INFLATION REPORT / II

2011

CZECH NATIONAL BANK

INFLATION REPORT / II

CZECH NATIONAL BANK

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

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

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

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

This Inflation Report was approved by the CNB Bank Board on 12 May 2011 and contains the information available as of 22 April 2011. Unless stated otherwise, the sources of the data contained in this Inflation Report are the CZSO or the CNB. All the Inflation Reports published to date are available on the CNB website. Underlying data for the tables and charts presented in the text of this Inflation Report, minutes of Bank Board meetings, and time series of selected economic and monetary indicators (available in the ARAD database) are published at the same internet address.

CHART I.1

FULFILMENT OF THE INFLATION TARGET

Headline inflation was just below the CNB's inflation target in 2011 Q1
(annual percentage changes)

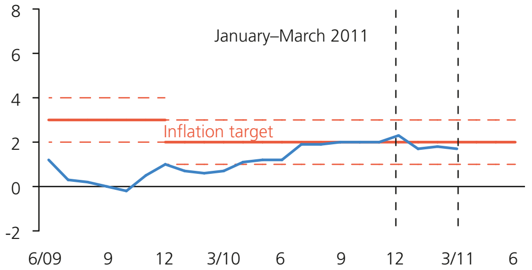


CHART I.2

HEADLINE INFLATION FORECAST

According to the forecast, headline inflation will be close to the inflation target
(annual percentage changes)

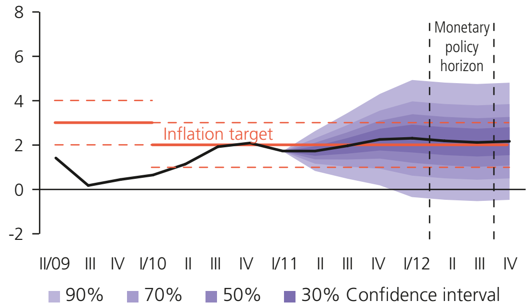
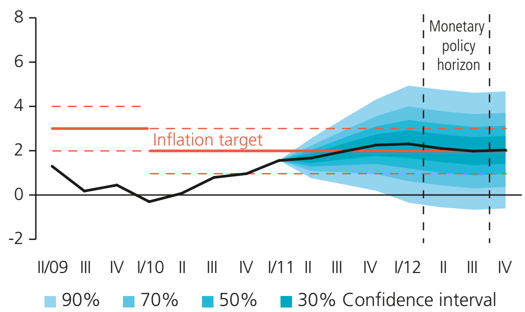


CHART I.3

MONETARY-POLICY RELEVANT INFLATION FORECAST

Monetary-policy relevant inflation will also be close to the target
(annual percentage changes)



I. SUMMARY

Czech economic growth, which has so far been driven mainly by investment in inventories, is gradually slowing. Headline inflation is just below the target. Monetary-policy relevant inflation is rising towards headline inflation. The inflation pressures from the domestic economy are not significant and commodity prices are currently the main source of inflation. GDP growth will decrease this year as a result of the consolidation of public budgets, fading investment in inventories and slowing external economic growth. Growth will pick up markedly next year, with contributions coming from all components of domestic demand. Both headline and monetary-policy relevant inflation will be close to the target over the next two years. Consistent with the forecast is broad stability of market interest rates in the near future and a gradual rise in rates starting in 2011 Q4.

The **annual rate of growth of the Czech economy** slowed slightly to 2.6% in 2010 Q4. Only investment in inventories and net exports made positive contributions; the other contributions were negative. A further slowdown to 2.3% is expected in 2011 Q1.

Headline inflation fell just below the CNB's target in 2011 Q1 (see Chart I.1). Monetary-policy relevant inflation is rising towards the target, and the difference between monetary-policy relevant inflation and headline inflation is narrowing as the lagged effects of the increase in indirect taxes unwind. Commodity prices are currently the main source of inflation. They are being reflected in rising fuel and food prices. Annual food price inflation slowed somewhat at the end of Q1. Adjusted inflation excluding fuels remains negative, although the decline in prices in this segment moderated. Overall, the effect of import prices is inflationary, as the increase in global commodity prices is being offset only partially by appreciation of the exchange rate. By contrast, the domestic inflationary pressures are not significant at present, owing to weak domestic demand and low wage growth. Profit margins are now only slightly squeezed below their equilibrium level.

Economic growth in the euro area fell somewhat in 2010 Q4. A further gradual slowdown in economic growth is expected this year and the next and the differences between the individual countries are widening. The market outlook for interest rates in the euro area is rising over the entire forecast horizon, and its slope has increased compared to the previous forecast in expectation of a further tightening of ECB monetary policy. The higher interest rate outlook is reflected in the current appreciation of the euro-dollar exchange rate. However, the euro is expected to depreciate gradually to USD 1.3/EUR at the forecast horizon. Prices of oil and other commodities continued to rise at the start of 2011. In the longer run, the commodity markets are expected to calm down.

Headline inflation will be close to the inflation target over the entire **forecast** horizon (see Chart I.2). Given the small impact of the changes to indirect taxes incorporated into the baseline scenario of the forecast (consisting solely of the fading past – or, for 2012, expected – changes in excise duties on cigarettes), **monetary-policy relevant inflation**, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, will – along with headline inflation – be close to the target (see Chart I.3). This will be fostered by gradually strengthening inflationary pressures from the domestic economy linked with a pick-up in the currently low wage growth. These pressures will be partly offset by gradual exchange rate appreciation, which, with regard to the impacts of import prices on net inflation, will outweigh the effect of rising prices abroad from mid-2011 onwards. Domestic cost pressures should continue to rise in 2012 as a result of renewed growth in both external demand and the Czech economy and of rising wage growth. Food prices will increase in the short term, but after the effect of high prices of agricultural producers unwinds, their annual growth will slow. A similar pattern is forecasted for fuel prices owing to a slightly falling market outlook for oil prices. Adjusted inflation excluding fuels will gradually rise and turn positive at the end of 2011.

Consistent with the forecast is broad stability of market **interest rates** in the near future and a gradual rise in rates starting in 2011 Q4 (see Chart 1.4). The rate stability at the start of the forecast horizon is a result of the counteracting effects of foreign inflationary and domestic anti-inflationary pressures. In the longer run, as domestic inflationary pressures gradually renew and interest rates abroad continue to rise, rates are expected to rise. The forecast assumes a gradual appreciation of the **koruna-euro exchange rate** owing to a favourable outlook for net exports, declining risk premia owing to fiscal consolidation and renewed real convergence in 2012. By contrast, low domestic interest rates are expected to attenuate the appreciation of the exchange rate via a negative interest rate differential (see Chart I.5).

The growth of the **Czech economy** will slow to 1.5% this year as a result of a slowdown in domestic demand (due to fiscal consolidation and fading investment in inventories) and external growth (see Chart I.6). In 2012, however, the contributions of all components of domestic demand to GDP growth will increase and its pace will therefore increase overall to 2.8%, despite a lower contribution of net exports.

The GDP growth slowdown and budget consolidation will also affect the **labour market**. After turning positive at the start of 2011, annual employment growth will slow to zero again. Annual growth in employment will increase and the general unemployment rate will decrease next year owing to an accelerating recovery in economic activity. Wage growth in the business sector will gradually rise, whereas wages in the non-business sector will fall this year owing to fiscal austerity measures, and will increase only slightly in 2012.

CHART I.4

INTEREST RATE FORECAST

Consistent with the forecast is broad stability of market interest rates in the near future and a gradual rise in rates starting in 2011 Q4
(3M PRIBOR, %)

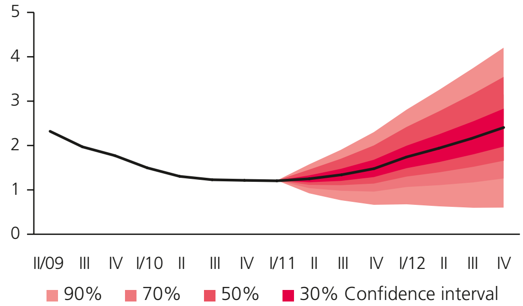


CHART I.5

EXCHANGE RATE FORECAST

The nominal exchange rate is gradually appreciating over the forecast horizon
(CZK/EUR)

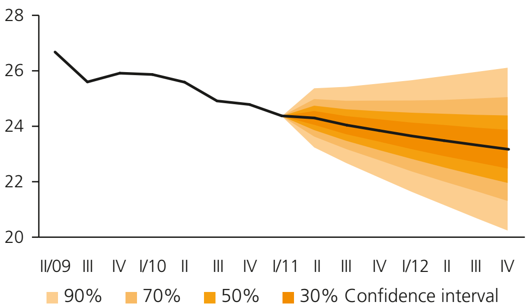


CHART I.6

GDP GROWTH FORECAST

GDP growth will slow in 2011 as a result of fiscal restriction, fading investment in inventories and slowing external growth
(annual percentage changes; seasonally adjusted)

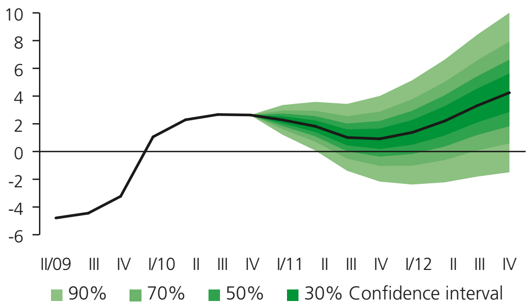
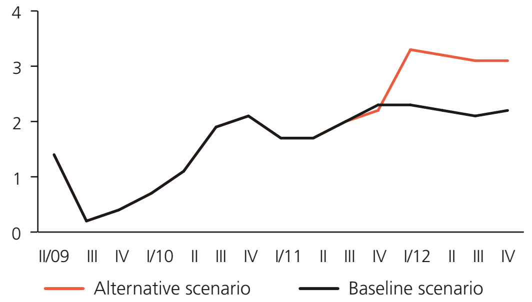


Chart I.7

HEADLINE INFLATION – COMPARISON OF BASELINE AND ALTERNATIVE SCENARIO

The higher VAT rate increases headline inflation by around 1 percentage point as from the start of 2012
(annual percentage changes)



The government proposals under preparation led to the creation of an **alternative scenario of an increase in the reduced VAT rate from 10% to 14%** with effect from 1 January 2012. The first-round effect of this change on headline inflation will be about 1.1 percentage points (see Chart 1.7). The first-round effects of changes to indirect taxes are not included in monetary-policy relevant inflation, so they do not have a direct impact on interest rates. At the same time, the alternative scenario – in line with past experience and the continued subdued economic activity – does not assume significant second-round effects of the increase in the VAT rate on inflation (e.g. due to rising inflation expectations). Interest rates in the alternative scenario thus respond only to the slight decrease in monetary-policy relevant inflation caused by the slowdown in real household consumption and GDP growth and fall slightly in 2012 H2. Average annual GDP growth declines by 0.4 percentage point in 2012 compared to the baseline. The exchange rate is almost the same as in the baseline scenario.

At its monetary policy meeting on 5 May 2011, the Bank Board decided by a majority vote to **leave the interest rates unchanged**. The risks of the monetary-policy relevant inflation forecast were assessed as being balanced. A deepening of the debt problems of some euro area countries represents a downside risk to inflation. On the other hand, the domestic economy might not dampen inflation as strongly as predicted in the forecast.

II. THE FORECAST, ITS CHANGES AND RISKS

II.1 EXTERNAL ASSUMPTIONS OF THE FORECAST

Economic growth in the euro area is expected to slow this year and the next, but will still be above 2%. The increase in prices on commodity markets was reflected in a simultaneous rise in both consumer and producer price inflation and their outlook for this year was also raised. The ECB reacted to the growing inflationary pressures by raising its key interest rates. The expected three-month EURIBOR path is still rising and its slope is increasing. The higher interest rate outlook is reflected in a stronger euro-dollar exchange rate. Prices of oil and other commodities continued to rise at the start of 2011. In the longer run, the commodity markets are expected to calm down.

The **outlook for the effective indicator of euro area GDP** growth foresees a modest slowdown this year and the next (see Chart II.1.1).[1] Economic growth in the euro area is being driven mainly by the German economy in a context of rising demand for German exports. However, the rate of growth is being hindered by some countries of the southern periphery. In addition, a further modest slowdown in growth can be expected in 2012 H1 caused by fiscal consolidation in individual member countries. The overall growth outlook in the euro area stands at 2.4% for this year (i.e. 0.5 percentage point lower than in 2010) and at 2.2% for 2012. The risks to future economic growth in the euro area include the currently high prices of oil and of commodities in general. The risk of an escalation of the debt crisis in the euro area also remains.

The outlook for growth in the **effective indicator of producer prices in the euro area** has been strongly affected by the continued growth in prices of commodities (particularly cereals, industrial metals and energy commodities). This growth started in 2010 H2 (see Chart II.1.2) and commodity prices have remained high ever since. The forecast for industrial producer prices has shifted upwards mainly for this year. Subsequently, their strong growth fades in line with the expected calming on commodity markets. Overall, the average growth in the effective producer price indicator was revised upwards by 1.8 percentage point for 2011. Annual growth of 4.7 % is thus expected. Producer price inflation is expected to slow to 2.5 % in 2012.

The high commodity prices are also reflected in the outlook for the **effective indicator of consumer prices in the euro area** (see Chart II.1.3). Inflation has been above the ECB's definition of price stability (below but close to 2%) for several months now (since December 2010). At 2.4%, the estimate of annual inflation for 2011 is also above this level. In addition to the high commodity and energy

1 The outlook for external variables is based on Consensus Forecasts (CF) and prices of market contracts. It was updated on 4 April 2011. The outlook is indicated by the grey areas in the charts. This convention is used throughout this Report.

CHART II.1.1

EFFECTIVE GDP IN THE EURO AREA

Economic growth will slow in the euro area during 2011 H1, despite a significant contribution from the German economy

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

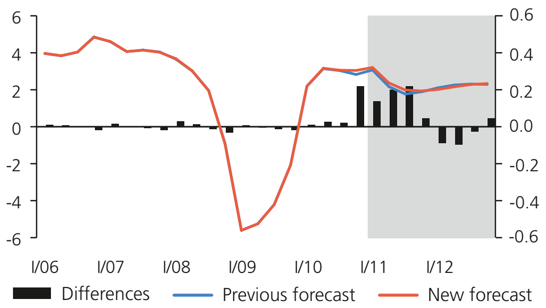


CHART II.1.2

EFFECTIVE PPI IN THE EURO AREA

The sharp growth in industrial producer prices in 2011 is due to high commodity prices

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

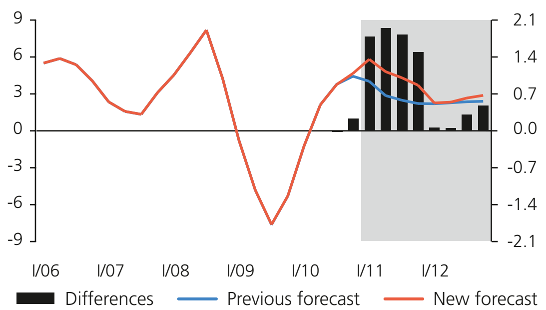


CHART II.1.3

EFFECTIVE CPI IN THE EURO AREA

The outlook for effective inflation has been increased above the 2% level

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

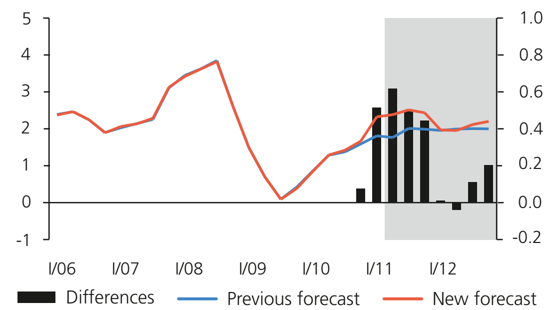


CHART II.1.4

3M EURIBOR

The monetary policy tightening by the ECB and faster growth in prices have shifted the market outlook for interest rates significantly upwards over the entire forecast horizon
(in %; differences in p.p. – right-hand scale)

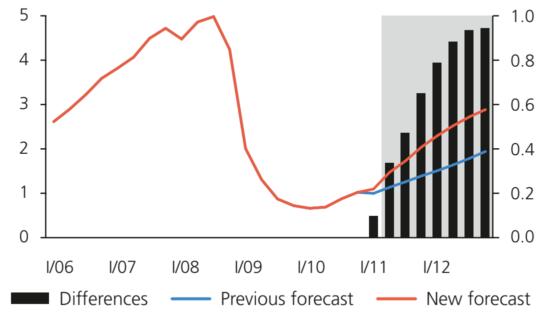


CHART II.1.5

EURO-DOLLAR EXCHANGE RATE

The present and expected ECB monetary policy settings are fostering a stronger exchange rate of the euro against the dollar
(USD/EUR; differences in % – right-hand scale)

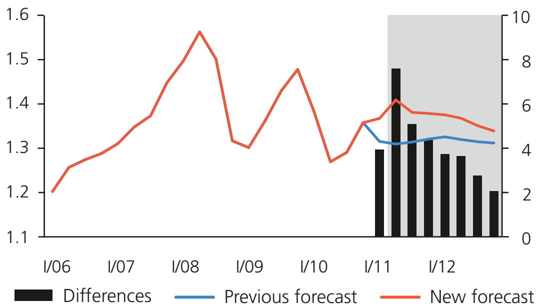
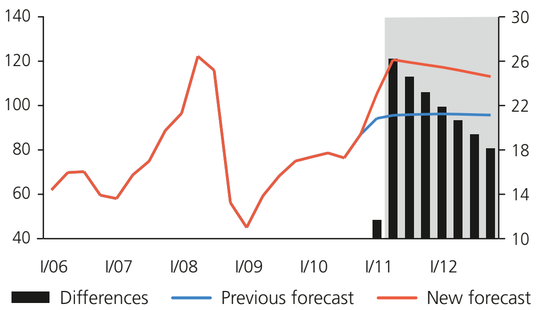


CHART II.1.6

PRICE OF BRENT CRUDE OIL

The oil price outlook expects a rise to USD 120 a barrel and then a very gradual decline
(USD/barrel; differences in % – right-hand scale)



prices, this reflects economic growth in the euro area, which is being driven by exports and partly also by domestic demand. Inflation is expected to return to the 2% level in 2012 H1 owing to falling prices on commodity markets and an expected downswing in domestic demand. In 2012 as a whole, consumer prices are expected to rise by 2.1% overall.

The 3M EURIBOR path is still rising and its slope has increased over the entire forecast horizon compared to the previous forecast (see Chart II.1.4). Market expectations reacted in advance to the ECB's monetary policy tightening; the ECB raised its refinancing rate from 1% to 1.25% on 7 April. This decision was aimed chiefly at reducing the expected inflationary pressures in the euro area stemming from the high commodity prices. The Consensus Forecasts (CF) analysts expect the ECB's key monetary policy rate to be 1.75% at the end of 2011. Compared to the previous forecast, the expected three-month rate rose by 0.4 percentage point to 1.6% for 2011 and by 0.9 percentage point to 2.6% for 2012. A risk of higher rates can be seen in the "two-speed" European economy, with Germany showing pronounced economic growth while some southern periphery countries are still experiencing economic recession and debt crisis.

The **current appreciation of the euro-dollar exchange rate** primarily reflects the ECB's current and expected monetary policy settings. However, the forecast expects the dollar to appreciate gradually from USD 1.4/EUR to just above USD 1.3 at the end of 2012 (see Chart II.1.5). Compared to the previous forecast this means a weakening of the dollar by about 5% on average this year and 3% in 2012. However, the risks associated with the deepening debt crisis in some euro area countries may lead very quickly to a revision of this outlook to the detriment of the euro.

Based on market outlooks, the **price of Brent crude oil** is expected to rise by around 45% in 2011 compared to 2010. At the start of April 2011, the oil price exceeded USD 120 a barrel, but it is expected to fall gradually to roughly USD 113 a barrel at the end of 2012 (see Chart II.1.6). As regards the future oil price, the supply-side risks include the duration of the military conflict in Libya and the political instability in Arab countries. An expected slowdown of the overheating Chinese economy and the planned exit from quantitative easing by the Fed at the end of June this year may act in the opposite direction. The market outlook for the Brent crude oil price is in line with the expectations of CF analysts, who also expect WTI oil prices to fall slightly (by 7% at the one-year horizon).

II.2 THE FORECAST

Headline inflation was 1.8% and monetary-policy relevant inflation 1.6 % on average in 2011 Q1. Commodity prices are currently the main source of inflation. Growth in foreign industrial producer prices is being only partly offset by appreciation of the Czech currency. The domestic inflationary pressures are not currently significant, owing to weak domestic demand and wage growth. At the forecast horizon, both headline and monetary-policy relevant inflation will be close to the 2% target. This will be fostered by gradually strengthening pressures from the domestic economy linked with a pick-up in the currently low wage growth. These pressures will be partly offset by gradual appreciation of the exchange rate, which, with regard to import prices, will outweigh the effect of rising prices abroad from mid-2011 onwards. In 2011, GDP growth will slow to 1.5% as a result of fiscal restriction, fading investment in inventories and a short-term decline in growth of external economic activity. Consistent with the forecast is broad stability of market interest rates in the near future and a gradual rise in rates starting in 2011 Q4.

Annual **headline inflation** was 1.8% on average in 2011 Q1. Monetary-policy relevant inflation, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, was 1.6% on average. At the forecast horizon, annual headline inflation and monetary-policy relevant inflation will both be close to the inflation target (see Chart II.2.1).

Annual **administered price** inflation rose to 4.3% in 2011 Q1 compared to the previous quarter. It is forecasted to be flat in 2011 Q2 (see Chart II.2.2), but a further rise in administered prices of natural gas for households had already been announced for April. Thereafter, administered price inflation is expected to rise gradually to about 6% in 2012 Q1 and then slow to 4% at the end of 2012 (see Table II.2.1). Growth in regulated and deregulated rents and rising prices of electricity and natural gas for households will be the main sources of growth in administered prices in both years.

As regards **indirect taxes**, annual inflation is currently being affected only by the small lagged effects of higher excise duties and VAT on cigarettes since January 2010. This effect will disappear in 2011 Q3. At the start of 2012, the forecast assumes a harmonisation increase in excise duties on cigarettes with a contribution to inflation of just over 0.1 percentage point. The planned increase in the reduced VAT rate from 10% to 14% as from 2012 is part of an alternative scenario (see Chart II.4.1).

Net inflation continued rising in 2011 Q1, reaching 1% in annual terms (see Chart II.2.3). This was mainly a result of continuing relatively high growth in food and fuel prices. Commodity prices (including agricultural producer prices) will, together with a gradual renewal of domestic cost pressures and balancing of margins, contribute to the rise in net inflation. However, these effects will be partly offset by gradual exchange rate appreciation and later also by a renewed slowdown in annual food price inflation.

CHART II.2.1

HEADLINE INFLATION AND MONETARY-POLICY RELEVANT INFLATION

Headline and monetary-policy relevant inflation will both be close to the inflation target
(annual percentage changes)

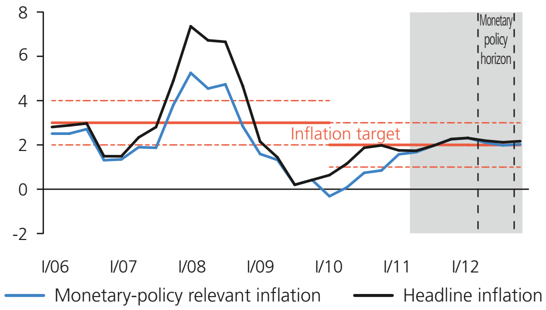


CHART II.2.2

ADMINISTERED PRICES AND FUEL PRICES

Administered prices and fuel prices will be affected by rising commodity prices on world markets
(annual percentage changes; excluding first-round effects of indirect tax changes)

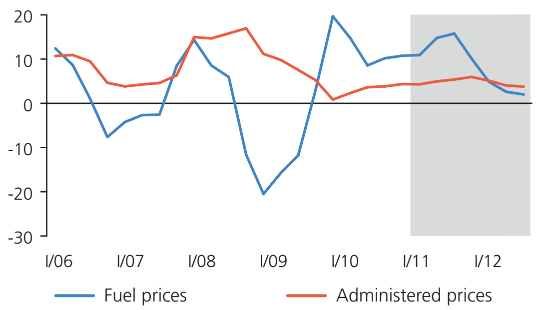


TABLE II.2.1

FORECAST OF ADMINISTRATIVE EFFECTS

The growth of administered prices will be due to further growth in regulated rents and rising energy prices
(annual percentage changes; impact in p.p.)

	2010 actual		2011 forecast		2012 forecast	
Administered prices – total [a)]	3.8	0.66	5.5	0.95	3.8	0.68
of which (selected items):						
Regulated rents	16.8	0.23	12.0	0.19	15.0	0.26
Electricity	-2.5	-0.09	4.8	0.17	5.0	0.18
Natural gas	6.7	0.16	11.1	0.27	1.0	0.03
Heat	3.3	0.08	3.5	0.08	2.0	0.05
Healthcare	7.8	0.16	3.5	0.07	2.0	0.04
First-round impacts of tax changes in non-administered prices		1.02		0.00		0.14

a) Including effects of indirect tax changes

CHART II.2.3

NET INFLATION AND ADJUSTED INFLATION EXCLUDING FUELS

Adjusted inflation excluding fuels will turn positive in late 2011
(annual percentage changes)

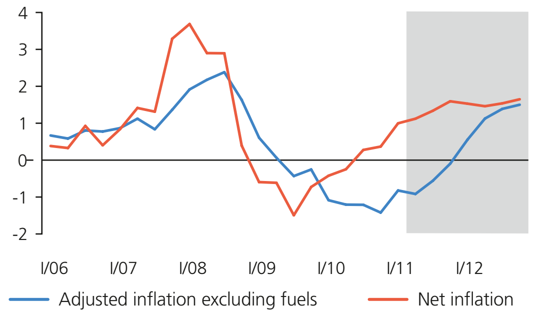


CHART II.2.4

FOOD PRICES AND AGRICULTURAL PRODUCER PRICES

Food price inflation will slow as agricultural producer price inflation subsides
(annual percentage changes)

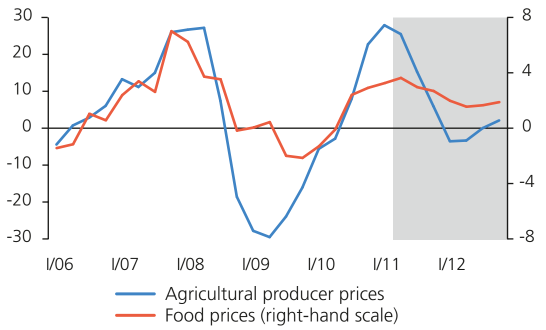
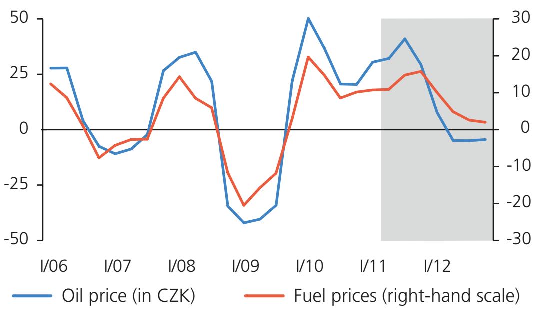


CHART II.2.5

FUEL PRICES AND OIL PRICES

The current high growth in fuel prices will last until the end of 2011 and then decline
(annual percentage changes)



Annual **adjusted inflation excluding fuels** remained negative in 2011 Q1, but its decline slowed to -0.8%. These low figures reflect the subdued domestic cost pressures and weak domestic demand, which is keeping businesses' margins squeezed. Adjusted inflation excluding fuels will turn positive at the end of 2011. It will then increase further, reaching values of around 1.5% at the end of 2012.

The rise in **food prices** has so far been lower than that consistent with the substantial increase in agricultural producer prices. However, prices in the food industry are now showing faster growth. In the past, food sellers increased their margins by reacting only partially to the previous fall in input prices. So far, therefore, they have had some scope to absorb their rising costs, but this scope is gradually disappearing. Food price inflation will thus increase further in the near future, reaching 4% (see Chart II.2.4). Once the effect of high agricultural commodity prices has dropped out, annual food price inflation will ease to around 2% in 2012.

Annual **fuel price inflation** was high in 2011 Q1, fluctuating around 11%. The forecast expects it to rise further during 2011 as a result of the observed sharp growth in world oil and petrol prices (see Chart II.2.5). The oil price growth has been partly offset by depreciation of the dollar. The market outlook expects a gradual fall in oil prices at the longer horizon. This, together with the expected stability of the koruna-dollar exchange rate, should help to reduce annual fuel price inflation in 2012.

BOX 1

PRICE-SETTING BEHAVIOUR IN THE CZECH REPUBLIC (MICRO DATA EVIDENCE) IN RELATION TO THE PRICING MECHANISM IN THE G3 FORECASTING MODEL

The aim of the analysis presented in this box is to obtain **information about changes in the prices of consumer basket items**. That information is subsequently compared with how the pricing mechanism is set in the microeconomic foundations of the g3 core forecasting model.

The frequency, seasonality and average size of the changes in prices, the average length of the period of unchanged prices and other characteristics were assessed using detailed data on prices monitored in the CZSO's consumer price survey. Data on prices of selected items of the consumer basket were available at the level of individual reporting agents (retail outlets) at monthly frequency over the period 2001–2005. Average annual headline inflation was 2.3% in this period.

The average price change frequency of all the selected items was 0.26. This means that roughly one in every four prices was changed compared to the previous month (see Tables 1 and 2). The frequency of price increases was 0.16 and the frequency of price decreases was 0.10. The average price change was around 10%. For the individual subcategories of the consumer basket, the lower the price change frequency, the larger the average price change. The average length of the period of unchanged prices for all the selected items was 10.7 months.

The analysis reveals that administrative prices mostly only go up, usually doing so sharply at the start of the year. Unprocessed food has a higher price change frequency than processed food, owing to the volatility of agricultural commodity prices. Prices of tradables excluding food and fuels decreased continuously throughout the period under review and had a low price change frequency. Non-tradable unregulated prices steadily increased, and this subcategory, with the exception of hypothetical rents and prices of package holidays, recorded the lowest price change frequency. By contrast, hypothetical rents and prices of package holidays had a high frequency of change. Fuel prices changed most frequently, but their individual changes were the smallest of the categories under review on average. Fuel prices respond relatively quickly to changes in prices of raw materials and the koruna exchange rate, so they change to a lesser extent but frequently.

The g3 forecasting model also works with the fact that retailers change their prices only after a certain period of time has elapsed (see the box *Pricing in the g3 model* in Inflation Report IV/2008). This price rigidity is captured in the model by assuming that each company can change the prices of its products in a given quarter with a certain probability only. The actually observed price rigidity can be simulated very well using this mechanism, and for this reason it is one of the core elements of most macroeconomic models currently used in practice. Given the settings of the g3 model, firms in the model economy change their prices every three quarters on average. This mechanism models net inflation only, whereas the stickiest regulated prices are inserted into the forecast by expert judgement, so this value is in line with the above statistics. Similar settings are used in other comparable models and are confirmed by estimates based on data using Bayesian methods.

