospects for the economy and the labour market.

According to the available **leading indicators**, household consumption is likely to continue falling year on year in the near future. This is indicated by the latest May figures on a continuing decline in retail sales, even though it decreased in intensity and the automotive segment recorded a recovery in sales growth.[12] Consumer confidence is gradually improving, but the overall consumer confidence indicator is still low compared to the pre-crisis period (see Chart III.3.16). Consumers' perceptions of the future overall economic situation and their own financial situation have improved, but their expectations regarding future unemployment have worsened further.

General government expenditure on final consumption rose by 2% year on year in real terms in 2010 Q1 (and by 1.8% at current prices). The rate of growth of government expenditure thus slowed considerably compared to 2009, but this expenditure still made the main positive contribution to final consumption in 2010 Q1.

Investment

According to the CZSO's latest estimates, investment activity in the economy remained subdued in 2010 Q1. The year-on-year decline in **fixed investment** was at roughly the same level as in the previous quarter, reaching 6.6% (see Chart III.3.7). The weak investment demand in conditions of improving aggregate demand was due mainly to uncertainty regarding the future, as well as to still low capacity utilisation and to banks' prudent approach to lending.

As in previous quarters, the effects of these factors were most pronounced in the **non-financial corporations sector**, which accounts for more than one-half of total investment (see Table III.3.1). Its year-on-year decline moderated, but remained in double figures (-10.2%). As regards its structure, there was a clear slowdown in

12 According to seasonally adjusted data.

the decline in investment in machinery, equipment and transport equipment to less than 10%, whereas investment in construction recorded a deeper year-on-year fall. Although total investment by non-financial corporations fell much more slowly in Q1 than in the previous quarter, the latest June results of the CNB business survey do not so far indicate any major changes in the investment activity of the non-financial corporations sector in the near future.[13]

Investment by the **household sector** also fell markedly year on year in Q1 (-8%). However, investment in dwellings, which accounts for a significant proportion of total household investment, showed a continued weakening of its annual decline, which stood only at 1.5% in Q1 (see Chart III.3.8). However, when assessing the extent of this decline one should take the previous year's low base into account. The main reasons for the decline in household investment in dwellings remain the same as in previous quarters, namely uncertainty among households about future prospects on the labour market and their ability to repay loans, and also banks' persisting prudence in providing new mortgage loans. The significantly falling numbers of housing starts and building permits issued indicate that no major recovery in investment in dwellings can be expected in the near future.

In Q1, the overall decline in investment by non-financial corporations, households and financial corporations was offset only partially by positive – albeit slower compared to the previous quarter – growth in **general government investment**. This is mostly linked with the development of infrastructure.

The real year-on-year and quarter-on-quarter change in additions to **inventories** switched to positive figures in 2010 Q1 following marked declines last year (see Chart III.3.2). The sharp upswing in additions to inventories at the beginning of this year is probably associated with the pick-up in external demand and the gradual renewal of pre-crisis inventories in industry and in export-oriented branches.

III.3.2 Net external demand

The favourable trend in **net exports of goods and services**, visible since 2009 Q4, continued into 2010 Q1. Net exports recorded a surplus of CZK 10.6 billion and increased markedly year on year. However, the increase was only roughly half that recorded in the previous quarter (see Chart III.3.9). The overall contribution to annual GDP growth was thus positive again, as Chart III.3.2 shows.

13 According to the latest CNB survey, uncertainty regarding future demand will limit investment expenditure among 67% of respondents and shortages of own funds among 49% of respondents in the manufacturing sector in the next 12 months. The uncertain demand will curb investment expenditure among 76% of respondents in construction and 76% of respondents in trade.

CHART III.3.7

FIXED CAPITAL FORMATION

The decline in fixed investment stayed at the previous quarter's level in 2010 Q1
(annual percentage changes; contributions in percentage points; constant 2000 prices)

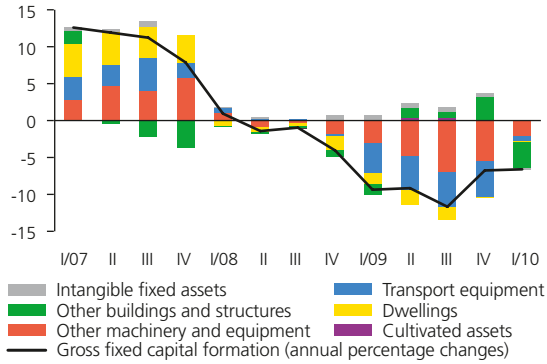


TABLE III.3.1

FIXED INVESTMENT BY SECTOR

The decline in fixed investment eased in the non-financial corporations sector
(annual percentage changes; percentage shares)

	II/09	III/09	IV/09	I/10
Annual percentage changes				
Non-financial corporations	-15.4	-18.6	-20.5	-10.2
Households	-5.1	-4.2	5.9	-8.0
General government	6.7	0.4	18.9	6.1
Financial corporations	-31.5	-33.7	-28.7	-41.0
Non-profit institutions serving households	1.2	-2.5	6.4	10.6
Shares in total fixed investment in per cent				
Non-financial corporations	53.3	50.5	47.7	53.7
Households	21.7	23.6	22.6	20.8
General government	23.0	24.0	27.6	23.9
Financial corporations	1.4	1.3	1.5	0.9
Non-profit institutions serving households	0.6	0.6	0.6	0.7

CHART III.3.8

INVESTMENT IN DWELLINGS

The decline in investment in dwellings stayed roughly at the previous quarter's level in 2010 Q1
(annual percentage changes)

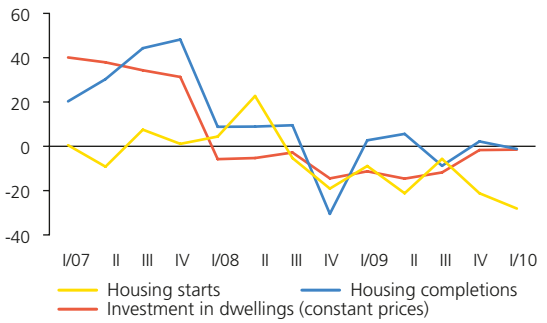


CHART III.3.9

NET EXTERNAL DEMAND

The annual growth in net exports continued into 2010 Q1
(CZK billions; constant 2000 prices; seasonally adjusted data)

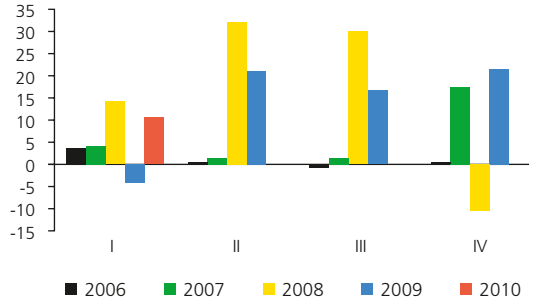


CHART III.3.10

EXPORTS AND IMPORTS

Total foreign trade turnover picked up strongly in 2010 Q1
(annual percentage changes; percentage points; constant prices; seasonally adjusted data)

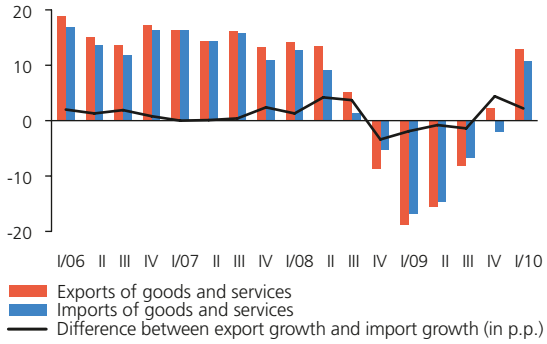
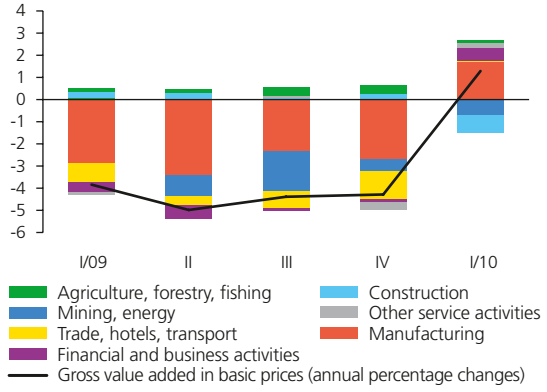


CHART III.3.11

CONTRIBUTIONS OF BRANCHES TO GDP GROWTH

Manufacturing was the biggest contributor to gross value added growth in 2010 Q1
(contributions in percentage points; annual percentage changes)



This net exports result in Q1 was achieved amid a sharp upswing in **foreign trade turnover**, indicating continued abatement of the impacts of the financial and economic crisis on the real economy (see Chart III.3.10). This was due in particular to a marked strengthening of annual growth in **total exports** compared to 2009 Q4 (by more than 10 percentage points to 12.9%), chiefly reflecting a gradual recovery in the output of the Czech Republic's major trading partner countries. As in the previous quarter, the export growth rate was affected by the low base of the previous year, when the year-on-year export contraction resulting from the global crisis had reached its highest values. Despite the high rate of year-on-year growth, the volume of exports at constant prices in Q1 was still well below the pre-crisis level.

Total imports, which are significantly affected by the high import intensity of exports, increased by a pronounced 10.7% year on year in 2010 Q1, following five consecutive quarters of decline. Exports still rose faster than imports, but the lead of export growth over import growth halved.

As in the previous quarter, the year-on-year growth in net exports was a result of a high **trade surplus**, which rose year on year. About two-thirds of this surplus, however, was offset by a services deficit. The recovery of growth in goods exports (of 15.1% year on year) following five quarters of decline was linked primarily with the renewed growth in total external demand. It was also affected by a very low base due to large falls in exports of machinery at the start of the previous year. At the same time there was renewed growth in goods imports thanks to an increase in imports for intermediate consumption, associated chiefly with export production, and also in investment imports.

Conversely, real **growth in exports and imports of services** was very moderate compared to the previous year. Owing to a sharp slowdown in imports of services, driven in previous quarters mainly by imports of services within multinational corporations, the year-on-year widening of the services deficit was also only modest.

III.3.3 Output

The quarter-on-quarter growth in **gross value added at basic prices**, observed since 2009 H2, continued into 2010 Q1. At the same time, there was also renewed value added growth in year-on-year comparison (1.3%), although this was largely due to a low base in 2009 Q1 (see Chart III.3.11). The published data suggested a continuing gradual recovery of the Czech economy from the significant contraction caused by the global financial and economic crisis.

The year-on-year growth in value added at basic prices was due mainly to **manufacturing** (see Chart III.3.11). In this case as well, however, the annual growth was largely due to base effects, as manufacturing had been hit hardest by the crisis and reached the bottom of its fall in 2009 H1. Chart III.3.12 shows that the level of production increased gradually in industry as a whole but was still well below the pre-crisis values. This was reflected in gradually rising capacity utilisation in industry; however, the utilisation rate was still 10 percentage points lower in 2010 Q2 than in 2008 H1 (see Chart III.3.13).

The renewed growth in production in industry in 2010 Q1 was fostered mainly by external demand, which was reflected in rapid annual growth in real exports of goods (of around 15%). According to the latest figures for May, production continued to grow in most branches of industry; annual growth in production picked up further in industry as a whole, reaching 11.1% in May.[14] A further improvement in sales opportunities was also suggested by strengthening growth in new **industrial orders** (see Chart III.3.14), which was recorded in most of the sectors monitored. These results were consistent with the results of a business survey, according to which there was a gradual decline in the effect of insufficient demand as a barrier to growth in industry (see Chart III.3.15), which had been viewed as the key barrier in the recession.

Activity in **services and trade** also recovered gradually in 2010 Q1. This was apparent overall in a positive contribution to annual growth in total value added (of 0.8 percentage point). Renewed or stronger growth in value added was visible particularly in business services and banking. This was broadly in line with the gradual overall recovery in production growth in industry. By contrast, value added in trade and hotels and restaurants recorded a substantial annual decline in Q1, reflecting households' low consumer demand for the reasons detailed in section III.3.1. As mentioned in that section of the Report, the latest data for May on the continuing decline in retail sales are not so far signalling any clear changes in consumer demand in the near future. The same is also suggested by the indicators of consumer and retail business confidence.

By contrast, **construction** saw a sharp fall in output in 2010 Q1 (of 18.1%[14] year on year), which was reflected in a sizeable negative contribution to total gross value added growth (see Chart III.3.11). The pronounced decline was due to a combination of adverse weather conditions and insufficient orders and was driven not only by building construction but also newly by civil engineering. The same trend continued into April. According to the latest available data, the year-on-year decline moderated to 2.2% in May[14] owing to a substantial month-on-month rise; this change was observed for both building construction and civil engineering.

14 Seasonally adjusted data.

CHART III.3.12

INDUSTRIAL PRODUCTION

Despite the ongoing recovery, industrial production is still below the pre-crisis level
(basic index; year 2005 = 100)

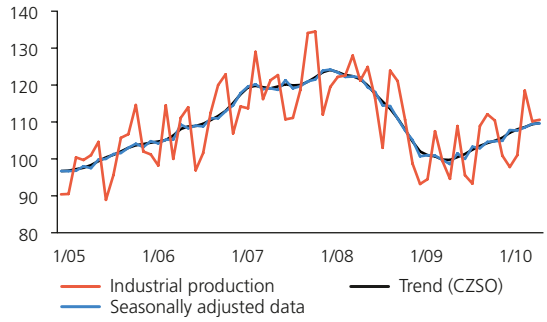


CHART III.3.13

CAPACITY UTILISATION

Production capacity utilisation in manufacturing is rising only gradually
(full capacity utilisation = 100)

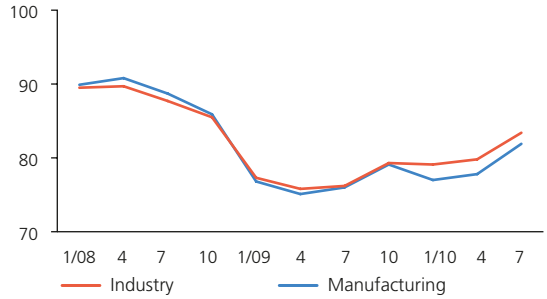


CHART III.3.14

NEW ORDERS IN INDUSTRY

The trend in orders suggests continuing growth in industrial production
(annual percentage changes)

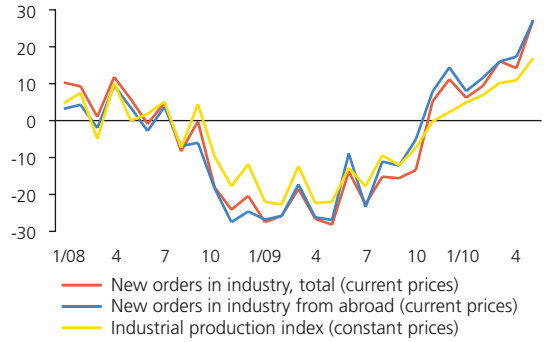


CHART III.3.15

BARRIERS TO GROWTH IN INDUSTRY

The effect of demand as a barrier to growth started to decline slowly
(percentages)

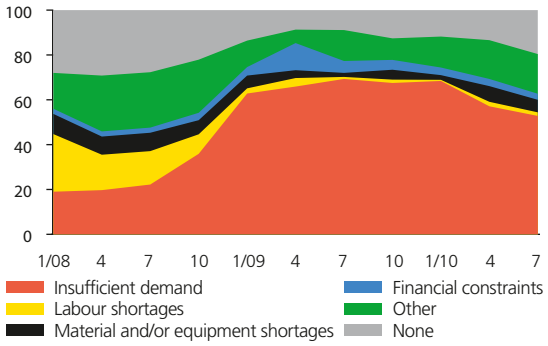
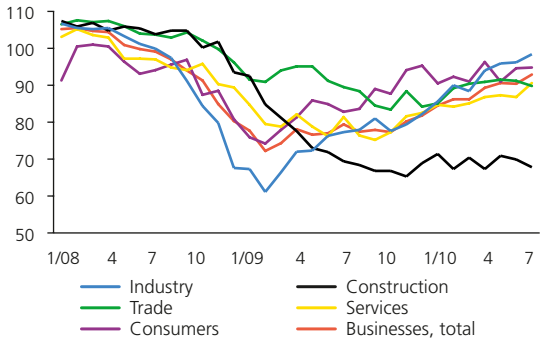


CHART III.3.16

CONFIDENCE INDICATORS

Optimism is rising above all in industry
(2005 average = 100; source: CZSO)



According to the June results of the CZSO's business survey, **business confidence** increased in 2010 Q1 and Q2, but views about the current and future economic situation varied across the different sectors. In line with the observed developments, optimism rose most in industry and negligibly in trade and services. By contrast, negative expectations continue to prevail in construction (see Chart III.3.16). Industrial businesses are positive about aggregate domestic and external demand, and their outlook for aggregate demand is also increasing.

