INFLATION REPORT / IV

2015

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 November 2015 and contains the information available as of 23 October 2015. 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

The Czech economy recorded a marked upturn in growth in the first half of this year. Both headline and monetary policy-relevant inflation decreased slightly in 2015 Q3, remaining well below the CNB's target. The easy monetary conditions are still supporting growth in the domestic economy and a related improvement in the labour market situation. Accelerating growth in external demand, low oil prices and rising government investment are also having a favourable effect on economic growth. GDP will grow by 4.7% this year as a result of these factors. Economic growth will then slow just below 3% in the next two years as these extraordinary factors dissipate. The growing economic activity and accelerating wage growth will continue to foster higher costs and consequently also a higher price level, whereas import prices will dampen inflation until mid-2016. Both headline and monetary policy-relevant inflation will increase and hit the 2% target at the monetary policy horizon. In 2017, they will be slightly above the target. 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 the end of 2016. Consistent with the forecast is an increase in interest rates amid gradual appreciation of the koruna in 2017.

The **Czech economy** expanded by 4.6% year on year **in 2015 Q2**, with all demand components making positive contributions. GDP also continued growing in quarter-on-quarter terms at a relatively strong pace. The forecast expects annual GDP growth to accelerate further in 2015 Q3.

Both **headline and monetary policy-relevant inflation** decreased slightly **in 2015 Q3**, remaining well below the CNB's target, or below the lower boundary of the tolerance band around the target (see Chart I.1). The decrease in inflation was due to a slowdown in food price growth, a deepening of the fall in fuel prices and a renewed slight year-on-year decline in administered prices. Adjusted inflation excluding fuels remained stable just above 1%, with the effect of accelerating growth in the domestic economy and wages being offset by a continuing decline in foreign producer prices and a slight appreciation of the koruna against the euro.

According to the assumptions of the forecast, growth in economic activity in the **effective euro area** should accelerate to 1.9% in 2015 and reach about 2% in 2016 and 2017. Producer and consumer price inflation in the euro area remains very subdued, owing mainly to very low commodity prices. However, both producer and consumer prices are expected to start rising gradually thanks to the ECB's easy monetary policy, an expected further slight weakening of the euro against the dollar and an increase in the growth rate of the euro area economy. This will also be fostered by the fading effect of the fall in oil prices. The ECB's unconventional monetary policy is reflected in the outlook for 3M EURIBOR rates, which fluctuates around zero until the end of 2017. The Brent crude oil price is expected to rise only gradually from its current low level.

CHART I.1

FULFILMENT OF THE INFLATION TARGET

Headline inflation decreased slightly in 2015 Q3, remaining well below the CNB's target
(year on year in %)

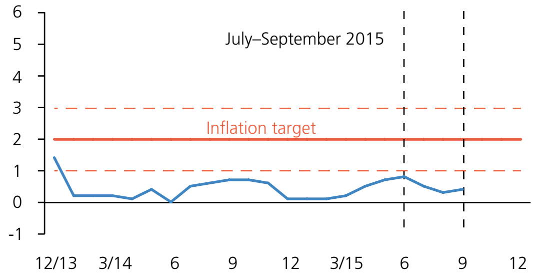
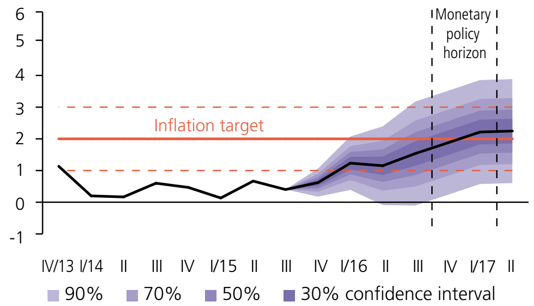


CHART I.2

HEADLINE INFLATION FORECAST

Headline inflation will rise, hitting the 2% target at the monetary policy horizon; it will be slightly above the target in 2017
(year on year in %)



According to the **forecast, both headline and monetary policy-relevant inflation** will increase and hit the 2% target at the monetary policy horizon. In 2017, they will be slightly above the target (see Charts I.2 and I.3). The overall upward cost pressures on consumer prices will increase gradually. The current decline in euro area producer prices coupled with the fall in global prices of most commodities will continue to substantially reduce the costs stemming from import prices. The anti-inflationary effect of import prices will subside in 2016 H2 in connection with the expected return of energy commodity prices and euro area industrial producer prices to annual growth. Costs in the domestic economy will continue to increase due to accelerating wage growth and rising prices of capital amid continued growth in economic activity. This will lead to an increase in adjusted inflation excluding fuels. Food prices will rise owing to agricultural producer price developments. Administered prices will keep falling slightly year on year until the end of 2016 and then return to growth. The current deep year-on-year decline in fuel prices will fade during next year and fuel prices will then rise moderately, in line with global oil prices.

The forecast expects market **interest rates** to be flat at their current very low level until the end of 2016. 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 interest rates in 2017 (see Chart I.4). The forecast for the **koruna-euro exchange rate** takes into account its shift towards the level of the asymmetric exchange rate commitment (i.e. CZK 27 to the euro) in recent months. The forecast assumes that the exchange rate will be used as a monetary policy instrument until the end of 2016. The 2% inflation target will be reached in late 2016 or early 2017. Sustainable fulfilment of this target is a condition for a return to conventional monetary policy. At the forecast horizon, however, this return should not result in the exchange rate appreciating 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. A positive interest rate differential and continued – although much slower than in the pre-crisis period – real convergence of the Czech economy to the advanced euro area countries will be apparent after the exit from the exchange rate commitment, and the koruna will start to appreciate gradually against the euro.

The **Czech economy** will continue to show robust growth for the rest of this year. Accelerating external demand, low commodity prices, easy domestic monetary conditions via the weakened koruna and exceptionally low interest rates, and higher government investment will lead to GDP growth of 4.7% this year. A slowdown in economic growth to just below 3% next year will reflect a fall in government investment and the unwinding of the effect of an increase in inventories this year as well as the fall in oil prices. The economy will maintain a similar rate of growth in 2017 (see Chart I.5), with positive contributions from

CHART I.3

MONETARY POLICY-RELEVANT INFLATION FORECAST

Monetary policy-relevant inflation will hit the 2% target at the monetary policy horizon and will be slightly above it in 2017
(year on year in %)

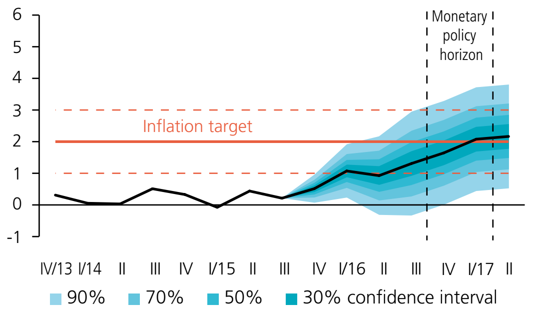


CHART I.4

INTEREST RATE FORECAST

The forecast expects market interest rates to be flat at their current very low level until the end of 2016; consistent with the forecast is an increase in rates in 2017
(3M PRIBOR in %)

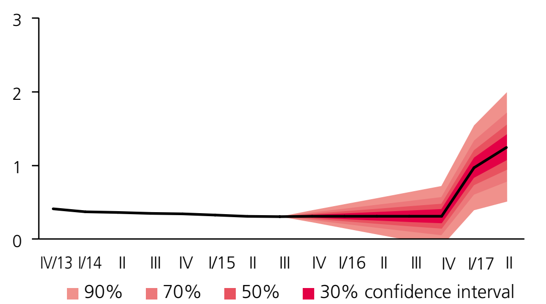
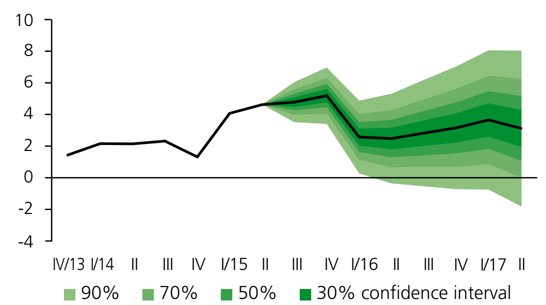


CHART I.5

GDP GROWTH FORECAST

GDP will grow rapidly this year, but the rate of growth will slow in the next two years as extraordinary factors dissipate
(annual percentage changes; seasonally adjusted)



all components of domestic demand. The rising economic activity will manifest itself in the **labour market** in continued growth in the number of employees converted into full-time equivalents. This will result in a further decrease in unemployment. Wage growth in the business sector will increase noticeably and wage growth in the non-business sector will slow somewhat from its current high level.

At its monetary policy meeting on 5 November 2015, 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 significantly expansionary monetary conditions persists. The likelihood that it will be necessary to discontinue the exchange rate commitment earlier than assumed in the forecast is decreasing over time. The Bank Board assessed the risks to the forecast at the monetary policy horizon as being balanced. Slowing demand in emerging countries is a downside risk to economic growth and consequently inflation. Materialisation of that risk could contribute, via lower global demand and commodity prices, to continued very subdued producer price inflation in the euro area, for which the forecast assumes a recovery. On the other hand, an upside risk to domestic inflation is that the assumed decrease in natural gas prices for households at the start of next year may not materialise. In this situation, the Bank Board discussed extending the duration of the exchange rate commitment. It agreed that its discontinuation would probably shift to around the end of 2016.

II. THE FORECAST, ITS CHANGES AND RISKS

II.1 EXTERNAL ASSUMPTIONS OF THE FORECAST

The growth rate of external economic activity will accelerate slightly further in the near future and fluctuate around 2% over the entire forecast horizon. The current decline in euro area producer prices mainly reflects low energy commodity prices. Producer prices are not expected to return to annual growth until the second half of next year. Consumer price inflation will also rise gradually from its still very low levels owing to rising demand and the unwinding of the effect of the slump in oil prices, but will not exceed 2% before the end of 2017. The subdued inflation is reflected in the ECB's easy monetary policy and consequently also in the outlook for 3M EURIBOR rates, which remain close to zero over the entire forecast horizon. The euro is expected to depreciate slightly against the US dollar next year. The outlook for the Brent crude oil price foresees a gradual increase from its current low level over the forecast horizon.

The outlook for the **effective indicator of euro area GDP** foresees a pick-up in economic growth to 1.9% this year, which is 0.8 percentage point higher than in 2014 (see Chart II.1.1).[1] This is due to easier monetary conditions, including a weaker euro against the dollar, and a drop in oil prices. A further slight acceleration in economic growth to 2.1% is expected in 2016, followed by growth of 2% in 2017. Compared to the previous forecast, the outlooks are unchanged. Slowing demand in emerging countries, especially China, and the Volkswagen scandal are downside risks, while the fiscal impacts of the refugee crisis may act in the opposite direction.

The **effective indicator of producer prices in the euro area** is expected to decrease by 2.3% on average this year (see Chart II.1.2), owing chiefly to a decline in energy commodity prices. Industrial producer prices should return to year-on-year growth in the second half of next year as the effect of the commodity price decline unwinds, the economy grows at a stable pace and the euro depreciates slightly further against the dollar. Producer prices are expected to rise by 0.6% on average in 2016 as a whole and accelerate to 1.9% in 2017.[2] Compared to the previous forecast, the outlook for this year and the next has thus been lowered by 0.5 percentage point and 0.8 percentage point respectively. By contrast, it is slightly higher for 2017.

1 The outlooks for euro area GDP, PPI and CPI and the dollar-euro exchange rate are based on the October Consensus Forecasts (CF). The outlooks for the 3M EURIBOR and the Brent crude oil price are derived from prices of market contracts as of 12 October 2015. The outlook is indicated by the grey areas in the charts. This convention is used throughout this Report. The differences between the previous and new forecast for already known facts are due, in addition to revisions, to an update of the weights of individual countries in Czech exports and new seasonal adjustment.

2 For 2016, this represents a slight downward expert adjustment compared to the CF outlook, whose materialisation would require implausibly strong producer price inflation in late 2015 and early 2016.

CHART II.1.1

EFFECTIVE GDP IN THE EURO AREA

The growth rate of economic activity abroad will fluctuate around 2% over the entire forecast horizon

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

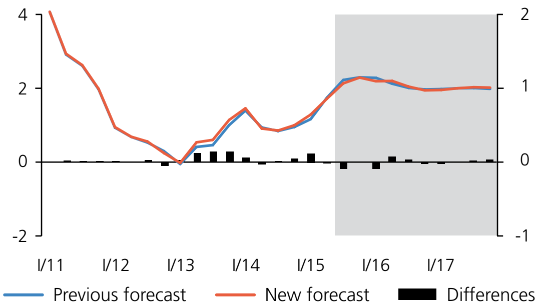


CHART II.1.2

EFFECTIVE PPI IN THE EURO AREA

The decline in producer prices will fade out in 2016 H2 and their growth will then accelerate to 2%

(year on year in %; differences in percentage points – right-hand scale; seasonally adjusted)

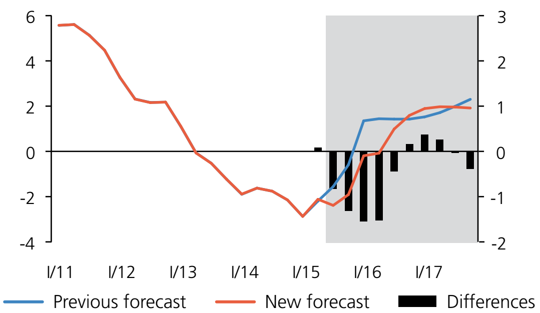


CHART II.1.3

EFFECTIVE CPI IN THE EURO AREA

The currently very low consumer price inflation will gradually rise, but will not exceed 2%

(year on year in %; differences in percentage points – right-hand scale; seasonally adjusted)

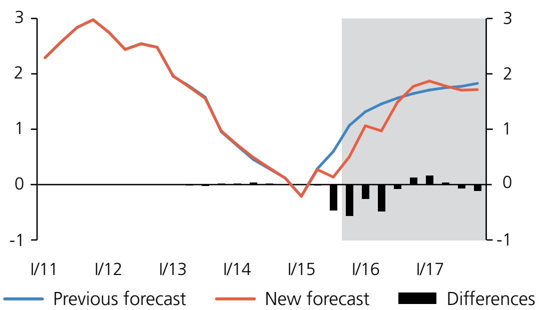


CHART II.1.4

3M EURIBOR

Subdued inflation and continued unconventional monetary policy of the ECB is reflected in a low outlook for interest rates in the euro area

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

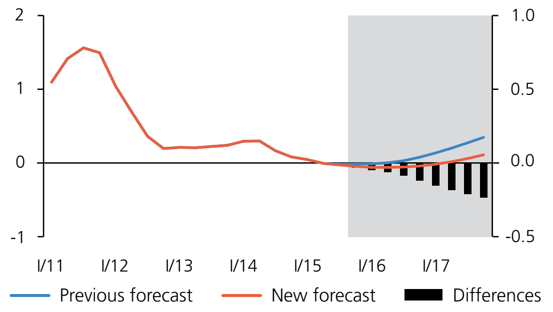


CHART II.1.5

EURO-DOLLAR EXCHANGE RATE

The euro is expected to weaken slightly against the dollar next year

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

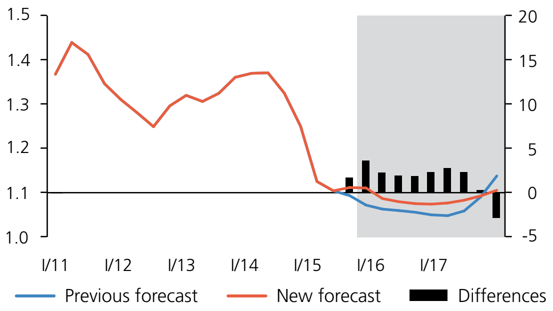
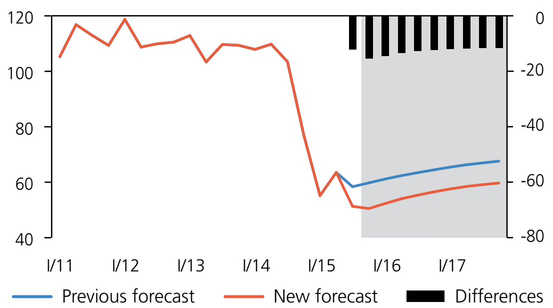


CHART II.1.6

PRICE OF BRENT CRUDE OIL

The market outlook for the crude oil price foresees a gradual rise from its current low level

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



The very low outlook for the **effective indicator of consumer prices in the euro area** this year mainly reflects a continuing decline in energy prices for households. In 2015 as a whole, consumer prices are expected to increase by just 0.2% on average (see Chart II.1.3). Consumer prices are projected to go up on average by 1.3% next year and by 1.8% in 2017 as growth in economic activity continues and the effect of low energy prices gradually unwinds. Compared to the previous forecast, the outlook is slightly lower for this year and the next.

