INFLATION REPORT / II

2016

CZECH NATIONAL BANK

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In 1998, the Czech National Bank switched to inflation targeting. In the inflation targeting regime, the central bank's communication with the public plays a significant role. One of the core elements of this communication is the publishing of quarterly Inflation Reports. 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 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 Bank Board's final decision may not correspond to the message of the forecast due to the arrival of new information since the forecast was drawn up and to 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.

This Inflation Report was approved by the CNB Bank Board on 12 May 2016 and contains the information available as of 22 April 2016. 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.

I. SUMMARY

Both headline and monetary policy-relevant inflation increased slightly at the start of this year, but remained well below the CNB's target. The growth of the Czech economy slowed at the end of last year. It will continue to follow this trend this year, with GDP growth slowing to 2.3% because of a drop in government investment. On the other hand, economic activity will continue to be supported by easy monetary conditions, growth in external demand and low oil prices. GDP growth will pick up again next year. In the context of continued economic growth, the labour market situation will improve further. The growing economic activity and wages will continue to foster higher costs and consequently also higher consumer prices over the entire forecast horizon. The current strongly anti-inflationary effect of import prices will fade. Both headline and monetary policy-relevant inflation will increase, hitting the 2% target at the monetary policy horizon and then moving slightly above it. The forecast assumes that market interest rates will be flat at their current very low level and the exchange rate will be used as a monetary policy instrument until mid-2017. Consistent with the forecast is an increase in market interest rates thereafter.

The annual rate of growth of the **Czech economy** slowed to 4% in **2015 Q4**, owing mainly to slower growth in investment. However, all components of demand except inventories made positive contributions to the growth. The forecast expects growth to slow further to less than 3% in 2016 Q1 as a result of a drop in government investment.

Both **headline and monetary policy-relevant inflation** increased slightly in **2016 Q1**, but remained well below the CNB's target, or below the lower boundary of the tolerance band around the target (see Chart I.1). The increase in the price level was due to the return of administered prices to annual growth and to still markedly positive adjusted inflation excluding fuels, reflecting growth in the domestic economy and wages. By contrast, prices of food and fuels declined as a result of persisting anti-inflationary supply shocks from abroad.

Growth in economic activity in the **effective euro area** will remain close to 2% over the entire forecast horizon. Producer and consumer price inflation in the euro area remains very subdued. However, both producer and consumer prices will rise gradually as a result of the unwinding of the effect of the drop in oil prices and stable growth of the euro area economy. This will also be fostered by the ECB's easy monetary policy, which is reflected in the outlook for 3M EURIBOR market interest rates. This outlook is negative until the end of 2017. The Brent crude oil price is expected to rise only gradually.

According to the **forecast, both headline and monetary policy-relevant inflation** will decline temporarily again close to zero in the near future. However, they will start to rise at the close of this year, hitting the 2% target at the monetary policy horizon and then slightly exceeding it (see Charts I.1 and I.2). The overall upward cost pressures

CHART I.1

HEADLINE INFLATION FORECAST

Headline inflation will increase, hitting the 2% target at the monetary policy horizon and then moving slightly above it
(year on year in %)

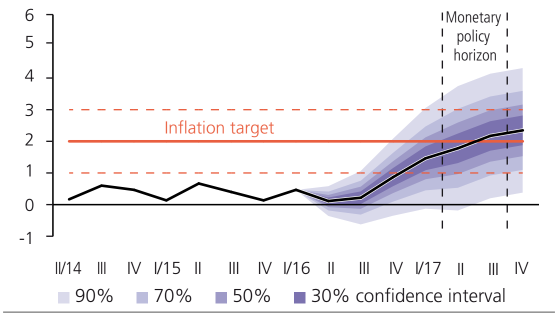
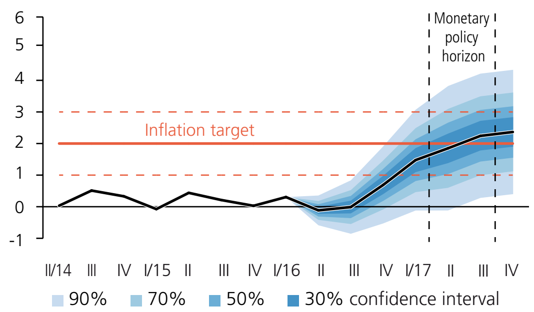


CHART I.2

MONETARY POLICY-RELEVANT INFLATION FORECAST

Monetary policy-relevant inflation will break free from zero at the end of this year and reach the 2% target at the monetary policy horizon
(year on year in %)



on consumer prices will re-emerge this year. Costs in the domestic economy will continue to increase over the entire forecast horizon due to rising wages and price of capital amid continued growth in economic activity. At the same time, the current strongly anti-inflationary effect of import prices, stemming from a fall in producer prices in the euro area, will fade gradually. The return of inflation to the target will also be aided by the extension of the use of the exchange rate as a monetary policy instrument until mid-2017, as assumed by the forecast. These factors will lead to renewed growth in adjusted inflation excluding fuels from the end of this year. Food prices will return to growth owing to the evolution of world prices of agricultural commodities and the fading of one-off effects observed last year. Administered prices will fall slightly overall this year and then increase modestly. The current deep year-on-year decline in fuel prices will moderate. Fuel prices will rise from the start of next year in line with world prices of oil and petrol.

The forecast expects market **interest rates** to be flat at their current very low level until mid-2017. This reflects an assumption that the 2W repo rate will be left at technical zero and the money market premium will remain unchanged in the same period. Consistent with the forecast is an increase in market interest rates in the second half of 2017 (see Chart I.3). The forecast assumes that the **exchange rate** will be used as a monetary policy instrument with the CNB's commitment at CZK 27 to the euro until mid-2017. The 2% inflation target will be exceeded slightly in 2017 Q3. Sustainable fulfilment of this target is a condition for a return to conventional monetary policy. This return should not result in the exchange rate appreciating sharply to the slightly overvalued level recorded before the CNB started intervening, among other things because the weaker exchange rate of the koruna is in the meantime passing through to the price level and other nominal variables. Nevertheless, a positive interest rate differential against the euro and the repercussions of the ECB's quantitative easing, which the forecast assumes will last until March 2017, will manifest themselves after the exit from the exchange rate commitment. Renewed – although much slower than in the pre-crisis period – real convergence of the Czech economy to the advanced euro area countries will act in the same direction. According to the forecast, the koruna will thus appreciate against the euro in the second half of 2017.

The **growth of the Czech economy** will slow to 2.3% this year (see Chart I.4) because of a temporary decline in gross capital formation due mainly to a drop in government investment co-financed from EU funds. However, the economy will continue to be supported by easy domestic monetary conditions via the weakened koruna and exceptionally low interest rates. Low oil prices and rising external demand are also fostering economic growth. Growth will pick up again to 3.4% next year, with positive contributions from all components of demand except inventories. The rising economic activity will manifest itself in the **labour market** in continued growth in employment, although its pace will slow. This will result in a further,

CHART I.3

INTEREST RATE FORECAST

The forecast expects market interest rates to be flat at their current very low level until mid-2017; consistent with the forecast is an increase in rates thereafter
(3M PRIBOR in %)

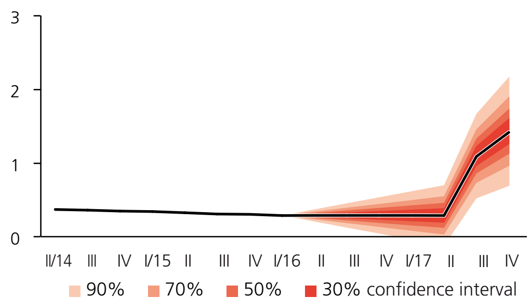
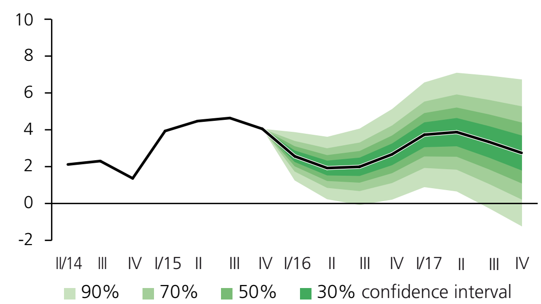


CHART I.4

GDP GROWTH FORECAST

GDP will slow markedly this year due mainly to a drop in government investment financed from EU funds, and will pick up again in 2017
(annual percentage changes; seasonally adjusted)



albeit only modest, decrease in the unemployment rate. Wages in the business sector will rise at a steady pace this year and their growth will accelerate further next year, as in the non-business sector.

At its monetary policy meeting on 5 May 2016, the Bank Board decided unanimously to keep interest rates unchanged at technical zero. The Bank Board also decided to continue **using the exchange rate as an additional instrument for easing the monetary conditions** and confirmed the CNB's commitment to intervene on the foreign exchange market if needed to weaken the koruna against the euro so that the exchange rate of the koruna is kept close to CZK 27 to the euro. A need to maintain expansionary monetary conditions at least to the current extent persists. The Bank Board assessed the risks to the forecast at the monetary policy horizon as being slightly anti-inflationary. Producer price inflation in the euro area is acting in this direction. In addition, the risk of undesirable second-round effects of foreign cost factors is rising as the duration of the period of very low inflation increases. In this context, the Bank Board pointed out that the CNB stands ready to shift the exchange rate commitment to a weaker level if there were to be a systematic decrease in inflation expectations manifesting itself in nominal variables, especially wages. The Bank Board stated that the Czech National Bank will not discontinue the use of the exchange rate as a monetary policy instrument before 2017. The Bank Board considers it likely that the commitment will be discontinued in mid-2017.

II. THE FORECAST, ITS CHANGES AND RISKS

II.1 EXTERNAL ASSUMPTIONS OF THE FORECAST

Growth in external economic activity will fluctuate close to 2% over the entire forecast horizon. The previous sharp decline in energy commodity prices is reflected in an outlook for subdued growth in industrial producer prices, which will not return to annual growth until the start of next year. Consumer price inflation will rise gradually from very low levels, but will stay below 2% over the entire horizon. The ECB responded to the subdued inflation by further easing monetary policy. This is reflected in the market outlook for 3M EURIBOR rates, which is negative until the end of 2017. The outlook foresees broad stability for the euro-dollar exchange rate. The Brent crude oil price will rise very slowly.

The outlook for the **effective indicator of euro area GDP** foresees growth of 2.1% this year, which is 0.2 percentage point higher than in 2015 (see Chart II.1.1).[1] This is mainly due to low oil prices and easy monetary conditions. Next year, economic activity in the effective euro area is expected to rise by 1.9%. This means slightly lower figures over almost the entire horizon compared to the previous forecast.

The previous marked decline in energy commodity prices is reflected in the outlook for the **effective indicator of industrial producer prices in the euro area** (see Chart II.1.2). Its growth is not predicted to return to positive values until the start of next year. Producer prices will decline by 2.4% for this year as a whole on average.[2] In 2017, producer prices are expected to rise by 1.6% on average owing to the unwinding of the commodity price decrease coupled with continued economic growth. The outlook is lower than in the previous forecast, especially for this year.

The low outlook for the **effective indicator of consumer prices in the euro area** this year mainly reflects a continuing decline in prices of energy for households and low food prices. In 2016 as a whole, consumer prices are expected to increase by just 0.6% on average (see Chart II.1.3). Next year they are expected to rise by 1.5%, driven by easy ECB monetary policy, the unwinding of the effect of low energy prices and stable economic growth. Compared to the previous forecast, the outlook is lower for both years.

1 The outlooks for euro area GDP, PPI and CPI and the dollar-euro exchange rate are based on the April Consensus Forecasts (CF). The outlooks for the 3M EURIBOR and the Brent crude oil price are derived from prices of market contracts as of 11 April 2016. The outlook is indicated by the grey areas in the charts. This convention is used throughout this Report.

2 Compared to the April CF outlook, expected industrial producer price inflation in the effective euro area in 2016 underwent a downward expert adjustment of 1.2 percentage points (i.e. to the same extent as in the previous forecast) owing to very low observed outcomes in 2016 Q1.

CHART II.1.1

EFFECTIVE GDP IN THE EURO AREA

Growth in external economic activity will fluctuate close to 2% over the entire forecast horizon
(annual percentage changes; differences in percentage points – right-hand scale; seasonally adjusted)

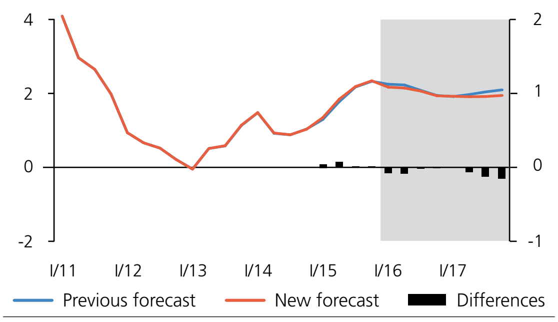


CHART II.1.2

EFFECTIVE PPI IN THE EURO AREA

The decline in producer prices will not fade out until early 2017
(year on year in %; differences in percentage points – right-hand scale; seasonally adjusted)

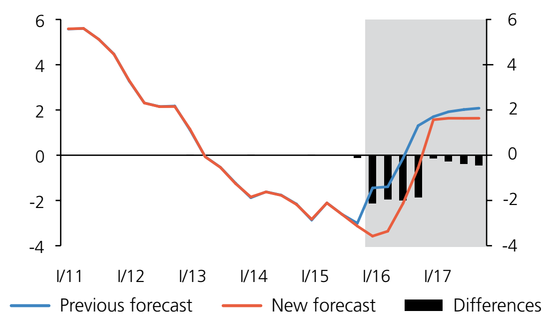


CHART II.1.3

EFFECTIVE CPI IN THE EURO AREA

Consumer price inflation will fluctuate below 2% over the entire forecast horizon
(year on year in %; differences in percentage points – right-hand scale; seasonally adjusted)

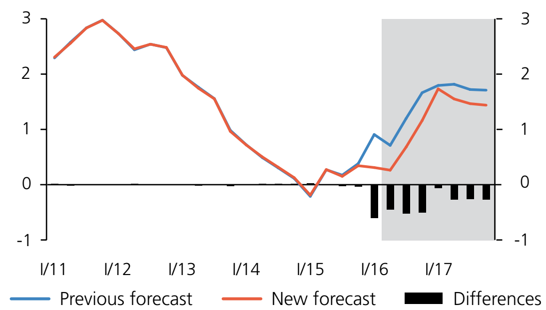


CHART II.1.4

3M EURIBOR

Subdued inflation and a further easing of monetary policy by the ECB is reflected in an outlook for continued negative market interest rates in the euro area
(in %; differences in percentage points – right-hand scale)

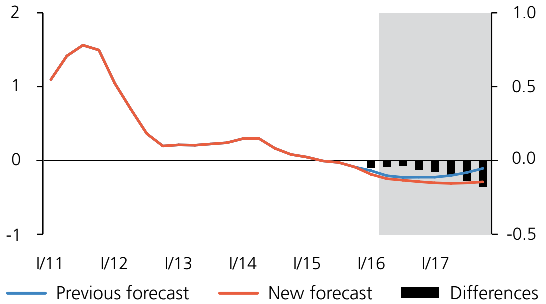


CHART II.1.5

EURO-DOLLAR EXCHANGE RATE

The euro-dollar exchange rate will be broadly stable over the entire horizon
(USD/EUR; differences in % – right-hand scale)

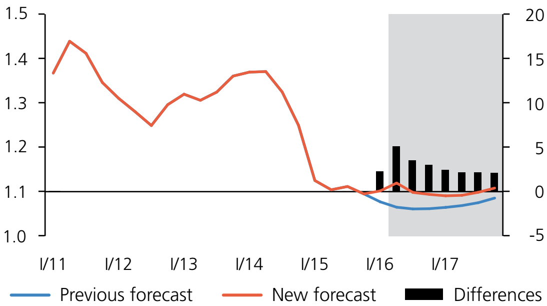
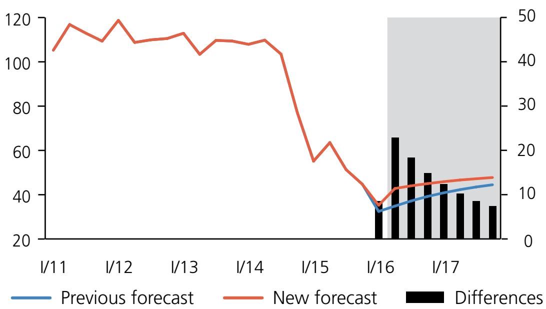


CHART II.1.6

PRICE OF BRENT CRUDE OIL

The market outlook for the crude oil price expects only a gradual rise
(USD/barrel; differences in % – right-hand scale)



The outlook for **3M EURIBOR market interest rates** reflects continuing subdued inflation in the euro area and the further monetary policy easing implemented by the ECB at its March meeting (a lowering of key ECB interest rates and an increase in the size of bond purchases; see section III.7 for details).[3] Market interest rates should thus be negative over the entire forecast horizon, slightly more so than in the previous forecast (see Chart I.4). The market outlook for foreign interest rates at the three-month horizon is in line with the expectations of the analysts surveyed in the April CF. The market outlook for the 12-month horizon is roughly 0.1 percentage point lower.

The outlook for the **euro-dollar exchange rate** foresees stability at around USD 1.10/EUR this year and the next (see Chart II.1.5). Compared to the previous forecast, this represents a shift towards a stronger euro over the entire forecast horizon. This mainly reflects the Fed's communications, which have given rise to expectations of a more gradual tightening of its monetary policy. At the same time, the ECB communicated after its March meeting that its interest rates had probably reached their trough. This also supported the euro.

The market outlook for the **Brent crude oil price** expects a gradual rise from an initial level of roughly USD 43 a barrel to about USD 48 a barrel at the end of 2017 (see Chart II.1.6). The low oil price still reflects high production, especially in Russia and Saudi Arabia, and currently also the rising production in Iran. Demand for oil remains an uncertainty due to the slowing growth of the Chinese economy and other emerging economies. The outlook is around USD 5 a barrel higher than in the previous forecast over the entire forecast horizon, mainly in response to negotiations between large world oil producers regarding a cut in production.[4] The analysts surveyed in the April CF expect the Brent crude oil price to be around USD 46 a barrel at the 12-month horizon, in line with the market outlook.

3 The extension of the expanded asset purchase programme by the ECB at least until March 2017 had already been reflected in the previous forecast via an expert adjustment using shadow interest rates, which are more negative than the market rate outlook (by around 1 percentage point). The recent increase in the ECB's asset purchase programme of EUR 20 billion, effective from April 2016, was quantified as a further decline in the path of the 3M EURIBOR shadow rate even deeper below the market outlooks (by 0.25 percentage point).

4 However, these negotiations did not result in an agreement.

II.2 THE FORECAST

Both headline and monetary policy-relevant inflation accelerated slightly in 2016 Q1. Nevertheless, they were still well below the lower boundary of the tolerance band around the CNB's target. They will decline temporarily close to zero in the near future but then start to rise, hitting the 2% target at the monetary policy horizon and then slightly exceeding it. The domestic economy will continue to foster higher costs and consequently higher consumer prices via rising wages and price of capital. At the same time, the current strongly anti-inflationary effect of import prices, stemming from a fall in producer prices in the euro area, will fade gradually. The extension of the duration of the exchange rate commitment until mid-2017 assumed by the forecast will act in the same direction. The strong GDP growth up until now will slow markedly this year due to a decline in gross capital formation, which will be affected mainly by a fall in government investment as a result of an only gradual start to the drawdown of EU funds in the new programme period. On the other hand, the economy will be supported by still easy monetary conditions and the positive supply-side effect of low oil prices. The economic growth will be reflected in a further improvement in the labour market situation. The forecast expects that market interest rates will be flat at their current very low level until mid-2017. Consistent with the forecast is an increase in interest rates thereafter.

Annual **headline inflation** accelerated slightly to 0.5% in 2016 Q1. It will fall again in the following two quarters owing to a renewed decrease in administered prices, a further deepening of the decline in food prices and a temporary slowdown in adjusted inflation excluding fuels. Inflation will then increase, hitting the 2% inflation target at the monetary policy horizon and slightly exceeding it thereafter (see Chart II.2.1). This will be aided by rising inflation pressures from the domestic economy, renewed growth in food prices and an unwinding of the current strongly anti-inflationary effect of import prices. The extension of the use of the exchange rate as an additional monetary policy instrument until mid-2017, as assumed by the forecast, will aid the return of inflation to the target by preventing import prices from having a renewed anti-inflationary effect in 2017 and by increasing the inflation pressures from the domestic economy. After the effect of the drop in natural gas prices for households dissipates, administered prices will switch from a moderate decline to annual growth of around 1% in 2017.

Monetary policy-relevant inflation, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, reached 0.3% in 2016 Q1. It was thus still well below the CNB's 2% target, or below the lower boundary of the tolerance band around the target. Over the forecast horizon, it will differ only marginally from headline inflation. Given initially positive and later negative contributions of indirect tax changes, it will be slightly below headline inflation this year and slightly above it in 2017 (see Chart II.2.1).

CHART II.2.1

HEADLINE INFLATION AND MONETARY POLICY-RELEVANT INFLATION

Both headline and monetary policy-relevant inflation will rise and hit the 2% target at the monetary policy horizon
(year on year in %)

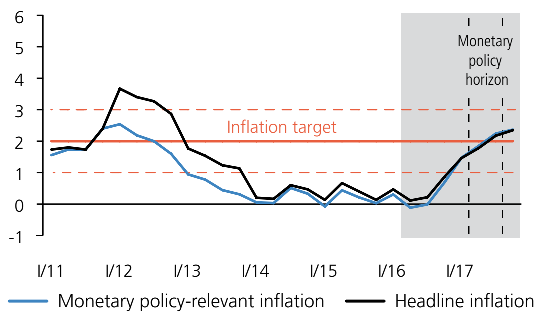


Chart II.2.2

ADMINISTERED PRICES

Administered prices will decline slightly this year due to falling natural gas prices but will start rising again next year as the fall in gas prices fades out
(annual percentage changes; contributions in percentage points)

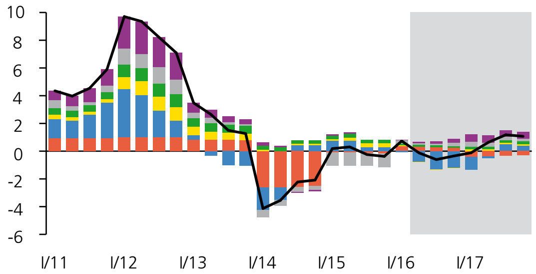


Table II.2.1

FORECAST OF ADMINISTRATIVE EFFECTS

Administered prices will not return to modest growth until 2017, when most of their components will increase
(annual average percentage changes; contributions to headline inflation in percentage points)

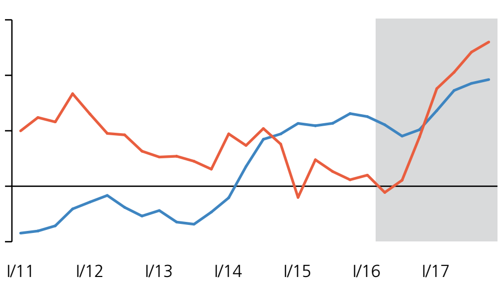
	2015 actual		2016 forecast		2017 forecast	
Administered prices – total[a)]	0.0	0.00	-0.1	-0.01	0.7	0.12
of which (main changes):						
electricity	-0.4	-0.01	1.0	0.05	-1.2	-0.06
natural gas	3.1	0.08	-5.0	-0.14	-0.3	-0.01
heat	1.9	0.03	0.0	0.00	0.9	0.02
water	3.4	0.03	0.5	0.00	2.0	0.02
health care	-17.0	-0.15	2.8	0.03	4.4	0.05
First-round impacts of indirect tax changes in non-administered prices		0.21		0.20		-0.01

a) Including effects of indirect tax changes

Chart II.2.3

NET INFLATION AND ADJUSTED INFLATION EXCLUDING FUELS

The measures of market and core inflation will increase from mid-2016 as a result of continuing wage growth and the unwinding of anti-inflationary external effects
(year on year in %)



The contribution of changes to **indirect taxes** to annual headline inflation was 0.2 percentage point in 2016 Q1. It was linked with the two harmonisation adjustments made to excise duty on cigarettes and tobacco in January 2015 and January 2016. Their effect on the price level of 0.1 percentage point and 0.2 percentage point respectively materialised during the first months of the relevant year. The forecast assumes a further increase in excise duty on tobacco products in January 2017 with an estimated impact on headline inflation of 0.1 percentage point. The forecast newly incorporates a decrease in the VAT rate for restaurants and other catering facilities (excluding alcoholic beverages) from the current 21% to a reduced 15%. The estimated first-round effect of this change on headline inflation is -0.15 percentage point. The decrease in VAT is a part of the Electronic Sales Registration Act and will take effect on 1 December 2016.

Administered prices returned to modest year-on-year growth (of 0.7%) in 2016 Q1. This was due most of all to electricity prices and to a lesser extent to health care prices, heat prices for households and water supply and sewerage collection charges. However, the forecast expects administered prices to start falling again during Q2, owing chiefly to a decline in natural gas prices announced in advance by the largest suppliers (RWE and Pražská plynárenská).[5] As regards electricity prices for households, the forecast assumes continued price growth of 1% this year. In 2016 as a whole, administered prices are expected to fall marginally. Next year, by contrast, they are expected to rise by around 0.7% on average (see Chart II.2.2). This will be due to renewed growth in natural gas prices in the second half of the year owing to expected growth in prices on world markets, and to positive contributions from most other administered price items. The exception will be electricity prices, for which market outlooks indicate falling electricity generation prices, albeit partly offset by further growth in administered fees (see Table II.2.1).

Annual **net inflation** rose slightly to 0.2% on average in 2016 Q1 (see Chart II.2.3). In the next few months, net inflation will temporarily turn negative. Starting in the second half of this year, however, it will increase amid continued growth of the domestic economy and strengthening cost pressures from the labour market. The current strongly anti-inflationary effect of import prices and food prices will meanwhile moderate gradually. As from 2017 Q2, net inflation will fluctuate above 2% owing to persisting inflation pressures from the domestic economy in an environment of easy monetary policy. It will also be affected by renewed growth in foreign producer prices, which until the end of the forecast horizon will almost fully offset the effect of appreciation of the koruna following the assumed exit from the use of the exchange rate as a monetary policy instrument.

5 The risk is tilted towards an even larger decrease in natural gas prices than assumed by the forecast.

Adjusted inflation excluding fuels stayed at the previous quarter's level in 2016 Q1, averaging 1.3%. As regards its components, non-tradables prices were flat while growth in tradables prices declined significantly in January but gradually accelerated in February and March despite a deepening decline in import prices. As a result of still falling import prices and a halt in the acceleration of wage growth, adjusted inflation excluding fuels will slow towards 1% in the rest of this year (see Chart II.2.3). In 2017, it will pick up pace gradually and approach 2%, mainly on the back of inflation pressures from the domestic economy and renewed growth in industrial producer prices in the effective euro area. This will be counteracted by appreciation of the koruna following the assumed exit from the CNB's exchange rate commitment.

The year-on-year decline in **food prices** deepened during 2016 Q1, averaging 0.4%. This was due to a faster downturn in agricultural producer prices, which gradually passed through to retail prices. Food prices continued to reflect the lagged effect of the retaliatory embargo on imports of selected foodstuffs into Russia together with the lifting of milk quotas in the EU last year. Agricultural producer prices – and consequently food prices – are expected to decrease further in the near future. Food price inflation will not recover until the end of this year (see Chart II.2.4). This will be due to the fading of the above one-off effects, a gradual rise in inflation pressures from the domestic economy and next year also a gradual increase in agricultural commodity prices. Food price inflation will rise further during 2017, exceeding 3% in the second half of the year.

Fuel prices continued falling year on year in 2016 Q1, although the decline slowed somewhat (to 12.4% on average; see Chart II.2.5). Fuel prices thus continued to reflect the low prices of Brent crude oil and petrol abroad. According to the available indicators,[6] their deep year-on-year decline will continue into Q2 but should gradually moderate in the rest of this year. In line with the assumed rise in global oil and petrol prices, domestic fuel prices will also start rising again in early 2017 and increase by around 7% in 2017 as a whole.

Domestic money market **interest rates** remained at historical lows at all maturities in 2016 Q1. The forecast expects market interest rates to be flat at their current very low level until mid-2017. This reflects an assumption that the 2W repo rate will be left at technical zero and the money market premium will remain unchanged in the same period. Consistent with the forecast is an increase in market interest rates in the second half of 2017 (see Chart II.2.6).

The **exchange rate of the koruna against the euro** averaged CZK 27 in 2016 Q1. The forecast expects it to remain at the level of the CNB's exchange rate commitment (i.e. CZK 27 to the euro) in

6 CCS payment cards portal data and the CZSO's weekly surveys of fuel prices.

CHART II.2.4

FOOD PRICES AND AGRICULTURAL PRODUCER PRICES

Food prices will start rising again due to developments in agricultural commodity prices and fading one-off anti-inflationary effects

(annual percentage changes)

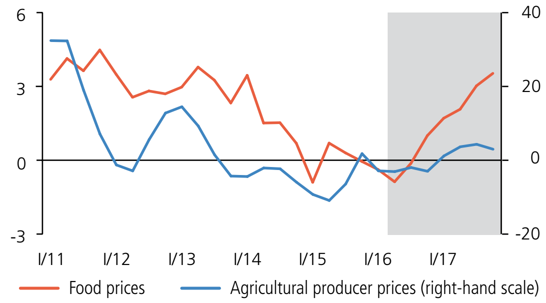


CHART II.2.5

FUEL PRICES AND THE OIL PRICE

The decline in fuel prices will fade out at the start of next year in line with global oil prices

(annual percentage changes)

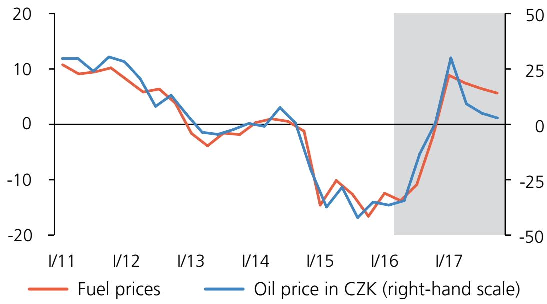


CHART II.2.6

INTEREST RATE FORECAST

The forecast expects market interest rates to be flat at their current very low level until mid-2017; consistent with the forecast is an increase in rates thereafter

(percentages)

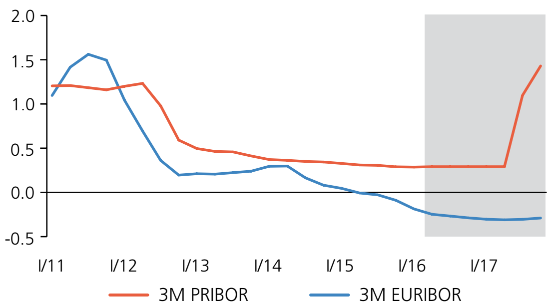


Chart II.2.7

COSTS IN THE CONSUMER SECTOR

A sharp acceleration in growth in costs this year will reflect the growing domestic economy and wages and fading negative contributions of import prices

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

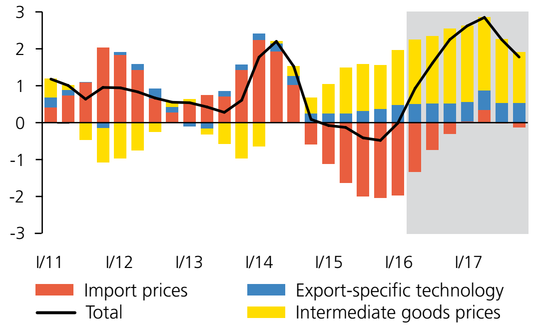


Chart II.2.8

COSTS IN THE INTERMEDIATE GOODS SECTOR

Domestic costs will rise on the back of wage growth and a rising price of capital

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

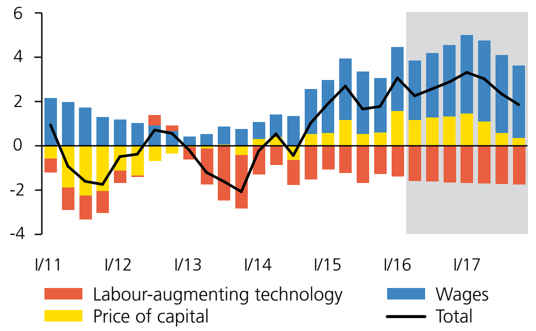
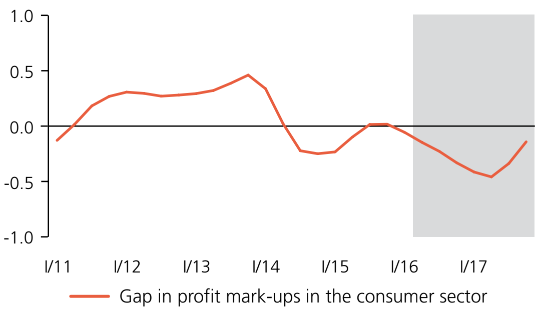


Chart II.2.9

GAP IN PROFIT MARK-UPS IN THE CONSUMER SECTOR

The gap in profit mark-ups will turn more negative and then start to close in 2017 H2

(percentages)



the quarters ahead as well. The forecast assumes that the exchange rate will be used as a monetary policy instrument until mid-2017. The 2% inflation target will be exceeded slightly in 2017 Q3. Sustainable fulfilment of this target is a condition for a return to conventional monetary policy. This return should not result in the exchange rate appreciating sharply to the slightly overvalued level recorded before the CNB started intervening, among other things because the weaker exchange rate of the koruna is in the meantime passing through to the price level and other nominal variables. Nevertheless, the positive interest rate differential against the euro[7] and the repercussions of the ECB's quantitative easing, which the forecast assumes will last until March 2017, will manifest themselves after the exit from the exchange rate commitment. Renewed – although much slower than in the pre-crisis period – real convergence of the Czech economy to the advanced euro area countries will act in the same direction. According to the forecast, the koruna will thus appreciate against the euro in the second half of 2017.[8] In light of the CF outlook for an almost stable exchange rate of the euro against the dollar (see section II.1), this also implies gradual appreciation of the koruna-dollar exchange rate.