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

The calculations of the stage of the business cycle and of the evolution of potential output described in this section are not based on the CNB's main forecasting model (these calculations were examined in more detail in Box 2 in Inflation Report I/2010). They are used to test the robustness of the estimate of the current and future position of the economy in the cycle as described by marginal costs and the profit mark-up margin in section II.2.

According to the calculation of the **Cobb-Douglas production function** in its basic form,[15] annual growth in potential output continued to slow in 2010 Q1 (see Chart III.3.17). The calculations indicate that the rate of growth of potential output fell to 1.4% (from 1.7% in 2009 Q4).[16] The corresponding output gap narrowed slightly to -2.1% (from -2.5% in 2009 Q4).[16] The calculations for the next quarter indicate that continuing moderate GDP growth will be accompanied by a halt in the decline of the growth rate of potential output and by a very gradual narrowing of the output gap (see Chart III.3.18).

The breakdown of the **contributions of the individual factors**[17] entering the production function reveals that the slowdown in annual potential output growth in 2010 Q1 was due to a negative contribution of equilibrium employment (see Chart III.3.19). As a result of this lag, negative contributions of equilibrium employment will persist over the entire forecast horizon, although the seasonally adjusted number of employed persons will rise as from mid-2011 according to our expectations. The contributions of capital and productivity were little changed in Q1 and we expect them to remain close to their current levels in the coming quarters.

An alternative estimate using the **HP filter** suggests slightly higher potential output growth (2.2% in 2010 Q1) and a less open output gap (-1.6%). The estimate of potential output using the **Kalman filter** continues to be affected by low observed inflation and therefore indicates a much stronger opening of the negative output gap (to -4.7%) amid faster growth in potential output (2.4% in 2010 Q1). The sizeable dispersion of the results of the individual methods points to a persisting large degree of uncertainty affecting the estimates of the current cyclical position of the economy.

15 The production function is computed in three ways using different input data. Coefficient λ = 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 moderate the deviation of the HP filter at the end of the data sample.
16 Average of the three calculations.
17 The breakdown into contributions is performed for the baseline production function.

CHART III.3.17

POTENTIAL OUTPUT

Potential output growth slowed further in 2010 Q1
(annual percentage changes)

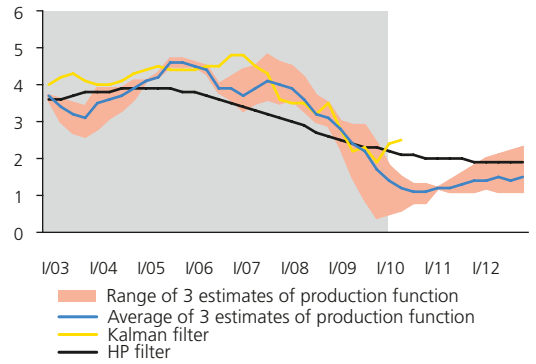


CHART III.3.18

THE OUTPUT GAP

The output gap remains significantly negative
(in % of potential output)

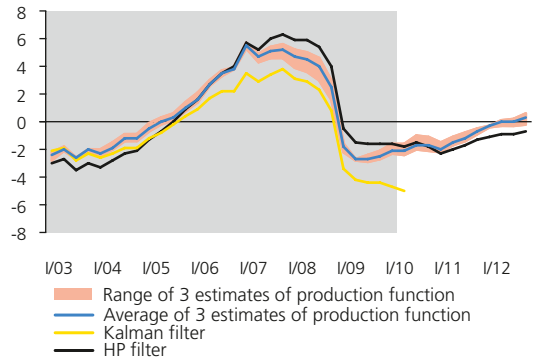


CHART III.3.19

CONTRIBUTIONS TO POTENTIAL OUTPUT GROWTH

The slowdown in potential output growth in 2010 Q1 was due mainly to falling equilibrium employment
(annual percentage changes; contributions in percentage points; basic variant of production function)

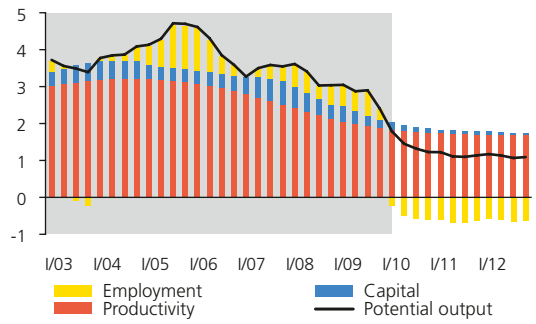


CHART III.4.1

LABOUR MARKET INDICATORS

Despite the slight upswing in economic growth, the decline in employment deepened even further
(annual percentage changes; percentage points)

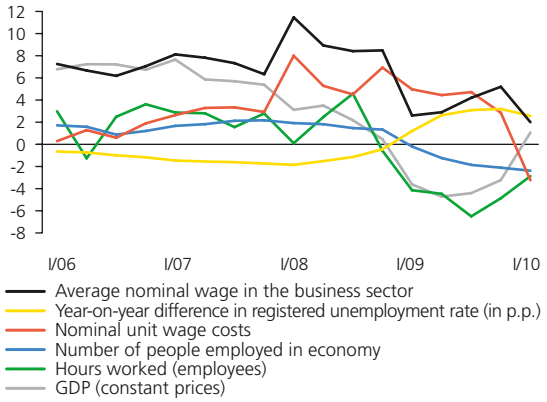


CHART III.4.2

EMPLOYMENT BREAKDOWN BY BRANCHES

The decline in employment in industry moderated, but employment in market services started falling
(contributions in percentage points to annual growth; selected branches)

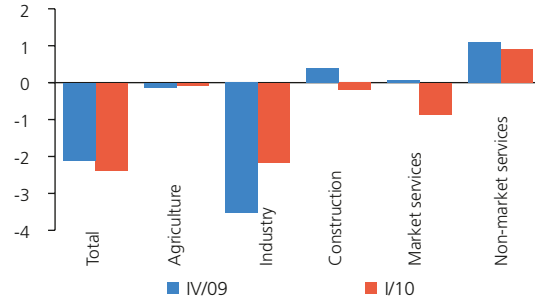
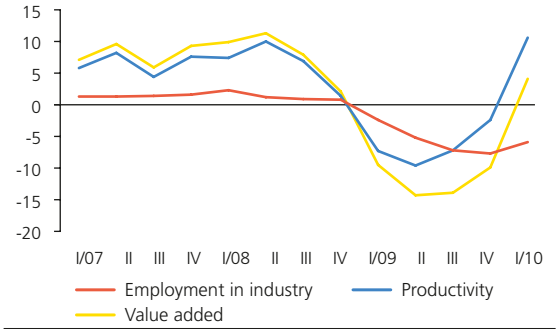


CHART III.4.3

EMPLOYMENT IN INDUSTRY

Businesses are responding to demand with changes in employment with a lag
(annual percentage changes)



III.4 THE LABOUR MARKET

As expected, the trends of a deepening year-on-year decline in employment and a rising general and registered unemployment rate continued into 2010 Q1. However, there was a reversal in the registered unemployment rate trend in Q2 and the number of unemployed people per vacancy decreased distinctly. After having picked up at the end of 2009, annual average wage growth slowed significantly in 2010 Q1, owing mainly to the unwinding of the temporary effects of structural changes in employment and a lower sickness rate and to a slight year-on-year decline in wages in the services sector. Nominal unit wage costs recorded an annual decrease amid a gradual upturn in economic activity and a decline in the volume of wages and salaries.

III.4.1 Employment and unemployment

Despite the slight recovery in economic activity in 2010 Q1, the year-on-year decline in **employment** deepened further (to -2.4%; see Chart III.4.1). This was again due to a declining number of employees[18] (down by 3.2% year on year), whose effect on total employment was partly offset by a rise in the number of entrepreneurs. This suggests that employees turn to full-time independent business activity if they lose their job.

In 2010 Q1, employment decreased mainly in industry and market services (see Chart III.4.2). However, the latest available data signal a change in trend in **industry**, which had been hit hardest by the sales crisis in previous quarters; the pronounced deepening of the annual decline in employment observed during 2009 came to a halt in 2010 Q1, with the annual decline being almost 2 percentage points lower than in 2009 Q4 (-7.3%, or 107,000 persons). This can be viewed as a gradual response of businesses to the ongoing recovery in production growth in industry, which, according to the latest CZSO data for May, continued into 2010 Q2. However, since employment continued to decrease, productivity in industry rose significantly amid growing production (see Chart III.4.3).

Employment in **services and trade**, where the previous impact of the crisis had been slower and less intense than in industry, continued to show year-on-year growth in 2010 Q1, albeit to a considerably lesser extent than in the previous quarter. A more significant change in employment was recorded in market services at the start of 2010, when the previous only slight growth in the number of employed people was replaced by a pronounced annual decline (see Chart III.4.2). This fact suggested a strengthening pass-through of the impact of the still low demand – a recovery of which was recorded in only some service branches – to employment in market services. By contrast,

18 Including members of production cooperatives.

employment in non-market services (especially in health and social care, public administration and defence) continued to rise, albeit more moderately than in the previous quarter.

The continuing decline in employment was reflected in a further increase in the **unemployment rate** in 2010 Q1. The general unemployment rate (LFS) rose by a further 0.6 percentage point compared to 2009 Q4, to 7.9%, while the registered unemployment rate[19] increased by 0.3 percentage point to 9.5% (see Chart III.4.4)[20], although its year-on-year growth rate slowed. The registered unemployment rate (MLSA) edged down by 0.1 percentage point quarter on quarter in 2010 Q2 (see Chart III.4.4).

A gradual slight improvement in the labour market situation in 2010 Q2 was also indicated by the **Beveridge curve**, according to which the downward trend in the number of unemployed people continued for the fourth consecutive quarter amid a very modest decline in vacancies (see Chart III.4.5). The number of unemployed persons per vacancy thus decreased from historical highs to 16 in June 2010.

III.4.2 Wages and productivity

Following a sizeable pick-up in 2009 H2, annual **average nominal wage** growth slowed significantly in 2010 Q1 (to 2.2%; see Table III.4.1). At 1.5%, real annual growth was lower because of inflation. The slower average wage growth in Q1 was largely associated with the fading effect of one-off factors.[21] 2010 Q1 thus saw a marked slowdown in average wage growth in the business sector in particular (to 2% year on year; that in the non-business sector was 1 percentage point higher).

Given the still low demand, employers tended to increase wages only in exceptional cases or to a small extent. The exceptions were health and social care and cultural, entertainment and recreational activities, where average wages grew by 7.6% and 7.3% respectively year on year. Average nominal year-on-year wage growth in industry was 3.9%. In most other sectors, however, the average wage was flat or falling slightly. On the other hand, few employers cut their employees' wages considerably; extraordinary bonuses and benefits were reduced instead.

Whole-economy labour productivity increased in 2010 Q1 (by 3.2% year on year). As Chart III.4.6 shows, its renewed growth after five quarters of "crisis" decline was supported most of all by declining employment in the economy; the contribution of the so far only slight

19 Not adjusted for unavailable job applicants.
20 Seasonally adjusted data in both cases.
21 Dismissals of employees with lower wages, a decline in the sickness rate, and a time shift in the payment of bonuses as a result of the raising of social and health insurance ceilings as from 2010. For details see section II.4.2 of Inflation Report II/2010.

CHART III.4.4

THE UNEMPLOYMENT RATE

The modest fall in registered unemployment in 2010 Q2 indicated a change in trend
(percentages; seasonally adjusted data; source: MLSA, CZSO, CNB calculation)

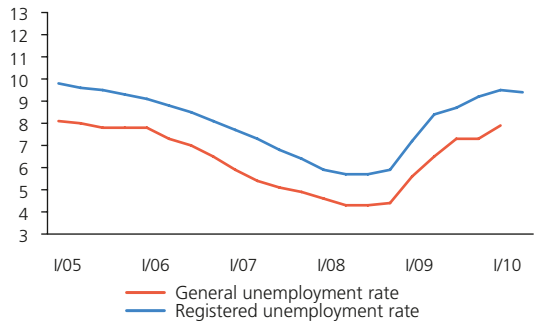


CHART III.4.5

THE BEVERIDGE CURVE

The number of vacancies was flat and the number of unemployed people fell in 2010 Q2
(seasonally adjusted numbers in thousands)

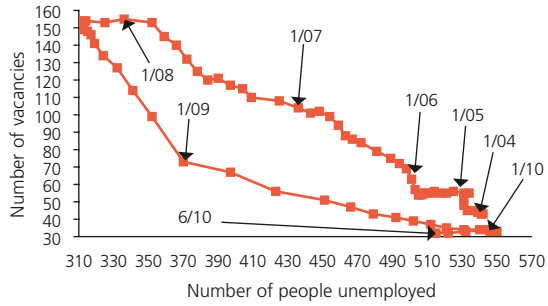


TABLE III.4.1

WAGES, PRODUCTIVITY, UNIT WAGE COSTS

Nominal unit wage costs decreased year on year in 2010 Q1
(annual percentage changes)

	II/09	III/09	IV/09	I/10
Average wage in monitored organisations				
nominal	3.2	4.6	5.2	2.2
real	1.8	4.5	4.8	1.5
Average wage in business sector				
nominal	2.9	4.2	5.2	2.0
real	1.5	4.1	4.8	1.3
Average wage in non-business sector				
nominal	4.4	5.6	4.4	3.0
real	3.0	5.5	4.0	2.3
Whole-economy labour productivity	-4.1	-3.1	-1.0	3.2
Nominal unit wage costs	4.4	4.7	2.9	-3.2

CHART III.4.6

WHOLE-ECONOMY PRODUCTIVITY

Productivity started rising again
(contributions in percentage points; annual percentage changes)

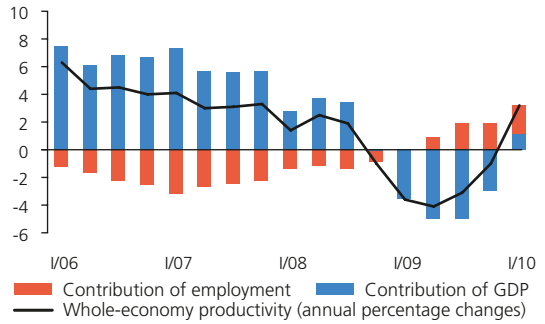
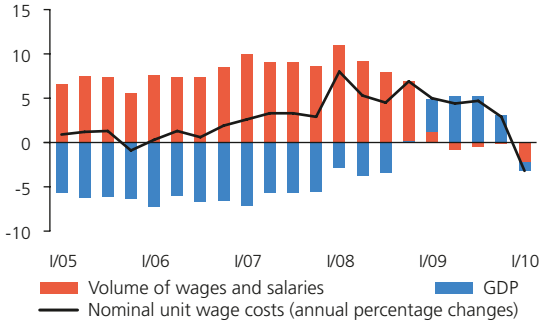


CHART III.4.7

NOMINAL UNIT WAGE COSTS

A falling volume of wages and salaries was the biggest contributor to the year-on-year decline in nominal unit wage costs
(contributions in percentage points; annual percentage changes)



upturn in output growth was lower. As regards individual sectors, productivity increased most in industry (by 10.6%), where a sizeable rise in orders and subsequently production was accompanied by still markedly declining employment in year-on-year terms. Productivity growth was only moderate in the other sectors. Only in construction did productivity record a sharp annual decline, as a result of falling production in the two main segments of this sector.