The outlook for **3M EURIBOR rates** fluctuates around zero over the entire forecast horizon (see Chart II.1.4). It mainly reflects the ECB's unconventional monetary policy and its communication regarding a potential increase in the overall size and an extension of its asset purchase programme. Compared to the previous forecast, the rates are thus lower above all at the longer end of the forecast horizon. The market outlook for foreign interest rates is in line with the expectations of the analysts surveyed in the October CF, who expect the 3M EURIBOR to be flat at the zero level at the 3–12-month horizon. At the same time, most of the analysts expect the ECB's main refinancing rate to stay at the current level of 0.05% at least over the one-year horizon.

The outlook for the **euro-dollar exchange rate** foresees the euro weakening slightly from this year's expected average of USD 1.11 to the euro to USD 1.08 next year. In 2017, the average exchange rate is expected to be about USD 1.09 to the euro (see Chart II.1.5). Compared to the previous forecast, the outlook has shifted towards a slightly smaller weakening of the euro over almost the entire forecast horizon, primarily reflecting the postponement of monetary policy tightening by the Fed.

The outlook for the **Brent crude oil price** based on market futures takes into account its current low level below USD 50 a barrel (see Chart II.1.6). This level continues to reflect a persisting high supply of oil in the market. Demand from China and other emerging economies meanwhile remains weak. The futures curve of the Brent crude oil price is gradually upward-sloping, but the curve has been revised downwards over the entire horizon compared to the previous forecast. A moderate increase from this year's average of USD 55 a barrel to about USD 60 a barrel at the end of 2017 is expected. The analysts surveyed in the October CF expect the Brent crude oil price to be approximately USD 58 a barrel at the 12-month horizon, i.e. slightly higher than the market outlooks.

II.2 THE FORECAST

Both headline and monetary policy-relevant inflation decreased slightly in 2015 Q3, thus remaining well below the target, or below the lower boundary of the tolerance band around the target. However, they will increase in the period ahead, hitting the 2% target at the monetary policy horizon and exceeding it slightly in 2017. The current anti-inflationary effect of import prices stemming from the fall in euro area producer prices and global prices of most commodities, as well as from the recent appreciation of the koruna against the euro, will subside, and import prices will be slightly inflationary in 2016 H2. The domestic economy will foster higher costs and consequently higher consumer prices over the entire forecast horizon via accelerating wage growth and rising prices of capital. The high annual GDP growth recorded in the first half of this year will accelerate slightly further in the rest of the year, thanks mainly to the contribution of gross capital formation. The economy is being supported by still easy monetary conditions. Its rapid growth is also being fostered by the positive supply-side effect of low oil prices and a strong increase in government investment. However, these two extraordinary factors will dissipate in the next two years and economic growth will slow. The favourable economic developments will be reflected in a further improvement in the labour market situation. 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 the end of 2016. Consistent with the forecast is an increase in interest rates amid gradual appreciation of the koruna in 2017.

Annual **headline inflation** dropped to 0.4% on average in 2015 Q3. Inflation will start increasing again in Q4, reaching 0.6%. This will be fostered mainly by faster growth in food prices and a slower decline in fuel prices. Next year, adjusted inflation excluding fuels will also increase, as a result of rising cost pressures from the domestic economy and an unwinding of the current marked anti-inflationary effect of import prices, reflecting the current decline in euro area industrial producer prices and the fall in energy commodity prices on global markets. Administered prices will continue to fall moderately next year. Headline inflation will reach the 2% target at the monetary policy horizon and then will be slightly above it until the end of 2017 (see Chart II.2.1).

Monetary policy-relevant inflation, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, slowed to 0.2% on average in 2015 Q3. 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, monetary policy-relevant inflation will follow a similar path to headline inflation, although it will be slightly lower owing to slightly positive contributions from changes to indirect taxes (see Chart II.2.1). It, too, will be slightly above the 2% target as from the start of 2017.

CHART II.2.1

HEADLINE INFLATION AND MONETARY POLICY-RELEVANT INFLATION

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

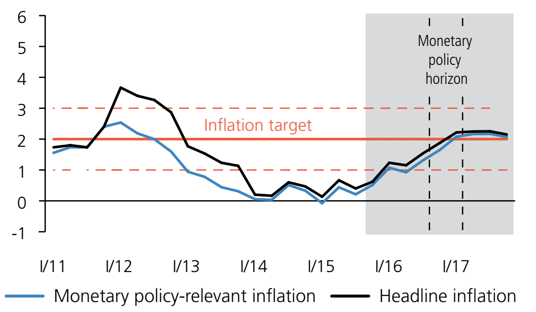


CHART II.2.2

ADMINISTERED PRICES

Administered prices started falling slightly year on year in 2015 Q3 and will start rising again only in 2017 as the negative contribution of gas prices fades out

(annual percentage changes; contributions in percentage points)

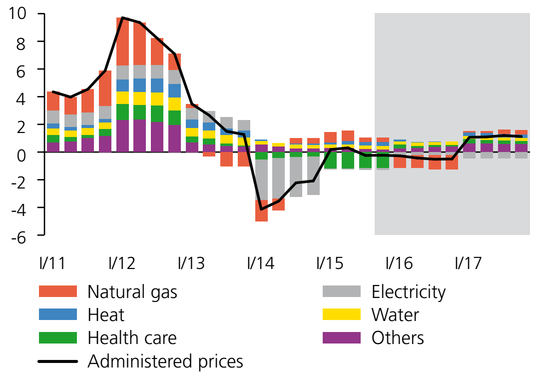


TABLE II.2.1

FORECAST OF ADMINISTRATIVE EFFECTS

Administered prices will not rise moderately before 2017, as the forecast expects a further decline in prices of energy, especially natural gas, in 2016

(annual average percentage changes; contributions to headline inflation in percentage points)

	2014 actual		2015 forecast		2016 forecast		2017 forecast	
Administered prices – total[a)]	-3.0	-0.51	0.0	0.00	-0.4	-0.07	1.1	0.19
of which (main changes):								
electricity	-10.3	-0.49	-0.4	-0.02	-0.7	-0.03	-1.6	-0.07
natural gas	-2.4	-0.07	3.1	0.09	-5.8	-0.17	1.3	0.04
heat	0.5	0.01	1.9	0.04	0.3	0.01	2.0	0.04
water	3.4	0.03	3.4	0.03	3.0	0.03	3.0	0.03
health care	-5.6	-0.01	-16.7	-0.02	2.7	0.00	3.9	0.00
First-round impacts of indirect tax changes in non-administered prices		0.13		0.21		0.21		0.10

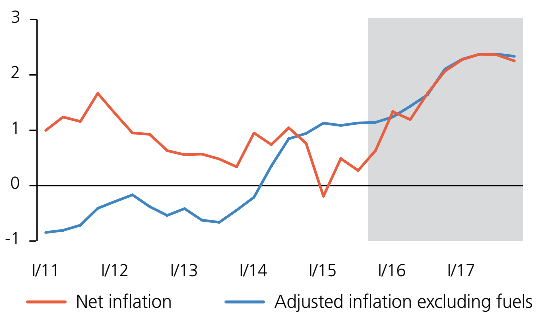
a) Including effects of indirect tax changes

CHART II.2.3

NET INFLATION AND ADJUSTED INFLATION EXCLUDING FUELS

Net inflation will accelerate in the near future; within it, adjusted inflation excluding fuels will also rise

(year on year in %)



The contribution of changes to **indirect taxes** to annual headline inflation was 0.2 percentage point in 2015 Q3. This reflected harmonisation increases in excise duties on cigarettes in December 2014. This was offset by the introduction of a second reduced VAT rate of 10% on medicines, books and irreplaceable infant food with effect from 1 January 2015. The forecast assumes a further two increases in excise duty on tobacco products in 2016 and 2017 with an estimated impact on headline inflation of 0.2 percentage point and 0.1 percentage point respectively.

Administered prices started falling slightly year on year in 2015 Q3 (see Chart II.2.2). This was due to slower year-on-year growth in gas prices coupled with a persisting effect of the abolition of a large proportion of fees in health care and the decrease in electricity prices in early 2015. By contrast, a rise in gas prices and water supply and sewerage collection charges implemented at the start of this year had an upward effect on administered prices. The forecast expects the moderate decrease in administered prices to continue for the rest of this year and next year, when their dynamics will be dampened by a further decline in energy prices for households. This is true above all of natural gas prices for households (-5.8% on average), as global market prices of natural gas have been falling sharply since the start of this year. However, the extent to which the main suppliers will reflect this fall in end prices for households remains uncertain. A decrease in electricity generation prices at which most purchases for supplies next year were made suggests that the overall price for households will also decline slightly (by 0.7%). The forecast expects administered prices to increase by around 1% in 2017 on the back of renewed growth in gas prices and continuing positive contributions from most other components. The exception will be electricity prices, as market outlooks for the electricity generation component point to a stronger decrease (see Table II.2.1).

Annual **net inflation** slowed slightly to 0.3% on average in 2015 Q3 (see Chart II.2.3). This was due mainly to a temporary moderation of growth in food prices and a deepening of the year-on-year decline in fuel prices. Net inflation will rise markedly in the period ahead owing to an increase in food price inflation and next year also in adjusted inflation excluding fuels, which will reflect continuing growth of the domestic economy and strengthening cost pressures in particular from the labour market. Another contributing factor will be expected renewed growth in euro area producer prices together with an unwinding of the effect of the drop in oil prices. In 2017, net inflation will be above 2%, with positive contributions from all its components.

Adjusted inflation excluding fuels was unchanged in 2015 Q3, averaging 1.1%. Growth in prices of other non-tradables accelerated marginally. A continuation of this trend is indicated by the substantially rising domestic economic activity and favourable developments on the labour market. Growth in prices of other tradables excluding fuels remained stable in quarterly average terms, but accelerated in September. Adjusted inflation excluding fuels will stay at its current level for the rest of this year and rise next year. This will be due to a continuing inflationary effect of domestic economic activity and wage growth combined with gradual dissipation of the currently strong anti-inflationary factors stemming from import prices. In 2017, these factors will be counteracted by an expected gradual appreciation of the koruna, but adjusted inflation will nonetheless remain above 2% (see Chart II.2.3).

Annual growth in **food prices** slowed substantially in 2015 Q3, averaging 0.3%. This was due to falling import prices of food and prices of agricultural commodities, which were affected, among other things, by the lagged effect of the retaliatory trade sanctions imposed by Russia last year and by the lifting of EU milk quotas this year. However, the forecast expects food price inflation to increase by the end of 2015, a tendency that was already visible in the September data. In the coming months, this will reflect this year's drought, which is causing prices of vegetables, fruit and some other food products to rise. In the longer term, an expected gradual rise in world agricultural commodity prices coupled with an increase in inflationary pressures from the domestic economy will foster an increase in food price inflation. In 2017, food price inflation will stabilise above 2% (see Chart II.2.4).

The year-on-year decline in **fuel prices** deepened in 2015 Q3 (to -12.6%) owing to a further decrease in global prices of oil and petrol (see Chart II.2.5). According to leading indicators,[3] this decline will intensify in the remainder of this year but will largely fade away at the start of next year and fuel prices will record only a slight annual decline. In line with global prices of oil and petrol, fuel prices will start rising moderately at the end of 2016 and record growth in the range of 2%–4% in 2017.

Domestic money market **interest rates** remained at historical lows at all maturities in 2015 Q3. The forecast expects market interest rates to be flat at their current very low level until the end of 2016. 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 interest rates in 2017 (see Chart II.2.6).