The previous decline in **nominal marginal costs in the consumer goods sector** halted in 2016 Q1 (see Chart II.2.7). The recent decrease in costs reflected a long-running fall in import prices resulting from deflation in euro area industrial producer prices, due in large measure to the fall in global oil prices. This outweighed the rise in intermediate goods prices resulting from cost pressures from the domestic economy, in particular rising wages in the business sector. The estimated impact on inflation of growth in export-specific technology, linked to different productivity growth in tradables and non-tradables (the Balassa-Samuelson effect), is gradually increasing. The overall upward cost pressures on consumer prices will rise quickly until mid-2017. Accelerating wage growth and renewed growth in foreign producer prices will thus be apparent. Given a stable exchange rate of the koruna, the currently strongly anti-inflationary effect of import prices will thus moderate and will disappear at the start of next year. Appreciation of the koruna and continued growth in euro area producer prices will act in opposite directions in the second half of 2017, i.e. after the assumed exit from the use of the exchange rate as a monetary policy instrument.

Nominal marginal costs in the intermediate goods sector grew by 3% in 2016 Q1. This was due mainly to nominal wage growth in the business sector outpacing labour productivity growth. The price of capital also made a positive contribution to marginal costs, reflecting

7 However, the forecast routinely attaches only a minor weight to foreign interest rates beyond the six-quarter horizon, as it also takes into account model mechanisms which ensure a gradual return of these rates to their steady state.

8 However, the forecast does not take into account that the appreciation of the koruna may be dampened by hedging of exchange rate risk by exporters before the exit from the CNB's exchange rate commitment, by the closing of koruna positions by financial investors and by possible CNB interventions to mitigate exchange rate volatility after the exit.

robust growth in investment activity and overall economic activity last year and stable growth in external demand (see Chart II.2.8). The growth rate of domestic nominal costs will stay above 2% and peak at the start of next year, reflecting gradually increasing wage growth and a still rising price of capital in an environment of robust domestic demand. Conversely, continued growth in labour productivity will dampen the rise in costs. Growth in nominal marginal costs in the intermediate goods sector will later slow, as the expected appreciation of the koruna will reduce the positive contribution of the price of capital in the second half of 2017. At the same time, wage growth will slow slightly in quarter-on-quarter terms.

The gap in **profit mark-ups in the consumer goods sector** closed in mid-2015. This was due to a further decline in costs as a result of their decrease in the import sector coupled with stable wage growth, which together outweighed the very low market price inflation. The gap in profit mark-ups will turn more negative again this year, as growth in costs (stemming mainly from wage increases and the unwinding of the significantly anti-inflationary effect of import prices) will exceed inflation. The gap in profit mark-ups will start to close again in mid-2017 due to appreciation of the koruna and a noticeable upswing in inflation (see Chart II.2.9).

Whole-economy **labour productivity** rose at a pace of around 3% throughout 2015. This reflected a sharp upswing in economic activity linked with robust growth in investment owing to drawdown of EU funds last year. This effect will fade this year and labour productivity growth will slow to roughly half its previous rate. A renewed pick-up in economic activity in 2017 coupled with a slowdown in employment growth will result in labour productivity growth accelerating back to levels close to 3%.

The average nominal **wage in the business sector** rose by 3.9% year on year (seasonally adjusted) in 2015 Q4. The surge in its growth observed earlier in the year thus halted. According to the assumptions of the forecast, a similar rate of growth will persist in the first three quarters of this year (see Chart II.2.10). Wage growth will be affected by a further rise in the minimum wage.[9] The average nominal wage in the business sector will thus go up by 4% on average in 2016. A gradual return of inflation to the target and a renewed pick-up in economic activity will result in faster nominal wage growth from the end of this year. It will amount to 5.2% on average for next year as a whole. The real wage in the business sector will increase by 3.6% this year and by 3.2% in 2017.

Average nominal **wage growth in the non-business sector** edged up to 3.7% year on year in 2015 Q4 (see Chart II.2.10). At the start of 2016, wages in this sector were affected by an increase in the wages

9 The minimum wage was increased from CZK 9,200 to CZK 9,900 on 1 January 2016. The increase will make a 0.2 percentage point contribution to wage growth.

Chart II.2.10

AVERAGE NOMINAL WAGE

Wage growth in the business sector and the non-business sector will not pick up further until next year
(annual percentage changes; business sector – seasonally adjusted; non-business sector – seasonally unadjusted)

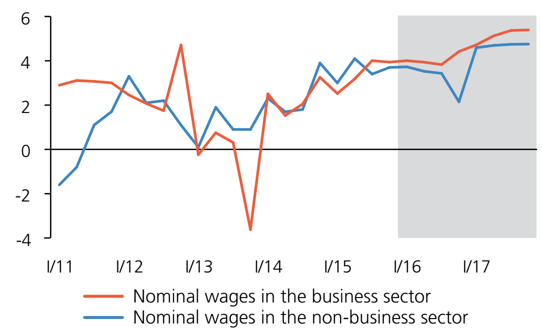
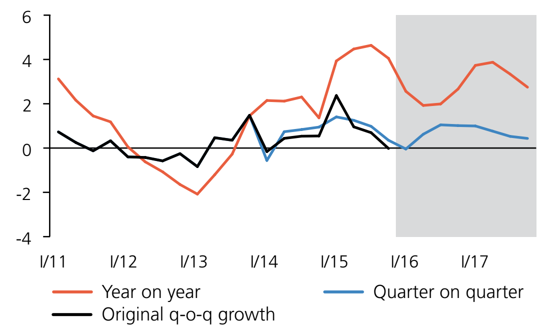


Chart II.2.11

GDP GROWTH FORECAST

Annual GDP growth will slow this year as the extraordinary factor of growth in government investment and inventories subsides, and will accelerate again in 2017
(percentage changes; seasonally adjusted)



Note: The forecast works with new seasonal adjustment of the quarterly national accounts for 2014 and 2015, which primarily affects quarterly economic activity. The revised data for 2014 and 2015 will be published at the same time as the preliminary GDP estimate for 2016 Q1.

Chart II.2.12

ANNUAL GDP GROWTH STRUCTURE

Household consumption will be the biggest contributor to GDP growth over the forecast horizon, whereas the contribution of investment will be temporarily negative
(annual percentage changes; contributions in percentage points; seasonally adjusted)

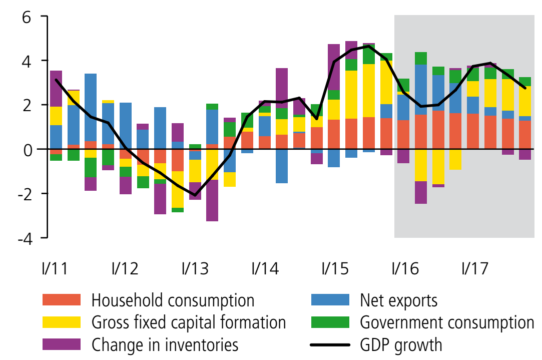


CHART II.2.13

NUMBER OF EMPLOYEES (FULL-TIME EQUIVALENT)

The growth in the converted number of employees will gradually slow
(annual percentage changes; contributions in percentage points)

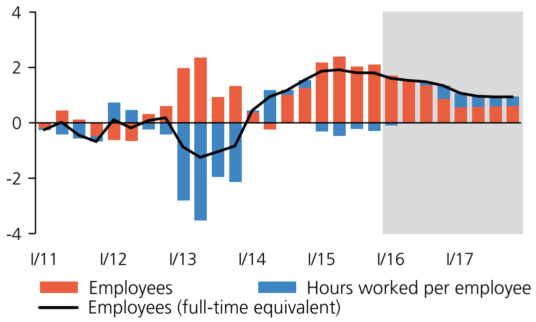


CHART II.2.14

LABOUR MARKET FORECAST

Total employment will continue to rise slowly, albeit at a falling pace, while the decline in the unemployment rate will slow
(annual percentage changes in employment; general unemployment rate in percentages; seasonally adjusted)

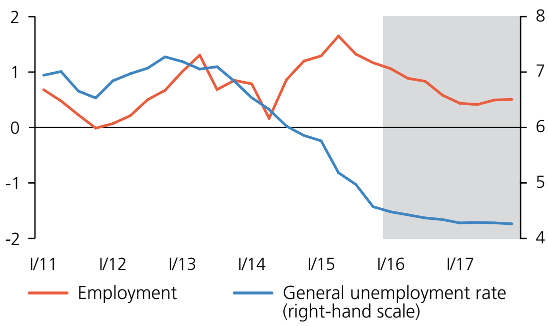
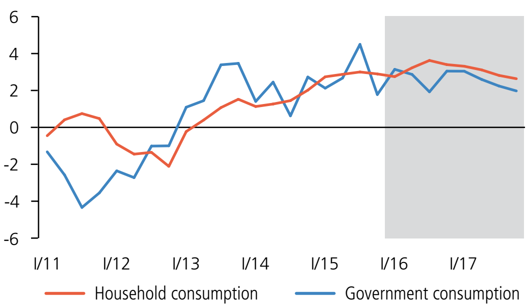


CHART II.2.15

REAL HOUSEHOLD AND GOVERNMENT CONSUMPTION

Household consumption will rise steadily and modestly outpace government consumption
(annual percentage changes; seasonally adjusted)



of constitutional officials. Annual wage growth in the non-business sector will be 3.1% this year. The forecast predicts that wages will accelerate to 4.7% next year. In addition to the government's current plans, this reflects expected robust growth in government revenues.

Real GDP growth recorded a year-on-year decline to 4% **in 2015 Q4**[10] (see Chart II.2.11). All components of demand except inventories made positive contributions to the growth, with gross fixed capital formation and household consumption being the main drivers (see Chart II.2.12). Overall, **GDP** grew by 4.3% **in 2015**. The growth in gross fixed capital formation was fostered by expansionary fiscal policy due to significantly faster growth in government investment co-financed from European sources. Growth in household consumption was fostered by high real growth in wages and salaries, including the effect of low oil prices, and still low real interest rates. Despite growing external demand, the contribution of net exports was slightly negative due to continued growth in imports for consumption and investment.

GDP growth will slow to 2.3% **in 2016**, mainly because of a decline in gross capital formation, due, among other things, to a fall in government investment as a result of an only gradual start to the new programme period for EU funds. This effect, coupled with a negative contribution from change in inventories, will outweigh growth in private investment reflecting favourable domestic and external demand and low commodity prices. GDP growth will continue to be fostered significantly by household consumption, which will be supported by continued high real wage growth and the positive effect of low commodity prices. The contributions of net exports and government consumption will also be positive. GDP growth will pick up to 3.4% **in 2017**, mainly because of renewed growth in government investment. All components of demand except inventories will make positive contributions.

The forecast expects continued year-on-year growth in the **number of employees converted into full-time equivalents**, although the growth will gradually slacken. Growth in the converted number of employees will initially be generated mainly by a further increase in the number of employees; the contribution of growth in average hours worked will also renew in the second half of the year (see Chart II.2.13). The forecast also expects annual growth in **total employment** to slow gradually (despite an assumed rise in employment in the non-business sector), due to slower economic growth this year. Annual growth in total employment will ease further to 0.5% in 2017 amid a widening gap between still growing labour demand and limited labour supply (see Chart II.2.14).

10 The forecast works with an estimate of the effect of the announced revision of the seasonal adjustment of the CZSO's quarterly national accounts for 2014 and 2015 on quarterly economic activity. The revised seasonally adjusted GDP data will be published officially at the same time as the preliminary GDP estimate for 2016 Q1.

The previous sharp decrease in the seasonally adjusted **general unemployment rate** will moderate significantly this year. This indicator will remain at 4.3% next year (see Chart II.2.14) amid similar quarterly growth in the labour force and employment. The forecast expects similar developments for the seasonally adjusted **share of unemployed persons, as determined by the MLSA**, which will drop to 5.4% in 2017 Q4, assuming a continued slight decline in the population aged 15–64.

Real **household consumption** went up by 2.9% in year-on-year terms in 2015 Q4 (see Chart II.2.15). This growth was fostered by all its components in terms of kind. According to the forecast, the annual growth rate of household consumption slowed somewhat in early 2016. However, household consumption will remain a large contributor to annual growth in economic activity. In addition to an expected faster increase in wages and salaries, this is consistent with still sizeable growth in retail sales, prevailing consumer confidence (see section III.3) and a recovery in consumer credit growth (see section III.5). Household consumption will thus grow slightly faster this year than last year on average (3.3%), thanks mainly to higher growth in real wages amid still low real interest rates. In 2017, by contrast, household consumption growth will slow slightly due to slower growth in real wages.

Growth in **gross nominal disposable income** picked up slightly in 2015 Q4 (by 0.2 percentage point to 2.2%), mainly as a result of a sharp increase in social benefits (see Chart II.2.16). However, the contribution of the most significant item – wages and salaries – was almost unchanged, remaining significantly positive. Annual growth in disposable income will strengthen to around 5% at the forecast horizon. This will again be due primarily to wages and salaries thanks to continued growth in wages and employment. The contributions stemming from income of entrepreneurs will also start to rise gradually.

At the end of 2015, the seasonally adjusted **household saving rate** remained at the level observed in the previous quarter. Over the forecast horizon, the saving rate will gradually drop to levels close to 10% at the end of 2017, amid faster annual growth in nominal household consumption than gross nominal disposable income (see Chart II.2.17).

Annual growth in real **government consumption** slowed noticeably from 4.4% in 2015 Q3 to 1.8% in Q4, owing to a short-term fall in health care expenditure. The forecast expects annual growth in government consumption to pick up again at the start of this year and stay at similar levels over the rest of the forecast horizon (see Chart II.2.15). Government consumption will thus rise by 2.7% in 2016 as a whole; its real growth rate will slow only slightly to 2.5% in 2017. The forecast for government consumption reflects pronounced growth in compensation of employees; it predicts that average wages will go up sharply in 2017 after an increase in the average wage in the non-business sector and a rise in the number of public sector positions this year.

CHART II.2.16

NOMINAL DISPOSABLE INCOME

Disposable income growth will gradually accelerate thanks mainly to rising growth in wages and salaries and in the income of entrepreneurs

(annual percentage changes; contributions in percentage points)

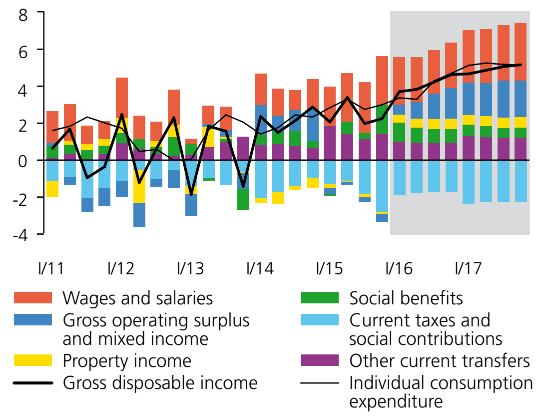


CHART II.2.17

HOUSEHOLD SAVING RATE

The household saving rate will gradually decline to 10%

(percentages)

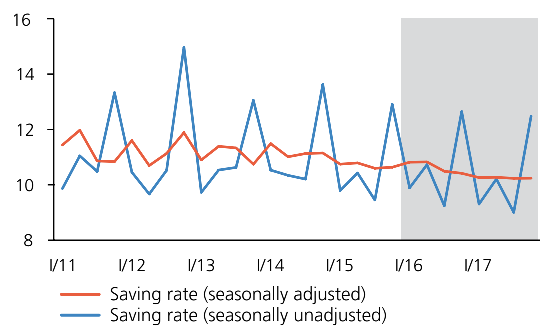


CHART II.2.18

GROSS CAPITAL FORMATION

Gross capital formation will fall this year, mainly due to a drop in government investment

(annual percentage changes; seasonally adjusted)

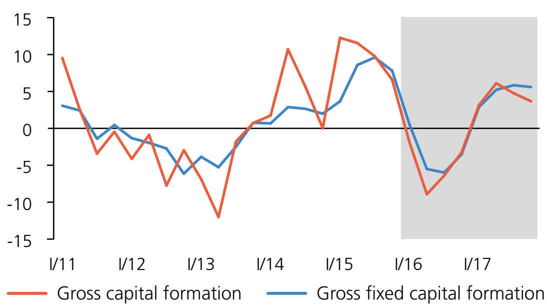


CHART II.2.19

INVESTMENT DECOMPOSITION

A sharp fall in public investment this year will outweigh continued growth in private investment
(annual percentage changes; contributions in percentage points; constant prices)

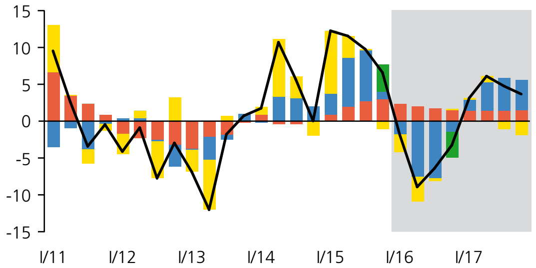


CHART II.2.20

REAL EXPORTS AND IMPORTS

Exports and imports will grow at fairly high rates owing to rising external and domestic demand respectively
(annual percentage changes; annual changes in CZK billions; seasonally adjusted)

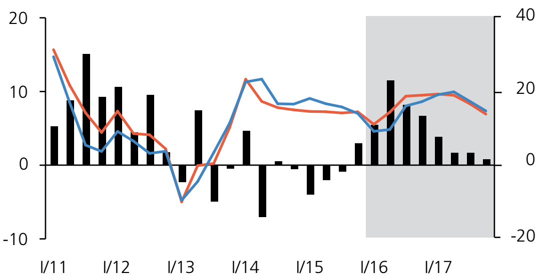


TABLE II.2.2

FORECASTS OF SELECTED VARIABLES

Real disposable income will continue to rise as wage growth picks up, and labour productivity will also increase
(annual percentage changes unless otherwise indicated)

	2015 actual	2016 forecast	2017 forecast
Real gross disposable income of households	2.3	3.5	2.7
Total employment	1.4	0.8	0.5
Unemployment rate (in per cent)[a]	5.1	4.4	4.3
Labour productivity	3.0	1.4	2.9
Average nominal wage	3.4	3.9	5.1
Average nominal wage in business sector	3.3	4.0	5.2
Average real wage	3.1	3.4	3.1
Current account balance (ratio to GDP in per cent)	0.9	2.0	1.5
M3	7.4	9.3	8.1

a) ILO methodology, 15–64 years

Annual growth in **gross capital formation** slowed to 6.6% in 2015 Q4 (see Chart II.2.18). This slowdown was due to declining investment activity financed by EU funds from the previous programme period and to slower growth in private investment (see Chart II.2.19). Despite this, gross capital formation increased by 10% in 2015 as a whole. The forecast expects gross capital formation to fall in year-on-year terms during 2016. The main factor will be only gradual drawdown of EU funds from the new programme period. The need to reassess the environmental effects of large infrastructure projects (EIA) under new legislation will act in the same direction. Continued growth in private investment, reflecting both external demand growth and the positive effect of low oil prices, will only partly offset these factors. Gross capital formation will thus decrease by 5.2% in 2016 as a whole. Growth in total fixed investment will recover again in 2017 as government investment returns to growth.

Real **exports of goods and services** maintained the growth rate seen in the previous period at the end of last year. Exports of goods and services grew by 7.2% in 2015 as a whole (see Chart II.2.20). According to the forecast, export growth dipped temporarily in Q1. However, the forecast expects it to rise again in the coming quarters, in line with external demand and given a stable exchange rate of the koruna against the euro. Exports of goods and services will increase by 7.9% in 2016 and pick up further to 8.6% in 2017.

Real annual growth in **imports of goods and services** declined in 2015 Q4 due to lower observed growth in government and private investment. In 2015 as a whole, imports increased by 8.1%. The forecast expects lower annual import growth this year (6.5%), reflecting developments in the components of GDP (a decline in investment activity in particular) taking into account their import intensity. Conversely, import growth will pick up to 8.9% in 2017.

The contribution of **net exports** to annual GDP growth at constant prices turned positive in 2015 Q4. Nevertheless, the contribution of net exports to annual GDP growth was slightly negative in 2015 as a whole. In 2016, by contrast, the contribution of change in net exports will be significantly positive (1.6 percentage points) owing to a slight upswing in external demand and slower investment growth. The contribution of net exports to annual GDP growth will also be positive, albeit to a lesser extent, in 2017.

According to preliminary data, the **balance of payments** recorded a current account surplus of 0.9% of GDP in 2015. According to the forecast, the current account surplus will amount to 2% in 2016 and 1.5% in 2017 (see Table II.2.3).

The forecasted increase in the **current account** surplus **in 2016** mainly reflects a rise in the goods surplus, due primarily to an expected slowdown in aggregate domestic demand growth and a continued favourable effect of the decline in energy commodity prices. Modest year-on-year appreciation of the koruna and an expected further decrease in exports to countries of the former Soviet Union will have the opposite effect on the goods balance. To a lesser extent, the expected increase in the current account surplus will also be due to growth in the surplus on services (in particular other services). On the other hand, the current account surplus will be moderated by a further widening of the primary income deficit due to a rise in non-residents' direct investment income. The secondary income account will be practically unchanged from 2015.

The **current account** surplus will decrease **in 2017** compared to this year. This decrease will be fostered mainly by an increase in the primary income deficit linked with a widening of the investment income deficit (due to expected growth in dividends and reinvested earnings of non-residents on direct investment). To a lesser extent, the deterioration of the current account will be due to a switch in the secondary income balance to a slight deficit associated with expected lower net drawdown from EU funds. A further slight rise in the goods surplus (due mainly to still growing external demand) will act in the opposite direction.

The forecast expects a large decrease in the **capital account** surplus this year compared to last year. This is associated with the winding down of payments from EU funds for the 2007–2013 programme period. A further marked decline in 2017 will reflect the only gradual start of drawdown of funds from the new programme period.

Direct investment flows will see a reversal in 2016, with a modest net outflow replaced by a net inflow. This is because the extraordinary factors that affected direct investment in 2015 (a one-off outflow of residents' capital abroad and a drop in equity in major domestic subsidiaries owned by non-residents) will disappear. To a lesser extent, it will be due to a major new investment of more than CZK 20 billion by Nexen in the Czech Republic (in 2016 and 2017). The forecast predicts that direct investment in the Czech Republic will still primarily take the form of reinvested earnings. The amount of direct investment in 2017 is expected to be the same as in 2016.

The **portfolio investment** figures have been significantly affected in 2015 and 2016 (to an extent of more than CZK 100 billion) by accounting operations of the banking sector related to the calculation of contributions to the newly established Resolution Fund.[11] They increased the net capital inflow under portfolio investment in 2015 but have been decreasing it so far in 2016. Besides the aforementioned accounting operations, portfolio investment will be affected on the liability side this year by non-residents' continuing interest in government koruna bonds coupled with increased issuance activity by the Czech Ministry of Finance, which is taking advantage of the current interest rates to cut the cost of government debt financing.

11 Similar operations may occur again. However, they are not included in the forecast (with the exception of those already settled), as their size cannot be estimated.

Table II.2.3

BALANCE OF PAYMENTS FORECAST

A record current account surplus will be achieved this year, mainly as a result of a rising goods surplus
(CZK billions)

	2015 actual	2016 forecast	2017 forecast
A. CURRENT ACCOUNT	41.4	90.0	70.0
Goods	210.7	270.0	280.0
Services	75.0	80.0	80.0
Primary income	-243.5	-260.0	-280.0
Secondary income	-0.9	0.0	-10.0
B. CAPITAL ACCOUNT	106.1	60.0	20.0
C. FINANCIAL ACCOUNT[a)]	193.8	225.0	90.0
Direct investment	26.6	-70.0	-70.0
Portfolio investment	-164.1	-20.0	-40.0
Financial derivatives	-4.8		
Other investment	-15.2	50.0	50.0
Reserve assets	351.3	265.0	150.0

a) forecast excluding operations of banking sector and financial derivatives

Owing to current developments on world stock markets, the forecast also expects a decrease in residents' interest in foreign stocks this year and a resulting moderation of the overall outflow of capital abroad on the asset side.

With regard to **other investment** (excluding banking sector operations), the forecast predicts a relatively high net outflow of capital from the corporate sector in the form of growth in residents' deposits abroad and repayments of existing loans accepted from non-residents.[12]

The forecast for **reserve assets** includes expected returns on international reserves, a surplus vis-à-vis the EU (drawdown of EU funds from the previous programme period and the gradual start of the new programmes) and, under the current exchange rate commitment, generally an inflow into the reserves stemming from a surplus on the other items of the balance of payments (excluding banking sector operations, which are not forecasted).

The future macroeconomic developments described above and the fiscal policy settings are reflected in the **government finance** outlook for 2016 and 2017 (see Table II.2.4).

According to the **spring notifications** of the government deficit and government debt, the general government deficit amounted to 0.4% of GDP **in 2015**.[13] Despite a marked year-on-year drop in the deficit, the overall effect of fiscal policy was strongly expansionary last year, making a positive contribution of around 0.8 percentage point to economic growth (see Table II.2.5). This was due chiefly to stronger growth in government investment, reflecting intensive drawdown of EU funds from the previous programme period.[14] The increase in the growth rate of government expenditure was amplified by a further acceleration of wage growth in the government sector and an increase in pensions. Growth in public budget revenues reflecting the fast economic growth and the improving labour market situation was hindered by the introduction of a second reduced VAT rate of 10%. Counteracting this was higher excise duty on tobacco products and one-off income for the Deposit Insurance Fund.

In an environment of continuing economic growth, the general government deficit will decline further to 0.1% of GDP **in 2016**. On the expenditure side, a marked decrease in government investment

Table II.2.4

FISCAL FORECAST

A continuing decline in the public finance deficit will culminate in a slight government budget surplus in 2017
(% of nominal GDP)

	2015 actual	2016 forecast	2017 forecast
Government revenue	42.2	41.3	41.7
Government expenditure	42.6	41.4	41.2
of which: interest payments	1.1	1.0	0.9
GOVERNMENT BUDGET BALANCE	-0.4	-0.1	0.5
of which:			
primary balance[a)]	0.7	0.9	1.4
one-off measures[b)]	-0.1	0.1	0.1
ADJUSTED BUDGET BALANCE[c)]	-0.4	-0.2	0.4
Cyclical component (ESCB method)[d)]	-0.2	-0.1	-0.1
Structural balance (ESCB method)[d)]	-0.1	-0.1	0.5
Fiscal stance in pp (ESCB method)[e)]	0.5	0.1	0.5
Cyclical component (EC method)[d)]	-0.3	-0.4	-0.1
Structural balance (EC method)[d)]	0.0	0.2	0.5
Fiscal stance in pp (EC method)[e)]	0.4	0.2	0.2
Government debt	41.1	40.6	39.0

a) government budget balance minus interest payments
b) This item consists of expected revenue from sales of emission permits, expenditure on the (New) Green Savings Programme, revenue from the sale of frequency bands to mobile operators, and in 2015 the impact of the extension of the lease of supersonic fighter aircraft and non-recurring revenue to the Deposit Insurance Fund in bankruptcy proceedings and completed lawsuits.
c) adjusted for one-off measures; CNB estimate
d) CNB estimate
e) year-on-year change in structural balance (positive value indicates fiscal restriction, negative value fiscal expansion)

12 Owing to a drop in demand in some countries (mainly the countries of the former Soviet Union), which will probably peak this year, and a tightening of conditions applied to export loans from the CEB and insurance from EGAP, the forecast no longer expects any further growth in total trade credits provided abroad.
13 The notified data have been affected by the reclassification of public-service media organisations (Czech Television and Czech Radio) as government sector institutions. This change is reflected mainly in the structure of general government revenues and expenditure, while the impact on the total deficit and debt is negligible.
14 In addition, government investment rose at the end of last year due to the accounting effect of an extension of the lease of Gripen aircraft of 0.2% of GDP. However, this one-off factor does not affect the estimate of the fiscal impulse, as its effect is GDP neutral.

can be expected. This drop is related to the end of the previous programme period for drawing down European funds and the only gradual start of the new one. A further moderate decrease in debt service costs will act in the same direction. Counteracting this will be faster growth in wages in the government sector, higher expenditure in health care, an increase in subsidies for renewable resources and an extraordinary benefit payment to pensioners.[15] The general government revenue side will be bolstered by additional revenues from the introduction of VAT control statements,[16] a further increase in excise duty on tobacco and a rise in the rate of tax on lotteries and other similar games. Fiscal policy will have a significantly restrictive effect overall in 2016, making a contribution to economic growth of around -0.8 percentage point, primarily due to the aforementioned decrease in government investment.

In 2017, a general government surplus of 0.5% of GDP can be expected, due mainly to continued economic growth. The general government revenue side is expected to be positively affected by the approved introduction of electronic sales registration[17] and an increase in excise duty on tobacco products. Counteracting this will be a transfer of restaurant services (with the exception of alcoholic beverages) to a reduced VAT rate of 15% related to electronic sales registration and an increase in the tax discount for dependent children. On the expenditure side, a further acceleration of wage growth in the government sector and higher expenditure on pensions and health care are assumed. A drop in some one-off expenditure measures taken this year and a continuing decline in debt service costs will act in the opposite direction. The effect of fiscal policy (via household consumption and investment) will be approximately neutral in 2017 due to expected renewed growth in government investment activity linked with the start of drawdown of EU funds from the new programme period. Economic activity will be positively affected by an acceleration in nominal expenditure on government consumption in the form of the aforementioned increased growth in wages and salaries, intermediate consumption and health care expenditure.

The general government **structural balance** was approximately balanced last year and will record a surplus of about 0.5% of GDP by 2017. This year it will reflect the aforementioned drop in investment and in both the years also the impact of the aforementioned discretionary revenue and expenditure measures, which will foster an increase in the structural surplus overall. Given the current fiscal policy settings, the medium-term structural deficit objective of 1% of GDP will thus be safely met at the forecast horizon.

TABLE II.2.5

FISCAL IMPULSE

The fiscal impulse will be markedly negative in 2016, mainly as a result of a drop in government investment; this effect will fade out next year

(contributions to GDP growth in percentage points)

	2015 actual	2016 forecast	2017 forecast
Fiscal impulse[a)]	0.8	-0.8	0.0
of which impact through:			
private consumption	0.2	0.0	-0.2
private investment	0.1	-0.1	0.0
government investment, domestic	0.0	0.0	0.1
government investment, EU funded	0.5	-0.8	0.1

a) Owing to rounding, the total sum may not equal the sum of the individual items.

15 A one-off payment of CZK 1,200 per person (totalling approximately CZK 3.5 billion) was made to pensioners in February 2016.

16 The impact on VAT revenue of 0.2% of GDP is based on a conservative Finance Ministry estimate drawing on an analysis of the change in the implicit tax rate based on the Slovak experience after the introduction of a similar measure.

17 The updated Convergence Programme of April 2016 estimates the positive impact of electronic sales registration in 2017 at approximately 0.3% of GDP. In light of the date when this law will take effect, i.e. December 2016, the impact will be negligible this year (+CZK 0.5 billion).

The use of excess Treasury liquidity as a source of funding, coupled with rapid economic growth, caused the **ratio of government debt to GDP** to fall significantly to 41.1% last year. The forecast expects a further decrease in government debt relative to GDP this year and the next – to 39% in 2017. Amid increasing general government primary surpluses, this will also be aided by accelerating nominal GDP growth and a drop in debt service costs. The latter results from an assumed further reduction in the effective interest rate on government debt owing to financial market developments and positive perceptions of the Czech Republic.

A significant **risk** to the fiscal forecast is a potential larger drop in government investment than expected by the forecast.[18] Higher government expenditure related to the approaching parliamentary elections scheduled for 2017 might be a risk in the opposite direction.

18 The new Act on Environmental Impact Assessment (EIA) represents a downside risk to investment, as many construction projects were approved under the old law and must now go through this process again. This may delay them by approximately two years. The list of projects jeopardised by this includes roads and motorways worth tens of billions of koruna.

II.3 COMPARISON WITH THE PREVIOUS FORECAST

In the new forecast, the assumption of flat market interest rates at their current very low level and the use of the exchange rate as a monetary policy instrument has moved two quarters further into the future, i.e. to mid-2017. The path of market interest rates after the exit from the use of the exchange rate is higher than in the previous forecast. Compared to the previous forecast, the predictions for headline and monetary policy-relevant inflation are markedly lower until mid-2017, owing to lower observed net inflation, a more subdued outlook for foreign producer prices and lower growth in domestic nominal wages. Overall GDP growth in 2016 has been revised downwards, mainly as a result of a deeper fall in government investment and slower growth in private investment. By contrast, the GDP forecast for 2017 has been raised, partly because of an extension of the expected length of the exchange rate commitment. Nominal wage growth in the business sector has shifted downwards until mid-2017 due to the lower levels observed last year, more subdued inflation and a slower expected increase in economic activity.