TABLE 1 (BOX)

CHANGES IN PRICES OF CONSUMER BASKET ITEMS

Fuel prices changed most frequently

Jan 2001–Dec 2005	Unprocessed food	Processed food	Admin. prices	Fuels
Frequency of price changes	0.42	0.19	0.10	0.85
Frequency of price increases	0.22	0.11	0.07	0.32
Frequency of price decreases	0.21	0.09	0.03	0.53
Average price increase (in %)	15.4	10.7	9.0	5.5
Average price decrease (in %)	-13.0	-8.8	-4.0	-3.6
Average length of period of unchanged prices calculated from frequencies (in months)	2.5	7.0	16.7	0.5

TABLE 2 (BOX)

CHANGES IN PRICES OF CONSUMER BASKET ITEMS

The average length of the no price change period was 10.7 months

Jan 2001–Dec 2005	Other non-tradables	Other non-tradables excl. holidays and hyp. rent	Other tradables excl. fuels	Whole consumer basket
Frequency of price changes	0.39	0.06	0.12	0.26
Frequency of price increases	0.31	0.05	0.05	0.16
Frequency of price decreases	0.09	0.02	0.07	0.10
Average price increase (in %)	9.9	13.9	12.5	10.7
Average price decrease (in %)	-9.1	-12.3	-12.7	-9.1
Average length of period of unchanged prices calculated from frequencies (in months)	12.2	21.5	12.2	10.7

CHART II.2.6

INTEREST RATE FORECAST

Consistent with the forecast is broad stability of market interest rates in the near future and a gradual rise in rates starting in 2011 Q4
(3M PRIBOR and 3M EURIBOR in %)

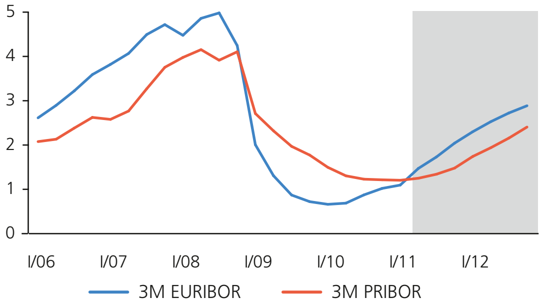


CHART II.2.7

EXCHANGE RATE FORECAST

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

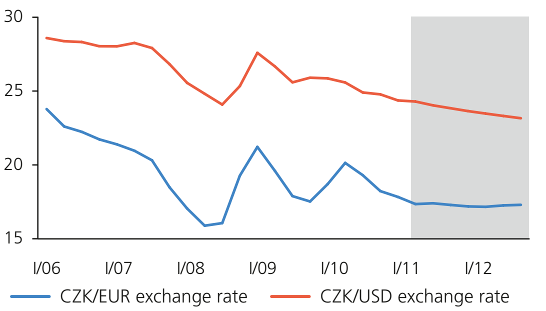
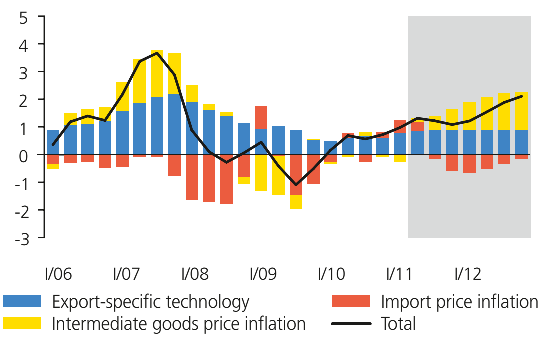


CHART II.2.8

COSTS IN THE CONSUMER SECTOR

The pressures from the domestic economy are not currently significant but will start increasing in 2011 H2
(quarterly percentage changes; contributions in p.p.; annualised)



Money market **interest rates** were flat in 2011 Q1, while rates with longer maturities increased slightly. Consistent with the forecast is broad stability of market interest rates in the near future and a gradual rise in rates starting in 2011 Q4 (see Chart II.2.6). The rate stability at the start of the forecast horizon is a result of the counteracting effects of foreign inflationary and domestic anti-inflationary pressures. In the longer run, as domestic inflationary pressures gradually renew and interest rates abroad continue to rise, rates increase towards their long-term equilibrium.

The **koruna-euro exchange rate** appreciated on average in 2011 Q1, but the sharp appreciation recorded in January 2011 saw a slight correction in the months that followed. The forecast for 2011 Q2 assumes an average exchange rate of CZK 24.3 against the euro. The subsequent gradual appreciation of the exchange rate over the forecast horizon (see Chart II.2.7) is due to a favourable outlook for net exports. The exchange rate appreciation will also be fostered by declining risk premia owing to fiscal consolidation and renewed real convergence in 2012. By contrast, low domestic interest rates will attenuate the appreciation of the exchange rate via a negative interest rate differential.

The inflation forecast described above and the corresponding interest rate path 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** picked up slightly in 2011 Q1 (see Chart II.2.8). The effect of import prices is inflationary at present, as the increase in global commodity prices is being offset only partially by the appreciation of the exchange rate. The pressures from the domestic economy, approximated by intermediate goods price inflation, are still not significant. 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) and traditionally fosters positive inflation.

Pressures from the domestic economy are not yet apparent at the start of the forecast and therefore reflect low growth in wages and the price of capital. Domestic inflation pressures will start increasing gradually in 2011 H2, when the effect of import prices on quarterly net inflation will turn anti-inflationary. Industrial producer price inflation in the euro area will be outweighed by a gradually appreciating exchange rate of the koruna. In addition to renewed growth in external and domestic demand and rising wage growth, the forecast expects further growth in domestic cost pressures from early 2012.

Nominal marginal costs in the intermediate goods sector recorded a further quarter-on-quarter decline in 2011 Q1, with the contribution of the price of capital being negative again, reflecting the currently very low investment activity and the decline in the investment deflator. The low nominal wage growth was partly offset by growth in labour-augmenting technology (see Chart II.2.9), which is consistent with the observed rise in labour productivity. Domestic cost pressures will start to return gradually owing to wage growth and, as from 2012, a more robust recovery in economic activity. Gradually recovering corporate investment activity will foster a decline in the negative contribution of the price of capital in 2011.

Profit mark-ups in the consumer goods sector are assessed as having been slightly squeezed below their equilibrium level in 2011 Q1 (see Chart II.2.10). Starting from 2011 Q2, they will very slowly return to their equilibrium level, mostly via slow growth in costs.

Labour productivity will reflect the slowdown in economic activity in 2011. Its annual rate of growth will thus moderate to 1.2%. In 2012, labour productivity growth will pick up to 2.5% as economic activity gathers pace.

The average **nominal wage in the business sector** recorded subdued growth of 2.1% in 2010 Q4 and probably maintained a similar pace at the start of 2011. A subsequent gradual increase in its annual growth rates in the forecast will result in an increase in the average annual wage of 2.7% for 2011. The wage in the business sector will rise by 5% in 2012 owing to a pick-up in economic activity (see Chart II.2.11).

As a result of the continuing consolidation of public budgets, the forecast expects an average annual decline in the **wage in the non-business sector** of 1.7% in 2011. This will be the result of an expected decline in the volume of wages and salaries in the non-business sector of around 3.4%, around one-half of which is expected to be due to a drop in employment. In 2012, average wage growth in the non-business sector will reach 0.5% year on year.

In 2010 Q4, real GDP growth slowed in both year-on-year (2.6%) and quarter-on-quarter (0.3%) terms compared to the previous quarter (see Chart II.2.12). The previous forecast had assumed significantly faster growth. Investment in inventories and net exports made positive contributions to annual GDP growth. By contrast, the contributions of fixed investment and household and government consumption were negative.

The forecast expects annual **growth in economic activity** to slow slightly to 2.3% in 2011 Q1 (see Chart II.2.13). This slowdown should be fostered by a marked slowdown in total investment and a deeper annual decline in household consumption. The contribution of net exports and a slight increase in government consumption acted in the opposite direction. Overall, the GDP growth rate is predicted to decrease to 1.5% in 2011 owing to slowing growth in all components of domestic demand. The slowdown in household consumption is only slight and is connected with the sluggish recovery on the labour market, the consolidation of public budgets, and price effects. The decline in government consumption will be affected by previously approved government austerity measures. As regards investment, the effects of replenishment of inventories and investment in solar

CHART II.2.9

COSTS IN THE INTERMEDIATE GOODS SECTOR

Domestic cost pressures will contribute only modestly to growth in intermediate goods prices
(quarterly percentage changes; contributions in p.p.; annualised)

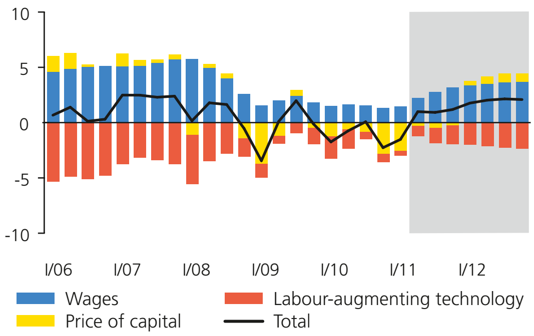


CHART II.2.10

GAP IN PROFIT MARK-UPS IN THE CONSUMER SECTOR

Corporate profit mark-ups will be close to their equilibrium level starting from 2011 Q3
(percentages)

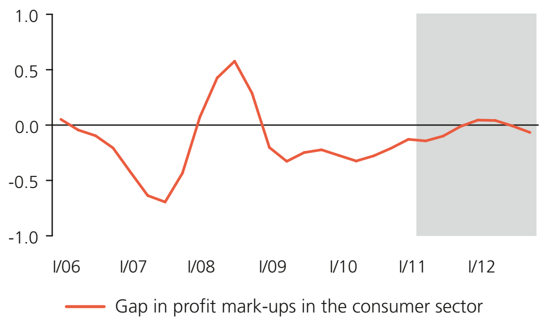


CHART II.2.11

AVERAGE NOMINAL WAGE

Wage growth in the business sector will be subdued in 2011 and wages in the non-business sector will continue to fall
(annual percentage changes; seasonally adjusted)

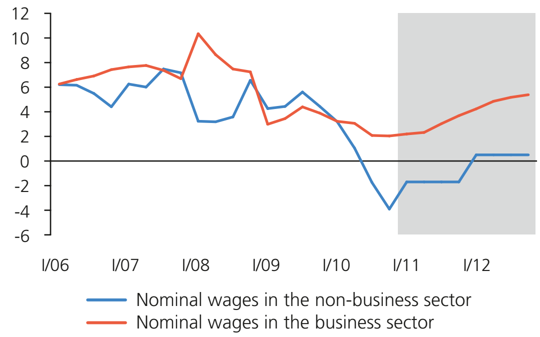


CHART II.2.12

GDP GROWTH FORECAST

GDP growth will slow in 2011 as a result of fiscal consolidation and lower investment and external demand
(percentage changes; seasonally adjusted)

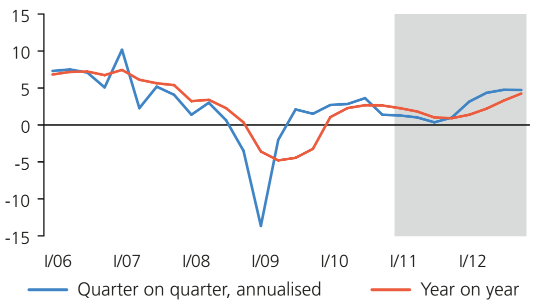


CHART II.2.13

STRUCTURE OF ANNUAL GDP GROWTH

Net exports will be the main contributor to GDP growth in 2011
(annual percentage changes; contributions in p.p.; seasonally adjusted)

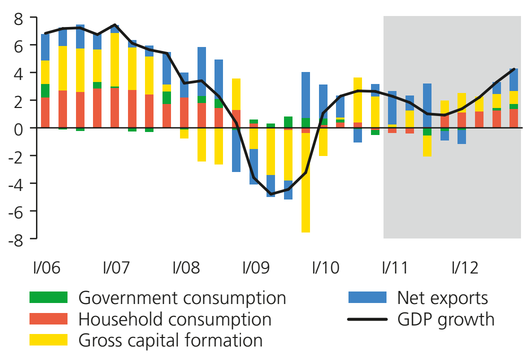
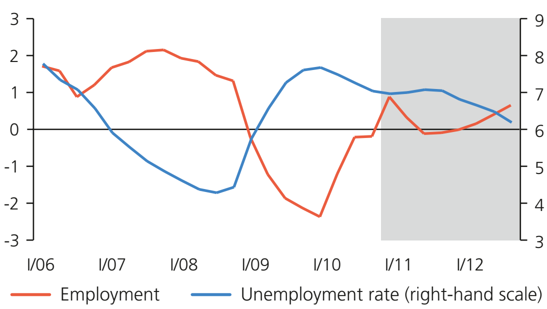


CHART II.2.14

LABOUR MARKET FORECAST

Aggregate employment will start to rise continuously in 2012; this rise will be reflected in the unemployment rate
(annual percentage changes in employment; unemployment rate in percentages; seasonally adjusted)



power stations in 2010 H2 should wane. The positive contribution of net exports will act against a slowdown in the annual GDP growth rate. The contributions of all components of domestic demand to GDP growth should increase in 2012, while the contribution of net exports should decrease slightly. Overall, the GDP growth rate will rise to 2.8% in 2012. The most significant contributions will be recorded by household consumption owing to faster wage growth and by gross capital formation as a result of a recovery in fixed investment.

The expected annual increase in **employment** at the start of 2011 is affected by a low base (see Chart II.2.14). After this effect unwinds, the government consolidation measures and slowing economic growth will take effect and overall employment will be broadly flat. Underlying this will be two opposing factors. On the one hand, employment should continue to rise in export-oriented industrial production. By contrast, the services sector, which has a larger weight in total employment (60%) and significantly slowed its decline last year, should see a slight fall in employment. Quarter-on-quarter growth in employment will pick up at the start of 2012 thanks to an accelerating recovery in economic activity. This, in turn, will be reflected in higher year-on-year growth rates of employment.

The seasonally adjusted **general unemployment rate** will be flat at 7% on average during 2011. The forecast expects it to decline to 6.5% on average from the start of 2012 (see Chart II.2.14). This decline will be due to a recovery in employment amid a continuing fall in the labour force caused by the shrinking working age population. During 2011 Q1, the seasonally adjusted **registered unemployment rate** saw a partial correction of the sharp increase observed at the end of the previous year and will subsequently also be flat. Like the general unemployment rate, the registered unemployment rate will decline more significantly from the start of 2012 owing to a recovery in economic activity. A risk of the forecast for both indicators is the estimate of the strength and timing of the impact of fiscal consolidation, which will increase the unemployment rate by around 0.2 percentage point.

Real **household consumption** growth is likely to fall slightly to 0.2% in 2011. The subdued consumption will be affected by continued low growth in nominal disposable income relating to the subdued recovery on the labour market and to fiscal consolidation measures. Moreover, a temporary fall in real consumption will be fostered at the start of the forecast by higher price growth. Owing to higher growth in the volume of wages and the unwinding of the effect of government measures, consumption can be expected to pick up to 2.4% in 2012 (see Chart II.2.15).

The evolution of nominal household consumption over the forecast horizon is determined primarily by **gross disposable income**, the growth rate of which will start to rise significantly at the end of the forecast. The total volume of wages will continue to rise slowly during 2011 and will pick up noticeably in 2012 (see Chart II.2.16).

The rise in the volume of wages will be due to an upswing in the average wage in the private sector and growth in the number of employees. The average wage in the non-business sector will decrease in 2011 and contribute negatively to disposable income, albeit less significantly than at the end of 2010. The contribution of social benefits, which are the second-largest component of disposable income, will also be positive, owing mainly to a rise in pension expenditure, which will outweigh the cuts in the state social support area. The contribution of operating surplus and mixed income relating to the profits of small businesses will be minimal to slightly positive at the forecast horizon. The negative impact of current taxes and social contributions on disposable income will be more pronounced in 2011 as a result of government austerity measures. This effect will moderate in the following year.

The saving rate will be flat in 2011, following a more substantial decline recorded during the crisis, when households smoothed their consumption over time. Households will start to increase their saving rate in 2012, when disposable income will grow faster than nominal consumption.

Real **government consumption** slowed gradually during 2010 and declined by 1.6% in 2010 Q4. In 2011, government consumption will drop further year on year because of fiscal austerity measures. It will return to real growth in 2012.

Gross capital formation recorded a high annual increase of 11.2% in 2010 Q4, but slowed compared to the previous quarter. The increase was fostered by inventories, whereas fixed investment saw a deeper annual decline.[2] The forecast expects gross capital formation to slow sharply to 0.7% year on year in 2011 Q1, mainly because of a weaker contribution of change in inventories (see Chart II.2.17). Gross capital formation will record a considerable rise in its quarterly growth rate from 2011 Q2 onwards and grow at around 5% during 2012.

Real **exports of goods and services** rose by 16.8% year on year in 2010 Q4. The forecast expects a year-on-year and quarter-on-quarter slowdown in exports in 2011 Q1 (see Chart II.2.18) in connection with the forecast for external demand and relative prices (the real exchange rate). Export growth is expected to decline further in 2011; the forecast expects an upswing in 2012. The forecast for exports is based mostly on the profile of expected growth in external effective demand.

Annual growth in **goods and services imports** moderated slightly (to 17.3%) in 2010 Q4 amid lower annual growth rates of all components of domestic demand. The forecast expects a further sharp decline in import growth in 2011 due to weak export growth and slower gross capital formation; both these demand components are very import-intensive.

2 Investment in solar power stations has been largely unaffected by the reported data for Q4 (for more details see section III.3).

CHART II.2.15

REAL HOUSEHOLD AND GOVERNMENT CONSUMPTION

Household consumption growth will temporarily turn negative
(annual percentage changes; seasonally adjusted)

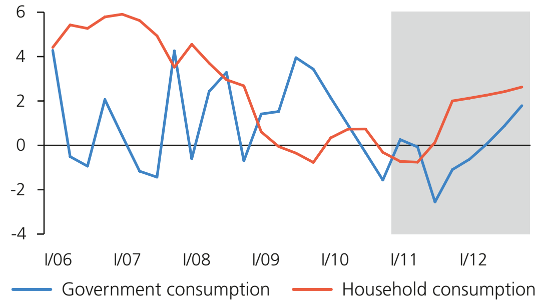


CHART II.2.16

NOMINAL DISPOSABLE INCOME

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

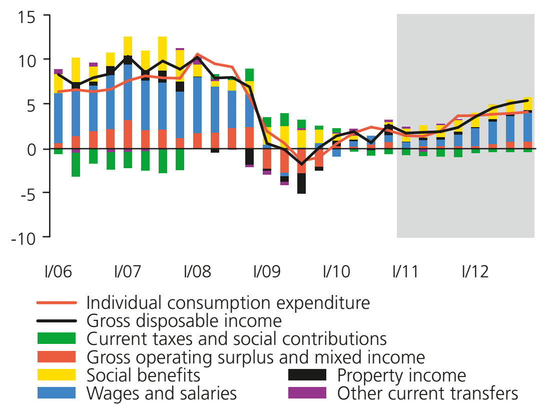


CHART II.2.17

GROSS CAPITAL FORMATION

Total investment growth will slow sharply this year owing mainly to falling investment in replenishment of inventories
(annual percentage changes; seasonally adjusted)

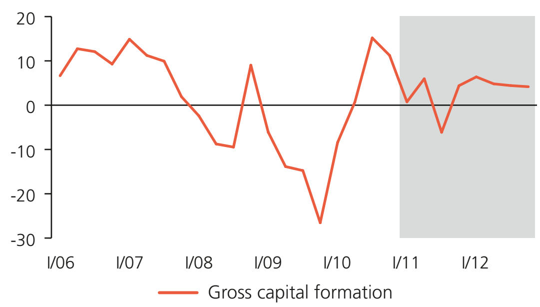


CHART II.2.18

REAL EXPORTS AND IMPORTS

Net exports will continue to rise in 2011
(annual percentage changes; annual changes in CZK bn.; seasonally adjusted)

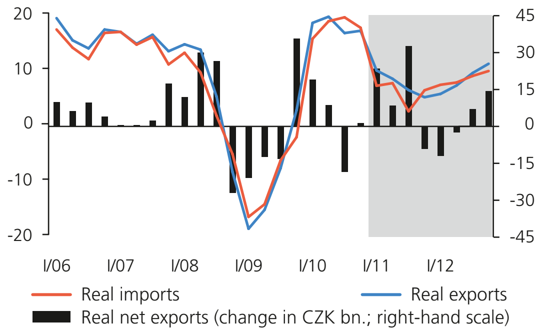


TABLE II.2.2

FORECAST OF SELECTED VARIABLES

The labour market will not see a recovery until 2012
(annual percentage changes, unless otherwise indicated)

	2009 actual	2010 actual	2011 forec.	2012 forec.
Real gross disposable income of households	-0.6	0.3	0.0	3.1
Total employment	-1.4	-1.0	0.2	0.3
Unemployment rate (in per cent)a)	6.8	7.4	7.0	6.5
Labour productivity	-3.0	3.1	1.2	2.5
Average nominal wage	4.0	2.0	1.9	4.1
Average nominal wage in business sector	3.7	2.6	2.7	5.0
Current account deficit (ratio to GDP in per cent)	-3.2	-3.8	-4.0	-4.3
M2	6.2	4.0	3.4	8.3

a) ILO methodology, 15–64 years.

TABLE II.2.3

BALANCE OF PAYMENTS FORECAST

An increasing income balance deficit will widen the current account deficit
(CZK billions)

	2009 actual	2010 actual	2011 forec.	2012 forec.
A. CURRENT ACCOUNT	-114.7	-139.1	-150.0	-170.0
Trade balance	81.2	54.0	60.0	60.0
Balance of services	65.2	66.1	70.0	70.0
Income balance	-251.7	-257.7	-280.0	-300.0
Current transfers	-9.4	-1.5	0.0	0.0
B. CAPITAL ACCOUNT	41.8	34.0	38.0	38.0
C. FINANCIAL ACCOUNT	123.9	177.0	185.0	180.0
Direct investment	37.7	97.0	90.0	105.0
Portfolio investment	158.7	157.4	110.0	70.0
Financial derivatives	-7.7	-4.1		
Other investment a)	-5.7	-54.3	-15.0	5.0
D. ERRORS AND OMISSIONS	-38.4	-35.5		
E. CHANGE IN RESERVES (- = increase)	-60.6	-41.4	-55.0	-55.0

a) excluding operations of banking sector

Amid faster growth in exports and lower growth in imports, the contribution of **net exports** to annual GDP growth was positive in 2010 Q4 (0.9 percentage point). The contribution should reach 2.3 percentage points in 2011 Q1. It will remain positive until 2011 Q3, then temporarily turn negative owing to an expected recovery in household consumption and investment. The contribution of net exports to annual GDP growth will reach about 1.5 percentage points at the end of the forecast horizon.

The balance of payment forecast expects the **current account** deficits to increase slightly year on year in 2011 and 2012 (see Table II.2.3). In real terms, this represents a widening of the deficit from about 3.8% of GDP in 2010 to around 4.3% in 2012. A higher income deficit in both years will be only partly offset by a slightly higher goods and services surplus.[3] The annual increase in the latter in 2011 will be related to slower import growth due to the effect of fading imports for photovoltaic power stations and slow growth in domestic demand (a result of restrictive fiscal policy). Relatively strong annual growth in commodity prices on world markets, fuels in particular, will act in the opposite direction. The goods and services surplus is expected to be flat in 2012, with a slight rise in external demand being offset by a recovery in domestic demand and a higher average price of imported gas. The increasing income deficit will be due mainly to continuing growth in non-residents' profits from foreign direct investment in the Czech Republic and growth in interest expenses related to a rise in external financing of government debt. The balance of current transfers is expected to stay the same. Higher net drawdown of EU funds and a widening of the private transfers deficit will counteract each other.

The current account deficit will be financed by a capital account surplus (drawdown of EU funds and sales of emission permits by private entities) and a net inflow of direct and portfolio investment on the financial account. The net inflow of **direct investment** will decline slightly this year compared to 2010 in the area of credit relations between foreign parent companies and domestic subsidiaries. The forecast expects annual growth in the overall balance again in 2012, due mostly to reinvested earnings; the outflow of capital will decrease gradually as well. The **portfolio investment** surplus will fall substantially because of a lower need for external public sector financing and renewed interest of residents in investing abroad.

The expected future economic developments described above are reflected in the **government finance** outlook for 2011 and 2012 (see Table II.2.4). This outlook also includes new information on government finance in 2009–2010 taken from the spring government deficit and debt notifications.

3 i.e. the trade balance and the services balance.

On 31 March 2011, the CZSO submitted data on general government finance in 2007–2010 to Eurostat under the **spring government deficit and debt notifications**. According to this data, the general government deficit was 4.7% of GDP in 2010.

The forecast expects the **general government deficit** to fall to 4% of GDP in 2011 owing to consolidation measures adopted in connection with the preparation of the 2011 state budget. The restrictive effect of these measures enters the forecast mainly via government and household consumption, with an estimated downward impact on real GDP growth of just over 0.6 percentage point.

The forecast for 2012 takes into account the so-called "small" pension reform, which has a neutral overall impact on the budget. Under this small pension reform, the parameters of the pension system are being changed and the maximum annual assessment base for health insurance and social security contributions is being reduced from 72 to 48 times the average wage. As regards other government revenue and expenditure items, the forecast is based on an assumption of unchanged fiscal policy compared to 2011. A decrease in the general government deficit to 3.8% of GDP is expected in 2012 as a result of faster economic growth. The general government **structural deficit** was around 4% of GDP in 2010 and will fall to roughly 3% of GDP in 2011–2012. The expected general government deficit will lead to an increase in general government debt from 38.5% of GDP in 2010 to 43% of GDP in 2012.

Additional **consolidation measures**, whose adoption should lead to the 3% reference value being achieved by 2013 (as stipulated in the excessive deficit procedure), remain a downside risk to the general government deficit prediction for 2012. These measures include, in particular, an increase in the reduced VAT rate in 2012. The government unveiled proposals for tax changes, intended partly as a source of funding for the pension reform, at the end of February. However, the proposed VAT rate change is still at an early stage of the legislative process and will be adopted in mid-2011 at the earliest. Therefore, this measure (and any other budget measures) will be incorporated into the baseline scenario of the forecast only when it reaches a later stage of the legislative process and is highly likely to be adopted. The macroeconomic impact of an increase in the reduced VAT rate from 10% to 14% in 2012 is described in an alternative "VAT rate increase" forecast scenario (see section II.4.1).

TABLE II.2.4

FISCAL FORECAST

The fiscal consolidation will lead to a noticeable reduction of the general government deficit in 2011

(% of nominal GDP)

	2009 actual	2010 actual	2011 forec.	2012 forec.
Government revenue	40.1	40.5	41.7	41.1
Government expenditure	45.9	45.2	45.7	44.9
of which: interest payments	1.3	1.4	1.5	1.6
GOVERNMENT BUDGET BALANCE	-5.8	-4.7	-4.0	-3.8
of which:				
primary balance [a]	-4.5	-3.3	-2.5	-2.2
one-off measures	0.4	-0.1	-0.2	-0.1
ADJUSTED BUDGET BALANCE [b]	-6.2	-4.6	-3.8	-3.7
Cyclical component (ESCB method) [c]	0.1	-0.4	-1.0	-0.9
Structural balance (ESCB method) [c]	-6.3	-4.2	-2.8	-2.8
Fiscal stance in p.p. (ESCB method) [d]	-2.1	2.1	1.3	0.1
Cyclical component (EC method) [c]	-0.8	-0.6	-0.5	-0.1
Structural balance (EC method) [c]	-5.4	-4.0	-3.3	-3.6
Fiscal stance in p.p. (EC method) [d]	-1.3	1.4	0.7	-0.3
Government debt	35.3	38.5	41.5	43.0

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)

CHART II.3.1

CHANGE IN THE HEADLINE INFLATION FORECAST

The headline inflation forecast is little changed
(annual percentage changes; differences in p.p. – right-hand scale)

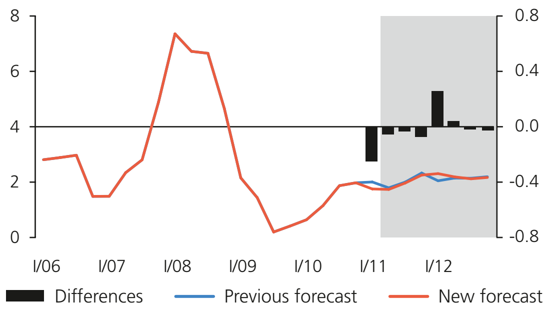


CHART II.3.2

CHANGE IN THE NET INFLATION FORECAST

The decrease in the net inflation forecast is due mainly to low domestic demand
(annual percentage changes; differences in p.p. – right-hand scale)

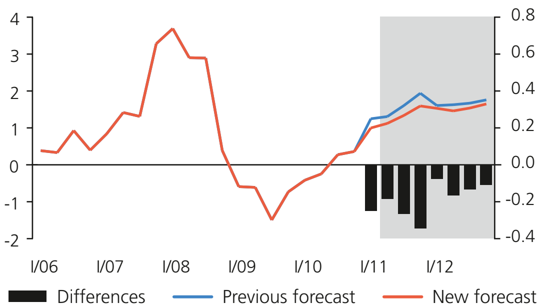
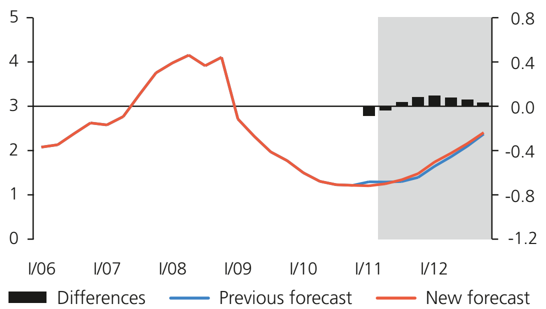


CHART II.3.3

CHANGE IN THE INTEREST RATE PATH

The market interest rate forecast is slightly higher from 2011 H2 onwards
(percentages; differences in p.p. – right-hand scale)



II.3 COMPARISON WITH THE PREVIOUS FORECAST

The headline inflation forecast for 2011 is little changed from the previous forecast. However, the difference between the impacts of domestic and external inflationary pressures is increasing. More rapidly rising imported inflation pressures stemming from higher commodity price inflation are offset by a sharper decline in domestic inflation pressures. The significantly higher outlook for foreign interest rates exerts upward pressure on domestic interest rates, while the initial state acts in the opposite direction, mainly because of lower observed wage growth and inflation and generally lower domestic demand. The path of domestic market interest rates is therefore only slightly higher. Annual GDP growth will be slightly lower in 2011 and 2012 owing to currently slower GDP growth and a lower contribution of household consumption. The pace of wage growth in the business sector has been revised downwards. The exchange rate forecast has shifted towards slightly stronger values.

The forecast for annual **headline inflation** is little changed from the previous forecast. Its path is at roughly the same level (see Chart II.3.1).

The outlook for **administered price inflation** is higher in 2011, owing to an increase in the prediction for prices of natural gas, heat, water supply and sewerage collection. The prediction for 2012 has also been increased, especially in the case of electricity prices for households in connection with rising world electricity prices.

The **net inflation** forecast, by contrast, is slightly lower than the previous prediction in both 2011 and 2012 (see Chart II.3.2). This change is due to lower-than-expected observed inflation, subdued domestic demand and slow wage growth. At the longer end of the forecast, a slightly faster appreciation of the koruna is acting in the same direction.

The overall inflation pressures have been revised downwards by comparison with the previous forecast. The **gap in profit mark-ups in the consumption sector** remains only slightly squeezed in 2011 Q1. The main reason for the less squeezed mark-ups is lower growth in costs – wages as well as the price of capital – compared to the previous forecast amid broadly unchanged price developments. From 2011 Q1 onwards the mark-ups are close to their equilibrium level and their path is similar to the previous forecast.

All the variables of the **external environment outlook** have been revised. The path of foreign 3M EURIBOR rates is significantly higher over the entire forecast horizon. Higher industrial producer price inflation is also expected in 2011 as a whole compared to the previous forecast. The outlook for external demand has changed only marginally. The overall effect of the change in the external outlook on the change in the future domestic market interest rate path is positive over the entire forecast horizon.