In these circumstances, **nominal unit wage costs** declined in 2010 Q1. As Chart III.4.7 shows, nominal unit wage costs, which are an indicator of potential inflation pressures in the wage area, recorded a year-on-year decline (of 3.2%) in Q1, the first such fall since 2006. This change was mostly due to a substantial deepening of the year-on-year decline in the volume of wages and salaries compared to the previous quarter, resulting mainly from declining employment. The effect of the slight growth in output on the decline in nominal unit wage costs was smaller.

The nominal unit wage costs declined most in industry and market services (by 7% and 6.2% respectively year on year). Within industry, nominal unit wage costs fell most sharply in manufacturing (by 9.3%), where increasing value added was accompanied by a declining volume of wages. In market services, a slight rise in value added was accompanied by a more pronounced decline in the volume of wages and salaries.

III.5 FINANCIAL AND MONETARY DEVELOPMENTS

Annual money growth remained moderate. The rate of growth of household deposits continued to decline, while deposits of non-financial corporations switched to growth. With interest rates low, demand for longer-term time deposits weakened, while the preference for transaction money rose again. The total volume of loans was broadly flat, the decline in loans to non-financial corporations stopped deepening, and growth in loans to households continued to decline slightly. Interest rates on the money market dropped in response to the May lowering of the repo rate, most client interest rates on new loans and deposits also declined. However, client risk premia remained elevated. The exchange rate of the koruna against the euro appreciated in 2010 Q2. The indicators of the financial performance of corporations improved in year-on-year terms. The total debt-to-GDP ratio declined for corporations, while rising slightly for households. A moderation of the year-on-year decline in supply prices of flats suggests a gradual stabilisation of the property market.

III.5.1 Money

The gradual economic recovery is being accompanied by still subdued **M2** growth. However, its annual growth rate increased slightly compared to Q1, reaching 4% in May (see Chart III.5.1).[22] The money supply growth in 2010 Q2 was thus above the level of the previous forecast, which had predicted a further slowdown in the growth rate to 2.5%. This was due mainly to an increase in corporate deposits in April as a result of corporate bond issues on foreign markets. However, the monthly money supply flow was negative in May.

Turning to the **structure of M2**, growth in M1 transaction money surged, while quasi money declined. This reflected the shifting of some time and savings deposits to overnight deposits in one selected bank (see Table III.5.1)[23], while the volume of currency in circulation continued to decline slightly in year-on-year comparison.[24] Long-term M2 time deposits, i.e. deposits with an agreed maturity of over two years, maintained high growth, while the effect of the elevated interest rates weakened compared to other deposits.

The total volume of **deposits** with banks was unchanged in year on year terms and increased slightly for building societies only. The year-on-year growth in deposits of households slowed further (to 4.6% in May), while deposits of corporations have been rising in recent

22 Harmonised M3 recorded an annual decline of 0.8%. The difference in the growth rates of M3 and M2 is due to higher demand for long-term time deposits in recent months. In contrast to M2, such deposits are not included in M3.

23 The shifting of time and savings deposits to overnight deposits was driven by efforts to increase competitiveness as a result of a change in the parameters of some products.

24 The annual decline in currency represents a correction of the one-off increase in currency holdings at the end of 2008 (i.e. following the escalation of the global financial and economic crisis).

Chart III.5.1

MONETARY AGGREGATES

M2 growth increased slightly in Q2
(annual percentage changes)

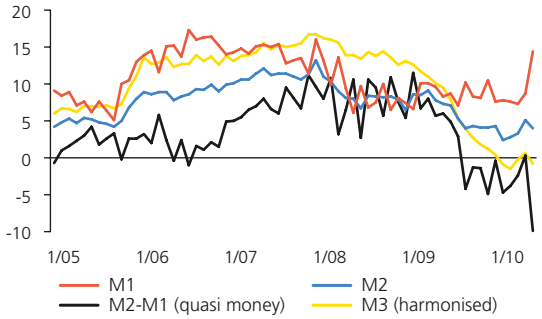


Table III.5.1

MONETARY AGGREGATE STRUCTURE

Strong M1 growth was offset by a fall in quasi money deposits
(quarterly averages and end-of-month stocks; annual percentage changes)

	IV/09	I/10	4/10	5/10	Share in M2, % 5/10
M1	8.7	7.5	8.7	14.4	63.1
Currency in circulation	-3.4	-2.4	-2.0	-1.3	12.7
Overnight deposits	12.6	10.6	12.0	19.2	50.4
M2–M1 (quasi money)	-2.2	-3.7	0.3	-9.9	36.9
Deposits with agreed maturity	-12.8	-7.7	-0.6	-9.2	20.9
up to two years	-16.9	-19.9	-12.5	-23.7	14.5
Deposits redeemable at notice	16.5	3.6	1.5	-10.2	15.5
up to three months	10.3	-5.7	-7.5	-7.5	13.5
Repurchase agreements	-35.4	-37.2	-1.0	-27.2	0.5
M2	4.1	2.8	5.1	4.0	100.0

Chart III.5.2

DEPOSITS BY SECTOR WITHIN M2

Household deposit growth slowed
(annual percentage changes)

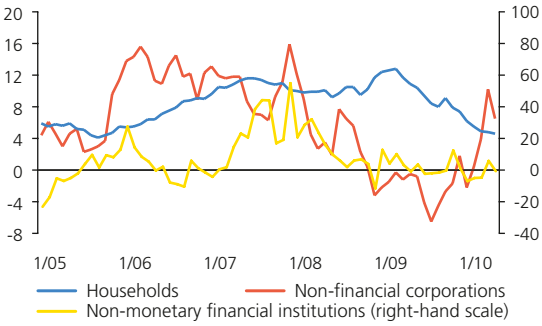


CHART III.5.3

LOANS TO CORPORATIONS AND HOUSEHOLDS

The credit contraction is starting to halt owing to the turnaround in the business cycle
(annual percentage changes)

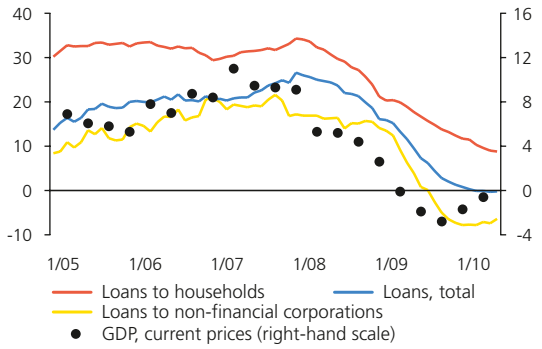


CHART III.5.4

LOANS PROVIDED TO THE REAL ESTATE MARKET

Loans to the real estate market were the biggest contributor to the slowdown in loans in the past
(contributions in percentage points; annual percentage changes)

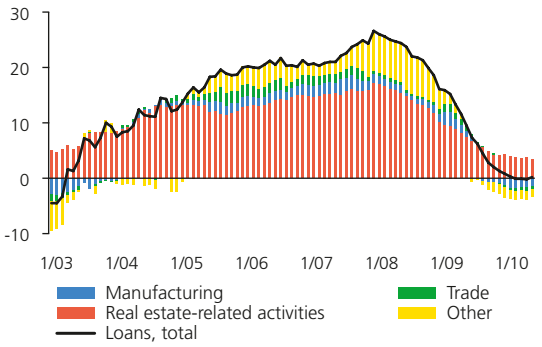
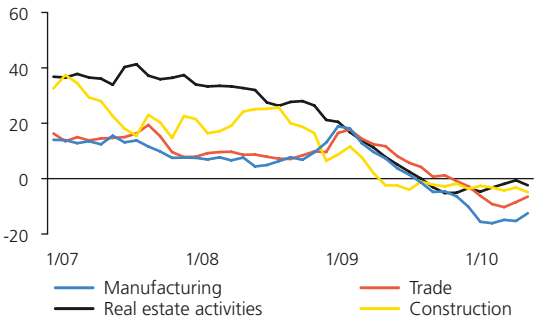


CHART III.5.5

LOANS TO CORPORATIONS BY ECONOMIC ACTIVITY

The decline in loans to manufacturing and trade moderated
(annual percentage changes)



months. The signs of a possible reversal in the adverse trends in nominal income and the unemployment rate should gradually start to boost household deposit growth. As regards corporations, the sharp increase in deposits in April can be expected to subside, but deposits will be positively affected by the economic recovery. Deposits of non-monetary financial institutions have remained broadly unchanged since 2008 despite showing some short-term volatility (see Chart III.5.2).

III.5.2 Credit

The growth rate of loans to **corporations and households** is still low.[25] It recorded an annual increase of 0.2% in May, or 1.1% when adjusted for non-transaction effects. Despite the weak growth rate, this suggests stabilisation, reflecting the gradual economic recovery and the fall in interest rates on the demand side (see Chart III.5.3). However, uncertainty prevails because of the still relatively weak labour and property markets. The slower loan growth since 2008 was mostly due to loans provided to the real estate market, which comprise loans to households for house purchase, loans to developers and loans to corporations in the construction sector[26] (see Chart III.5.4). Loans to households for house purchase accounted for the largest proportion of these loans. On the supply side, banks are maintaining increased client risk premia. Zero growth in loans also persists in the other CEE countries and in the euro area.

The annual decline in **loans to non-financial corporations** seems to have bottomed out at the start of 2010 and moderated further to 6.4% in May. This may have been linked with the growth in demand and in new orders of industrial firms. The decline in loans to manufacturing and trade moderated. By contrast, a slight decline in loans to developers and the construction sector persisted (see Chart III.5.5). Short-term operating loans (of up to one year) declined less than in the previous month, while long-term loans (of over five years) grew slightly despite the weak investment demand. The seasonally adjusted monthly flow of loans was slightly positive. As usual, the trend in loans is lagging behind the continuing rise in the industrial business confidence indicator and the turnaround in the business cycle. On the other hand, about half of businesses are still citing lower demand in the economy. It can thus still be presumed that loans will not start to record annual growth until the end of 2010.

Annual growth **in loans to households** continued to slow slightly but, in contrast to loans to corporations, remained positive (at 8.8% in May). Loans for house purchase and consumer credit slowed as a result of almost zero growth in nominal gross disposable income

25 The previous high growth in loans to central government is simultaneously slowing.
26 Loans provided to the construction sector relate only partially to the property market. About 64% are for real estate-related activities, while the remainder are loans to the structural engineering sector and for specialised construction activities.

and the increased unemployment rate (see Chart III.5.6). Nevertheless, the turnaround in the business cycle, the improving economic situation of corporations and the related expected decline in unemployment and growth in nominal income are gradually starting to be reflected in a slowing annual decline in new loans for house purchase (see Chart III.5.7). New loans for house purchase with interest rate fixations of over one year and up to five years recorded an annual increase. This was also fostered by a falling interest rate on such loans. By contrast, new consumer credit continued to decline quite strongly, but was accompanied by an increase in account overdrafts. A recovery in loans to households continued to be dampened by high risk premia, associated mainly with the rising unemployment rate (see below). A greater recovery of household demand for loans can thus be expected with a lag after the labour market turns around. Growth in these loans is likely to be around the current level, i.e. no higher than 10%, at the end of 2010.

The **non-performing loan ratio** of non-financial corporations edged down to 8.5% in May, while that of loans for house purchase and consumer credit rose to 3% and 9.8% respectively. The subdued economic growth continues to imply a risk of further growth in non-performing loans, although their double-digit growth has been declining in 2010. Non-performing loans totalled CZK 110 billion in May. This is double the figure recorded in 2008.

III.5.3 Interest rates

Monetary policy interest rates

At its May meeting, the Bank Board decided to **lower the repo and Lombard rates** by 0.25 percentage point. The two-week repo rate was thus set at 0.75% and the Lombard rate at 1.75% with effect from 7 May 2010 (see Chart III.5.8). The discount rate was left unchanged at 0.25%. The monetary policy decision-making of the CNB Bank Board in 2010 Q2 was based on the macroeconomic forecast published in the previous Inflation Report. Consistent with the forecast was a modest decline in market interest rates initially, followed by stability and a gradual rise in rates as from 2011. The risks of the baseline scenario of the previous forecast were assessed as being balanced at the Bank Board meeting in May. The balance of risks was also identified as being broadly balanced at the meeting in June and interest rates remained unchanged.

At its meeting in August the Bank Board decided unanimously **to leave interest rates unchanged**. The balance of the risks to the forecast was assessed as being moderately anti-inflationary overall. In particular, the exchange rate and the planned fiscal consolidation are acting in this direction. By contrast, commodity prices are identified as an upside risk to inflation.

CHART III.5.6

LOANS TO HOUSEHOLDS

Nominal income and the unemployment rate are affecting loans to households

(annual percentage changes)

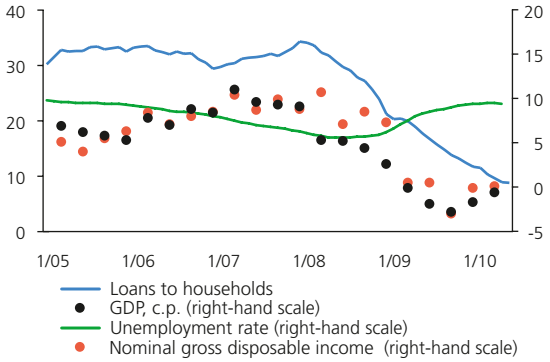


CHART III.5.7

LOANS TO HOUSEHOLDS FOR HOUSE PURCHASE

The contraction in new loans for house purchase slowed amid a gradual fall in interest rates

(new business; annual percentage changes, interest rate in %)

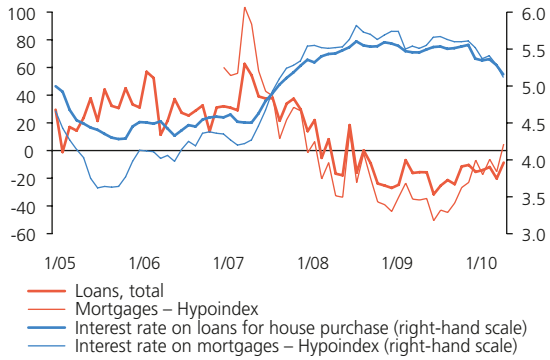


CHART III.5.8

THE CNB'S KEY RATES

The CNB lowered the two-week repo rate and the Lombard rate in May 2010

(percentages)

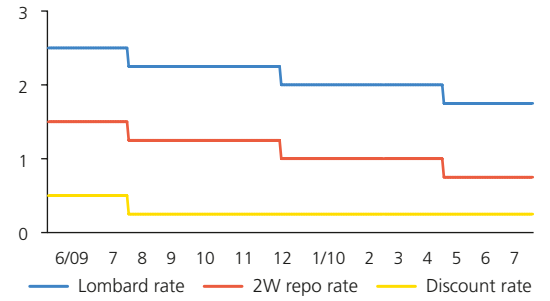


CHART III.5.9

MARKET INTEREST RATES

Money market interest rates fell
(percentages)