The **exchange rate of the koruna against the euro** appreciated slightly in 2015 Q3 to CZK 27.1 on average. The forecast expects it to remain at similar levels in the quarters ahead. The forecast assumes that the exchange rate will be used as a monetary policy instrument until the end of 2016. The 2% inflation target will be reached in late 2016 or early 2017. Sustainable fulfilment of this target is a condition for a return to conventional monetary policy. At the forecast horizon, however, this return should not result in the exchange rate

3 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 reflect agricultural producer prices, which will start rising moderately in year-on-year terms next year

(annual percentage changes)

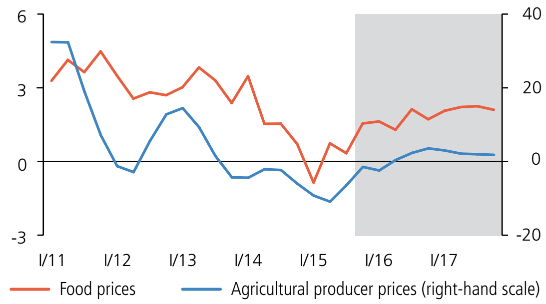


CHART II.2.5

FUEL PRICES AND OIL PRICES

Fuel prices will return to annual growth at the end of next year, in line with global oil prices

(annual percentage changes)

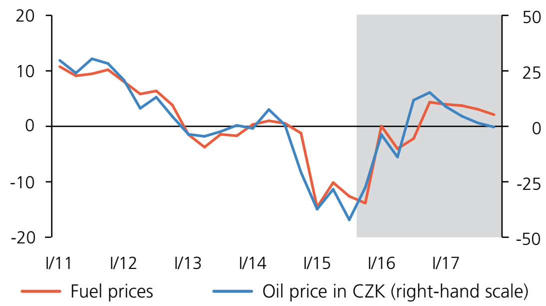
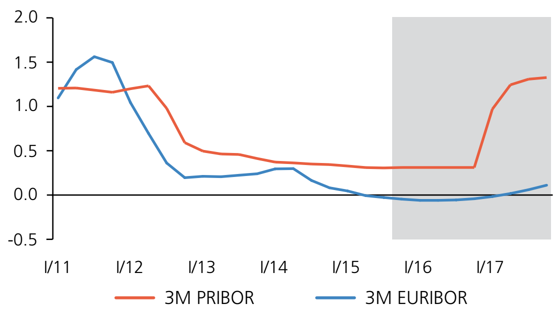


CHART II.2.6

INTEREST RATE FORECAST

The forecast expects market interest rates to be flat at their current very low level until the end of 2016; consistent with the forecast is an increase in rates in 2017

(percentages)



appreciating 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. A positive interest rate differential[4] and continued – although much slower than in the pre-crisis period – real convergence of the Czech economy to the advanced euro area countries will be apparent after the exit from the exchange rate commitment, and the koruna will start to appreciate gradually against the euro. Given the CF outlook for a slightly depreciating euro against the dollar (see section II.1), this implies gradual depreciation of the koruna-dollar rate until the end of 2016. By contrast, the koruna will start to appreciate against the dollar at the beginning of 2017, due to an expected appreciation of the euro against the dollar and a slight appreciation of the koruna against the single European currency.

Quarterly growth in **nominal marginal costs in the consumer goods sector** picked up slightly in 2015 Q3 (see Chart II.2.7). This mainly reflects accelerating intermediate goods price inflation due to cost pressures from the domestic economy, most notably wage growth in the business sector. On the other hand, still falling import prices resulting from deflation in euro area industrial producer prices and a fall in global oil prices, coupled with a slight strengthening of the koruna, are significantly dampening the rise in costs. 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), has been growing gradually but is much weaker than in the pre-crisis period. The overall upward cost pressures on consumer prices will strengthen gradually until the end of 2016, with growth in costs rising temporarily above 2%, reflecting accelerating wage growth and continued growth in economic activity. At the same time, the return to growth in foreign producer prices will gradually moderate the anti-inflationary effect of import prices, and from mid-2016 onwards import prices will have a slight upward effect on costs. However, this effect will subside again during 2017 as the koruna gradually appreciates following the assumed exit from the exchange rate commitment, which will be offset by continued growth in euro area producer prices.

Growth in **nominal marginal costs in the intermediate goods sector** slowed slightly to below 3% in 2015 Q3. This continued growth was due mainly to nominal wage growth in the business sector outpacing labour productivity growth. The price of capital[5] also made a positive contribution to marginal costs, reflecting a recovery

CHART II.2.7

COSTS IN THE CONSUMER SECTOR

Accelerating growth in costs in the consumer sector will reflect the strengthening effect of the growing domestic economy, while the negative contributions of import prices will fade out in 2016 H2

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

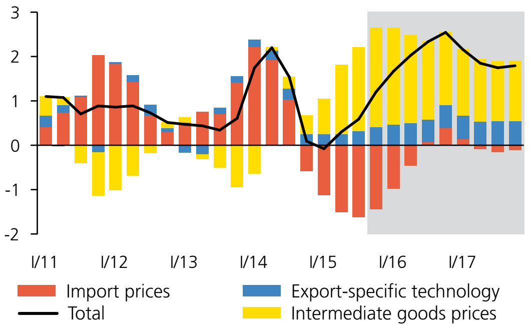
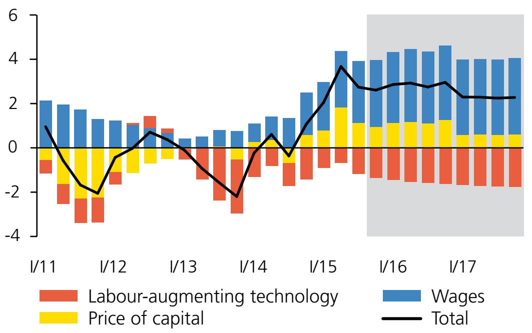


CHART II.2.8

COSTS IN THE INTERMEDIATE GOODS SECTOR

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

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



4 The forecast routinely attaches only a minor weight to 3M EURIBOR market 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. The forecast hence implicitly now assumes a lower interest rate differential in 2017 than indicated in Chart II.2.6.

5 The price of capital reflects demand for investment, which responds to current and expected developments in aggregate demand. Given the high import intensity of investment, the price of capital is affected, in addition to cyclical developments in the economy, by foreign prices, the exchange rate and other factors.

in investment activity and overall economic activity in a growth phase of the business cycle (see Chart II.2.8). The growth rate of domestic nominal costs will stay slightly above 2% over the entire forecast horizon on the back of gradually strengthening wage growth and continued growth in the price of capital. These cost pressures will be only partly offset by growth in labour productivity.

The negative gap in **profit mark-ups in the consumer goods sector** has started to close gradually this year, due to a slight rise in market prices coupled with very subdued growth in total costs. The gap in mark-ups will turn temporarily slightly more negative in the next few quarters, as the rise in costs stemming mainly from wage increases will outweigh growth in market prices of consumer goods, amid a subsiding anti-inflationary effect of import prices. The gap in mark-ups will close at the end of 2017 as the exchange rate appreciates slightly again with net inflation running at just above 2% (see Chart II.2.9).

Whole-economy **labour productivity** continued to grow at a pace of around 3% year on year in 2015 Q2. It will pick up further in the second half of this year as economic activity increases, averaging 3.3% in 2015 as a whole. The fading of the one-off economic growth factors observed this year will cause productivity growth to slow to 1.8% in 2016. Labour productivity will grow by 2.3% in 2017.

The average nominal **wage in the business sector** rose by 2.9% year on year (seasonally adjusted) in 2015 Q2. The forecast expects it to pick up further in Q3, to 3.4%. Continued growth in domestic economic activity, falling unemployment and a gradual return of inflation to the target will result in faster growth in the average wage in the period ahead (see Chart II.2.10). Next year, this will also be fostered by a further rise in the minimum wage.[6] The average wage in the business sector will increase by 3.2% on average in 2015 as a whole and accelerate to 4.8% and 5.2% in 2016 and 2017 respectively.

Average nominal **wage growth in the non-business sector** picked up to 4.3% year on year in 2015 Q2 (see Chart II.2.10). Wage growth this year will be affected by an advance rise in public sector wages in 2015 Q4. Wages of constitutional officials will increase at the start of 2016. Annual wage growth in the non-business sector will thus reach 3.7% this year and slow to 3.1% and 2.6% in 2016 and 2017 respectively.

Real GDP recorded a further year-on-year acceleration to 4.6% and a quarter-on-quarter rise of 1.1% in **2015 Q2** (see Chart II.2.11). All components of demand made positive contributions to the annual growth, with gross capital formation and household consumption being the main drivers (see Chart II.2.12). According to the forecast, annual GDP growth stood at 4.8% **in Q3**, with economic activity increasing by

6 The minimum wage will increase from CZK 9,200 to CZK 9,900 on 1 January 2016, which will foster wage growth of 0.2 percentage point.

CHART II.2.9

GAP IN PROFIT MARK-UPS IN THE CONSUMER SECTOR

The gap in profit mark-ups will fluctuate at slightly negative levels almost until the end of 2017
(percentages)

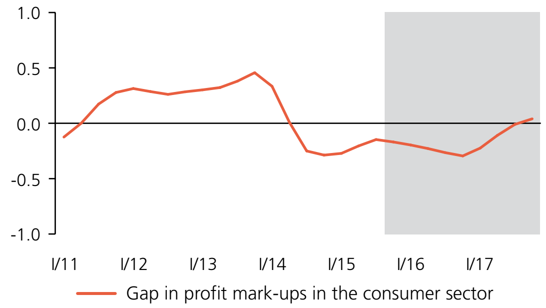


CHART II.2.10

AVERAGE NOMINAL WAGE

Wage growth in the business sector will pick up and will outpace the declining wage growth in the non-business sector as from the end of this year
(annual percentage changes; business sector – seasonally adjusted; non-business sector – seasonally unadjusted)

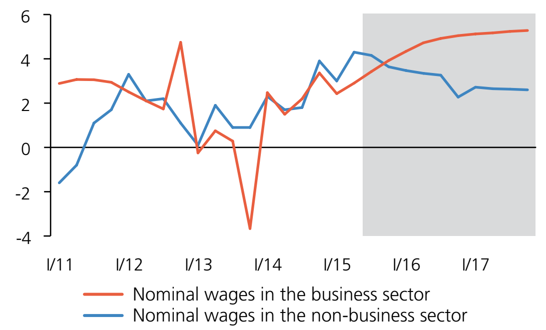


CHART II.2.11

GDP GROWTH FORECAST

Annual GDP growth will remain buoyant this year but will slow in the next two years
(percentage changes; seasonally adjusted)

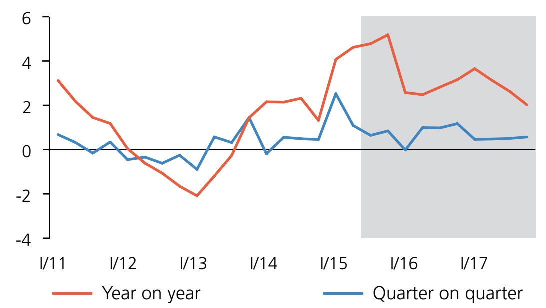


CHART II.2.12

ANNUAL GDP GROWTH STRUCTURE

Household consumption and fixed investment will be the biggest contributors to GDP growth
(annual percentage changes; contributions in percentage points; seasonally adjusted)

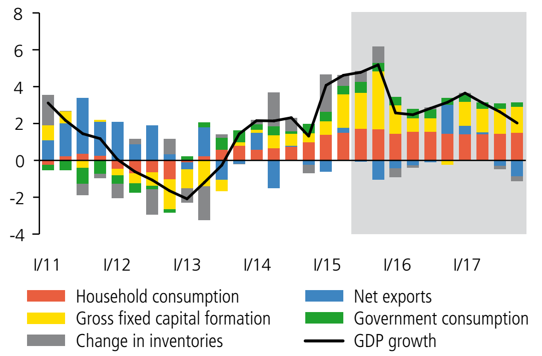


CHART II.2.13

NUMBER OF EMPLOYEES (FULL-TIME EQUIVALENT)

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

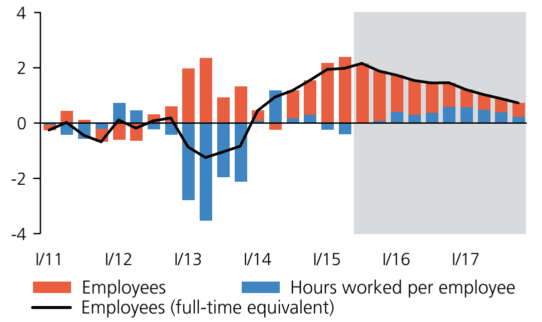
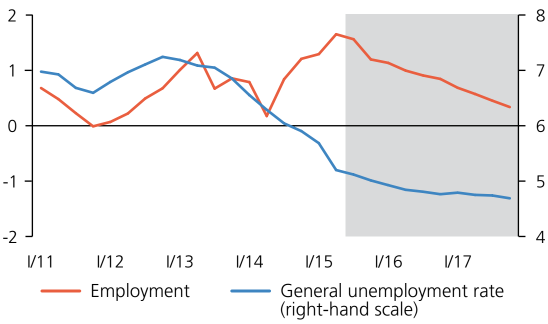


CHART II.2.14

LABOUR MARKET FORECAST

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



0.6% quarter on quarter. The contributions of the domestic components of GDP were similar to those in the previous quarter according to the forecast, and all thus had a positive impact on growth in economic activity. Conversely, the contribution of net exports was slightly negative. Overall, **GDP** will grow by 4.7% **in 2015**, with the economy being driven mainly by buoyant growth in gross capital formation and household consumption. This is fostered by expansionary fiscal policy due to fast growth in government investment financed mainly from European sources. GDP growth this year is also supported by still easy monetary policy and low oil prices.[7] Despite growing external demand, the contribution of net exports will be negative on average due to continued growth in imports of consumer goods and machinery.[8]

GDP growth will slow to 2.8% **in 2016**, reflecting, among other factors, a fall in government investment due to the end of possible drawdown of EU funds from the previous programme period and the only gradual start of the new programme period. The slowdown in economic activity will also be due to the unwinding of the effect of an increase in inventories at the start of this year and the fall in oil prices. GDP growth will be fostered by all its components, most notably still by household consumption and private fixed investment. **GDP growth** will edge up to 2.9% **in 2017**, with positive contributions from all components of domestic demand, while net exports will have a slight dampening effect.

With demand for labour increasing owing to strong growth in economic activity, annual growth in **the number of employees converted into full-time equivalents** fluctuated around 2% in 2015 Q2. This was due to a higher number of employees amid slightly shorter average hours worked per employee. The forecast expects rather faster growth in the converted number of employees in 2015 Q3. However, the rate of growth will gradually slow in the next few quarters. This will initially be due mainly to a further increase in the number of employees, but the average number of hours worked will also contribute later on (see Chart II.2.13). Fast growth in economic activity will result in a marked increase in **total employment** this year (of 1.4%). Growth in employment will slow next year due to slower economic growth – to 1% on average, despite a rise in employment in the non-business sector. Annual growth in total employment will ease further to 0.5% in 2017, amid an increasing shortage of available labour (see Chart II.2.14).

According to the forecast, the previous rapid decline in the seasonally adjusted **general unemployment rate** slowed to 5.1% in 2015 Q3. It will continue to come down gradually in the period ahead as a result of sizeable growth in employment and a simultaneous slight increase in the labour force. In 2017, the general unemployment rate will

7 For details on the favourable impacts of low oil prices on GDP see *Scenario assessing the impacts of continuing low oil prices* in Inflation Report I/2015.

8 In 2015 Q4, the accounting effect of an extension of the lease of JAS-39 Gripen supersonic fighter aircraft will result in a strongly negative contribution of net exports. From the perspective of GDP, however, this will be fully offset by an increase in fixed investment.

fall only marginally to 4.7%, with the labour force and employment growing at similar rates (see Chart II.2.14). The seasonally adjusted **share of unemployed persons, as determined by the MLSA**, will also gradually decline from its current level of 6.4% in 2015 Q3 over the entire forecast horizon. Owing to cyclicality, the supply of vacancies should edge up further. The seasonally adjusted share of unemployed persons will drop to 5.5% at the end of 2017, assuming a continued slight decline in the population aged 15–64.