The forecast for market **interest rates** is unchanged in 2011 Q2 and is slightly higher from 2011 H2 onwards (see Chart II.3.3). The positive contribution of the new external outlook is offset over the entire forecast horizon by a negative contribution of the initial state (see Chart II.3.4); the latter stems from generally weaker domestic demand and reflects the observed data showing lower wage growth and lower inflation and also the national accounts data. The effect of the individual changes in other factors on market interest rates is not strong, but contributes to higher rates overall. Within these changes, rates have been pushed upwards by expert adjustments taking into account the impacts of the high commodity price growth on net inflation above and beyond the effect captured by the short-term forecast and the outlook for industrial producer prices in the euro area.

The prediction of the nominal **koruna-euro exchange rate** is unchanged at the start of the forecast horizon but shifts towards stronger levels as the horizon lengthens (see Chart II.3.5). Compared to the previous forecast, a more favourable outlook for net exports, which outweighs the effects of a shift of the forecasted interest rate differential vis-à-vis the euro into negative territory, is fostering a stronger exchange rate.

The forecast for annual **GDP** growth is slightly lower (see Chart II.3.6). This change is due mainly to lower GDP growth at the end of 2010 and a revision of its structure by the CZSO. The contributions of household and government consumption are lower, whereas the contribution of net exports to GDP growth is higher.

Compared to the previous forecast, the new forecast expects lower **household consumption** growth at the start of the forecast horizon. This is due mainly to the slow consumption growth in 2010 Q4. After this effect unwinds, household consumption growth is higher in 2012.

New data for Q4 and a revision of the Q3 data indicate that **gross capital formation** decreased quarter on quarter at the end of 2010. Investment in solar power stations is thus probably not fully captured yet in the national accounts data. The new forecast therefore expects a moderate recovery in investment from the low recorded levels, whereas the previous forecast had assumed that the effect of photovoltaic power stations would unwind in early 2011. Investment growth over the rest of the forecast horizon is also slightly higher than in the previous forecast.

CHART II.3.4

DECOMPOSITION OF CHANGES IN THE INTEREST RATE FORECAST

The initial state is contributing to lower interest rates, while a higher outlook for foreign interest rates is acting in the opposite direction

(3M PRIBOR; percentage points)

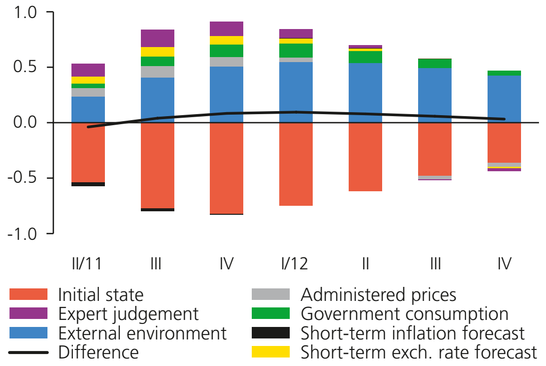


CHART II.3.5

CHANGE IN THE EXCHANGE RATE FORECAST

The exchange rate forecast has shifted towards slightly stronger values

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

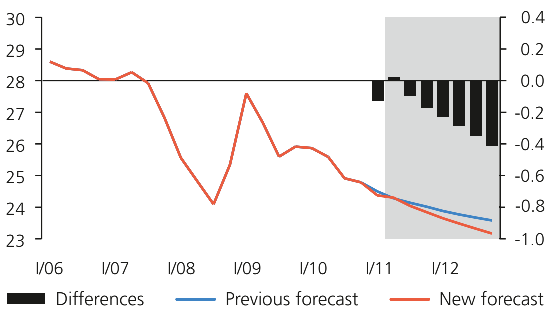


CHART II.3.6

CHANGE IN THE GDP FORECAST

The forecast for annual GDP growth is slightly lower this year and the next

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

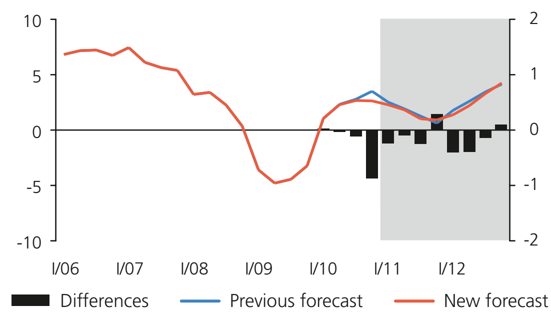
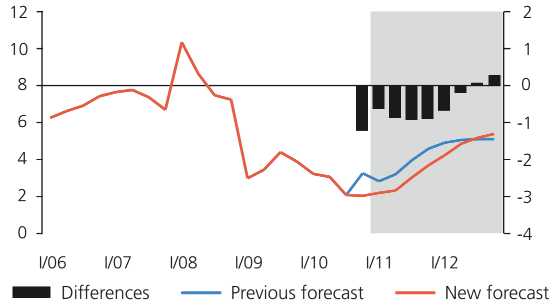


CHART II.3.7

CHANGE IN THE NOMINAL WAGE FORECAST

The business-sector nominal wage forecast has shifted downwards

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



Net exports have been revised upwards, mainly as a result of new data for 2010 Q4 and a revision of the previous data. The higher contribution of net exports to GDP growth will persist throughout 2011. At the end of the forecast horizon the quarterly growth rate of foreign trade is close to the previous forecast.

The forecast for average **nominal wage growth** in the business sector in 2011 is slightly lower than in the previous forecast as a result of the low wages observed in 2010 H2. Stronger economic activity will contribute to slightly higher wage growth at the end of 2012 (see Chart II.3.7).

II.4 ALTERNATIVE SCENARIOS AND SENSITIVITY ANALYSES

The risks of the forecast continue to be associated with external developments (described in detail in the alternative scenarios in Inflation Report I/2011[4]). Besides these risks, the government has drawn up proposals for VAT rate changes, leading to the creation of an alternative scenario. An exchange rate sensitivity scenario was also prepared as usual.

II.4.1 Alternative scenario – VAT rate increase

The alternative scenario reflects planned government proposals relating to fiscal consolidation and pension system reform. They include an **increase in the reduced VAT rate** from 10% to 14% with effect from 1 January 2012.[5] The tax revenues associated with this change should run to around CZK 28 billion, i.e. 0.7% of GDP.

The first-round effect of the increase in the reduced VAT rate on inflation is roughly 1.1 percentage points (see Table II.4.1). The largest part of the impact of the change pertains to food prices (0.6 percentage point), but administered prices will also be affected significantly (0.3 percentage point), as some administered items – heat, water supply, sewerage collection, medicines and public transport – are subject to the reduced VAT rate. Most items of adjusted inflation excluding fuels are subject to the basic VAT rate, so the first-round effect is only 0.2 percentage point.[6] Fuel prices will be unaffected by the increase in the reduced VAT rate.

The higher VAT rate will affect economic activity above all through a decline in household consumption expenditure caused by lower real disposable income. At this stage, the alternative scenario does not include possible compensation to households in the form of tax relief or social benefits.

The first-round effects of indirect tax changes are not included in monetary-policy relevant inflation, so they do not have a direct impact on interest rates in the simulation. At the same time, the alternative scenario – in line with past experience and the continued subdued economic activity – does not assume significant second-round effects of the increase in the VAT rate on inflation (e.g. due to

Table II.4.1

ALTERNATIVE SCENARIO OF VAT RATE INCREASE – FIRST-ROUND EFFECT ON INFLATION AND ITS COMPONENTS

The change in VAT will affect food prices most of all
(percentage points)

	First-round effect
Inflation, total	1.1
of which:	
Administered prices	0.3
Food prices	0.6
Prices of other tradables excluding fuels	0.1
Prices of other non-tradables	0.1
Fuels	0.0

Table II.4.2

ALTERNATIVE SCENARIO OF VAT RATE INCREASE – EFFECT ON DOMESTIC ECONOMY

The higher VAT rate will foster higher headline inflation, slower GDP growth and slightly lower interest rates
(deviations in percentage points from baseline scenario)

	CPI inflation	3M PRIBOR	GDP	Household consumption
II/11	0.0	0.0	0.0	0.0
III/11	0.0	0.0	0.0	-0.1
IV/11	0.0	0.0	-0.1	-0.2
I/12	1.0	0.0	-0.2	-0.4
II/12	1.0	-0.1	-0.3	-0.7
III/12	1.0	-0.2	-0.4	-1.1
IV/12	1.0	-0.2	-0.5	-1.5

4 Some of the risks described in these alternative scenarios – in particular higher commodity prices, faster interest rate growth in the euro area and robust growth of the German economy – have been incorporated into the baseline scenario of the new forecast. The main persisting risk to the forecast is an escalation of the euro area debt crisis.

5 A further change in VAT is scheduled for 1 January 2013, when the government plans to unify the two rates at 17.5%. If further progress is made in the legislative process, both changes will be incorporated into the baseline scenario of the next forecast, for which the forecast horizon will be extended to include the end of 2013.

6 As regards prices of non-tradables, the change will affect, for example, air tickets, sporting services, books, magazines and joinery and tile-laying services. The tradable items affected will include flowers and animal fodder.

rising inflation expectations). Interest rates in the alternative scenario thus respond only to the slight decrease in monetary-policy relevant inflation caused by the slowdown in real household consumption and GDP growth and fall slightly in 2012 H2. Rates thus respond only to the slight decrease in monetary-policy relevant inflation caused by the slowdown in GDP growth and fall slightly in 2012 H2 (see Table II.4.2). Whole-year GDP growth declines by roughly 0.4 percentage point in 2012 compared to the baseline. The exchange rate is almost the same as in the baseline scenario.

II.4.2 Exchange rate sensitivity scenario

The sensitivity scenario quantifies the impacts of a **different exchange rate path** compared to the forecast. This standard sensitivity scenario assumes a deviation of the nominal exchange rate of ±3% from the baseline scenario in the first quarter of the forecast. Interest rates in the first quarter of the forecast are the same as in the baseline scenario. The exchange rate is thus CZK 23.6/25.0 to the euro in 2011 Q2, compared to CZK 24.3 in the baseline scenario.

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

The exchange rate appreciation leads to a decline in import prices at the start of the forecast horizon and hence to lower inflation. The market interest rate path is therefore lower than in the baseline scenario. The appreciation also reduces exporters' price competitiveness, leading to a decline in GDP growth in 2011 compared to the baseline scenario. However, GDP growth rises gradually in response to easier monetary policy and an exchange rate correction and inflation also returns to the baseline scenario.

TABLE II.4.3

EXCHANGE RATE SENSITIVITY SCENARIO

The exchange rate appreciation leads to temporarily lower inflation and slower GDP growth than in the baseline scenario; interest rates decrease
(deviations from baseline scenario)

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

II.5 FORECASTS BY OTHER ENTITIES

Analysts' inflation expectations were broadly flat in 2011 Q1 at both the one-year and three-year horizon and are above the inflation target of 2% at both monitored horizons. The analysts expect GDP growth to reach around 2% this year and pick up pace next year. They also expect appreciation of the koruna and an increase in the CNB's key rates in the following 12 months. Most of the analysts were expecting stable key rates before the CNB Bank Board meeting in May.

Inflation expected by financial market analysts[7] and business managers remained above the CNB's inflation target of 2% in 2011 Q1 and April 2011 (see Table II.5.1). Analysts' inflation expectations have been broadly flat around 2.5% since mid-2010. Their inflation expectations for the three-year horizon are also flat about 0.5 percentage point above the CNB's target.

The indicator of **inflation perceived by households** has long been rising gradually but remains negative (see Chart II.5.1).[8] This means that households on average felt that prices tended not to rise over the last 12 months. The indicator of expected inflation has been positive since early 2010 and increased quite considerably during 2011 Q1. This suggests that the number of respondents who expect prices to rise more rapidly over the next 12 months is higher than the number of those who expect prices to stay the same or increase more slowly than in the past.

Both the FMIE and CF analysts expect GDP to grow by roughly 2% this year (see Tables II.5.1 and II.5.2). The growth rate is expected to increase next year, a fact that is also reflected in the analysts' wage growth predictions. Compared to the exchange rate of the koruna observed at the end of April, both the mostly domestic analysts participating in the FMIE and the mostly foreign analysts participating in the CF expect a stronger exchange rate at the one-year horizon (by around 1.8% and 1.1% respectively). Before the May meeting of the CNB Bank Board, seven analysts participating in the FMIE survey were expecting key rates to remain unchanged after this meeting and two analysts were expecting them to go up by 0.25 percentage point. All 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 1.25% to 2.25%. Accordingly, the forecasts for market interest rates also moved upwards.

7 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. Table II.5.1 shows average values from these surveys.

8 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).

TABLE II.5.1

EXPECTED INDICATORS OF FMIE AND CORPORATIONS

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

	12/10	1/11	2/11	3/11	4/11
FMIE:					
CPI	2.4	2.5	2.4	2.5	2.5
CPI, 3Y horizon	2.5	2.5	2.5	2.5	2.6
Real GDP in 2010	2.0	2.1	2.1	2.0	2.0
Real GDP in 2011		2.8	2.8	2.8	2.7
Nominal wages in 2010	2.4	2.4	2.5	2.4	2.1
Nominal wages in 2011		4.1	4.2	4.1	3.9
CZK/EUR exchange rate (level)	24.0	24.0	23.8	23.8	23.8
2W repo rate (in per cent)	1.4	1.4	1.4	1.5	1.6
1Y PRIBOR (in per cent)	2.3	2.4	2.4	2.4	2.5
Corporations:					
CPI	2.5			2.7	

CHART II.5.1

PERCEIVED AND EXPECTED INFLATION

The inflation expectations of households increased at the start of 2011
(source: European Commission Business and Consumer Survey)

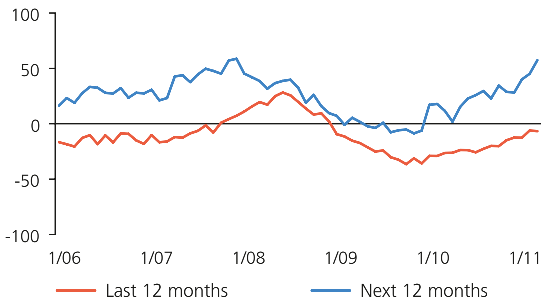


TABLE II.5.2

CF EXPECTED INDICATORS

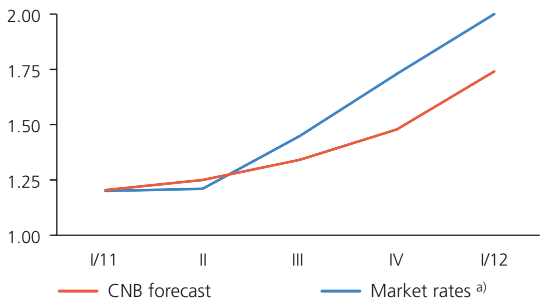
The CF analysts expect the economy to grow at a pace of just over 2%
(at 1Y; annual percentage changes unless otherwise indicated)

	12/10	1/11	2/11	3/11	4/11
Real GDP in 2011	2.2	2.2	2.2	2.2	2.1
Real GDP in 2012		3.1	3.0	2.9	2.8
Nominal wages in 2011	3.0	2.9	2.7	2.6	2.7
Nominal wages in 2012		4.4	4.2	4.0	4.1
CZK/EUR exchange rate (level)	24.2	24.2	24.2	23.8	23.9
3M PRIBOR (in per cent)	1.7	1.8	1.8	1.9	1.9

Chart II.5.2

FRA RATES VERSUS THE CNB FORECAST

The outlook for FRA rates is above the forecasted rates
(percentages)



a) for 2011 Q1 and 2011 Q2 the 3M PRIBOR and for 2011 Q3–2012 Q1 the average values of the FRA 3*6, 6*9 and 9*12 rates for the last 10 trading days as of 22 April 2011

Compared to the CNB's new forecast, the analysts expect real GDP growth to be roughly 0.5 percentage point higher this year. The predictions for next year are almost identical. Inflation expected by the analysts at the one-year horizon is slightly higher. This difference is probably due to the fact that the analysts have already taken into account with some certainty the increase in the reduced VAT rate from 10% to 14% in 2012, which is so far not included in the baseline scenario of the CNB forecast. However, its potential impacts are described in an alternative scenario (see section II.4.1). The exchange rate prediction at the one-year horizon is 1.1% weaker in the case of the FMIE analysts and 1.8% weaker according to the CF analysts. The analysts' expectations regarding the 2W repo rate and market rates at the one-year horizon are in line with the 3M PRIBOR path consistent with the CNB forecast.

Chart II.5.2 provides a **comparison of expected 3M market rates** derived from FRA quotations and the interest rate path consistent with the baseline scenario of the new CNB forecast. The outlook for FRA rates is above the forecasted rates, with the deviation rising as the horizon lengthens. This is probably due to market expectations of a faster increase in monetary policy interest rates compared to the CNB forecast (and analysts' expectations).

III. CURRENT ECONOMIC DEVELOPMENTS

III.1 INFLATION

Headline annual inflation stood at 1.7% in March 2011 and was thus slightly below the CNB's target. Monetary-policy relevant inflation, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, was 1.5%. The fall in headline annual inflation in 2011 Q1 was mostly due to the fading effect of the changes to indirect taxes made in January 2010. Market prices, as measured by net inflation, showed faster growth. Despite upward pressures from commodity prices, net inflation remains low in conditions of weak demand, low wage growth and mostly falling import prices of final products for the consumer market.

III.1.1 Fulfilment of the inflation target

Headline inflation was slightly below the CNB's inflation target in 2011 Q1 (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 2011 Q1, we have to examine above all the period roughly from July 2009 to March 2010 (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 IV/2009 forecast with subsequent inflation.

The **Inflation Report IV/2009 forecast** expected headline inflation to fluctuate close to zero in the near future. The low inflation figures were due mostly to a contraction in real economic activity, resulting in no inflationary pressures from the domestic economy or from import prices. Inflation was expected to start rising in 2010 Q2 and reach the 2% inflation target in 2010 H2 (see Chart III.1.1), owing mainly to an expected modest recovery in economic activity supported by easy monetary policy over the entire forecast horizon and to rising commodity prices.

Headline **inflation in reality** grew faster than forecasted until the end of 2010 and was below the forecast thereafter. The individual consumer price categories showed deviations in both directions. Adjusted inflation excluding fuels, which was affected by low domestic inflation pressures and in the second half of the forecast horizon also by a stronger koruna, acted strongly in the direction of lower inflation. This negative deviation from the forecast was partly offset by administered prices and food and fuel prices, whose contributions to headline inflation were positive (see Table III.1.1).

CHART III.1.1

FORECAST VERSUS ACTUAL INFLATION

Inflation was below the IR IV/2009 forecast in 2011 Q1
(annual percentage changes)

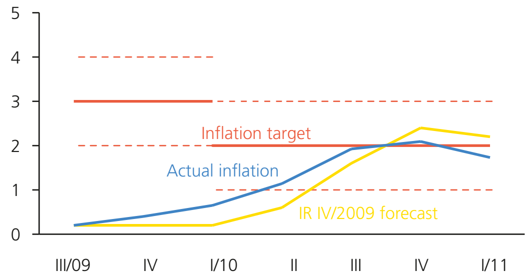


TABLE III.1.1

FULFILMENT OF THE INFLATION FORECAST

Adjusted inflation excluding fuels acted in the direction of lower inflation, while the contributions of other components were higher than forecasted
(annual percentage changes; contributions in percentage points)

	IR IV/2009 forecast	2011 Q1 outturn	Contribution to total difference
CONSUMER PRICES	2.2	1.7	-0.5
Breakdown into contributions:			
administered prices	2.0	4.3	0.3
first-round impacts of changes to indirect taxes	0.2	0.2	0.0
food prices[a)]	2.2	3.2	0.3
fuel prices[a)]	5.5	10.8	0.2
adjusted inflation excl. fuels[a)]	1.6	-0.8	-1.3

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

Table III.1.2

FULFILMENT OF THE EXTERNAL ASSUMPTIONS

Most external factors fostered higher inflation

(annual percentage changes unless otherwise indicated)

		IV/09	I/10	II/10	III/10	IV/10	I/11
GDP in euro area[a), b), c)]	p	-2.2	2.6	1.7	0.2	-0.4	0.3
	o	-2.1	2.2	3.2	3.1	3.0	-
PPI in euro area[b), c)]	p	-4.9	-1.6	0.7	2.0	2.1	1.6
	o	-5.3	-1.2	2.1	3.8	4.7	5.8
3M EURIBOR	p	0.7	1.0	1.2	1.5	2.2	2.5
(percentages)	o	0.7	0.7	0.7	0.9	1.0	1.1
USD/EUR exchange rate	p	1.47	1.45	1.45	1.44	1.43	1.42
(levels)	o	1.48	1.38	1.27	1.29	1.36	1.37
Brent crude oil price	p	68.5	73.5	75.4	77.1	78.3	79.4
(USD/barrel)	o	75.0	76.8	78.6	76.4	86.9	105.2

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

Table III.1.3

FULFILMENT OF THE FORECAST FOR KEY VARIABLES

Domestic economic activity rose faster than forecasted in 2010 H2

		IV/09	I/10	II/10	III/10	IV/10	I/11
3M PRIBOR	p	1.1	1.2	1.5	1.8	2.0	2.3
(percentages)	o	1.8	1.5	1.3	1.2	1.2	1.2
CZK/EUR exchange rate	p	25.6	25.7	25.7	25.7	25.7	25.6
(levels)	o	25.9	25.9	25.6	24.9	24.8	24.4
Real GDP [a)]	p	-2.7	2.5	2.3	1.2	-0.2	0.3
(annual perc. changes)	o	-3.2	1.1	2.3	2.7	2.6	-
Nominal wages [b)]	p	1.6	3.3	3.0	2.5	3.2	3.8
(annual perc. changes)	o	5.2	2.0	2.7	2.9	2.1	-

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

External economic factors contributed significantly to domestic inflation. Initially, most macroeconomic variables moved broadly in line with the forecast. During 2010, however, the recovery in external – and therefore also domestic – economic activity was stronger than forecasted. At the same time, production prices and oil prices rose more quickly than forecasted. These factors therefore fostered higher domestic inflation. By contrast, foreign interest rates were lower than forecasted over the entire forecast horizon (see Table III.1.2).

Domestic **interest rates and the exchange rate** also differed from the assumptions of the forecast. The initially tighter real interest rates turned easier following the lowering of monetary policy rates at the end of 2009 and as inflation rose. The exchange rate was roughly in line with the forecast until mid-2010. Subsequently, however, improving export performance, measures to reduce the public budget deficit and an upgrading of the Czech Republic's rating outlook were reflected in a strengthening koruna (see Table III.1.3).

Based on the CNB's current knowledge of the workings of the Czech economy and its current knowledge of the actual economic situation, the **developments since the forecast under review was drawn up** can be summed up in the following way. The stronger domestic economic growth was driven – via the export channel – by a faster recovery in external demand and so did not exert any major inflation pressures. In addition, the higher external inflation was partly offset by the appreciating koruna. Owing to the above factors, headline inflation was slightly below the inflation target at the start of 2011. The low domestic interest rates reflected, in addition to domestic inflationary pressures, continuing easy global monetary policy.

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 July 2009 and March 2010, the Bank Board assessed the risks of the forecasts first as being on the downside and then as being slightly on the upside at the end of 2009 and as balanced or slightly on the downside at the start of 2010. The Bank Board's decisions led to market interest rates being higher than implied by the forecasts. This applies especially to the forecast contained in Inflation Report IV/2009, which revised the market interest rate path downwards quite significantly. Overall, CNB monetary policy did not prevent monetary-policy relevant inflation from staying slightly below the CNB's 2% inflation target. From this perspective, based on current knowledge, it seems that monetary policy should have been easier at the end of 2009.

III.1.2 Current inflation

Annual inflation fell in 2011 Q1. At 1.7%, inflation in March was 0.6 percentage point lower than in December 2010 (see Chart III.1.2). This decline was mostly due to the fading effect of changes to indirect taxes made in January 2010. Annual food and fuel price inflation also decreased slightly. These changes were partially offset by a rise in administered price inflation and a slower decline in adjusted inflation excluding fuels (see Chart III.1.4).

Turning to the **structure of annual inflation**, inflation continued to be affected strongly by administrative factors, i.e. the effects of changes to indirect taxes and administered prices, although their contribution to annual inflation decreased significantly in Q1 (to 0.9 percentage point in March 2011; see Chart III.1.4). At 0.8 percentage point, the contribution of market prices to annual inflation was almost the same as that of administrative factors.

Administrative effects were dominated in 2011 Q1 by growth in **administered prices** (of 4.3% year on year in March). After rising in January, they were broadly stable during the quarter. The biggest January changes to prices of administered items included increases in energy prices, water supply and sewerage collection charges and regulated and deregulated rents.[9] These items, together with administered health care items, were also the biggest contributors to annual administered price inflation in March 2011.

By contrast, the contribution of changes to **indirect taxes** to consumer price inflation decreased significantly in 2010 Q1 (to 0.2 percentage point[10]; see Chart III.1.4), mostly because of the unwinding of the effect of the VAT increase implemented on 1 January 2010 from the year-on-year comparison. Thanks to this, monetary-policy relevant inflation moved closer to headline inflation (1.5%; see Chart III.1.2). The following text assesses the evolution of the main components of inflation excluding the effect of tax changes.

Annual **market price inflation**, as measured by net inflation, rose slightly further in 2011 Q1. At 0.9% in March, it was 0.2 percentage point higher than in December 2010. This was due to a slowing annual decline in adjusted inflation excluding fuels, which, however, was still negative. Adjusted inflation thus continued to show a significant effect of the subdued demand and the absence of inflationary pressures from the domestic economy. Also, the mostly falling import prices of final products with a higher degree of processing for the consumer market (see Chart III.2.2), reflecting, among other things, the earlier appreciation of the exchange rate, helped to keep adjusted inflation low.

9 In January 2011, prices of electricity for households were increased by 4.8%, natural gas prices by 1.7% and heat prices by 1.8%. Water supply and sewerage collection charges rose by about 6% and regulated and deregulated rents by 2.7%.

10 This remaining small contribution is a result of the lagged effect of the increase in the excise duty on cigarettes (valid from 1 January 2010) on annual inflation.

CHART III.1.2

INFLATION

Annual inflation decreased in 2011 Q1

(annual percentage changes)

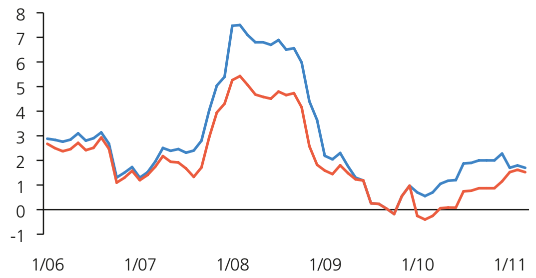


CHART III.1.3

INFLATION COMPONENTS

The year-on-year decline in adjusted inflation weakened, while food and fuel price inflation fell slightly

(annual percentage changes; except for administered prices excluding indirect tax changes)

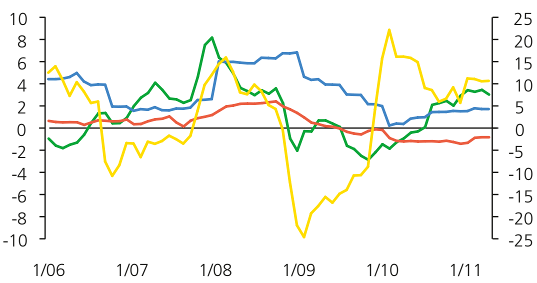


CHART III.1.4

STRUCTURE OF INFLATION

The contributions of administrative effects and market prices to annual inflation were almost equal

(annual percentage changes; contributions in percentage points)

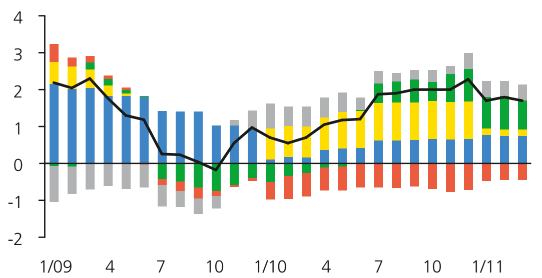


CHART III.1.5

FOOD PRICES

Food prices kept rising in 2011 Q1
(annual percentage changes)

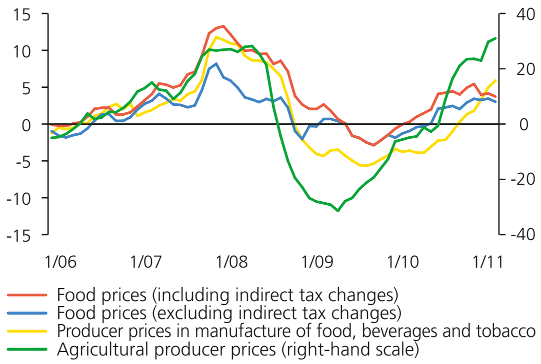


CHART III.1.6

ADJUSTED INFLATION EXCLUDING FUELS

The annual decline in prices within adjusted inflation moderated in 2011 Q1
(annual percentage changes)

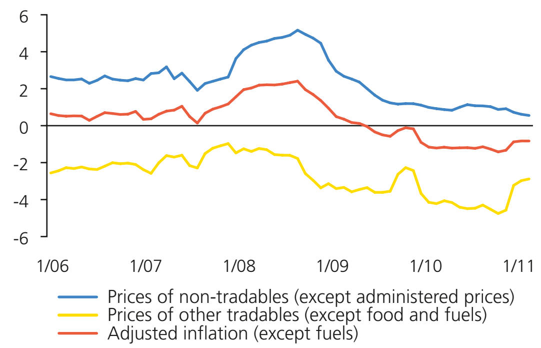
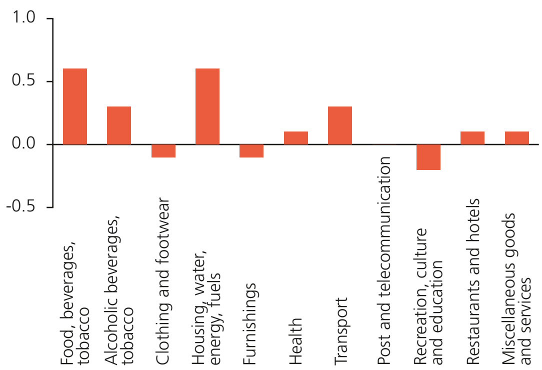


CHART III.1.7

CONSUMER BASKET PRICES

Prices in the food and non-alcoholic beverages and housing categories were the biggest contributors to annual inflation
(March 2011; contributions in percentage points, including changes to indirect taxes)



The fast annual growth in world prices of raw materials and food has so far passed through only to consumer prices of fuels and, to a limited extent, to food prices.

Annual **food price inflation** remained above 3% in 2011 Q1, but decreased somewhat due to base effects. The rise in food price inflation observed since mid-2010 reflects the pass-through of surging agricultural producer prices to consumer prices. This pass-through has so far been lagged and subdued, mainly at the expense of margins in the production and retail chains. Taking into account the intensity and duration of these cost pressures and the rising growth in producer prices in this sector (see Chart III.1.5), we can nonetheless expect a further rise in food prices on the consumer market in the near future.[11]

Annual **adjusted inflation excluding fuels** remained negative in 2011 Q1, but its decline moderated (from -1.3% in December to -0.8% in March; see Chart III.1.6) owing to prices of tradable commodities excluding fuels, whose year-on-year decline slowed in 2011 Q1 (from -4.6% in December 2010 to -2.9% in March). This change was due mainly to base effects caused by substantial decreases in prices of these commodities (automobiles, for example) in early 2010. Growth in prices of non-tradable commodities (excluding administered prices), which was already low, continued to slow amid still weak domestic demand and wage growth. This resulted in the lowest-ever annual growth figure of 0.6% in March.