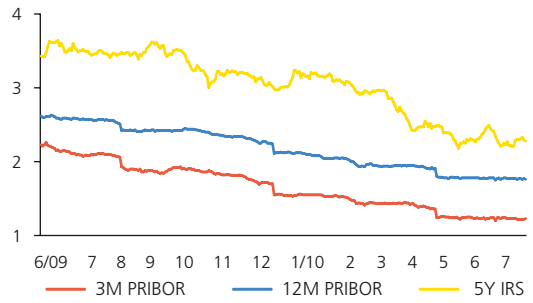


CHART III.5.10

INTEREST RATE DIFFERENTIALS

Interest rate differentials vis-à-vis the euro and the dollar decreased
(percentage points)

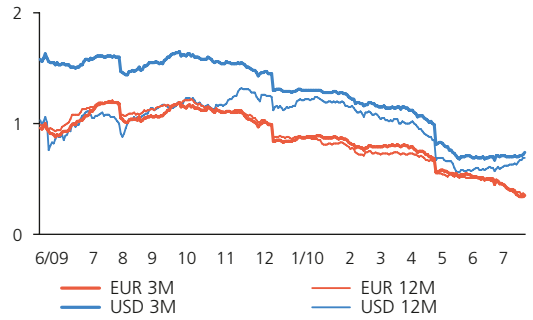
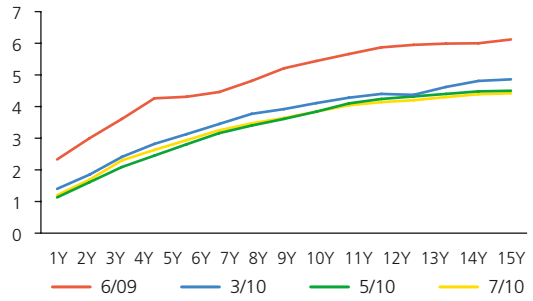


CHART III.5.11

GOVERNMENT BOND YIELD CURVE

The yield curve was roughly unchanged
(percentages)



Financial market interest rates

Following the lowering of the repo rate in May, which had not been expected by most of the market or by most analysts, **market interest rates** continued to fall gradually at almost all maturities (see Chart III.5.9). FRA and IRS derivative rates also edged down. Their higher volatility was probably linked with movements in the exchange rate of the koruna and partly also with the transmission of the renewed increase in nervousness in financial markets connected with the Greek crisis. The market outlook for 3M FRA rates is stable until the start of 2011. It is slightly above the path consistent with the baseline scenario of the new forecast over the entire horizon. The market and analysts agree that the CNB's key rates have now bottomed out and that the next change in rates will be in the upward direction. Analysts are gradually shifting the expected timing of the change in rates to a later date.

The average **3M PRIBOR rate** was 1.3% in 2010 Q2, up by 0.2 percentage point compared to the previous forecast. Money market interest rates continued to be influenced by the credit premium. The money market yield curve has a positive slope; the spread between the 1Y PRIBOR and the 2W PRIBOR was 0.9 percentage point on 23 July.

PRIBOR interest rates were down by 0.3–0.4 percentage point overall depending on maturity compared to the start of 2010. The decline was more pronounced for IRS interest rates, amounting to 0.8 percentage point for most maturities.

The PRIBOR **yield curve** shifted downwards during 2010 Q2, but its slope remained positive. The spread between the 1Y PRIBOR and 2W PRIBOR was around 0.9 percentage point in June 2010. The money market yield curve was unchanged during July. The IRS yield curve also shifted downwards during 2010 Q2, to a greater extent than on the money market. The average 5Y–1Y spread was 1.0 percentage point and the 10Y–1Y spread 1.6 percentage points in June 2010.

Short-term **interest rate differentials** vis-à-vis the main world currencies (PRIBOR/CZK – EURIBOR/EUR, or LIBOR/USD) recorded a decline (see Chart III.5.10). The main underlying factor was the lowering of the CNB's key rates in May and the related decline in interest rates on the domestic money market. By contrast, rates increased slightly on foreign money markets. Despite that, differentials remained positive. The 3M PRIBOR – 3M EURIBOR interest rate differential was 0.6 percentage point on average in 2010 Q2. On 23 July, it was 0.3 percentage point.

Eight auctions of fixed coupon bonds were held on the primary **government bond market** in the period under review. The total volume of bonds issued was CZK 58.8 billion. In addition, "flood bonds" amounting to CZK 3 billion were issued; they were purchased directly by the EIB. The Ministry of Finance increased the originally announced volumes in all auctions in order to fulfil its issuance

strategy. Rising risk aversion and increased volatility on foreign markets postponed a planned Czech eurobond issue. The government bond yield curve was little changed in shape and slope and merely shifted slightly upwards at some maturities (see Chart III.5.11). Given the government's plans to consolidate public budgets, Fitch Ratings improved the outlook for the Czech Republic's liabilities from stable to positive.

Client interest rates

Client interest **rates on new loans** continued to decline slightly in Q2. In May 2010, money market rates also fell amid a slight increase in the ten-year government bond yield. However, the credit conditions, as expressed by interest rate spreads, remained tight, most of all for loans to households. The rate on loans to non-financial corporations fell further to 4% for most short and long fixations. The interest rate on loans to sole proprietors also declined to 5.8%. Both rates, short-term ones in particular, are at their lowest levels since 2004. In the euro area the downward trend in rates on loans to corporations recorded in the past is now less pronounced. Both short-term and long-term rates are about 1 percentage point lower there than in the Czech Republic, mainly because of a larger fall in market interest rates in the euro area than in Czech Republic in the past (see Chart III.5.12).

Despite the decline in loan interest rates in May, the spread between **corporate** and market interest rates stayed at the elevated levels observed since the end of 2008. From the long-term perspective, the average rate on large loans to corporations was down by 1.6 percentage points on average compared to September 2008 (short-term rates dropped by 1.7 percentage points), while the 3M PRIBOR rate was down by 2.5 percentage points. The spread between short-term client interest rates and the 3M rate on the Czech interbank market is similar to that in the euro area.

The interest rate on loans for house purchase for **households** continued to fall gradually, reaching 5.2% in May. All interest rate fixations decreased, but the largest decline was recorded for rates with shorter fixations of up to five years (see Chart III.5.13). Demand for loans with fixations of over one year and up to five years thus increased. The spread between the **rate on loans for house purchase** with fixations of up to one year and the 3M PRIBOR rate fell slightly. The spread between the rate on loans for house purchase and the ten-year government bond yield also declined. This notwithstanding, both spreads remained relatively high, mainly because of the increased unemployment rate (see Chart III.5.14). The rate on loans for house purchase was down by 0.4 percentage point compared to September 2008 (short-term rates by 0.7 percentage point), while the 3M PRIBOR was down by 2.5 percentage points. Rates on loans for house purchase are at roughly the end-2007 level, while in the euro area they are at a historical low. The interest rate on consumer credit fell by 0.4 percentage point to 14% in May, while short-term rates are at a historical high as a result of the still high risk perceived by banks.

CHART III.5.12

INTEREST RATES ON LOANS TO CORPORATIONS

Interest rates on loans to corporations mostly fell

(new business; percentages)

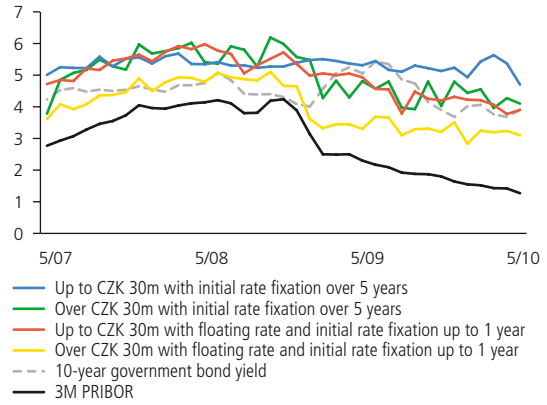


CHART III.5.13

INTEREST RATES ON LOANS FOR HOUSE PURCHASE

The largest decline was recorded for rates on loans for house purchase with fixations up to one year and up to five years

(new business; percentages)

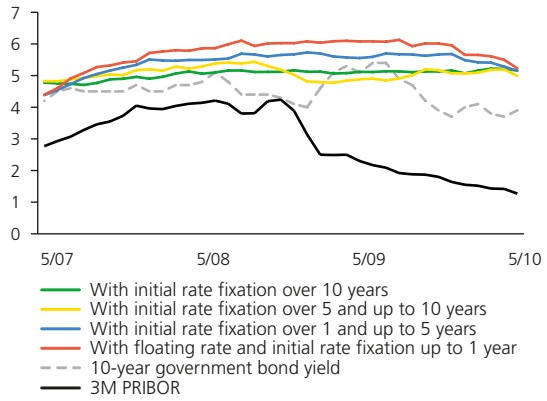


CHART III.5.14

SPREADS OF INTEREST RATES ON LOANS

The differences between client and market rates remain at increased levels

(percentage points; percentages)

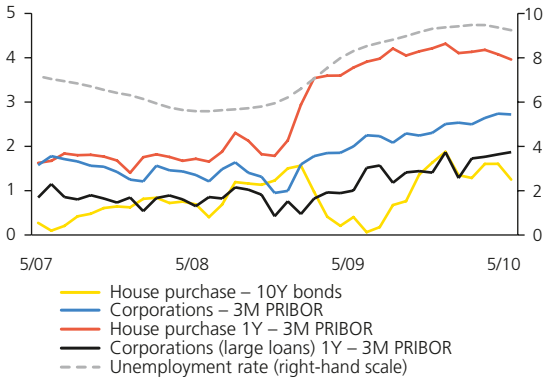


CHART III.5.15

EX ANTE REAL RATES

Ex ante real interest rates on new loans decreased in 2010 H1
(percentages)

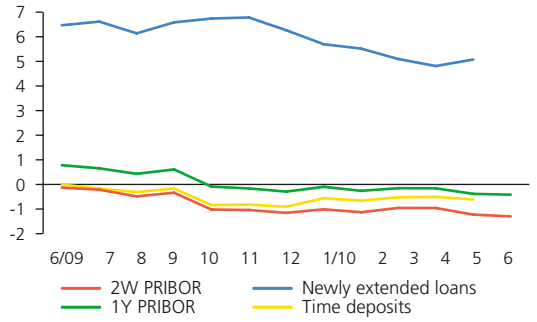
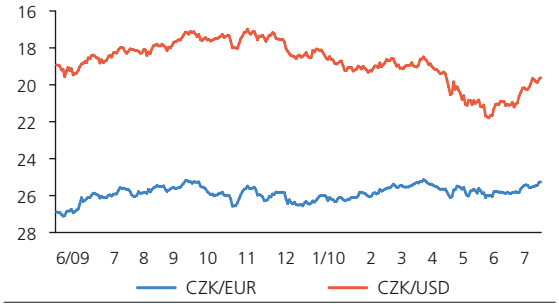


CHART III.5.16

CZK/EUR AND CZK/USD EXCHANGE RATES

The koruna appreciated against the euro and depreciated against the dollar year on year in 2010 Q2 and July



The interest rate on **deposits** stayed at 0.9% in May. Following a gradual decline recorded since 2009, the rate on household deposits has been flat at 1.1% in the last few months. The rate on deposits of non-financial corporations fell slightly further to 0.5%. In the case of households, the short-term rate on deposits with an agreed maturity of up to one year declined, the rate on deposits redeemable at notice of up to three months remained above the 3M PRIBOR, and the rate on overnight deposits increased somewhat. Long-term interest rates on deposits with an agreed maturity of over two years decreased.

The **margins** between loan and deposit interest rates on new business rose further in May to 6.1 percentage points. They have been fluctuating at historical highs since 2009 Q2.

After previously falling, **real client interest rates**[27] were broadly flat in Q2. Real rates on new loans were 5.1% in May, while real rates on time deposits were -0.6% (see Chart III.5.15)

III.5.4 The exchange rate

The average **exchange rate of the koruna against the euro** was CZK 25.6 in 2010 Q2, which represents a year-on-year appreciation of 4.1% and a quarter-on-quarter appreciation of 1.1% (see Chart III.5.16). The exchange rate of the koruna is showing a gradual appreciation tendency this year, offset by shorter periods of correction. This trend picked up considerably in July, with the koruna appreciating from around CZK 25.7 to just below CZK 25 to the euro at the end of July.

Short-term investors' sentiment again played the key role as regards the koruna exchange rate; the contribution of domestic fundamentals was small. In the short term, the exchange rate alternately reflected common investor sentiment about Europe as a whole or the Central European region and factors specific to individual countries. In the long term, however, investors are distinguishing between the risks of individual currencies, taking into account the extent of the economic problems and the prospects of individual countries. The Swiss franc has appreciated the most in Europe this year, followed by the Swedish krona, the Russian rouble, the Czech koruna and the Polish zloty. The Hungarian forint has depreciated the most. Owing to developments in Southern European countries, the euro has weakened and the pound sterling has also depreciated modestly. The faster appreciation in July was probably due to a significant revision of short-term investors' view of the Central European region. Among convertible currencies the Czech koruna and the Polish zloty appreciated the most. The Hungarian forint also gradually recovered from a temporary depreciation.

27 Ex ante real interest rates: nominal interest rates on loans are deflated by the industrial producer price inflation forecasted by the CNB; nominal interest rates on deposits and PRIBOR rates are deflated by the consumer price inflation expected by financial market analysts.

The average **exchange rate of the koruna against the dollar** was CZK 20.2 in 2010 Q2, which represents a quarter-on-quarter depreciation of 8% and a year-on-year depreciation of 3%. However, the exchange rate fluctuated considerably during the quarter as a result of movements in the dollar's exchange rate against the other world currencies. The dollar at first appreciated in response to greater risks of some European countries and positive expectations of economic growth in the USA. Against the koruna it moved from around CZK 18.5 to almost CZK 22.0 at the start of June. Owing to growing doubts about the sustainability of US economic growth, however, the dollar then weakened sharply. In the second half of July, the exchange rate was also affected by the koruna's appreciation against the euro. At the end of July the exchange rate was around CZK 19.0 to the dollar.

III.5.5 Economic results of non-financial corporations

According to the available data and CNB calculations, sales and output in the monitored segment of **non-financial corporations with 50 employees or more**[28] saw renewed modest annual growth in 2010 Q1 (see Table III.5.2). However, book value added again declined slightly year on year, owing to faster growth in intermediate consumption than in output (see Chart III.5.17). By contrast, personnel costs continued to fall year on year, and, according to CNB calculations, contributed to annual growth in the gross operating surplus (see Chart III.5.18).

In 2010 Q1, the material cost-output ratio was influenced by a marked upswing in import prices of energy-producing materials (oil in particular) at the end of 2009. This factor was probably the main source of upward pressure on producers' costs, which fostered annual growth in the material cost-output ratio (of 0.4 percentage point to 71.4%). The scope for raising prices in conditions of low demand was limited. At the same time, corporations intensively reduced their wage costs. This was reflected in a further annual decline in the personnel cost-output ratio in Q1 (of 0.8 percentage point to 15.5%). Given the rising average wage, the reduction was due to a sharp fall in the number of employees.

Data for the narrower segment of **large corporations** (with 250 employees or more[29]) offer a more favourable picture of economic performance than the wider segment of corporations described above. Growth in sales and output was more pronounced in large corporations. Book value added in this segment of corporations recorded a year-on-year increase in 2010 Q1. Amid declining personnel expenses, the gross operating surplus also increased – again more significantly than in the wider segment of corporations.

28 The segment of corporations with 50 employees or more consisted of more than 9,200 non-financial corporations at the end of 2010 Q1.
29 The segment of corporations with 250 employees or more consisted of more than 1,600 non-financial corporations at the end of 2010 Q1.