The forecast for annual **headline inflation** (see Chart II.3.1) is lower than in the previous forecast until mid-2017 and higher thereafter as a result of an extension of the assumption of the use of the exchange rate as a monetary policy instrument. The weaker rate will prevent import prices from having a renewed anti-inflationary effect and will foster growth of inflationary pressures from the domestic economy. The revision of the net inflation forecast (see Chart II.3.2) is similar; in the short run it is affected by the lower data observed in recent months (an unexpected further drop in food prices, lower adjusted inflation excluding fuels and a deeper decline in fuel prices). The forecast also reflects weaker cost pressures due to a further sharp drop in import prices in 2015, which, in turn, primarily reflects greater anti-inflationary effects of foreign producer prices and a continuing pass-through of the previous declines in oil prices. Lower growth in nominal wages in 2016 than expected in the previous forecast is also added to these factors. This reduces the domestic fundamental upward pressures on costs until the end of this year. Compared with the previous forecast, the cost pressures will rise more quickly during 2017 due to the inflationary effect of the extension of the expected length of the CNB's exchange rate commitment on import prices and domestic costs. The outlook for administered prices has been revised downwards for both forecasted years. This mainly reflects the recently announced reduction in prices of gas for households as of May 2016. The estimate of the effects of changes to indirect taxes is unchanged for this year and 0.1 percentage point lower for 2017. The forecast for **monetary policy-relevant inflation** has therefore been revised in the same way as that for headline inflation – except for the small impact of tax changes (the transfer of restaurant services, with the exception of alcoholic beverages, to the 15% VAT rate) incorporated in 2017.

Turning to the assumptions regarding the **external environment** (see the charts in section II.1), the outlook for industrial producer prices in the effective euro area has been lowered significantly for

CHART II.3.1

CHANGE IN THE HEADLINE INFLATION FORECAST

The forecast for headline inflation is lower until mid-2017
(year on year in %; differences in pp – right-hand scale)

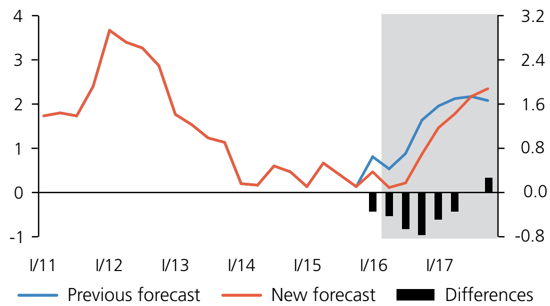
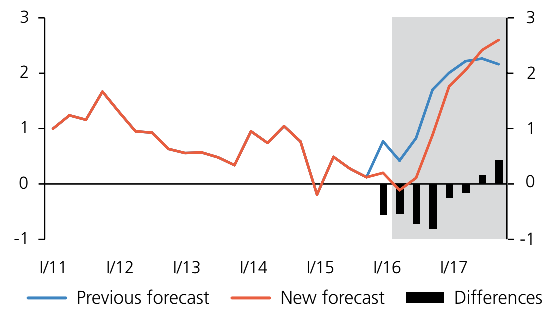


CHART II.3.2

CHANGE IN THE NET INFLATION FORECAST

The significantly lower outlook for net inflation over the next five quarters reflects its evolution in recent months, more anti-inflationary external effects and lower wage growth
(year on year in %; differences in pp – right-hand scale)



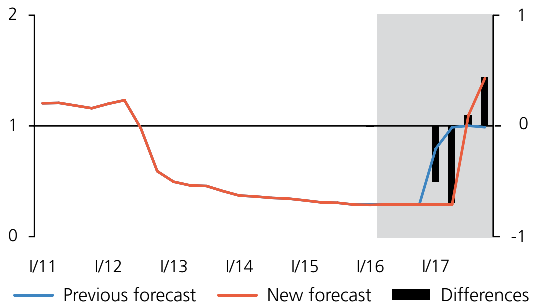
this year compared to the previous forecast owing to past declines in oil prices, which continue to pass through to an observed sharp decline in producer prices. The prediction for external demand growth is only slightly lower over the entire horizon. The market outlook for 3M EURIBOR rates has also been lowered slightly deeper into negative territory in response to the further easing of monetary policy by the ECB. The forecast also newly incorporates an increase in the ECB's asset purchases, doing so via more markedly negative 3M EURIBOR shadow rates, which are 0.25 percentage point further below the market rate outlook on average at the forecast horizon than in the previous forecast.

Compared with the previous forecast, the assumption of the use of the exchange rate as an additional monetary policy instrument has shifted to mid-2017. The **exchange rate of the koruna against the euro** thus remains at the CNB's exchange rate commitment level two quarters longer than was assumed by the previous forecast. The exchange rate outlook for the second half of 2017 has been revised towards slightly weaker levels compared with the previous forecast, largely due to the assumed longer use of the exchange rate as a monetary policy instrument and a lower outlook for industrial producer prices in the euro area. By contrast, the further easing of monetary policy by the ECB, as captured by a downward shift in foreign market and shadow interest rates, is acting in the opposite direction. The path of domestic market **interest rates** (stable until the end of 2016 in the previous forecast) is stable until the middle of next year owing to the assumed extension of the exchange rate commitment. This extension then allows for a greater increase in interest rates in the forecast (see Chart II.3.3).

Chart II.3.3

CHANGE IN THE INTEREST RATE PATH

Interest rates remain stable until the middle of next year; thereafter, their path is higher than in the previous forecast
(3M PRIBOR in %; differences in pp – right-hand scale)

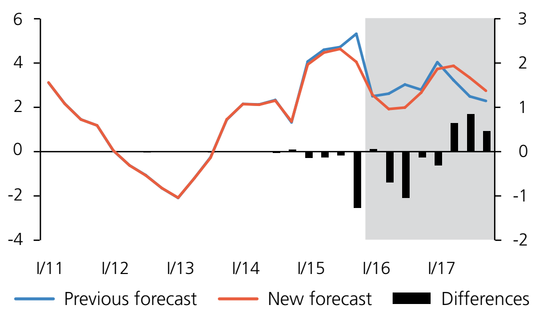


The forecast for annual **GDP** growth is lower this year but higher in 2017 owing primarily to the shift in the assumed exit from the exchange rate commitment (see Chart II.3.4). Annual GDP growth is therefore more volatile than in the previous forecast. Household consumption is unchanged overall this year and the next and will continue to be affected by robust real growth in wages and salaries and the positive supply-side effect of lower oil prices. Gross capital formation growth is significantly affected by government investment, which will record a larger fall in 2016, as the new forecast expects – in light of assigned public procurement – a slower start to the drawdown of EU funds under the new programme period. At the same time, private investment is also expected to grow at a slower rate. Fixed investment growth will therefore be generally more subdued this year compared with the previous prediction. Government consumption will rise at a slower rate this year, reflecting lower observations in 2015 Q4. For 2017, by contrast, it has been revised upwards due to a higher outlook for wage growth in the non-business sector. The predicted fiscal impulse on top of government consumption is more negative for 2016. In 2017, it shifts from a slightly positive to a roughly neutral position.

Chart II.3.4

CHANGE IN THE GDP FORECAST

The GDP growth forecast is lower in 2016 and higher in 2017
(annual percentage changes; differences in pp – right-hand scale; seasonally adjusted)



In contrast to the previous forecast, the contribution of **net exports** to GDP growth will be positive this year due to a sharper slowdown in overall investment activity. For 2017, the contribution of net exports is also higher as a result of the extension of the assumption of the use of the exchange rate as a monetary policy instrument.

Growth in the average **nominal wage** in the business sector is markedly lower than in the previous forecast until the middle of next year (see Chart II.3.5). This revision reflects the lower wage growth observed last year. At the same time, it is consistent with the lower expected GDP growth and inflation this year. From mid-2017, by contrast, nominal wage growth will be faster than in the previous forecast, as the assumed extension of the exchange rate commitment will support domestic economic activity and foster a rise in inflation.

CHART II.3.5

CHANGE IN THE FORECAST FOR NOMINAL WAGES IN THE BUSINESS SECTOR

The nominal wage forecast has shifted significantly lower until the middle of next year
(annual percentage changes; differences in pp – right-hand scale, seasonally adjusted)

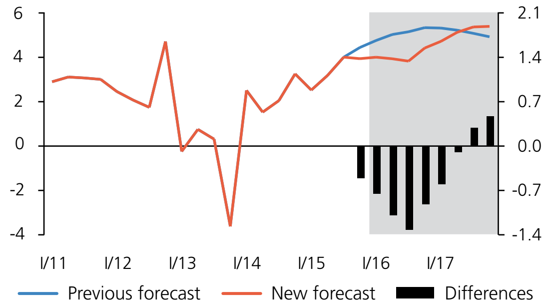


TABLE II.4.1

EXPECTED INDICATORS OF FMIE AND CORPORATIONS

The analysts' inflation expectations are constantly slightly below the CNB's target of 2% at the one-year horizon and at the target at the three-year horizon

(at 1Y; annual percentage changes unless otherwise indicated)

	12/15	1/16	2/16	3/16	4/16
FMIE:					
CPI	1.7	1.8	1.8	1.8	1.8
CPI, 3Y horizon	2.0	2.0	2.0	2.0	2.0
Real GDP in 2016	2.6	2.7	2.5	2.5	2.5
Real GDP in 2017		2.7	2.7	2.7	2.7
Nominal wages in 2016	3.9	4.0	4.1	4.1	4.1
Nominal wages in 2017		3.9	4.1	4.0	4.0
CZK/EUR exchange rate (level)	26.8	26.8	26.8	26.7	26.8
2W repo rate (in per cent)	0.05	0.05	0.05	0.05	0.05
1Y PRIBOR (in per cent)	0.6	0.6	0.5	0.5	0.5
Corporations:					
CPI	1.5			1.4	

CHART II.4.1

PERCEIVED AND EXPECTED INFLATION

Perceived inflation stayed negative, while expected inflation has long been slightly positive; both fell at the start of this year

(source: European Commission Business and Consumer Survey)

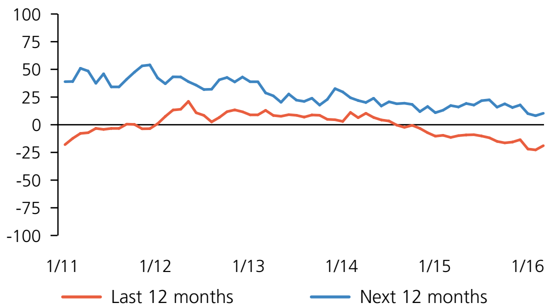


TABLE II.4.2

CF EXPECTED INDICATORS

The CF analysts expect economic growth to slow below 3% this year and stay there next year

(at 1Y; annual percentage changes unless otherwise indicated)

	12/15	1/16	2/16	3/16	4/16
Real GDP in 2016	2.5	2.6	2.6	2.5	2.4
Real GDP in 2017		2.7	2.7	2.7	2.7
Nominal wages in 2016	3.8	3.9	3.8	3.9	3.9
Nominal wages in 2017		3.9	3.9	4.0	4.0
CZK/EUR exchange rate (level)	26.9	26.7	26.6	26.7	26.8
3M PRIBOR (in per cent)	0.3	0.3	0.3	0.3	0.3

II.4 FORECASTS BY OTHER ENTITIES

In recent months, analysts' inflation expectations have been constantly slightly below the CNB's target at the one-year horizon and at the target level at the three-year horizon. The indicator of inflation perceived by households is slightly negative, while the indicator of expected inflation is slightly positive. Both indicators recorded a fall early this year. On average, the analysts expect economic growth to slow below 3% this year and to stay there next year despite a slight acceleration. According to the analysts, the exchange rate of the koruna will appreciate to just below CZK 27 to the euro on average at the one-year horizon. None of the analysts expects the exchange rate commitment to be discontinued before 2017. About half of them expect the exit to happen in the second quarter of next year, whereas the CNB forecast assumes the use of the exchange rate to continue until mid-2017. At the same time, all the analysts were expecting interest rates to be left unchanged both at the CNB Bank Board's meeting in May and at the one-year horizon. The market outlook indicates only a minor decrease in interest rates at the one-year horizon and is therefore negligibly below the interest rate path contained in the new CNB forecast.

Inflation expected by financial market analysts at the one-year horizon has been constantly slightly below the CNB's target of 2% in recent months. The inflation expectations of business managers at the one-year horizon also remain below the target (see Table II.4.1). Analysts' inflation expectations at the three-year horizon have long been exactly at the level of the CNB's 2% target or very close to it.

The indicator of **inflation perceived by households** turned slightly more negative on average in 2016 Q1 (see Chart II.4.1). This means that households overall felt that prices did not increase over the last 12 months. By contrast, the indicator of **expected inflation** has long been slightly positive. This signals that the number of respondents who expect prices to rise more rapidly over the next 12 months is slightly higher than the number of those who expect prices to stay the same or increase more slowly than they did previously. However, this indicator also moved downwards at the start of this year.

Both the FMIE and CF analysts expect economic growth to slow below 3% this year after one-off factors from 2015 have subsided (see Tables II.4.1 and II.4.2). The growth should remain below this level next year despite accelerating modestly. Nominal wages are expected to increase by about 4% in both years. The analysts on average expect the koruna to appreciate to just below CZK 27 to the euro at the one-year horizon. All the analysts expect that the exchange rate commitment will not be discontinued before the end of 2016. Their expectations of this step are spread over the whole of 2017 and early 2018. About half of the analysts place this moment in the second quarter of next year. Before the Bank Board meeting in May, all fifteen

FMIE analysts were expecting no changes in key interest rates at this meeting. All the analysts also expect the 2W repo rate to be flat at its current level of 0.05% at the one-year horizon.

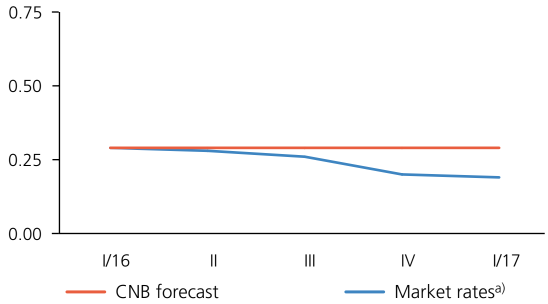
Overall, the analysts expect similar real GDP growth this year and lower growth next year **compared with the CNB's new forecast**. Inflation expected by the analysts at the one-year horizon is the same as the CNB forecast. The analysts' expectations regarding the 2W repo rate and market rates are also in line with the 3M PRIBOR path contained in the new CNB forecast. The exchange rate at the one-year horizon is slightly stronger on average in the analysts' predictions than in the CNB forecast.

Chart II.4.2 provides a **comparison of expected 3M market rates** derived from FRA quotations and the interest rate path assumed by the new CNB forecast. The current market outlook for 3M rates implies a decrease of about 0.1 percentage point at the one-year horizon. Over the entire horizon, the expected market rates are thus negligibly below the interest rate path assumed in the new CNB forecast.

CHART II.4.2

FRA RATES VERSUS THE CNB FORECAST

Expected interest rates derived from FRA quotations are negligibly below the rates contained in the new CNB forecast
(percentages)



a) for 2016 Q1 and 2016 Q2 the 3M PRIBOR and for 2016 Q3–2017 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 2016

III. CURRENT ECONOMIC DEVELOPMENTS

III.1 INFLATION

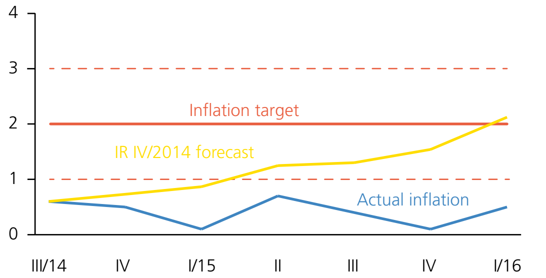
Annual headline inflation increased in January 2016 but fell back in February and March, averaging 0.5% in Q1. Prices adjusted for the first-round effects of changes to indirect taxes rose by 0.3% year on year. Inflation was thus still well below the CNB's target. The very low inflation is being fostered by falling fuel and food prices, reflecting a drop in global oil prices and a persisting fall in agricultural commodity prices respectively. By contrast, administered prices started to rise modestly year on year in January 2016. Adjusted inflation was broadly stable just above 1% and remained the main contributor to consumer price inflation. It reflected strengthening domestic cost pressures as a result of continued growth of the domestic economy and a further improvement in the labour market situation. Anti-inflationary developments abroad acted in the opposite direction.

III.1.1 Fulfilment of the inflation target

Chart III.1.1

FORECAST VERSUS ACTUAL INFLATION

Inflation was well below the IR IV/2014 forecast in 2016 Q1 and therefore well below the CNB's 2% target
(year on year in %)



In 2016 Q1, both **headline inflation and monetary policy-relevant inflation** were well below the CNB's target, or below the lower boundary of the tolerance band around the target (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 2016 Q1, we have to examine the period from July 2014 to December 2015, which takes into account the different lengths of transmission of interest rates and the exchange rate. This is because monetary policy starts to pass through to inflation with a substantially shorter lag in the regime where the exchange rate is used as a monetary policy instrument than when interest rates are used. For the sake of clarity, however, the analysis of the accuracy of the forecasts is limited here to a comparison of Inflation Report IV/2014 with subsequent inflation.

The **Inflation Report IV/2014 forecast** was based on the assumption that the exchange rate would be used as an instrument for easing monetary policy with a CNB exchange rate commitment of CZK 27 to the euro until 2016 Q1. Import prices were expected to start having a slightly anti-inflationary effect. By contrast, a growing domestic economy and accelerating wage growth were expected to foster growth in prices over the entire forecast horizon. This was expected to result in a steady increase in adjusted inflation excluding fuels. Administered prices were expected to decline in both 2014 and 2015 and then start rising slightly. Food price inflation was initially expected to slow significantly because of a deepening decline in agricultural producer prices, and accelerate in 2015. Fuel prices were predicted to fall noticeably due to the observed decline in global oil prices, and start rising again in 2016. Thus, both headline and monetary policy-relevant inflation were expected to continue rising gradually towards the CNB's 2% target, crossing it from below at the monetary policy horizon and then staying slightly above it in 2016 (see Chart III.1.1).

Headline **inflation in reality** was below the forecast over the entire period. The gap between actual inflation and the forecast was -1.6 percentage points in 2016 Q1 (see Table III.1.1). This deviation was due to all components of inflation except the first-round effects of indirect tax changes. Unexpectedly subdued food price inflation (a stronger-than-expected fall in global agricultural commodity prices, the embargo on food imports into Russia and the abolition of EU milk production quotas) made the biggest negative contribution. The negative deviation from the forecast was also due to a drop in fuel prices and slower growth in adjusted inflation excluding fuels, caused mainly by a continued decline in euro area producer prices and lower observed wage growth. To a lesser extent, slower growth in administered prices also contributed to the deviation from the forecast.

External economic factors contributed significantly to the substantially lower-than-forecasted domestic inflation. The biggest deviation was recorded by foreign production prices (almost 5 percentage points), which did not record the expected growth and on the contrary continued to show strongly negative year-on-year dynamics (see Table III.1.2). The unexpected fall in oil prices contributed substantially to these developments. External demand growth was slightly stronger than expected. Foreign interest rates decreased further, even reaching negative levels, a trend which had not been expected by the forecast either. Overall, then, external developments had an anti-inflationary effect on the Czech Republic, i.e. they acted towards a need for much easier monetary conditions. **Domestic market interest rates**, however, remained stable (see Table III.1.3); the zero lower bound meant that no reduction occurred. The **exchange rate** stayed at levels that were at first slightly weaker than the commitment announced by the CNB, but they were not weak enough to offset the deflationary pressures from abroad and deliver a return of inflation to the target. The impacts of the anti-inflationary developments abroad on domestic inflation were thus much stronger than in an environment where monetary policy is not constrained by the zero lower bound.

Based on the CNB's current knowledge, the **developments in the Czech economy since the forecast under review was drawn up** can be summed up in the following way. The assumption of a recovery of the Czech economy materialised qualitatively, although actual GDP growth was lower than predicted at the close of 2014. In 2015, by contrast, GDP growth was higher as a result of increasing investment (drawdown of EU funds) and real household and government consumption (higher wage growth in the government sector). Unexpectedly low prices of energy commodities also had a positive impact on GDP growth. By contrast, nominal variables deviated substantially downwards from the forecast. Nominal wage growth lagged behind the predicted figures over the entire period. This, together with strongly anti-inflationary price developments abroad, led to considerably lower inflation than forecasted.

Table III.1.1

FULFILMENT OF THE INFLATION FORECAST

The deviation of inflation from the forecast was due to all components of inflation except changes to indirect taxes
(annual percentage changes; contributions in percentage points)

	IR IV/2014 forecast	2016 Q1 outturn	Contribution to total difference[c]
CONSUMER PRICES	2.1	0.5	-1.6
Breakdown into contributions:			
administered prices	1.7	0.7	-0.2
first-round impacts of changes to indirect taxes[a]	0.0	0.2	0.2
food prices[b]	2.7	-0.4	-0.8
fuel prices[b]	1.1	-12.4	-0.5
adjusted inflation excl. fuels[b]	2.0	1.3	-0.4

a) impact in non-administered prices on total inflation
b) excluding the first-round effects of changes to indirect taxes
c) Owing to rounding, the total difference may not equal the sum of the individual items.

Table III.1.2

FULFILMENT OF THE EXTERNAL ASSUMPTIONS

External factors had an anti-inflationary effect overall, fostering a need for much easier domestic monetary conditions
(annual percentage changes unless otherwise indicated)

		IV/14	I/15	II/15	III/15	IV/15	I/16
GDP in euro area[a), b), c)]	p	0.9	1.1	1.6	1.9	2.0	2.1
	o	1.0	1.3	1.8	2.2	2.3	-
PPI in euro area[b), c)]	p	-1.1	0.2	1.1	1.4	1.6	1.9
	o	-2.2	-2.8	-2.1	-2.6	-3.1	-
3M EURIBOR	p	0.1	0.1	0.1	0.1	0.1	0.1
(percentages)	o	0.1	0.0	0.0	0.0	-0.1	-0.2
USD/EUR exchange rate	p	1.26	1.25	1.24	1.23	1.22	1.21
(levels)	o	1.25	1.13	1.10	1.11	1.09	1.10
Brent crude oil price	p	89.8	91.1	92.3	93.1	93.5	93.8
(USD/barrel)	o	77.1	55.1	63.5	51.3	44.7	35.2

p – prediction, o – outturn
a) at constant prices
b) seasonally adjusted
c) IR IV/2014 outlook for effective indicator

Table III.1.3

FULFILMENT OF THE FORECAST FOR KEY VARIABLES

GDP growth was higher than forecasted in 2015, whereas wage growth lagged behind the forecast

		IV/14	I/15	II/15	III/15	IV/15	I/16
3M PRIBOR	p	0.4	0.4	0.4	0.4	0.4	0.4
(percentages)	o	0.3	0.3	0.3	0.3	0.3	0.3
CZK/EUR exchange rate	p	Exchange rate commitment: close to CZK 27 to the euro					
(levels)	o	27.6	27.6	27.4	27.1	27.1	27.0
Real GDP[a]	p	2.2	2.0	2.4	2.8	2.7	3.0
(annual perc. changes)	o	1.4	3.9	4.5	4.6	4.0	-
Nominal wages[b]	p	3.9	2.9	3.5	4.2	4.6	4.8
(annual perc. changes)	o	1.8	2.2	3.3	3.8	3.9	-

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

Chart III.1.2

INFLATION

Inflation increased slightly at the start of 2016 but then decreased again

(annual percentage changes)

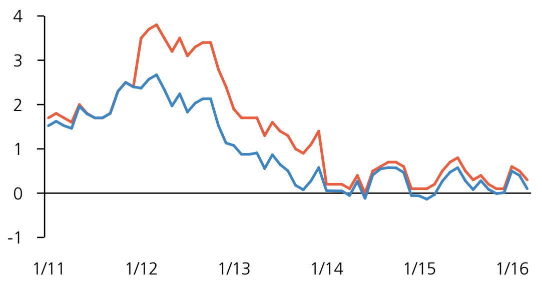


Chart III.1.3

STRUCTURE OF INFLATION

The decline in fuel and food prices was more than outweighed by adjusted inflation excluding fuels, administered prices and the effects of changes to indirect taxes

(annual percentage changes; contributions in percentage points)

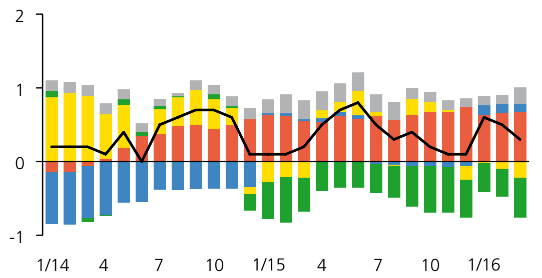
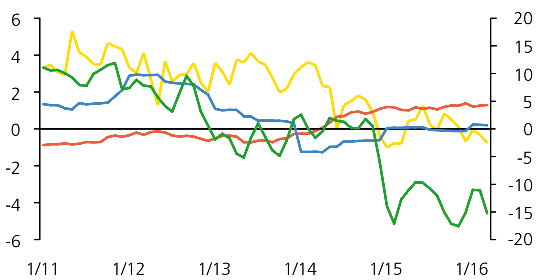


Chart III.1.4

INFLATION COMPONENTS

In 2016 Q1, adjusted inflation was broadly flat, administered prices started to rise slightly and food and fuel prices continued to fall

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



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 settings**. The Bank Board assessed the balance of risks to the forecast at the monetary policy horizon as being either on the downside or balanced over the entire key period. With the benefit of hindsight, it can be said that most of the identified risks materialised in the key period, with anti-inflationary risks (particularly subdued inflation in the euro area and global energy commodity prices, and later also appreciation of the exchange rate and a decrease in food commodity prices) clearly prevailing overall. The direct pass-through of the weakened exchange rate to inflation through import prices faded out, but the exchange rate is still contributing to growth in the domestic economy, which is fostering an increase in costs and consequently also consumer prices. On account of strong foreign cost shocks, however, the inflation target has been significantly undershot for some time now, with inflation lying below the lower boundary of the tolerance band. This has also been due to slower wage growth in the domestic economy.

Overall, based on current knowledge, it thus seems that the monetary policy pursued between July 2014 and December 2015 should have been substantially easier.

III.1.2 Current inflation

Annual inflation[19] was 0.5% on average in 2016 Q1, 0.4 percentage point higher than in the previous quarter. Inflation increased only in January (to 0.6%) and then moderated gradually in February and March (to 0.5% and 0.3% respectively; see Chart III.1.2). The January rise in annual consumer price inflation was chiefly due to higher administered prices and a more moderate annual decline in food and fuel prices. However, this decline deepened again in February and March, and that, in turn, was the main reason for the drop in consumer price inflation (see Chart III.1.3). Adjusted inflation excluding fuels moderated slightly in January, owing to slower growth in tradables prices[20] amid broadly flat growth in non-tradables prices.[21] However, it was still the biggest contributor to consumer price inflation.

The contribution of changes to **indirect taxes** to annual consumer price inflation was 0.2 percentage point in 2016 Q1. It was linked with the two harmonisation adjustments made to excise duty on cigarettes and tobacco in January 2015 and January 2016. Their effect on the price level of 0.1 percentage point and 0.2 percentage point respectively materialised during the first three months of the relevant year.

Monetary policy-relevant inflation, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, accelerated slightly

19 Measured by year-on-year growth in the consumer price index.
20 Prices of tradable commodities comprise prices of goods excluding food and fuels.
21 Prices of non-tradable commodities primarily comprise prices of services excluding administered prices.

in January but slowed gradually in February and March. It averaged 0.3% in 2016 Q1 and was thus well below the CNB's target, i.e. below the lower boundary of the tolerance band around the target.

Administered prices started to rise modestly year on year in 2016 Q1 (by 0.7%). This was mainly due to prices of electricity and heat for households. Water supply and sewerage collection charges and health care prices also made positive contributions. The price growth in these categories was partially offset by a decline in prices of natural gas for households and transport prices.

Annual **market price inflation**,[22] as measured by net inflation, averaged 0.2% in 2016 Q1. Market price inflation primarily reflected food price developments, the year-on-year decline of which moderated in January but then deepened again. The decline in fuel prices continued, but moderated somewhat on average. Adjusted inflation excluding fuels was broadly flat just above 1% (see Chart III.1.4).

Prices of food, beverages and tobacco saw an overall deepening of their annual decline during 2016 Q1, falling by 0.4% on average (see Chart III.1.5). Their evolution remained very mixed. On the one hand, it reflected an accelerating decline in agricultural producer prices, including a persisting effect of the abolition of EU milk production quotas, while on the other hand it was affected by last year's drought. Prices of milk, dairy products and meat, bread products and many other items thus continued to fall sharply. By contrast, prices of vegetables, fruit, fish and alcoholic beverages increased (see Chart III.1.6).

The annual decline in **fuel prices** slowed in 2016 Q1 compared to the end of last year. Nevertheless, it reached a sizeable 12.4% on average (see Chart III.1.4). Fuel prices continued to reflect low world prices of Brent crude oil and petrol amid year-on-year stagnation of the koruna-dollar exchange rate.

Adjusted inflation excluding fuels slowed in January but saw a weak correction of this slowdown in February and March (to 1.3%; see Chart III.1.7). These small changes were due to tradables prices, whereas growth in non-tradables prices was broadly flat. Overall, annual growth in tradables prices slowed in Q1 compared to the end of last year, owing to strongly anti-inflationary foreign prices coupled with year-on-year appreciation of the koruna against the euro. Non-tradables prices reflected continued growth in domestic economic activity, especially in the service sector, and the improving labour market situation. The increase in prices of non-tradable commodities was fostered above all by prices of cultural and recreational services, rents, restaurant prices and prices of services connected with the operation of personal transport equipment. By contrast, post and telecommunications prices recorded a decline.

22 The following text describes the evolution of the individual categories of market prices adjusted for tax changes.

CHART III.1.5

FOOD PRICES

Falling agricultural producer prices and food import prices were reflected in a faster decline in consumer prices of food
(annual percentage changes)

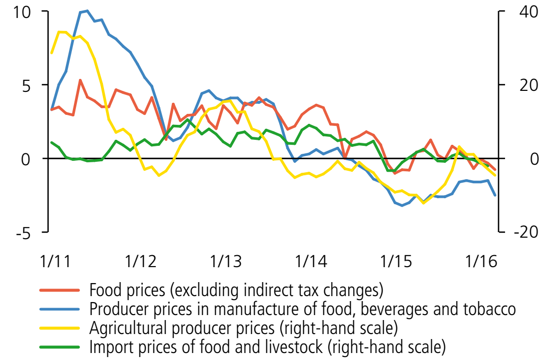
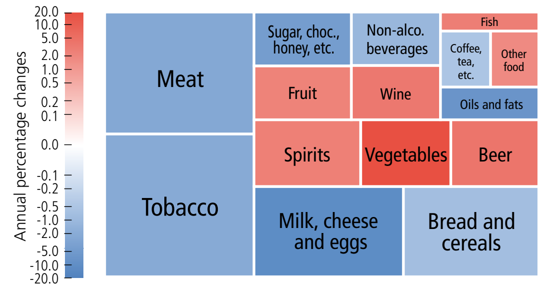


CHART III.1.6

STRUCTURE OF FOOD, ALCOHOL AND TOBACCO PRICE INFLATION IN MARCH 2016

The trends in food prices remain very mixed
(size of tile – relative weight in consumer basket; colour of tile – annual percentage changes)



Note: Adjusted for the effect of changes to indirect taxes, tobacco product prices would have increased by 2.4% year on year.