Growth in **fuel prices** fell marginally in 2011 Q1 (from 11.2% in December to 10.7% in March, excluding tax changes). This still high growth in fuel prices was due to a sharp increase in oil and petrol prices on European exchanges in late 2010, whose impact on domestic prices was only partly offset by the movement of the koruna-dollar exchange rate. As a result, average petrol prices reached an all-time high in March (including the increased excise duty and VAT rates introduced in January 2010).

Consumer prices broken down by the major **categories of the consumer basket** rose the fastest in the alcoholic beverages and tobacco category and the health category (by 3.9% in both categories in March, including the effect of tax changes). However, the biggest contributors to annual inflation in March 2011 were again the categories of food and non-alcoholic beverages and housing (see Chart III.1.7).

11 The largest impacts of these growing cost pressures on domestic prices were observed for bread products, milk, and edible oils and fats.

By international comparison, consumer prices as measured by the **HICP** continued to rise more slowly in the Czech Republic than on average in the EU countries in 2011 Q1. According to Eurostat's latest estimate, HICP growth in the Czech Republic decreased to 1.9% in March, while the average figure for the EU countries was much higher, standing at 3.1% in the same month.

CHART III.2.1

IMPORT PRICES AND PRODUCER PRICES

Rapid growth in import prices and industrial and agricultural producer prices continued into 2011 Q1
(annual percentage changes)

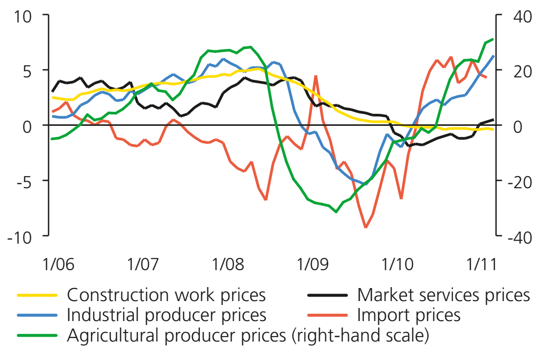


CHART III.2.2

IMPORT PRICES

Import price growth continued to be driven by prices of imported commodities and semi-finished products
(annual percentage changes; contributions in percentage points)

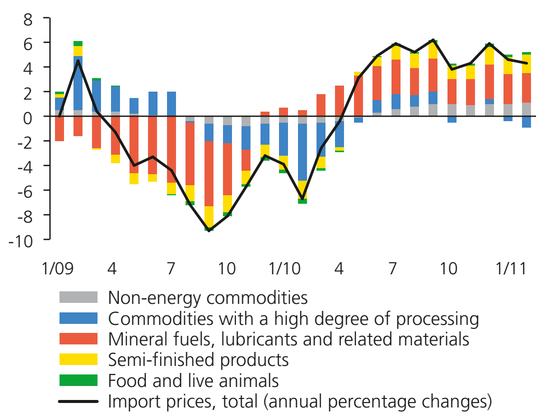
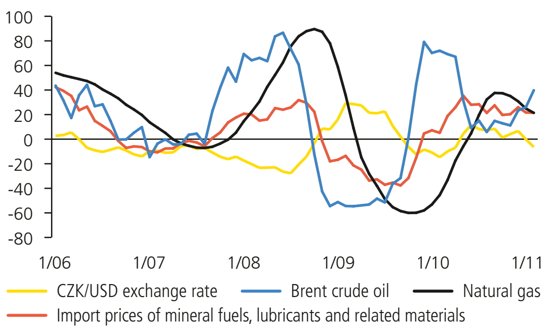


CHART III.2.3

MINERAL FUELS

Prices of oil and natural gas passed through to import prices of energy commodities with a short lag
(annual percentage changes)



III.2 IMPORT PRICES AND PRODUCER PRICES

Import price inflation remained high amid persisting fast growth in prices of key commodities on world markets. The high growth in import prices of energy and non-energy commodities and semi-finished products was reflected most of all in prices of producers at the early stages of the production chain. At the same time, a strengthening pass-through of these cost pressures to prices in high-value-added branches of manufacturing was visible in 2011 Q1. Annual industrial producer price inflation rose overall. However, agricultural producer prices recorded the highest growth. Prices of market services showed a modest upturn in growth. Only construction work prices continued falling in year-on-year terms.

III.2.1 Import prices

In the first two months of 2011 Q1, the annual rise in **import prices** (observed since May 2010) continued to be due mainly to rapid growth in prices of key commodities on world markets (see Chart III.2.2). According to the latest data for February, annual import price inflation slowed slightly compared to December 2010 (to 4.3%), mainly because of changes in the koruna exchange rate.

Fast growing prices of imported **mineral fuels** remained the biggest contributor to annual import price inflation (see Chart III.2.2). However, their contribution decreased slightly in January and February, owing largely to a marked slowdown in the annual growth rate of world natural gas prices (to 21.4% in February), which usually "copy" oil prices with a lag (see Chart III.2.3). By contrast, oil prices again tended towards markedly faster annual growth, which was almost 40% in February. The impact of the still high oil and natural gas prices on mineral fuel import prices was dampened by renewed year-on-year appreciation of the koruna-dollar exchange rate in the first two months of 2011.[12] Nevertheless, import prices of energy commodities accounted for more than half of the overall annual import price growth in February.

The persisting strong demand for raw materials (particularly metals) was also reflected in a further pick-up in growth of prices of **semi-finished products** (see Table III.2.1). Prices of **imported non-energy commodities** also recorded a marked increase in annual growth to above 40%, the highest level seen since the import price index started to be monitored. Despite their relatively small weight, their contribution to import price inflation exceeded 1 percentage point. The high growth in world oil prices also led to faster annual growth in prices of imported **chemicals** (to 4% in February); comparable growth had last been recorded in 2000. The high prices of agricultural

12 The koruna-dollar exchange rate depreciated by 6.7% year on year in December and appreciated by 6.3% year on year in February.

commodities on world markets passed through to import prices of **food**, particularly in late 2010. At the start of 2011, the rate of growth of food import prices moderated, mainly because of a year-on-year appreciation of the koruna exchange rate.

Whereas import prices of raw materials and semi-finished products recorded mostly high annual growth amid persisting strong demand on global markets, import prices of **high-value-added commodities**[13] saw a renewed deepening of their year-on-year decline (see Chart III.2.2). Import prices of these commodities were clearly affected in this period by a sharp annual appreciation of the koruna-euro exchange rate (of 6.5% in February). However, the effect of the much lower growth of foreign prices of these commodities compared to prices of raw materials was also significant.

III.2.2 Producer prices

Industrial producer prices

Industrial **producer price inflation** recorded a continuing upward trend in 2011 Q1. According to the latest data, it rose by 2.7 percentage points compared to December 2010, to 6.3% in March (see Chart III.2.4), the highest figure recorded since 2005.

The view of the causes and **structure of the growth in industrial producer prices** has changed somewhat since the previous report. The annual growth continued to be driven mainly by rapidly rising import prices of significant energy and non-energy inputs, which strongly affected prices of producers at the early stages of the production chain. However, they also started to pass through more noticeably to producer prices in other branches of manufacturing (see Chart III.2.4). This implies that, amid persisting cost pressures and a continuing recovery of demand, industrial enterprises were now starting to reflect the cost pressures in their prices. The reduction of personnel cost-output ratios was probably no longer sufficient to offset the rising material cost-output ratio (see section III.5.5).

The overall annual growth in industrial producer prices in 2011 Q1 was due most of all to prices of **basic metals** (up by 13.8% in March), which were affected mainly by rapidly rising import prices of metal-based semi-finished products (see Chart III.2.5). Only slightly lower was the contribution of prices in the manufacture of **coke and refined petroleum products**, whose still high growth rate exceeded 25% in Q1. Prices also rose quickly in the chemical industry, where many producers are dependent on oil products.

TABLE III.2.1

STRUCTURE OF IMPORT PRICE INFLATION

Prices rose in most import categories, although they fell again for high-value-added commodities

(annual percentage changes)

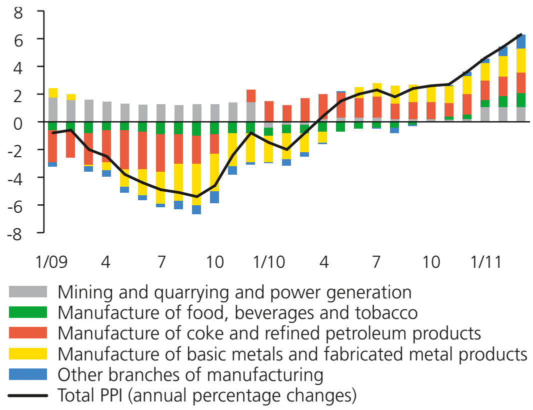
	11/10	12/10	1/11	2/11
IMPORTS, TOTAL	4.3	5.9	4.6	4.3
of which:				
food and live animals	4.1	5.4	4.3	3.0
beverages and tobacco	-2.0	0.6	1.6	5.3
crude materials inedible, except fuels	34.2	37.2	37.8	40.7
mineral fuels and related products	20.3	25.9	21.7	21.5
animal and vegetable oils	10.9	17.5	22.3	30.9
chemicals and related products	1.6	3.1	3.6	4.1
manufactured goods classified chiefly by material	5.1	6.3	6.7	6.9
machinery and transport equipment	-0.1	0.6	-1.4	-2.5
miscellaneous manufactured articles	-1.5	-1.0	-3.0	-4.3

CHART III.2.4

INDUSTRIAL PRODUCER PRICES

Growth in industrial producer prices accelerated further

(annual percentage changes; contributions in percentage points)



13 Machinery, transport equipment and miscellaneous manufactured articles.

CHART III.2.5

PRICES OF METALS AND REFINED PETROLEUM PRODUCTS

The high growth in prices of imported semi-finished products and mineral fuels passed through quickly to prices of producers at the early stages of the production chain
(annual percentage changes)

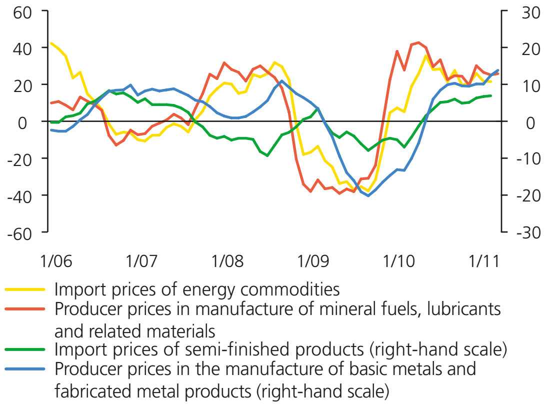
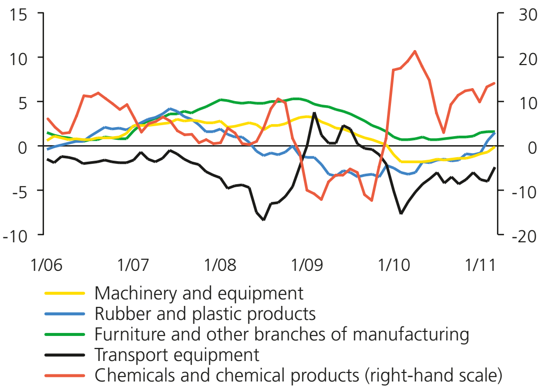


CHART III.2.6

MANUFACTURING

Rising prices prevailed in high-value-added branches
(annual percentage changes; selected branches)



Annual industrial producer price inflation in Q1 was strengthened by renewed price growth in the **electricity, gas and steam industry** (of 3.9% in March) and by an upswing in growth in prices in the water supply and sewage-related services industry to almost 6% and in **mining and quarrying** to more than 9%. The contribution of these industries to annual industrial producer price inflation was around 1percentage point in 2011 Q1. The contribution of the **food industry**, where annual producer price inflation rose further in reaction to the continuing growth in world and domestic prices of agricultural and food commodities (to 5.9% in March), also increased.

Prices in **other high-value-added branches of manufacturing** were by now recording accelerating growth or a slowing decline in most branches (see Chart III.2.6). Their contribution to annual industrial producer price inflation was 1 percentage point, the highest figure recorded since 2007. Producer prices decreased only in three branches.[14]

Agricultural producer prices

The continuing rise in annual **agricultural producer price inflation** in 2011 Q1 signalled an increase in potential inflationary pressures arising from prices of agricultural commodities. According to the latest data for March, annual growth in the overall agricultural producer price index increased by more than 7 percentage points compared to December 2010, to 31% (see Chart III.2.7). This was due to an extraordinarily sharp upswing in annual growth in prices of crop products to 56.1% in March. By contrast, growth in prices of lower-weight livestock product items slowed gradually in 2011 Q1 (to 6.3% in March).

The main causes of the persisting fast growth in domestic agricultural producer prices remain unchanged. The primary factor was the upswing in growth in **agricultural commodity prices on world markets** observed since 2009 H2, caused by the global economic recovery and easier global monetary conditions boosting investment in commodities as an alternative asset. Unfavourable weather conditions in the major world producers of crop products in 2010 concurrently led to a reduction in global stocks. The aforementioned factors fostered a large increase in world prices of crop products, particularly cereals and oil crops, in 2010 H2. The growth in agricultural producer prices was also due to a surge in prices of some traditionally volatile commodities (fruit, vegetables and potatoes). As regards domestic prices, the renewed growth in world prices of these commodities was only partly offset by the year-on-year appreciation of the koruna-euro exchange rate during 2010 and in early 2011.

14 Transport equipment, machinery and equipment, and computer, electronic and optical products.

Other producer prices

Amid persisting low construction investment demand, **prices of construction work** continued to show a slight annual decline in 2011 Q1, reaching 0.4% in March (see Chart III.2.8). However, growth in prices of materials and products consumed in construction rose further (to 3.9% in March). This was probably caused by rising prices of inputs in the form of imported semi-finished products and raw materials.

After a year-long decline, **prices of market services** saw renewed annual growth in 2011 Q1 (to 0.5% in March). Services with rising prices predominated. Faster annual growth or slower declines in prices were recorded for all services except accounting and auditing and renting. After previously falling, prices of real estate services and advertising and architectural services saw renewed growth.

CHART III.2.7

AGRICULTURAL PRODUCER PRICES

Agricultural producer prices continued to rise sharply

(annual percentage changes)

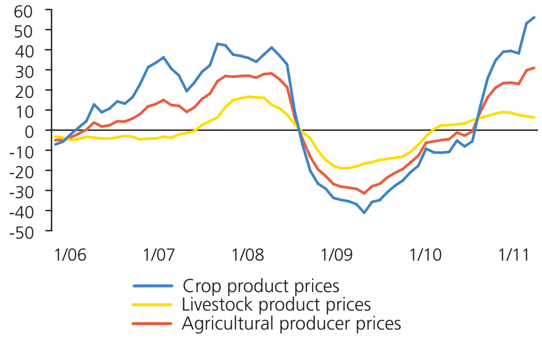


CHART III.2.8

OTHER PRICE CATEGORIES

Prices of market services recorded renewed year-on-year growth

(annual percentage changes)

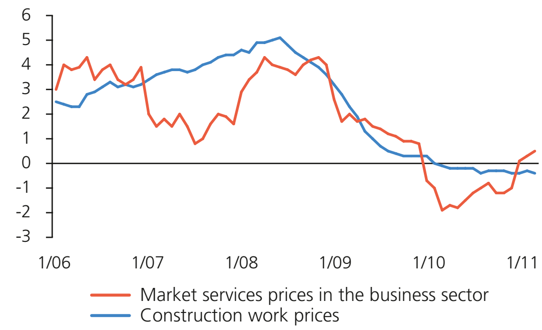


Chart III.3.1

GROSS DOMESTIC PRODUCT

GDP growth slowed slightly in 2010 Q4

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

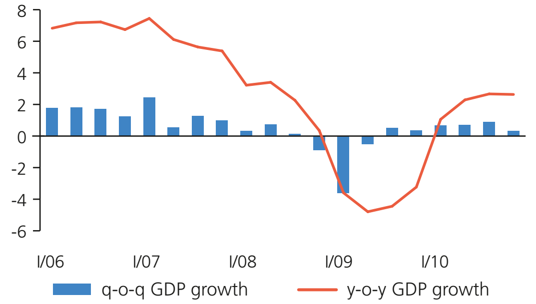


Chart III.3.2

STRUCTURE OF ANNUAL GDP GROWTH

Change in inventories made the largest contribution to the GDP growth

(contributions in percentage points; seasonally adjusted data)

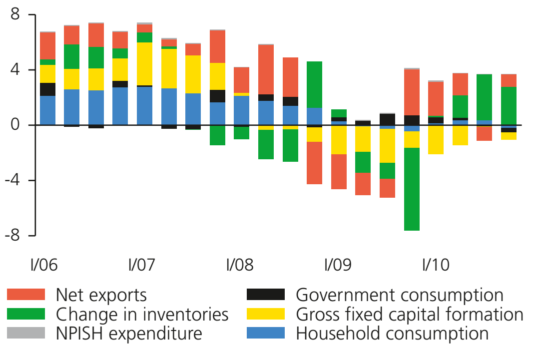
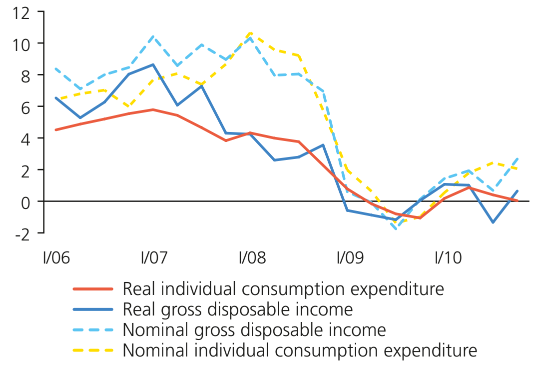


Chart III.3.3

HOUSEHOLD CONSUMPTION EXPENDITURE

Household consumption remains weak, in line with real disposable income

(annual percentage changes)



III.3 DEMAND AND OUTPUT

Annual real GDP growth decreased by 0.1 percentage point to 2.6% in 2010 Q4.[15] Quarter-on-quarter output growth was also slower than in the previous quarter (by 0.3%). The largest contributor to annual GDP growth was again change in inventories. Net exports also contributed partially to the GDP growth amid quickly rising foreign trade turnover. The contributions of fixed investment and final consumption expenditure were negative in Q4. On the supply side, the continuing economic growth was due mainly to manufacturing, and the contribution of the services sector was also positive.

III.3.1 Domestic demand

Annual **domestic demand** growth fell noticeably in 2010 Q4. All its expenditure components contributed to this change. Positive domestic demand growth was fostered only by inventories, as fixed investment and final consumption decreased year on year (see Chart III.3.2). In the case of fixed investment this trend has been continuing since 2008 H1. Final consumption showed a modest decline following previous slight growth.

Final consumption

A modest recovery in **household consumption** growth during the first three quarters of 2010 was replaced by a renewed decline in Q4 (of 0.4% year on year according to seasonally adjusted CZSO data). However, households decreased expenditure only on non-durable goods (by 2% year on year), whereas their expenditure in the other categories increased.

The above developments were recorded amid an upswing in year-on-year growth in nominal **gross disposable income** (to 2.7%; see Chart III.3.3), which is the main source of financing of households' consumption expenditure. Most components of household income contributed to the recovery in its growth in 2010 Q4 following a decline in 2009. The biggest contributions to the gross disposable income growth came from wages and salaries, property income and gross operating surplus and mixed income (see Chart III.3.4). The contribution of social benefits was low.

Under these circumstances, the main cause of the interruption of growth in real household consumption in Q4 can be seen in a combination of two factors. The main factor was the more than 2% inflation[16], which weakened the year-on-year growth rate of households' real gross disposable income to just 0.6%, thereby reducing its purchasing power. There was also a modest increase in the saving rate (from

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

16 As measured by the household consumption deflator.

9.2% in Q3 to 9.8% in Q4; see Chart III.3.5), which was also shifted upwards by a significant revision of the data on both household consumption and nominal and disposable income.

The latest available **leading indicators**, which are a source of information for estimating the household consumption trend in the short run, are mixed. Whereas the seasonally adjusted retail sales data for January and February showed positive growth in all subcategories of this sector except sales of fuels, the results of the consumer confidence survey are less optimistic. A considerable decrease in this indicator in 2011 Q1 suggests rather subdued household consumption growth at the twelve-month horizon (see Chart III.3.14). It is based mainly on a deterioration in households' expectations regarding their financial situation and unemployment. As a result, households expect to save less of their disposable income.

Real **final government consumption expenditure** was affected in 2010 Q4 by the continuing implementation of government austerity measures. The year-on-year decline in government consumption deepened further compared to Q3, to -1.6%. These data reveal the commencement of government expenditure restrictions in 2010 H2.

Investment

Investment activity in the economy remained subdued in 2010 Q4. The year-on-year decline in **fixed investment**, closely related to the financial and economic crisis and uncertainty about future economic developments, continued for the third consecutive year (see Chart III.3.6).

In 2010 Q4 alone, the year-on-year decline in fixed investment deepened again, reaching -2.3%.[17] The forecasted positive contribution of investment in photovoltaic power stations had little effect on the fixed investment data in Q4, although the installed capacity of these power stations exceeded the upper limit of the original estimates and the foreign trade data show high imports of solar panels. This suggests the possibility of a future revision of the fixed investment data.

The continuing slowdown in investment activity was observed primarily in the **government sector**, where the year-on-year decline in fixed investment deepened to 12.8% on account of the implementation of austerity measures, whose impact was particularly visible in infrastructure. Investment in the **household sector** continued falling year on year (by 5.5%), although much more slowly than in the previous quarter. This slowdown was probably mostly due to investment in dwellings, which accounts for a large proportion of total household investment and which increased significantly in Q4 (to 8.5%; see Chart III.3.7). However, no marked recovery in demand for investment in dwellings can be expected in the near future, despite an increase in new loans for house purchase recorded in early 2011.[18]

17 This result was also partly due to a revision of the 2010 Q1–Q3 data.
18 For details see section II.5.2 *Credit.*

CHART III.3.4

DISPOSABLE INCOME

The growth rate of nominal gross household disposable income increased
(annual percentage changes; contributions in percentage points; current prices)

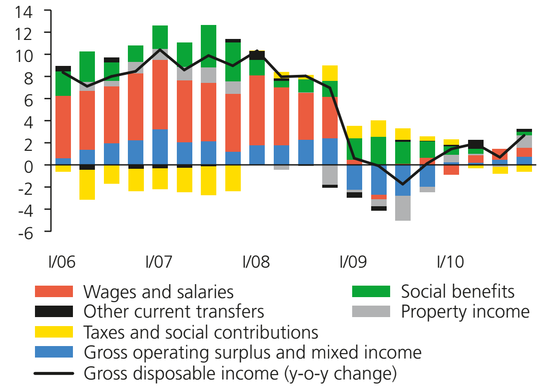


CHART III.3.5

GROSS SAVING RATE

The saving rate increased slightly in 2010 Q4
(percentages; source: CZSO, seasonally adjusted CNB data)

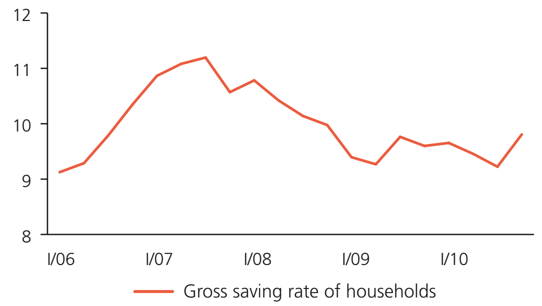


CHART III.3.6

FIXED CAPITAL FORMATION

Fixed investment is still falling
(annual percentage changes; contributions in percentage points; constant 2000 prices)

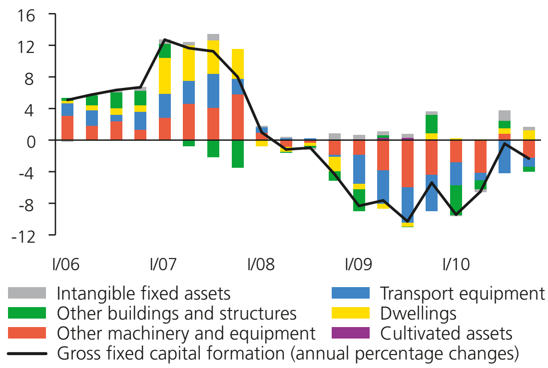


CHART III.3.7

INVESTMENT IN DWELLINGS

Growth of investment in dwellings increased in 2010 Q4, but housing starts continued to decline
(annual percentage changes)

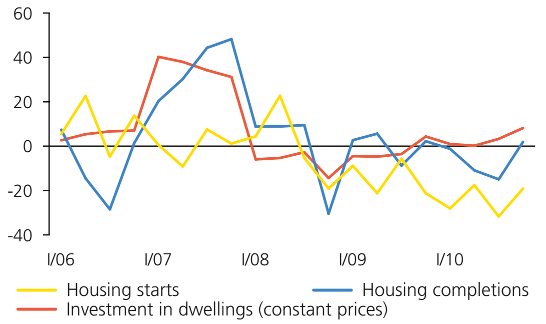


CHART III.3.8

NET EXTERNAL DEMAND

Net exports increased slightly year on year in 2010 Q4
(CZK billions; constant 2000 prices; seasonally adjusted data)

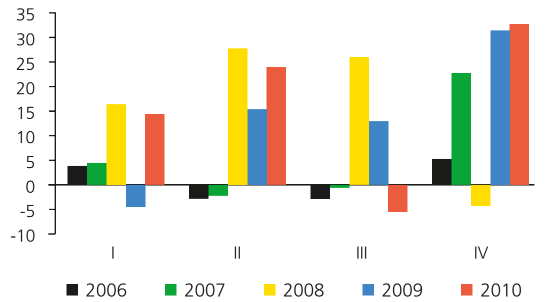
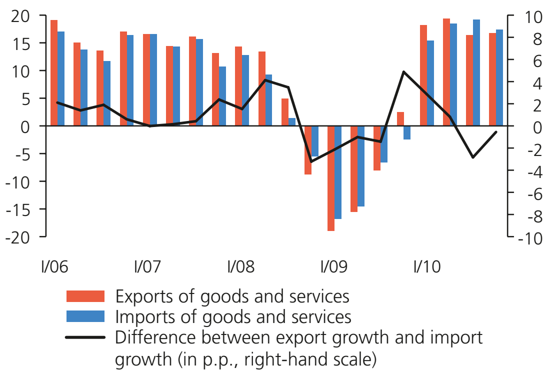


CHART III.3.9

EXPORTS AND IMPORTS

Foreign trade turnover continued to grow rapidly in 2010 Q4, with imports rising slightly faster than exports
(annual percentage changes; percentage points; constant prices; seasonally adjusted data)



This is indicated by the falling number of housing starts recorded until recently, primarily reflecting perceptions of uncertainty on this market from developers' point of view and a large "stock" of completed unsold apartments. The only slowly changing conditions on the labour market should also be taken into account.

In the **non-financial corporations** sector, which accounts for roughly one-half of fixed investment, investment at constant prices increased by 2.6% year on year in Q4. When assessing investment developments in this sector, the previous year's very low base should be taken into account; the level of investment is still far below the figures recorded in 2007–2008.

In contrast to fixed investment, the sharp upswing in additions to **inventories** observed since the start of 2010 continued into Q4 (see Chart III.3.2 above). This phenomenon was probably associated primarily with growth in external demand and the gradual replenishment of inventories following their decline in industry, particularly in export-oriented branches, during the crisis.

III.3.2 Net external demand

The decline in **net exports of goods and services**[19] observed in the previous quarter halted in 2010 Q4. Net exports switched to a surplus of CZK 32.7 billion and increased slightly year on year (by CZK 1.3 billion); in quarter-on-quarter terms, they grew by more than CZK 38 billion (see Chart III.3.8). Unlike in the previous quarter, the contribution of net exports to GDP growth was positive.

The growth rate of **total exports** picked up slightly in 2010 Q4, rising by 0.4 percentage point from the previous quarter, to a significant 16.8%. The rapid growth in exports was fostered by continuing growth in external demand in the Czech Republic's major trading partner countries. However, it was still partly affected by the previous year's low base resulting from the global economic crisis.

However, year-on-year growth in total foreign trade turnover declined slightly, as the growth rate of **total imports** was slower than in 2010 Q3 (down by 1.9 percentage points to 17.3%; see Chart III.3.9). The still high growth in imports was associated mainly with rising imports of goods for investment purposes and for intermediate consumption for export production. The year-on-year increase in net exports in Q4 was thus due to a decrease in the lead of import growth over export growth (of 0.5 percentage point; see Chart III.3.9).

19 At 2000 prices, seasonally adjusted.

III.3.3 Output

The quarter-on-quarter growth rate of **gross value added** decreased in 2010 Q4. In year-on-year terms, however, value added at basic prices continued to show pronounced growth (of 4.1%), although this was still due largely to a low base in the crisis year 2009. Gross value added growth continued to be driven by industry and services (see Chart III.3.10).

Thanks to the continuing favourable trend in manufacturing, the contribution of **industry** to annual gross value added growth increased further in 2010 Q4 (see Chart III.3.10). The growth in value added in industry was achieved amid fast overall annual growth in industrial production, supported most of all by the manufacture of motor vehicles, trailers and semi-trailers, machinery and equipment and electrical equipment, which are largely exported. The crucial effect of external demand on production in industry was also indicated by quickly rising direct export sales,[20] accounting for almost one-half of total sales in industry, and by high (almost 17%) real year-on-year growth in goods exports in 2010 Q4.[21] In line with the continuing growth in industrial production, there was also a further rise in **capacity utilisation** in industry – to 84% in Q4 (see Chart III.3.11).

According to the latest available data, industrial production continued rising in both month-on-month and year-on-year terms in January and February 2011 (by 12.5% year on year in February)[22] and thus converged further towards its pre-crisis levels (see Chart III.3.11). The favourable production trend was also reflected in a further weakening of perceptions of insufficient demand as a **barrier to growth** in production from businesses' point of view (see Chart III.3.13). The latest February data on **new industrial orders** suggest continued faster growth in external demand than in domestic demand in the coming months of 2011 (see Chart III.3.12). However, the results of the March business confidence survey in industry are indicating a slight deterioration in expectations regarding external demand in the next three months.

The contribution of **services and trade** to annual growth in total gross value added increased slightly in 2010 Q4 (to 1.5 percentage points). This was chiefly on account of continuing value added growth in services associated with growth in industrial production (in transport, storage and telecommunications, and business services). Gross value added also continued to rise in trade. The retail sales data suggest that this growth was probably still being driven by car sales. However, the latest available data on retail sales in January and February 2011 are indicating renewed growth in other categories of retail goods as well.

20 An increase of 24.4% at current prices in December 2010.
21 Seasonally adjusted exports of goods at constant prices according to the national accounts.
22 Seasonally adjusted data.