CHART III.5.17

KEY FINANCIAL INDICATORS

Output rose modestly in 2010 Q1
(annual percentage changes)

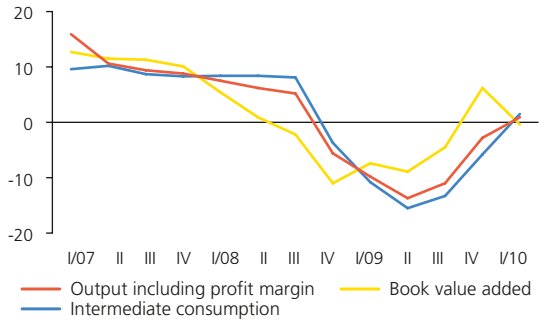
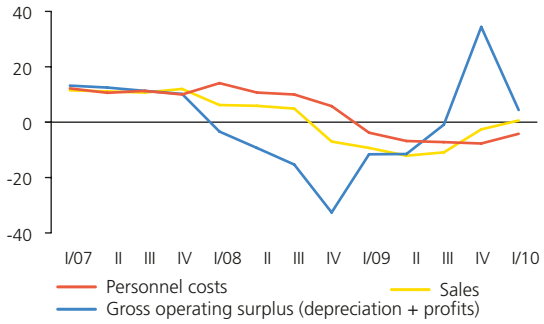


CHART III.5.18

PERSONNEL COSTS

Personnel costs continued to fall year on year owing to a rapid decline in the number of employees
(annual percentage changes)



TAB. III.5.2

PERFORMANCE INDICATORS OF CORPORATIONS

The material-cost output ratio increased in 2010 Q1
(CZK billions; percentages; annual changes in percentage points and percentages)

	2010 Q1	2009 Q1	Annual percentage changes
Output incl. profit margin (CZK billions)[a]	1,163.0	1,152.1	0.9
Personnel costs (CZK billions)	180.1	187.9	-4.2
Intermediate consumption (CZK billions)	830.5	818.3	1.5
Book value added (CZK billions)	332.4	333.8	-0.4
Sales (CZK billions)	1,487.7	1,479.2	0.6
	percentages	percentages	Annual changes in p.p.
Ratio of personnel costs to value added[a]	54.2	56.3	-2.1
Material cost-output ratio[a]	71.4	71.0	0.4
Personnel cost-output ratio[a]	15.5	16.3	-0.8
Ratio of book value added to output[a]	28.6	29.0	-0.4

a) CNB calculation

CHART III.5.19

FINANCIAL LIABILITIES OF NON-FINANCIAL CORPORATIONS

Corporate financial liabilities rose modestly, mainly because of an increase in share value

(contributions in percentage points; annual percentage changes)

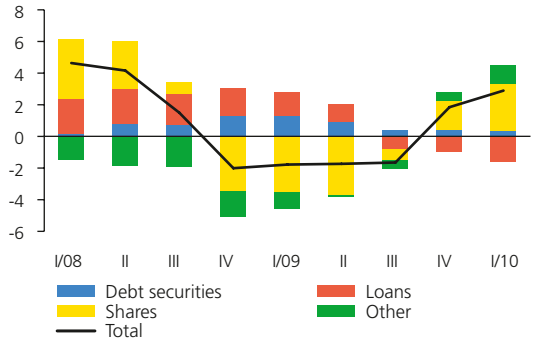


CHART III.5.20

DEBT RATIO AND INTEREST BURDEN

The interest burden decreased for corporations

(percentages)

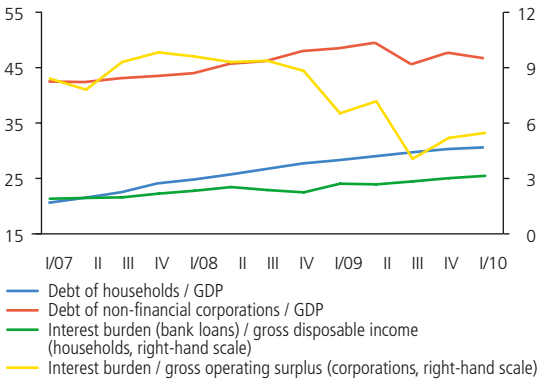
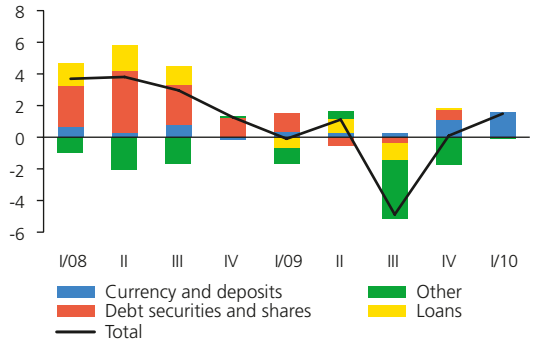


CHART III.5.21

FINANCIAL INVESTMENT OF NON-FINANCIAL CORPORATIONS

Financial investments of corporations increased as a result of a rise in deposit and currency growth

(contributions in percentage points; annual percentage changes)



III.5.6 The financial position of non-financial corporations and households

Corporations

The relatively favourable evolution of most profitability indicators, especially those of large non-financial corporations[30], was accompanied in 2010 Q1 by subdued growth in external financing[31], which increased by 2.3% year on year. Total corporate financial liabilities rose by 2.9% (see Chart III.5.19). Total loans (from banks, non-residents and other corporations) fell by 7.6% year on year, growth in bond financing moderated to 12.9%, while the growth rate of listed shares and other equity increased to 6.2% as a result of growth in their value. By contrast, **non-financial corporations' debt** ratio, expressed only in terms of loans and issued bonds to GDP, declined to 46.7% (see Chart III.5.20). Following a decline in 2008 and at the start of 2009, the interest burden of corporations relative to the gross operating surplus rose slightly to 5.5% in the last two quarters. However, it is still one of the lowest figures since 2007. Its decline since 2008 was due to a reduction in loan interest rates and loans granted. The decrease in client and market interest rates in 2010 Q2 seems to have fostered a further decline in the interest burden of corporations.

Financial investment of corporations increased by 1.1% year on year as a result of a rise in the growth rate of deposits and currency of corporations, which indicates an improvement in their cash-flow. The contributions of the other components of assets to the growth were zero (see Chart III.5.21).

The **financial indicators** of selected non-financial corporations with the largest asset volumes (about one half of corporations) show that the gradual economic recovery is being reflected in annual growth in assets and equity capital. The short-term liquidity and solvency of corporations rose to 142.9% and 102.4% respectively year on year. By contrast, the ratio of debt to equity capital declined to 31.3%, which led to a fall in leveraging.[32]

Households

Household debt rose slightly further in 2010 Q1, to 30.6% of GDP and 56.1% of disposable income (see Chart III.5.20). This reflected faster growth in loans to households than growth in GDP and nominal income. Households' interest burden in connection with bank loans

30 Most profitability indicators of non-financial corporations also improved further in the euro area in 2010 Q1, with market expectations pointing to a continued improvement in estimates of future corporate profits. Non-financial corporations in the euro area are improving their financial position – they are increasing internal resources amid subdued external financing. Nevertheless, the corporate debt-to-GDP ratio amounts to 83%, which is almost double that in the Czech Republic.

31 Total corporate financing consists of loans, issued bonds and shares, i.e. financial liabilities excluding other accounts payable and insurance technical reserves.

32 Liquidity is the ratio of short-term financial assets to short-term liabilities; solvency is the ratio of total financial assets to liabilities; leverage is the ratio of total assets to equity capital.

relative to their gross disposable income increased to 3.1%.[33] According to data from banks, households' interest expenses have increased in contrast to corporations, reflecting past developments in interest rates on loans and a long-term rise in households' debt with banks. Annual growth in household financing slowed further to 5.5% in Q1, with non-bank financing continuing to record an annual decline (see Chart III.5.22).

Annual growth in the **financial assets of households** also dropped further, to 8.8%. This was due to currency and deposits, as the contribution of insurance technical reserves increased slightly, reaching approximately its pre-crisis levels.

III.5.7 The property market

Supply **prices of dwellings** fell slightly year on year in the Czech Republic and Prague in 2010 Q2. However, the moderation of their annual declines in Q1 and Q2 represents the first signs of a gradual stabilisation of the property market (see Chart III.5.23). Throughout 2009, sale prices of dwellings declined more significantly than supply prices in both quarter-on-quarter and year-on-year terms, with Prague recording somewhat smaller declines than the rest of the Czech Republic[34] (see Chart III.5.24). Land prices in January–May 2010 were flat on average in most regions of the Czech Republic and increased slightly on average in Prague.

The decline in residential property demand was reflected in **new housing construction**. The number of housing starts in January–May recorded an annual fall of 20.3%. The number of housing completions rose slightly year on year in the same period (by 0.8%). Falling mortgage interest rates and a slight increase in the number of property market transactions led to a slowdown in the annual decline in new mortgage loans from the double-digit figures seen last year to -5.5% in January–May.

Demand for **rented dwellings** is edging up but has not so far led to growth in market rent. This is probably due to an increase in supply in the rented housing market to include flats whose sale is being deferred in expectation of future price growth.

In connection with an upswing in the European investment market, property transaction volumes are rising on the Czech **commercial property** market as well.

33 Households' interest expenses are taken from the CNB's banking statistics data and therefore only cover interest expenses on households' loans from banks. Unlike the quarterly national accounts data, they take into account the total cost of financial intermediation in excess of the risk-free market interest rate.

34 The CZSO publishes quarterly supply price data within five days of the end of the quarter and quarterly estimates of sale prices, or transfer prices according to tax returns, with a six-month lag.

CHART III.5.22

FINANCING OF HOUSEHOLDS

Growth in financing of households decreased

(contributions in percentage points; annual percentage changes)

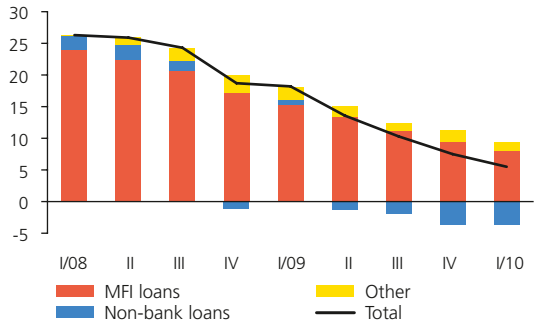


CHART III.5.23

SUPPLY PRICES OF DWELLINGS

The annual decline in supply prices of dwellings moderated in 2010 Q2

(annual percentage changes)

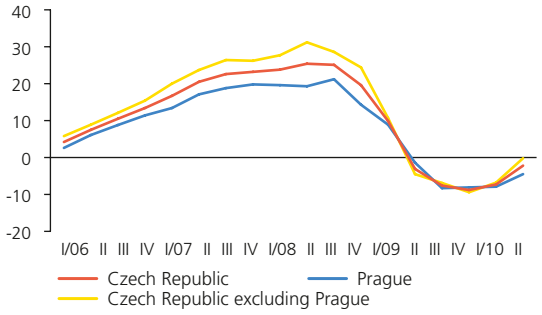


CHART III.5.24

SALE PRICES OF DWELLINGS

The annual decline in sale prices of dwellings deepened in 2009 Q3 and Q4

(annual percentage changes)

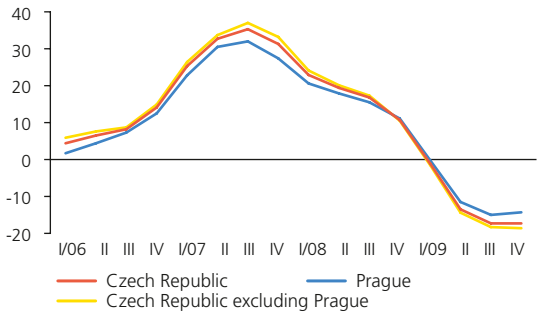


CHART III.6.1

THE CURRENT ACCOUNT

The annual current account deficit increased slightly in 2010 Q1, owing mainly to changes in the balance of services and current transfers
(annual moving total in CZK billions)

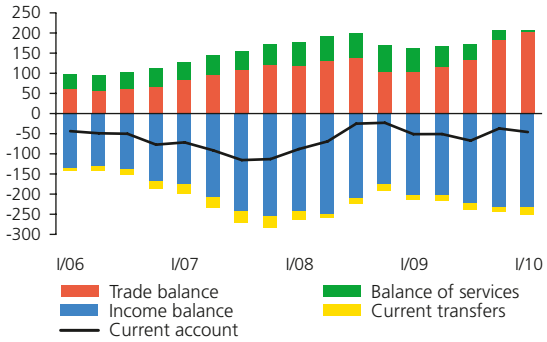


CHART III.6.2

THE TRADE BALANCE

The higher trade surplus for January–May 2010 was affected most strongly by growth in the machinery surplus
(accumulation since start of year in CZK billions)

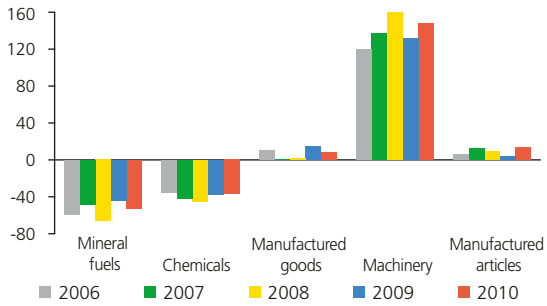
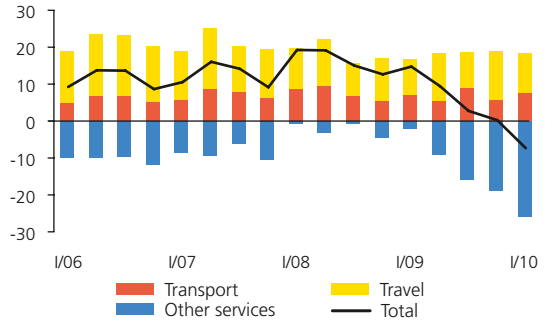


CHART III.6.3

THE BALANCE OF SERVICES

The balance of services was most strongly affected in 2010 Q1 by the balance of other services
(CZK billions)



III.6 THE BALANCE OF PAYMENTS

In 2010 Q1, the balance of payments was characterised by a persisting high output surplus, linked mainly with the recovery in external demand growth and the still good competitiveness of the Czech economy. However, its effect on the current account was largely offset by an income deficit. The annual moving current account deficit of 1.3% of GDP confirms the external balance of the Czech economy. On the financial account, the high other investment deficit was due chiefly to a very strong net outflow in the corporate sector. It was, however, partly offset by a surplus on direct and portfolio investment.

III.6.1 The current account

The **current account** ended 2010 Q1 in a surplus of CZK 16.1 billion (see Chart III.6.1). The quarterly surplus shrank by almost CZK 9 billion year on year, owing chiefly to the services balance and the current transfers balance shifting into deficit. A rise in the trade surplus acted in the opposite direction. The annual moving ratio of the current account to GDP thus increased slightly to -1.3%.

In 2010 Q1, the **trade balance** recorded a surplus of CZK 62.6 billion, up by CZK 21 billion on a year earlier. The increase in the trade surplus was due to developments in real terms. Roughly one-half of the increase was offset by a price effect associated mainly with strongly negative terms of trade for mineral fuels. The recovery in external demand growth was reflected in renewed growth in goods exports, whose nominal year-on-year rate of growth rose to 10.5% despite the appreciation of the koruna. At the same time, it fostered a strong increase in imports as a result of the high import intensity of exports. However, a slight decrease in total domestic demand acted against faster growth in goods imports. As regards the commodity structure, growth in the surpluses on machinery and transport equipment and miscellaneous manufactured articles was the biggest contributor to the increase in the overall surplus (see Chart III.6.2). The trade surplus continued to rise year on year during 2010 Q2, up by more than CZK 10 billion for April and May.