CHART III.1.7

ADJUSTED INFLATION EXCLUDING FUELS

Adjusted inflation excluding fuels was broadly flat in 2016 Q1; both of its components remained positive
(annual percentage changes)

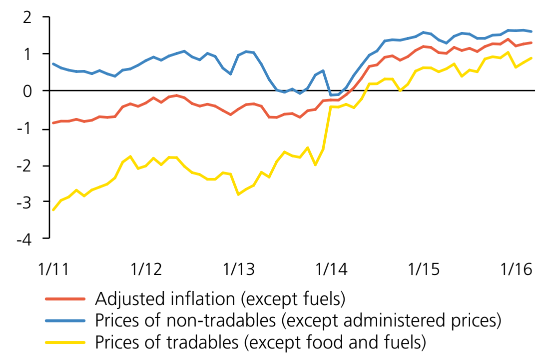


CHART III.2.1

IMPORT PRICES AND PRODUCER PRICES

The declines in import prices, industrial producer prices and agricultural producer prices strengthened at the start of this year, whereas prices in construction continued to rise slightly
(annual percentage changes)

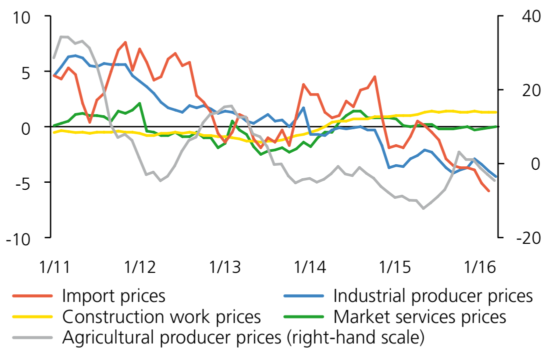


CHART III.2.2

IMPORT PRICES

The continuing decline in import prices was broad-based, although the fall in energy commodity prices remained the biggest contributor to it
(annual percentage changes; contributions in percentage points)

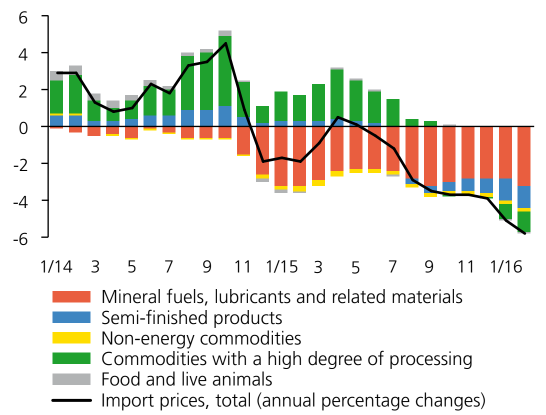
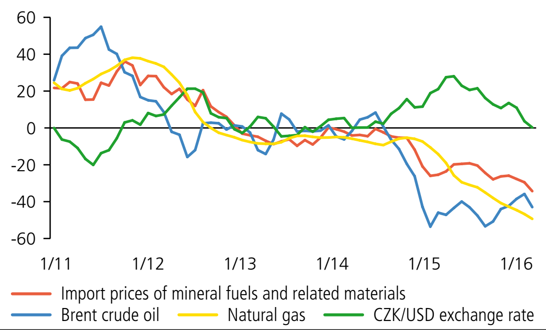


CHART III.2.3

MINERAL FUELS AND LUBRICANTS

Prices of imported mineral fuels reflected a deepening year-on-year decline in world prices of oil and natural gas
(annual percentage changes)



III.2 IMPORT PRICES AND PRODUCER PRICES

The decline in import prices deepened further during 2016 Q1. This was due mainly to a persisting fall in prices of energy and non-energy commodities and a simultaneous switch of annual growth in prices of commodities with a high degree of processing to negative levels. The lower prices of imported inputs were subsequently reflected in a further deepening of the year-on-year decline in industrial producer prices. Agricultural commodity prices returned to year-on-year decline as a result of a sizeable downturn in crop product price inflation amid a continuing marked decrease in livestock product prices. Annual growth in construction work prices remained subdued, only just exceeding 1%. Prices of market services for the business sector were broadly flat.

III.2.1 Import prices

The year-on-year decline in **import prices** deepened at the start of this year (to 5.8% in February; see Chart III.2.1), continuing the downward trend observed in the second half of last year. Import prices went down in a large majority of the categories monitored. Although the decline in import prices continued to be fostered largely by sharply falling prices of mineral fuels, the deepening of the decline in the overall index at the start of this year was due mainly to growth in the negative contributions of import prices of semi-finished products and commodities with a high degree of processing (see Chart III.2.2).

February 2016 saw a slight increase in the markedly negative contribution of prices of **mineral fuels** (see Chart III.2.2). This reflected a temporary deepening of the year-on-year decline in Brent crude oil prices (to 43%; see Chart III.2.3) and world prices of natural gas (to 49.3%). The effect of annual depreciation of the koruna against the US dollar, which in previous months had partially dampened the impact of the fall in global prices of energy commodities on domestic prices, almost disappeared in February 2016. In these circumstances, the year-on-year decline in import prices of mineral fuels deepened below 30%.

Year-on-year decreases in import prices were also recorded for **semi-finished products** and **non-energy commodities** at the start of this year. Import prices of **food, tobacco and beverages** also switched to an annual decline in late 2015 and early 2016. The decline deepened further in February as well. This was due to import prices of food and live animals, whereas import prices of beverages and tobacco decreased at a slower pace.

Year-on-year growth in **import prices of commodities with a high degree of processing** also turned negative in late 2015 and early 2016 in the categories of both imported machinery and transport equipment and miscellaneous manufactured articles (to -0.9% and -2.5% respectively in February). In the first of those categories, however, import prices showed mixed trends, with import prices of office machines and equipment still rising (by 0.7% year on year in

February) but import prices of industrial machinery and equipment continuing to fall (by 1.4%). Higher import prices were thus fostered solely by continued annual growth in the low-weight category of animal oils and fats. However, even this growth slowed in the first two months of this year.

III.2.2 Producer prices

Industrial producer prices

Following a slight moderation in late 2015 and early 2016, the year-on-year decline in **industrial producer prices** deepened again during 2016 Q1 (to 4.5% in March; see Chart III.2.4). This was due mainly to prices of imported inputs, in particular world prices of oil, which passed through to industrial producer prices with a traditionally short lag.

The strengthening of the annual decline in industrial producer prices was most apparent in the **composite indicator of energy producer prices and prices of water-related services**[23] (see Chart III.2.4). A closer look at the individual industries within this index revealed sizeable differences between its components.

As regards **electricity, gas, steam and air-conditioned air**, where the prices set in January are mostly stable over the whole year, the annual decline in producer prices deepened sharply to levels close to 4%. The annual growth in producer prices in **water supply and sewerage-related services** slowed considerably from January (to 0.5%; see Chart III.2.5). The annual decline in producer prices in **mining and quarrying** deepened markedly at the start of the year (to 6.5% in March). However, the low weight of this industry meant that this change had little effect on the composite indicator. The strengthening of the annual decline in the composite indicator in 2016 Q1 was therefore again due most of all to prices in the manufacture of **coke and refined petroleum products**. This primarily reflected a previous temporary deepening of the year-on-year decline in world oil prices. In the classification by main industrial groupings, this was reflected in a deeper decline in prices of energy and a continuing fall in prices of intermediate goods in 2016 Q1 (see Chart III.2.6).

The annual decline in prices in the **food industry** fluctuated at the levels observed in 2015 Q4 in January and February, but deepened considerably in March (to 2.5%). The year-on-year fall in producer prices in manufacture of **basic metals and fabricated metal products** also deepened further in 2016 Q1 (to 5.8% in March). Prices of transport equipment producers also recorded a larger decrease compared to the end of last year (of 2.2% in March).

23 In May 2015, the CZSO ceased to publish separate data on producer prices in the manufacture of coke and refined petroleum products. For this reason, in Chart III.2.4 this item is combined with mining and quarrying, electricity, gas, steam and air-conditioned air and water supply and sewerage-related services.

Chart III.2.4

INDUSTRIAL PRODUCER PRICES

The across-the-board decline in industrial producer prices deepened slightly again in 2016 Q1

(annual percentage changes; contributions in percentage points)

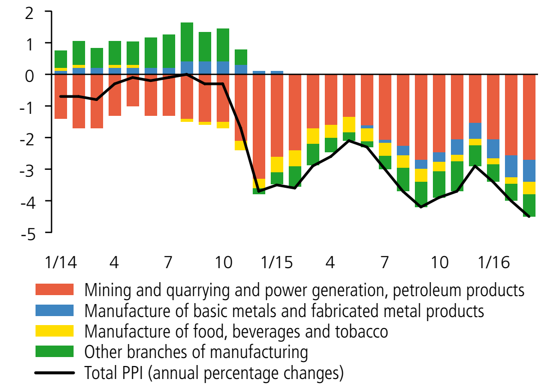


Chart III.2.5

PRICES OF ENERGY AND WATER-RELATED SERVICES

The decline in electricity prices deepened and the growth in prices of water-related services slowed

(annual percentage changes)

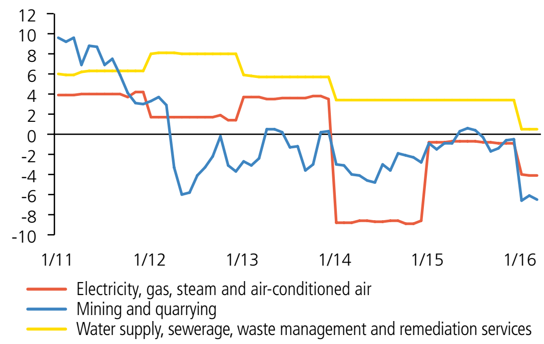
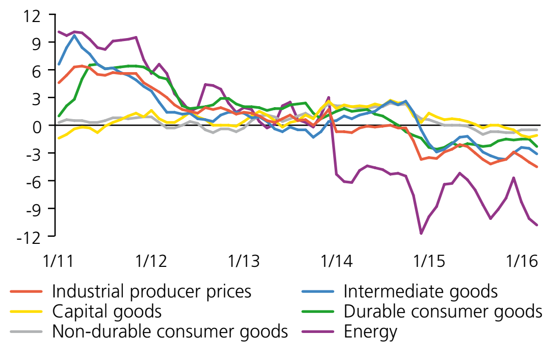


Chart III.2.6

PRODUCER PRICES BY MAIN INDUSTRIAL GROUPINGS

The decline in energy prices deepened significantly and prices fell in all other categories

(annual percentage changes)

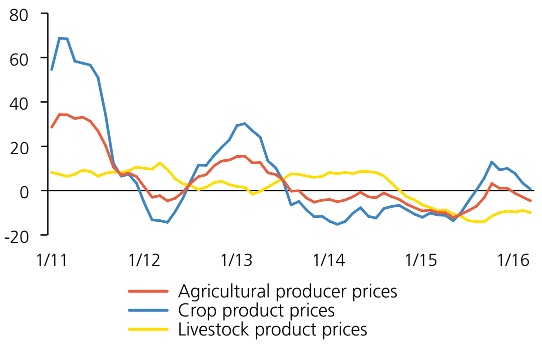


Overall, **producer prices in manufacturing** continued to fall sharply in 2016 Q1 (by 4.6% in March). This was due not only to lower global oil prices and a persisting decline in producer prices in the effective euro area, but also to modest year-on-year appreciation of the koruna against the euro.

CHART III.2.7

AGRICULTURAL PRODUCER PRICES

With crop product prices showing a marked slowdown, agricultural producer prices started to decline again
(annual percentage changes)



Agricultural producer prices

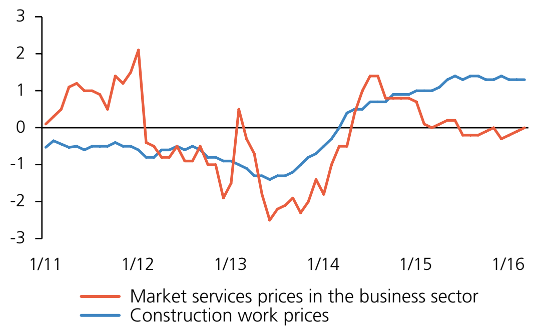
Following a short-lived return to growth in 2015 Q4, **agricultural producer prices** started to decline again at the start of this year (by 4.6% year on year in March; see Chart III.2.7). This was due to a marked slowdown in growth in crop product prices from 10% at the close of last year to 0.6% in March. Price of most cereals switched to a year-on-year decline, whereas prices of potatoes and fresh vegetables continued to rise sharply. Price growth in other categories slowed. Livestock product prices continued to show a sharp decline, which deepened only marginally compared to the previous period (to 9.9% in March). This was due mainly to a still sharp fall in milk prices. Prices of most other products in this category except cattle also declined significantly.

This was due to several **factors**. As regards crop product prices, the slower growth was a result of the above-average harvest last year and also to a favourable outlook for global production this year coupled with a further rise in global stocks given an expected decrease in global agricultural trade. This led to further decline in the crop product price level and kept prices very low. Together with continuing retaliatory trade sanctions imposed by Russia, the liberalisation of the EU milk market last year helped maintain the decline in milk and pork prices. A year-on-year appreciation of the exchange rate of the koruna also fostered lower domestic agricultural producer prices.

CHART III.2.8

MARKET SERVICES PRICES IN THE BUSINESS SECTOR AND CONSTRUCTION WORK PRICES

Growth in construction work prices stayed just above 1%, while market services prices were flat in March
(annual percentage changes)



Other producer prices

The modest annual growth in **construction work prices** continued into 2016 Q1 at a rate of just above 1% (see Chart III.2.8). However, prices of materials and products consumed in the construction industry were still declining year on year (by 1.7% in March).

Market services prices in the business sector in early 2016 followed the only moderate downward year-on-year trend recorded in previous quarters. These prices stopped falling in March (see Chart III.2.8). This points to generally subdued inflation in this area, with only architectural and engineering services recording price growth exceeding 3%.

III.3 DEMAND AND OUTPUT

Annual real GDP growth slowed to 4% in 2015 Q4. Gross capital formation and household consumption were again the biggest contributors to the annual output growth. For the first time in quite a while, however, net exports also made a positive contribution. On the supply side, gross value added growth also slowed. Industry and services again contributed in roughly equal measure to this growth. Economic output was thus slightly below its potential.

III.3.1 Domestic demand

The still strong annual GDP growth (see Chart III.3.1) was driven by **domestic demand**. However, the dynamics of domestic demand slowed in Q4. Domestic demand growth was again fostered above all by fixed investment and household consumption (see Chart III.3.2). Government consumption also made a positive – albeit much smaller – contribution. The contribution of change in inventories was slightly negative.

Final consumption

The significant annual growth in real **final consumption expenditure of households** continued into 2015 Q4, reaching 2.9% (see Chart III.3.3). The similar rate of growth of household consumption compared to the previous quarter was again achieved amid lower growth in gross disposable income, reflected in a slight annual decline in the saving rate.

Annual growth in nominal **gross disposable income**, which is the main source of financing of households' consumption expenditure, accelerated slightly in 2015 Q4 (by 0.2 percentage point to 2.2%; see Chart III.3.3). With the household consumption deflator showing a marginal decline, its real purchasing power rose by 2.3%. Annual growth in nominal wages and salaries slowed slightly (to 4.5%), but given its share of almost 60% of disposable income it again contributed significantly to its year-on-year growth (see Chart III.3.4). Social benefits and other transfers also made positive contributions, slightly more so than in the previous quarter. By contrast, a significantly negative contribution of payments of taxes and social contributions, reflecting growth in households' taxable income, fostered lower growth in gross disposable income. Income of entrepreneurs and property income continued to decline year on year.

Households' **saving rate**[24] decreased in year-on-year terms in 2015 Q4 (by 0.7 percentage point to 12.9%). Growth in consumer credit picked up pace, helping to finance the growth in households' consumption expenditure (see section III.5).

24 According to seasonally unadjusted data.

CHART III.3.1

GROSS DOMESTIC PRODUCT

Annual GDP growth slowed in 2015 Q4

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

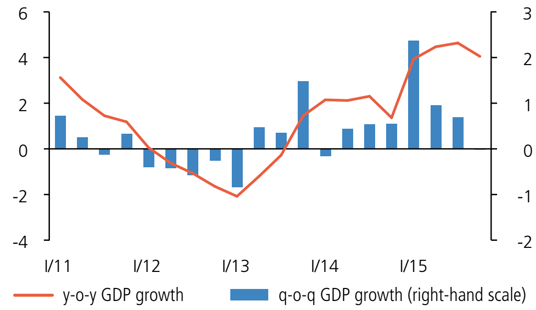


CHART III.3.2

STRUCTURE OF ANNUAL GDP GROWTH

Gross fixed capital formation and household consumption were again the biggest contributors to GDP growth, but net exports also made a positive contribution for the first time in quite a while

(contributions in percentage points to annual percentage change; seasonally adjusted data)

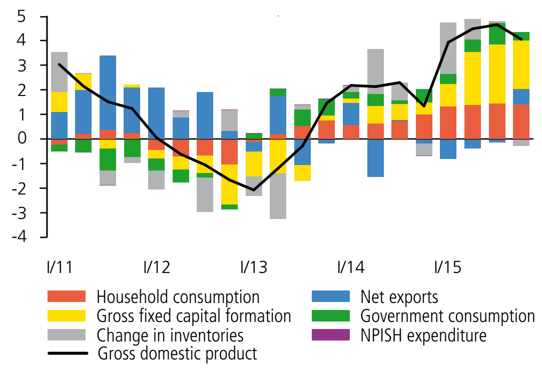


CHART III.3.3

HOUSEHOLD CONSUMPTION EXPENDITURE

Household consumption continued to rise faster than gross disposable income

(annual percentage changes; seasonally unadjusted data)

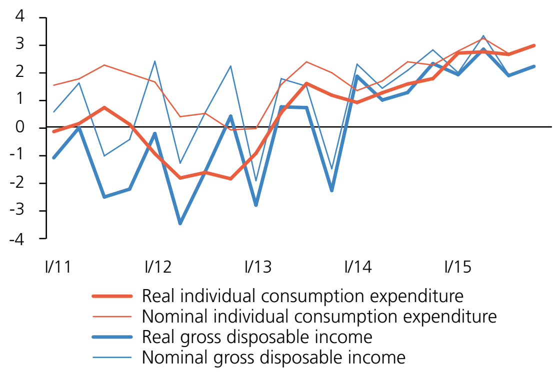


CHART III.3.4

DISPOSABLE INCOME

Wages and salaries, social benefits and other transfers contributed to the growth in disposable income, whereas taxes and social contributions had a strong downward effect

(annual percentage changes; contributions in percentage points; current prices; seasonally unadjusted data)

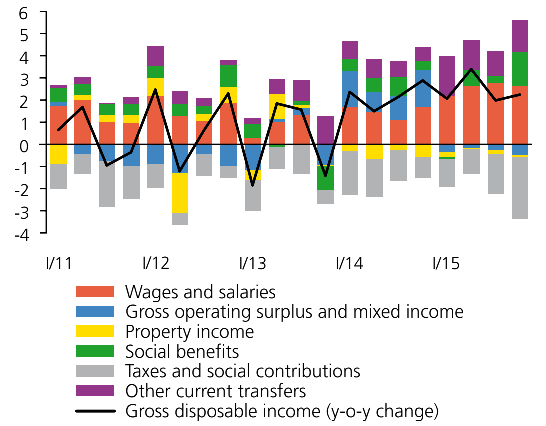


CHART III.3.5

STRUCTURE OF HOUSEHOLD CONSUMPTION

Household consumption expenditure continued to increase in all categories, with expenditure on durable goods recording the largest contribution

(annual percentage changes; contributions in percentage points; constant prices; seasonally unadjusted data)

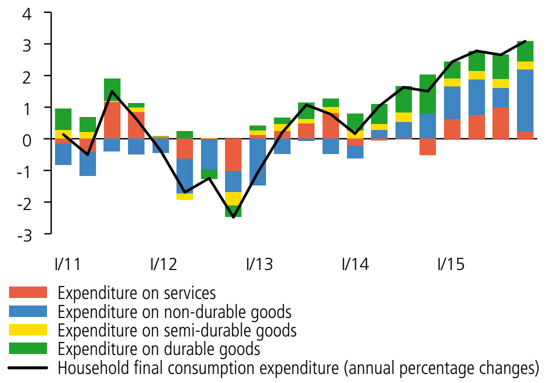
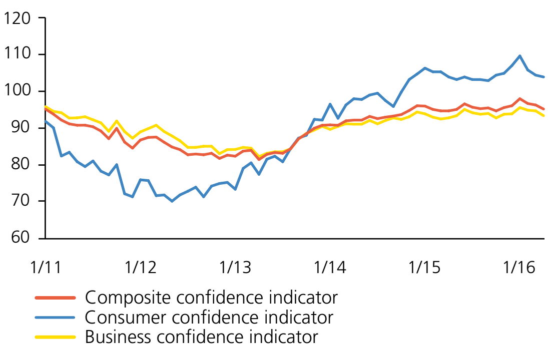


CHART III.3.6

CONFIDENCE INDICATORS

Consumer and business confidence remains at high levels

(2005 average = 100)



The growth in **consumption expenditure** was again channelled into all the monitored categories in 2015 Q4 (see Chart III.3.5). Unlike in previous quarters, however, the growth in households' consumption was due mostly to an increase in expenditure on non-durables, whereas the contributions of the other components declined, with that of services falling most sharply.

According to the latest available **monthly indicators**, annual growth in seasonally adjusted retail sales stayed high in January and February 2016 both in the automotive segment and in the rest of the retail sector. The consumer confidence indicator also increased further, but did not reach the record-high January levels in the following two months (see Chart III.3.6).

Annual growth in real **government final consumption expenditure** slowed markedly to 1.8% in 2015 Q4 from 4.5% in the previous quarter, owing to temporarily lower health care expenditure. The positive contribution of government consumption to annual GDP growth thus decreased to 0.3 percentage point (see Chart III.3.2).

Investment

Annual growth in **fixed investment** remained buoyant in 2015 Q4 (7.8%[25]), but slowed slightly compared to the previous quarter. The slowdown was dampened by the one-off accounting effect of the lease of Gripen aircraft, which contributed almost 4 percentage points to the increase in fixed investment.

The growth in investment activity was due[26] predominantly to growth in fixed investment in the **government sector** (of more than 40%; see Chart III.3.7). Government investment was channelled to an increased extent into machinery and equipment as a result of the aforementioned effect of the lease of Gripen aircraft. The contribution of investment in buildings and structures decreased compared to 2015 Q3, reflecting the unwinding of the effect of the drawdown of EU structural funds from the previous programme period (see Chart III.3.8).

The significant contribution of investment by the **non-financial corporations sector** from previous quarters fully dissipated at the close of last year. This was due to a year-on-year decline in investment in most manufacturing branches[27] coupled with a continuing rise in investment in trade and services. However, non-financial corporations' view of expected future demand remains positive according to the CZSO's business survey indicators. The same picture is offered by the latest survey conducted by the CNB and the Confederation of Industry for 2016 Q1, according to which non-financial corporations foresee continued growth in investment at both the six-month and twelve-month horizons.

25 According to seasonally adjusted data at constant prices.
26 According to seasonally unadjusted data at constant prices.
27 The automotive, chemical and pharmaceutical industries maintained positive annual investment growth rates.

Investment by the **household sector** rose negligibly in 2015 Q4 (by 0.3%; see Chart III.3.7). However, growth in investment in dwellings, which accounts for a significant proportion of the total fixed investment of households, kept close to 5% (see Chart III.3.9). Selected indicators are still pointing to possible further growth in household investment in dwellings. Households' confidence in future growth of the economy and employment is near its highest-ever levels. Financing conditions for investment in dwellings are still favourable and are being accompanied by strong growth in new mortgage loans (see section III.5.2) and rising property prices (see section III.5.7). Growth in the number of housing starts also accelerated significantly year on year (to 15.5%).

Annual growth in **inventories** contributed significantly to the upswing in economic activity in the first half of 2015, but this contribution was slightly negative in Q4 (see Chart III.3.2). However, inventories of materials and goods in both the manufacturing and trade sectors continued to increase.

III.3.2 Net external demand

Following four quarters of moderate year-on-year decline, **net exports of goods and services**[28] recorded an increase in 2015 Q4 (of CZK 5.9 billion; see Chart III.3.10), making a positive contribution to GDP growth for the first time in one and a half years (of 0.6 percentage point). The year-on-year increase in net exports was due to the balance of services, as its surplus increased for the third quarter in a row. Nevertheless, the higher services surplus was partly offset by a decrease in the goods surplus at constant prices. The year-on-year increase in net exports was a result of export growth slightly outpacing import growth (by 0.2 percentage point; see Chart III.3.10). Year-on-year growth in total trade turnover slowed moderately further.

Total exports continued to rise at a similar pace as in the previous three quarters (7.2%). The marginal increase in the export growth rate compared to the previous quarter was due to only very moderately rising growth in external demand in the Czech Republic's major trading partner countries. The faster growth in total exports was fostered by faster growth in goods exports, whereas growth in services exports slowed compared to the previous quarter.

Total imports increased by 7% year on year, their growth slowing for the third consecutive quarter. This slowdown was linked with the evolution of total domestic demand, which slowed noticeably following three quarters of buoyant growth. The slowdown in total imports was due to weaker growth in goods imports and a sharper

28 At 2010 prices, seasonally adjusted.

CHART III.3.7

INVESTMENT BY SECTOR

The buoyant growth in fixed investment was due mostly to general government

(annual percentage changes; contributions in percentage points; constant prices; seasonally unadjusted data)

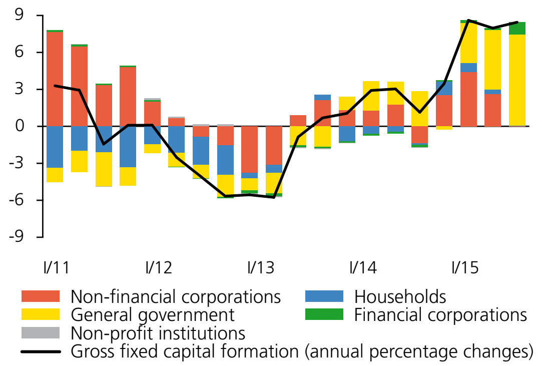


CHART III.3.8

FIXED CAPITAL FORMATION

Investment in buildings and structures was the biggest contributor to the growth in fixed capital

(annual percentage changes; contributions in percentage points; constant prices; seasonally unadjusted data)

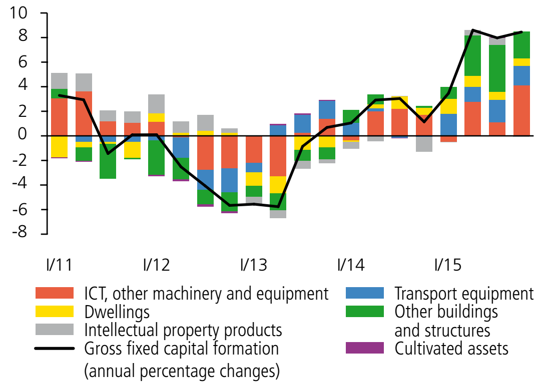


CHART III.3.9

INVESTMENT IN DWELLINGS

Growth in investment in dwellings was unchanged, but growth in the number of housing starts accelerated significantly

(annual percentage changes)

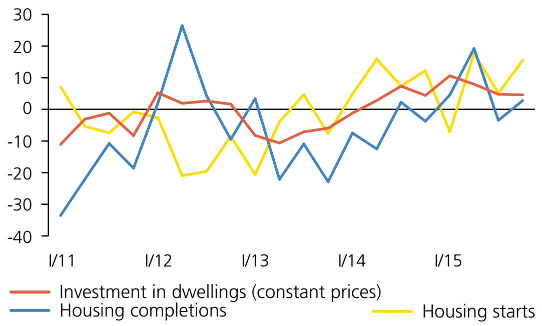


Chart III.3.10

EXPORTS AND IMPORTS

Growth in trade turnover slowed slightly further in 2015 Q4, but net exports increased year on year
(annual changes in percentages and CZK billions; constant prices; seasonally adjusted data)

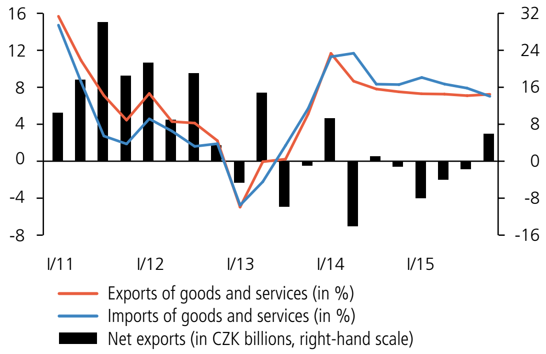


Chart III.3.11

CONTRIBUTIONS OF BRANCHES TO GVA GROWTH

The slowdown in gross value added growth was due above all to a smaller contribution of manufacturing
(annual percentage changes; contributions in percentage points)

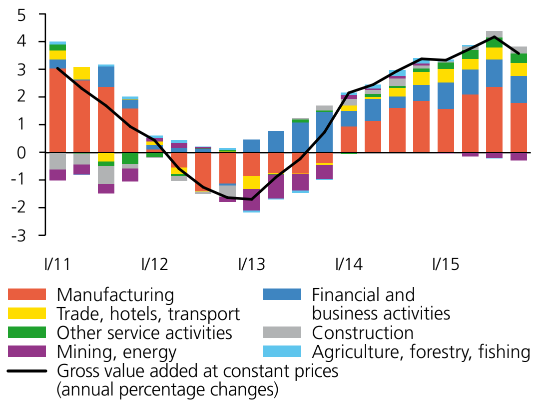
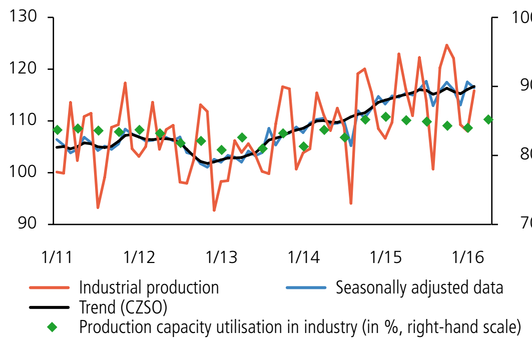


Chart III.3.12

INDUSTRIAL PRODUCTION

Despite a slight slowdown, industrial production and production capacity utilisation remain high
(basic index; year 2010 = 100)



decline in services imports. As regards goods imports, the fastest growth was recorded by imports for final consumption. By contrast, imports for intermediate consumption rose at the slowest pace.

III.3.3 Output

Annual growth in **gross value added** at constant prices[29] slowed in 2015 Q4 (by 0.6 percentage point to 3.6%; see Chart III.3.11). This was due above all to **manufacturing**, whose positive contribution declined in Q4 (by 0.5 percentage point). The decrease in the contribution of manufacturing was probably connected with a slowdown in investment growth and one-off production shortfalls in some branches. By contrast, external demand continued to have a positive effect on gross value added formation.

Turning to the **other sectors of the economy**, gross value added increased year on year in all sectors except mining and energy supply. In addition, the negative contribution of this sector recorded in the previous quarter increased slightly further. By contrast, the contributions of construction, trade, hotels and restaurants and transport to gross value added formation saw a moderate increase.

The slowing growth in gross value added in 2015 Q4 was consistent with a downswing in **industrial production** growth[30] (of 3.3 percentage point to 2.6%), driven chiefly by a slowdown in manufacturing production (to 4.1%). This slowdown was due largely to manufacture of chemicals and chemical products, manufacture of basic metals and fabricated metal products, and repair and installation of machinery and equipment. In terms of use, the annual growth rates of industrial production for investment and for long-term consumption increased (to 6.2% and 9.7% respectively). By contrast, growth in production for intermediate consumption slowed (to 2.8%). Annual growth in industrial production for short-term consumption remained unchanged from Q3 (at 7.5%).

According to the available **monthly indicators**, annual growth in seasonally adjusted industrial production at constant prices accelerated in January (to 3.7%; see Chart III.3.12) but slowed in February (to 1.4%). **Sales from industrial activity**[31] fell in year-on-year terms in January (by 1.7%) but rose again in February (by 2.8%). The renewed overall growth in sales was due again to a strong rise in direct export sales coupled with a slowdown in the annual decline in domestic sales. **New orders** in January and February 2016 suggest a future year-on-year slowdown in industrial production (see Chart III.3.13). There was a sizeable downturn in growth in industrial orders from abroad and, conversely, a moderation in the decline in domestic orders.

29 Seasonally adjusted.
30 Seasonally adjusted.
31 At current prices, seasonally unadjusted.

According to the April results of the CZSO's business survey, the number of businesses in industry reporting insufficient demand as the main **barrier to growth** edged down further (see Chart III.3.14). By contrast, the number of businesses in industry considering a shortage of employees to be the main barrier to growth increased to its highest level since 2011. The number of businesses which see no barrier to their future development also rose slightly. Capacity utilisation in industry increased again in April and continued to fluctuate at high levels.

Growth in **construction output**[32] slowed considerably in 2015 Q4 (by 6.2 percentage points to 1.5%), owing chiefly to the aforementioned unwinding of the effect of drawdown of EU funds. Production growth in civil engineering slowed sharply (by 10.2 percentage points). The decline in building construction output deepened (by 2.8 percentage points). According to the latest monthly indicators, construction output switched to a year-on-year decline in January and February amid still slowing civil engineering and decreasing building construction output. Year-on-year growth in the number of building permits issued was lower in January and February than in the previous period, but the approximate value of these permits recorded a sizeable year-on-year increase (of 45.5% in January and 16.2% in February).

An **international comparison of economic sentiment** suggests a slight decrease in the aggregate confidence indicator for the Czech Republic during February and March 2016. However, the indicator remains high and from a longer-term perspective the decrease represents only a small correction from previous highs (see Chart III.3.15). Similar developments can be observed in Germany and in the EU as a whole.

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

According to the **Cobb-Douglas production function**, potential output grew by 2.4% year on year in 2015 Q4 (see Chart III.3.16). Despite a pronounced increase in economic activity, the output gap remained negative (at -0.9% of potential output; see Chart III.3.17). According to the production function, potential output will grow at a steady year-on-year pace at approximately the current level over the forecast horizon. The effect of rising employment will fade, being offset by an increase in the contribution of aggregate productivity. The contribution of capital will remain stable. The negative output gap will close gradually in 2016, with full closure expected in the first half of 2017.