CHART III.3.10

CONTRIBUTIONS OF BRANCHES TO GVA GROWTH

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

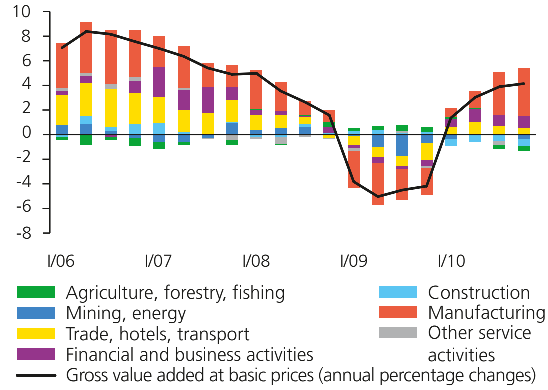


CHART III.3.11

INDUSTRIAL PRODUCTION

Industrial production continued to converge to pre-crisis level
(basic index; year 2005 = 100)

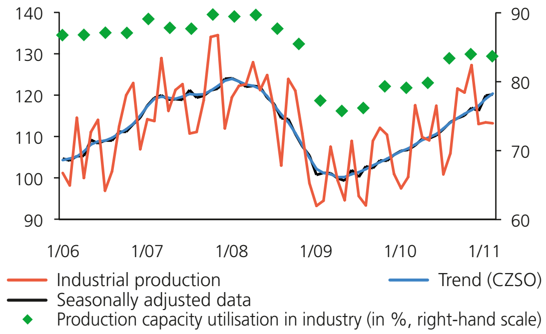


CHART III.3.12

NEW ORDERS IN INDUSTRY

Growth in production is being driven by new orders from abroad
(annual percentage changes)

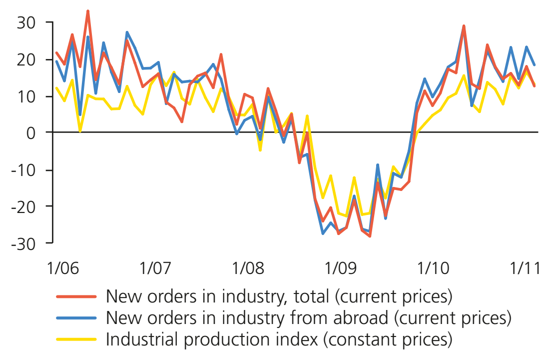


CHART III.3.13

BARRIERS TO GROWTH IN INDUSTRY

The effect of insufficient demand as a barrier to growth in output in industry is decreasing
(percentages; source: CZSO)

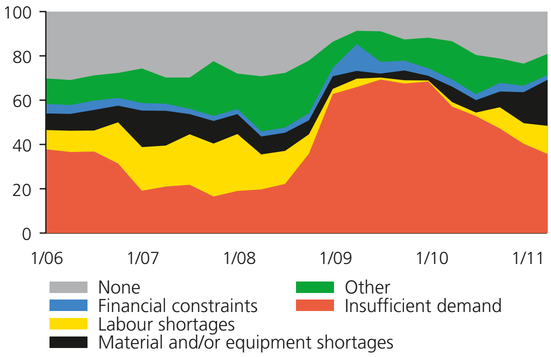


CHART III.3.14

CONFIDENCE INDICATORS

Business and consumer confidence indicators decreased in 2011 Q1
(2005 average = 100)

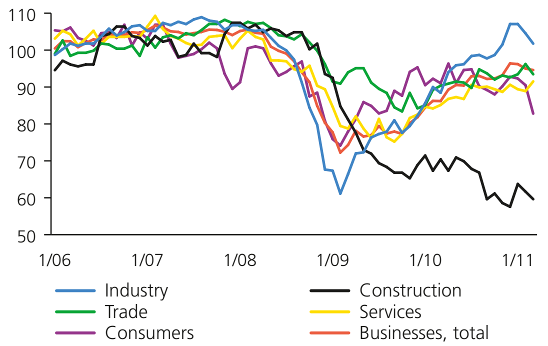
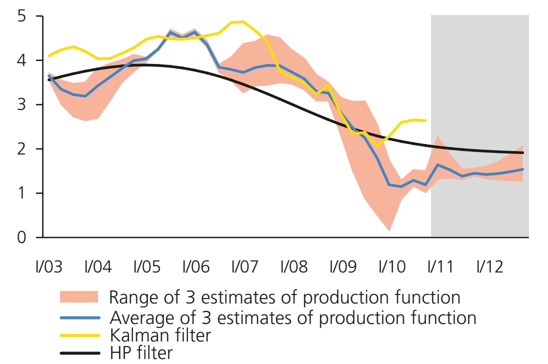


CHART III.3.15

POTENTIAL OUTPUT

The estimated rate of growth of potential output slowed slightly in 2010 Q4
(annual percentage changes)



Construction kept declining year on year in 2010 Q4 and its contribution to gross value added thus remained negative (see Chart III.3.10). According to sector statistics, there was a sharp fall in production in December 2010, and the latest available data show that construction output failed to "emerge" from this fall in January and February. Its year-on-year growth was due exclusively to the previous year's very low base, and the level of construction output in building construction and civil engineering projects remained very low in early 2011. The data on construction work orders in the Czech Republic do not suggest any improvement in the outlook in the coming months. The sharp increase in the approximate value of buildings permitted in February was affected by permits granted to costly power generation construction projects, which probably cannot be regarded as a sign of a general turnaround in the construction market.

According to the March results of the CZSO business survey, the overall **confidence indicator** declined slightly in 2011 Q1, largely because of worsening consumer expectations. The business confidence indicator decreased only modestly. Declining confidence was recorded mainly among industrial businesses. Nevertheless, positive outlooks still predominated over negative outlooks among both industrial businesses and trade and services businesses. By contrast, pessimistic expectations continued to prevail in construction (see Chart III.3.14).

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

According to the calculation of the **Cobb-Douglas production function**,[23] the annual growth rate of potential output increased slightly in 2010 Q4 (see Chart III.3.15) to about 1.2%.[24] The corresponding output gap was unchanged at around -1.2% of potential output.[24] The calculations suggest a pick-up in potential output growth in the first half of 2011, although this will subsequently be replaced by a slowdown to around 1.5%. The output gap is initially likely to open slightly further into negative values again in 2011 H2. It will start to close during 2012 and probably turn slightly positive in the second half of that year (see Chart III.3.16).

The baseline production function calculation also suggests a slight slowdown in the annual growth rate of potential output in 2010 Q4 and a subsequent acceleration in 2011 H1. However, according to the baseline calculation, the growth rate of potential output is below the average of the three calculations over the entire forecast horizon. The breakdown of the **contributions of the individual factors** entering the baseline production function reveals that the slowdown

23 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.
24 Average of the three calculations.

in annual potential output growth is due to a negative contribution of equilibrium employment (see Chart III.3.17). The contribution of capital remains almost zero. Potential output growth thus continues to be driven by aggregate productivity growth.

An alternative estimate using the **HP filter**[25] suggests higher potential output growth (2.1% in 2010 Q4) and a slightly more open output gap (-1.3%). The estimate using the **Kalman filter**, which is affected by the low observed inflation, continues to suggest a much greater opening of the negative output gap (-5.1% of potential output in 2010 Q4). The estimated growth rate of potential output using the Kalman filter is thus higher than suggested by the other methods (2.6% in 2010 Q4). The sizeable dispersion of the results of the individual methods continues to indicate a high degree of uncertainty surrounding the estimates of the current cyclical position of the economy.

CHART III.3.16

OUTPUT GAP

The output gap will probably narrow gradually until 2012
(in % of potential output)

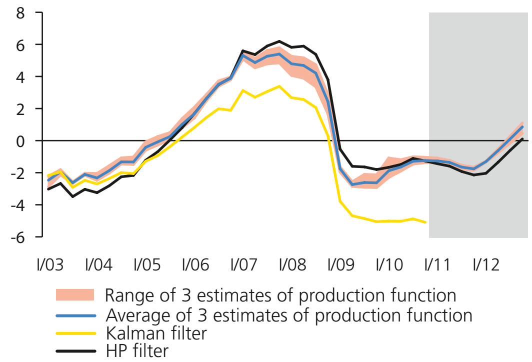
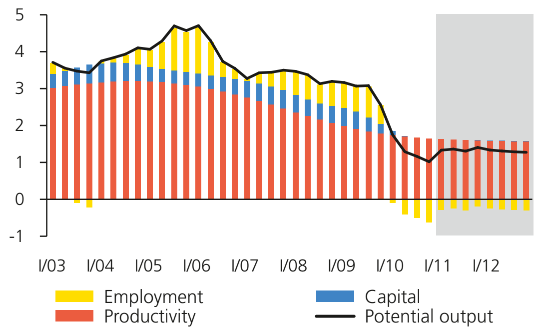


CHART III.3.17

CONTRIBUTIONS TO POTENTIAL OUTPUT GROWTH

Potential output growth is being driven by growth in aggregate productivity
(baseline production function; annual percentage changes)



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

III.4 THE LABOUR MARKET

The labour market was characterised in 2010 Q4 by a quarter-on-quarter stagnation in employment, which, together with a decrease in the labour force, caused a decline in the general unemployment rate. After increasing in December owing to new conditions for obtaining unemployment benefit, the registered unemployment rate fell back slightly during 2011 Q1. Year-on-year growth in the average nominal wage fell to historical lows. Whole-economy labour productivity rose faster than in the previous quarter. The decline in the unit wage costs deepened in Q4.

III.4.1 Employment and unemployment

The gradual moderation of the decline in employment observed in the economic recovery phase halted in 2010 Q4. As in the previous quarter, the year-on-year decline in **total employment** stood at -0.2% (see Chart III.4.1). In absolute terms this meant an annual decline in the number of employed persons of 8,500. In quarter-on-quarter terms,[26] the decline in employment was only negligible. The aforementioned developments were affected by changes in the **employee**[27] category, the decline of which deepened again (to 1.5% year on year); this was partly offset by continued fast year-on-year growth in the number of entrepreneurs (of 6.3%).[28]

The halt in the gradual downward trend in the year-on-year decline in employment was fostered by the services and construction sectors (see Chart III.4.2). Employment in **services** dropped overall in 2010 Q4 for the first time since the start of the recent recession (by 0.9% year on year, or 27,500 persons). In quarter-on-quarter terms, the decline amounted to -0.5%. This reversal was due to employment in both segments of services. In non-market services, employment decreased mainly in public administration and education. In market services, employment fell in 2010 Q4 primarily in the wholesale and retail trade sectors, where the number of jobs fell by 45,400 year on year. A deepening decline in employment in **construction** reflected subdued production in this sector (see section III.3 *Demand and output*).

In **industry**, where the recovery in production is being driven mainly by external demand, employment recorded an increase for the second consecutive quarter. It rose by a significant 5.8% year on year in 2010 Q4, which represented an absolute increase in the number of jobs of 78,600. Employment increased most of all in export-oriented manufacturing (by 6.5% year on year, i.e. 78,000 persons). Industry was the only sector to record an annual increase in the number of employed persons at the end of 2010 (see Chart III.4.2).

26 Seasonally adjusted.
27 Including members of production cooperatives.
28 Employees often turn to full-time independent business activity if they lose their job.

CHART III.4.1

LABOUR MARKET INDICATORS

Employment continued to decline only moderately and average wage growth slowed markedly in 2010 Q4
(annual percentage changes)

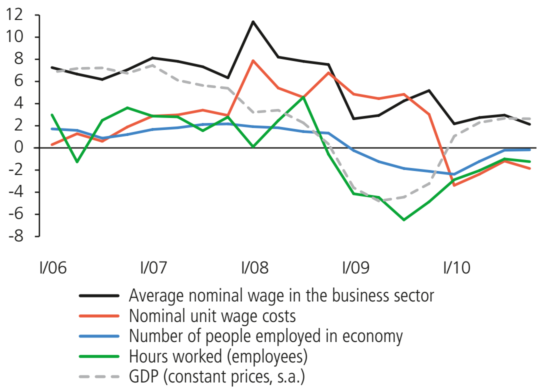
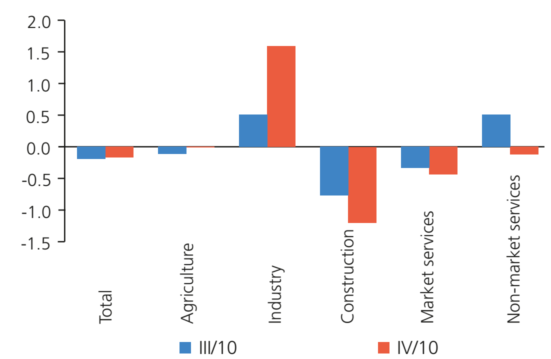


CHART III.4.2

EMPLOYMENT BREAKDOWN BY BRANCHES

Employment fell in services but kept rising in industry in 2010 Q4
(contributions in percentage points to annual growth; selected branches; source: LFS)



In these circumstances, the **general unemployment rate**[29] showed another quarter-on-quarter decrease in 2010 Q4, to 7%. Given the quarter-on-quarter stagnation in employment, this was due to a decline in the labour force. However, the **registered unemployment rate** (MLSA)[30] showed a quarter-on-quarter increase in 2010 Q4 (of 0.4 percentage point to 9.4%; see Chart III.4.3). This increase was probably a result of amendments to the Employment Act[31] which forced job applicants to register with labour offices before the end of 2010. This phenomenon was partially reversed in 2011 Q1, when the registered unemployment rate fell to 9.2%.

The effect of the new tighter conditions for obtaining unemployment benefit (introduced at the start of 2011) on agents' behaviour in advance at the end of 2010 and the subsequent partial reversal of this effect were also reflected in the **Beveridge curve** (see Chart III.4.4). Having moved significantly to the right in December 2010, the curve gradually moved back to the left during 2011 Q1, together with a slight increase in the number of vacancies in March; however, this number remains low.

III.4.2 Wages and productivity

Annual **average nominal wage growth** slowed further to below 1% in 2010 Q4, while the real average wage recorded an annual decline for the first time since the comparable time series began (see Table III.4.1). The weaker average nominal wage growth in the economy was due to wages in both monitored sectors, with wages in the non-business sector recording a considerable annual decrease. According to more detailed data from the Average Earnings Information System, flexible pay elements (bonuses) were reduced in this sector in 2010, while basic pay increased.

The low overall growth in the average wage in the current phase of the business cycle was a result of various factors, most notably a still sizeable lead of labour supply over labour demand and the implementation of austerity measures in the public sector.

Average wages **in sectoral terms** suggest that employers tended to increase wages only if there was continued fast growth in demand for their production. In industry, for example, a pronounced recovery in external demand was reflected in a rise in the average wage (of 3.8%), especially in manufacturing. In other segments, by contrast, average wages declined, for instance in banking and insurance by 4.7%.

29 In the 15–64 age category. Measured by the ILO methodology according to the LFS; seasonally adjusted.
30 Seasonally adjusted data.
31 These amendments mainly involved a reduction in unemployment benefit to 45% over the whole benefit period in the case of voluntary severance. In addition, job seekers registered after 1 January 2011 can no longer earn up to 50% of the minimum wage (i.e. CZK 4,000) while on benefit, and job seekers who receive a severance payment from their employer are entitled to unemployment benefit only after the severance payment period has expired.

CHART III.4.3

UNEMPLOYMENT RATE

The increase in the unemployment rate at the end of 2010 was affected by tighter conditions for obtaining unemployment benefit with effect from 2011

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

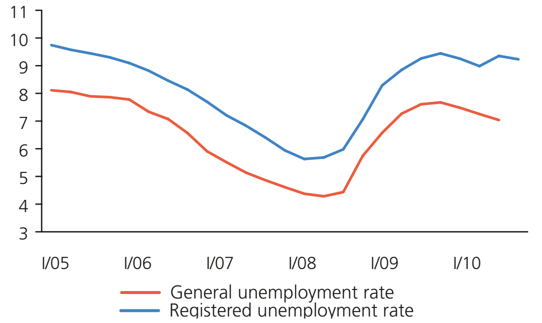


CHART III.4.4

BEVERIDGE CURVE

The number of vacancies remains low

(seasonally adjusted numbers in thousands)

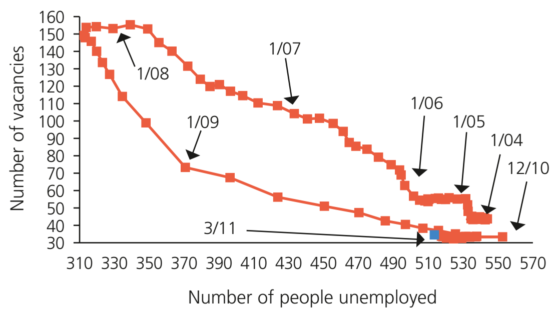


TABLE III.4.1

WAGES, PRODUCTIVITY, UNIT WAGE COSTS

Average wage growth slowed sharply

(annual percentage changes)

	I/10	II/10	III/10	IV/10
Average wage in monitored organisations				
nominal	2.4	2.4	2.1	0.9
real	1.7	1.2	0.2	-1.2
Average wage in business sector				
nominal	2.2	2.7	3.0	2.1
real	1.5	1.5	1.1	0.0
Average wage in non-business sector				
nominal	3.2	1.0	-1.7	-3.9
real	2.5	-0.2	-3.5	-5.9
Whole-economy labour productivity	3.2	3.9	2.5	2.9
Nominal unit wage costs	-3.4	-2.4	-1.2	-1.9

CHART III.4.5

WHOLE-ECONOMY LABOUR PRODUCTIVITY

Productivity growth increased slightly

(contributions in percentage points; annual percentage changes)

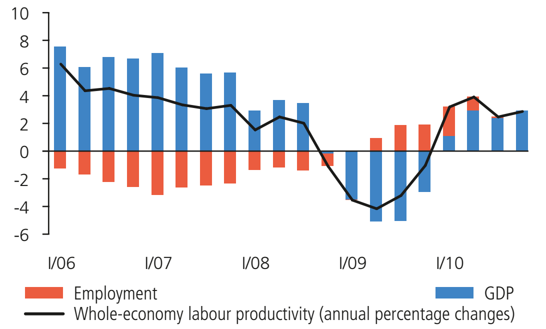
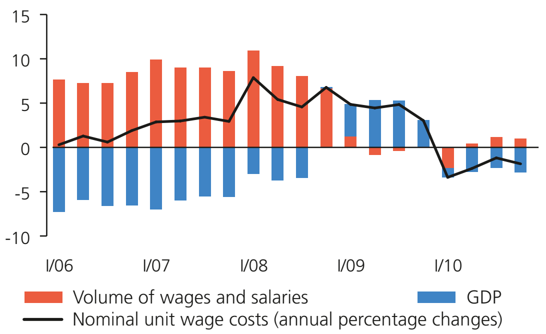


CHART III.4.6

NOMINAL UNIT WAGE COSTS

Nominal unit wage costs continued falling year on year

(contributions in percentage points; annual percentage changes)



In the non-business sector, where wages were affected by government austerity measures, the average wage continued to decline in education (by 5.8%), public administration and defence (by 3.5%).

Annual **whole-economy labour productivity** growth edged up to 2.9% in 2010 Q4 (see Chart III.4.5). Given the year-on-year stagnation in total employment, its growth was due solely to a faster rise in non-seasonally adjusted GDP[32] (see Chart III.4.5). Productivity continued to be very mixed across sectors. Productivity in industry increased at double-digit rates for the third consecutive quarter (by 15.8% year on year), while productivity in construction declined throughout 2010 (by 8.4% in Q4) owing to continued subdued demand in both building construction and civil engineering. Productivity rose significantly in the other sectors, remaining flat only in non-market services.

In these circumstances, **unit wage costs**[33] fell in 2010 Q4 (see Chart III.4.6). The year-on-year decline in nominal unit wage costs deepened, reaching -1.9%. Unit wage costs fell most of all in industry (by 8.5%), where rapid growth in value added significantly outpaced growth in wages and salaries. Nominal unit wage costs also decreased in most other sectors (trade, restaurants and transport, and market, non-market and financial services). Only in construction did they increase slightly.

32 Seasonally adjusted GDP growth slowed slightly; the rise in non-seasonally adjusted GDP can be partly explained by an unequal number of working days.

33 Unit wage costs are also calculated on the basis of seasonally unadjusted data.

III.5 FINANCIAL AND MONETARY DEVELOPMENTS

Annual M2 and harmonised M3 growth remained low. Potential inflation pressures stemming from the broader money supply are therefore weak for the time being. However, the rate of growth of transaction money remains high. Total loans gradually increased, mainly as a result of growth in loans to non-financial corporations; the growth rate of new mortgage loans is recovering. Interest rates on loans to corporations were mostly falling, while the previous decline in rates on loans to households halted. Client risk premia decreased slightly for corporate loans and loans for house purchase, but remained higher than in the pre-crisis period. The financial indicators and economic results of corporations are no longer improving as sharply as in the previous quarter. Supply prices of apartments continued to record a year-on-year decline.

III.5.1 Money

Annual **M2** growth declined slightly further in 2011 Q1, reaching 2.8% in February, or 3.3% when adjusted for non-transaction effects (see Chart III.5.1). Harmonised M3 increased by 1% year on year in February 2011. Demand for long-term deposits continued to decline and funds are being moved partly into more liquid products. The growth rates of the two broad aggregates remain well below the average pre-crisis level. In terms of the broader money aggregates, therefore, the money growth does not imply inflation pressures.

Annual M2 and M3 growth moved very close to nominal GDP growth in 2010, causing the long-running decline in the **velocity of circulation** – resulting from faster growth in monetary aggregates than in nominal GDP – to come to a halt. The previous accelerating decline in the velocity of circulation during the crisis had been due mainly to the low interest rate level and to the greater inertia of monetary aggregates compared to the sharp fall in economic activity (see Chart III.5.2).

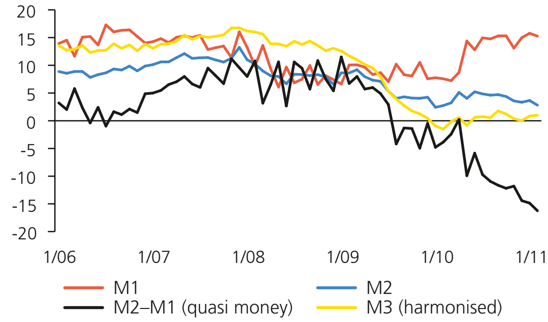
Turning to the **structure of M2**, the relatively high growth rate of transaction money included in M1 continued (see Table III.5.1). This reflected the low interest rate level – leading to shifts from time deposits in previous months into more liquid forms of money – and the moderate economic growth. The growth in M1 was due mainly to overnight deposits of households. Demand for other short-term deposits (i.e. deposits with an agreed maturity of up to two years or redeemable at notice of up to three months) fell year on year. However, a slight annual decrease was also recorded for long-term deposits.

Total bank **deposits** grew by 3.2% in February 2011 and their ratio to loans reached 135%. The annual growth rate of deposits of non-financial corporations slowed to 1.3%. Corporate deposits are being affected by growth in corporate cash-flow, reflecting year-on-year changes in gross operating surplus. After stabilising in 2010, annual

CHART III.5.1

MONETARY AGGREGATES

M2 growth remained subdued
(annual percentage changes)

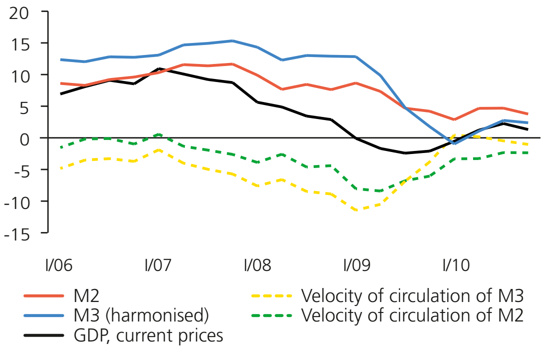


Note: The velocity of circulation is calculated as nominal GDP divided by the outstanding stock of broad money.

CHART III.5.2

VELOCITY OF CIRCULATION

The velocity of circulation was flat
(annual percentage changes; seasonally adjusted data)



Note: The velocity of circulation is calculated as nominal GDP divided by the outstanding stock of broad money.

TABLE III.5.1

MONETARY AGGREGATE STRUCTURE

High growth in transaction money was offset from the M2 perspective by a fall in quasi money
(quarterly averages and end-of-month stocks; annual percentage changes)

	III/10	IV/10	1/11	2/11	Share in M2, % 2/11
M1	15.0	14.5	15.8	15.3	67.8
Currency in circulation	0.7	0.9	0.7	0.9	12.8
Overnight deposits	19.1	18.2	19.9	19.2	55.0
M2–M1 (quasi money)	-10.7	-12.8	-14.8	-16.2	32.2
Deposits with agreed maturity	-0.6	-3.1	-4.5	-6.6	19.3
up to two years	-15.9	-19.1	-21.2	-21.8	11.6
over two years	55.6	49.0	43.6	32.4	7.7
Deposits redeemable at notice	-22.4	-24.8	-27.3	-27.4	12.5
up to three months	-18.8	-20.3	-21.8	-20.3	10.8
over three months	-39.1	-44.4	-49.8	-53.8	1.7
Repurchase agreements	-25.6	-2.1	-0.8	-27.6	0.4
M2	4.7	3.8	3.7	2.8	100.0

CHART III.5.3

DEPOSITS BY SECTOR WITHIN M2

Corporate and household deposits increased only slightly
(annual percentage changes)

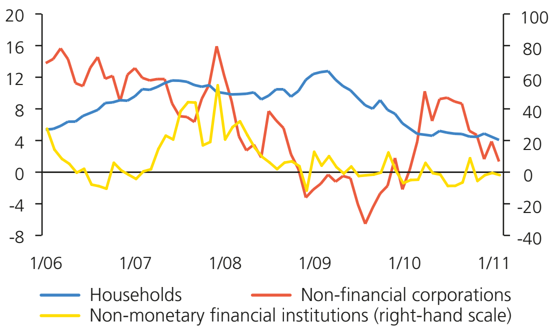


CHART III.5.4

LOANS TO CORPORATIONS AND HOUSEHOLDS

Loans to corporations and households continued to rise modestly
(annual percentage changes)

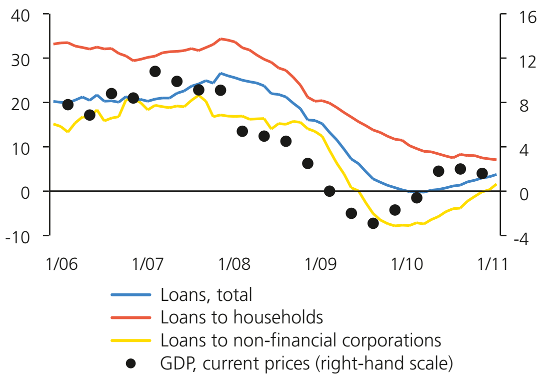
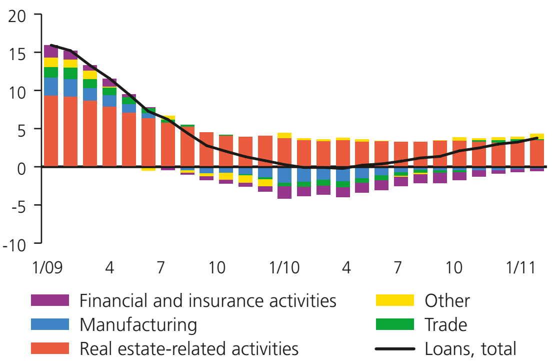


CHART III.5.5

TOTAL LOANS BY ECONOMIC ACTIVITY

The contribution of loans to the property market stagnated
(annual percentage changes; contributions in percentage points)



Note: The time series of loans for construction and real estate-related activities within loans to the property market were revised in 2009 owing to a change of methodology. Loans to the property market additionally include loans to households for house purchase.

growth in household deposits moderated again to 4.1% in February 2011. This may have reflected the persisting downturn in the labour market and also the change in the structure of financial assets. Deposits of non-monetary financial institutions have been broadly unchanged since 2008 and fell by 1.8% year on year in February (see Chart III.5.3).

III.5.2 Credit

Loans to corporations and households are continuing to recover gradually. Annual growth in loans rose by 0.6 percentage points to 3.8% in February 2011, or 4.7% when adjusted for non-transaction factors (see Chart III.5.4). New loans to corporations and households also grew in year-on-year terms, albeit at a slower pace in February than in the previous month. The contribution of loans to the property market, which comprise loans to households for house purchase, loans to developers and loans for construction, remained flat (see Chart III.5.5). Modest annual growth in loans also continued in the euro area, reaching 2.6% in February.

Loans to non-financial corporations grew for the second consecutive month (by 1.6% year on year in February). New corporate loans showed a similar trend (see Chart III.5.6). The fall in short-term loans with a maturity of up to one year continued to moderate amid a further recovery in long-term loans. As regards individual sectors, the fastest growth in the volume of loans was recorded again in the energy sector. Slower growth in loans was recorded in trade, while loans to manufacturing and construction continued to edge down. Corporate loans were affected by the relatively weak economic growth amid mixed developments in individual sectors of the economy.

The CZSO's March **business survey** reveals that the percentage of industrial corporations that expect loans to increase in the coming three months is rising only gradually. About 9% of respondents expect loans to increase, while 41% expect no change and 19% expect a decrease (31% of corporations expect to have no loans).[34]

Annual growth in loans to households slowed slightly further to 7.1% in February 2011. The growth in loans to households mainly reflected an increase in **loans for house purchase**. The sharp rise in new mortgage loans recorded in January moderated in February amid a persisting decline in building society loans (see Chart III.5.7). According to Hypoindex, mortgage loans recorded fairly dynamic growth in March 2011 (of 48% year on year, similar to the rates recorded

34 As regards the financial condition of corporations, around 21% had past-due debts at the time of the survey (the sales of these corporations account for 11% of the sales of all the selected corporations). The ability of corporations to repay their debts in the coming three months will not change for 88% of corporations, and will increase for 8% and decrease for 4% of them.

in 2007 and 2008).[35] The number of new mortgages increased, but their average amount remained flat. The recovery in mortgage loans was due to the low interest rate level and increased availability of mortgages. Base effects also played a role. A temporary rise in demand for house purchase loans can be expected in 2011, mainly because of a planned increase in the VAT rate on construction work in 2012 (see the alternative scenario of the forecast in section II.4.1) and expected future growth in interest rates. However, the weak labour market will continue to act in the opposite direction. The moderation of the decline in new **consumer credit** observed in previous months came to a halt in February. Consumer credit remains subdued, reflecting the greater caution shown by households in respect of this type of credit.

The ratio of **non-performing loans** to total loans stabilised for corporations, but edged up further for households, mainly as a result of consumer credit. The NPL ratio for corporate loans was 8.8% while that for households was 5.3% (12.3% for consumer credit and 3.3% for loans for house purchase). This reflected a further pronounced moderation of annual NPL growth in all segments of the credit market.

III.5.3 Interest rates

Monetary policy interest rates

The monetary policy decision-making of the CNB Bank Board in 2011 Q1 was based on the macroeconomic forecast published in the previous Inflation Report. Consistent with this forecast and its assumptions was stability of market interest rates close to their starting levels initially, followed by a gradual rise in rates as from the end of 2011. The risks of the baseline scenario of the previous forecast were assessed at the February Bank Board meeting as being significant, linked with external developments, pointed in both directions, and balanced overall. At its March meeting, the Bank Board assessed the risks to the forecast as being on the upside for headline inflation and broadly balanced for monetary-policy relevant inflation. Accordingly, the Bank Board decided to leave the **key interest rates** unchanged at both meetings. The two-week repo rate was set at 0.75%, the discount rate at 0.25% and the Lombard rate at 1.75% with effect from 7 May 2010 (see Chart III.5.8).

At its monetary policy meeting on 5 May 2011, the Bank Board decided by a majority vote to **leave the interest rates unchanged**. The risks of the monetary-policy relevant inflation forecast were assessed as being balanced. A deepening of the debt problems of some euro area countries represents a downside risk to inflation. On the other hand, the domestic economy might not dampen inflation as strongly as predicted in the forecast.

35 In 2011 Q1, the key banks of the mortgage lending market granted loans totalling CZK 23 billion, compared to CZK 16 billion in the same period a year earlier. In March, more than half (56%) of these mortgages had fixations of five years. The share of loans with fixations of over one year and up to five years for banks in total increased to 57% in February 2011 from 46% in the same period a year earlier.