Year-on-year growth in real **household consumption** accelerated to 3.1% in 2015 Q2 (see Chart II.2.15). This was fostered by all of its components in terms of kind, and most of all by short-term consumption. The forecast predicts that household consumption accelerated slightly further to 3.5% in Q3, consistent with the continued sizeable growth in retail sales amid persisting positive consumer confidence (see section III.3). Household consumption will maintain a similar growth rate at the end of the year, increasing by 3.2% in 2015 as a whole. The stable growth in household consumption will be driven by continued real wage growth coupled with rising employment over the entire forecast horizon. Growth in household consumption will remain close to 3% in 2016 and 2017.

Growth in **gross nominal disposable income** picked up significantly to 3.7% in 2015 Q2, mainly as a result of social benefits and operating surplus and mixed income, whose contributions turned positive (see Chart II.2.16). Growth in the most significant item – wages and salaries – also rose significantly. Annual growth in disposable income will strengthen further to above 5% at the forecast horizon. Although this will be due largely to wages and salaries thanks to continued positive developments in the labour market, business income and property income will also gradually start to contribute to an increasing extent. The positive contributions of social benefits will be broadly flat.

The seasonally adjusted **household saving rate** rose slightly in 2015 Q2 to 11%, where it will remain until mid-2016. It will then drop to 10% as a result of slightly faster annual growth in nominal household consumption than gross nominal disposable income amid still low real interest rates (see Chart II.2.17).

Annual growth in real **government consumption** slowed slightly to 2.3% in 2015 Q2. The forecast expects a somewhat higher growth rate in the second half of the year (see Chart II.2.15). In 2015 as a whole, government consumption will rise by 2.6%. Nominal government consumption will be affected in 2015 and 2016 by a pronounced increase in compensation of employees due to a rise in the public sector's wage bill (the forecast incorporates the planned rise in the number of public sector positions in 2016). Real growth in government consumption will slow below 2% in 2017 due to both an increase in the government consumption deflator and slower growth in nominal expenditure.

CHART II.2.15

REAL HOUSEHOLD AND GOVERNMENT CONSUMPTION

Household consumption will continue to rise appreciably and rather faster than government consumption
(annual percentage changes; seasonally adjusted)

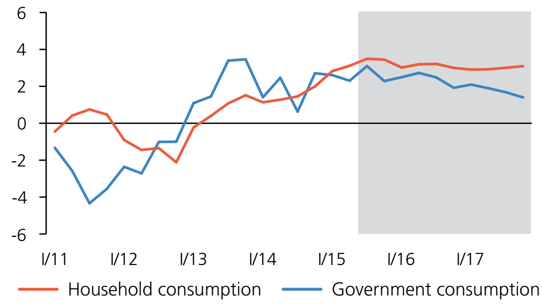


CHART II.2.16

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)

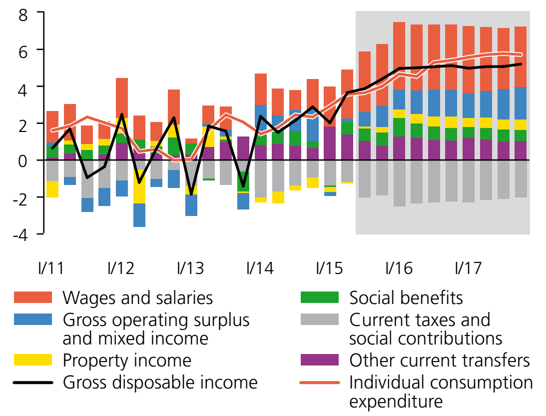


CHART II.2.17

HOUSEHOLD SAVING RATE

The household saving rate will gradually decline to 10% at the end of 2017
(percentages)

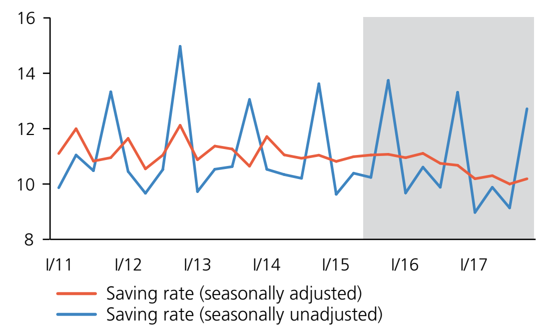


Chart II.2.18

GROSS CAPITAL FORMATION

Gross capital formation will rise this year, boosted by the drawdown of EU funds, but its growth will then slow markedly

(annual percentage changes; seasonally adjusted)

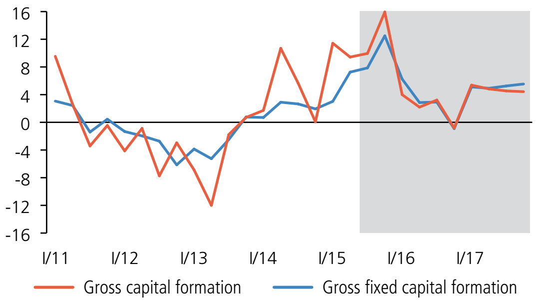


Chart II.2.19

REAL EXPORTS AND IMPORTS

Exports will increase thanks to growing external demand, while imports will rise slightly faster on the back of increasing domestic demand

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

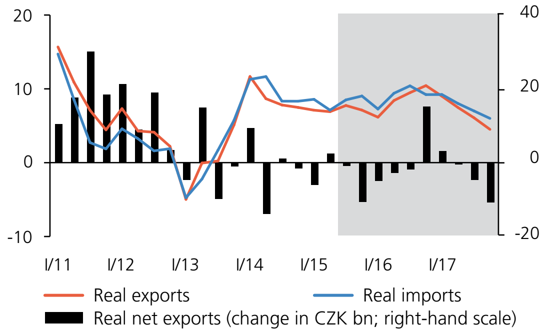


Table II.2.2

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)

	2014 actual	2015 forec.	2016 forec.	2017 forec.
Real gross disposable income of households	1.7	3.2	3.2	2.4
Total employment	0.8	1.4	1.0	0.5
Unemployment rate (in per cent)[a]	6.2	5.3	4.8	4.7
Labour productivity	1.4	3.3	1.8	2.3
Average nominal wage	2.3	3.3	4.4	4.7
Average nominal wage in business sector	2.2	3.2	4.8	5.2
Current account balance (ratio to GDP in per cent)	0.6	0.9	1.2	0.7
M2	4.2	6.3	6.6	6.4

a) ILO methodology, 15–64 years

Annual growth in **gross capital formation** slowed slightly in 2015 Q2, but remained close to 10%. This slowdown was driven by a lower contribution of additions to inventories, while growth in fixed investment picked up significantly. Gross capital formation growth will increase in the second half of the year, mainly as a result of expected growth in fixed investment connected with the drawdown of EU funds for the 2007–2013 programme period.[9] Gross capital formation will thus increase by 11.7% overall in 2015 as a whole (see Chart II.2.18). The forecast expects significantly lower growth in 2016, when government investment will fall considerably as a result of an only gradual start of the drawdown of EU funds for the new programme period. By contrast, private fixed investment will continue to rise. Growth in gross capital formation will accelerate again in 2017 as the contributions of government investment return to positive figures.

Annual growth in real **exports of goods and services** edged down to 6.9% in 2015 Q2. However, the forecast expects a slightly higher rate of growth in exports until the end of this year as a result of external demand developments (see Chart II.2.19). The growth rate of exports of goods and services will total 7.2% in 2015. The forecast expects this growth to pick up slightly further next year, amid faster growth in external demand and a stable exchange rate of the koruna against the euro. The annual growth rate of exports will fall to 6.7% in 2017 as a result of expected gradual appreciation of the koruna after the exit from the CNB's exchange rate commitment.

Annual growth in real **imports of goods and services** also slowed in 2015 Q2. Owing to a higher expected rate of export growth this year and continued growth in domestic demand, annual growth in imports of goods and services will also go up in the second half of this year. It will average 8.3% in 2015. The forecast expects import growth to pick up further next year and to slow to 7.5% in 2017 in connection with slackening growth in exports.

The contribution of **net exports** to annual GDP growth at constant prices temporarily turned slightly positive in 2015 Q2. It will turn negative again in the second half of the year as a result of continued robust growth in domestic demand and the related lead of import growth over export growth. Its contribution to annual GDP growth will thus be negative overall in 2015 as a whole, at -0.4 percentage point. In 2016, the contribution of the change in net exports will be slightly positive owing to a slight upswing in external demand and slower growth in domestic investment (due to base effects linked with the extension of the lease of supersonic fighter aircraft at the end of this year). The forecast again expects a slightly negative contribution in 2017.

9 In 2015 Q4, growth in fixed investment will see a one-off increase due to the accounting effect of an extension of the lease of supersonic fighter aircraft.

The **balance of payments** forecast expects the current account surplus to grow to 0.9% of GDP in 2015 (from 0.6% last year), to increase slightly further to 1.2% in 2016 and to fall again to 0.7% of GDP in 2017 (see Table II.2.3.).

The increase in the **current account surplus in 2015** will be due to a rise in the **services** surplus, associated mainly with lower debits in financial services and, to a lesser extent, also rising credits from communication and information services and construction work. The improvement in the current account will also be due (to roughly the same extent as the services balance) to **secondary income** switching from a slight deficit to a slight surplus, solely as a result of higher drawdown of EU funds. Conversely, a slight decline in the **goods** surplus, due mainly to faster growth in domestic than external demand and a decrease in exports to Russia and Ukraine,[10] will foster a lower current account surplus. On the other hand, the decrease in the goods surplus will be mitigated by a sizeable annual decline in energy commodity prices fostering improved terms of trade (with a positive impact on the goods balance of around CZK 70 billion). A moderately rising **primary income** deficit, linked mainly with expected higher earnings of non-residents on foreign direct investment in the Czech Republic, will foster a lower current account surplus.

The **current account surplus in 2016** will increase further compared to this year, solely because of the goods balance, which will reflect the following factors: a fading decline in prices of energy commodities (the lagged reaction of gas prices to the previous fall in oil prices), an expected modest upswing in external demand and a slowdown in domestic demand. By contrast, continued growth in the primary income deficit, linked with a further deepening of the investment income deficit (expected growth in dividends and reinvested earnings of non-residents on direct investment), will foster a lower current account surplus. The services surplus is expected to remain roughly at this year's level, as is the secondary income deficit (owing to payments related to the completion of projects from EU funds from the previous programme period). The expected slight decrease in the current account surplus **in 2017** is linked mainly with expected significantly lower net drawdown from EU funds and a widening of the investment income deficit.

The forecasted sharp increase in the **capital account** surplus in 2015 and 2016 compared to last year is associated exclusively with payments from EU funds for the 2007–2013 programme period. In 2017, by contrast, this item will reflect the only gradual start of drawdown of funds from the programmes for 2014–2020 and its surplus will decrease noticeably.

10 The negative impact of the developments in these two countries on the goods balance is estimated at around CZK 40 billion.

Table II.2.3

BALANCE OF PAYMENTS FORECAST

The current account surplus should increase this year and the next compared to 2014 thanks mainly to falling prices of energy commodities and higher drawdown of EU funds
(CZK billions)

	2014 actual	2015 forecast	2016 forecast	2017 forecast
A. CURRENT ACCOUNT	26.1	40.0	55.0	35.0
Goods	238.9	230.0	265.0	285.0
Services	55.9	70.0	70.0	70.0
Primary income	-259.0	-265.0	-285.0	-310.0
Secondary income	-9.7	5.0	5.0	-10.0
B. CAPITAL ACCOUNT	32.2	100.0	65.0	20.0
C. FINANCIAL ACCOUNT[a)]	48.0	455.0	172.0	112.0
Direct investment	-133.6	0.0	-70.0	-70.0
Portfolio investment	90.3	50.0	40.0	60.0
Financial derivatives	-6.0			
Other investment	24.2	90.0	70.0	50.0
Reserve assets	73.1	315.0	132.0	72.0

a) forecast excluding operations of banking sector and financial derivatives

The relatively high net inflow of **direct investment** recorded last year will be replaced by a roughly balanced outcome in 2015. This change will be linked with higher outflows of residents' capital and with the already observed clear decline in investment by non-residents in their domestic subsidiaries (see section III.6). In 2016, the most significant factors of the expected renewal of the net inflow of direct investment will include the unwinding of this year's one-off effects on both the asset and liability sides and an already approved sizeable new investment in the automotive industry in the Czech Republic. However, the forecast predicts that direct investment in the Czech Republic will still primarily take the form of reinvested earnings. The structure and magnitude of direct investment in 2017 are forecasted to be the same as in 2016.

The net outflow of **portfolio investment** will decrease markedly this year, despite a significant year-on-year rise in residents' interest in investing abroad. This is because this year, unlike in 2014, there will be no one-off repayment of euro-denominated government bonds totalling several tens of billions of korunas and, moreover, non-residents' interest in domestic government koruna bonds has risen markedly. A further slight decrease in the net outflow of portfolio investment is expected in 2016 owing to government bond issues on foreign markets.[11] In 2017, after this one-off shock subsides, the net capital outflow is expected to increase again.

With regard to **other investment** (excluding banking sector operations), the forecast predicts a high – albeit falling – net outflow of capital from the corporate sector in the form of growth in residents' deposits abroad, growth in loans to non-residents and repayments of existing loans accepted from non-residents. The expected decline in the net outflow is due to an expected gradual recovery in private investment in the Czech Republic.

Besides returns on international reserves, the forecast for **reserve assets** mainly reflects 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, this year, also the foreign exchange interventions already made.

11 According to government's draft state budget for 2016.

The future macroeconomic developments described above and the fiscal policy settings are reflected in the **government finance** outlook for 2015–2017 (see Table II.2.4).[12]

The general government deficit is expected to drop to 1.3% of GDP **in 2015** owing to accelerating economic growth coupled with dissipation of the extraordinary factors that contributed to the one-off increase in the deficit in 2014.[13] However, the overall effect of fiscal policy is again expansionary this year, making a positive contribution of around 0.6 percentage point to economic growth (see Table II.2.5). This is due chiefly to stronger growth in government investment reflecting an effort to draw as much EU money as possible from the previous programme period, which is supported by increased use of domestic funds. In addition, investment expenditure will rise at the end of the year due to the accounting effect of an extension of the lease of JAS-39 Gripen aircraft of 0.2% of GDP, although this can be regarded as an extraordinary or one-off measure with no impact on the fiscal impulse. This year's increase in the growth rate of government expenditure is amplified by a further acceleration of wage growth in the government sector[14] and an increase in pensions. This rise is due to the restoration of the policy to increase pensions fully in line with inflation plus one-third of real wage growth and a one-off additional increase in January 2015. The general government revenue side is being weakened by the introduction of a second reduced VAT rate of 10% and the additional effect of a kindergarten allowance and an increase in the tax discount for dependent children in January 2015. Counteracting this is higher excise duty on tobacco products.