The **balance of services** ended 2010 Q1 in a deficit of CZK 7.4 billion, representing a year-on-year change of more than CZK 22 billion amid a shift from surplus to deficit (see Chart III.6.3). The first-ever quarterly deficit was due to a high other services deficit affected mainly by continuing very fast growth in other business services debits.[35] Nevertheless, the surpluses on transportation and travel increased very slightly.

35 Rapid growth in the trade surplus and a simultaneous sharp deterioration of the services balance have been visible since 2009 Q2. They are related above all to higher estimates for branding, i.e. trade operations of multinational corporations connected with increasing the value of goods imported into the Czech Republic and subsequently re-exported. These are operations of non-resident corporations registered as VAT payers in the Czech Republic which contribute to growth in the trade surplus as a result of increasing the value of exported goods. These operations are corrected in the balance of payments within the other services balance. The overall effect on the output balance is thus neutral.

The **income balance** showed a deficit of CZK 38 billion, which increased only modestly year on year. The balance of direct investment income (CZK -37.6 billion) had the largest impact on the overall balance, influenced chiefly by dividends paid to non-residents and estimated earnings reinvested in the Czech Republic (see Chart III.6.4). The overall deficit widened as a result of a larger investment income deficit stemming from a drop in the profitability of domestic investments abroad. By contrast, a decrease in the deficit on compensation of employees, due mainly to lower wage expenditure on foreign workers in the Czech Republic, helped to moderate the overall deficit.

Current transfers recorded a deficit of CZK 1.3 billion, deteriorating by CZK 5.6 billion year on year due to a faster drop in credits than in debits. The determining factor was the private transfers deficit, which exceeded CZK 6 billion. However, it was largely offset by a government transfers surplus. The surplus on transfers between the Czech Republic and the EU budget, recorded on the current account, reached CZK 6.2 billion. However, the switch from surplus to deficit in the overall balance was due mainly to a lower government transfers surplus.

III.6.2 The capital account

The **capital account** recorded a surplus of CZK 2.3 billion, a decrease of more than CZK 13 billion from a year earlier owing to significantly lower credits. This time its largest item was a surplus on trading in emission allowances of CZK 1.8 billion. Net government revenues from EU funds recorded on the capital account declined to CZK 0.5 billion.

III.6.3 The financial account

The **financial account** ended 2010 Q1 in a deficit of CZK 28.9 billion. This represented a year-on-year deterioration of more than CZK 20 billion. The largest component of the deficit was a net outflow of other investment. The year-on-year widening of the financial account deficit was due exclusively to developments within other investment (see Chart III.6.5).

The net inflow of **direct investment** reached CZK 36.2 billion (see Chart III.6.6). It increased by more than CZK 21 billion year on year due to faster growth in foreign investment in the Czech Republic than in Czech investment abroad. The inflow of foreign direct investment in the Czech Republic increased to CZK 53.3 billion owing to a significant change in other capital flows. Other capital, especially in the form of financial loans and trade credits, also represented the largest component of the overall inflow in Q1 (59%). By contrast, the inflow of investment in equity capital was very low. Growth in Czech direct investment abroad was also influenced the most by credit relationships between affiliated corporations. With regard to its branch structure, the foreign capital inflow was channelled primarily into transport and telecommunications, followed by manufacture of

CHART III.6.4

THE INCOME BALANCE

The income balance was most strongly affected in 2010 Q1 by growth in the investment income deficit
(accumulation since start of year in CZK billions)

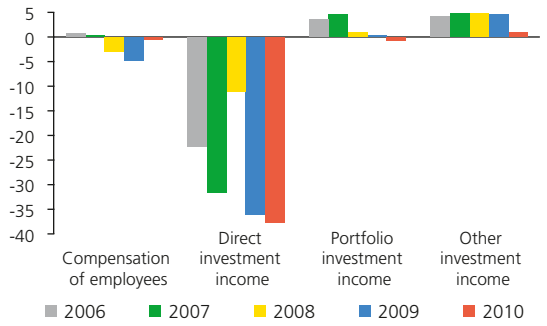


CHART III.6.5

THE FINANCIAL ACCOUNT

The annual financial account surplus decreased in 2010 Q1, owing mainly to change in other investment
(annual moving total in CZK billions)

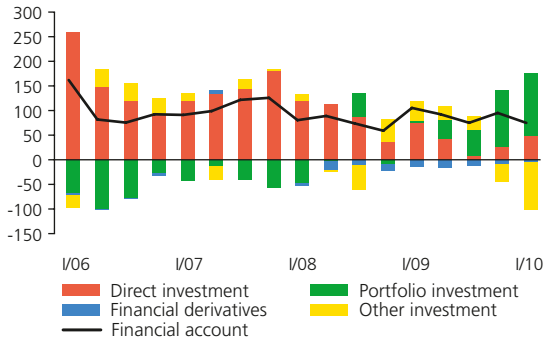


CHART III.6.6

DIRECT INVESTMENT

The direct investment surplus in 2010 Q1 was affected most strongly by a net inflow of other capital
(CZK billions)

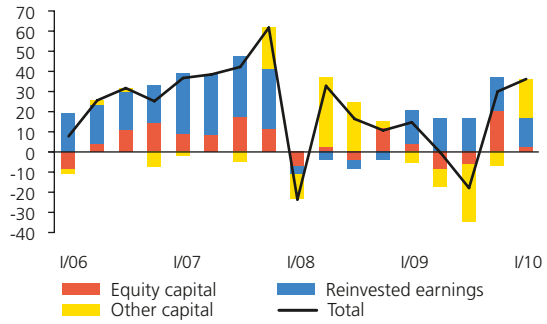


CHART III.6.7

PORTFOLIO INVESTMENT

Portfolio investment recorded a net inflow in 2010 Q1 owing to purchases of bonds by non-residents
(CZK billions)

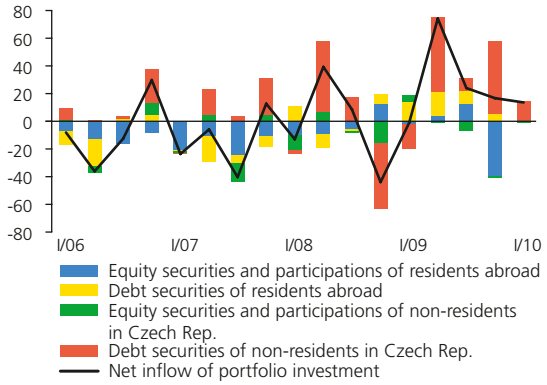
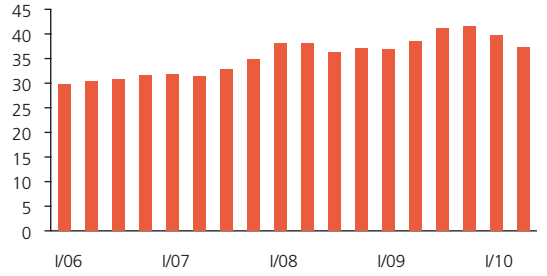


CHART III.6.8

THE CNB'S INTERNATIONAL RESERVES

The CNB's international reserves decreased in dollar terms in 2010 Q2 compared to the previous quarter
(USD billions)



metals and metal products. The outflow of capital abroad went mainly into the electricity, gas and water supply sector.

Portfolio investment recorded a net inflow of CZK 13.6 billion in 2010 Q1 (see Chart III.6.7), following a moderate net outflow a year earlier. Given that the trading of domestic investors in foreign equity and debt securities was balanced, the only significant operations were purchases of long-term koruna government bonds by non-residents and issues of corporate bonds in foreign markets. The annual change in portfolio investment flows of almost CZK 15 billion was due chiefly to renewed interest of foreign investors in domestic bonds.

The net outflow of capital in the form of **financial derivatives** was only CZK 0.7 billion. It fell by more than CZK 3 billion year on year.

Other investment recorded a net capital outflow of CZK 78.1 billion in 2010 Q1, up by almost CZK 60 billion on a year earlier. Both the overall balance and the increase in deficit were affected mainly by a net outflow of corporate sector funds exceeding CZK 40 billion. It was related to the provision of trade credits and financial loans to non-residents and the concurrent repayment of loans received from abroad. Also significant was a net outflow in the financial corporations sector (CZK -36.1 billion), linked with decreasing balances on non-residents' deposits with domestic banks. Only a net inflow of government sector funds, linked with EIB loans for infrastructure development, helped to reduce the overall deficit very slightly.

The CNB's **international reserves** totalled CZK 779.6 billion at the end of 2010 Q2, up by more than CZK 30 billion quarter on quarter mainly as a result of valuation changes. In dollar terms, the reserves declined by USD 2.5 billion to USD 37.2 billion in the same period (see Chart III.6.8). The CNB's international reserves covered 48.2% of all external debt liabilities of domestic entities at the end of Q1.

III.7 THE EXTERNAL ENVIRONMENT

The economic recovery in the euro area should strengthen in Q2, thanks mainly to Germany. However, future growth will be slowed by fiscal cuts in most countries. By contrast, the USA is sending out signals dampening the future growth optimism stemming from the US economy's Q1 results. The estimates of future inflation were increased in the euro area and decreased in the USA. However, these changes are not large. The euro-dollar exchange rate hit a four-year low at the beginning of June. However, it strengthened by more than 9% in the first three weeks of July as concerns over the financing of indebted euro area countries subsided and the economic outlook for the USA worsened. Commodity prices were declining in Q2, but a significant turnaround was recorded for food commodity prices in July, with growth expected for the entire next two years. Weaker growth is also expected for oil prices.

III.7.1 The euro area

The quarterly growth rate of **euro area** GDP reached 0.2% in 2010 Q1 as a result of growth in inventories and government consumption. The annual change in economic activity (see Chart III.7.1) returned to positive territory following five quarters of decline. Growth of 0.6% was achieved thanks to slower declines in household consumption and investment and a rise in net exports. The ratio of the current account deficit to GDP declined by one-half in year-on-year comparison to -0.9%. The July Consensus Forecasts (CF) expect annual growth to accelerate to 1.1% in 2010 as a whole and 1.4% in 2011. Compared to the April CF, this represents a slight deterioration of 0.1 percentage point for both years.

Preliminary estimates suggest that **euro area** growth will increase in Q2 to around 1.2% year on year (0.5% quarter on quarter). This is indicated by a pick-up in industrial production growth in April and May to 9.5% and an increase in new industrial orders of 22% in April. Despite some fluctuations, the leading indicators for industry and services also remain in the growth band. In May, unemployment was flat at 10% for the third consecutive month, but employment is expected to increase again in year-on-year terms in Q2 following four quarters of decline or stagnation.

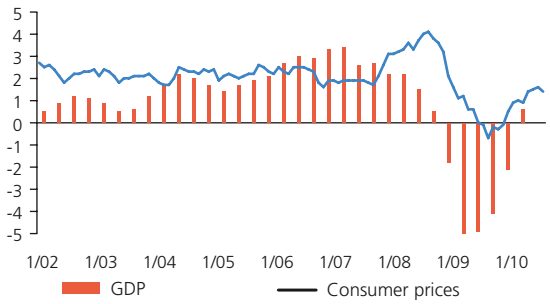
Annual **inflation** in the euro area fell by 0.2 percentage point to 1.4% in June, mainly because of lower growth in energy and transport prices. The July CF expects headline inflation to remain roughly at this level for the rest of 2010 and in 2011. This was a slight increase in the inflation estimate by comparison with the April CF, but even in the new forecast inflation remains safely within the price stability band as defined by the ECB. The ECB also revised its outlook for inflation slightly upwards in June, to a level almost identical to the July CF estimate. Low core inflation, which rose to 0.9% in June, also points to weak domestic inflation pressures. M3 decreased by 0.2% year on year and loans to

CHART III.7.1

GDP AND INFLATION IN THE EURO AREA

The year-on-year decline in euro area GDP turned into growth in 2010 Q1 and inflation increased during 2010 Q2 compared to the previous quarter

(annual percentage changes; source: Eurostat)



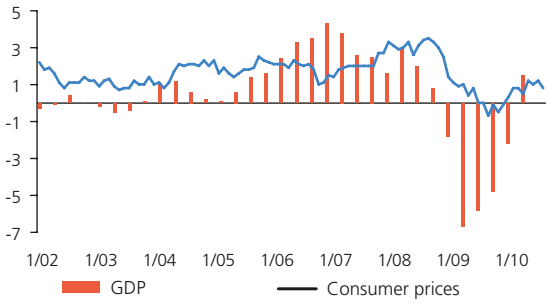
non-financial corporations rose by only 0.1%. In Q2 and July, the ECB left its key rate unchanged (since May 2009) at 1%. The ECB expects continued moderate economic growth and does not expect inflation pressures or inflation expectations to rise in the medium term.

CHART III.7.2

GDP AND INFLATION IN GERMANY

German GDP increased year on year in 2010 Q1 after five quarters of contraction; inflation decreased at the end of 2010 Q2

(annual percentage changes; source: Eurostat)



The **German** economy continued to recover only slowly in 2010 Q1, partly because of the cold winter (see Chart III.7.2). As in the previous quarter, quarterly growth was only 0.2% and all components of domestic demand except additions to inventories recorded a decrease, as did net exports. A significant turnaround in economic activity occurred during Q2. The continuing recovery in emerging economies (especially in Asia, but also in Latin America) coupled with the weakening euro led to a marked rise in demand for German exports. Interest in German high technology (above all complete industrial facilities and luxury cars) boosted industrial orders (by 32% year on year in April) and industrial production (by 14% year on year in April and May). The unemployment rate declined both month on month (by 0.1 percentage point to 7%) and year on year (by 0.6 percentage points). According to a preliminary estimate of the German Ministry of Economics and Technology, GDP rose by 1.5% and industrial production by 5% quarter on quarter in Q2.

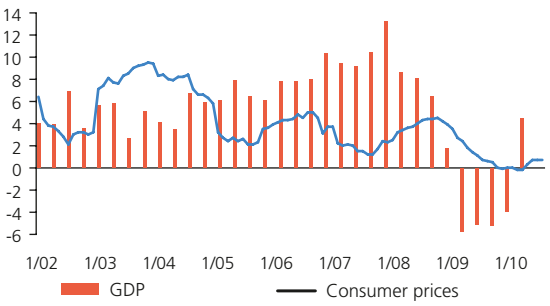
The improved economic situation in **Germany** was also reflected in an increased economic growth estimate for 2010 as a whole. Compared to April, the July CF increased its prediction for this year by 0.4 percentage point to 2%, but left that for next year unchanged at 1.7%. The OECD increased its forecast similarly. However, counteracting the rise in demand for German products is a deterioration in household confidence regarding the future economic situation. An increase was recorded in the proportion of respondents who expect the recession to return because they do not believe that the rapid GDP growth accompanied by a decrease or at least stagnation of the current unemployment rate will be sustained. The July CF also predicts that household consumption will drop by almost 1% this year. That said, German unemployment is among the lowest in the EU and is currently lower than before the financial crisis with a downward tendency. Inflation was around 1% in Q2 (0.8% in June) and is predicted (by the July CF) to stay at this level for the rest of 2010 and rise modestly to 1.4% next year.

CHART III.7.3

GDP AND INFLATION IN SLOVAKIA

Slovakia recorded strong GDP growth in 2010 Q1; annual inflation increased in 2010 Q2

(annual percentage changes; source: Eurostat)



After a one-year hiatus, the **Slovak** economy returned to growth in 2010 Q1 (see Chart III.7.3), with real GDP rising by a high 4.8%. The renewed economic growth was largely due to rising external demand. In May the industrial production index reached its highest level this year, rising by 31% year on year. The slower growth in domestic consumption compared to 2009 Q4 reflects a still relatively high unemployment rate (exceeding 14%). As in the previous two months, inflation remained stable at 0.7%. According to the June CF estimate, economic growth of around 3% is expected for 2010, i.e. lower than in Q1 alone. The state of public finances is a topical issue in the Slovak economy. According to current IMF estimates, the originally declared state budget deficit to GDP ratio of 5.5% in 2010 should be exceeded by 1.5–2.5 percentage points.