CHART III.5.6

LOANS TO NON-FINANCIAL CORPORATIONS

New loans to corporations rose slightly amid a persisting fall in interest rates

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

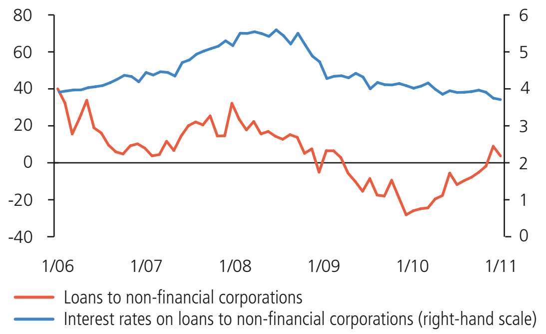


CHART III.5.7

LOANS TO HOUSEHOLDS FOR HOUSE PURCHASE

New mortgage loans recovered in early 2011, while building society loans fell

(new business; contributions in p.p.; annual percentage changes; interest rate in %)

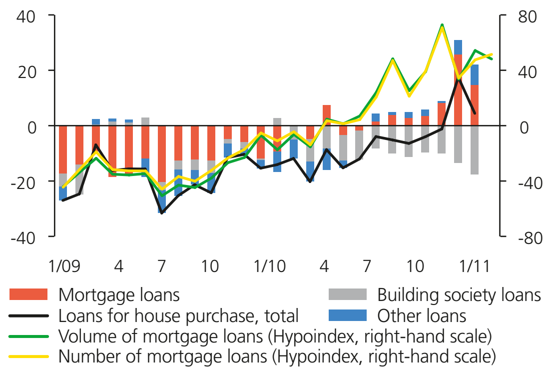


CHART III.5.8

CNB KEY RATES

The CNB left key rates unchanged in 2011 Q1

(percentages)

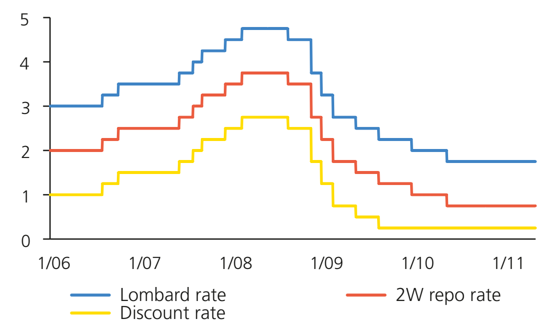


CHART III.5.9

MARKET INTEREST RATES

Money market interest rates were virtually unchanged, but IRS rates rose
(percentages)

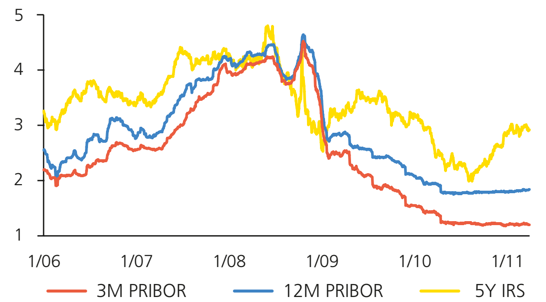


CHART III.5.10

INTEREST RATE DIFFERENTIALS

Interest rate differentials vis-à-vis the euro declined to negative values
(percentage points)

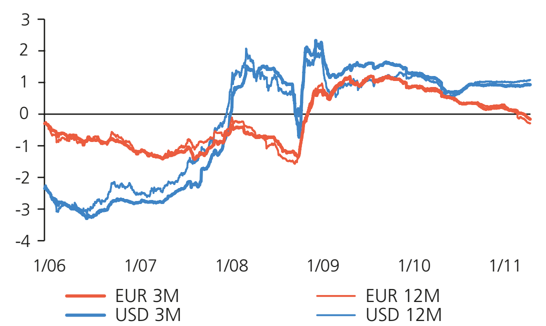
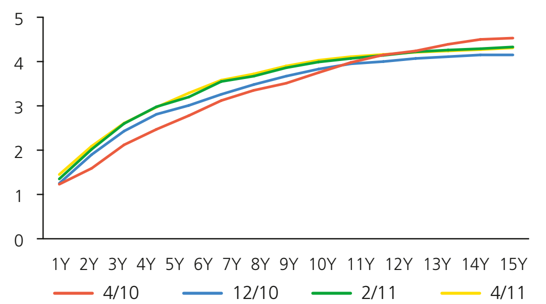


CHART III.5.11

GOVERNMENT BOND YIELD CURVE

The yield curve shifted upwards slightly
(percentages)



Financial market interest rates

Money market interest rates remained flat at all maturities in 2011 Q1. **FRA derivative rates** showed higher volatility. They had long been suggesting expectations of a tightening of CNB monetary policy and edged up further after the Bank Board's meeting in February. This was the market's response to the information that the CNB had left rates at their current levels by only a slim majority of the votes. In the days that followed, however, the growth in FRA rates fell back in response to published macroeconomic data (lower-than-expected inflation and GDP). The current market outlook for 3M rates according to FRA quotations is rising and is above the path consistent with the baseline scenario of the new forecast (see sections I and II). **Interest rates with longer maturities** largely copied rates abroad, where the gradual rise – which had lasted for several months – came to a halt in mid-February. Several factors were acting in parallel on European markets: on the one hand continuing economic growth and an expected rise in ECB rates, and on the other hand the continuing debt problems of some countries on the periphery of the EU. The geopolitical tensions in Arab countries also had an effect. They were immediately reflected in increased oil prices, which will potentially cause lower global economic growth in addition to having inflationary price effects. In addition, volatility on world stock markets rose, risk aversion increased and investors shifted partly to safe assets, including Czech government bonds.

The average **3M PRIBOR** was 1.2% in 2011 Q1, i.e. slightly below the level assumed in the previous forecast. Money market interest rates continued to be influenced by the credit premium. The average spread between the 3M PRIBOR and 2W repo rate was 0.45 percentage point in 2011 Q1. This spread has been close to this level since May 2010.

Overall, PRIBOR interest rates have been unchanged since the start of 2011, while IRS interest rates have increased by 0.1–0.3 percentage point at individual maturities.

The **PRIBOR yield curve** did not change during 2011 Q1 and its slope remained positive. The spread between the 1Y PRIBOR and 2W PRIBOR was around 1 percentage point in March 2011. The money market yield curve was again unchanged during April. By contrast, **the IRS yield curve** steepened at the start of 2011, shifting upwards over its entire length. In March, the average 5Y–1Y spread was 1.3 percentage points and the 10Y–1Y spread 1.8 percentage points.

Short-term **interest rate differentials** vis-à-vis the two main world currencies (PRIBOR/CZK – EURIBOR/EUR, or LIBOR/USD) reflected developments on foreign markets, as rates on the domestic money market were flat. The differentials vis-à-vis dollar rates were broadly unchanged over the whole reference period, while those vis-à-vis euro rates continued to decline, reaching negative values (see Chart III.5.10). The 3M PRIBOR – 3M EURIBOR interest rate differential was 0.1 percentage point on average in 2011 Q1. On 22 April, it was -0.1 percentage point.

Five auctions of fixed coupon bonds and three auctions of variable coupon bonds were held on the primary **government bond market** in the period under review. The total volume of bonds issued was CZK 52.8 billion. Most auctions met with high demand, but the bonds were subscribed with higher yields than in the previous period, in line with the rise in rates for longer maturities. Moreover, the Ministry of Finance sold eurobonds amounting to EUR 37.5 million from its portfolio. These were variable coupon bonds linked to the 6M Euribor which were issued in September 2009 and mature in 2015. This sale closed the issue with a total volume of EUR 300 million. The government bond yield curve shifted upwards slightly, but its positive slope remained broadly unchanged (see Chart III.5.11).

Client interest rates

Interest rates on new loans to corporations mostly fell slightly in 2011 Q1, while those on new loans to households started to edge up. Client risk premia remain higher than in the pre-crisis period due to the weak and volatile economic growth and banks' persisting prudent approach.

The **interest rate on loans to non-financial corporations** has dropped by 0.2 percentage point to 3.7% since the end of 2010 (see Chart III.5.12). These rates are thus at their lowest level since 2004. Some rates with short fixations of up to one year and on current account overdrafts recorded a decline, while rates with longer fixations mostly increased. Corporate rates reflected the flat money market rates and the gradual decrease in – still elevated – client risk premia. In the euro area, the interest rate on corporate loans is currently rising for short fixations, while remaining unchanged or increasing slightly for long fixations (these rates lie in the range of 3 to 4%).

As for households, the previous decline in the **interest rate on loans for house purchase** halted, as the rate rose slightly for the first time in a year to 4.6% in February (see Chart III.5.13). Rates of over one year and up to five years primarily edged up, while other rates were flat or only slightly falling (see Chart III.5.14). This mainly reflected banks' expectations regarding increases in interest rates as well as the gradual termination of some marketing campaigns at the turn of the year. Rates rose in large and medium-sized banks. According to Hypoindex, interest rates on mortgages edged up further in March 2011 – increases were recorded by rates with three-year fixations, while one-year and five-year fixations and variable rates were broadly flat. The spread between the rate on house purchase loans with a short fixation and the 1Y PRIBOR market rate narrowed slightly at the start of 2011 as a result of the subsiding decrease in rates on loans with this fixation. The spread between the overall rate on loans for house purchase and the ten-year government bond yield showed a similar tendency as a result of growth in the government bond yield (see Chart III.5.15). Rates on loans for house purchase were roughly at the 2006 level. These rates were flat or rising slightly in the euro area (ranging between 3% and 4%).

CHART III.5.12

INTEREST RATES ON LOANS TO CORPORATIONS

Interest rates on loans to non-financial corporations mostly continued falling

(new business; percentages)

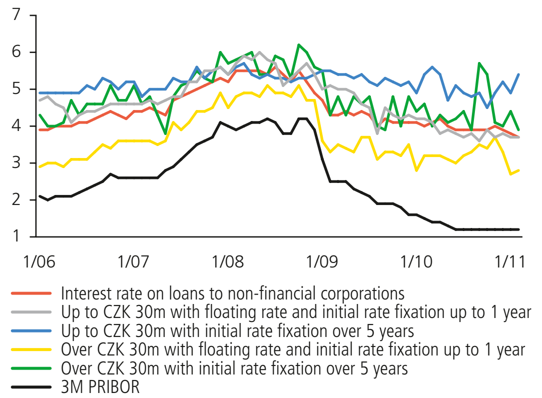


CHART III.5.13

CHANGES IN INTEREST RATE ON LOANS FOR HOUSE PURCHASE

The interest rate on loans for house purchase rose slightly for the first time in a year

(new business; monthly percentage changes; interest rate in %)

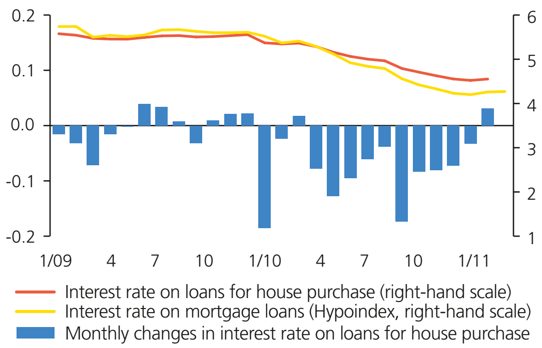


CHART III.5.14

INTEREST RATES ON LOANS FOR HOUSE PURCHASE

Rates with fixations of over one year and up to five years increased slightly

(new business; percentages)

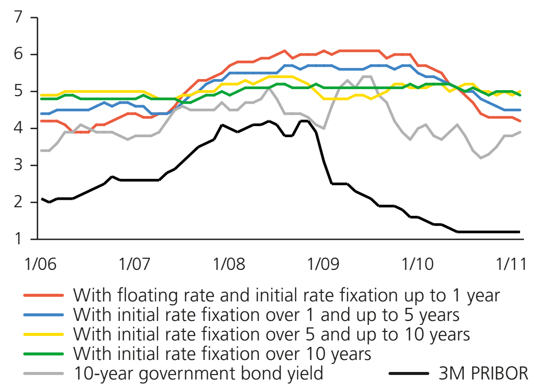


CHART III.5.15

SPREADS OF INTEREST RATES ON LOANS

The spreads between client and market rates decreased
(percentage points)

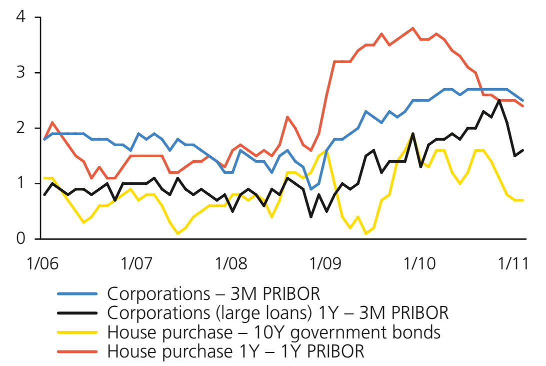


CHART III.5.16

EX ANTE REAL RATES

Ex ante real interest rates on new loans were flat in 2011 Q1
(percentages)

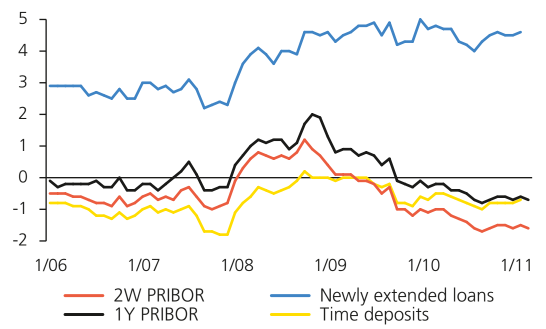
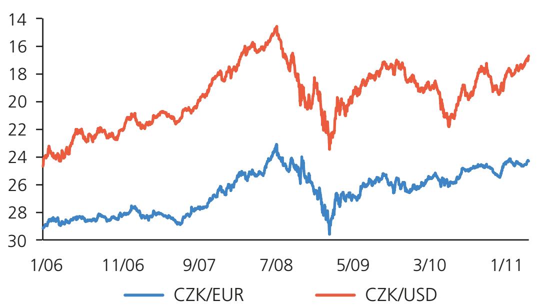


CHART III.5.17

CZK/EUR AND CZK/USD EXCHANGE RATES

The koruna appreciated quite strongly against the euro and the dollar in 2011 Q1 and April



The rate on consumer credit increased to 14.5% in the period under review, while that on current account overdrafts remained at 18.4%, reflecting the high risk perceived by banks when providing such loans. The said increase in rates on consumer credit was due to rate increases for all fixations. Having declined at the end of 2010, the spread between the rate on consumer credit and the 3M PRIBOR rate widened during Q1. Rates on consumer credit range between 5% and 8% in the euro area.

The average interest rate on **deposits** remained at 0.9%. It was 1.1% for households and 0.4% for non-financial corporations. Real interest rates on individual deposit products have recently declined to negative values from both the ex ante and ex post perspective; from the longer-term perspective they are roughly at the 2004–2006 level.

The **margin** between interest rates on new loans and deposits has been at 6.2 percentage points since September 2010. The margin remains at 3.3 percentage points for corporate loans and deposits and at 3.5 percentage points for loans for house purchase and deposits of households, while the margin for consumer credit increased to 13.5 percentage points.

Real client interest rates[36] were mostly flat in Q1. Real rates on new loans were 4.6% in February, while real rates on time deposits were -0.7% (see Chart III.5.16).

III.5.4 The exchange rate

The average **exchange rate of the koruna against the euro** was CZK 24.4 in 2011 Q1, which represents a year-on-year appreciation of 5.8% and a quarter-on-quarter appreciation of 1.7%. The appreciation of the koruna in Q1 was concentrated exclusively in January; the koruna stood at CZK 24.0 to the euro in late January and early February and then corrected slightly to around CZK 24.4–24.5 to the euro (see Chart III.5.17). The Czech koruna was the third-fastest appreciating convertible currency in 2011 Q1 (after the Hungarian forint and the Romanian lei). The koruna's exchange rate against the euro was broadly at its Q1 average level at the start of April, but appreciated by a further more than 1% to CZK 24.1 in mid-April.

The koruna's exchange rate continued to be affected mainly by short-term investors' positive sentiment. In the short term, the exchange rate was also influenced by information about the monetary policy outlook in the Czech Republic and the euro area. However, neither the widening of the negative monetary policy interest rate differential against the euro after the ECB increased its rates, nor the manifestations of political instability in the Czech Republic had

36 Ex ante real interest rates: nominal interest rates are deflated by the consumer price inflation expected by financial market analysts.

any impact on the exchange rate. The koruna was not affected by revisions to the external trade and balance of payments data, either. The further appreciation of the koruna in mid-April was associated mainly with a fall in short-term investors' interest in the euro (other currencies and gold also appreciated, but the dollar did not) connected with the expected restructuring of Greece's debt.

The average **exchange rate of the koruna against the dollar** was CZK 17.8 in 2011 Q1, which represents a year-on-year appreciation of 4.7% and a quarter-on-quarter appreciation of 2.3%. The dollar depreciated on world markets in Q1. Moreover, its movements against the koruna were amplified by the koruna's appreciation against the euro. During Q1, the koruna appreciated from around CZK 18.7 to the dollar to about CZK 17.3 at the end of March. The depreciation of the dollar was due mainly to the dollar-euro exchange rate, reflecting expectations of an earlier monetary policy tightening in the euro area than in the USA. The trend of a gradual decline of the dollar against the koruna continued into April. At the end of April the rate was around CZK 16.7 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**[37] saw continuing fairly fast annual growth in 2010 Q4. However, the growth rate of book value added slowed further due to a high material cost-output ratio, influenced mainly by fast growing prices of imported inputs (see Chart III.5.18). According to CNB calculations, annual growth in gross operating surplus thus almost halted amid continued year-on-year growth in personnel costs.

In 2010 Q4, the **material cost-output ratio** of non-financial corporations was influenced mainly by continued buoyant growth in import prices of energy and non-energy commodities and metal-based semi-finished products. The mostly fast growing prices of these inputs exerted upward pressure on producers' costs, which contributed to a further year-on-year rise in the material cost-output ratio of non-financial corporations (of 1.6 percentage points; see Table III.5.2).

In these circumstances, corporations reduced the **wage cost-output ratio.** This was indicated by an annual decline recorded in 2010 Q4 (of 0.8 percentage point) even though personnel costs rose year on year as in the previous quarter. However, this rise was again only moderate compared to the buoyant growth in output (3.7%; see Table III.5.2).

37 The segment of corporations with 50 employees or more consisted of more than 9,200 non-financial corporations at the end of 2010 Q4.

Chart III.5.18

KEY FINANCIAL INDICATORS

Output growth was accompanied by rapid growth in intermediate consumption in 2010 Q4
(annual percentage changes)

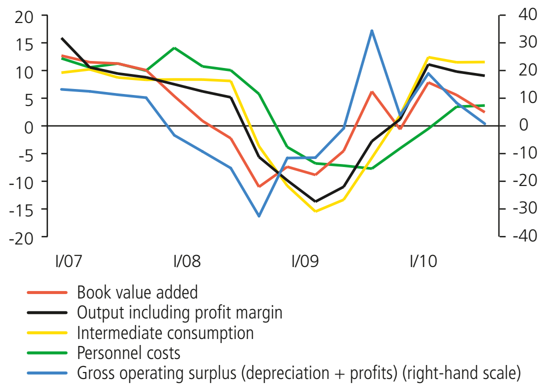


Table III.5.2

PERFORMANCE INDICATORS OF CORPORATIONS

The material cost-output ratio rose in 2010 Q4, but the wage cost-output ratio kept falling
(CZK billions; percentages; annual changes in percentage points and percentages)

	2009 Q4	2010 Q4	Annual percentage changes
Output incl. profit margin (CZK billions)[a)]	1,277.0	1,392.7	9.1
Personnel costs (CZK billions)	202.2	209.7	3.7
Intermediate consumption (CZK billions)	928.9	1,036.0	11.5
Book value added (CZK billions)	348.2	356.7	2.5
Sales (CZK billions)	1,680.2	1,816.4	8.1
	Percentages	Percentages	Annual changes in p.p.
Ratio of personnel costs to value added[a)]	58.1	58.8	0.7
Material cost-output ratio[a)]	72.7	74.4	1.6
Personnel cost-output ratio[a)]	15.8	15.1	-0.8
Ratio of book value added to output[a)]	27.3	25.6	-1.6

a) CNB calculation

CHART III.5.19

FINANCING OF NON-FINANCIAL CORPORATIONS

Total financing of corporations was flat in 2010
(contributions to external financing in percentage points; annual percentage changes)

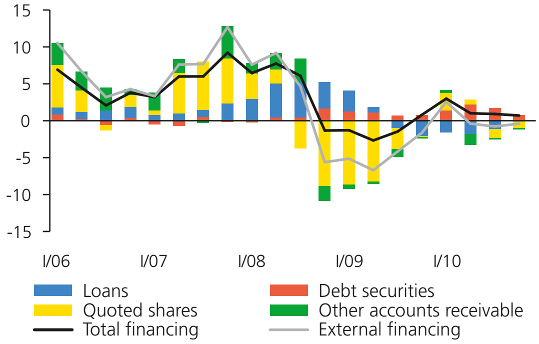


CHART III.5.20

DOMESTIC AND FOREIGN CORPORATE LOANS

A change in trend towards modest growth is being recorded for loans granted by domestic lenders, whereas loans from abroad declined further
(annual percentage changes)

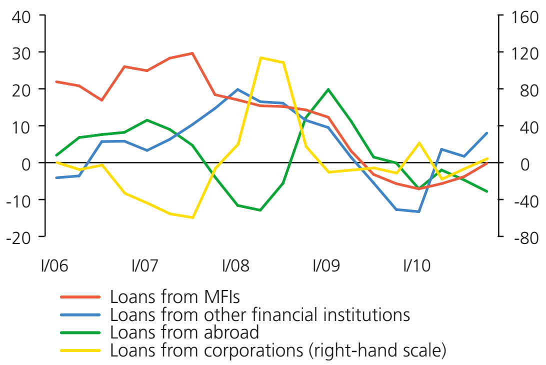
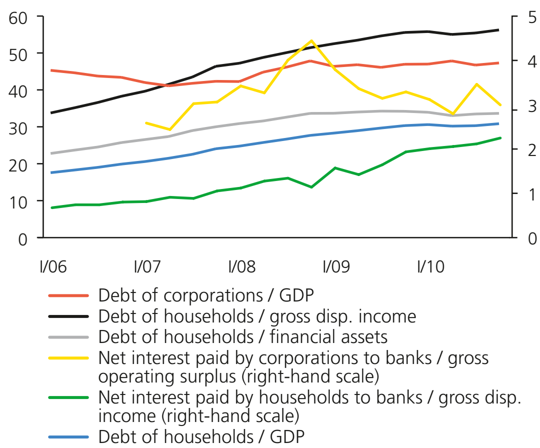


CHART III.5.21

DEBT AND NET INTEREST PAYMENTS

Households' net interest payments increased
(percentages)



Data for the narrower segment of **large corporations** (with 250 employees or more[38]) again indicate that large corporations achieved slightly faster growth in sales, output and book value added in 2010 Q4. However, they also recorded high growth in personnel costs. According to CNB calculations, growth in gross operating surplus in large corporations was only slightly higher than in the wider segment of corporations.

III.5.6 Financial position of corporations and households

The quarter-on-quarter growth rate of **total corporate financing** was 0.7% in 2010 Q4. Roughly half of this was due to transaction factors and the other half to non-transaction factors. External financing fell by a further 0.4%.[39] The year-on-year decline in loans moderated further and the growth rate of debt security issuance slowed. Other accounts receivable declined slightly (see Chart III.5.19). The growth in the use of market financing recorded at the start of 2010 consequently slowed further in Q4. As regards the loan structure, the decline in domestic banking loans slowed amid growth in loans from other corporations and from non-banks, while the decline in loans obtained by corporations from abroad deepened further (see Chart III.5.20). The debt-to-equity ratio increased slightly to 106.9% due to a greater increase in debt and slower growth in equity.

Annual growth in **financial investment by corporations** declined further to 1% in Q4. Lower growth was recorded by free funds of corporations in the form of currency and deposits, other assets (associated usually with trade payments) and shares. The contribution of loans granted and securities was negative. The share of financial investment by corporations in total financial investment in the economy reached 23.1%.[40]

The **debt of non-financial corporations**, as expressed by the ratio of loans and debt security issuance to GDP, edged up to 47.3%[41] in Q4. Nevertheless, the interest burden on corporations in relation to banks decreased as a result of a fall in interest costs paid (see Chart III.5.21).

38 The segment of corporations with 250 employees or more consisted of almost 1,700 non-financial corporations at the end of 2010 Q4.

39 Revised financial accounts data for 2010 Q3 were released simultaneously with the data for 2010 Q4. External financing comprises loans, debt securities, quoted shares and other accounts receivable. Total financing comprises all financial liabilities of corporations.

40 Non-financial corporations account for 23%, households 17%, financial institutions 32%, general government 8% and rest of the world 20% of financial investment in the economy as a whole. Compared to the previous quarter, the share of financial investment by non-residents increased in 2010 Q4, as did the shares of households and corporations (slightly), while the share of general government declined.

41 When other accounts payable (relating mainly to trade liabilities) are included, the ratio of corporate debt to GDP is 111%.

The **financial indicators of non-financial corporations** are signalling that the gradual annual improvement in the solvency and the acid-test ratio of corporations observed since the end of 2009 has been moderating since 2010 Q2 (see Table III.5.3). However, the acid-test ratio remains higher than in the pre-crisis period and the solvency of corporations is broadly comparable. The difference between corporations' internal funds (i.e. gross savings) and their investment expenditure (i.e. gross capital formation) turned positive in Q4, mainly because of a quarter-on-quarter decline in investment by corporations.

Household debt remained broadly flat at 30.8% of GDP and 56.2% of gross disposable income (see Chart III.5.21). Net interest payments (i.e. the difference between interest paid and received on bank loans and deposits) edged up to 2.2% of gross disposable income, with interest expenses rising slightly to 3.2% and interest income being flat at just under 1%. Annual growth in interest payments moderated at the end of 2010, mainly because of falling interest rates. Annual growth in overall household financing by both banks and non-banks has been around 5% since 2010 Q2 (see Chart III.5.22).

The rate of growth of **financial investment by households** also declined only slightly, to 4.7%. Following the sharp fall recorded in 2009, financial investment – in particular in currency holdings and household deposits – has been stable since 2010. In response to the financial crisis, households slowed the creation of financial assets, which prevailed over the fall in financial asset growth, so the net financial assets of households remained broadly flat or rising slightly. However, their ratio to gross disposable income has been increasing since 2009 (see Chart III.5.23). The ratio of growth in net financial assets according to the financial accounts and net loans of households according to the national accounts to gross disposable income was broadly in line with the decline in the saving rate at the peak of the crisis, when households smoothed consumption, and with the subsequent stabilisation of the gross saving rate during 2010.

III.5.7 The property market

Supply **prices of apartments** continued to decline in 2011 Q1. According to the CZSO, they fell by 1.5% quarter on quarter in Prague and by 2.1% in the rest of the Czech Republic. Their year-on-year rates of decline also increased slightly (by 0.7 and 0.3 percentage point respectively; see Chart III.5.24). As regards **transfer prices of apartments**, which had previously been published only by the CZSO and after a relatively long lag, a new HB index[42], published by

42 The HB index is based on property valuers' prices and covers only properties for which Hypoteční banka provided a mortgage (its market share is about one-third). Although the representativeness of the index is limited and the index so far covers only a very short period of time (from 2010 to date), it is the only source of information on property transfer prices apart from the CZSO statistics.

TABLE III.5.3

FINANCIAL INDICATORS OF CORPORATIONS

Corporate solvency rose more modestly than in the previous period

	II/2010	III/2010	IV/2010	IV/2010
Corporations total a)	Annual percentage changes			CZK billions
Equity (shares issued)	3.5	1.3	0.9	3,796.2
Loans	-5.4	-3.5	-0.3	1,463.9
Debt securities issued	58.1	44.2	16.0	271.6
Quoted shares	4.7	-8.3	-5.8	636.4
Other accounts payable	-3.0	-0.3	-0.5	2,345.1
Total financing 1)	1.0	0.9	0.7	7,876.8
Financial assets	2.5	3.2	1.0	4,662.9
Corporations total a)	Annual changes in percentage points			Indicators in %
Acid-test ratio 2)	32.2	24.2	17.0	170.2
Solvency indicator 3)	4.1	2.8	0.6	114.3
Financial leverage 4)	-1.2	2.2	0.1	122.8

a) CNB calculation
1) Total financial liabilities
2) Short-term fin.assets / short-term fin. liabilities - debt securities issued and loans
3) Total financial assets / liabilities excluding shares and other equity
4) Total financial assets / shares and other equity issued

CHART III.5.22

FINANCING OF HOUSEHOLDS

The rate of growth of household debt stabilised in 2010
(contributions in percentage points; annual percentage changes)

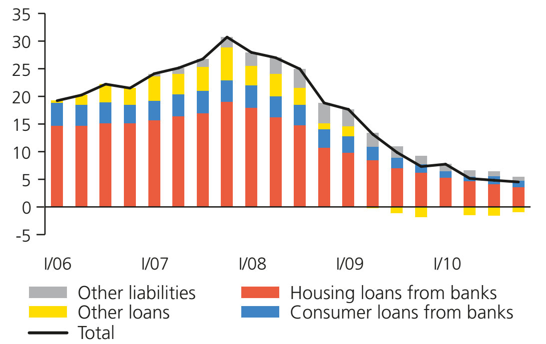


Chart III.5.23

HOUSEHOLDS' NET FINANCIAL ASSETS AND SAVING RATE

The ratio of net financial assets to gross disposable income was broadly flat at the end of 2010

(annual percentage changes calculated from annual flows; ratios in percentages)

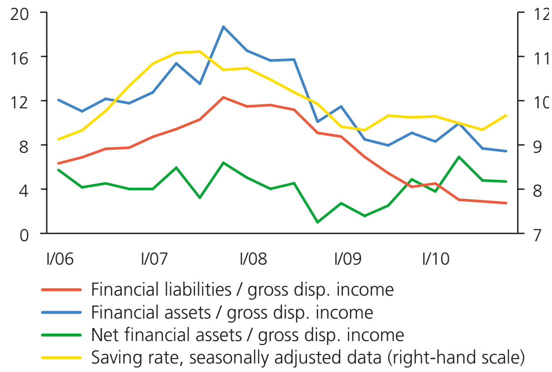


Chart III.5.24

TRANSFER AND SUPPLY PRICES OF APARTMENTS

The year-on-year decline in supply prices of apartments continued into 2011 Q1

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

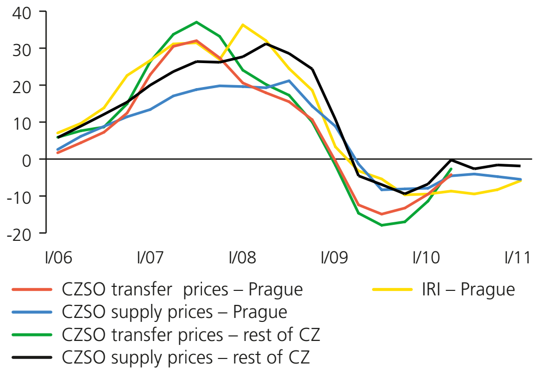
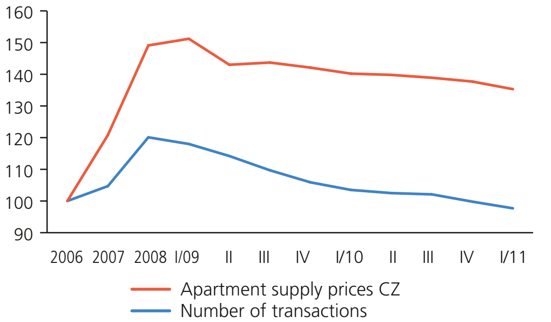


Chart III.5.25

NUMBERS OF TRANSACTIONS IN THE PROPERTY MARKET

The fall in prices was again accompanied by a falling number of transactions in the property market

(2006 average = 100; numbers of transactions as moving sums for 1 year; source: CZSO, COSMC)



Hypoteční banka, now exists. This index indicates a quarter-on-quarter decline in apartment prices of 0.8% in 2011 Q1. Since mid-2010 (the latest available CZSO figure on transfer prices of apartments) apartment prices have fallen by 1.4% in total. The HB index also indicates a moderation of the year-on-year decline in transfer prices of apartments, as was already visible from the CZSO data.