Amid continuing economic growth, the general government deficit will decline further to 0.6% of GDP **in 2016**. On the expenditure side, a marked year-on-year decrease in government investment can be expected owing to the end of the previous programme period for drawing down EU funds and the only gradual start of the new one, along with slightly lower debt service costs. Counteracting this will be a further increase in wages in the government sector,[15] an increase in subsidies for renewable resources and an extraordinary benefit

12 As part of the autumn government deficit and debt notifications, the CZSO carried out a data revision for 2011–2014. This revision was due mainly to the extension of the general government sector to include all semi-budgetary organisations and public hospitals irrespective of their legal form. The incorporation of these new institutions into the general government sector significantly changed the sector's finance structure, in particular on the expenditure side, and slightly increased the general government deficit and debt in the said years.

13 The general government balance in 2014 was affected by a rise in capital expenditure to include payments from the Deposit Insurance Fund to the clients of bankrupt credit unions (amounting to 0.3% of GDP) and a marked shortfall in collection of excise duty on tobacco products (of 0.5% of GDP) connected with legislative restrictions on the frontloading of tobacco products (effective from 1 December 2014).

14 This will be fostered by an upward revision of the wage scales of state employees, public services employees and teachers, which has been brought forward to 1 November 2015.

15 According to the government's draft state budget for 2016, wage expenditure in organisational units of the state and semi-budgetary organisations will rise by approximately 7% next year. The number of positions will increase by 3.1% and the average wage by 4.2%. The increase in the number of positions is due mainly to a rise in employment in education, the police and the army, labour offices, financial administration and justice.

Table II.2.4

FISCAL FORECAST

The structural deficit will widen to 1% of GDP this year and then narrow again by 2017
(% of nominal GDP)

	2014 actual	2015 forec.	2016 forec.	2017 forec.
Government revenue	40.6	41.0	40.5	40.6
Government expenditure	42.6	42.3	41.1	40.7
of which: interest payments	1.3	1.2	1.1	1.0
GOVERNMENT BUDGET BALANCE	-1.9	-1.3	-0.6	-0.1
of which:				
primary balance[a)]	-0.6	-0.1	0.5	1.0
one-off measures[b)]	-0.6	-0.2	0.1	0.1
ADJUSTED BUDGET BALANCE[c)]	-1.4	-1.1	-0.7	-0.2
Cyclical component (ESCB method)[d)]	-0.8	-0.1	0.3	0.7
Structural balance (ESCB method)[d)]	-0.6	-1.0	-1.1	-0.8
Fiscal stance in pp (ESCB method)[e)]	-0.3	-0.4	-0.1	0.2
Cyclical component (EC method)[d)]	-1.0	-0.1	0.0	0.1
Structural balance (EC method)[d)]	-0.4	-1.0	-0.7	-0.2
Fiscal stance in pp (EC method)[e)]	-0.2	-0.6	0.3	0.5
Government debt	42.7	40.9	39.5	38.1

a) government budget balance minus interest payments
b) This item includes expected revenue from sales of emission permits, expenditure on the (new) Green Savings Programme, revenue from the sale of mobile frequencies, in 2014 payments from the Deposit Insurance Fund and a fall in excise duties on tobacco products, and in 2015 the impact of the extension of the lease of fighter aircraft.
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)

Table II.2.5

FISCAL IMPULSE

The fiscal impulse will have an impact primarily through government investment over the forecast horizon
(contributions to GDP growth in percentage points)

	2014 actual	2015 forec.	2016 forec.	2017 forec.
Fiscal impulse[a)]	0.3	0.6	-0.3	0.1
of which impact through:				
private consumption	0.1	0.1	0.0	-0.1
private investment	0.0	0.0	0.0	0.0
government investment, domestic	0.1	0.2	0.0	0.1
government investment, EU funded	0.2	0.4	-0.4	0.1

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

payment to pensioners.[16] The general government revenue side will be bolstered by additional revenues from 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 be slightly restrictive overall in 2016, making a contribution to economic growth of around -0.3 percentage point, in particular due to a decrease in government investment.

A decline in the general government deficit to 0.1% of GDP can be expected **in 2017**. This reduction will again be driven by favourable economic growth. Moreover, the revenue side will be positively affected by an expected increase in extraordinary revenues from sales of emission permits (totalling roughly 0.2% of GDP), which will be used only partly to fund the "New Green Savings" programme in 2017. The overall effect of fiscal policy will be slightly expansionary in 2017, making a contribution to economic growth of around 0.1 percentage point, due to expected renewed growth in government investment activity connected with the start of drawdown of EU funds from the new programme period.

The general government **structural deficit** will increase this year (to 1% of GDP) and then decrease again by 2017. Given the current fiscal policy settings, the medium-term objective of 1% of GDP will thus be met in 2017.

Owing to the use of excess Treasury liquidity as a source of funding, in combination with rapid economic growth, the **ratio of government debt to GDP** will decrease significantly to less than 41% this year. The forecast expects a further decrease in government debt relative to GDP in the next two years (to approximately 38% in 2017). Amid low general government deficits or primary surpluses, this will be aided by the use of excess Treasury liquidity, accelerating nominal GDP growth and an expected further reduction in the effective interest rate on government debt owing to financial market developments and positive perceptions of the Czech Republic.

The main **risks** to the fiscal forecast for 2016–2017 are potential positive impacts of the proposed measures to limit tax evasion, although their quantification and effectiveness are still subject to a high degree of uncertainty.[17] There is also uncertainty about the materialisation of the government investment outlook.

16 Government coalition representatives have agreed to make a one-off payment to pensioners of CZK 900 per person (totalling approximately CZK 2.6 billion), to be paid out of the state budget in February 2016.

17 In the draft state budget of the Czech Republic for 2016, the Ministry of Finance expects these measures to have a positive year-on-year impact of approximately 0.3% of GDP in 2016 and 0.2% of GDP in 2017.

II.3 COMPARISON WITH THE PREVIOUS FORECAST

Compared to the previous forecast, the predictions for headline and monetary policy-relevant inflation are lower until 2016 Q3 owing to lower observed net inflation and a lower outlook for foreign producer prices and domestic administered prices. Thereafter, the forecasted inflation levels are slightly higher, due to better performance of the domestic economy. Stronger growth of the economy in 2015 Q2 and a faster labour market recovery have led to a marked upward revision of annual GDP growth this year. The prediction for the following years is virtually unchanged. Growth in nominal wages in the business sector has shifted upwards over the entire forecast horizon as a result of a higher observed level in 2015 Q2 and the faster growth of the domestic economy. 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 until the end of 2016 is unchanged. After the exit from the exchange rate commitment in 2017, the path of market interest rates is slightly higher.

The forecast for annual **headline inflation** is lower than in the previous forecast until 2016 Q3, but slightly higher thereafter (see Chart II.3.1). The revision of the net inflation forecast (see Chart II.3.2) is similar; in the short run it is affected by the lower inflation observed in recent months (lower food price inflation and a larger-than-forecasted decrease in fuel prices). The more robust growth of the domestic economy is reflected in the net inflation outlook, in particular in the longer term. Compared to the previous forecast, the situation this year is characterised by slightly weaker cost pressures owing to a sharper fall in import prices, mainly reflecting a more anti-inflationary effect of foreign prices. By contrast, in 2016 the fundamental upward pressures on costs are slightly higher (for both wage growth and the price of capital), pushing annual net inflation higher as from the end of next year. The administered price outlook is lower for both coming years compared with the previous forecast. The revision of the forecast for next year mainly reflects a lower energy price outlook; the expected decrease in gas prices for households and public transport prices is larger, while growth in heat prices and water supply and sewerage collection charges is smaller. The expected growth in water supply and sewerage collection charges and heat and electricity prices is smaller in 2017. The estimated impacts of changes to indirect taxes remain in line with the previous forecast, so the outlook for **monetary policy-relevant inflation** has been revised in the same way as that for headline inflation.

Turning to the assumptions regarding the **external environment** (see the charts in section II.1), the outlook for producer prices in the effective euro area has been lowered significantly for this year and the next compared to the previous forecast owing to the current decline in oil prices and the observed continued sharp decline in producer

CHART II.3.1

CHANGE IN THE HEADLINE INFLATION FORECAST

The forecast for headline inflation is lower than in the previous forecast in the next four quarters, but slightly higher thereafter
(year on year in %; differences in pp – right-hand scale)

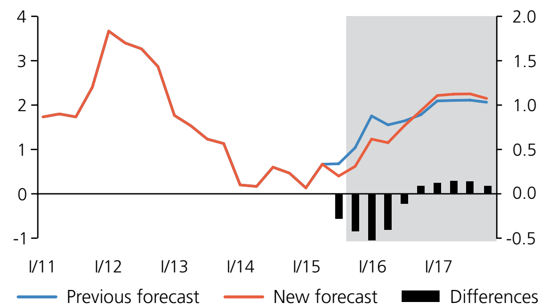


CHART II.3.2

CHANGE IN THE NET INFLATION FORECAST

The lower outlook for net inflation at the start of the forecast horizon reflects its evolution in recent months and a deeper decline in euro area producer prices; later on, stronger inflationary pressures from the domestic economy have an effect
(year on year in %; differences in pp – right-hand scale)

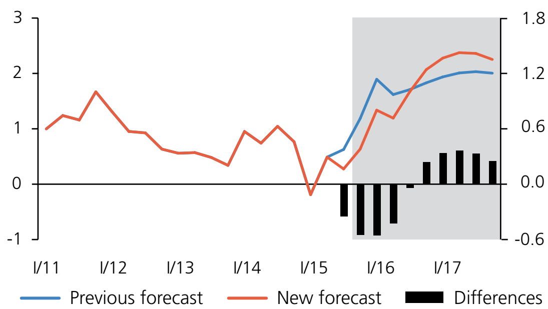


CHART II.3.3

CHANGE IN THE INTEREST RATE PATH

After the exit from the exchange rate commitment in 2017, the path of interest rates is slightly higher
(3M PRIBOR in %; differences in pp – right-hand scale)

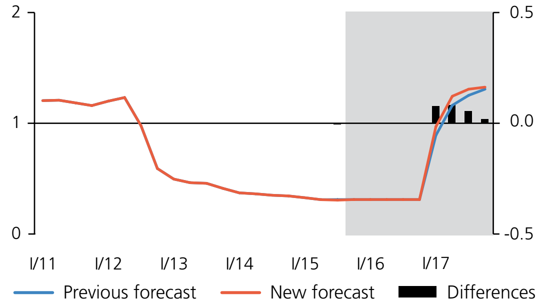


CHART II.3.4

CHANGE IN THE GDP FORECAST

The GDP growth forecast is significantly higher for this year and almost unchanged for the next two years
(annual percentage changes; differences in pp – right-hand scale; seasonally adjusted)

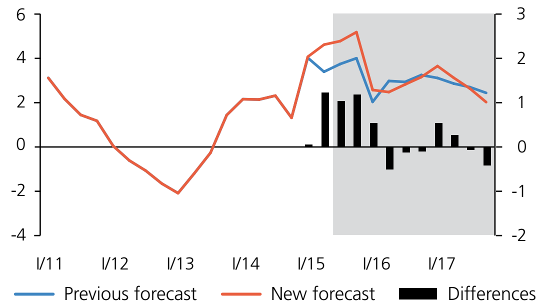
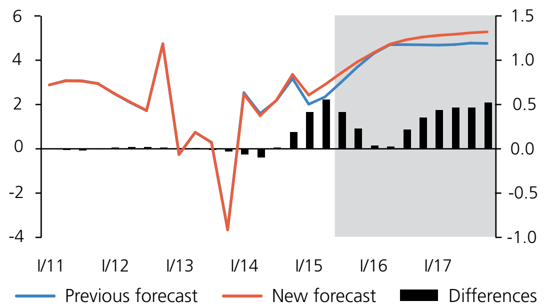


CHART II.3.5

CHANGE IN THE FORECAST FOR NOMINAL WAGES IN THE BUSINESS SECTOR

The nominal wage forecast has shifted to higher rates of growth
(annual percentage changes; differences in pp – right-hand scale; seasonally adjusted[a])



a) The differences between the previous and new forecast for already known facts are due to revisions and seasonal adjustment by the CNB.

prices.[18] The overall revision for 2017 is negligible. The prediction for external demand growth is unchanged. The market outlook for 3M EURIBOR rates has decreased primarily in the longer run in reaction to ECB communication on a possible further easing of its monetary policy.

As a result of the need for a sustained easing of the domestic monetary conditions, the assumption of the use of the exchange rate as an additional monetary policy instrument until the end of 2016 is maintained as in the previous forecast. The expected level of **koruna-euro exchange rate** is unchanged and is only slightly weaker than the announced level of CNB's exchange rate commitment. The path of domestic market **interest rates** remains unchanged until the end of next year and is slightly higher thereafter (see Chart II.3.3). This is due to higher upward cost pressures from the domestic economy and a counteracting lower outlook for 3M EURIBOR rates.

The forecast for annual **GDP** growth in 2015 is significantly above the previous prediction (see Chart II.3.4). The revision is due mainly to considerably stronger GDP growth in 2015 Q2, primarily reflecting stronger growth in gross capital formation. The GDP growth outlook for the following years is almost unchanged overall. At the same time, there are only slight changes in the individual demand components in both years. The forecast for household consumption this year has moved downwards slightly owing to the observed data for Q2. For 2016 and 2017, by contrast, it is revised slightly upwards owing to faster growth in wages and employment. At the forecast horizon, higher economic activity will also lead to stronger growth in fixed investment and inventories, which are expected to follow the standard cyclical path, in contrast to the previous forecast, which had associated their observed growth more with one-off factors. By contrast, government investment will record a larger fall in 2016, as the new forecast assumes a slower start to the drawdown of EU funds under the new programme period. Government consumption will grow slightly faster this year and the next, reflecting an increase in the forecasted rise in compensation of employees; the changes for 2017 are negligible. The expected fiscal impulse in the individual years remains largely unchanged.

The contribution of **net exports** to GDP growth in 2015 is more negative than in the previous forecast as a result of observed lower growth in exports than imports. The contribution of net exports will be roughly the same next year and decrease slightly in 2017.

Growth in the average **nominal wage** in the business sector has increased compared to the previous forecast over the entire forecast horizon (see Chart II.3.5). This revision primarily reflects the observed higher growth in wages and faster growth in domestic economic activity this year.

18 In 2016 this is also due to expert adjustments – see section II.1.

II.4 FORECASTS BY OTHER ENTITIES

Analysts' inflation expectations remain slightly below the CNB's target at the one-year horizon and are stable 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. On average, the analysts expect the economy to grow by more than 4% this year and less than 3% next year. According to the analysts, the exchange rate of the koruna will appreciate to just below CZK 27 to the euro at the one-year horizon. None of the analysts expects the exchange rate commitment to be discontinued before 2016 H2. At the same time, they were all expecting key interest rates to be left unchanged both at the CNB Bank Board's November meeting and at the one-year horizon. The market outlook one year ahead indicates only a minor decrease in interest rates and is therefore slightly below the interest rate path in the new CNB forecast.