32 At constant prices, seasonally adjusted.

CHART III.3.13

NEW ORDERS IN INDUSTRY

Growth in new orders in industry slowed further
(annual percentage changes)

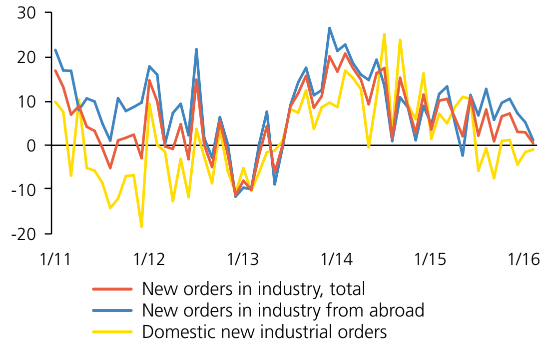


CHART III.3.14

BARRIERS TO GROWTH IN INDUSTRY

The effect of insufficient demand as a barrier to growth in industrial production decreased slightly further, while labour shortages grew in significance
(percentages)

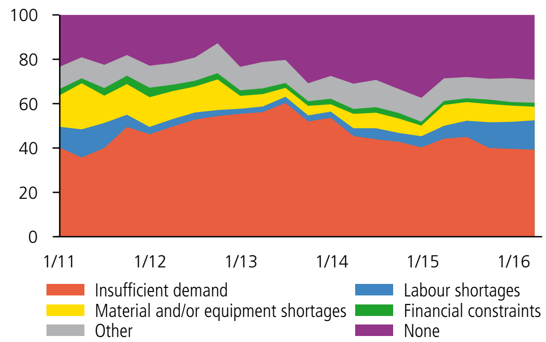


CHART III.3.15

ECONOMIC SENTIMENT

Confidence in the Czech and EU economies remains high despite having fallen slightly
(long-term average = 100; seasonally adjusted data; source: Eurostat)

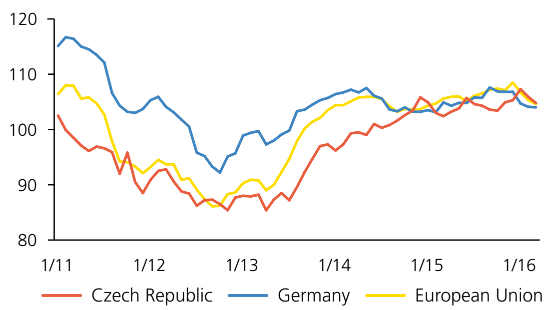


Chart III.3.16

POTENTIAL OUTPUT

The rate of growth of potential output was above 2% in 2015 Q4 according to all the methods used
(annual percentage changes)

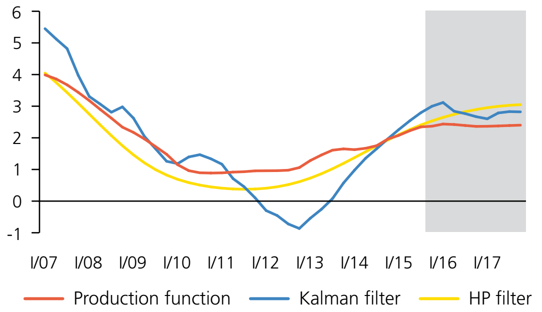
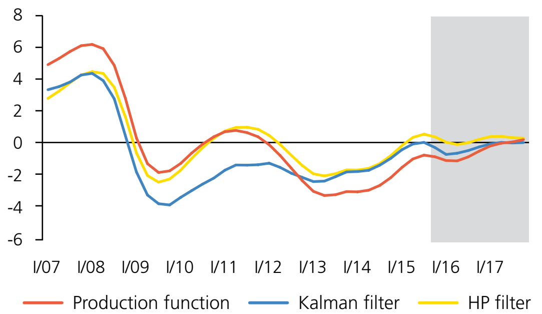


Chart III.3.17

OUTPUT GAP

The Czech economy approached its potential output level
(in % of potential output)



A slightly higher growth rate of potential output (at 2.5%) was indicated for 2015 Q4 by an alternative estimate using the **HP filter**.[33] Under this method, the output gap turned slightly positive last year due to high GDP growth. It will stay close to zero over the forecast horizon.

The **Kalman filter** method suggests even higher growth in potential output in 2015 Q4 (3% year on year). However, the rise in potential output should slow again slightly over the forecast horizon. As in the case of the production function, the output gap will be slightly negative this year and close during 2017.

33 The estimate using the HP filter used coefficient λ = 1,600.

III.4 THE LABOUR MARKET

The labour market situation improved further in 2015 Q4 due to continued strong economic growth. Total employment and the number of employees converted into full-time equivalents picked up significantly further year on year. This, coupled with only a slight increase in the labour force, led to a further decline in the general unemployment rate. The share of unemployed persons declined in 2016 Q1, too. Annual growth in the average nominal wage picked up slightly in 2015 Q4. Amid faster annual growth in seasonally unadjusted economic activity, whole-economy labour productivity increased faster than in the previous quarter and unit labour costs stayed at the previous year's level.

III.4.1 Employment and unemployment

Total employment continued to show robust growth in 2015 Q4 (of just above 1%; see Chart III.4.1). This was due to an increase in the number of employees, while the number of entrepreneurs continued to decrease year on year.

Unlike in the previous quarter, the **secondary sector** was the biggest contributor to the year-on-year growth in employment in 2015 Q4 (see Chart III.4.2). The renewed annual growth in employment in this sector (to the levels observed in the first half of last year) was associated mainly with faster growth in employment in industry, and especially in manufacturing. According to the latest data for January and February, the registered number of employees[34] in industry rose further year on year (by 3.6% in both months). Conversely, the decline in employment in construction saw only a moderation. The registered number of employees in construction subsequently decreased by more than 2% in January and February.

In the **tertiary sector**, growth in employment in market services slowed considerably in 2015 Q4, while growth in employment in non-market services was roughly stable (see Chart II.4.2). Within market services, employment in wholesale and retail trade continued to grow, albeit at a much slower pace. The contribution of transport and storage and professional and scientific activities was also significant. The contribution of non-market services remained at levels close to those observed in the previous quarter due an increase in employment in education and culture, which, however, was largely offset by a deeper decline in the number of persons employed in public administration and defence.

The pronounced growth in employment observed in the **primary sector** in previous quarters slowed significantly. Given its low weight, the contribution of this sector to the growth in total employment was relatively weak.

34 Corporations with 50 employees or more, excluding agency workers.

CHART III.4.1

LABOUR MARKET INDICATORS

Total employment and the number of employees converted into full-time equivalents continued to rise

(annual percentage changes)

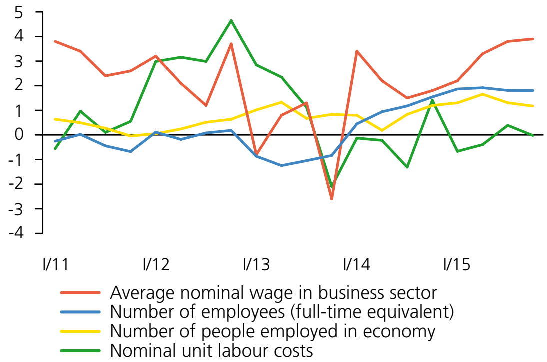


CHART III.4.2

EMPLOYMENT BREAKDOWN BY BRANCHES

Industry made the biggest contribution to the growth in employment, while market services recorded a noticeably smaller contribution

(contributions in percentage points to annual change; selected branches; source: LFS)

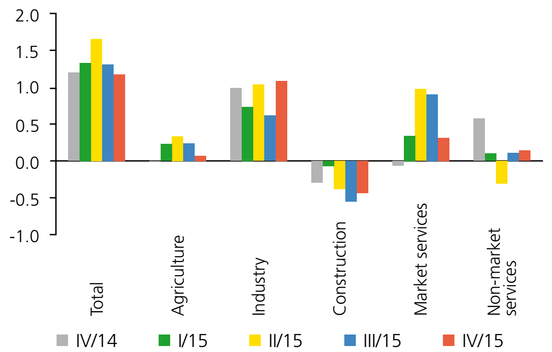


CHART III.4.3

NUMBER OF EMPLOYEES (FULL-TIME EQUIVALENT)

Growth in the number of employees was accompanied by a slightly shorter average number of hours worked per employee

(annual percentage changes; contributions in percentage points)

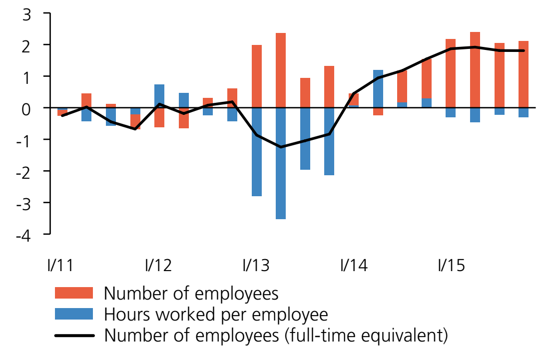


Chart III.4.4

UNEMPLOYMENT INDICATORS

The general unemployment rate decreased further and the share of unemployed persons also went down
(percentages; seasonally adjusted data; source: MLSA, CZSO)

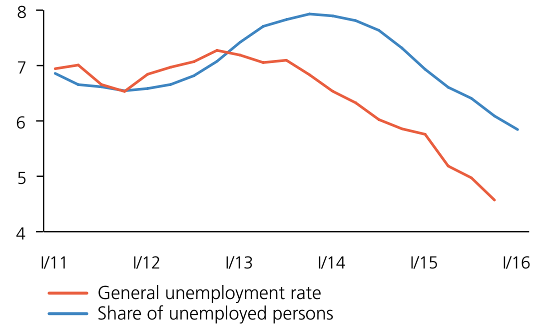


Chart III.4.5

BEVERIDGE CURVE

The previous smooth growth in the number of vacancies halted in March 2016, while the number of unemployed persons continued to decline
(seasonally adjusted numbers in thousands; source: MLSA)

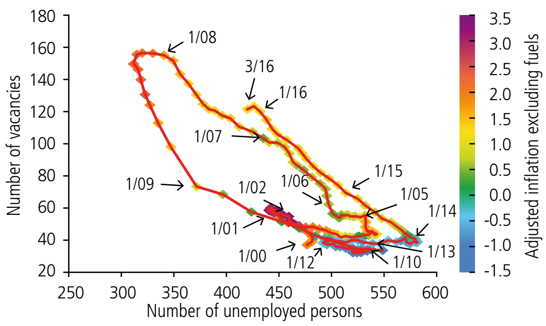
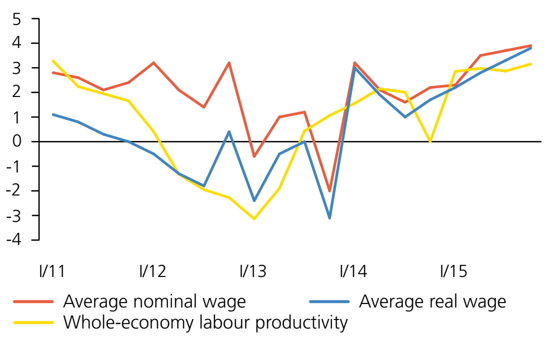


Chart III.4.6

AVERAGE WAGE AND WHOLE-ECONOMY LABOUR PRODUCTIVITY

Labour productivity growth lagged only slightly behind real wage growth
(annual percentage changes)



The robust growth in economic activity in 2015 Q4 resulted in continued annual growth in the **number of employees converted into full-time equivalent** at a rate of only just below 2% (see Chart III.4.3). As in previous quarters, this growth was due mainly to developments in manufacturing. Also significant was the contribution of wholesale and retail trade and administrative and supporting services, where the number of agency workers increased. In the non-business sector, the converted number of employees continued to grow in public administration and defence and in education, whereas in the health and social care sector it has been falling year on year since early 2015. Overall, the growth in the converted number of employees in 2015 Q4 was in line with the previous period and was driven exclusively by growth in the number of employees amid a further slight reduction in average hours worked per employee.

Due to the continued growth in employment, the **general unemployment rate**[35] decreased further in 2015 Q4 (to 4.6%; see Chart III.4.4). According to monthly figures, however, this trend virtually halted in January and February. The **rate of economic activity**[36] was close to a historical high (around 74% after seasonal adjustment) and according to monthly data it rose further in 2016 Q1. The **share of unemployed persons**[37] continued to fall gradually (MLSA; see Chart III.4.4). With the number of available job applicants registered with labour offices continuing to decline and the population in the given age group shrinking slightly, the share of unemployed persons decreased to 5.8% on average in 2016 Q1 (according to seasonally adjusted data).

A long-running improvement in the labour market situation is also indicated by the **Beveridge curve**, which moved in the north-westerly direction for most of the period under review due to cyclicality. According to the March figures, however, growth in the seasonally adjusted number of vacancies came to a halt (see Chart III.4.5).[38] The number of registered unemployed persons nonetheless continued to decline. A comparison with the similar phase of the previous labour market cycle reveals that rather higher adjusted inflation excluding fuels (and, conversely, lower nominal wage growth) is currently being recorded.

35 In the 15–64 age category. Measured by the ILO methodology (LFS). The data are seasonally adjusted.
36 The rate of economic activity is defined as the ratio of employed and unemployed persons to the population in each age category.
37 The share of unemployed persons is the ratio of available job applicants aged 15–64 to the population of the same age.
38 In March 2016, the number of registered unemployed persons was around 80,000 lower year on year after seasonal adjustment, while the number of vacancies offered via labour offices was about 40,000 higher.

III.4.2 Wages and productivity

Annual **average nominal wage growth** increased slightly in 2015 Q4 (to 3.9%; see Chart III.4.6). This was fostered by faster wage growth in both the business and non-business sectors. With annual inflation low, the **average real wage** increased significantly overall (by 3.8%; see Table III.4.1).

Annual average wage growth in the **business sector** went up slightly to 3.9% in 2015 Q4 (see Table III.4.1). In real terms, the average wage rose by 3.8%. The services sector accounted for more than a half of the growth in the average wage. The contribution of industry remained significant, too. The highest wage growth was recorded in the low-weight sector of culture, in accommodation and food services activities (reflecting growth in the minimum wage) and in real estate activities. The average wage in manufacturing continued to rise at the same pace as in the previous quarter (by 3.7%). Based on the January and February data, similar wage growth can be expected on average in 2016 Q1.

Annual average wage growth in the **non-business sector** picked up slightly in 2015 Q4 (to 3.7%), mainly due to increased wage growth in public administration and defence. Conversely, average wage growth slowed in health and social care and education. Owing to low inflation, annual growth in the average real wage in the non-business sector amounted to 3.6% in 2015 Q4 (see Table III.4.1).

Annual growth in **whole-economy labour productivity**[39] picked up slightly in 2015 Q4 and fluctuated close to 3% (see Chart III.4.6). It rose fastest in construction (by 7.8% year on year), where strong growth in value added, due probably to drawdown of EU funds, was accompanied by a decline in employment. Growth also remained solid in industry, despite slackening by comparison with the previous quarter (to 3.3%; see Chart III.4.7). Annual growth in **hourly labour productivity** slowed, mainly on account of faster growth in the number of hours worked. A pronounced increase in the number of hours worked was recorded for industry (especially manufacturing). This resulted in hourly labour productivity in this sector decreasing for the first time in a long time.

Nominal unit labour costs in 2015 Q4 were at the same level as in the previous year, amid identical annual growth in economic activity[40] and the wage bill (see Chart III.4.8). This was a result of continued growth in nominal unit labour costs in services and, on the other hand, a slight decline in nominal unit labour costs in industry and a deeper decline in construction.

39 Total whole-economy productivity is calculated as the ratio of GDP to employment (i.e. including the effect of taxes and subsidies on products). Labour productivity in individual sectors is calculated as the ratio of gross value added to employment (i.e. excluding taxes and subsidies on products).

40 According to seasonally unadjusted data.

TABLE III.4.1

WAGES, PRODUCTIVITY, UNIT LABOUR COSTS

Average wage growth in the business sector increased slightly, while nominal unit labour costs were flat in year-on-year terms

(annual percentage changes)

	I/15	II/15	III/15	IV/15
Average wage in Czech Republic				
nominal	2.3	3.5	3.7	3.9
real	2.2	2.8	3.3	3.8
Average wage in business sector				
nominal	2.2	3.3	3.8	3.9
real	2.1	2.6	3.4	3.8
Average wage in non-business sector				
nominal	3.0	4.1	3.4	3.7
real	2.9	3.4	3.0	3.6
Whole-economy labour productivity	2.9	3.0	2.9	3.2
Nominal unit labour costs	-0.7	-0.4	0.4	0.0

CHART III.4.7

PRODUCTIVITY IN BRANCHES

Labour productivity rose in all the monitored branches, with construction showed the fastest growth

(annual percentage changes)

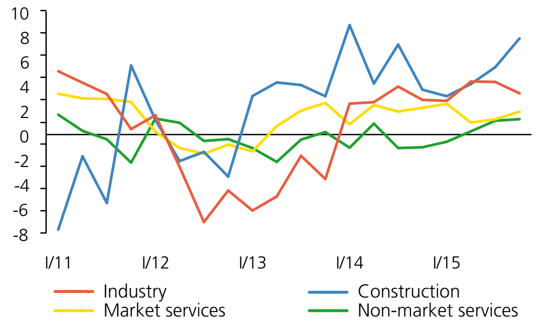
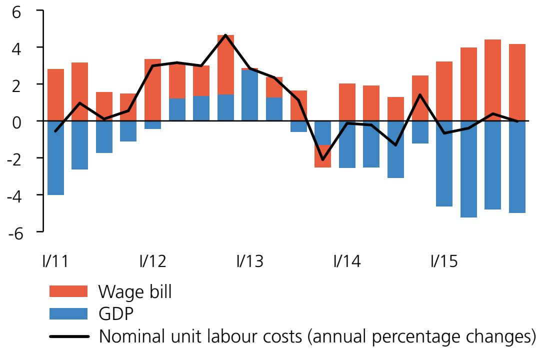


CHART III.4.8

UNIT LABOUR COSTS

Identical annual growth in economic activity and the wage bill led to stable nominal unit labour costs

(annual percentage changes; contributions in percentage points)



BOX 1

Wage growth in 2015 from the CZ-ISCO skills structure perspective

The buoyant growth in economic activity in 2015 was reflected in the situation in the labour market, which recovered significantly further by comparison with the previous year. Increasing demand for labour fostered an upswing in wage growth, which, however, still fell short of the levels expected by the CNB forecast in Inflation Report I/2016. This box analyses the **structure of wage growth** in 2014 and 2015 in terms of the CZ-ISCO skills structure.[41] The aim of the box is to identify to what extent growth in average wages was affected by structural factors. The calculations are based on AEIS data from corporations with 250 employees or more.

Growth in the average wage in the period under review was due most of all to the category of manual workers (see Chart 1). The wage growth in this category was influenced by two factors. Given the lower wages of manual workers, the increase in the minimum wage in January 2015 had an above-average effect in this category.[42] The second factor was strong demand for labour in this category (accounting for around 60% of the vacancies recorded by the Labour Office), which resulted in strong annual growth in wages of new recruits. In addition to manual workers, professionals and technicians contributed significantly to the growth in the average wage in 2015.

More detailed information about wage growth can be obtained from the **average wage distribution**. A comparison of the wage distributions in 2014 and 2015 does not reveal any major changes in structure, with the exception of the lowest income groups, where the increase in the minimum wage had the strongest effect (see Chart 2). Annual growth in the average wage was approximately equal across the other income groups. Nevertheless, a weak structural impact on average wage growth was identified, stemming from differences in employment growth across the CZ-ISCO categories, which reduced wage growth by around 0.2 percentage point in 2015.[43]

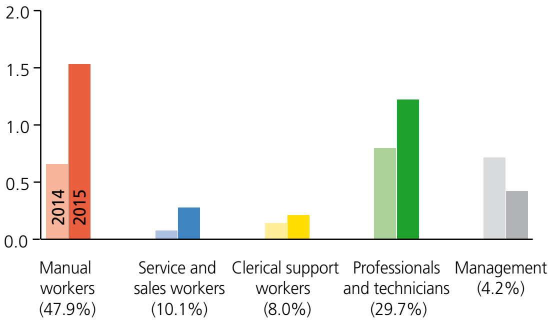
A **comparison with hourly labour productivity** can also be used to **assess wage growth**[44] (see Chart 3). Except for very short episodes, these two variables are correlated in the longer

CHART 1 (BOX)

CONTRIBUTIONS TO AVERAGE WAGE GROWTH

Manual workers and professionals and technicians were the biggest contributors to wage growth

(percentage points; source: AEIS, CNB calculations)



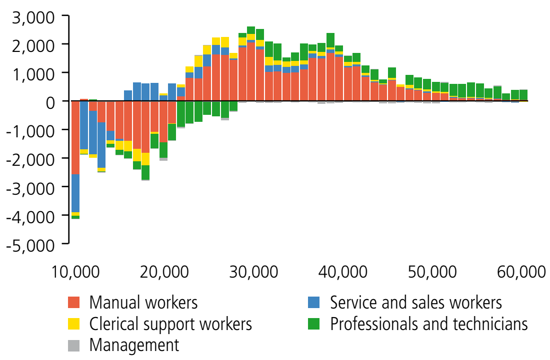
Note: The figures in parentheses below the key refer to the share of the given category of employees in the data sample used.

CHART 2 (BOX)

CHANGE IN WAGE DISTRIBUTION 2014–2015

The individual data indicate an effect of the increase in the minimum wage together with equal wage growth across higher income groups

(vertical axis – change in number of employees, horizontal axis – average wage; source: AEIS, CNB calculations)



Note: The chart shows the difference between the wage distributions as of the end of 2015 and 2014. For clarity of presentation, categories of employees with an average wage exceeding CZK 60,000 are not shown in the chart. A total of 4,121 people left the category of employees with wages below CZK 9,000 as a result of the increase in the minimum wage on January 2015.

41 This box abstracts from developments in the category of skilled agriculture and forestry workers due to the very low share of these workers in the Czech economy.
42 The minimum wage was increased from CZK 8,500 to CZK 9,200 in January 2015.
43 The estimate of this effect is based on an alternative assumption of equal growth in employment in all CZ-ISCO categories.
44 The assessment uses annual growth in the average wage in the business sector adjusted for seasonal effects and tax optimisation.

run. Real wage growth started to lag behind hourly labour productivity in early 2014, but from the second half of 2015 this was offset by faster growth in wages than productivity. The slowdown in hourly labour productivity was due mainly to a sizeable increase in hours worked in industry, which was not accompanied by a similar change in gross value added.[45] This comparison reveals that the growth in real wages given by the combination of low nominal wage growth and low inflation has recently been broadly in line with labour productivity growth.

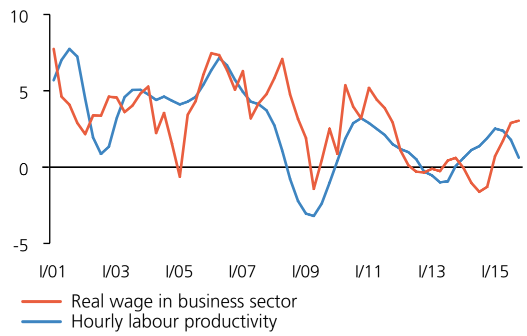
Overall, **average nominal wage growth was not strongly affected by distribution effects** relating to strong growth in employment, but rather reflected the low-inflation environment. Nominal wages therefore cannot be expected to pick up significantly this year if the low-inflation environment persists.

CHART 3 (BOX)

REAL WAGE AND HOURLY LABOUR PRODUCTIVITY GROWTH

Real wage growth has long been correlated with hourly labour productivity growth; the current faster growth in wages than productivity is offsetting the lag observed between the start of 2014 and mid-2015

(annual percentage changes; source: CZSO, CNB calculations)



Note: The average wage in the business sector is adjusted for seasonal effects and wage optimisation associated with a change in overall wage taxation. The nominal wage is deflated using the GDP deflator. HP (1) is applied to both series.

45 Data on economic activity in 2015 are largely affected by higher investment connected with the drawdown of EU funds.

CHART III.5.1

MONETARY AGGREGATES AND LOANS

M3 growth is fluctuating around 9%
(annual percentage rates of growth)

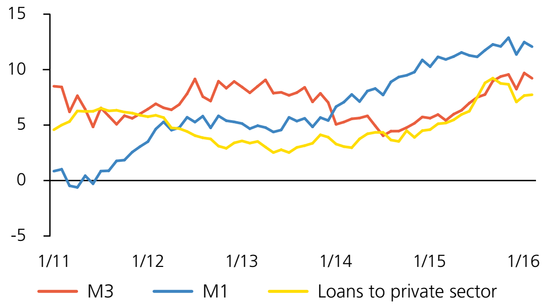


CHART III.5.2

COMPONENTS OF M3

Economic agents are preferring to hold overnight deposits in an environment of low interest rates
(annual flows in CZK billions)

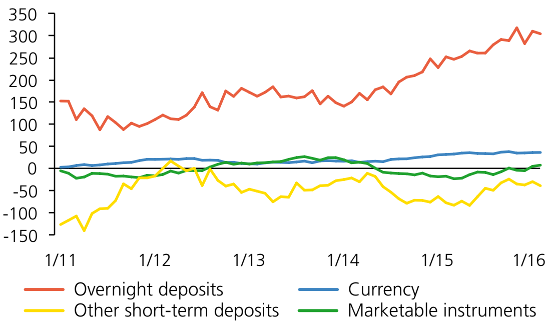
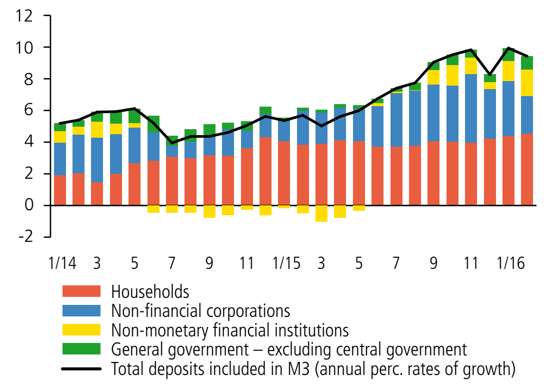


CHART III.5.3

DEPOSIT STRUCTURE OF M3

The growth in M3 at the start of this year was fostered most of all by household deposits; the contribution of deposits of non-financial corporations decreased
(contributions in percentage points; annual percentage rates of growth)



III.5 FINANCIAL AND MONETARY DEVELOPMENTS

M3 growth is fluctuating around 9%. Monetary developments are being affected by continued growth in loans to the private sector accompanied by a rise in net external assets. Growth in loans to non-financial corporations slowed. Growth in loans for house purchase remained high, accompanied by record-low interest rates and a rise in residential property prices. Consumer credit growth accelerated sharply. Growth in the net financial assets of households slowed year on year due to an upswing in growth in their debt. Banks left their credit standards almost unchanged and further eased their credit conditions in 2016 Q1. Client interest rates were close to historical lows amid strong competition, high bank liquidity and record-low bank financing costs. The financial results of non-financial corporations were affected by declining input prices in 2015 Q4. This fostered faster annual growth in their gross operating surplus. Financial market interest rates remain low. The interest rate differentials of the koruna against the euro increased slightly. The koruna appreciated modestly year on year against the euro in 2016 Q1 and was just above the CNB's exchange rate commitment. The koruna recorded no year-on-year change against the dollar.

III.5.1 Money

Following an increase last year, the annual growth rate of **M3** edged down to 9.2% and was thus only slightly higher than the average for 2015 Q4 (see Chart III.5.1). M3 growth is above the level in the euro area, where M3 growth stabilised close to 5%. In the Czech Republic, M3 grew faster than nominal GDP in 2015 Q4. This was reflected in a year-on-year decrease in the velocity of money, as in the previous quarter. M3 growth continues to be fostered predominantly by high M1 growth.

In an environment of low interest rates, economic agents are preferring to hold **overnight deposits** (see Chart III.5.2). Other short-term deposits continued to decline.[46] Turning to sectors, the M3 growth was fostered primarily by deposits of households, whose growth increased further (see Chart III.5.3). By contrast, growth in deposits of non-financial corporations – which had supported the increase in M3 growth last year – slowed. Growth in deposits slowed in manufacturing and wholesale and retail trade but increased in services, real estate and construction.[47] Deposits of non-monetary financial institutions (including insurance companies and pension funds) also increased in an environment of increased risk aversion.

46 Marketable instruments (making up a relatively small part of M3) switched to slight growth as a result of an increase in deposits in repo operations with insurance companies and pension funds amid a continued decrease in deposits in market fund shares/units.

47 The acid-test ratio of non-financial corporations rose in 2015 Q4 to its highest level in several years. This reflected higher growth in short-term assets of corporations (especially loans provided).

Turning to the **creation of money**, the M3 growth reflects growth in loans to the private sector (see Chart III.5.1), which is being accompanied by increased growth in net external assets. This is due mainly to the current account surplus (including the effect of drawdown of EU funds from the previous programme period) and to an inflow of capital linked with purchases of domestic koruna government bonds by non-residents. In conditions of low long-term interest rates, the longer-term financial liabilities of MFIs fell year on year due to a decrease in time deposits accompanied by slower growth in debt securities issued by MFIs, thereby contributing to M3 growth.

III.5.2 Credit

Growth in **loans to the private sector** slowed somewhat in late 2015 and early 2016 (see Chart III.5.4), but remains close to a seven-year high. The slower growth rate of loans reflected slower growth in corporate loans. Credit growth continues to be supported by easy credit and monetary conditions and growth in economic activity.

The April bank lending survey reveals that banks left their **credit standards** almost unchanged in 2016 Q1. Banks continued to ease their credit conditions, most of all in the case of interest margins. Banks also relaxed their non-interest conditions for corporate loans (for example by extending loan maturity). By contrast, the LTV conditions applying to loans for house purchase were tightened. **Demand** for loans to households for house purchase and consumer credit increased across the board in 2016 Q1. A smaller section of the banking market also perceived growth in demand among non-financial corporations.[48] Demand for loans was positively affected by the low interest rates, the prospects for the residential property market and, in the case of corporations, by financing needs for mergers and acquisitions and for corporate and debt restructuring. Conversely, corporate demand for financing of fixed investment declined compared to the previous period.

Annual growth in **loans to non-financial corporations** slowed to around 7% in February 2016 (compared to its peak of about 12% in September 2015). The growth was still driven by loans with longer maturities amid a fall in short-term loans (see Chart III.5.5). Growth in loans in industry slowed.[49] Slower growth in loans was also recorded in wholesale and retail trade. Loans in construction continued to edge down. By contrast, growth in loans in real estate increased amid stable growth in loans in services (see Chart III.5.6). Long-term investment loans expanded at a relatively high pace (of around 14%), accelerating

48 The results of the April bank lending survey are available on the CNB website at http://www.cnb.cz\en\bank_lending_survey\index.html.

49 In manufacturing, the high growth in loans for the manufacture of motor vehicles slowed (to 18%), loans for the manufacture of machinery and equipment recorded a decline and growth in loans for the manufacture of food products and beverages decreased. Following increases last year, loans in the energy sector recorded a year-on-year decline.