Together with the continuing – albeit moderating – decline in property prices, a persisting decrease in the **number of transactions on the property market** confirmed that demand on the housing market remained subdued. The number of proceedings on entry of ownership rights in the cadastre fell by 8.1% year on year in 2011 Q1; in cumulative terms (the one-year moving sum) it was down by 18.7% from the peak recorded in 2008 (see Chart III.5.25). By contrast, the number of new mortgages for property purchase surged by 45.8% year on year in 2011 Q1; in cumulative terms (the one-year moving sum) it is 26.2% above the historical low recorded in mid-2010 (Fincentrum Hypoindex data). Although building society loans are falling at the same time (see section III.5.2 for details) and only some transactions on the property market are financed by mortgages, this may represent the first signs of market recovery following the previous marked declines.

There are also mixed signals from new supply on the residential property market. After decreasing significantly in 2010 (a year-on-year drop in the **number of apartment completions** of 5.3% and in the **number of apartment starts** of 24.6%), the number of apartment starts rose by 10.5% year on year in January–February 2011. However, the annual decline in the number of apartment completions deepened further in this period (down by 34% overall and 70% for apartment blocks) owing to the extremely low number of apartment starts last year.

As regards the property price sustainability indicators, the **price-to-income ratio** fell by a further 1.8% in 2011 Q1 (and is down by 26.5% compared to the peak recorded in 2008) owing to the decrease in prices. By contrast, the **price-to-rent ratio** rose slightly (by 0.9%), possibly because of rent deregulation[43] exerting moderate downward pressure on market rents. This may lead to a rise in the price-to-rent ratio, which is, however, still 9.3% lower than the historical high observed in 2008 Q3.

Although there are signs of recovery on the residential property market, and although the property price sustainability indicators are relatively favourable, we continue to expect apartment prices to stagnate in 2011 and rise moderately in late 2011 or early 2012. This is due to the still subdued labour market (see section III.4) and to demographic trends (the gradual end of the era of founding families

43 As of 1 January 2011, rent regulation had been fully terminated in around 400,000 of the roughly 700,000 apartments with regulated rents. However, the termination of regulation does not pertain to regional capitals (except Ostrava and Ústí nad Labem), large towns in Central Bohemia, and Prague, where gradual deregulation will continue until 2012.

and seeking housing by the generation born in the early 1970s and lower population growth due to migration). A short-term increase in supply due to foreclosures of apartments used as collateral for loans to households for house purchase or loans to developers may be a risk factor acting towards lower prices.

As regards the **commercial property sector**, the market is continuing to recover gradually in the industrial property segment thanks to the upswing in industrial production. Gross take-up in this market segment increased by 72% year on year in 2010 Q4 and the vacancy rate fell further (by 1.5 percentage points quarter on quarter to 10.4%; King Sturge data). New supply recovered at the end of the year, but declined by 64% year on year in 2010 as a whole owing to its almost complete halt in H1.

The situation in the **office property sector** was considerably worse, with gross take-up declining by one-half in Q4 (and by 20% in 2010 as a whole), new supply still falling (to one-third of the 2009 level in 2010 as a whole) and the vacancy rate rising in year-on-year terms (by 1.4 percentage points to 13.2%; however, the vacancy rate has fallen by 0.3 percentage point since the end of H1). A partial recovery on the market is suggested by falling commercial property yields in all market segments (given relatively stable rents, the drop in yields indicates rising prices; see Chart III.5.27).

CHART III.5.26

APARTMENT PRICE SUSTAINABILITY INDICATORS

The apartment price-to-income ratio continued to fall
(2000–2007 average = 100)

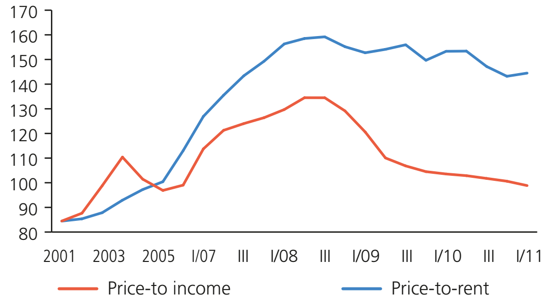


CHART III.5.27

OFFICE PROPERTY YIELDS

Office property yields are falling moderately
(percentages; source: King Sturge, Prague Research Forum)

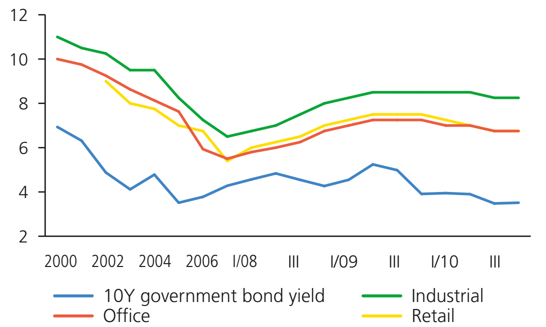


CHART III.6.1

CURRENT ACCOUNT

The current account deficit widened in 2010, owing mainly to a falling trade surplus
(annual moving total in CZK billions)

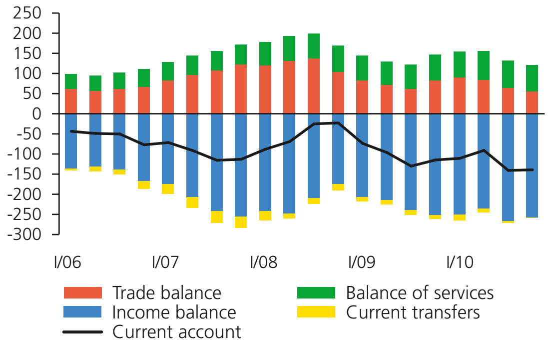


CHART III.6.2

TRADE BALANCE

The year-on-year change in the trade balance was affected most strongly in 2010 by growth in the mineral fuels deficit
(annual accumulation in CZK billions)

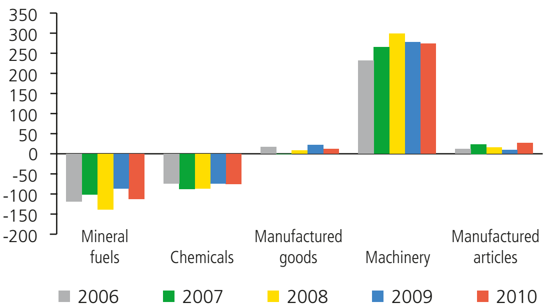
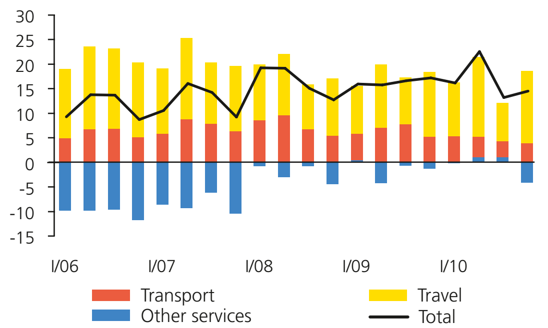


CHART III.6.3

BALANCE OF SERVICES

The services surplus in 2010 was again due solely to travel and transport
(CZK billions)



III.6 THE BALANCE OF PAYMENTS

The balance of payments was characterised in 2010 by a persisting high income deficit, due mainly to dividends paid to non-residents. Almost one-half of its effect on the current account was offset by a surplus on the goods and services balance, which, however, declined year on year owing to price developments. A high portfolio investment surplus was due chiefly to government bond issuance on foreign markets. Direct investment also recorded a significant surplus, due mainly to earnings reinvested in the Czech Republic. However, the financial account surplus was partly offset by a deficit on other investment, associated mainly with a net outflow in the corporate sector.

III.6.1 The current account

The **current account** ended 2010 in a deficit of CZK 139.2 billion, or 3.8% of GDP.[44] The deficit widened by more than CZK 24 billion year on year, owing mainly to trade balance developments (see Chart III.6.1). Current transfers acted in the opposite direction.

In 2010, the **trade balance** recorded a surplus of CZK 54 billion, down by more than CZK 27 billion year on year. The fall in the trade surplus was caused by price effects associated mainly with strongly negative terms of trade for mineral fuels. A year-on-year increase in the surplus in real terms offset only about one-half of the decline. Relatively rapid growth in external demand was reflected in a large increase in goods exports, which rose by 18.5% year on year in nominal terms despite the koruna strengthening against the euro. At the same time, imports rose rapidly as a result of the high import intensity of exports and the recovery in domestic demand, linked among other things with investment imports of photovoltaic equipment, especially in H2. Turning to the commodity structure, a rise in the mineral fuels deficit was the biggest contributor to the fall in the overall trade surplus. By contrast, an increase in the surplus on miscellaneous manufactured articles was the strongest factor acting in the opposite direction (see Chart III.6.2). The year-on-year drop in the trade surplus halted in early 2011 and the surplus edged up by CZK 1 billion in January and February.

The **balance of services** ended 2010 in a surplus of CZK 66.1 billion, virtually unchanged from a year earlier (see Chart III.6.3). As in 2009, the overall surplus was a result of surpluses on travel and transport, while other services ended in a slight deficit. A decline in the transport surplus owing to rapid growth in debits was offset by stronger growth in credits than in debits in travel and other services.

44 A revision of data on the goods balance and the services balance for 2009 and 2010, involving adjustment of the cross-border goods movement statistics for margin payments due to non-residents ("branding"), resulted in an increase in the current account deficit. The goods and services surplus in 2010 was reduced by CZK 45.6 billion by comparison with the preliminary unadjusted data. As a result, the ratio of the current account deficit to GDP rose by around 1.2 percentage points to 3.8%.

The **income balance** showed a deficit of CZK 257.7 billion, a year-on-year increase of CZK 6 billion. Direct investment income, where the deficit exceeded CZK 242 billion, remained the largest component of the overall balance (see Chart III.6.4). However, the year-on-year increase in the overall deficit was linked with a higher portfolio investment income deficit, due mainly to rising external debt, and a lower investment income surplus, which includes interest and income on CNB reserves, due to lower interest rates abroad than in the Czech Republic. By contrast, a decrease in the deficit on compensation of employees, due to lower wage expenditure on foreign workers in the Czech Republic, helped to reduce the overall deficit.

Current transfers recorded a slight deficit of CZK 1.5 billion, down by almost CZK 8 billion year on year owing to an increase in government sector credits. The private transfers deficit of CZK 27.4 billion was the key item, although it was largely offset by a government transfers surplus. Within government transfers, the surplus on transfers between the Czech Republic and the EU budget recorded on the current account rose to CZK 23 billion.

III.6.2 The capital account

The **capital account** showed a surplus of CZK 34 billion in 2010, a year-on-year decrease of almost CZK 8 billion due to lower income from EU institutions (most of which was recorded on the current account). However, its main component was still net government revenues from EU funds recorded on the capital account, which amounted to CZK 24.5 billion. By contrast, the emission allowance trading surplus rose to CZK 9.7 billion.

III.6.3 The financial account

The **financial account** ended 2010 in a strong net inflow of CZK 182.1 billion (see Chart III.6.5). Its biggest component was a portfolio investment surplus, although this was partly offset by a net outflow of other investment. However, direct investment was the biggest contributor to the year-on-year growth in the financial account surplus.

The net inflow of **direct investment** reached CZK 97 billion, a year-on-year increase of more than CZK 59 billion due to higher foreign investment in the Czech Republic despite a net capital outflow in Q4 (see Chart III.6.6). The inflow of foreign direct investment into the Czech Republic increased to CZK 129.5 billion, mainly as a result of a change in other capital flows. Reinvested earnings accounted for almost two-thirds of the total inflow. Direct investment by domestic corporations abroad was also affected most of all by reinvested earnings. With regard to its branch structure, the foreign capital inflow was channelled primarily into trade, followed by manufacture of metals and metal products. The outflow of capital went mainly into the electricity, gas and water supply industry and manufacture of motor vehicles.

CHART III.6.4

INCOME BALANCE

Within the income balance there was a decrease in the compensation of employees deficit and an increase in the portfolio investment income deficit in 2010
(annual accumulation in CZK billions)

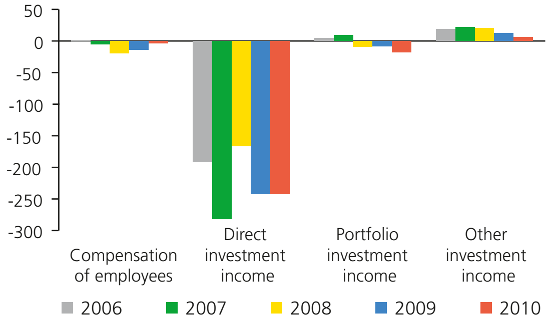


CHART III.6.5

FINANCIAL ACCOUNT

The financial account surplus increased in 2010 owing to growth in the direct investment surplus
(annual moving total in CZK billions)

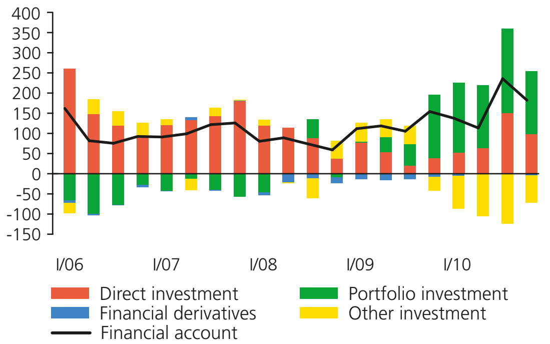


CHART III.6.6

DIRECT INVESTMENT

The direct investment deficit in 2010 Q4 was a result of a net outflow of other capital
(CZK billions)

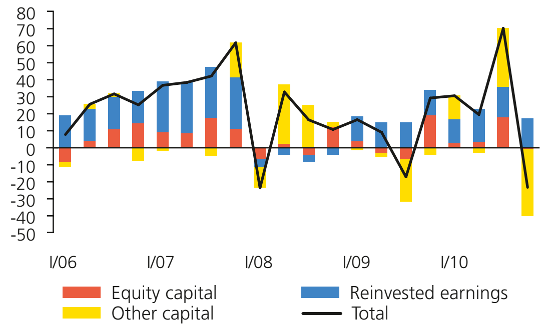


CHART III.6.7

PORTFOLIO INVESTMENT

Portfolio investment recorded only a slight net inflow in 2010 Q4
(CZK billions)

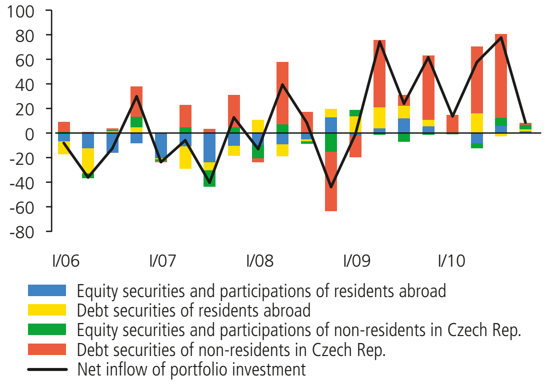
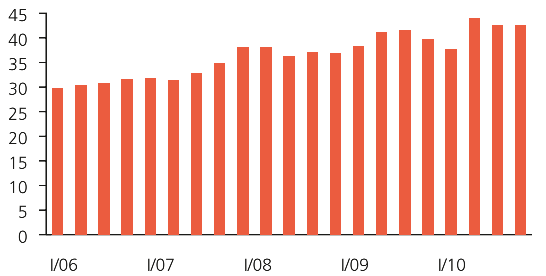


CHART III.6.8

CNB INTERNATIONAL RESERVES

The CNB's international reserves were unchanged in dollar terms at the end of 2011 Q1 compared to the end of 2010
(USD billions)



As in 2009, **portfolio investment** ended in a high net inflow of CZK 157.4 billion. The overall surplus recorded a slight year-on-year decrease, due mainly to a decline in the net inflow in Q4 (see Chart III.6.7). The biggest transactions were purchases of domestic debt securities by non-residents, which exceeded CZK 138 billion. They were associated mainly with government bond issues on foreign markets and also with purchases of koruna government bonds by foreign investors on the domestic market. Purchases slightly outweighed sales also in trading in domestic shares. As regards investment abroad, the general lack of interest in foreign securities among domestic investors persisted. Sales of foreign bonds were significantly higher than purchases of foreign shares by residents.

Settlement of **financial derivatives** recorded a net outflow of CZK 4.1 billion. The balance switched from surplus to deficit, deteriorating by almost CZK 8 billion.

Other investment recorded a net outflow of CZK 68.2 billion in 2010, up by almost CZK 34 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 of almost CZK 70 billion. This was related to the provision of trade credits and financial loans to non-residents and with the repayment of loans received by residents from abroad. A smaller net capital outflow was also recorded in the financial corporations sector in connection with an increase in long-term deposits and loans abroad. Only a net inflow of government sector capital, linked mainly with EIB loans for infrastructure development, helped to reduce the overall deficit.

The CNB's **international reserves** totalled CZK 733.7 billion at the end of 2011 Q1, down by CZK 63.1 billion quarter on quarter. In dollar terms, the reserves amounted to USD 42.5 billion in the same period, the same as at the end of 2010 (see Chart III.6.8). The CNB's international reserves covered 44.5% of all external debt liabilities of domestic entities at the end of 2010.

III.7 THE EXTERNAL ENVIRONMENT

Economic growth in the euro area was 1.7% in 2010 and the same growth rate is expected in 2011. However, the economic differences between individual euro area countries are widening. The USA is maintaining a relatively high rate of economic growth, and this should continue into 2011. However, it is being accompanied by a marked pick-up in both consumer price and producer price inflation since late 2010. Global inflation is being driven by rising prices of oil and other commodities. In response to increasing risks to price stability, the ECB raised its key interest rate in April, unlike the Fed, which will continue its quantitative easing policy until June. The euro has therefore been appreciating against the dollar in 2011.

III.7.1 The euro area

Euro area GDP growth was 1.7% in 2010 and 2.0% in Q4 (see Chart III.7.1). In quarter-on-quarter terms, GDP growth slowed slightly in Q4, from 0.4% to 0.3%. In Q4, annual growth in household consumption accelerated slightly to 1.1%, but monthly data on retail sales in the first two months of 2011 (up by 0.5% and 0.3% year on year) indicate a slowdown in household consumption in 2011 Q1. Year-on-year government consumption growth also rose slightly in 2010 Q4, to 0.6%. However, the biggest increase was recorded for gross fixed capital formation growth, which rose from 0.5% to 1.1%. Annual growth in exports and imports was 11.6% and 10.7% respectively in Q4. The ratio of the current account deficit to GDP was 0.3% in Q4, a year-on-year deterioration of 0.8 percentage point. This was due to a year-on-year decrease in the goods and services surplus.

Annual **industrial production growth** (excluding construction) has been rising relatively strongly since March 2010, reaching 8% on average. In February alone, industrial production grew by 7.4% year on year. At the same time, the unemployment rate fell in February in both year-on-year and month-on-month terms (by 0.1 percentage point to 9.9%).

The **April Consensus Forecasts** (CF) expect euro area GDP to rise by 1.7% in 2011, a slight upward revision compared to January (1.5%) in line with the forecasts by international institutions. In addition, the differences between individual euro area countries are widening. Germany and Finland, for example, are expected to grow by 2.7% and 2.9% respectively this year, while declines of 3.4% and 1.2% are predicted for Greece and Portugal respectively.

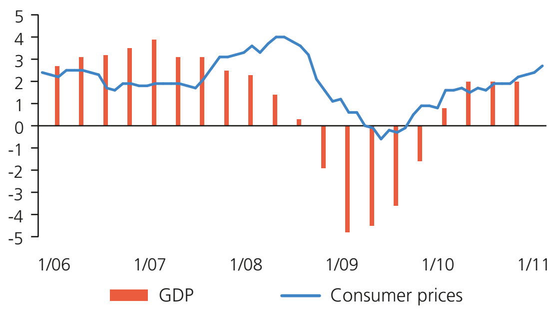
Annual inflation in the euro area (HICP) has been rising quite sharply since December 2010 and reached 2.7% in March. This rise is due above all to increasing prices of oil and other commodities. The gap between overall consumer price inflation and consumer price inflation adjusted for energy and food prices was 1.4 percentage points in February and March. At the same time, annual producer

CHART III.7.1

GDP AND INFLATION IN THE EURO AREA

Euro area GDP grew by 2% year on year for the third consecutive quarter; inflation reached 2.7% in March

(annual percentage changes; source: Datastream)



price inflation has been rising gradually since November 2010, reaching 6.6% in February compared to an average of 2.9% for 2010 as a whole. The April CF expects consumer prices to rise by 2.4% (the ECB expects 2.3%) and producer prices by 4.7% in 2011.

In line with its earlier communications, the **ECB** Governing Council decided on 7 April to increase the key interest rate on its main refinancing operations by 0.25 percentage point to 1.25%. This was the first interest rate hike since August 2008. The ECB said this decision was warranted by stronger risks to price stability, while it regarded the pace of monetary expansion as moderate. The annual growth rate of M3 rose by 0.5 percentage point month on month to 2% in February. Money market liquidity was assessed as being ample.

Annual **economic growth in Germany** edged up to 4% in 2010 Q4 compared to the previous quarter as a result of rapid growth in all components of domestic demand, especially fixed investment (see Chart III.7.2). By contrast, net exports deteriorated. The strong economic growth can be expected to continue into 2011 Q1. The growth rates of industrial production and retail trade turnover were broadly unchanged from 2010 Q4 in January and February, while growth in construction output and new industrial orders was stronger. In February the unemployment rate fell by a further 0.2 percentage point compared to January, to 6.3%. It is likely to decrease again in March.

Most leading institutions expect German GDP growth to remain strong in 2011 as a whole, but at a slightly lower level than last year, when it reached 3.6%. Most of the predictions are around 2.6%. The **April CF increased its estimate** by 0.2 percentage point compared to January, to 2.7%. It expects stronger growth in investment, industrial production and the price level, and a lower unemployment rate and general government deficit. Household consumption is expected to rise more slowly. The German government and central bank also increased their GDP growth estimates for this year. The main reason for the improved estimates is a more optimistic outlook for the world economy and trade, which will have a favourable impact on German exports. HICP inflation rose further to 2.3% in March, mainly because of strong energy price growth, which reached 10.5% in March.

Slovak GDP growth was 4% in 2010 as a whole, but slowed slightly to 3.4% in Q4 (see Chart III.7.3). In quarter-on-quarter terms, the Slovak economy maintained a relatively robust growth rate of 0.9% in 2010 Q4. Net exports recorded the biggest annual increase (10%) in Q4. Household consumption also rose, albeit at a slower pace (0.5%). By contrast, government expenditure and gross fixed capital formation recorded annual decreases of 3.3% and 1.6% respectively. Following previous high increases (the 2010 average was 19.1%), industrial production growth moderated somewhat to 10.8% in February. The unemployment rate increased in year-on-year terms to 13.1% in March.

CHART III.7.2

GDP AND INFLATION IN GERMANY

German annual GDP growth edged up to 4% in 2010 Q4; inflation continued rising in 2011 Q1

(annual percentage changes; source: Datastream)

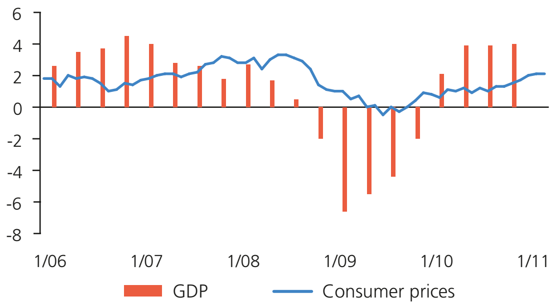
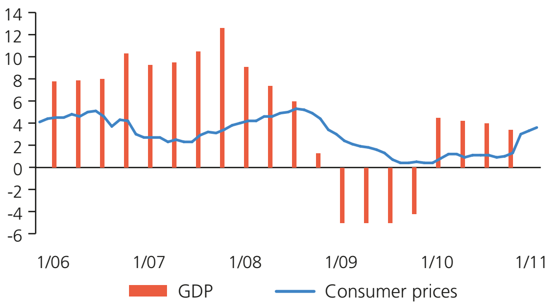


CHART III.7.3

GDP AND INFLATION IN SLOVAKIA

Inflation accelerated sharply in 2011 Q1; GDP grew by 3.4% in 2010 Q4

(annual percentage changes; source: Datastream)



Consumer price inflation increased by 0.7 percentage point in January compared to the previous month, reaching 3%, partly as a result of a rise in indirect taxes. Inflation then increased further to 3.6% in March owing to higher prices of energy and other commodities. Following a decline of 2.7% in 2010, producer price inflation rose to 3.4% in February.

The **April CF** expects the Slovak economy to grow by 3.4% in 2011 and accelerate further in 2012. Consumer prices are expected to rise by 3.4% this year.

III.7.2 The United States

Annual **GDP growth in the United States** weakened slightly from 3.2% in Q3 to 2.8% in Q4, but it remains at a relatively high level that is enabling employment to grow (see Chart III.7.4). In 2010 as a whole, US economic growth reached 2.9%. In 2010 Q4, the quarterly rate of growth increased compared to the previous period by 0.2 percentage point to 0.8%, owing to robust growth in household consumption and fixed investment and an increase in net exports. The outlook for 2011 Q1 is also favourable. In January and February the goods and services deficit widened compared to the previous quarter, but industrial production growth remains at the high level observed in 2010 Q4, employment is rising noticeably (up by 480,000 people in Q1) and the unemployment rate is falling (down by 1 percentage point year on year in March, to 8.8%). The favourable outlook is also supported by some leading indicators. The PMI index in manufacturing weakened somewhat from 61.4 in February to 61.2 in March, but the February value was the highest since 2004 and so the index remains at a strong level. The PMI in services also remains high despite falling somewhat.

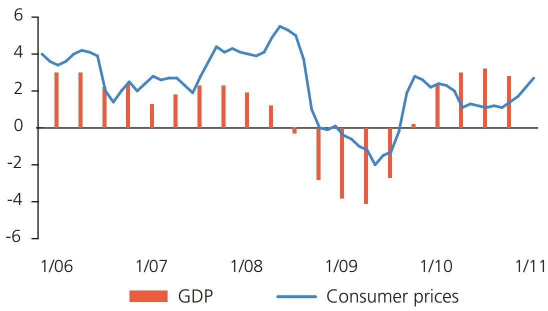
In 2011 Q1, annual inflation increased rapidly, reaching 2.7% in March (the average in the previous quarter had been only 1.2%). This was due chiefly to energy prices, which rose by 15.5% year on year in March. By contrast, core inflation remained low (1.2% in March) owing to sluggish growth in imputed rents (due to a further slowdown in the property market), high unemployment and slow growth in wages (1.7% year on year in March) and capacity utilisation. This is why the Fed continues to maintain very loose monetary policy with a key rate of 0–0.25% and a second round of quantitative easing under way. However, support for this monetary policy within the Fed is visibly falling, as evidenced by statements made by the presidents of some regional Fed banks. According to most analysts, the Fed will complete the current round of quantitative easing (June 2011) but is unlikely to extend it. The timing of the first key rate increase will depend on whether the current elevated inflation persists or turns out to be only temporary.

CHART III.7.4

GDP AND INFLATION IN THE USA

GDP growth fell to 2.8% in 2010 Q4; inflation picked up considerably in 2011 Q1

(annual percentage changes; source: Datastream)



The **US federal budget deficit** for the first six months of the current fiscal year 2010/2011, which started last October, totalled USD 830 billion. This is an increase of 16% compared to the same period a year earlier. The deficit for the entire fiscal year is estimated to reach USD 1.5 trillion. US debt (total outstanding public debt) rose to 97% of 2010 GDP in March and an intensive dispute regarding its further evolution is going on in Congress between the Democrats and the Republicans. In mid-April, President Obama introduced his plan to reduce the debt by USD 4 trillion over the next twelve years by cutting expenditure on health care, defence and security and increasing taxes, especially on the rich. The Republicans would like to reduce the debt by USD 6 trillion over ten years by making sharp cuts in spending on health care and social benefits and lowering taxes at the same time. These proposals are only the first steps in the conflict over the shape of the medium- and long-term austerity measures that are badly needed by US public budgets.

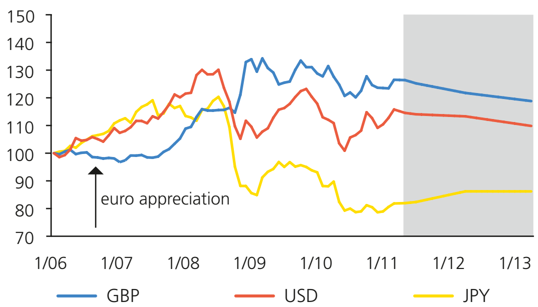
As a result of the fundamental differences in opinion between the two political parties on the way forward in the fiscal area and their expected inability to reach the necessary compromise, S&P reduced its outlook for the **rating of US long-term liabilities**. The USA is thus facing a real threat of losing its AAA rating, with all the negative consequences that that would probably entail – higher debt service costs, a damaged reputation, and depreciation of the dollar and a weakening of its role as a global reserve currency.

Chart III.7.5

EURO EXCHANGE RATE AGAINST MAJOR CURRENCIES

The euro appreciated against major currencies in 2011 Q1

(January 2006 = 100; source: Datastream; outlook from CF)



III.7.3 The USD/EUR exchange rate

In 2011 Q1, the euro appreciated against the dollar (see Chart III.7.5). At the end of March the euro was almost 9% stronger than in January. This was due to a change in the outlook for ECB monetary policy towards an earlier tightening, amid still easy Fed policy.[45]

The euro strengthened from USD 1.41 to USD 1.45 in the **first half of April 2011**. In the course of April, the main issue in both the euro area and the USA was public debt. The looming restructuring of Greek debt could worsen the public debt financing conditions in Portugal and Ireland, which would lead to depreciation pressures on the euro. On the other hand, S&P decreased its rating outlook for US long-term liabilities from stable to negative, which is a factor acting against the US dollar.

45 The euro also strengthened against the pound sterling, but the appreciation in the same period was smaller (6%). The euro also appreciated considerably against the Japanese yen (8%). In the short run, the exchange rate was affected by the earthquake in Japan, to which major central banks responded with joint intervention on 18 March 2011.

However, the **April Consensus Forecasts** expect the dollar to appreciate gradually against the euro to USD 1.3 at the two-year horizon. The euro should weaken similarly against the pound sterling, but is expected to strengthen against the Japanese yen.

III.7.4 Prices of oil and other commodities

Oil price growth started to accelerate in mid-February. The **price of Brent crude oil** reached almost USD 127 a barrel in early April. The same price level was last observed in summer 2008 (see Chart III.7.6). The price of oil thus reached a level where concerns of an adverse impact on demand started to spread. This was partly due to a number of warning statements issued, for example, by the International Energy Agency (IEA), Saudi Arabian representatives and Goldman Sachs analysts. Following a temporary decline, Brent crude oil returned above USD 120 a barrel on 19 April.