Inflation expected by financial market analysts at the one-year horizon has been stable in recent months slightly below the CNB's target of 2%. In October it increased marginally to 1.7%. Inflation expected at the three-year horizon has long been at the level of the CNB's 2% target or very close to it. The inflation expectations of business managers at the one-year horizon remain below the target (see Table II.4.1).

The indicator of **inflation perceived by households** turned slightly more negative in 2015 Q3 (see Chart II.4.1). This means that households on average 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 in the recent past. However, this indicator went down at the end of 2015 Q3 after a period of sustained growth.

Both the FMIE and CF analysts expect GDP to grow by more than 4% this year (see Tables II.4.1 and II.4.2). Next year – after one-off factors have subsided – economic growth is expected to slow below 3%. By contrast, a smooth increase in wage growth is predicted. The analysts on average expect the koruna to appreciate to just below CZK 27 to the euro at the one-year horizon. In line with previous communications of the CNB Bank Board, all the analysts expect that the exchange rate commitment will not be discontinued before 2016 H2. Before the Bank Board meeting in November, all fourteen 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 lower real GDP growth in particular this year, but also next year **compared with the new CNB forecast**. Inflation expected by the analysts at the one-year horizon is slightly

TABLE II.4.1

EXPECTED INDICATORS OF FMIE AND CORPORATIONS

The analysts' inflation expectations are slightly below the CNB's target of 2% at the one-year horizon and at the target level at the three-year horizon
(at 1Y; annual percentage changes unless otherwise indicated)

	6/15	7/15	8/15	9/15	10/15
FMIE:					
CPI	1.6	1.6	1.6	1.6	1.7
CPI, 3Y horizon	2.0	2.0	2.0	2.0	2.0
Real GDP in 2015	3.3	3.3	3.9	4.1	4.2
Real GDP in 2016	2.7	2.7	2.6	2.6	2.5
Nominal wages in 2015	2.8	2.8	2.8	3.0	3.1
Nominal wages in 2016	3.4	3.7	3.8	3.8	3.8
CZK/EUR exchange rate (level)	27.3	27.1	26.9	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)	0.5	0.5	0.6	0.6	0.6
Corporations:					
CPI	1.5			1.5	

CHART II.4.1

PERCEIVED AND EXPECTED INFLATION

Perceived inflation stayed negative, while the previous gradual rise in expected inflation halted in September
(source: European Commission Business and Consumer Survey)

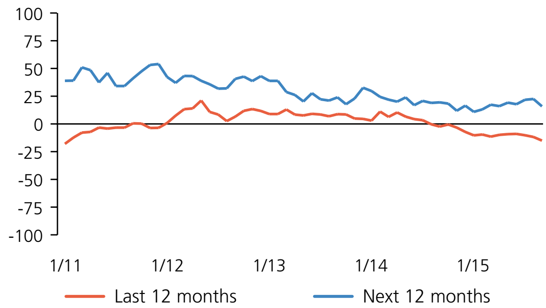


TABLE II.4.2

CF EXPECTED INDICATORS

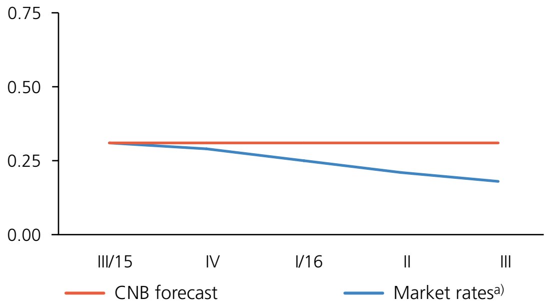
The CF analysts expect the economy to grow at a rate of more than 4% this year; next year the growth will slow appreciably
(at 1Y; annual percentage changes unless otherwise indicated)

	6/15	7/15	8/15	9/15	10/15
Real GDP in 2015	3.0	3.3	3.6	3.8	4.1
Real GDP in 2016	2.7	2.7	2.7	2.7	2.6
Nominal wages in 2015	2.8	2.9	2.9	3.0	3.2
Nominal wages in 2016	3.4	3.6	3.6	3.8	3.8
CZK/EUR exchange rate (level)	27.3	27.3	27.0	26.9	26.9
3M PRIBOR (in per cent)	0.3	0.3	0.3	0.3	0.3

Chart II.4.2

FRA RATES VERSUS THE CNB FORECAST

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



a) for 2015 Q3 and 2015 Q4 the 3M PRIBOR and for 2016 Q1–2016 Q3 the average values of the FRA 3*6, 6*9 and 9*12 rates for the last 10 trading days as of 23 October 2015

below the CNB forecast. The analysts' expectations regarding the 2W repo rate and market rates are in line with the 3M PRIBOR path in the new CNB forecast.

Chart II.4.2 provides a **comparison of expected 3M market rates** derived from FRA quotations and the interest rate path expected by the new CNB forecast. The current market outlook for 3M rates implies a minor decrease at the one-year horizon. This is in line with expectations of flat monetary policy interest rates at least until the same date and a marginal decline in the money market premium. At the one-year horizon, the expected market rates are thus slightly below the interest rate path expected by the new CNB forecast, which is based on stability of the money market premium.

III. CURRENT ECONOMIC DEVELOPMENTS

III.1 INFLATION

Annual headline inflation fell slightly in 2015 Q3, averaging 0.4%. Monetary policy-relevant inflation was 0.2%. Inflation was thus still noticeably below the lower boundary of the tolerance band around the CNB's target. The fall in inflation was due to a marked slowdown in annual food price inflation and a renewed acceleration of the decline in fuel prices. Administered prices switched to a modest year-on-year decline. The fast-growing domestic economy and a continued improvement in the labour market situation supported growth in domestic cost pressures and consequently also consumer prices. This was most apparent in adjusted inflation excluding fuels, which remained stable despite the long-running strongly anti-inflationary effect of prices abroad and appreciation of the koruna against the euro during Q3.

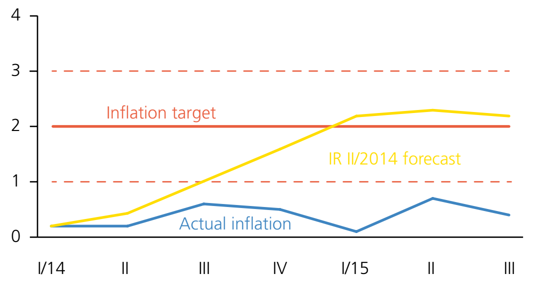
III.1.1 Fulfilment of the inflation target

In 2015 Q3, both **headline inflation and monetary policy-relevant inflation** were still 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 2015 Q3, we have to examine the period from January 2014 to June 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 II/2014 with subsequent inflation.

CHART III.1.1

FORECAST VERSUS ACTUAL INFLATION

Inflation was well below the IR II/2014 forecast in 2015 Q3
(year on year in %)



The **Inflation Report II/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 the start of 2015. The weakened exchange rate was expected to be reflected in rising import prices amid growth in foreign producer prices and also to have a positive effect on domestic economic activity. Inflation pressures from the domestic economy were thus expected to gradually resurge and take over the main role in price developments, primarily via accelerating wage growth. Adjusted inflation excluding fuels was thus expected to turn positive and then continue to rise. Food prices were forecasted to go up, due among other things to the rise in world prices of agricultural commodities observed at that time. By contrast, administered prices were expected to continue falling and return to only gradual annual growth in 2015. Fuel prices were forecasted to fall moderately on the

Table III.1.1

FULFILMENT OF THE INFLATION FORECAST

The deviation of inflation from the forecast was due to all components of inflation except the first-round effects of changes to indirect taxes

(annual percentage changes; contributions in percentage points)

	IR II/2014 forecast	2015 Q3 outturn	Contribution to total difference c)
CONSUMER PRICES	2.2	0.4	-1.8
Breakdown into contributions:			
administered prices	0.6	-0.2	-0.1
first-round impacts of changes to indirect taxes a)	0.2	0.2	0.0
food prices b)	3.4	0.3	-0.8
fuel prices b)	-1.9	-12.6	-0.4
adjusted inflation excl. fuels b)	1.9	1.1	-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 easier monetary conditions

(annual percentage changes unless otherwise indicated)

		II/14	III/14	IV/14	I/15	II/15	III/15
GDP in euro area a), b), c)	p	1.4	1.7	1.9	2.0	2.0	2.0
	o	0.9	0.9	1.0	1.3	1.7	-
PPI in euro area b), c)	p	0.1	0.4	0.7	1.6	1.6	1.4
	o	-1.6	-1.8	-2.1	-2.9	-2.1	-
3M EURIBOR	p	0.3	0.3	0.3	0.3	0.3	0.4
(percentages)	o	0.3	0.2	0.1	0.0	0.0	0.0
USD/EUR exchange rate	p	1.37	1.35	1.33	1.31	1.30	1.29
(levels)	o	1.37	1.32	1.25	1.13	1.10	1.11
Brent crude oil price	p	108.7	107.7	106.1	104.8	103.5	102.1
(USD/barrel)	o	109.8	103.5	77.1	55.1	63.5	51.3

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

Table III.1.3

FULFILMENT OF THE FORECAST FOR KEY VARIABLES

Observed GDP growth was slower than forecasted in 2014 but has been faster this year; wage growth lagged behind the forecast

		II/14	III/14	IV/14	I/15	II/15	III/15
3M PRIBOR	p	0.4	0.4	0.4	0.8	0.9	0.9
(percentages)	o	0.4	0.4	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	27.4	27.6	27.6	27.6	27.4	27.1
Real GDP a)	p	2.2	3.9	1.5	3.0	3.7	2.5
(annual perc. changes)	o	2.1	2.3	1.3	4.1	4.6	-
Nominal wages b)	p	1.2	2.0	3.6	3.8	4.5	5.0
(annual perc. changes)	o	2.2	1.5	1.8	2.2	3.2	-

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

whole, influenced by global prices of crude oil and petrol. Headline inflation was expected to increase towards the CNB's 2% target, slightly exceed it at the start of 2015 and then return to the target from above during 2015 (see Chart III.1.1). Owing to the first-round effects of changes to indirect taxes, monetary policy-relevant inflation was expected to be just below headline inflation.

Headline **inflation in reality** was well below the forecast over the entire period and the deviation increased gradually until the start of 2015. The 1.8 percentage point deviation of actual headline inflation from the forecast in 2015 Q3 was due to all inflation components except the first-round effects of changes to indirect taxes. An unforecasted fall in global agricultural commodity prices, the embargo on imports to Russia and the abolition of EU milk trade quotas led to a significant deviation in food prices. Adjusted inflation excluding fuels picked up gradually, although much more slowly than forecasted owing to deflation in the euro area and an only gradual recovery in domestic wage growth. Fuel prices were affected by an unexpected fall in global oil prices in late 2014 and early 2015, and administered prices were also lower than forecasted (see Table III.1.1).

External economic factors contributed significantly to the substantially lower-than-forecasted domestic inflation. The biggest deviation was recorded by foreign production prices, which did not record the expected growth and on the contrary showed strongly negative year-on-year dynamics. External demand growth was also lower than expected. Foreign interest rates also decreased further, a trend which had not been expected by the forecast. Oil prices also dropped unexpectedly in late 2014 and early 2015 (see Table III.1.2). Overall, then, external developments had an anti-inflationary effect on domestic inflation, i.e. they acted towards a need for easier monetary conditions. **Domestic market interest rates**, however, were broadly stable (see Table III.1.3), as in reality the zero lower bound meant they could not be lowered. A marked deviation of the monetary conditions from the predicted values towards an easier effect can be seen only from the start of 2015, for which the forecast had assumed the exit from the use of the exchange rate as an additional monetary policy instrument and the return to the standard regime. However, this did not occur in reality. The **exchange rate** stayed at levels that were 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 in domestic economic activity materialised qualitatively, although actual domestic GDP growth was lower than predicted in 2014, with real export growth slowing due to weaker external demand. In 2015, by contrast, GDP growth was higher than forecasted. Growth in real household consumption, investment and government consumption was meanwhile faster than forecasted over the entire period. Gross capital formation was strongly affected by unexpected fluctuations in inventories, which contributed in large part to the high GDP growth figures observed this year. By contrast, nominal variables deviated significantly downwards from the forecast. Nominal wage growth lagged behind the predicted figures. This, together with strongly anti-inflationary price developments abroad, led to considerably lower inflation than forecasted.

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 risks of the forecast 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 weakened koruna, affected mainly by the CNB's exchange rate commitment, fostered an easing of the monetary conditions in a situation where the zero lower bound on monetary policy rates had been reached at the end of 2012. 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. The inflation target is being significantly undershot at present, i.e. headline inflation is noticeably below the lower boundary of the tolerance band, but without the weakening of the koruna it would have been negative.

Overall, based on current knowledge, it seems that the monetary policy pursued between January 2014 and June 2015 should have been substantially easier. Nonetheless, thanks to the action taken to weaken the koruna in November 2013, the threat of deflation linked with a drop in demand was averted.