CHART III.5.4

LOANS TO THE PRIVATE SECTOR

Growth in loans to the private sector slowed slightly in late 2015 and early 2016 as a result of lower growth in loans to corporations

(contributions in percentage points; annual percentage rates of growth)

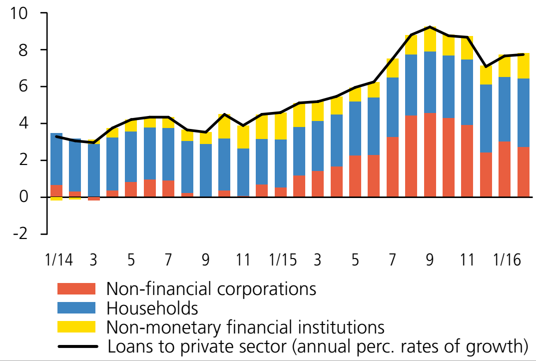


CHART III.5.5

LOANS TO NON-FINANCIAL CORPORATIONS

The growth in corporate loans is still being driven by long-term loans; short-term loans recorded a year-on-year fall

(annual percentage rates of growth)

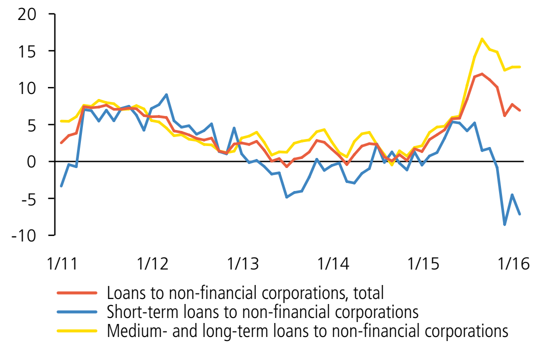


CHART III.5.6

LOANS TO NON-FINANCIAL CORPORATIONS ACCORDING TO SECTOR OF ACTIVITY

The growth in loans is concentrated in real estate activities and services; in industry it slowed

(contributions in percentage points; annual percentage changes)

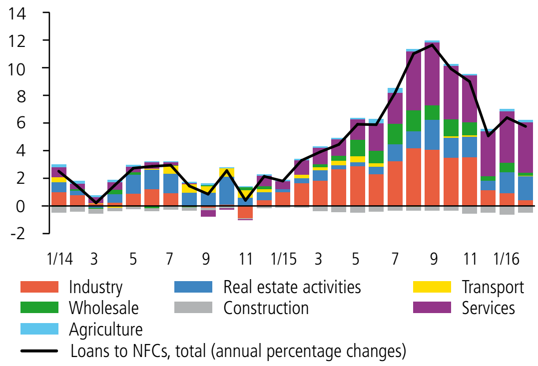


CHART III.5.7

LOANS TO HOUSEHOLDS

Growth in loans to households remains elevated as a result of growth in loans for house purchase and accelerating growth in consumer credit
(annual percentage rates of growth)

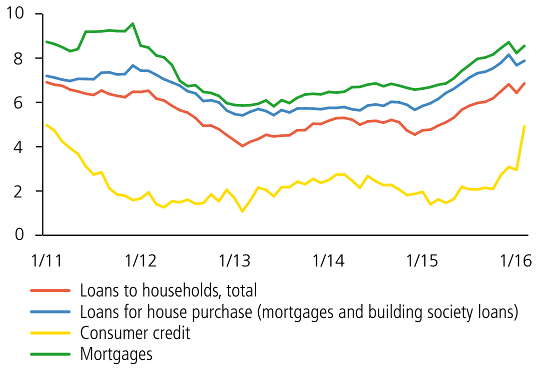


CHART III.5.8

NEW LOANS TO HOUSEHOLDS

Growth in new mortgages remains high despite having slackening somewhat recently; by contrast, growth in new consumer credit surged
(annual percentage changes, 3M moving averages)

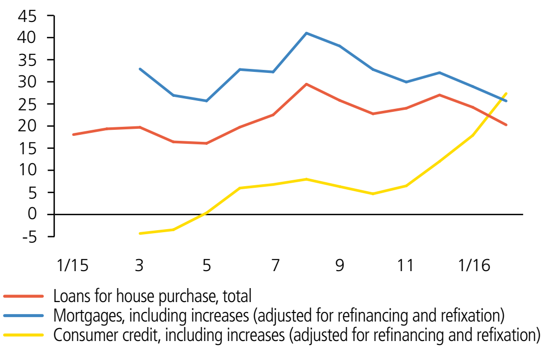
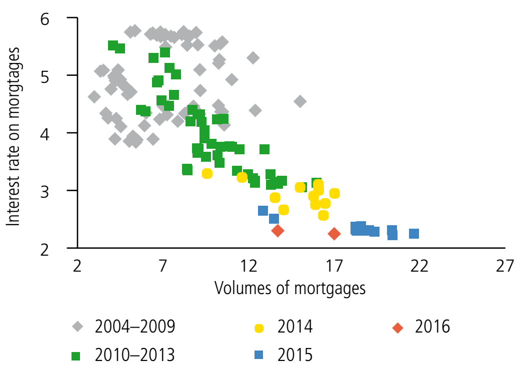


CHART III.5.9

NEW MORTGAGES

The evolution of new mortgages recently is consistent with the record-low interest rates
(horizontal axis – monthly volumes of new mortgages in CZK billions; vertical axis – interest rates on new mortgages in %)



in real estate and services in Q1 while slowing in most other sectors. As regards the currency structure, koruna loans account for more than two-thirds of the credit growth. Increased interest in foreign currency loans persists, although their growth slowed. New corporate loans decreased for the third consecutive month.

Total **external financing of corporations**, as expressed by the annual flow of financial transactions in the area of loans, bonds issued and quoted shares, grew more slowly in 2014 Q4 than in the previous period. This was due to lower growth in loans and a deeper decline in issuance of debt securities. Loans drawn by corporations from abroad in 2015 Q4 recorded a year-on-year decline of almost 18%, reflecting a decrease in loans drawn from foreign banks and direct investment loans obtained from parent companies. On the other hand, loans to corporations from non-banks increased by around 13% year on year. This again mainly involved financial leasing. According to financial accounts data, the total debt of non-financial corporations edged down to 60% of GDP in 2015 Q4 (with loans received and bonds issued accounting for 52% and 8% respectively).

The growth rate of **loans to households** increased last year. Following a slowdown in January 2016, it rose again in February to around 7% (see Chart III.5.7). The growth in loans to households is due largely to **loans for house purchase**, accompanied recently by a pick-up in consumer credit. Mortgage loans rose by around 9% year on year in February. New mortgage loans (adjusted for refinancing and refixation) grew at a high pace (see Chart III.5.8), but their growth fell short of the highs observed last year (35% in February 2016 compared to around 50% last year). The large monthly volumes of new mortgage loans have recently been in line with record-low interest rates (see Chart III.5.9). In 2016 Q1, banks perceived a broad-based increase in demand for house purchase loans, which exceeded their expectations at the end of last year. Demand is being affected by expectations of continued growth in house prices, the low level of interest rates and by improved consumer confidence. According to current Fincentrum Hypoindex data, the volumes and numbers of new mortgage loans increased month on month in March 2016, but in year-on-year terms growth in the volume of mortgages slowed and the number of mortgages fell slightly.

The annual growth rate of **consumer credit** has recently accelerated, reaching 4.9% in February 2016 (see Chart III.5.7). Growth in new loans surged (see Chart III.5.8). Growth in household demand for consumer credit is being affected by improved consumer confidence (accompanied by an increase in income and a decline in unemployment), rising consumption expenditure and falling interest rates in this credit market segment. Banks expect broad-based growth in demand in 2016 Q2, too.

Total household debt increased further to around 66% of annual aggregate disposable income in 2015 Q4 (compared to 64% in the same period last year). This reflected higher growth in households' financial liabilities than their aggregate annual gross disposable income. Turning to the financial liabilities of households, the share of loans increased to around 60% of income, especially in the case of house purchase loans (the share of loans from non-bank intermediaries stood at 2.5%). The net bank interest burden on Czech households (comprising interest expenses and income on bank loans and deposits) decreased gradually following an increase in the first half of last year.

III.5.3 Interest rates

Monetary policy interest rates

The **monetary policy decision-making** of the CNB Bank Board in 2016 Q1 was based on the macroeconomic forecast published in the previous Inflation Report. The forecast assumed that market interest rates would be flat at a very low level and the exchange rate would be used as a monetary policy instrument until the end of 2016. Consistent with the forecast was an increase in interest rates in 2017.

At its **February meeting**, the Bank Board decided unanimously to keep **key interest rates** unchanged at their current level, i.e. at technical zero[50] (see Chart III.5.10). The Board also decided to continue using the **exchange rate as an additional instrument** for easing the monetary conditions. It also confirmed the CNB's commitment to intervene on the foreign exchange market if needed to weaken the koruna against the euro so that the exchange rate of the koruna is kept close to CZK 27 to the euro. The Bank Board assessed the risks to the forecast at the monetary policy horizon as being broadly balanced. The evolution of oil prices was a significant source of uncertainty in both directions. The Bank Board stated that the Czech National Bank would not discontinue the use of the exchange rate as a monetary policy instrument before 2017. The Bank Board considered it likely that the commitment would be discontinued in the first half of 2017.

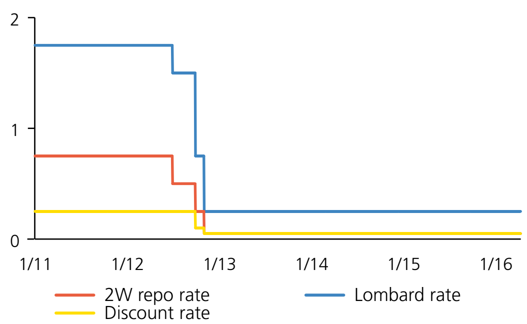
At its **meeting in March**, the Bank Board again decided unanimously to leave key interest rates unchanged. At the same time, it confirmed the above exchange rate commitment. The balance of risks to the previous inflation forecast at the monetary policy horizon was assessed as being slightly anti-inflationary. The Bank Board stated again that the CNB would not discontinue the use of the exchange rate as a monetary policy instrument before 2017. In view of the slightly anti-inflationary balance of risks, the Bank Board considered it likely that the commitment would be discontinued nearer to mid-2017.

At its **monetary policy meeting on 5 May 2016**, the Bank Board decided unanimously to keep interest rates unchanged at technical zero. The Bank Board also decided to continue using the exchange rate as an additional instrument for easing the monetary conditions

CHART III.5.10

CNB KEY RATES

The CNB left its key interest rates at technical zero in 2016 Q1
(percentages)



50 The two-week repo rate and the discount rate were thus set at 0.05% and the Lombard rate at 0.25% with effect from 2 November 2012.

and confirmed the CNB's commitment to intervene on the foreign exchange market if needed to weaken the koruna against the euro so that the exchange rate of the koruna is kept close to CZK 27 to the euro. A need to maintain expansionary monetary conditions at least to the current extent persists. The Bank Board assessed the risks to the forecast at the monetary policy horizon as being slightly anti-inflationary. Producer price inflation in the euro area is acting in this direction. In addition, the risk of undesirable second-round effects of foreign cost factors is rising as the duration of the period of very low inflation increases. In this context, the Bank Board pointed out that the CNB stands ready to shift the exchange rate commitment to a weaker level if there were to be a systematic decrease in inflation expectations manifesting itself in nominal variables, especially wages. The Bank Board stated that the Czech National Bank will not discontinue the use of the exchange rate as a monetary policy instrument before 2017. The Bank Board considers it likely that the commitment will be discontinued in mid-2017.

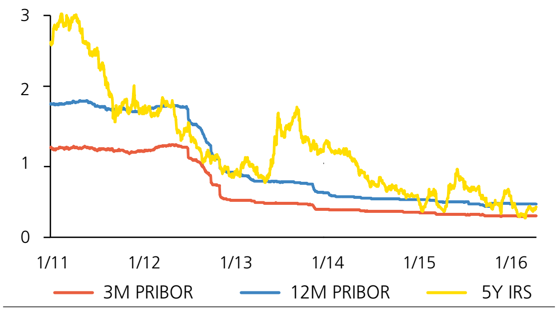
Financial market interest rates

PRIBOR rates remained at historical lows at all maturities in 2016 Q1 (see Chart III.5.11). They thus reflected the setting of the CNB's key interest rates at technical zero. The average 3M PRIBOR remained stable at 0.3% in line with the assumption of the previous forecast. The money market premium, as measured by the spread between the 3M PRIBOR and the 2W repo rate, remained at just below 0.3 percentage point.

Chart III.5.11

MARKET INTEREST RATES

Money market interest rates stayed at historical lows, while IRS rates with longer maturities mostly went down
(percentages)



FRA derivative rates have been declining gradually since the start of the year, even after the CNB Board meeting in February. This meant a shift close to zero at longer maturities (FRA 6*9, FRA 9*12). This was due to information that the Bank Board had discussed the possibility of introducing negative interest rates. At the same time, the financial market was expecting the ECB to move its deposit interest rate further into negative territory at its March meeting, a move that would further widen the interest rate differential between domestic and euro area rates. Following the ECB meeting (on 10 March), domestic FRA rates corrected back in response to information issued at Mario Draghi's press conference and probably also to follow-up statements made by some CNB board members that the outcome of the ECB meeting had not changed the situation for the CNB's monetary-policy considerations for the time being. The market outlook for 3M rates according to end-April FRA quotations implies a decline in 3M PRIBOR rates of around 0.1 percentage point at the one-year horizon. The expected market rates are thus negligibly below the interest rate path assumed in the new CNB forecast over this entire horizon (see section II).

Short-term **interest rate differentials** vis-à-vis both major world currencies (PRIBOR/CZK-EURIBOR/EUR and LIBOR/USD) reflected opposite movements in money markets in the euro area and the USA (due to opposite monetary policy developments in these economies) amid interest rate stability in the Czech Republic. The differentials vis-à-vis euro rates increased marginally, while those vis-à-vis the dollar became more negative (see Chart III.5.12). The 3M PRIBOR–3M EURIBOR differential was 0.5 percentage point on average in 2016 Q1 and was at the same level at the end of April.

Domestic **interest rates with longer maturities** moved mostly in line with foreign rates. The latter had been falling since early January, when financial markets saw a global sell-off of risky assets. This was a response to published data confirming an economic slowdown in China. The global market response also included a depreciation of the renminbi, a stock market crash and a further decline in oil prices below USD 30 a barrel. Other impulses included the reduction in the ECB's key rates and the extension of its asset purchase programme. Although the measures announced by the ECB at the start of March were more extensive than expected by the market, the market assessed the information given at the press conference (Mario Draghi said there was no further room for lowering rates) as a disappointment and interest rates went up again. Turning to domestic factors, IRS rates and bond yields (especially at shorter maturities) continued to be affected by high koruna liquidity in the banking sector due to foreign exchange interventions and the conversion of euros from EU funds by general government via the CNB. Overall, domestic IRS rates thus declined by as much as 0.4 percentage point compared to the start of January (see Chart III.5.11). However, government bond yields in the secondary market decreased only at longer maturities and moved upwards at the shorter end. The slope of the government bond yield curve thus became less positive, but the curve remained at slightly negative levels at its shorter end (see Chart III.5.13).

Twelve auctions of fixed coupon bonds and two auctions of variable coupon bonds have been held on the primary **government bond market** since the start of this year. The total volume of bonds issued was CZK 75.4 billion.[51] Demand exceeded supply in almost all the auctions; the average bid-to-cover ratio was 2.3. The Ministry of Finance took advantage of the favourable market conditions and sold bonds at shorter maturities with a negative yield. Demand from foreign investors in the auctions remained high and was focused mainly on bonds with shorter maturities. The share of non-residents in total holdings of medium- and long-term government bonds thus increased to around 25% at the end of March 2016.[52]

Client interest rates

Client interest rates on new loans in nominal terms remained close to record-low levels in 2016 Q1 (see Chart III.5.14). Rates on corporate loans and loans to households for house purchase have fallen by 0.3 percentage point and 0.4 percentage point respectively since the start of 2015. They are currently being affected mainly by

51 The Czech Republic's Funding and Debt Management Strategy for 2016 assumes issues of medium- and long-term government bonds of at least CZK 150 billion.

52 The share of non-residents in total holdings of medium- and long-term government bonds has stood at around 14% on average in recent years.

CHART III.5.12

INTEREST RATE DIFFERENTIALS

Interest rate differentials vis-à-vis the euro increased marginally, while those vis-à-vis the dollar became more negative
(percentage points)

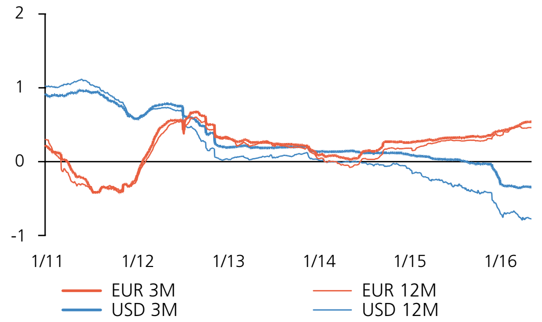


CHART III.5.13

GOVERNMENT BOND YIELD CURVE

Government bond yields moved upwards at the shortest maturities, but those maturities remain at slightly negative levels
(percentages)

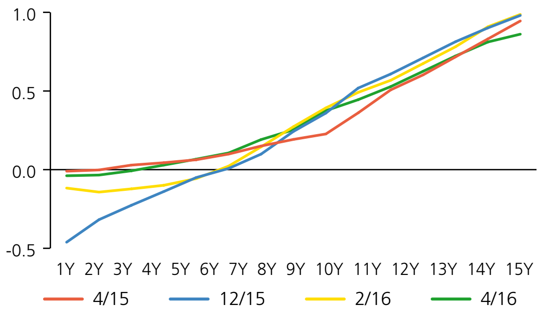


CHART III.5.14

CLIENT INTEREST RATES IN THE CZECH REPUBLIC AND THE EURO AREA

Interest rates on loans to non-financial corporations and loans to households for house purchase are close to record lows in both the Czech Republic and the euro area
(cost of borrowing indicators; new business; percentages)

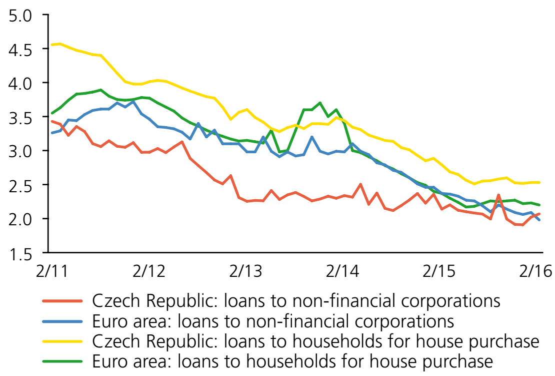


Chart III.5.15

INTEREST RATES ON LOANS TO CORPORATIONS

Interest rates on domestic koruna loans to corporations increased only slightly and are marginally higher than rates on euro loans

(new business; percentages)

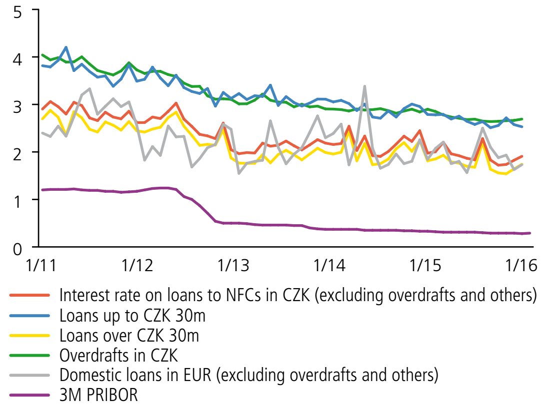


Chart III.5.16

INTEREST RATES ON LOANS TO HOUSEHOLDS

Interest rates on loans for house purchase were essentially unchanged at the start of this year amid a slight decrease in the mortgage rate; the rate on consumer credit continued to fall

(new business; percentages)

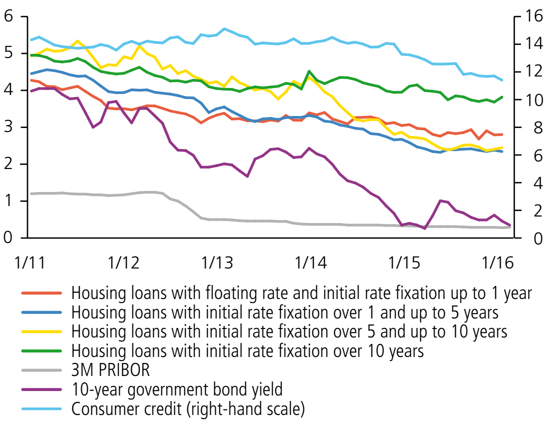
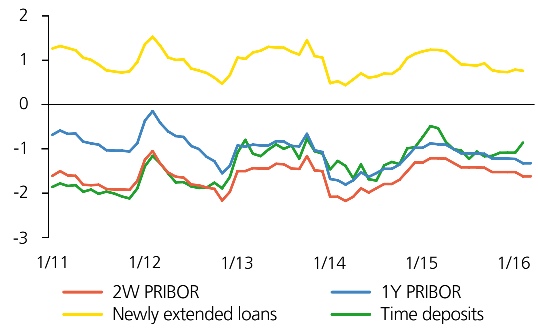


Chart III.5.17

EX ANTE REAL INTEREST RATES

Ex ante real interest rates on new loans were just below 1% on average, while real rates on deposits remained negative

(percentages)



strong competition, high bank liquidity and low financing costs. Ten-year government bond yields dropped further to 0.35%, and two-year and five-year bond yields stayed slightly negative (at -0.17% and -0.1% respectively in March 2016). Bond yields edged up in April due to the situation in global markets. Interest rates on new time deposits were flat or slightly falling, averaging 0.9%. Rates on new loans in the euro area were stable, following decreases in the past four years.

The **interest rate on loans to non-financial corporations** increased only slightly in 2016 Q1, reaching 2.1% in February 2016 as expressed by the cost-of-borrowing indicator. This reflected a rise in rates on large loans with short fixations (see Chart III.5.15). By contrast, rates on smaller loans (of up to CZK 30 million) decreased slightly further. The spread between rates on small and large loans declined, showing the largest drop for very small loans (of up to CZK 7.5 million) in the longer term. The rate on new euro loans is currently slightly lower than that on koruna loans.

Turning to households, the **interest rate on loans for house purchase** stayed at 2.5% in February 2016. The rate on mortgage loans edged down to 2.2%. The rate on house purchase loans fixed for over one year and up to five years, which account for around 66% of all new house purchase loans, fell slightly to 2.3% (see Chart III.5.16). The rate on loans fixed for over five years and up to ten years remained at 2.4%. The share of loans with this fixation period has recently increased to around 20%. The rates on mortgage loans with those two fixation periods fell slightly further to 2% in February. This reflected, among other things, growing competition before the expected entry into force/effect of the new Consumer Credit Act and a decline in the price of long-term bank funding sources. According to Fincentrum Hypoindex, interest rates on mortgage loans decreased slightly further in March. According to the bank lending survey, banks expect credit standards to tighten in this segment of the credit market in 2016 Q2.

The **interest rate on consumer credit** continued to fall in February (see Chart III.5.16). In addition to competition, it was affected by favourable risk perceptions regarding the overall economic situation and the creditworthiness of clients. However, the consumer credit rate remains well above that in the euro area.

Real client interest rates[53] were little changed amid a slight rise in expected inflation. Real rates on new loans averaged 0.8% in February 2016 (see Chart III.5.17). The real interest rate on corporate loans was only slightly above zero and that on house purchase loans for households was 0.7% (only 0.4% for mortgage loans). Real rates on time deposits remained negative close to -1%.

53 Ex ante real interest rates: nominal interest rates are deflated by the consumer price inflation expected by financial market analysts at the one-year horizon.

III.5.4 The exchange rate

The **exchange rate of the koruna against the euro** fluctuated within a narrow range just above the CNB's exchange rate commitment in 2016 Q1 (and the first half of April). The average exchange rate was CZK 27.04 to the euro (in line with the forecast). This represented a year-on-year appreciation of the koruna of 2.1% (see Chart III.5.18).

The appreciation pressure on the koruna (which had re-emerged in November 2015) continued into January and, to a lesser extent, also February. It was linked with the better economic situation in the Czech Republic than in the euro area and the easier monetary policy of the ECB. The appreciation pressure on the koruna was subsequently alleviated by information that the CNB Bank Board had discussed the option of introducing negative monetary policy interest rates in the Czech Republic and extending the CNB's exchange rate commitment until 2017. Lower-than-expected inflation in the Czech Republic (signalling a later exit from the exchange rate commitment) and an only modest cut in euro area deposit rates (by 0.1 percentage point) probably also had an effect. The effect was magnified by Mario Draghi's subsequent statement that this was probably the last rate cut. The CNB spent a total of CZK 75 billion **defending its exchange rate commitment** in 2016 Q1, mostly in January. In March, the CNB made no interventions in the foreign exchange market.

The average **exchange rate of the koruna against the dollar** was CZK 24.5 in 2016 Q1. This represents year-on-year stability and a quarter-on-quarter appreciation of 0.7%. The koruna-dollar exchange rate during 2016 Q1 reflected the rate of the dollar against the euro. In the relationship between these currencies, the almost two-year appreciation trend of the US dollar (from USD 1.38 to 1.08 to the euro) halted and a slight correction (to USD 1.13 to the euro) followed. This was a result of changes in financial market expectations regarding future interest rates in the USA and the euro area, which were significantly affected by the communications of their central banks. Financial markets are no longer expecting the ECB deposit rate to go down any further. At the same time, expectations regarding the speed and extent of future growth of monetary policy rates in the USA have decreased significantly. The koruna-dollar exchange rate was around CZK 24.8 to the dollar shortly after mid-April.

III.5.5 Economic results of non-financial corporations

The **financial results of non-financial corporations with 50 employees or more**[54] were significantly affected in 2015 Q4 by falling input prices, which were mirrored in slowing growth in intermediate consumption. Thanks to this, annual growth in book value added

54 The segment of non-financial corporations with 50 employees or more consisted of more than 9,000 corporations at the end of 2015 Q4.

Chart III.5.18

CZK/EUR AND CZK/USD EXCHANGE RATES

The koruna was only just above the CNB's exchange rate commitment level in 2016 Q1; the exchange rate against the dollar was unchanged in year-on-year comparison

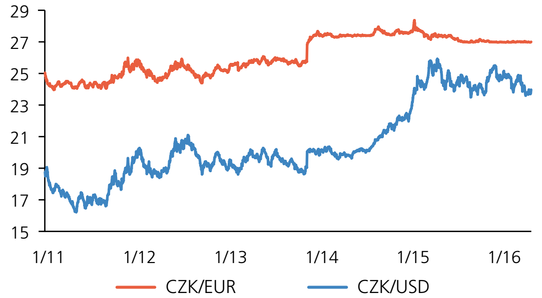


Chart III.5.19

KEY FINANCIAL INDICATORS

Growth in the main financial indicators of non-financial corporations was supported by falling input prices in 2015 Q4
(annual percentage changes)

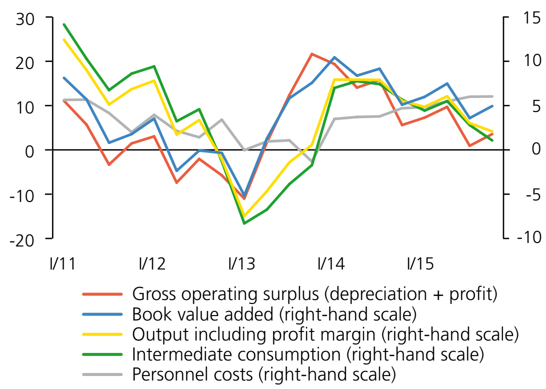


Table III.5.1

PERFORMANCE INDICATORS OF NON-FINANCIAL CORPORATIONS

The material cost-output ratio fell year on year, while the personnel cost-output ratio continued to rise

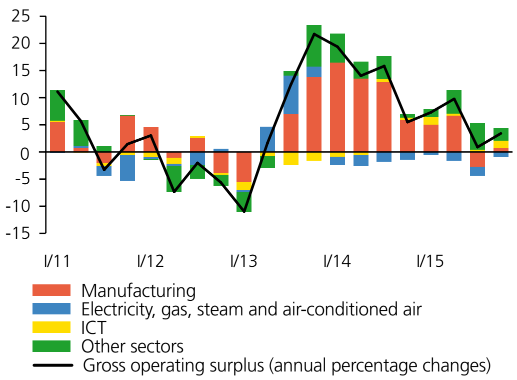
	2014 Q4 CZK billions	2015 Q4 CZK billions	Annual percentage changes
Sales	2,106.5	2,151.6	2.1
Output incl. profit margin	1,559.3	1,591.8	2.1
Intermediate consumption	1,150.8	1,163.1	1.1
Book value added	408.5	428.7	4.9
Personnel costs	228.8	242.6	6.0
Gross operating surplus	179.7	186.1	3.6
	%	**%**	**Annual changes in pp**
Material cost-output ratio	73.8	73.1	-0.7
Ratio of book value added to output	26.2	26.9	0.7
Personnel cost-output ratio	14.7	15.2	0.6
Ratio of personnel costs to book value added	56.0	56.6	0.6
Ratio of gross operating surplus to book value added	44.0	43.4	-0.6

CHART III.5.20

OPERATING PROFIT BY SECTOR

The contribution of manufacturing to growth in gross operating surplus turned slightly positive

(annual percentage changes; contributions in percentage points)



accelerated to 4.9% (see Chart III.5.19 and Table III.5.1), although annual output growth still continued to slow.[55] The slowing growth in output was due primarily to a slowdown in annual growth in sales, which account for a significant part of the output item. Annual growth in gross operating surplus accelerated compared to the previous quarter (to 3.6%) amid a constant rate of growth in personnel costs.

Similar developments were observed for the narrower category of **non-financial corporations with 250 employees or more**.[56] They also recorded a year-on-year drop in the material cost-output ratio,[57] albeit to a smaller extent. Growth in book value added was therefore rather more moderate for large corporations (4.5%). Growth in their gross operating surplus recorded a larger difference and was 2.1 percentage points lower than in the broader category of corporations. This was chiefly due to a faster rise in personnel costs, and particularly in the wage bill, which in turn was related to faster year-on-year growth in employment in large corporations.

From the sectoral perspective, the acceleration of annual growth in gross operating surplus was due mainly to manufacturing, whose contribution was slightly positive in 2015 Q4 – in contrast to its negative contribution in the previous quarter (see Chart III.5.20). The energy supply industry continued to contribute negatively to the growth in gross operating surplus. The aggregate contribution of the other sectors of the economy was positive.

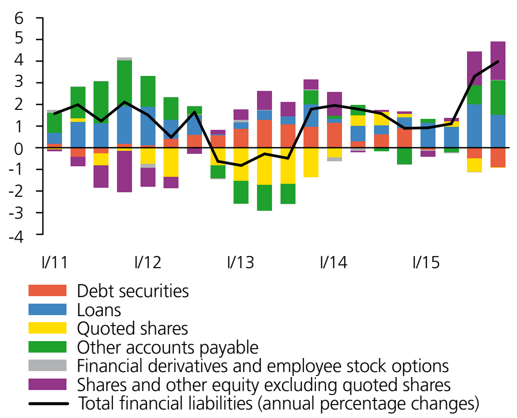
III.5.6 Financial position of corporations and households

CHART III.5.21

FINANCIAL LIABILITIES OF NON-FINANCIAL CORPORATIONS

The further acceleration in growth in corporate financial liabilities in Q4 was due mainly to trade credits and advances under other liabilities and to shares and other equity excluding quoted shares

(annual percentage changes; contributions in percentage points)



Annual growth in the **financial liabilities of non-financial corporations** accelerated further to 4% in 2015 Q4 (see Chart III.5.21). This was due primarily to shares and other equity excluding quoted shares and other liabilities, especially trade credits and advances. Loans made a positive but reduced contribution. By contrast, the negative contribution of debt securities increased. Annual growth in the **financial assets of non-financial corporations** was similar to that recorded in the previous quarter (5.5%). Within financial assets, currency and deposits, shares and loans increased. Overall, the negative net financial position of corporations widened for the first time since 2012 Q4.

The main **trends in the balance sheets of non-financial corporations** are reflected in their financial indicators. The acid-test ratio[58] of corporations rose again (to 216% in 2015 Q4) after a fall in

55 Both output and intermediate consumption are recorded in money units.

56 The segment of non-financial corporations with 250 employees or more consisted of more than 1,700 corporations at the end of 2015 Q4.

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

58 The asset-test ratio is a ratio with currency in circulation, transferable deposits, short-term debt securities held and short-term loans provided as the numerator and short-term debt securities issued and short-term loans accepted as the denominator.

the previous quarter. By contrast, corporate solvency[59] edged down to 115%. Growth in the market-based financing ratio[60] also declined (to 8.8%), mainly because of stagnant issuing activity.

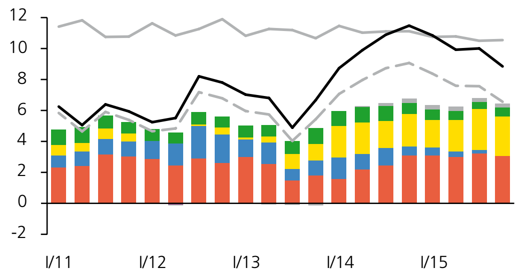
Annual growth in the **net financial assets of households** slowed to 6.6% in 2015 Q4 (see Chart III.5.22), owing to faster growth in their financial liabilities. Growth in net financial assets relative to annual gross disposable household income decreased slightly (to 8.8%), reflecting faster growth in long-term loans – the dominant form of household debt – in the past few quarters. Growth in **households' financial assets** meanwhile slowed slightly (to 6.4%). This was due to modest decreases in the contributions of both its main categories, i.e. currency and deposits and shares and other equity. Rising investment in investment fund shares and units is becoming a significant driver of growth in shares and other equity from a longer-term perspective. By contrast, the previously significant contribution of debt securities has faded away in recent quarters, primarily because of the termination of issuance of government saving bonds. Annual growth in the **financial liabilities of households** increased by 1 percentage point to 6.1% compared to the previous quarter, mainly as a result of sharply accelerating growth in long-term loans.

CHART III.5.22

STRUCTURE OF HOUSEHOLD FINANCIAL ASSETS

Growth in the net financial assets of households slowed further, owing to faster growth in their financial liabilities

(contributions in percentage points; annual percentage changes and percentage ratios)



III.5.7 The property market

Transaction prices of apartments increased further at the end of 2015. According to the CZSO House Price Index, they rose by 4.5% year on year in 2015 Q4 (see Chart III.5.23). This represents a medium-high rate of growth in the EU context (see Chart 1 (BOX)).