The high oil prices were supported by both supply and demand factors. On the supply side, the armed political conflict in Libya played an important role, causing an 80% drop in oil extraction in this country (oil exports from Libya have temporarily halted). This shortfall was partly offset by other members of the OPEC cartel. On the other hand, stronger demand for oil was supported by economic activity growth in emerging countries, especially China.[46] The outlook for oil consumption in Japan remains unclear. Following a drop in consumption due to the devastating earthquake, the renewal of infrastructure, extensive reconstruction and the need to replace nuclear energy with other sources are expected to generate higher demand for oil. The current price of oil also includes a significant risk premium due to concerns of unrest spreading to other oil-producing countries in North and West Africa and the Middle East.

Oil supply fell to 88.3 million barrels a day in March. **According to a recent IEA report**, expected demand for this year is 89.4 million barrels a day (up by 1.4 million barrels a day), which is higher than the new OPEC forecast. The IMF April forecast expects oil demand to rise by 3.4%, the highest growth rate since 2004. According to the IMF, the current combination of slowing oil supply growth and rising demand may generate market imbalances that could have damaging effects for future economic development.

Market **outlooks based on Brent oil futures** were about 6% higher than in the previous forecast. A gradual decline in prices from USD 124 to USD 115 a barrel is expected by the end of 2012. Similar conclusions result from the April CF survey on WTI oil prices. In koruna terms, oil prices could decline rather more markedly thanks to the strengthening koruna (see Chart III.7.7).

CHART III.7.6

OIL AND NATURAL GAS PRICES IN USD

According to market outlooks, the price of oil is expected to fall gradually over the entire forecast horizon

(oil in USD/barrel; gas in USD/1000 m³ – right-hand scale; source: IMF, Bloomberg)

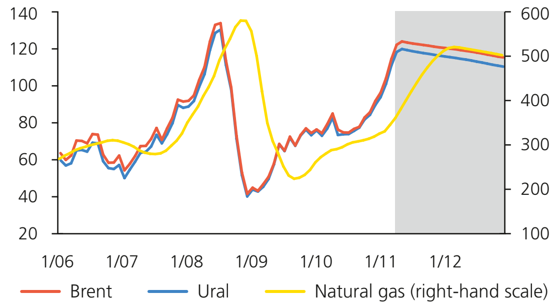
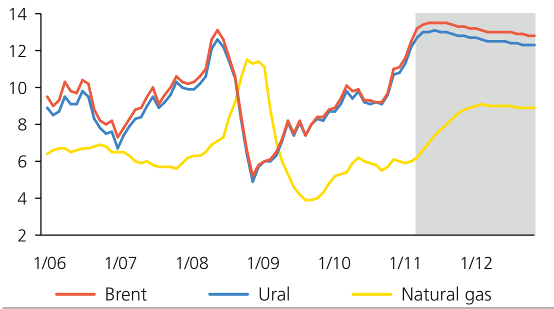


CHART III.7.7

OIL AND NATURAL GAS PRICES IN CZK

The strengthening koruna is depressing the high prices of oil only partially

(oil in CZK/litre; gas in CZK/m³; source: IMF, Bloomberg)

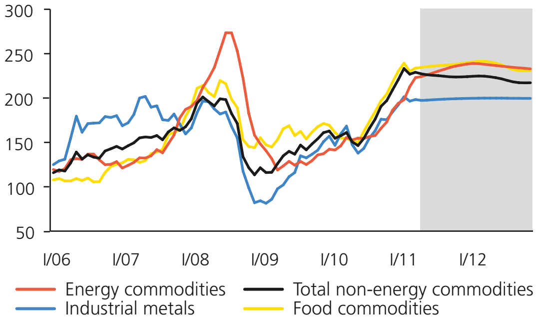


46 Growth in demand for oil in China was also affected by changes in its energy policy favouring the use of oil derivatives instead of electricity in some economic sectors.

Chart III.7.8

COMMODITY PRICES

Commodity prices continued to rise quickly in 2011 Q1
(year 2005 = 100; source: Bloomberg)



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

The **non-energy commodity price index** reached a long-term high in mid-February 2011 (see Chart III.7.8). At that time prices of maize, sugar, coffee, cocoa, pork, beef, cotton, rubber, copper, tin and iron ore reached record levels. Prices of most key commodities then fell until mid-March, but have been rising again since then. Compared to the previous forecast, the non-energy commodity price index was around 6% higher in the first half of April and the difference in the outlook for the end of 2012 is almost 9%. The largest revisions were made to the food commodity component, where the differences are 3.5% at the beginning and 12% at the end of the forecast. The strongest pressure is visible in the case of wheat prices, which should continue to increase in the rest of this year. A decline from elevated levels is expected for maize (stocks of which in the US are close to a 15-year low) and soy, but the actual developments will largely depend on oil prices. A large proportion of these crops are processed to produce alternative fuels.

An even larger deviation from the previous forecast was recorded by the **energy commodity price index**, which was almost 15% higher in April. Given the expected growth in natural gas prices and slight rise in coal prices, further growth in the overall index can be expected until mid-2012 despite the forecasted decline in oil prices.

BOX 2

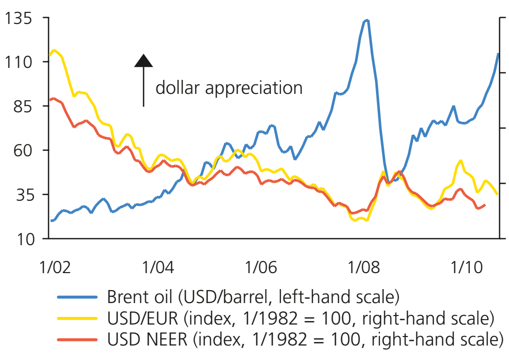
THE RELATIONSHIP BETWEEN THE BRENT CRUDE OIL PRICE AND THE DOLLAR EXCHANGE RATE

A strengthening of the inverse relationship between the price of Brent crude oil, which is traded in US dollars, and the dollar exchange rate has been evident since 2002, with the gradually rising price of oil having been accompanied by depreciation of the dollar. This trend peaked in 2008, when the effective exchange rate of the dollar weakened to a historical low in March (close to USD 1.6 to the euro) and the average monthly price of Brent oil then reached an all-time high of USD 134 a barrel in July. A similar situation has been observed in recent months, when oil price growth has been accelerating again amid a weakening of the US dollar (see Chart 1).

Chart 1 (Box)

BRENT CRUDE OIL PRICE AND USD EXCHANGE RATE

An inverse relationship between the price of Brent crude oil and the dollar exchange rate has been evident since 2002
(source: Datastream and IMF – International Financial Statistics)



This box examines the interdependence between the monthly returns of the two variables. As Chart 2 shows, the negative relationship between the dollar and the Brent oil price has increased over the last few years. The average coefficient of correlation between the two returns since 2007 is -0.6.

A similar inverse relationship with the dollar exchange rate is visible for other commodities, such as industrial metals and agricultural commodities. One explanation for this inverse relationship is the growing role of investors in commodity markets, related to falling financial asset returns (low interest rates) in advanced countries. Three-month rates on the dollar money market have averaged only 2% since 2002, compared to 6% in 1982–2001. In real terms, interest rates were 2.6% on average in 1982–2001 and have declined to an average of -0.4% since 2002. In addition, the Fed commenced a first round of quantitative easing (QE1) at the start of 2009. This was replaced with a second round (QE2) between November 2010 and June 2011. Under QE1, the Fed supplied the financial system with additional liquidity of USD 1.7 trillion, and USD 600 billion is planned for QE2. In this situation, oil and other commodities are alternative investment assets used to diversify the risk of inflation, the risk of dollar depreciation or the risk of a stock market decline. Above and beyond traditional fundamental factors, additional speculative demand has therefore probably been driving up commodity prices in recent years.

Using a simple regression equation including other relevant factors underlying Brent oil price movements (e.g. industrial production growth in OECD countries, real interest rates, oil inventories and the rate of use of oil refineries in the USA), we estimate that since 2005 a weakening of the effective exchange rate of the dollar of 1% has, on average, been accompanied by a rise in the Brent oil price of 2.1%.

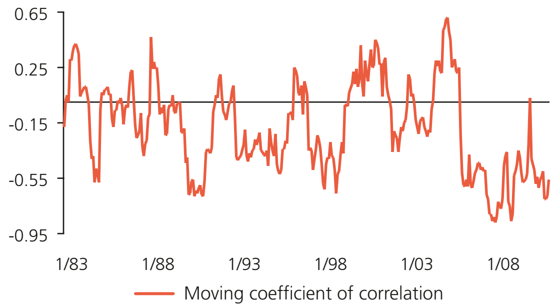
The negative relationship between the Brent crude oil price and the dollar exchange rate has thus dampened the impact of sharp fluctuations in the dollar price of Brent oil in "non-dollar" economies, including the Czech Republic. As the Czech koruna usually moves similarly against the dollar as against the euro, the impacts of fluctuations in dollar prices of oil on the Czech economy have been dampened similarly as in the euro area countries. Moreover, the dampening effect on the Czech Republic has been increased by the long-running nominal appreciation of the koruna against the euro (the average annual appreciation of the koruna against the euro since 2002 has been 3.1%).

Growth in the koruna price of oil relative to the dollar price of oil was dampened most of all between September 2007 and September 2008, when the difference in annual growth between the dollar and koruna price of Brent oil was 32 percentage points. In the first three months of this year the difference was 7 percentage points (see Chart 3).

CHART 2 (BOX)

CORRELATION BETWEEN BRENT CRUDE OIL AND USD EXCHANGE RATE

The average correlation coefficient since 2007 has been -0.6
(source: Datastream and IMF – International Financial Statistics; CNB calculation)

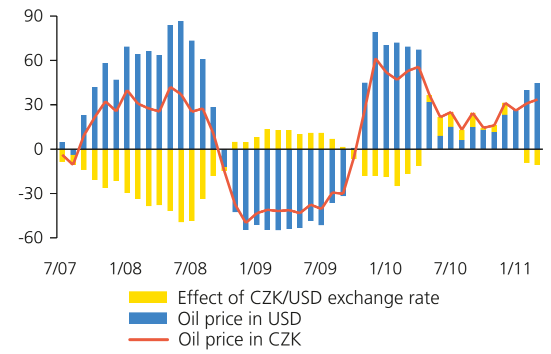


Note: Annual moving coefficient of correlation between monthly returns on the nominal effective exchange rate of the US dollar and Brent crude oil

CHART 3 (BOX)

BRENT CRUDE OIL PRICE IN CZK

The average difference in annual growth between the dollar and koruna price of oil between September 2007 and September 2008 was 32 percentage points
(annual percentage changes; percentage points; source: Datastream, CNB calculation)



CHARTS IN THE TEXT

BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics
CF	Consensus Forecasts
CNB	Czech National Bank
COSMC	Czech Office for Surveying, Mapping and Cadastre
CPI	consumer price index
CZK	Czech koruna
CZSO	Czech Statistical Office
ECB	European Central Bank
EIB	European Investment Bank
ERM II	Exchange Rate Mechanism
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
GBP	pound sterling
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
HP filter	Hodrick-Prescott filter
IEA	International Energy Agency
ILO	International Labour Organization
IMF	International Monetary Fund
IRS	interest rate swap
JPY	Japanese yen
LFS	Labour Force Survey
LIBOR	London Interbank Offered Rate
M1, M2	monetary aggregates
MLSA	Ministry of Labour and Social Affairs
OECD	Organisation for Economic Cooperation and Development
OPEC	Organization of the Petroleum Exporting Countries
PMI	Purchasing Managers Index
PPI	producer price index
PRIBOR	Prague Interbank Offered Rate
(1W, 1M, 1Y)	(one-week, one-month, one-year)
repo rate	repurchase agreement rate
USD	US dollar
VAT	value added tax
WTI	West Texas Intermediate

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

BOXES AND ANNEXES CONTAINED IN INFLATION REPORTS

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

Assessment of the accuracy of the outlooks for effective GDP and CPI in the euro area – comparison of forecasts	(Box)	II/2010
Revisions to the expenditure components of GDP	(Box)	II/2010
Business and consumer sentiment in the current phase of the economic cycle according to CZSO and CNB indicators	(Box)	II/2010
The January 2010 consumer basket update	(Box)	II/2010
The effect of new photovoltaic power station installations on economic activity	(Box)	IV/2010
An analysis of household consumption	(Box)	IV/2010
Property-market-related loans in the current phase of the business cycle	(Box)	IV/2010
Forecasts for general government debt and debt service, and sensitivity analyses	(Box)	I/2011
Price-setting behaviour in the Czech Republic (micro data evidence) in relation to the pricing mechanism in the g3 forecasting model	(Box)	II/2011
The relationship between the Brent crude oil price and the dollar exchange rate	(Box)	II/2011

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 administered prices, indirect tax changes and fuels.

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

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

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

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

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

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

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

Disinflation: A decline in inflation.

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

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

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

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

Financial account: Records transactions connected with the creation, liquidation and change in ownership of the financial assets and liabilities of the government, the banking and corporate sectors and other entities vis-à-vis the rest of the world. It 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 general government sector. A negative government balance is called a general government deficit and a positive government balance is called a general government surplus.

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

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

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

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

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

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

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

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

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

Monetary aggregates: Represent the amount of money in the economy covered in the monetary survey. According to the national definition, they are calculated from the monetary liabilities of resident monetary financial institutions to other resident sectors in the Czech Republic (households, non-financial corporations and financial institutions excluding the general government). Monetary aggregates differ according to the degree of liquidity of the individual components. The narrow monetary aggregate M1 comprises currency in circulation and overnight deposits. The broad monetary aggregate M2 comprises M1 plus 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 administered prices and adjusted for the first-round effects of changes to indirect taxes. Net inflation consists of food price inflation, fuel price inflation and adjusted inflation excluding fuels. Until the end of 2001, the CNB's inflation targets were set in terms of net inflation. Since 2002, the CNB has targeted headline inflation, using net inflation for analytical purposes only.

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

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

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

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

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

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

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

Property supply prices: Property sale supply prices in estate agencies. Supply prices should be higher than transfer prices. Property supply prices in the Czech Republic are published, for example, by the CZSO and the Institute for Regional Information (IRI). See also *Property transfer prices*.

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.

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	2,984.7	3,053.3	2,930.6	2,994.0	**3,039.0**	**3,123.6**
GDP	%, y-o-y, real terms, seas. adjusted	1.8	3.6	4.3	6.4	7.0	6.1	2.3	-4.0	2.2	**1.5**	**2.8**
Household consumption	%, y-o-y, real terms, seas. adjusted	2.2	5.9	2.8	2.6	5.2	4.9	3.4	-0.2	0.3	**0.2**	**2.4**
Government consumption	%, y-o-y, real terms, seas. adjusted	6.7	7.1	-3.5	2.9	1.2	0.5	1.1	2.6	0.3	**-0.9**	**0.5**
Gross capital formation	%, y-o-y, real terms, seas. adjusted	4.5	-1.4	8.4	-0.6	10.2	9.4	-3.2	-15.5	4.2	**1.0**	**4.9**
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	17.6	**7.1**	**8.1**
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	17.6	**5.6**	**8.2**
Net exports	CZK bn, constant p., seas. adjusted	-146.4	-170.7	-152.5	-26.1	3.6	24.5	65.8	55.1	65.5	**120.9**	**127.8**
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	10.0	-	-
Construction output	%, y-o-y, real terms	3.0	9.3	8.8	5.2	6.0	7.1	0.0	-0.9	-7.6	-	-
Receipts in retail sales	%, y-o-y, real terms	1.7	7.2	3.8	8.1	10.8	10.0	2.7	-4.7	1.0	-	-
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	1.5	-	-
Consumer Price Index	%, y-o-y, average	1.8	0.1	2.8	1.9	2.5	2.8	6.4	1.1	1.5	**1.9**	**2.2**
Administered prices (17.15%)*	%, y-o-y, average	5.7	0.6	3.5	5.7	9.3	4.8	15.6	8.4	2.7	**4.7**	**4.7**
Net inflation (82.85%)*	%, y-o-y, average	0.8	0.0	1.8	0.7	0.4	1.7	2.4	-0.9	0.0	**1.3**	**1.5**
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	0.9	**3.1**	**1.8**
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	**-0.6**	**1.1**
Fuel prices (3.70%)*	%, y-o-y, average	-9.3	1.5	4.5	7.8	3.7	-0.3	4.3	-11.1	11.8	**13.2**	**4.9**
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	0.4	**1.9**	**2.1**
GDP deflator	%, y-o-y, seas. adjusted	2.8	0.9	4.5	-0.3	1.1	3.4	1.8	2.5	-1.1	**0.1**	**2.2**
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	1.2	**5.9**	**3.2**
Agricultural prices	%, y-o-y, average	-7.5	-4.5	9.6	-9.8	1.3	16.4	10.8	-24.3	5.6	**18.7**	**-1.2**
Construction work prices	%, y-o-y, average	2.7	2.2	3.7	3.0	2.9	3.9	4.5	1.2	-0.2	-	-
Brent crude oil	%, y-o-y, average	2.2	15.5	32.7	42.3	20.0	11.1	34.5	-36.7	28.7	**45.5**	**-0.6**
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	7.8	4.0	2.0	**1.9**	**4.1**
Average monthly wages in monitored organisations	%, y-o-y, real terms	6.1	5.7	3.4	3.0	4.0	4.3	1.4	3.0	0.5	**-0.1**	**1.9**
Number of employees	%, y-o-y	-0.8	-2.0	-0.2	2.2	1.2	1.9	1.7	-2.1	-2.1	**-0.5**	**0.3**
Nominal unit wage costs	%, y-o-y	4.6	2.3	1.8	0.6	1.0	3.0	6.1	4.3	-2.2	**-0.1**	**1.6**
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	-7.6	-	-
Aggregate labour productivity	%, y-o-y	1.9	3.6	4.1	5.2	4.8	3.4	1.2	-3.0	3.1	**1.2**	**2.5**
ILO general unemployment rate	%, average, age 15–64	7.3	7.8	8.4	8.0	7.2	5.4	4.4	6.8	7.4	**7.0**	**6.5**
Registered unemployment rate	%, average	-	-	10.0	9.5	8.6	7.0	5.8	8.3	9.3	**9.1**	**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	-211.7	-170.8	**-150.4**	**-149.7**
Public finance deficit / GDP**	%, nominal terms	-6.8	-6.6	-2.9	-3.6	-2.6	-0.7	-2.7	-5.8	-4.7	**-4.0**	**-3.8**
Public debt (ESA95)	CZK bn, current p.	695.0	768.3	847.8	885.4	948.3	1,023.8	1,104.9	1,279.6	1,413.5	**1,547.2**	**1,684.6**
Public debt / GDP**	%, nominal terms	28.2	29.8	30.1	29.7	29.4	29.0	30.0	35.3	38.5	**41.5**	**43.0**
EXTERNAL RELATIONS												
Current account												
Trade balance	CZK bn, current p.	-71.3	-69.8	-13.4	59.4	65.1	120.6	102.7	81.2	54.0	**60.0**	**60.0**
Trade balance / GDP	%, nominal terms	-2.9	-2.7	-0.5	2.0	2.0	3.4	2.8	2.2	1.5	**1.6**	**1.5**
Balance of services	CZK bn, current p.	21.9	13.2	16.6	36.9	45.1	49.7	65.9	65.2	66.1	**70.0**	**70.0**
Current account	CZK bn, current p.	-136.4	-160.6	-147.5	-39.8	-77.2	-113.1	-22.9	-114.8	-139.2	**-150.0**	**-170.0**
Current account / GDP	%, nominal terms	-5.5	-6.2	-5.2	-1.3	-2.4	-3.2	-0.6	-3.2	-3.8	**-4.0**	**-4.3**
Foreign direct investment												
Direct investment	CZK bn, current p.	270.9	53.5	101.8	279.6	90.3	179.1	36.3	37.7	97.0	**90.0**	**105.0**
Exchange rates												
CZK/USD	average	32.7	28.2	25.7	24.0	22.6	20.3	17.1	19.1	19.1	**17.5**	**17.2**
CZK/EUR	average	30.8	31.8	31.9	29.8	28.3	27.8	25.0	26.5	25.3	**24.1**	**23.4**
CZK/EUR	%, y-o-y, real (CPI euro area), avg.	-	-	0.0	-6.3	-5.1	-2.2	-12.5	5.6	-4.4	**-3.9**	**-2.5**
CZK/EUR	%, y-o-y, real (PPI euro area), avg.	-	-	-3.1	-5.5	-1.3	-3.9	-8.8	4.3	-3.3	**-5.7**	**-3.6**
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	-1.0	**0.3**	**-0.1**
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	2.0	**4.3**	**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	4.0	**3.4**	**8.3**
2W repo rate	%, end-of-period	2.75	2.00	2.50	2.00	2.50	3.50	2.25	1.00	0.75	-	-
3M PRIBOR	%, average	3.5	2.3	2.3	2.0	2.3	3.1	4.0	2.2	1.3	**1.3**	**2.0**

* 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
760.2	765.8	767.0	760.2	732.9	729.1	732.9	735.7	740.6	745.8	752.5	755.1	**757.5**	**759.4**	**760.1**	**762.0**	**767.9**	**776.1**	**785.2**	**794.3**
3.2	3.4	2.3	0.4	-3.6	-4.8	-4.4	-3.2	1.1	2.3	2.7	2.6	**2.3**	**1.8**	**1.0**	**0.9**	**1.4**	**2.2**	**3.3**	**4.2**
4.5	3.7	2.9	2.7	0.6	-0.1	-0.5	-0.9	0.2	0.7	0.7	-0.4	**-0.7**	**-0.8**	**0.1**	**2.0**	**2.1**	**2.3**	**2.4**	**2.6**
-0.6	2.4	3.3	-0.7	1.4	1.5	4.0	3.4	2.1	0.9	-0.3	-1.6	**0.3**	**-0.1**	**-2.6**	**-1.1**	**-0.6**	**0.1**	**0.9**	**1.8**
-2.4	-8.8	-9.5	9.0	-6.1	-13.9	-14.8	-26.5	-8.4	0.7	15.2	11.2	**0.7**	**6.0**	**-6.1**	**4.4**	**6.4**	**4.8**	**4.4**	**4.2**
14.3	13.4	4.9	-8.7	-19.0	-15.6	-8.0	2.4	18.2	19.3	16.4	16.8	**9.6**	**8.1**	**6.1**	**4.8**	**5.4**	**6.9**	**9.2**	**10.8**
12.8	9.2	1.4	-5.5	-16.8	-14.5	-6.6	-2.4	15.4	18.5	19.2	17.3	**6.9**	**7.3**	**2.2**	**6.0**	**7.0**	**7.5**	**8.6**	**9.5**
16.4	27.8	26.0	-4.3	-4.5	15.4	12.9	31.4	14.4	23.9	-5.5	32.7	**37.8**	**32.3**	**27.1**	**23.7**	**25.8**	**29.8**	**34.2**	**38.0**
2.1	3.9	0.8	-13.2	-19.0	-19.0	-13.2	-2.1	6.8	11.0	10.3	11.6	-	-	-	-	-	-	-	-
0.7	-2.3	6.4	-4.2	-10.8	1.2	0.3	2.0	-21.4	-7.2	-3.9	-4.1	-	-	-	-	-	-	-	-
5.3	4.7	4.5	-2.7	-4.3	-5.1	-5.4	-4.0	-0.8	1.9	1.6	1.3	-	-	-	-	-	-	-	-
4.3	5.4	6.4	6.3	5.0	3.7	2.1	1.0	0.7	0.6	1.1	1.5	1.7	-	-	-	-	-	-	-
7.4	6.8	6.6	4.7	2.2	1.4	0.2	0.4	0.7	1.1	1.9	2.1	1.7	**1.7**	**2.0**	**2.3**	**2.3**	**2.2**	**2.1**	**2.2**
15.0	14.7	15.8	16.9	11.2	9.8	7.5	5.2	0.8	2.3	3.6	3.8	4.3	**4.3**	**5.0**	**5.4**	**6.0**	**5.1**	**4.0**	**3.8**
3.6	2.9	2.9	0.4	-0.6	-0.6	-1.5	-0.7	-0.5	-0.3	0.3	0.4	1.0	**1.1**	**1.3**	**1.6**	**1.5**	**1.5**	**1.5**	**1.6**
5.7	3.3	3.4	-0.3	0.0	0.4	-2.0	-2.2	-1.4	-0.2	2.3	2.8	3.2	**3.6**	**3.0**	**2.7**	**2.0**	**1.5**	**1.7**	**1.9**
1.8	2.2	2.3	1.7	0.6	0.1	-0.5	-0.2	-1.1	-1.2	-1.2	-1.3	-0.8	**-0.9**	**-0.6**	**-0.1**	**0.6**	**1.1**	**1.4**	**1.5**
14.4	8.5	5.9	-11.5	-20.5	-15.7	-11.8	3.7	18.1	13.3	7.0	8.7	10.8	**11.4**	**14.8**	**15.8**	**10.1**	**4.9**	**2.6**	**2.0**
5.3	4.6	4.7	2.9	1.6	1.3	0.2	0.4	-0.3	0.1	0.8	1.0	1.6	**1.7**	**2.0**	**2.3**	**2.3**	**2.1**	**2.0**	**2.0**
2.3	1.4	1.1	2.5	3.7	3.3	2.1	1.2	-1.6	-1.0	-0.4	-1.3	**-1.4**	**-0.2**	**0.3**	**1.5**	**3.2**	**2.2**	**1.9**	**1.4**
5.6	5.1	5.5	1.7	-1.1	-3.6	-5.2	-2.6	-1.4	1.3	2.2	3.0	5.4	**6.1**	**6.2**	**5.8**	**4.1**	**2.8**	**2.8**	**2.9**
26.7	27.2	7.7	-18.5	-27.8	-29.5	-23.8	-16.0	-5.6	-2.8	8.2	22.7	27.9	**25.5**	**15.3**	**5.9**	**-3.5**	**-3.3**	**0.0**	**2.1**
4.7	5.0	4.5	3.9	2.8	1.4	0.5	0.3	0.1	-0.2	-0.3	-0.3	-0.4	-	-	-	-	-	-	-
66.1	77.8	54.7	-36.7	-53.3	-51.5	-41.1	33.3	70.5	33.1	11.8	15.8	36.8	**53.3**	**56.4**	**36.4**	**11.8**	**-3.9**	**-4.2**	**-4.5**
9.9	7.3	7.1	7.4	2.9	3.2	4.6	5.2	2.4	2.4	2.1	0.9	**1.4**	**1.5**	**2.0**	**2.5**	**3.7**	**4.0**	**4.3**	**4.5**
2.3	0.5	0.5	2.6	0.8	1.8	4.5	4.8	1.7	1.2	0.2	-1.2	**-0.3**	**-0.2**	**0.0**	**0.3**	**1.3**	**1.8**	**2.1**	**2.3**
2.1	1.9	1.7	1.2	-0.9	-1.8	-2.8	-2.9	-3.2	-2.6	-1.3	-1.5	**-0.3**	**-0.4**	**-0.7**	**-0.4**	**-0.2**	**0.1**	**0.4**	**0.7**
7.9	5.4	4.6	6.8	4.9	4.5	4.8	3.0	-3.4	-2.4	-1.2	-1.9	**-1.1**	**-0.8**	**0.1**	**1.0**	**2.1**	**1.9**	**1.4**	**0.9**
3.1	-0.3	-2.3	1.7	5.5	5.1	5.9	1.2	-6.3	-6.6	-9.4	-8.5	-	-	-	-	-	-	-	-
1.5	2.5	2.0	-1.1	-3.5	-4.2	-3.2	-1.0	3.2	3.9	2.5	2.9	**1.4**	**1.6**	**1.3**	**1.2**	**1.3**	**2.0**	**2.9**	**3.6**
4.6	4.3	4.3	4.4	5.8	6.4	7.4	7.3	8.2	7.2	7.2	7.0	**7.2**	**6.8**	**7.1**	**7.0**	**7.0**	**6.5**	**6.5**	**6.1**
6.3	5.5	5.6	5.8	7.5	8.1	8.7	9.0	10.1	9.1	8.8	9.1	9.8	**9.0**	**8.9**	**8.8**	**9.5**	**8.6**	**8.3**	**7.9**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42.9	39.3	27.0	-6.6	21.4	27.8	17.7	14.3	28.8	21.8	-2.8	6.1	**29.0**	**20.0**	**0.0**	**11.0**	**26.0**	**18.0**	**1.0**	**15.0**
4.9	4.2	2.9	-0.7	2.4	3.0	1.9	1.6	3.3	2.3	-0.3	0.7	**3.3**	**2.1**	**0.0**	**1.1**	**2.8**	**1.8**	**0.1**	**1.5**
19.2	19.1	15.0	12.6	15.9	15.7	16.5	17.1	16.1	22.5	13.1	14.4	**16.0**	**19.0**	**17.0**	**18.0**	**16.0**	**18.0**	**18.0**	**18.0**
53.3	-31.1	-7.3	-37.8	2.4	-53.8	-41.0	-22.5	6.4	-34.0	-90.7	-20.9	**7.0**	**-52.0**	**-88.0**	**-17.0**	**2.0**	**-65.0**	**-91.0**	**-16.0**
6.1	-3.3	-0.8	-4.0	0.3	-5.9	-4.5	-2.4	0.7	-3.6	-9.8	-2.2	**0.8**	**-5.5**	**-9.4**	**-1.8**	**0.2**	**-6.5**	**-9.2**	**-1.6**
-23.6	32.8	16.4	10.7	16.5	9.0	-17.1	29.3	30.6	19.5	70.2	-23.3	-	-	-	-	-	-	-	-
17.1	15.9	16.1	19.3	21.2	19.6	17.9	17.5	18.7	20.1	19.3	18.2	17.8	**17.4**	**17.4**	**17.3**	**17.2**	**17.2**	**17.3**	**17.3**
25.5	24.8	24.1	25.4	27.6	26.7	25.6	25.9	25.9	25.6	24.9	24.8	24.4	**24.3**	**24.0**	**23.8**	**23.7**	**23.5**	**23.3**	**23.2**
-12.2	-14.7	-15.9	-7.2	7.4	6.7	6.1	2.2	-6.1	-3.9	-3.1	-4.7	-5.3	**-4.4**	**-2.8**	**-3.1**	**-2.6**	**-2.8**	**-2.3**	**-2.3**
-9.9	-11.1	-11.4	-3.0	8.6	6.1	3.4	-0.6	-6.1	-3.3	-1.1	-2.8	-5.5	**-6.2**	**-5.3**	**-5.7**	**-4.7**	**-3.8**	**-3.1**	**-2.9**
-4.3	-6.2	-6.5	-1.2	5.2	1.3	-2.2	-3.5	-6.6	-0.3	2.2	1.0	**0.7**	**-0.6**	**0.6**	**0.6**	**0.0**	**0.3**	**0.4**	**0.5**
-3.0	-4.4	-4.0	-1.6	1.6	-2.9	-7.0	-5.7	-4.5	2.5	5.8	4.7	**4.7**	**3.5**	**4.6**	**4.3**	**-0.1**	**0.0**	**-0.1**	**0.0**
10.1	7.6	8.3	7.6	8.8	7.5	4.6	4.1	2.8	4.8	4.7	3.8	**3.0**	**2.8**	**3.0**	**4.7**	**6.5**	**7.8**	**8.9**	**9.8**
3.75	3.75	3.50	2.25	1.75	1.50	1.25	1.00	1.00	0.75	0.75	0.75	0.8	-	-	-	-	-	-	-
4.0	4.2	3.9	4.1	2.7	2.3	2.0	1.8	1.5	1.3	1.2	1.2	1.2	**1.2**	**1.3**	**1.5**	**1.7**	**1.9**	**2.2**	**2.4**

Issued by:
CZECH NATIONAL BANK
Na Příkopě 28
115 03 Praha 1
CZECH REPUBLIC

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

http://www.cnb.cz

Produced by: Jerome s.r.o.
Design: Jerome s.r.o.

ISSN 1803-2419 (Print)
ISSN 1804-2465 (Online)