III.7.2 The United States

The annual growth of the **US** economy accelerated to 2.4% in 2010 Q1 thanks to increases in all components of domestic and external demand (see Chart III.7.4). By contrast, the quarterly growth rate fell by one-half compared to 2009 Q4, to 0.7%, owing to a decline in fixed investment, net exports and government consumption, whose effect outweighed faster growth in private consumption and additions to inventories. The number of signals indicating a further slowdown of economic growth was rising during Q2. The month-on-month growth rate of industrial production fell from 1.3% in May to 0.1% in June. The unemployment rate decreased to 9.5% in June, but employment has so far been sending out mixed signals. The first two months of Q2 indicated a renewed widening of the trade deficit. After rising for many months, the leading indicators changed trend. Although their levels still indicate continuing economic growth, all of them weakened in June at the latest. The estimates for economic growth in 2010 and 2011 have also been revised downwards in recent months. In the July CF, they were reduced by 0.1 percentage point compared to the April CF, to 3.1% and 3.0% respectively. Similarly, the Fed lowered its estimates by 0.2 percentage point.

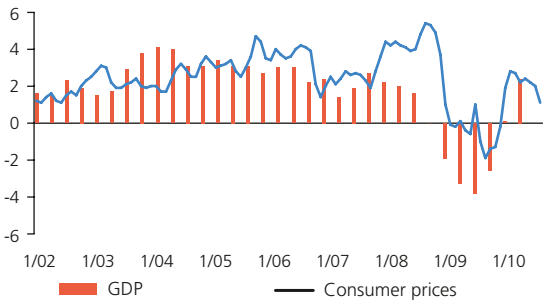
In addition to external factors, growth was weakened by the situation within the **USA**. High unemployment and a deteriorating residential property market are adversely affecting private consumption. Moreover, further government measures to support economic growth are surrounded by uncertainty. So far the US Congress has not approved the fiscal mini-stimulus (of roughly USD 30 billion) aimed at dampening the impact of the discontinuation of the large stimulus implemented in 2009, and it is not certain whether it will prolong the significant tax relief introduced by the previous administration. The domestic factors of the weakening are complemented by external ones: the budget crisis in Europe, the slowdown in growth in China and the marked appreciation of the US dollar, which is reducing the competitiveness of US producers.

Annual **inflation** in the USA fell for the third consecutive month (to 1.1% in June) and consumer prices are also falling in month-on-month comparison. Producer prices and import prices are showing the same trend. In addition to lower energy prices, this is due to low capacity utilisation and high unemployment. The absence of domestic inflation pressures is confirmed by low core inflation, which was flat at 0.9% in June. For 2010 and 2011 the July CF expects low inflation at 1.7% and 1.5% respectively, down by 0.2 percentage point compared to the April CF. In Q2, the Fed left its key policy rate unchanged at 0%–0.25%. According to the minutes of the FOMC meeting on 22–23 June, the Fed expects that inflation will not increase and that the rate of economic growth will weaken. In the Fed's opinion, the US economy will not achieve full employment in the next two years, but the situation at the same time will not require further monetary stimuli. The Fed hinted that it would maintain its policy rate at the current low level for an extended period, which according to analysts could mean as long as until the end of 2011.

CHART III.7.4

GDP AND INFLATION IN THE USA

Annual US GDP growth increased further in 2010 Q1; inflation continued to fall in 2010 Q2
(annual percentage changes; source: BEA, BLS)



The **US** federal budget deficit exceeded USD 1 trillion in June (for nine months of the fiscal year 2009/2010). The deficit fell slightly by comparison with the fiscal year 2008/2009. The US government expects the deficit-to-GDP ratio to reach 10.7% for the entire fiscal year. The government expects it to decline to 8.5% in the next fiscal year. The July CF predicts a slightly better trend.

III.7.3 The USD/EUR exchange rate

In **2010 Q2**, the euro returned to the downward trend it recorded in December 2009 (see Chart III.7.5) and continued weakening against the US dollar. It also depreciated against the other reserve currencies. Against the dollar the euro weakened from USD 1.35 to a trough of USD 1.19 at the start of June. The euro had last traded at this level against the dollar in March 2006. The euro depreciated against the Japanese yen by 14% to JPY 107.3 (its lowest level since November 2001). Against the pound sterling the single currency weakened by 10% to EUR 1.24, its lowest level since November 2008.

During July, by contrast, the euro appreciated sharply vis-à-vis all reserve currencies. In the third week of July it broke through USD 1.30 to the euro. The main drivers of its appreciation are concerns about a slowdown or even repeated downturn of the US economy (a double-dip recession). Investors' attention is thus shifting from troubled European countries to the United States, which has been sending out an increasing number of adverse signals during the last month (see above). The seriousness of the situation has been confirmed by the Fed, which lowered its GDP growth forecast for 2010 and 2011 in its July statement. Given the gradual unwinding of fiscal and monetary stimuli, the Fed is hinting at the possibility of reintroducing some support measures (e.g. quantitative easing). Such steps could lead to a further weakening of the US currency. The same goes for the recent statement by Fed Chairman B. Bernanke that key interest rates will remain at the current level for an extended period. The appreciation of the euro was also facilitated by recent successful auctions of Portuguese, Greek and Spanish bonds, as well as expectations of positive results of the stress tests of European banks.

The **July CF** forecasts an exchange rate of USD 1.21 to the euro at both the three-month and one-year horizon. However, this outlook does not take into account the latest exchange rate developments.

III.7.4 Prices of oil and other commodities

Following a sharp decline in May, when the **price of Brent crude oil** fell from USD 88.5 a barrel to below USD 70 a barrel in three weeks, trading in the first half of June was volatile with an upward trend (see Chart III.7.6). However, the price dropped rapidly again at the end of June and then fluctuated between USD 70 and 75 a barrel in the first half of July. While in May the main factors affecting the price of oil

CHART III.7.5

EURO EXCHANGE RATE AGAINST MAJOR CURRENCIES

The euro has been recording a correction since July following its sharp depreciation against reserve currencies in 2010 Q2
(2 January 2006 = 100; source: Datastream; outlook from CF)

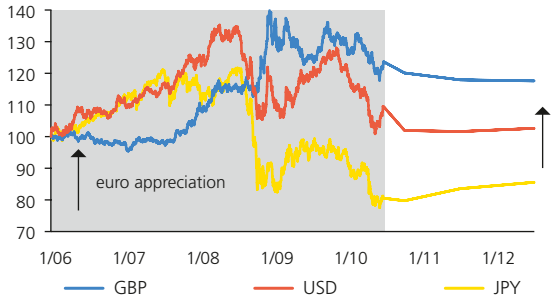
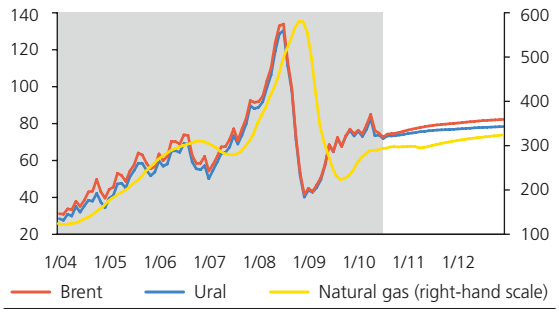


CHART III.7.6

OIL AND NATURAL GAS PRICES

After a short surge the price of oil returned to the band of USD 70–80 a barrel
(oil in USD/barrel – left-hand scale; gas in USD/1000 m³ – right-hand scale; source: IMF, Bloomberg)



were the Greek government's problems with financing the national debt and concerns over the debt crisis spreading to other indebted euro area countries (and the dollar consequently appreciating rapidly), thereafter the price of oil (together with stock markets) responded more to the mixed reports on the evolution of the global economy.

Owing to the improved global economic outlook, the International Energy Agency (IEA) revised expected growth in **oil consumption** this year upwards by 80,000 barrels a day (i.e. growth of 1.77 million barrels a day in 2010; by contrast, the growth expected for 2011 was reduced slightly to 1.35 million barrels a day, so total expected consumption should reach 87.84 million barrels a day in 2011). This growth is due solely to non-OECD countries. At the start of July, oil prices were also supported by stock market sentiment (reflecting a good start to the Q2 reporting season for US corporations) as well as by a minor weakening of the dollar after concerns regarding the fiscal problems in the euro area subsided.

The upward oil price movements have been only modest, as the rising consumption of oil has so far not led to the expected fall in stocks of **oil and oil products**. Stocks in the USA and the OECD as a whole have long been around one standard deviation above the moving five-year average. Until May, supplies from OPEC were rising gradually[36] as discipline in adherence to quotas declined. Moreover, supplies from non-OPEC countries surprisingly increased as well in 2010 H1.

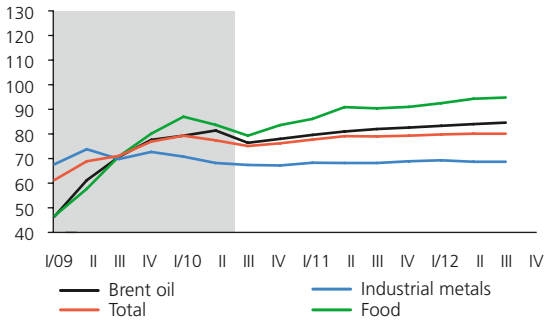
As oil prices declined, the **outlook** based on futures also shifted downwards. The price of oil should rise gradually to USD 82 a barrel at the end of 2012. This outlook is also consistent with the WTI oil price forecast according to the July CF. The predicted natural gas price (Russian gas at the German border; the historical data come from the IMF) is derived from the oil price forecast.

After rising strongly in Q1, **commodity prices** were falling gradually in 2010 Q2 (see Chart III.7.7), mainly because of uncertainty regarding the future global economic recovery. This trend was strongest for prices of industrial metals, oil and agricultural commodities. On the cereals market, however, a turnaround started to occur in July. In the first two weeks of July, maize prices rose by 18% and wheat prices by 28%, reaching their highest level since the start of the year. This was due to persisting adverse weather (drought and floods) in the main cereal-growing regions (the USA and Europe). Estimates of a very low harvest this year suggest that this upward trend will continue.

CHART III.7.7

COMMODITY PRICES

The downward trend in agricultural commodity prices seen since January switched to growth in July 2010
(2008 Q1 = 100; source: The Economist)



36 Production edged down in June, owing exclusively to problems in oil extraction in Nigeria.

CHARTS IN THE TEXT

ABBREVIATIONS

ARA	Amsterdam-Rotterdam-Antwerp
BCPP	Prague Stock Exchange
BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics
CF	Consensus Forecasts
CNB	Czech National Bank
CPI	consumer price index
CZK	Czech koruna
CZSO	Czech Statistical Office
ČMZRB	Czech-Moravian Guarantee and Development Bank
ECB	European Central Bank
EIB	European Investment Bank
EONIA	Euro Over-Night Index Average
ERM II	Exchange Rate Mechanism
ESA 95	European System of National Accounts
ESCB	European System of Central Banks
EU	European Union
EUR	euro
EURIBOR	Euro Interbank Offered Rate
Fed	US central bank
FMIE	Financial Market Inflation Expectations
FRA	forward rate agreement
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
HP filter	Hodrick-Prescott filter
HUF	Hungarian forint
ILO	International Labour Organization
IMF	International Monetary Fund
IRS	interest rate swap
LFS	Labour Force Survey
LIBOR	London Interbank Offered Rate
M1, M2	monetary aggregates
MLSA	Ministry of Labour and Social Affairs
MNB	Hungarian National Bank
MSE	mean squared error
NBP	National Bank of Poland
NCG	net credit to government
NDAs	net domestic assets
NEAs	net external assets
NPISHs	non-profit institutions serving households
OECD	Organisation for Economic Cooperation and Development
OMFIs	other monetary financial institutions
PLN	Polish zloty
PPI	producer price index
PRIBID	Prague Interbank Bid Rate
PRIBOR	Prague Interbank Offered Rate
(1W, 1M, 1Y)	(one-week, one-month, one-year)
repo rate	repurchase agreement rate
SFAOs	state financial assets operations
SITC	Standard International Trade Classification
USD	US dollar
VAT	value added tax

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	(Annex)	April 2001
Central Bank standards	(box)	leden 2003
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

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).

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

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 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 consist of direct investment, portfolio investment, other investment and financial derivatives transactions.

Fiscal position: 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 government sector. A negative government balance is called a government sector deficit and a positive government balance is called a government sector 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.

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 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.

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.

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 deposits with agreed maturity, deposits redeemable at notice and repurchase agreements.

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 regulated 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 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.

Output balance: The sum of the trade balance and the services balance.

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.

Regulated 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.

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.

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.