According to CZSO survey estimates, **transaction prices of older apartments**, which are considered to be the most cyclical segment of the residential property market, increased by 6.7% year on year on average in the Czech Republic as a whole (see Chart III.5.23). Their rate of growth outside Prague was higher than in the capital for the second consecutive quarter[61] (7.4% compared to 4.6% year on year). Since their cyclical trough transaction prices of apartments have recorded cumulative growth of 12% in Prague and 14% in the rest of the Czech Republic.[62]

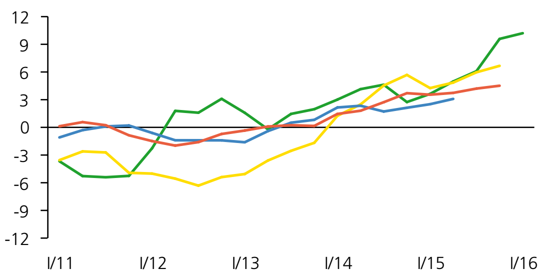
The transaction price estimates reveal that selling prices of apartments were rising at a slower rate than asking prices at the end of 2015.[63] In Prague this led to a further increase in the already large difference

CHART III.5.23

TRANSACTION AND ASKING PRICES OF HOUSING

Selling prices of apartments are going up, but asking prices are rising faster

(annual percentage changes)



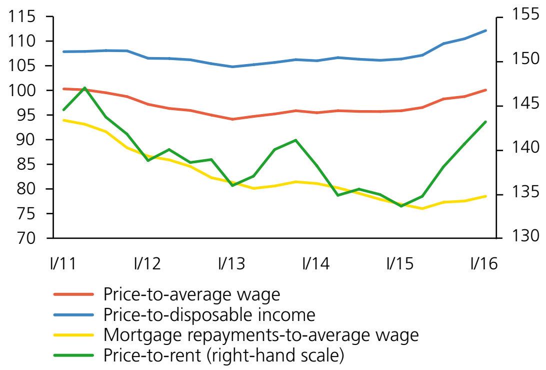
59 Corporate solvency is the ratio of total financial assets to liabilities excluding shares and other equity.
60 The market-based financing ratio is the ratio of bonds and quoted shares issued to total liabilities.
61 The previous CZSO estimates of transaction prices of older apartments in 2015 Q3 were revised downwards for Prague and upwards for the rest of the Czech Republic.
62 Transaction prices in Prague and in the rest of the Czech Republic last reached historical lows in 2012 Q3 and 2013 Q4 respectively.
63 See Inflation Report I/2016.

CHART III.5.24

APARTMENT PRICE SUSTAINABILITY INDICATORS

The indicators of affordability and perceived profitability of buying an apartment are deteriorating, and so now is the indicator for buying an apartment on credit

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



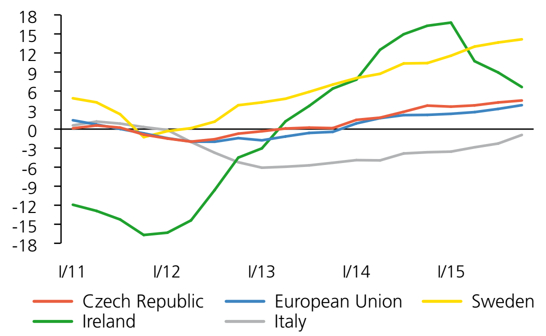
a) For the mortgage repayments-to-average wage ratio 2004–2007 = 100 due to limited availability of data on interest rates on new loans for house purchase.

CHART 1 (BOX)

HOUSE PRICES IN SELECTED EU COUNTRIES

House prices in the Czech Republic are rising slightly faster than on average in the EU, where, however, the growth is very mixed

(annual percentage changes; source: Eurostat)



between the two types of prices.[64] Moreover, annual growth in **asking prices of apartments** in Prague accelerated further to 10.2% in 2016 Q1. In the rest of the Czech Republic they continued to rise at a pace of just over 10%.

According to estimates, the growth in apartment prices in 2016 Q1 was reflected in a deterioration of the **indicators of affordability and the perceived profitability of purchasing an apartment**[65] (see Chart III.5.24). The estimates point to growth in the price-to-average wage ratio and the price-to-disposable income ratio of 4.4% and 5.4% year on year respectively. According to IRI data, the price-to-rent ratio increased by as much as 7.1%. The mortgage repayments-to-average wage ratio[66] also newly recorded an increase (of 2.1%).

BOX 2

The house price index and its evolution in EU countries

The House Price Index (HPI), monitoring of which we include in this section for the first time, is compiled by the CZSO in accordance with a single harmonised EU standard. It measures quarterly developments of the transaction prices of apartments, family houses and related plots of land bought by households. This index has the advantage of being internationally comparable[67] but the possible disadvantage of containing shorter time series than alternative data sources.[68] HPI data for EU Member States are published by Eurostat.

According to this data, house prices in the broader group of European countries are rising. The Czech Republic is slightly above the EU average in this respect (see Chart 1). House prices have long been increasing in some of the EU countries that recorded the strongest annual growth at the end of 2014 (Sweden, Austria and Germany). In other countries, prices have started rising again after previous declines related to the global financial crisis (the UK, Ireland and Estonia). The growth in house prices in Sweden (14% year on year) was accompanied in past years by an easing of credit standards, with a high proportion of mortgage loans lacking continuous principal amortisation.[69] The ability to buy on credit at higher prices thus simultaneously pushed prices higher. The house price

64 See Inflation Report IV/2015.
65 To calculate these indicators, apartment prices are approximated by tax return and survey-based transaction prices and by asking prices, depending on availability.
66 A mortgage with fixed parameters of an LTV of 65% and a maturity of 20 years was considered in the calculation of this indicator. The data available for the first two months of the quarter were taken as the interest rates on new loans for house purchase in 2016 Q1.
67 See the description of the CZSO methodology (in Czech only) at https://www.czso.cz/csu/czso/ceny_bytu.
68 Data for a broader group of countries have been available since 2008.
69 The requirement for continuous principal amortisation for new loans secured by residential property by the Swedish supervisory authority enters into force on 1 June 2016.

growth in Austria, Germany, Ireland and Denmark (6%–7% year on year) contains significant regional differences, with faster price growth recorded in the capital city or several large agglomerations. A partial influence of demand from abroad is mentioned in this context.[70] The high purchasing power of this demand is causing prices of residential property to rise, making it less affordable for residents. However, there are also countries in the EU where house prices are flat or falling, such as Cyprus and Italy (declines of up to 1% year on year).

70 ECB (2015): Financial Stability Review, November 2015.

III.6 THE BALANCE OF PAYMENTS

The balance of payments in 2015 Q4 was characterised by a relatively large goods and services surplus, which increased in year-on-year terms owing in particular to services. Roughly one-half of its effect on the current account was offset by a primary income deficit, which – by contrast – narrowed. The largest financial account item was a net inflow of portfolio investment, which on the liabilities side was related to optimisation of domestic banks' balance sheet structures at the end of the year with no impact on overall financial flows. The high net inflow of portfolio investment was outweighed by a net outflow of other investment, connected mainly with a drop in short-term deposits in domestic banks (as a counterpart to the evolution of portfolio investment), and by a rise in reserve assets.

III.6.1 The current account

The **current account**[71] recorded a surplus of CZK 14.6 billion in 2015 Q4. This represented a year-on-year increase of almost CZK 13 billion. The main contributor to the growth in the overall surplus was a reduction in the primary income deficit (see Chart III.6.1). The ratio of the annual moving current account surplus to GDP increased slightly (to 0.9%) compared to the previous quarter.

The **goods** balance ended 2015 Q4 in a surplus of CZK 38.9 billion, up by almost CZK 4 billion year on year following two quarters of annual decline. The growth in goods surplus was related to a price effect, i.e. a positive year-on-year change in the terms of trade. The effect of developments in real terms was neutral. Annual growth in nominal trade turnover accelerated compared to the previous quarter (by 2.2 percentage points to 6.3%). The growth was fostered mainly by a faster increase in goods exports (to 6.4%) despite continuing year-on-year appreciation of the koruna against the euro and only a slight upswing in demand in the euro area. Although growth in total domestic demand slowed and oil and natural gas prices continued to fall, nominal growth in goods imports also accelerated slightly (to 6.1%, including a new lease of JAS-Gripen fighter aircraft). Turning to the commodity structure, a decrease in the mineral fuels deficit was the biggest contributor to the year-on-year rise in the overall surplus (see Chart III.6.2). The overall surplus continued to rise year on year during 2016 Q1, growing by almost CZK 5 billion in January–February.

CHART III.6.1

CURRENT ACCOUNT

The year-on-year growth in the current account surplus in 2015 Q4 was due to an increase in the goods and services surplus and a reduction in the primary income deficit
(CZK billions)

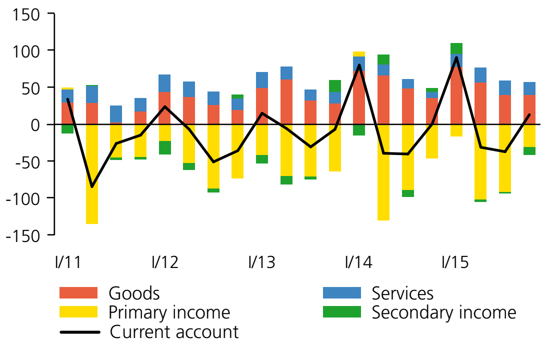
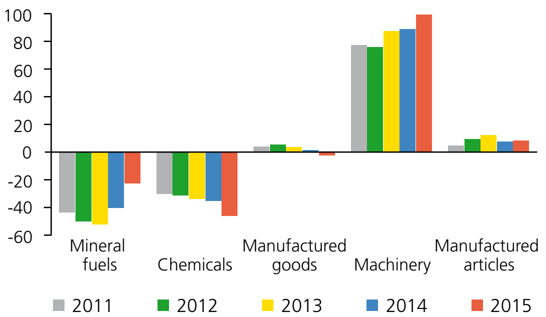


CHART III.6.2

EXTERNAL GOODS TRADE BY SITC

A decrease in the mineral fuels deficit was the biggest contributor to the year-on-year rise in the trade surplus
(Q4 of relevant year in CZK billions; national concept)



71 Simultaneously with the publication of the figures for 2015 Q4, revised data since 2014 were published. The revision of the balance of payments in 2014 led to a decline in the current account surplus by almost CZK 19 billion to CZK 7.5 billion, mainly as a result of a drop in the goods surplus. The most significant change on the financial account was a decrease in the net inflow of direct investment of more than CZK 53 billion (to CZK 80.4 billion), which, however, was largely offset by a revision under other investment. The revisions for 2015 Q1–Q3 resulted mainly in an increase in the primary income deficit of more than CZK 18 billion.

The goods and services surplus was also due to a CZK 17.4 billion surplus on **services** (see Chart III.6.3). The services surplus increased in year-on-year terms for the third consecutive quarter, this time by more than CZK 9 billion. The largest contributor to the overall surplus in this quarter was a travel surplus of CZK 9.3 billion, which, however, decreased slightly year on year. Manufacturing and repair services also ended in a slight surplus, as did transport. By contrast, other services ended in a slight deficit, although this decreased by more than CZK 10 billion year on year as a result of a steep fall in debits, mainly from financial services. Other services were thus simultaneously the largest contributor to the year-on-year growth in the overall surplus.

In contrast to the goods and services surplus, **primary income** ended in a deficit of CZK 31.4 billion. However, the deficit narrowed by more than CZK 15 billion year on year. The decline in the overall deficit was due most of all to a year-on-year decrease in direct investment income in the form of dividends paid to non-residents. However, the largest component of the overall balance was still the investment income deficit (see Chart III.6.4), stemming mainly from a direct investment income deficit of CZK 40.3 billion. Portfolio investment income also recorded a slight deficit associated with interest on bonds paid to non-residents. By contrast, surpluses on compensation of employees and income on reserve assets were the biggest contributors to the moderation of the overall deficit.

Secondary income also recorded a deficit (CZK 10.4 billion), down by more than CZK 16 billion year on year amid a switch from surplus to deficit. Its main component in this quarter was VAT- and GNI-based payments to the EU budget of almost CZK 11 billion. Slight deficits were recorded also for other items, above all social contributions and current taxes on income and wealth. By contrast, the largest surplus (of more than CZK 5 billion) was recorded for current international cooperation, which consists mainly of income from the EU budget. However, this surplus decreased markedly year on year. Net drawdown of funds from the EU budget recorded under secondary income thus ended Q4 in a deficit of CZK 4.8 billion, down by CZK 15 billion year on year amid a switch from surplus to deficit. The year-on-year change in secondary income was therefore linked mainly with lower income from the EU budget.

III.6.2 The capital account

The **capital account**, by contrast, recorded a surplus of CZK 14.8 billion, related mainly to drawdown of funds from the EU budget totalling CZK 11.8 billion. Its year-on-year increase of almost CZK 7 billion was also primarily the result of higher drawdown of funds from the EU.

CHART III.6.3

SERVICES

Travel contributed the most to the services surplus
(CZK billions)

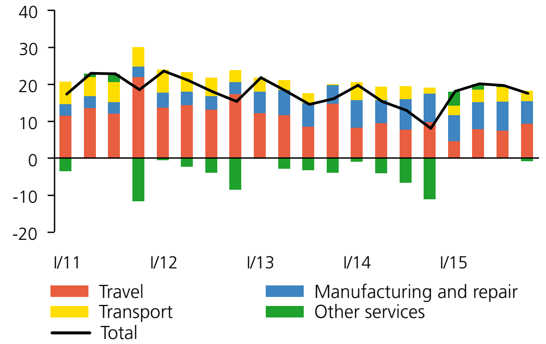


CHART III.6.4

PRIMARY INCOME

The primary income deficit narrowed year on year, primarily as a result of a decrease in the investment income deficit
(CZK billions)

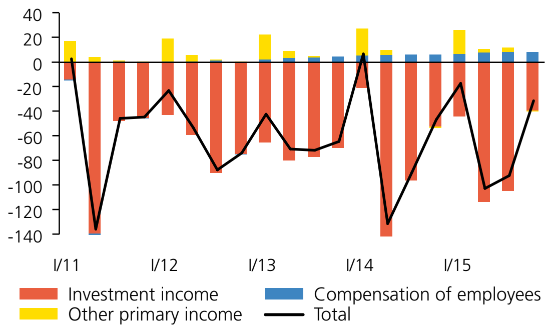


Chart III.6.5

FINANCIAL ACCOUNT

A net inflow of portfolio investment was the largest item on the financial account
(CZK billions)

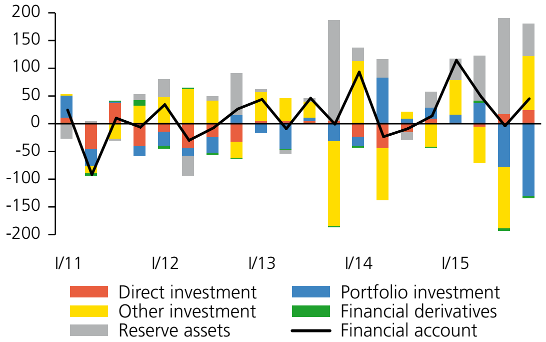


Chart III.6.6

DIRECT INVESTMENT

A net outflow of debt instruments was the sole contributor to the net outflow of direct investment
(CZK billions)

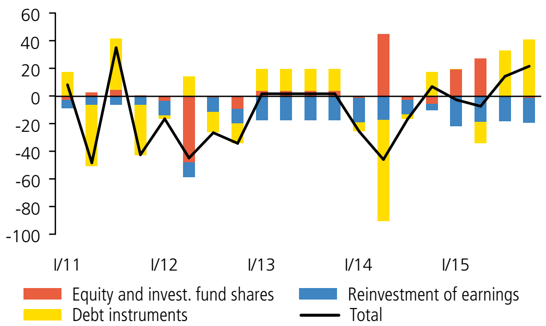
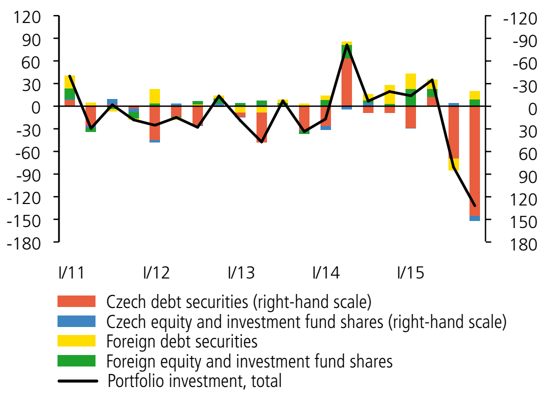


Chart III.6.7

PORTFOLIO INVESTMENT

Portfolio investment recorded a large net inflow, primarily due to growth in liabilities under debt securities
(CZK billions)



III.6.3 The financial account

The **financial account** recorded net lending abroad (a net outflow) of CZK 42.2 billion in 2015 Q4. A high net inflow of portfolio investment was outweighed by an aggregate net outflow of direct and other investment and growth in reserve assets (see Chart III.6.5).

As in the previous quarter, **direct investment** recorded net lending abroad (a net outflow) of CZK 21.8 billion (see Chart III.6.6). The net outflow was linked with growth in Czech investment abroad, which exceeded CZK 32 billion and was related mainly to lending in debt instruments and to reinvestment of earnings. The inflow of foreign investment into the Czech Republic was due most of all to reinvestment of earnings. It was also fostered to a small extent by an inflow under shares and other equity, whereas repayments of accepted loans were dominant under debt instruments. A change in credit relations within foreign investment in the Czech Republic, linked with a year-on-year change in their flows, was also the biggest contributor to the year-on-year increase in the overall net outflow of almost CZK 15 billion.

As in the previous quarter, **portfolio investment** recorded net borrowing from abroad (a net inflow) of CZK 132 billion in Q4 (see Chart III.6.7). This figure was due primarily on the liabilities side (under debt securities) to optimisation of banks' balance sheet structures at the year-end, related to new regulatory requirements coming into force. However, this was fully offset by a drop in liabilities under other investment. Holdings of long-term koruna government bonds by non-residents also increased. The year-on-year change in portfolio investment flows (exceeding CZK 151 billion) was also affected most strongly by a rise in liabilities in the debt securities item. Holdings of domestic equity and investment fund shares by foreign investors increased slightly as well. Overall, the growth in liabilities exceeded CZK 152 billion. Domestic investors' transactions in foreign securities were also dominated by purchases, which were roughly evenly spread between equity and investment fund shares and bonds.

Settlement of **financial derivatives and employee stock options** also led to moderate net borrowing from abroad (a net inflow) totalling CZK 4 billion, up by CZK 2 billion on a year earlier.

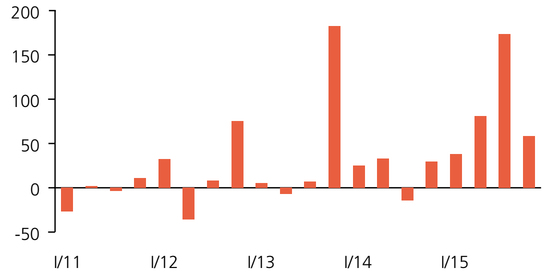
Other investment recorded sizeable net lending abroad (a net outflow) of CZK 97.8 billion. This was due solely to a net outflow of almost CZK 160 billion in the banking sector including the CNB. The outflow was associated chiefly with a decrease in short-term deposits on the liabilities side due to the above-mentioned optimisation of domestic banks' balance sheets at the year-end. The marked year-on-year change in other investment flows of almost CZK 141 billion was also due to a change in the short-term position of the banking sector. In contrast, the corporate sector saw a net inflow of CZK 52 billion, linked mainly with developments on the asset side, i.e. a drop in short-term deposits abroad and repayments of trade credits. General government financial flows also recorded net borrowing from abroad relating to the drawdown of a long-term trade credit (the lease of Gripen aircraft).

As in the previous four quarters, **reserve assets** increased. Their growth reached CZK 58.6 billion in 2015 Q4, due above all to the CNB's foreign exchange interventions (see Chart III.6.8).

CHART III.6.8

RESERVE ASSETS

Reserve assets increased again, due above all to the CNB's foreign exchange interventions
(changes in CZK billions)



III.7 THE EXTERNAL ENVIRONMENT

Annual economic growth in the euro area maintained the momentum of the previous two quarters, whereas that in the USA declined slightly further. In both economies, the growth was driven by domestic demand, stimulated by falling energy prices and central banks' easy monetary policies. By contrast, the contributions of net exports were negative. Annual consumer price inflation in the euro area is fluctuating around zero. In the USA, however, a rise in inflation was apparent at the beginning of the year. This rise is expected to gather strength in 2017. However, inflation in the euro area is also expected to rise. The euro has been appreciating against the US dollar with some brief interruptions since the end of last year, but is expected to return approximately to the level seen at the start of this year at the one-year horizon. The long-running price decline on commodity markets halted in 2016 Q1 and the oil price even recorded visible growth.

CHART III.7.1

GDP IN THE EURO AREA

Household consumption and investment were the main components of GDP growth in 2015 Q4

(annual percentage changes; contributions in percentage points; seasonally adjusted; source: Datastream, CNB calculation)

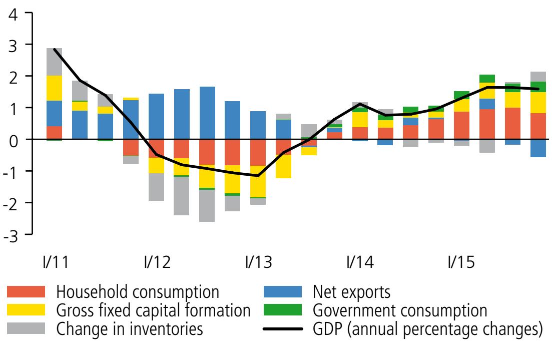
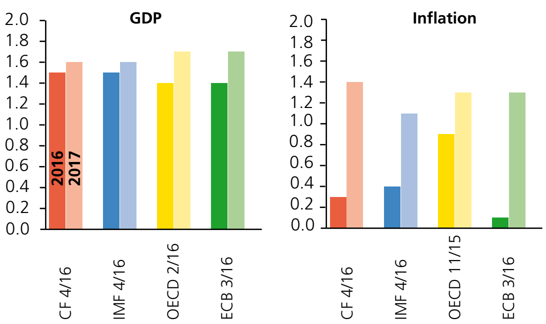


CHART III.7.2

EURO AREA GDP AND HICP INFLATION OUTLOOKS

Euro area GDP growth is expected to stay at 1.5% in 2016, while inflation will not accelerate until 2017

(annual percentage changes; source: CF, IMF, OECD, ECB)



Note: Horizontal axis shows most recent forecast data in format "Source month/year of publication". Midpoint of range for ECB.

III.7.1 The euro area

Annual growth in euro area **GDP** was flat at 1.6% in 2015 Q4. However, this is the highest annual figure since 2011 (see Chart III.7.1). Economic growth was also flat in quarter-on-quarter terms (at 0.3%). As in the previous quarters, household consumption, which rose by 1.5% year on year, was the main driver of growth. However, the overall growth was also newly driven by investment in almost equal measure. The only GDP component to contribute negatively to the overall growth was net exports. Euro area GDP increased by 1.5% in 2015 as a whole. Ireland, Slovakia and Spain recorded the highest growth rates. By contrast, Greece recorded a modest decline.

Economic growth in the euro area remains subdued and subject to many uncertainties. The PMI leading indicator in manufacturing was flat in March at approximately the same level as a month earlier (slightly in the expansionary band). The core euro area countries – Germany and France – recorded particularly weak PMI values. Annual growth in industrial production slowed sharply in February (and production decreased in month-on-month terms), despite the positive supply effect of low oil prices. The other leading indicators were also generally flat and the ZEW indicator declined further. Real retail sales growth in February was in line with previous months at 2.4% year on year. The unemployment rate edged down further to 10.3% in February. The forecasts for euro area GDP growth in 2016 from the monitored institutions are roughly at the level of growth recorded in 2015 (1.5%). In 2017, economic growth is expected to accelerate slightly (see Chart III.7.2).

Consumer prices were flat year on year in March after a previous moderate decline. The main reason for such subdued inflation was a year-on-year drop in energy prices. Overall, inflation is expected to be close to zero this year and to increase above 1% in 2017 (see

Chart III.7.2). Inflation excluding energy and food prices increased slightly to 1% in March. The already sharp year-on-year decline in industrial producer prices deepened further in February (see Chart III.7.3).

In March, the **ECB** revised its GDP growth and inflation outlooks for this year and the next downwards and further eased monetary policy. The force of the increase in quantitative easing combined with other accompanying measures came as a surprise. The 3M EURIBOR thus remains at slightly negative levels, where it will stay until the end of 2017 according to market outlooks. Annual M3 growth was 5% in February, the same as in the previous month.

Quarterly **economic growth in Germany** remained unchanged at 0.3% in 2015 Q4. The contribution from domestic demand outweighed the drop in net exports. The annual GDP growth rate fell by 0.4 percentage point to 1.3%. The growth was supported by an increase in household and government consumption, but slowed by a decline in net exports (see Chart III.7.4). GDP increased by 1.7% in 2015 as a whole. The public budget surplus increased to EUR 19.4 billion, employment rose by 0.8%, the real wage went up by 2.6% and unemployment dropped by 0.3 percentage point.

For the first half of this year, the April CF expects GDP growth to be just above the 2015 Q4 level (1.4% year on year).[72] This is suggested by leading indicators, which mostly increased in March and April, and by faster month-on-month and year-on-year growth in industrial production in January and February in comparison with the previous quarter. By contrast, retail turnover growth weakened in this period. For this year as a whole, CF lowered its economic growth expectations to 1.6%, in line with the estimates of major German economic institutes (1.6%) and the council of economic advisers to the German government (1.5%).

Consumer prices in Germany returned to year-on-year growth of 0.3% in March (see Chart III.7.5) after stagnating in February. This was a result of growth in services prices, which outweighed a further drop in energy prices. The year-on-year decline in industrial producer prices deepened to 3.1% in March. The April CF expects inflation of 0.5% for 2015 as a whole.

Quarterly GDP growth **in Slovakia** remained at 1% in 2015 Q4. The annual growth rate increased by 0.2 percentage point to 4%, owing to rapid growth in household consumption and fixed investment. The growth in Slovak GDP in 2015 as a whole went up by 1.1 percentage points to 3.6% compared to 2014 thanks to accelerating domestic demand, particularly household consumption and fixed investment, whereas net exports declined slightly. The use of EU funds had

72 The Bundesbank estimates that German economic growth strengthened considerably in Q1 compared to the previous period. However, it expects the growth to slow in Q2.

CHART III.7.3

INFLATION AND PRODUCER PRICES IN THE EURO AREA

Owing to falling energy prices, inflation recorded very low levels in February and March, while industrial producer prices declined sharply year on year

(annual percentage changes; source: Datastream)

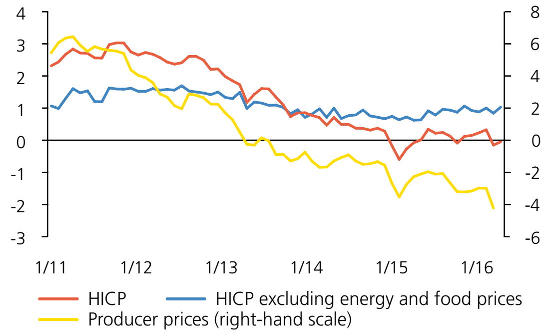


CHART III.7.4

GDP IN GERMANY

Annual GDP growth decreased in 2015 Q4 as a result of a decline in net exports, while domestic demand continued to rise

(annual percentage changes; contributions in percentage points; seasonally adjusted; source: Datastream, CNB calculation)

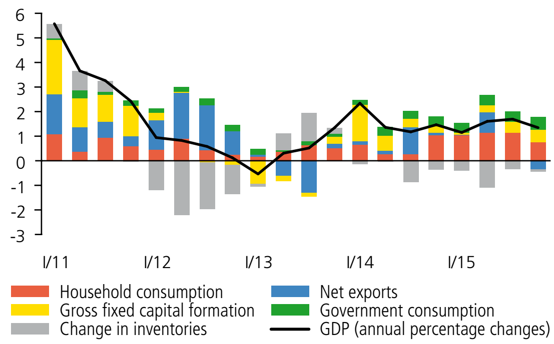


CHART III.7.5

INFLATION AND PRODUCER PRICES IN GERMANY

Inflation increased from zero to a slightly positive level in March, but the decline in industrial producer prices meanwhile deepened

(annual percentage changes; source: Datastream)

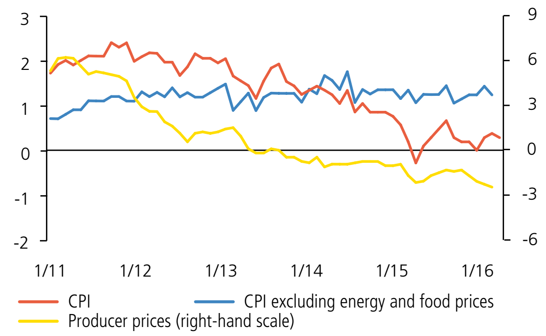


Chart III.7.6

GDP IN THE USA

The annual rate of growth in the USA has been falling since the start of 2015

(annual percentage changes; contributions in percentage points; seasonally adjusted; source: Datastream, CNB calculation)

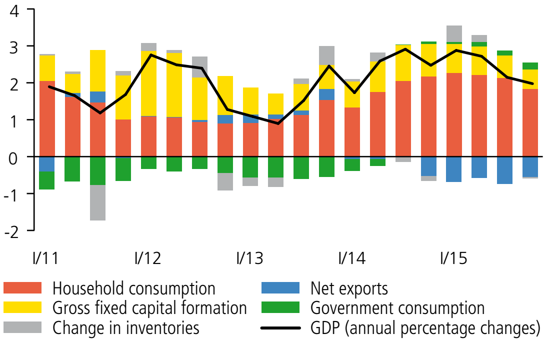
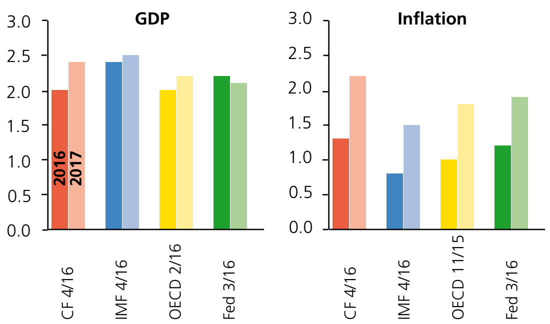


Chart III.7.7

US GDP AND INFLATION OUTLOOKS

According to most estimates, GDP growth will exceed the 2% level in 2016, while inflation will remain low

(annual percentage changes; source: CF, IMF, OECD, Fed)



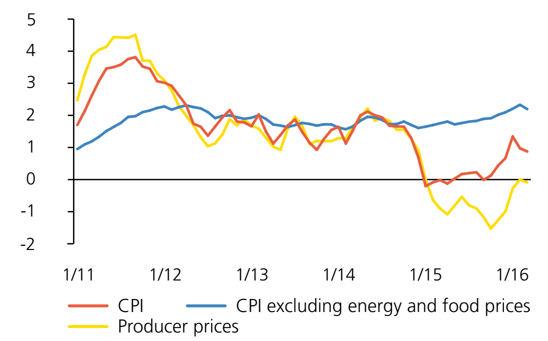
Note: Horizontal axis shows most recent forecast data in format "Source month/year of publication". Midpoint of range for Fed.

Chart III.7.8

INFLATION AND PRODUCER PRICES IN THE USA

A modest rise in inflation was apparent at the start of 2016

(annual percentage changes; source: Datastream)



a significant effect, boosting economic growth by more than 1 percentage point. The April CF and the NBS both predict economic growth to slow to 3.2% in 2015 as a whole.

The **decline in consumer prices in Slovakia** deepened by 0.2 percentage point to 0.6% as a result of a faster fall in food and energy prices amid growth in services prices. The April CF also lowered its outlook for average inflation to 0.2% this year. Next year, inflation in Slovakia will accelerate to 1.7% according to CF.

III.7.2 The United States

Annual **GDP growth** in the USA slowed to 2% in Q4 (see Chart III.7.6). The further slowdown of the US economy was related to the continued effect of the strong dollar and low oil prices on the financial situation of firms. The annual economic growth was driven chiefly by household consumption and fixed investment, while the negative contribution of net exports shrank slightly. In 2015 as a whole, GDP rose by 2.4%, which was the same growth as in the previous year. The US economy will slow in 2016 Q1 according to the available indicators. The difference between the growth of the labour market and that of the rest of the economy, which became apparent at the end of 2015, has further increased since January. Non-farm payrolls rose by 215,000 in March and the unemployment rate is at a low level of 5%. On the other hand, industrial production decreased by 2.2% year on year in 2016 Q1, in particular in the mining and energy sectors. Wholesale inventories dropped in year-on-year terms and corporate investment is lagging behind financial market expectations. The ISM PMI leading indicator in manufacturing was in the contraction band in January and February, but optimism associated with new orders pushed it up to a six-month high of 51.8 in March. Consumers are also more optimistic about future, as the latest Conference Board survey reveals. Retail sales increased in year-on-year terms in 2016 Q1, but the growth slowed in March due to falling car sales. The monitored outlooks expect GDP to grow by 2.0%–2.4% this year (see Chart III.7.7) and to accelerate slightly further in 2017.

Annual headline **inflation** in the USA exceeded the 1% level in January and February 2016 (see Chart III.7.8). Inflation excluding energy and food prices started to go up at the end of 2015 and in February reached its highest level since May 2012 (2.3%). Producer prices were virtually flat year on year in February and March. The inflation outlooks from the monitored institutions for 2016 range between 0.8% and 1.3%. Inflation is expected to approach the 2% target in 2017.

At its March meeting, the **Fed** decided to maintain the target range for its key rate at 0.25%–0.50%. Persisting risks in the global economy, particularly in China, led central bank representatives to revise the pace of interest rate growth. Financial markets are expecting the Fed to move the range of the key interbank rate only once or twice this year, each time by a quarter of a percentage point, instead of the four increases expected earlier.