III.1.2 Current inflation

Annual inflation[19] was 0.4% on average in 2015 Q3, 0.3 percentage point lower than in previous quarter. It went down in July and August, but rebounded slightly to 0.4% in September (see Chart III.1.2). The slowdown in annual consumer price inflation was due in part to very weak growth in food prices, which temporarily switched to a year-on-year decline in August. At the same time, the year-on-year decline in fuel prices accelerated again as a result of a renewed

19 Measured by year-on-year growth in consumer prices.

CHART III.1.2

INFLATION

Annual inflation went down on average in 2015 Q3
(year on year in %)

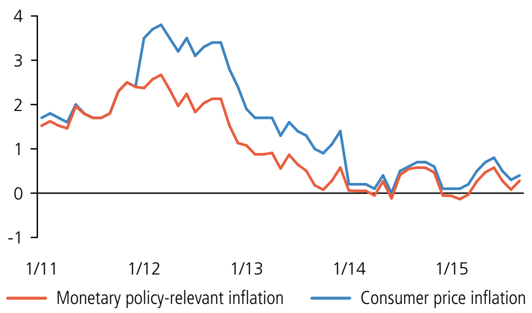


CHART III.1.3

STRUCTURE OF INFLATION

The decline in fuel prices was outweighed by a rise in other market prices and tax changes
(annual percentage changes; contributions in percentage points)

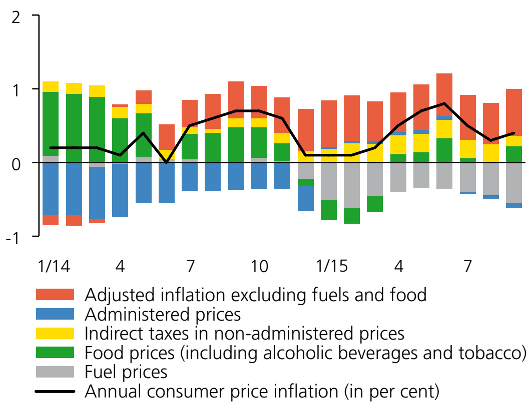


Chart III.1.4

INFLATION COMPONENTS

Adjusted inflation excluding fuels stayed markedly positive in 2015 Q3, food price inflation was weak and volatile, and the decline in fuel prices intensified

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

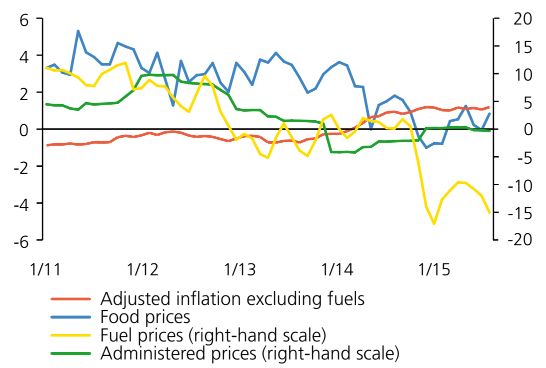


Chart III.1.5

FOOD PRICES

The low food price inflation was due to a decline in many agricultural producer prices and food import prices

(annual percentage changes)

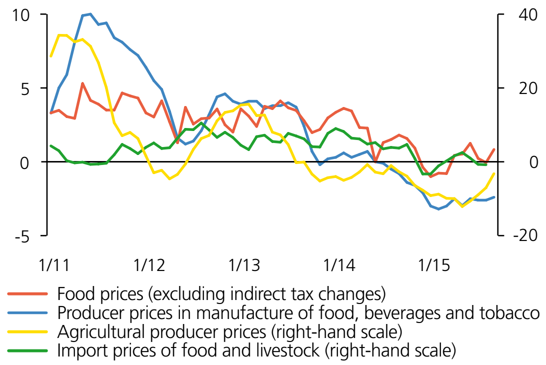
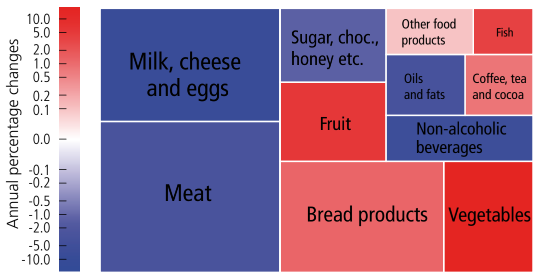


Chart III.1.6

STRUCTURE OF FOOD PRICE INFLATION IN SEPTEMBER 2015

Prices of fruit and vegetables went up due to the summer drought, while prices of dairy products and meat went down because of the abolition of EU quotas and the prohibition of imports into Russia respectively

(size of tile – relative weight in consumer basket; colour of tile – annual percentage changes)



fall in oil prices. Adjusted inflation excluding fuels remained at the previous quarter's figures despite the long-running significantly anti-inflationary evolution of prices abroad and the appreciation of the koruna against the euro during the summer months. Administered prices started falling modestly in July.

Turning to the **structure of annual inflation**, the sizeable decline in fuel prices was more than offset in 2015 Q3 by constantly positive adjusted inflation excluding fuels, the contribution of indirect tax changes in non-administered prices and, in September, also by renewed growth in food prices (see Chart III.1.3). Administered prices had only a slight downward effect on the price level.

The contribution of changes to **indirect taxes** to annual consumer price inflation was just under 0.2 percentage point in 2015 Q3. Harmonisation adjustments made to excise duty on cigarettes and tobacco last December had an upward effect on headline inflation of just over 0.2 percentage point. The introduction at the start of this year of a second reduced VAT rate of 10% on medicines, books and irreplaceable infant food, which had an impact of almost -0.1 percentage point, acted in the opposite direction.

Monetary policy-relevant inflation, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, fell slightly in 2015 Q3, averaging 0.2%. After reaching a short-term low of 0.1% in August, it accelerated again to 0.3% in September. Monetary policy-relevant inflation is thus still well below the lower boundary of the CNB's tolerance band.

Administered prices switched to a modest year-on-year decline in July this year. This decline, which strengthened only slightly in September (to 0.3%; see Chart III.1.4), was linked mostly with a moderation of the year-on-year rise in prices of natural gas for households. To a lesser extent, it was also due to the introduction of discounts on annual season tickets for the Prague public transport system, which caused a year-on-year decline in administered transport prices (of 0.2%). Changes made at the start of this year also contributed to the decrease in administered prices. These included the abolition of the remaining regulatory fees in health care (except for the emergency fee) and a decline in prices of electricity for households. The reduction in prices in these categories was partially offset by a January rise in prices of natural gas for households and water supply and sewerage collection charges.

Annual growth in **market prices**, as measured by net inflation,[20] slowed slightly in 2015 Q3, averaging 0.3%. Market prices reflected the very weak growth in food prices, which, however, accelerated again in September. By contrast, the decline in fuel prices deepened, while adjusted inflation excluding fuels was stable.

20 The following text describes the year-on-year evolution of the main components of market price inflation adjusted for tax changes.

Food price inflation was generally weak and volatile in 2015 Q3, averaging 0.3%. A short-lived year-on-year decline was even recorded in August, but in September food prices started rising again, reaching 0.8% (see Chart III.1.5). The weak growth in food prices was caused by a decline in prices across quite a wide range of items, reflecting weak growth in food import prices and a continued decline in agricultural producer prices. Low prices of milk and meat had a significant effect, reflecting Russian sanctions and, in the case of milk, the abolition of EU quotas. Prices of bread and flour, yoghurt and eggs also fell, although these items saw a partial correction in September. The summer drought started to foster growth in food prices, giving rise to higher prices of fruit, vegetables and fish (see Chart III.1.6).

The annual decline in **fuel prices** intensified again in 2015 Q3, averaging 12.6% (see Chart III.1.7). It gradually gained momentum as the quarter progressed, reaching 15% in September. Fuel prices thus followed the renewed decline in Brent crude oil prices and foreign petrol prices, which fed through to final prices without any significant delay.

Adjusted inflation excluding fuels stayed positive, averaging 1.1% year on year in 2015 Q3 (see Chart III.1.8). In September, it edged up to 1.2%. Annual growth in **prices of other tradables** rose to 0.9% in September despite the strongly anti-inflationary effect of foreign prices and the stronger exchange rate of the koruna against the euro. Prices of shoes and clothing were the biggest contributor to the growth in prices in this category. Growth in domestic **prices of non-tradables**[21] was stable, averaging 1.5% (1.4% in September). These prices reflected the continuing growth in domestic economic activity and the improving labour market situation, especially in the service sector. The increase in prices of non-tradable commodities in Q3 was fostered above all by net rents, restaurant prices and prices of insurance and financial services.

CHART III.1.7

FUEL PRICES

The decline in fuel prices intensified again due to foreign petrol prices
(annual percentage changes)

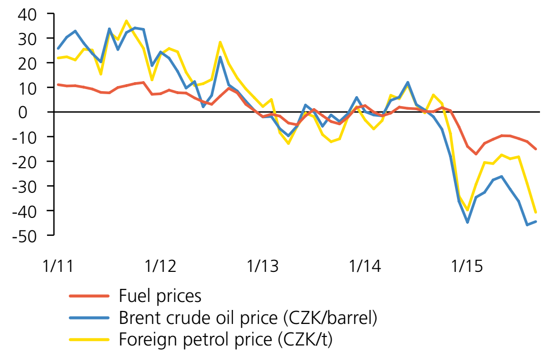
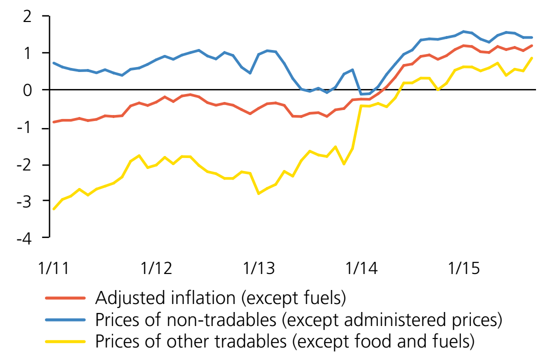


CHART III.1.8

ADJUSTED INFLATION EXCLUDING FUELS

Adjusted inflation excluding fuels remained stable, with both of its components making positive contributions
(annual percentage changes)



21 This segment consists mainly of services.

Chart III.2.1

IMPORT PRICES AND PRODUCER PRICES

The decline in import prices and industrial producer prices strengthened in 2015 Q3, whereas the decline in agricultural producer prices slowed; prices rose only modestly in construction and fell slightly in market services

(annual percentage changes)

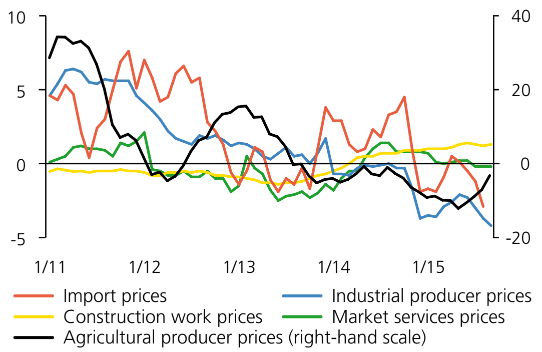


Chart III.2.2

IMPORT PRICES

The decline in import prices was due largely to falling prices of energy commodities

(annual percentage changes; contributions in percentage points)

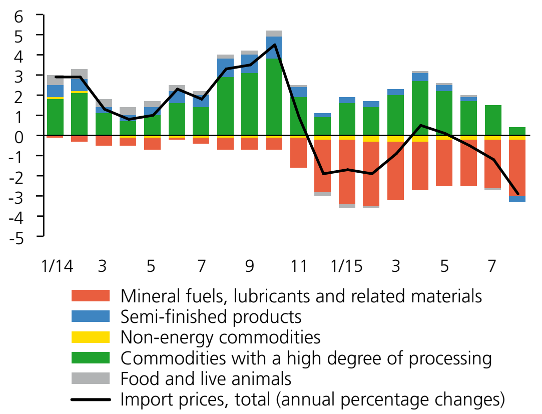
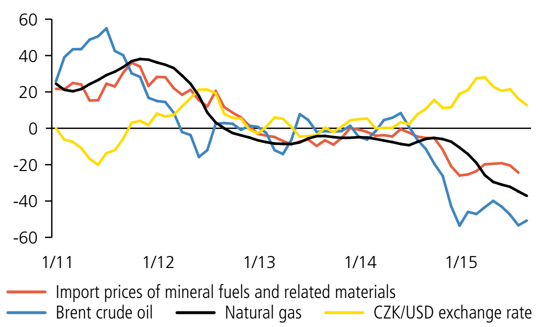


Chart III.2.3

MINERAL FUELS AND LUBRICANTS

Prices of imported mineral fuels reflected falling world prices of oil and natural gas, while the koruna-dollar exchange rate had the opposite effect

(annual percentage changes)



III.2 IMPORT PRICES AND PRODUCER PRICES

Import prices started falling again in June, and the decline deepened in the following two months of 2015. This was due mainly to slower growth in import prices of products with a high degree of processing and a faster decline in prices of energy commodities. The lower prices of imported inputs were subsequently reflected in a further increase in the year-on-year decline in industrial producer prices, especially in manufacturing. By contrast, the decline in agricultural commodity prices moderated, as crop product prices (unlike livestock product prices) began to go up again after a long-running decline. Year-on-year growth in construction work prices remained subdued, only just exceeding 1%. Prices of market services for the business sector switched to a slight decline in Q3.

III.2.1 Import prices

Following weak year-on-year growth in April and May, **import prices** started falling again in June. This decline intensified in 2015 Q3 (to -2.9% in August; see Chart III.2.1). The further strengthening of the decline in import prices in July and August was due mainly to slower growth in import prices of products with a high degree of processing and a simultaneous deepening of the decline in prices of mineral fuels and lubricants (see Chart III.2.2).

The fall in import prices continued to be due mainly to prices in the **mineral fuels** category, whose year-on-year decline started to deepen again in Q3 (see Chart III.2.2). This reflected a slump in oil prices on global markets of more than USD 15 a barrel during July and August, which in year-on-year comparison meant an acceleration of their decline by more than 10 percentage points (to 53.4% in August; see Chart III.2.3). The annual decline in global natural gas prices, which tend to follow oil price changes with a lag, also strengthened further to almost 35% in August. The impact of the sharply falling global prices of energy commodities on domestic prices meanwhile continued to be considerably dampened by year-on-year depreciation of the koruna-dollar exchange rate, albeit to a lesser extent than in 2015 Q2. In these circumstances, the year-on-year decline in import prices of mineral fuels strengthened by more than 5 percentage points compared to June (to 24.4% in August; see Table III.2.1).

There was also a deepening decline in import prices in the category of **chemicals and related products**, which are also affected to a large degree by oil prices. After a temporary rise in 2015 Q2, import prices of food and live animals also started to go down again in July, mainly due to prices of imported meat and milk (see Table III.2.1). Only in the category of **non-energy commodities** did the year-on-year decline in import prices slow down in July and August, although it remained at quite high levels (6.6% year on year in August).

Year-on-year growth in prices of **commodities with a high degree of processing** slowed further in the first two months of 2015 Q3 in the categories of both imported machinery and transport equipment and miscellaneous manufactured articles (to 1.5% and 2.6% respectively in August; see Table III.2.1). In the first of those categories, however, import prices continued to show very mixed trends, with import prices of office machines and equipment still rising at a rapid pace (8.4% year on year) but import prices of machinery and equipment continuing to decline (-3.3%). Despite this, most imported commodities in the machinery and equipment category recorded slower growth or a faster decline in prices in July and August. Import prices of semi-finished products also moved in the same direction, with previous weak growth replaced in the first two months of 2015 Q3 by a decline (of 2% in August).

TABLE III.2.1

STRUCTURE OF IMPORT PRICE INFLATION

The overall decline in commodity import prices intensified and growth in prices of commodities with higher value added slowed

(annual percentage changes)

	5/15	6/15	7/15	8/15
IMPORTS, TOTAL	0.1	-0.5	-1.2	-2.9
of which:				
food and live animals	2.5	1.0	-0.7	-0.8
beverages and tobacco	1.1	1.5	-0.2	-1.0
crude materials inedible, except fuels	-9.4	-8.2	-6.7	-6.6
mineral fuels and related products	-19.5	-19.2	-20.4	-24.4
animal and vegetable oils	1.4	3.0	10.8	5.6
chemicals and related products	-0.6	-0.6	-1.2	-3.5
manufactured goods classified chiefly by material	1.8	1.4	-0.1	-2.0
machinery and transport equipment	4.2	3.3	2.9	1.5
miscellaneous manufactured articles	5.7	4.8	4.2	2.6

III.2.2 Producer prices

Industrial producer prices

Industrial producer prices were affected most strongly in 2015 Q3 by changes in prices of imported inputs, in particular a renewed deepening of the decline in global oil prices, which producers in some industries transmitted into their prices with a relatively short lag. The year-on-year decline in industrial producer prices thus deepened during 2015 Q3, reaching 4.2% in September (see Chart III.2.4).