Table 1

KEY MACROECONOMIC INDICATORS												
						years						
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
DEMAND AND SUPPLY												
Gross domestic product												
GDP	CZK bn, constant p., seas. adjusted	2,286.0	2,368.4	2,470.8	2,628.5	2,812.2	2,984.6	3,053.3	2,931.3	**2,979.6**	**3,034.8**	**3,123.3**
GDP	%, y-o-y, real terms, seas. adjusted	1.8	3.6	4.3	6.4	7.0	6.1	2.3	-4.0	**1.6**	**1.8**	**2.9**
Household consumption	%, y-o-y, real terms, seas. adjusted	2.2	5.9	2.8	2.6	5.2	4.8	3.5	-0.2	**-0.8**	**0.4**	**1.7**
Government consumption	%, y-o-y, real terms, seas. adjusted	6.7	7.1	-3.5	2.9	1.2	0.7	1.0	4.2	**2.6**	**2.5**	**2.4**
Gross capital formation	%, y-o-y, real terms, seas. adjusted	4.5	-1.4	8.4	-0.6	10.2	9.3	-3.1	-16.8	**4.5**	**2.7**	**2.6**
Exports of goods and services	%, y-o-y, real terms, seas. adjusted	2.0	7.2	20.3	11.8	16.2	15.0	5.7	-10.5	**8.9**	**5.0**	**7.0**
Imports of goods and services	%, y-o-y, real terms, seas. adjusted	4.9	8.0	17.5	5.2	14.7	14.2	4.3	-10.4	**8.7**	**4.8**	**6.3**
Net exports	CZK bn, constant p., seas. adjusted	-146.4	-170.7	-152.5	-26.1	3.6	24.5	65.8	55.1	**64.0**	**75.2**	**105.8**
Coincidence indicators												
Industrial production	%, y-o-y, real terms	4.1	1.6	10.4	3.9	8.3	10.6	-1.8	-13.6	-	-	-
Construction output	%, y-o-y, real terms	3.0	9.3	8.8	5.2	6.0	7.1	0.0	-0.9	-	-	-
Receipts in retail sales	%, y-o-y, real terms	1.7	7.3	3.9	8.1	10.9	9.9	2.7	-4.7	-	-	-
PRICES												
Main price indicators												
Inflation rate	%, end-of-period	1.8	0.1	2.8	1.9	2.5	2.8	6.3	1.0	-	-	-
Consumer Price Index	%, y-o-y, average	1.8	0.1	2.8	1.9	2.5	2.8	6.4	1.1	**1.6**	**1.9**	**2.1**
Regulated prices (17.15%)*	%, y-o-y, average	5.7	0.6	3.5	5.7	9.3	4.8	15.6	8.4	**2.9**	**3.6**	**3.1**
Net inflation (82.85%)*	%, y-o-y, average	0.8	0.0	1.8	0.7	0.4	1.7	2.4	-0.9	**0.1**	**1.5**	**1.9**
Food prices (including alcoholic beverages and tobacco) (25.63%)*	%, y-o-y, average	-0.9	-1.2	2.8	0.0	-0.2	3.8	3.0	-0.9	**1.1**	**2.7**	**1.7**
Adjusted inflation excluding fuels (53.52%)*	%, y-o-y, average	2.4	0.6	1.2	0.7	0.6	0.7	2.0	0.0	**-1.2**	**0.7**	**1.8**
Fuel prices (3.70%)*	%, y-o-y, average	-9.3	1.5	4.5	7.8	3.7	-0.3	4.3	-11.1	**12.1**	**4.1**	**3.9**
Monetary-policy inflation (excluding tax changes)	%, y-o-y, average	1.8	0.1	2.0	1.8	2.3	2.2	4.4	0.9	**0.5**	**1.8**	**2.1**
GDP deflator	%, y-o-y, seas. adjusted	2.8	0.9	4.5	-0.3	1.1	3.4	1.8	2.6	**0.5**	**2.8**	**2.0**
Partial price indicators												
Producer prices	%, y-o-y, average	-0.5	-0.3	5.6	3.1	1.4	4.1	4.5	-3.1	**1.5**	**3.2**	**2.4**
Agricultural prices	%, y-o-y, average	-7.5	-4.5	9.6	-9.8	1.3	16.4	10.8	-24.3	**5.9**	**6.7**	-
Construction work prices	%, y-o-y, average	2.7	2.2	3.7	3.0	2.9	3.9	4.5	1.3	-	-	-
Brent crude oil	%, y-o-y, average	2.2	15.5	32.7	42.3	20.0	11.1	34.5	-36.7	**23.1**	**3.2**	**3.6**
LABOUR MARKET												
Average monthly wages in monitored organisations	%, y-o-y, nominal terms	8.0	5.8	6.3	5.0	6.6	7.2	8.3	4.0	**2.2**	**2.9**	**4.0**
Average monthly wages in monitored organisations	%, y-o-y, real terms	6.1	5.7	3.4	3.0	4.0	4.3	1.9	3.0	**0.6**	**1.0**	**1.9**
Number of employees	%, y-o-y	-0.8	-2.0	-0.2	2.2	1.2	1.9	1.7	-2.1	**-2.9**	**-0.7**	**1.0**
Nominal unit wage costs	%, y-o-y	4.6	2.3	1.8	0.6	1.0	3.0	6.1	4.2	**-4.2**	**-0.1**	**2.0**
Nominal unit wage costs in industry	%, y-o-y	0.5	3.4	-4.5	-4.0	-5.6	0.9	0.3	4.5	-	-	-
Aggregate labour productivity	%, y-o-y	1.9	3.6	4.1	5.2	4.8	3.4	1.2	-3.0	**3.5**	**2.4**	**2.4**
ILO general unemployment rate	%, average	-	7.8	8.3	7.9	7.1	5.3	4.4	6.7	**8.2**	**8.2**	**7.4**
Registered unemployment rate	%, average	-	-	10.0	9.5	8.6	7.0	5.8	8.3	**9.4**	**9.3**	**8.6**
PUBLIC FINANCE												
Public finance deficit (ESA95)	CZK bn, current p.	-166.8	-170.0	-82.7	-106.6	-84.5	-23.2	-98.6	-213.7	**-198.6**	**-233.5**	**-234.3**
Public finance deficit / GDP**	%, nominal terms	-6.8	-6.6	-2.9	-3.6	-2.6	-0.7	-2.7	-5.9	**-5.4**	**-6.0**	**-5.7**
Public debt (ESA95)	CZK bn, current p.	695.0	768.3	847.8	885.4	948.3	1,023.8	1,104.9	1,282.3	**1,439.6**	**1,634.2**	**1,825.1**
Public debt / GDP**	%, nominal terms	28.2	29.8	30.1	29.7	29.4	29.0	30.0	35.4	**38.8**	**42.1**	**44.8**
EXTERNAL RELATIONS												
Current account												
Trade balance	CZK bn, current p.	-71.3	-69.8	-13.4	59.4	65.1	120.6	102.7	180.6	**205.6**	**255.0**	**305.0**
Trade balance / GDP	%, nominal terms	-2.9	-2.7	-0.5	2.0	2.0	3.4	2.8	5.0	**5.5**	**6.6**	**7.5**
Balance of services	CZK bn, current p.	21.9	13.2	16.6	36.9	45.1	49.7	65.9	27.0	**-35.4**	**-45.0**	**-55.0**
Current account	CZK bn, current p.	-136.4	-160.6	-147.5	-39.8	-77.2	-113.1	-22.9	-37.0	**-69.9**	**-55.0**	-
Current account / GDP	%, nominal terms	-5.5	-6.2	-5.2	-1.3	-2.4	-3.2	-0.6	-1.0	**-1.9**	**-1.4**	-
Foreign direct investment												
Direct investment	CZK bn, current p.	270.9	53.5	101.8	279.6	90.3	179.1	36.3	26.5	**75.0**	**75.0**	-
Exchange rates												
CZK/USD	average	32.7	28.2	25.7	24.0	22.6	20.3	17.1	19.1	**20.0**	**20.2**	**19.7**
CZK/EUR	average	30.8	31.8	31.9	29.8	28.3	27.8	25.0	26.5	**25.4**	**24.3**	**23.9**
CZK/EUR	%, y-o-y, real (CPI euro area), avg.	-	-	0.0	-6.3	-5.1	-2.2	-12.5	5.6	**-4.1**	**-4.0**	**-1.6**
CZK/EUR	%, y-o-y, real (PPI euro area), avg.	-	-	-3.1	-5.6	-1.3	-3.9	-8.9	4.4	**-3.8**	**-5.2**	**-2.1**
Foreign trade prices												
Prices of exports of goods	%, y-o-y, average	-6.6	0.8	3.6	-1.5	-1.2	1.4	-4.6	0.2	**-0.4**	**-0.2**	**0.5**
Prices of imports of goods	%, y-o-y, average	-8.5	-0.3	1.6	-0.5	0.3	-1.0	-3.3	-3.5	**2.2**	**0.0**	**0.2**
MONEY AND INTEREST RATES												
M2	%, y-o-y, average	7.0	4.1	7.7	5.3	8.9	11.2	8.4	6.2	**4.6**	**7.1**	**7.6**
2W repo rate	%, end-of-period	2.75	2.00	2.50	2.00	2.50	3.50	2.25	1.00	-	-	-
3M PRIBOR	%, average	3.5	2.3	2.3	2.0	2.3	3.1	4.0	2.2	**1.2**	**1.4**	**2.2**

* in brackets are constant weights in actual consumer basket
** CNB calculation
– data are not available / forecasted / released
data in bold = CNB forecast

2008				2009				2010				2011				2012			
QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV
760.0	765.3	766.6	761.4	732.5	729.2	732.8	736.8	740.4	742.4	748.8	748.0	748.5	756.0	762.0	768.3	773.7	778.9	782.7	788.1
3.1	3.5	2.2	0.5	-3.6	-4.7	-4.4	-3.2	1.1	1.8	2.2	1.5	1.1	1.8	1.8	2.7	3.4	3.0	2.7	2.6
4.5	3.7	3.0	2.6	0.8	0.0	-0.5	-1.2	-0.5	-1.4	-1.0	-0.4	-0.9	0.6	0.9	1.2	1.4	1.5	1.8	2.0
-0.8	2.3	2.9	-0.4	3.1	3.4	5.5	4.8	2.0	1.6	3.3	3.3	4.6	4.2	0.4	1.0	3.1	2.8	2.2	1.6
-1.8	-8.8	-10.5	9.4	-8.9	-16.2	-16.0	-25.3	-4.5	8.3	8.0	7.4	0.8	3.7	3.4	3.1	2.9	2.7	2.5	2.4
14.1	13.4	5.1	-8.7	-18.8	-15.5	-8.2	2.3	12.9	11.6	5.2	6.3	4.2	4.0	5.3	6.6	7.3	7.3	6.8	6.7
12.8	9.2	1.4	-5.3	-16.9	-14.7	-6.8	-2.1	10.7	12.0	5.3	7.3	3.7	4.6	5.1	5.7	6.2	6.3	6.2	6.3
14.2	32.1	30.0	-10.5	-4.2	21.0	16.7	21.5	10.6	20.6	17.5	15.3	14.9	16.9	20.5	22.8	24.8	26.0	27.0	28.0
2.1	3.9	0.8	-13.2	-19.0	-19.0	-13.2	-2.1	7.5	-	-	-	-	-	-	-	-	-	-	-
0.7	-2.3	6.4	-4.2	-10.8	1.2	0.3	2.0	-21.4	-	-	-	-	-	-	-	-	-	-	-
5.3	4.7	4.5	-2.7	-4.3	-5.1	-5.4	-4.0	-0.8	-	-	-	-	-	-	-	-	-	-	-
4.3	5.4	6.4	6.3	5.0	3.7	2.1	1.0	0.7	0.6	-	-	-	-	-	-	-	-	-	-
7.4	6.8	6.6	4.7	2.2	1.4	0.2	0.4	0.7	1.1	2.0	2.5	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.0
15.0	14.7	15.8	16.9	11.2	9.8	7.5	5.2	0.8	2.3	4.0	4.6	4.7	3.8	3.1	2.9	3.1	3.1	3.1	3.0
3.6	2.9	2.9	0.4	-0.6	-0.6	-1.5	-0.7	-0.5	-0.3	0.4	0.7	1.2	1.4	1.6	1.7	1.8	1.9	1.9	1.9
5.7	3.3	3.4	-0.3	0.0	0.4	-2.0	-2.2	-1.4	-0.2	2.5	3.6	3.4	3.4	2.2	1.7	1.6	1.7	1.8	1.9
1.8	2.2	2.3	1.7	0.6	0.1	-0.5	-0.2	-1.1	-1.2	-1.1	-1.3	-0.2	0.3	1.0	1.5	1.7	1.8	1.8	1.9
14.4	8.5	5.9	-11.5	-20.5	-15.7	-11.8	3.7	18.1	13.3	7.8	9.2	6.3	1.7	3.9	4.5	4.3	4.2	3.7	3.5
5.3	4.6	4.7	2.9	1.6	1.3	0.2	0.4	-0.3	0.1	0.9	1.4	1.8	1.8	1.9	1.9	2.0	2.1	2.1	2.0
2.3	1.4	1.1	2.6	3.6	3.3	2.2	1.3	-1.7	1.6	1.6	0.5	3.1	2.1	2.5	3.4	2.8	1.8	1.7	1.9
5.6	5.1	5.5	1.7	-1.1	-3.6	-5.2	-2.6	-1.4	1.3	2.8	3.5	3.9	3.4	2.8	2.7	2.6	2.4	2.3	2.3
26.7	27.2	7.7	-18.5	-27.8	-29.5	-23.8	-16.0	-5.6	-2.8	10.7	21.4	15.4	12.1	1.7	-2.4	-	-	-	-
4.7	5.0	4.5	3.9	2.8	1.4	0.5	0.3	0.3	-0.2	-	-	-	-	-	-	-	-	-	-
66.1	77.8	54.7	-36.7	-53.3	-51.5	-41.1	33.3	70.6	32.6	6.4	0.5	0.2	-0.4	9.1	6.0	4.6	3.7	3.1	2.8
10.0	7.9	7.5	8.1	2.9	3.2	4.6	5.2	2.2	1.9	2.4	2.2	2.7	3.1	3.2	2.7	5.2	3.8	3.2	3.9
2.4	1.0	0.8	3.2	0.8	1.8	4.5	4.8	1.5	0.7	0.3	-0.3	0.8	1.2	1.3	0.8	3.1	1.7	1.1	1.8
2.1	1.9	1.7	1.2	-0.9	-1.8	-2.8	-2.9	-3.2	-2.9	-2.7	-2.9	-1.4	-1.1	-0.4	0.1	0.7	0.9	1.1	1.3
8.0	5.3	4.5	6.9	5.0	4.4	4.7	2.9	-3.2	-5.3	-4.4	-3.8	-0.8	-0.4	0.7	0.1	2.4	1.6	1.5	2.5
3.3	-1.4	-1.1	1.1	4.5	5.2	5.1	3.0	-7.0	-	-	-	-	-	-	-	-	-	-	-
1.4	2.5	1.9	-1.0	-3.6	-4.1	-3.1	-1.0	3.2	3.8	3.6	3.1	2.0	2.5	2.2	2.9	3.0	2.6	2.2	1.9
4.7	4.2	4.3	4.4	5.8	6.3	7.3	7.2	8.0	8.0	8.4	8.4	8.6	8.1	8.3	8.0	8.0	7.3	7.3	6.9
6.3	5.5	5.6	5.8	7.5	8.1	8.7	9.0	10.1	9.1	9.2	9.3	10.0	9.0	9.2	9.1	9.7	8.4	8.4	8.0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42.9	39.3	27.0	-6.6	41.7	52.4	44.2	42.2	62.6	69.0	47.0	27.0	70.0	76.0	60.0	49.0	89.0	91.0	71.0	54.0
4.9	4.2	2.9	-0.7	4.8	5.7	4.9	4.6	7.2	7.3	5.0	2.9	7.7	7.7	6.1	4.9	9.2	8.8	6.9	5.2
19.2	19.1	15.0	12.6	14.7	9.4	2.7	0.2	-7.4	-10.0	-9.0	-9.0	-10.0	-12.0	-11.0	-12.0	-12.0	-15.0	-14.0	-14.0
53.3	-31.1	-7.3	-37.8	25.0	-30.7	-23.7	-7.5	16.1	-26.0	-31.0	-29.0	22.0	-33.0	-30.0	-14.0	-	-	-	-
6.1	-3.3	-0.8	-4.0	2.8	-3.3	-2.6	-0.8	1.8	-2.7	-3.3	-3.1	2.4	-3.3	-3.0	-1.4	-	-	-	-
-23.6	32.8	16.4	10.7	14.7	-0.3	-17.9	30.0	36.2	-	-	-	-	-	-	-	-	-	-	-
17.1	15.9	16.1	19.3	21.2	19.6	17.9	17.5	18.7	20.2	20.5	20.6	20.4	20.3	20.1	19.9	19.8	19.7	19.6	19.6
25.5	24.8	24.1	25.4	27.6	26.7	25.6	25.9	25.9	25.6	25.3	24.9	24.6	24.4	24.2	24.1	24.0	23.9	23.8	23.8
-12.2	-14.7	-15.9	-7.2	7.4	6.7	6.1	2.2	-6.0	-3.9	-1.6	-4.8	-5.1	-4.4	-3.8	-2.6	-1.9	-1.7	-1.6	-1.4
-9.9	-11.1	-11.4	-3.0	8.6	6.1	3.4	-0.6	-6.1	-3.7	-1.1	-4.5	-6.3	-6.0	-5.1	-3.6	-2.9	-2.4	-1.7	-1.2
-4.3	-6.2	-6.5	-1.2	5.2	1.3	-2.2	-3.5	-6.5	-0.5	3.7	2.0	0.8	-0.6	-0.9	-0.2	0.2	0.3	0.6	0.9
-3.0	-4.4	-4.0	-1.6	1.6	-2.9	-7.0	-5.7	-4.4	2.2	6.5	4.6	2.0	-0.6	-1.0	-0.5	-0.2	0.0	0.3	0.6
10.1	7.6	8.3	7.6	8.8	7.5	4.6	4.1	2.8	4.8	5.6	5.2	7.4	6.4	7.0	7.8	8.1	7.9	7.4	6.9
3.75	3.75	3.50	2.25	1.75	1.50	1.25	1.00	1.00	0.75	-	-	-	-	-	-	-	-	-	-
4.0	4.2	3.9	4.1	2.7	2.3	2.0	1.8	1.5	1.3	1.1	1.1	1.2	1.3	1.5	1.7	2.0	2.1	2.2	2.3

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