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

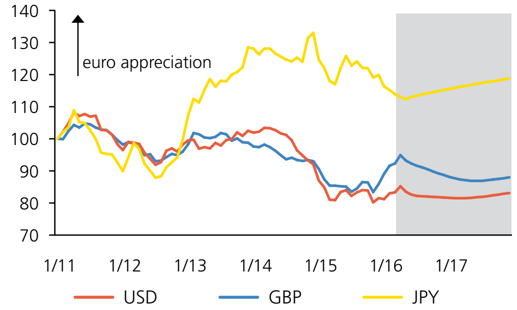
The **exchange rate of the euro against the US dollar** has been strengthening with some interruptions since December 2015 (see Chart III.7.9). The euro appreciated more markedly in early February due to the release of weaker data on the US economy and to the dovish rhetoric of Fed representatives. By the end of the month it had erased the gains due to growing expectations that the ECB would further ease monetary policy at its March meeting, but in early March it started to strengthen again. Although the ECB adopted a wide range of measures to further ease monetary policy at its meeting, the euro responded immediately by appreciating slightly further. Over the next few days it depreciated against the dollar, but the decline lasted only until the US Fed meeting a week later. After the meeting, financial markets revised their expectations towards more moderate growth in interest rates in the USA, and the euro strengthened again. It ended Q1 at USD 1.14 to the euro.

CHART III.7.9

EURO EXCHANGE RATE AGAINST MAJOR CURRENCIES

The euro appreciated against the dollar in 2016 Q1 despite a further easing of monetary policy by the ECB

(January 2011 = 100; source: Datastream; outlook from Consensus Forecasts; CNB calculation)



The euro has also been appreciating against the **British pound** since December 2015, and much more sharply than it has against the dollar (by 12.5% in four months). This was due to weaker data on the British economy and recently in particular to increasing uncertainty about the approaching June referendum on the UK's membership in the EU. UK monetary policy is thus not expected to be tightened before the start of 2017.

By contrast, the euro has been weakening constantly against the **Japanese yen** since the middle of last year. The BoJ surprised the markets by sharply easing monetary policy at the end of January, when it introduced negative interest rates on part of commercial banks' deposits at the central bank. The Japanese yen responded by weakening briefly but then returned to its appreciation trend despite dovish statements made by BoJ representatives. In spite of its fragile fundamentals, the Japanese economy is still regarded as a safe haven, but the appreciation of the yen is also being driven by increasing concerns about the effectiveness of monetary policy measures.

In the first half of April, the euro fluctuated against the dollar with no clear trend. It depreciated against the British pound, whereas the Japanese yen firmed sharply against the euro again in early April. According to the April CF, the euro will depreciate by 4.4% against the US dollar (to USD 1.09) and by 8.1% against the pound at the one-year horizon. On the other hand, it is expected to appreciate by 4.7% against the yen.

CHART III.7.10

OIL AND NATURAL GAS PRICES IN USD

The price of Brent crude oil fell to a 12-year low in mid-January 2016 but has mostly been rising since then; the outlook up to the end of 2017 is only gradually rising
(oil in USD/barrel; natural gas [Russian in Germany] in USD/1,000 m³ – right-hand scale; source: IMF, Bloomberg, CNB calculation)

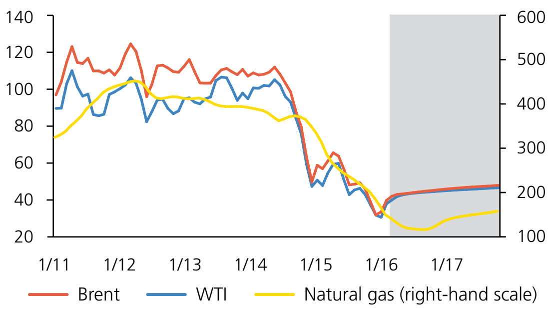
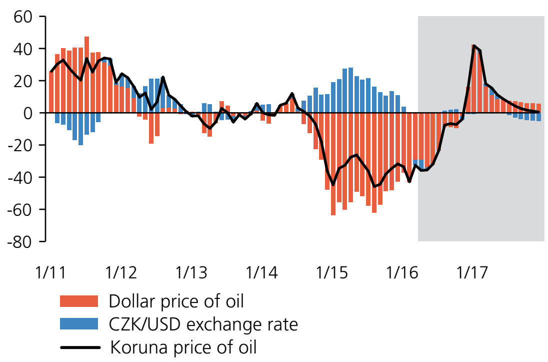


CHART III.7.11

DECOMPOSITION OF KORUNA OIL PRICE GROWTH

The koruna price of oil will start to rise year on year at the end of this year; the key factor will be the dollar price
(Brent crude oil in CZK/litre – annual percentage changes; contributions of dollar price of Brent crude oil and CZK/USD exchange rate in percentage points; source: Bloomberg, CNB calculation)



III.7.4 Prices of oil and other commodities

The **price of Brent crude oil** returned to its downward trend at the beginning of this year and, following a sharp fall, reached a more than 12-year low of USD 27.9 a barrel in the second half of January (see Chart III.7.10). The slump in prices was caused mainly by fundamental factors. Demand was reduced by unusually warm weather in the northern hemisphere and excess supply was predicted to rise further as a result of expected growth in oil output and exports from Iran following the lifting of sanctions. Uncertainty on markets was increased by turbulence on the Chinese stock market and the weakening of the Chinese currency.

In response to the fall in oil prices, **OPEC and Russian representatives released numerous statements** saying that they were willing to discuss potential regulation of their extraction in order to support and stabilise oil prices. Prospects of a further easing of monetary policy by the ECB at its March meeting also helped improve sentiment in the oil market. Prices thus returned to growth after three months of strong falls, with the Brent oil price rising to USD 40 a barrel in the second week of March, where it then fluctuated for about a month. Besides hopes of an agreement among large producers, the price was also supported by the weakening dollar and news of a massive reduction in the rig count and falling shale oil extraction in the USA. A slower-than-expected start to oil exports from Iran and a drop in extraction in some OPEC countries quelled concerns about the persisting oil surplus in the market. Rapid growth in oil prices was accompanied by increased activity of financial investors, who started to massively reduce short positions and increase long positions, especially in Brent oil, at the end of January.

Before the **meeting in Doha** (on 17 April), where OPEC and Russian representatives were expected to sign an agreement to freeze oil production growth at January levels, the Brent oil price rose to almost USD 45 a barrel on news that Russia and Saudi Arabia had agreed on the freeze before the official meeting. In the end, however, the Doha talks failed, with Saudi Arabia demanding that Iran also join the freeze in output growth. Iran's representatives, however, had ruled out such a demand before the meeting, as they first plan to raise output to pre-sanctions levels. The oil price fell sharply immediately after the result of the talks was announced, but it erased the loss on the very same day as oil output in Kuwait dropped by 1.7 million barrels a day as a result of a strike by oil industry workers and signs of stabilisation of the Chinese economy generated demand for risky assets such as shares and oil.

The **koruna price of oil** is expected to switch from a more than two-year-long annual decline to growth at the end of this year, owing mainly to changes in the dollar price (see Chart III.7.11).

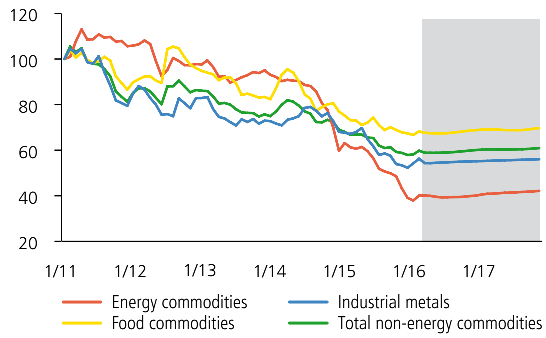
Differences in the individual forecasts suggest great **uncertainty regarding future price developments**. The lowest outlook was released by the EIA, which in its April forecast predicts an average Brent (and WTI) crude oil price of USD 35 a barrel and USD 41 a barrel for this year and the next respectively. By contrast, the market outlook based on the futures curve of 11 April 2016 implies a Brent price of USD 41.7 a barrel and USD 46.9 a barrel on average respectively for the two years. This is virtually in line with the April CF survey, which expects a price of USD 46.3 a barrel one year ahead. Most analysts agree that growth in oil prices will pick up pace in the second half of 2017, by which time falling supply and rising demand might have reached equilibrium. However, given the record-high global oil stocks, there is no reason to expect that oil prices will return any time soon to the levels they were at two years ago, especially considering that the current drop in shale oil output in the USA will start slowing if the price rises above about USD 50 a barrel.

The **downward trend in the non-energy commodity price index**, which started in May 2014, halted in the first quarter of this year (see Chart III.7.12). Prices of most industrial metals returned to growth in mid-January, benefiting at first from the depreciating dollar and later from improving sentiment in the oil market. In March, they were also supported by favourable economic data from China (the PMI in manufacturing, construction) and a further weakening of the dollar. The price of iron ore also went up. The agricultural product price index increased slightly only in March. Grain prices are still under pressure from high global inventories and are close to their lowest levels in many years. The growth of the index was therefore driven mainly by rising prices of sugar, coffee and cocoa, caused by the strengthening Brazilian currency, and also by seasonal growth in lean hog prices. Most commodities saw a modest correction of their previous price growth in the first half of April, and market outlooks are signalling only a gradual increase in prices in the months to come.

CHART III.7.12

COMMODITY PRICES

The downward trend in the non-energy commodity price index halted during 2016 Q1, but the outlook is only slightly rising
(January 2011 = 100; source: Bloomberg, CNB calculation)



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).

ABBREVIATIONS

AEIS	Average Earnings Information System
CEB	Czech Export Bank
CF	Consensus Forecasts
CNB	Czech National Bank
CPI	consumer price index
CZK	Czech koruna
CZ-ISCO	employment classification (used since 2011)
CZSO	Czech Statistical Office
ECB	European Central Bank
EEA	European Economic Area
EGAP	Export Guarantee and Insurance Corporation
EIA	U.S. Energy Information Administration
EIA	Environmental Impact Assessment
ESA	European System of Accounts
ESCB	European System of Central Banks
EU	European Union
EUR	euro
EURIBOR	Euro Interbank Offered Rate
FDI	foreign direct investment
Fed	US central bank
FMIE	Financial Market Inflation Expectations
FRA	forward rate agreement
GBP	pound sterling
GDP	gross domestic product
GNP	gross national product
GVA	gross value added
HICP	harmonised index of consumer prices
HP filter	Hodrick-Prescott filter
ILO	International Labour Organization
IMF	International Monetary Fund
IRS	interest rate swap
JPY	Japanese yen
KZAM	employment classification (used up to 2011)
LFS	Labour Force Survey
LIBOR	London Interbank Offered Rate
LTV	loan to value
M1, M2, M3	monetary aggregates
MFIs	monetary financial institutions
MLSA	Ministry of Labour and Social Affairs
NAIRU	non-accelerating inflation rate of unemployment
NBS	National Bank of Slovakia
NFCs	non-financial corporations
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PMI	Purchasing Managers Index
pp	percentage points
PPI	producer price index
PRIBOR	Prague Interbank Offered Rate
(1W, 1M, 1Y)	(one-week, one-month, one-year)
repo rate	repurchase agreement rate
USA	United States of America
USD	US dollar
VAT	value added tax
WTI	West Texas Intermediate

The pass-through of VAT to food prices at the end of 2011	(Box)	I/2012
Extraordinary revision of the quarterly national accounts	(Box)	I/2012
An analysis of the impacts of fiscal measures in the Czech Republic in 2001–2011	(Box)	I/2012
Revision of the consumer basket	(Box)	II/2012
Factors affecting retail fuel prices	(Box)	II/2012
The Bank Lending Survey	(Box)	III/2012
The CZK/USD exchange rate at a time of uncertainty	(Box)	III/2012
Easy monetary policy and commodity prices	(Box)	III/2012
The household saving rate	(Box)	IV/2012
Consumption and money savings by household income group	(Box)	IV/2012
The share of reinvested earnings in total FDI income	(Box)	IV/2012
Revision of the quarterly national accounts	(Box)	I/2013
Consumption, savings and debt burden of household income groups in 2012	(Box)	III/2013
The announced reduction of quantitative easing in the USA and its effect on yield curves	(Box)	III/2013
Using the exchange rate as an instrument to ease the monetary conditions	(Box)	IV/2013
New steady-state settings in the g3 model	(Box)	IV/2013
Comparison of corporate investment and employment from the perspective of ownership and reinvestment	(Box)	IV/2013
The impact of the growth in unconventional gas extraction on global prices of energy commodities	(Box)	IV/2013
Effects of the weakened exchange rate on consumer prices (input-output analysis)	(Box)	I/2014
Evolution and structure of shorter working hours	(Box)	II/2014
The Czech Republic's trade relations with Ukraine and Russia	(Box)	II/2014
The life cycle of foreign direct investment and its impact on the balance of payments	(Box)	III/2014
Assessment of the economic situation one year after the exchange rate commitment was adopted	(Box)	IV/2014
Revision of the national accounts following the switch to ESA 2010	(Box)	IV/2014
The impacts of the military and political crisis in Ukraine on the Czech Republic	(Box)	IV/2014
Wage growth structure in the business sector	(Box)	I/2015
Future oil supply on world markets with regard to extraction profitability in different oil plays given falling oil prices	(Box)	I/2015
Median inflation	(Box)	II/2015
Labour market developments from the perspective of the NAIRU and the cyclicality of the unemployment rate and wages	(Box)	II/2015
The monetary conditions index for the Czech Republic	(Box)	II/2015

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.

Bid-to-cover ratio: The ratio of total demand to demand coverage in primary auctions of medium-term and long-term government bonds.

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, financial derivatives and employee stock options, other investment and reserve assets.

Fiscal impulse: A variable taking into account the effect of fiscal policy on economic activity in the short run.

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

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

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

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

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

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

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

Gross operating surplus and mixed income of the household sector: Gross operating surplus – as a part of the gross disposable income of households – is the difference between gross value added in the household sector and the sum of compensation of employees and other taxes less other subsidies on production in this sector. Gross mixed income is generated only in the household sector, where remuneration for labour performed by a firm's owner or by family members cannot be distinguished from the entrepreneurial profit of the owner.

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.

Loan-to-value ratio (LTV): The ratio of the amount of a loan to the value of the property securing the financing.

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

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

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

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

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

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

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

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

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

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

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

Price-to-average wage ratio: The ratio of the price of an apartment to the sum of the annual average wage over the last four quarters. Higher values of this indicator usually mean that apartments are overpriced. The index is calculated from property transaction prices; the latest data are estimated from asking prices.

Price-to-disposable income ratio: The ratio of the price of an apartment to the sum of disposable income over the last four quarters. Higher values of this indicator usually mean that apartments are overpriced. The index is calculated from property transaction prices; the latest data are estimated from asking prices.

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. This indicator is calculated from asking rents and asking prices of apartments according to the Institute for Regional Information.

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 transaction prices: Prices based, on the one hand, 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. The second, alternative source of data on transaction prices is CZSO data from a survey in estate agencies, for which the time lag is considerably shorter.

Property asking prices: Property sale asking prices in estate agencies. Asking prices should be higher than transaction prices. Property asking prices in the Czech Republic are published, for example, by the CZSO and the Institute for Regional Information (IRI).

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

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

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

KEY MACROECONOMIC INDICATORS

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
							years					
DEMAND AND SUPPLY												
Gross domestic product												
GDP	CZK bn, constant p. of 2010, seas. adjusted	3,958.1	4,058.6	3,867.8	3,950.6	4,028.6	3,995.4	3,974.1	4,052.8	4,226.0	**4,326.9**	**4,474.8**
GDP	%, y-o-y, real terms, seas. adjusted	5.5	2.5	-4.7	2.1	2.0	-0.8	-0.5	2.0	4.3	**2.3**	**3.4**
Household consumption	%, y-o-y, real terms, seas. adjusted	4.1	2.8	-0.6	0.9	0.3	-1.5	0.7	1.5	2.9	**3.3**	**3.0**
Government consumption	%, y-o-y, real terms, seas. adjusted	0.4	1.1	3.0	0.4	-3.0	-1.8	2.3	1.8	2.8	**2.7**	**2.5**
Gross capital formation	%, y-o-y, real terms, seas. adjusted	14.3	0.9	-17.8	4.2	1.9	-3.9	-5.1	4.4	10.0	**-5.2**	**4.4**
Gross fixed capital formation	%, y-o-y, real terms, seas. adjusted	13.5	2.2	-9.8	0.9	1.1	-3.0	-2.8	2.0	7.4	**-3.7**	**4.9**
Exports of goods and services	%, y-o-y, real terms, seas. adjusted	11.0	3.8	-9.5	14.4	9.3	4.5	0.0	8.9	7.2	**7.9**	**8.6**
Imports of goods and services	%, y-o-y, real terms, seas. adjusted	12.8	2.8	-10.7	14.5	6.7	2.8	0.1	9.9	8.1	**6.5**	**8.9**
Net exports	CZK bn, constant p. of 2010, seas. adjusted	60.3	86.9	108.1	121.8	198.4	251.0	250.4	245.6	237.8	**301.3**	**317.2**
Coincidence indicators												
Industrial production	%, y-o-y, real terms	10.6	-1.8	-13.6	8.6	5.9	-0.8	-0.1	5.0	4.4	-	-
Construction output	%, y-o-y, real terms	7.1	0.0	-0.9	-7.4	-3.6	-7.6	-6.7	4.3	7.1	-	-
Receipts in retail sales	%, y-o-y, real terms	10.0	2.7	-4.7	1.5	1.7	-1.1	1.2	5.5	7.6	-	-
PRICES												
Main price indicators												
Inflation rate	%, end-of-period	2.8	6.4	1.1	1.5	1.9	3.3	1.4	0.4	0.3	-	-
Consumer Price Index	%, y-o-y, average	2.8	6.4	1.1	1.5	1.9	3.3	1.4	0.4	0.3	**0.4**	**1.9**
Regulated prices (18.70%)*	%, y-o-y, average	4.9	15.6	8.4	2.6	4.7	8.6	2.2	-3.0	0.0	**-0.1**	**0.7**
Net inflation (81.30%)*	%, y-o-y, average	1.5	2.4	-0.9	0.0	1.3	0.9	0.5	0.9	0.2	**0.3**	**2.2**
Food prices (including alcoholic beverages and tobacco) (24.58%)*	%, y-o-y, average	3.8	3.0	-0.9	0.9	3.9	2.8	3.1	1.8	0.0	**-0.1**	**2.6**
Adjusted inflation excluding fuels (53.32%)*	%, y-o-y, average	0.5	2.0	0.0	-1.2	-0.7	-0.4	-0.6	0.5	1.2	**1.1**	**1.7**
Fuel prices (3.39%)*	%, y-o-y, average	-0.1	4.3	-11.1	12.8	9.9	6.0	-2.3	0.2	-13.5	**-9.8**	**7.1**
Monetary policy inflation (excluding tax changes)	%, y-o-y, average	1.9	4.3	0.9	0.4	1.9	2.1	0.6	0.2	0.2	**0.2**	**2.0**
GDP deflator	%, y-o-y, seas. adjusted	3.5	2.0	2.6	-1.4	-0.2	1.4	1.4	2.5	0.7	**0.4**	**1.3**
Partial price indicators												
Industrial producer prices	%, y-o-y, average	4.1	4.5	-3.1	1.2	5.6	2.1	0.8	-0.8	-3.2	**-3.2**	**1.2**
Agricultural prices	%, y-o-y, average	16.5	9.3	-24.9	7.1	22.1	3.3	5.0	4.7	-6.7	**-2.8**	**3.0**
Construction work prices	%, y-o-y, average	3.9	4.5	1.2	-0.2	-0.5	-0.7	-1.1	0.5	1.2	-	-
Brent crude oil	%, y-o-y, average	9.9	35.4	-36.5	28.4	38.2	0.7	-2.6	-8.5	-46.1	**-22.2**	**12.3**
LABOUR MARKET												
Average monthly wage	%, y-o-y, nominal terms	7.2	7.8	3.3	2.2	2.5	2.5	-0.1	2.3	3.4	**3.9**	**5.1**
Average monthly wage	%, y-o-y, real terms	4.3	1.4	2.3	0.7	0.6	-0.8	-1.5	1.9	3.1	**3.4**	**3.1**
Number of employees	%, y-o-y	1.8	1.6	-2.2	-2.2	0.0	-0.1	1.6	0.6	2.2	**1.4**	**0.6**
Unit labour costs	%, y-o-y	2.6	4.7	3.0	-1.7	0.3	3.5	1.0	0.0	-0.2	**1.8**	**1.6**
Unit labour costs in industry	%, y-o-y	3.4	-1.7	3.3	-6.2	0.7	5.5	4.9	-1.9	-0.5	-	-
Aggregate labour productivity	%, y-o-y	3.4	0.5	-3.1	3.4	2.2	-1.3	-0.8	1.4	3.0	**1.4**	**2.9**
ILO general unemployment rate	%, average, age 15–64	5.4	4.4	6.7	7.4	6.8	7.0	7.1	6.2	5.1	**4.4**	**4.3**
Share of unemployed persons (MLSA)	%, average	4.9	4.1	6.2	7.0	6.7	6.8	7.7	7.7	6.5	**5.6**	**5.5**
PUBLIC FINANCE												
Public finance deficit (ESA 2010)	CZK bn, current p.	-26.6	-84.6	-216.2	-174.5	-109.9	-159.6	-51.1	-83.1	-18.7	**-3.2**	**22.3**
Public finance deficit / GDP**	%, nominal terms	-0.7	-2.1	-5.5	-4.4	-2.7	-3.9	-1.3	-1.9	-0.4	**-0.1**	**0.5**
Public debt (ESA 2010)	CZK bn, current p.	1,065.5	1,150.7	1,335.7	1,508.5	1,606.5	1,805.4	1,840.4	1,819.1	1,836.2	**1,867.3**	**1,875.9**
Public debt / GDP**	%, nominal terms	27.8	28.7	34.1	38.2	39.9	44.7	45.1	42.7	41.1	**40.6**	**39.0**
EXTERNAL RELATIONS												
Current account												
Trade balance	CZK bn, current p.	10.4	-4.4	65.0	40.4	75.5	123.8	167.0	219.5	210.7	**270.0**	**280.0**
Trade balance / GDP	%, nominal terms	0.3	-0.1	1.7	1.0	1.9	3.1	4.1	5.2	4.7	**5.9**	**5.8**
Balance of services	CZK bn, current p.	88.1	89.3	81.9	78.5	81.3	77.6	70.4	55.7	75.0	**80.0**	**80.0**
Current account	CZK bn, current p.	-164.5	-75.3	-89.2	-141.8	-84.8	-63.3	-21.8	7.5	41.4	**90.0**	**70.0**
Current account / GDP	%, nominal terms	-4.3	-1.9	-2.3	-3.6	-2.1	-1.6	-0.5	0.2	0.9	**2.0**	**1.5**
Foreign direct investment												
Direct investment	CZK bn, current p.	-179.1	-36.3	-37.7	-95.0	-46.8	-121.3	7.4	-80.4	26.6	**-70.0**	**-70.0**
Exchange rates												
CZK/USD	average	20.3	17.1	19.1	19.1	17.7	19.6	19.6	20.8	24.6	-	-
CZK/EUR	average	27.8	25.0	26.5	25.3	24.6	25.1	26.0	27.5	27.3	-	-
CZK/EUR	%, y-o-y, real (CPI euro area), avg.	-2.2	-12.6	5.3	-4.6	-2.1	1.5	3.5	6.0	-1.1	-	-
CZK/EUR	%, y-o-y, real (PPI euro area), avg.	-3.7	-8.6	4.6	-4.1	-3.1	2.6	2.3	4.8	-0.4	-	-
Foreign trade prices												
Prices of exports of goods	%, y-o-y, average	1.3	-4.6	0.2	-1.0	1.7	2.9	1.2	3.5	-1.7	**-2.5**	**0.8**
Prices of imports of goods	%, y-o-y, average	-1.0	-3.3	-3.5	2.0	4.3	4.2	-0.2	1.9	-1.9	**-4.3**	**1.5**
MONEY AND INTEREST RATES												
M3	%, y-o-y, average	15.0	14.2	6.5	0.2	1.0	5.1	5.1	5.1	7.3	**9.0**	**8.3**
2W repo rate	%, end-of-period, CNB forec. = avg.	3.50	2.25	1.00	0.75	0.75	0.05	0.05	0.05	0.05	**0.05**	**0.54**
3M PRIBOR	%, average	3.1	4.0	2.2	1.3	1.2	1.0	0.5	0.4	0.3	**0.3**	**0.8**

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

2013				2014				2015				2016				2017			
QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV
984.7	989.3	992.8	1,007.4	1,005.8	1,010.2	1,015.6	1,021.2	1,045.4	1,055.4	1,062.7	1,062.5	1,068.3	1,075.0	1,086.3	1,097.3	1,108.2	1,116.7	1,122.5	1,127.4
-2.1	-1.2	-0.3	1.5	2.1	2.1	2.3	1.4	3.9	4.5	4.6	4.0	2.6	1.9	2.0	2.7	3.7	3.9	3.3	2.7
-0.2	0.4	1.1	1.5	1.1	1.3	1.4	2.0	2.7	2.9	3.0	2.9	2.7	3.2	3.6	3.4	3.3	3.1	2.8	2.6
1.1	1.4	3.4	3.5	1.4	2.5	0.6	2.7	2.1	2.7	4.5	1.8	3.1	2.9	1.9	3.0	3.0	2.6	2.2	2.0
-6.9	-12.0	-1.8	0.7	1.7	10.7	5.7	0.0	12.3	11.6	9.8	6.6	-1.9	-8.9	-6.4	-3.3	3.1	6.1	4.8	3.7
-3.9	-5.3	-2.5	0.8	0.7	2.9	2.7	2.0	3.7	8.6	9.6	7.8	0.5	-5.5	-6.0	-3.5	2.9	5.2	5.8	5.6
-5.0	-0.1	0.2	5.1	11.7	8.7	7.8	7.5	7.3	7.3	7.1	7.2	5.5	7.2	9.4	9.5	9.6	9.5	8.3	6.9
-4.8	-2.2	1.7	5.7	11.3	11.7	8.3	8.3	9.1	8.3	7.9	7.0	4.6	4.8	8.0	8.6	9.6	10.0	8.7	7.4
58.9	71.4	60.3	59.8	68.1	57.3	61.4	58.7	60.2	53.3	59.6	64.6	71.1	76.3	76.0	78.0	78.7	79.6	79.3	79.6
-5.9	-2.8	3.7	5.0	6.9	6.0	4.0	3.2	4.8	5.3	4.0	3.5	-	-	-	-	-	-	-	-
-11.2	-11.7	-3.9	-3.1	13.3	5.6	2.9	0.7	7.7	10.0	5.4	1.0	-	-	-	-	-	-	-	-
-2.7	0.4	2.9	3.8	7.0	4.7	5.7	4.7	7.9	8.3	5.9	8.3	-	-	-	-	-	-	-	-
2.8	2.3	1.8	1.4	1.0	0.7	0.5	0.4	0.3	0.5	0.4	0.3	0.4	-	-	-	-	-	-	-
1.8	1.5	1.2	1.1	0.2	0.2	0.6	0.5	0.1	0.7	0.4	0.1	0.5	0.1	0.2	0.9	1.5	1.8	2.2	2.3
3.5	2.6	1.5	1.3	-4.1	-3.5	-2.2	-2.1	0.2	0.3	-0.2	-0.4	0.7	-0.1	-0.6	-0.3	-0.1	0.6	1.2	1.1
0.5	0.5	0.5	0.3	0.9	0.7	1.0	0.8	-0.2	0.5	0.3	0.1	0.2	-0.1	0.1	0.9	1.8	2.1	2.4	2.6
3.0	3.8	3.3	2.3	3.4	1.5	1.5	0.7	-0.9	0.7	0.3	0.0	-0.4	-0.9	-0.1	1.0	1.7	2.1	3.0	3.5
-0.4	-0.6	-0.7	-0.5	-0.2	0.4	0.8	0.9	1.1	1.1	1.1	1.3	1.3	1.1	0.9	1.0	1.4	1.7	1.9	1.9
-1.6	-3.9	-1.6	-1.8	0.3	1.0	0.5	-1.2	-14.6	-10.1	-12.6	-16.6	-12.4	-13.8	-10.9	-2.2	8.9	7.5	6.5	5.6
0.9	0.8	0.4	0.3	0.1	0.0	0.5	0.3	-0.1	0.4	0.2	0.0	0.3	-0.1	0.0	0.7	1.5	1.8	2.2	2.4
1.3	1.1	1.3	1.9	2.2	2.8	2.9	2.0	1.3	0.7	0.5	0.5	-0.1	0.2	0.6	1.1	1.1	2.0	0.8	1.1
1.2	0.5	0.7	0.8	-0.7	-0.2	-0.1	-1.9	-3.3	-2.3	-3.6	-3.5	-4.0	-4.6	-3.0	-1.3	1.3	1.4	1.1	1.0
14.5	9.3	1.5	-4.3	-4.4	-2.1	-2.3	-6.0	-9.3	-10.9	-6.5	1.8	-2.9	-3.1	-2.0	-3.0	1.2	3.6	4.3	3.0
-1.0	-1.3	-1.3	-0.8	-0.3	0.5	0.7	0.9	1.0	1.3	1.4	1.3	1.3	-	-	-	-	-	-	-
-4.6	-4.3	0.3	-0.7	-4.2	6.2	-5.7	-29.5	-48.9	-42.1	-50.6	-41.6	-36.3	-32.6	-13.5	1.7	19.0	32.0	31.8	21.0
-0.6	1.0	1.2	-2.0	3.2	2.1	1.6	2.2	2.3	3.5	3.7	3.9	4.0	3.9	3.8	4.0	4.7	5.0	5.3	5.3
-2.4	-0.5	0.0	-3.1	3.0	1.9	1.0	1.7	2.2	2.8	3.3	3.8	3.5	3.8	3.5	3.1	3.2	3.3	3.1	2.9
2.0	2.4	0.9	1.3	0.4	-0.2	1.0	1.2	2.2	2.4	2.0	2.1	1.7	1.6	1.4	0.9	0.5	0.6	0.6	0.6
2.8	2.3	1.1	-2.1	-0.1	-0.2	-1.3	1.4	-0.7	-0.4	0.4	0.0	1.6	2.1	2.0	1.5	0.9	1.0	1.8	2.5
6.0	6.1	4.1	3.4	-0.9	-1.4	-3.6	-1.9	-0.2	-1.2	-0.7	-0.1	-	-	-	-	-	-	-	-
-3.1	-1.9	0.4	1.1	1.6	2.1	2.0	0.0	2.9	3.0	2.9	3.2	1.5	1.0	1.1	2.1	3.3	3.4	2.8	2.2
7.5	6.8	7.0	6.8	6.9	6.1	6.0	5.8	6.1	5.0	4.9	4.5	4.7	4.3	4.3	4.3	4.5	4.2	4.3	4.2
8.0	7.5	7.5	7.8	8.5	7.6	7.4	7.2	7.5	6.4	6.2	6.0	6.3	5.5	5.3	5.5	6.1	5.3	5.2	5.3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48.4	59.7	31.7	27.3	71.5	65.2	47.7	35.1	76.9	56.0	38.9	38.9	91.0	70.0	52.0	57.0	94.0	72.0	55.0	59.0
5.1	5.9	3.1	2.5	7.3	6.1	4.4	3.1	7.4	5.0	3.4	3.3	8.6	6.1	4.4	4.7	8.5	5.9	4.5	4.7
21.7	18.2	14.5	16.0	19.6	15.2	12.8	8.0	18.0	20.0	19.6	17.4	20.0	21.0	20.0	19.0	20.0	21.0	20.0	19.0
16.5	-4.0	-29.1	-5.2	81.7	-37.7	-38.7	2.1	91.9	-29.6	-35.5	14.6	117.0	-20.0	-38.0	31.0	109.0	-22.0	-40.0	23.0
1.8	-0.4	-2.8	-0.5	8.3	-3.5	-3.5	0.2	8.9	-2.6	-3.1	1.2	11.0	-1.7	-3.2	2.5	9.8	-1.8	-3.3	1.8
1.9	1.9	1.9	1.9	-25.4	-45.7	-16.3	7.1	-2.5	-7.2	14.5	21.8	-	-	-	-	-	-	-	-
19.4	19.8	19.5	19.6	20.0	20.0	20.9	22.1	24.5	24.8	24.3	24.7	24.5	-	-	-	-	-	-	-
25.6	25.8	25.9	26.7	27.4	27.4	27.6	27.6	27.6	27.4	27.1	27.1	27.0	-	-	-	-	-	-	-
2.2	2.5	3.4	5.9	7.9	6.7	6.6	3.2	0.4	-0.7	-2.2	-1.9	-2.3	-	-	-	-	-	-	-
1.9	1.7	1.8	3.9	6.1	4.7	5.1	3.2	1.2	0.0	-1.0	-1.7	-1.7	-	-	-	-	-	-	-
0.9	0.6	0.4	2.9	4.1	3.4	4.7	2.0	-0.5	-0.5	-2.7	-3.3	-4.1	-3.7	-1.6	-0.3	1.5	1.8	0.2	-0.4
-0.3	-0.7	-0.9	1.0	2.4	1.3	2.9	1.2	-1.5	0.0	-2.5	-3.8	-5.6	-6.1	-3.7	-1.7	2.2	2.7	1.0	0.2
4.9	4.7	5.6	5.2	5.3	5.5	4.3	5.1	5.7	6.5	8.1	9.0	9.5	9.6	8.8	8.1	8.1	8.2	8.7	8.3
0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.86	1.19
0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.1	1.4

Issued by:
CZECH NATIONAL BANK
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http://www.cnb.cz

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

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