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**[22] (see Chart III.2.4). A closer look at the structure of this indicator reveals very mixed trends in its individual components in the course of this year.

The price trends in industries where producer prices are usually adjusted at the start of the year remained stable. This was true of the **electricity, gas, steam and air-conditioned air** industry, where prices have been declining at a rate of less than 1% year on year since the start of the year, and of the **water supply and sewerage-related services** industry, where prices have been maintaining stable growth of 3.4% in the same period (see Chart III.2.5). Prices in **mining and quarrying** returned to year-on-year decline in August after three months of modest growth. This decline deepened to 1.7% in September. 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 2015 Q3 was therefore again due most of all to prices in the manufacture of coke and refined petroleum products owing to the renewed deepening of the

CHART III.2.4

INDUSTRIAL PRODUCER PRICES

The decline in industrial producer prices deepened further in 2015 Q3

(annual percentage changes; contributions in percentage points)

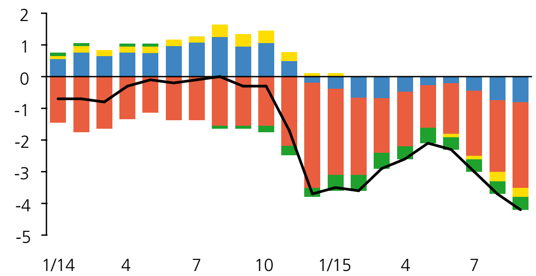
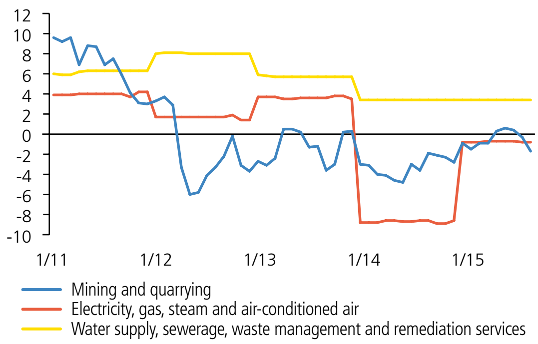


CHART III.2.5

PRICES OF ENERGY AND WATER-RELATED SERVICES

Electricity prices are declining slightly year on year, whereas prices of water-related services are maintaining stable growth

(annual percentage changes)



22 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.2.6

PRODUCER PRICES BY MAIN INDUSTRIAL GROUPINGS

The decline in energy prices deepened significantly
(annual percentage changes)

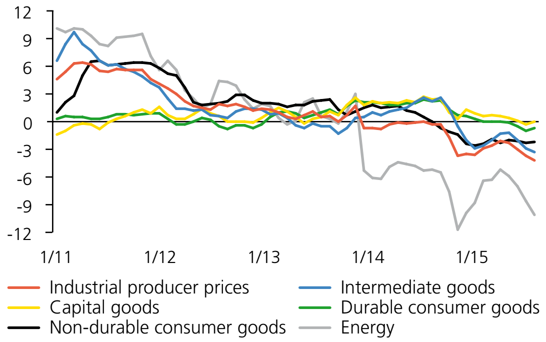
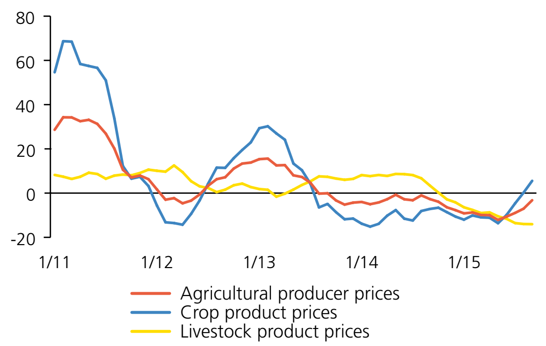


CHART III.2.7

AGRICULTURAL PRODUCER PRICES

The moderation of the decline in agricultural producer prices in 2015 Q3 was due to renewed growth in crop product prices
(annual percentage changes)



annual decline in global oil prices, which exceeded 50% in 2015 Q3. In the classification by main industrial groupings (see Chart III.2.6), the sharper decline in oil prices was reflected in a deeper decline in prices of energy and intermediate goods.

The changes in global oil prices were also reflected in producer prices of chemical products, whose annual decline gradually accelerated in 2015 Q3, reaching a sizeable 14.4% in September. The decline in producer prices also deepened in the manufacture of **basic metals and fabricated metal products** (to 2.5% in September). By contrast, the annual decline in prices in the food industry was almost unchanged from the previous quarter, remaining at an average level of 2.5%. There was also a renewed decline in producer prices in some branches of manufacturing – transport equipment, electrical equipment and computer, electronic and optical products.[23] Overall, the annual decline in **producer prices in manufacturing** deepened in 2015 Q3 (to 5.2% in September). 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.

Agricultural producer prices

Agricultural producer prices continued to fall year on year in 2015 Q3, although the decline gradually slowed from its previous double-digit levels to 3.2% in September (see Chart II.2.7). This change was a result of the dissipation of the two-year decline in crop product prices and the switch of those prices to annual growth (of 5.5% in September). This was due above all to renewed growth in prices of potatoes and oil crops along with most fruit and vegetable items. However, the renewal of annual growth in crop product prices was not across-the-board in nature, as prices of most cereals continued to fall year on year, albeit more moderately than in the previous quarter. By contrast, the annual decline in prices of livestock products – now observed for the fourth quarter in a row – continued to deepen (to 14.1% in September). This sizeable decline was a result of falling prices of milk and slaughter pigs, as prices of other livestock products (in particular slaughter cattle) mostly continued to rise.

The slowing annual decline in agricultural producer prices in 2015 Q3 reflected several significant **factors**. The retaliatory trade sanctions imposed by Russia on the EU in August 2014 coupled with the abolition of milk quotas in the EU in April 2015 were still a major factor in the decline in prices of livestock products. In the case of crop products, last year's strong base effect – caused by an above-average harvest and a related fall in the price level – faded away during 2015 Q3. The continuing year-on-year depreciation of the koruna against the dollar during 2015 Q3 also served to moderate the decline in agricultural producer prices.

23 Only in the categories of textiles, wearing apparel, leather, furniture and other manufacturing did producer prices rise slightly.

Other producer prices

The so far only modest, but gradually strengthening, annual growth in **construction work prices** slowed slightly in 2015 Q3 (by 0.1 percentage point to 1.3% compared to June; see Chart III.2.8). Prices of materials and products consumed in the construction industry switched from weak growth in June to a weak annual decline in July. This decline deepened in subsequent months (to 0.9% in September).

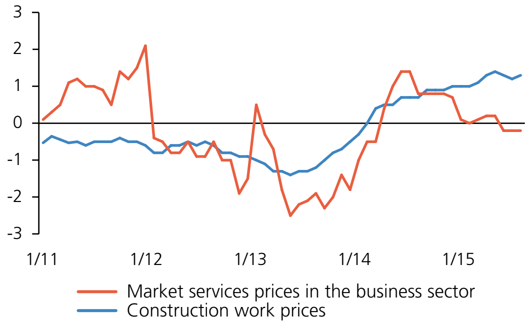
After recording modest growth in 2015 Q2, **prices of market services for the business sector** fell slightly during the following quarter (by 0.2%; see Chart III.2.8). This points to generally subdued inflation in this area, with just two branches – postal and courier services and publishing services – recording price growth exceeding 3%.[24] By contrast, prices in the other branches of market services recorded only modest annual growth or decreased.[25]

Chart III.2.8

PRICES OF MARKET SERVICES FOR THE BUSINESS SECTOR

Growth in construction work prices stayed just above 1%, while market services prices fell slightly

(annual percentage changes)



24 Prices went up by 6.9% in postal and courier services and by 3.5% in publishing services in September.

25 Annual price declines were observed in almost half of the branches of market services under review in September.

CHART III.3.1

GROSS DOMESTIC PRODUCT

Annual GDP growth picked up further in 2015 Q2

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

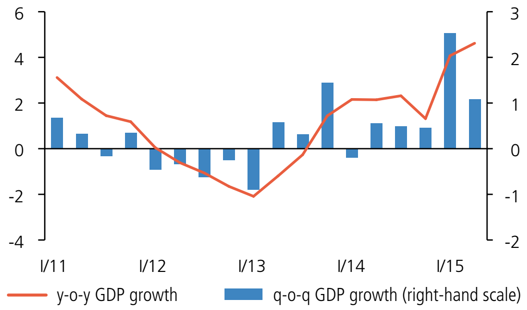


CHART III.3.2

STRUCTURE OF ANNUAL GDP GROWTH

Gross fixed capital formation contributed the most to the pick-up in GDP growth in 2015 Q2

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

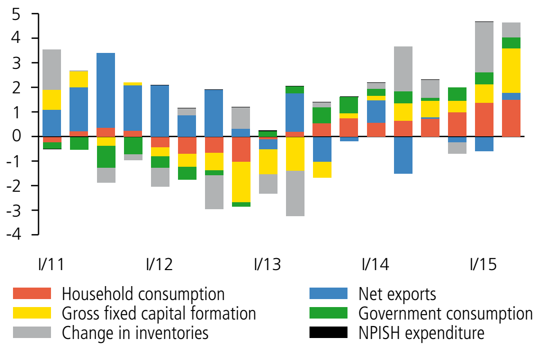
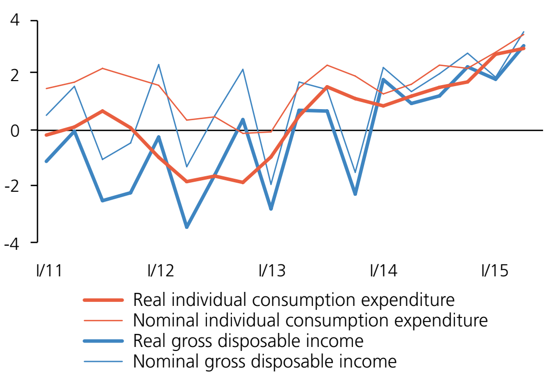


CHART III.3.3

HOUSEHOLD CONSUMPTION EXPENDITURE

Household consumption rose at a similar pace as gross disposable income, whose rate of growth increased markedly in 2015 Q2

(annual percentage changes; seasonally unadjusted data)



III.3 DEMAND AND OUTPUT

Annual real GDP growth picked up further to 4.6% in 2015 Q2. In quarter-on-quarter terms, economic activity increased by 1.1%. All components of demand continued to contribute to the annual output growth. On the supply side, gross value added growth accelerated further, with industry and services contributing the most to its growth. As a result, economic output approached its potential.

III.3.1 Domestic demand

Annual **domestic demand** growth remained buoyant in 2015 Q2 (at 4.7%), aided by all the components of domestic demand. However, the growth slowed slightly compared with the previous quarter, mainly due to more modest growth in inventories as compared to their strong growth in the previous quarter (see Chart III.3.2). Government consumption growth also weakened slightly. By contrast, annual growth in household consumption and fixed investment increased further.

Final consumption

Real final consumption expenditure of households remained on an upward trend in 2015 Q2 for the second consecutive year and accelerated further year on year. At 3.1%, the growth was 0.3 percentage point higher than in the previous quarter. This relatively marked increase in household consumption occurred amid still slightly higher growth in gross disposable income. This was reflected in an only slight increase in the saving rate in the period under review.

Annual growth in **nominal gross disposable income**, which is the main source of financing of households' consumption expenditure, increased in 2015 Q2 (by 1.7 percentage points to 3.7%; see Chart III.3.3). With the household consumption deflator growing only moderately, its real purchasing power rose by 3.3%. Overall, both nominal and real growth in households' gross disposable income picked up significantly.

Wages and salaries, representing almost 60% of households' income, grew faster year on year in 2015 Q2 than in the previous quarter, mainly due to stronger growth in average wages and salaries, which was accompanied by a further rise in employment.[26] Against this background, the positive contribution of wages and salaries to annual growth in gross disposable income reached 2.7 percentage points (see Chart III.3.4). The growth in gross disposable income was also due significantly to transfers (other than social benefits), although to a lesser extent than in the previous quarter. Social benefits also made

26 For details see section III.4 *The labour market.*

a positive contribution following a previous slight decline. Business income (gross operating surplus plus mixed income) increased slightly again in 2015 Q2 but affected the growth in disposable income only slightly. In contrast, property income decreased for the second consecutive year. The negative contribution of taxes and social contributions reflected growth in households' taxable income (see Chart III.3.4).

Households' **saving rate**[27] increased only slightly year on year in 2015 Q2, to 10.4%. An only slight pick-up in the annual growth rate of consumer credit (from 1.6% in March to 2.2% in June) for the time being did not indicate any significant increase in households' interest in credit financing of consumption (see section III.5).

For the second consecutive quarter, the growth in consumption expenditure was channelled into all the monitored **categories**, but most of all into current consumption expenditure (see Chart III.3.5). As in the previous quarter, the growth in households' consumption was mostly due to non-durable goods, which have the highest weight.[28] Expenditure on services was also significant again in 2015 Q2, in line with the continuing recovery of growth in value added in services. To a lesser extent, households also channelled their increased expenditure into semi-durable and durable goods.

According to the latest available **monthly indicators**, annual growth in seasonally adjusted retail sales stayed high in July 2015 both in the automotive segment and in the rest of the retail sector. In August, however, growth in retail sales excluding the automotive segment slowed by one-half, although this may have been due to exceptionally high temperatures in the month. In 2013 Q3, the consumer confidence indicator remained at the high levels recorded in previous quarters (see Chart III.3.6).

Annual growth in real **government final consumption expenditure** slowed slightly to 2.3% in 2015 Q2 from 2.6% in the previous quarter. Its positive contribution to annual GDP growth thus decreased slightly (to 0.4 percentage point).

Investment

The annual growth in **fixed investment** observed since the end of 2013 accelerated by 4.3 percentage points to 7.3% in 2015 Q2.

This marked surge in investment activity was linked mainly with renewed annual growth in fixed investment in the **government sector** following a temporary decrease in the previous quarter (see Chart III.3.7). At the same time, the material structure of fixed investment indicated that the increased investment in 2015 Q2

27 According to seasonally unadjusted data.
28 In 2015 Q2, non-durable goods accounted for 41% of households' total consumption expenditure.

CHART III.3.4

DISPOSABLE INCOME

The growth in disposable income was due mostly to wages and salaries
(annual percentage changes; contributions in percentage points; current prices; seasonally unadjusted data)

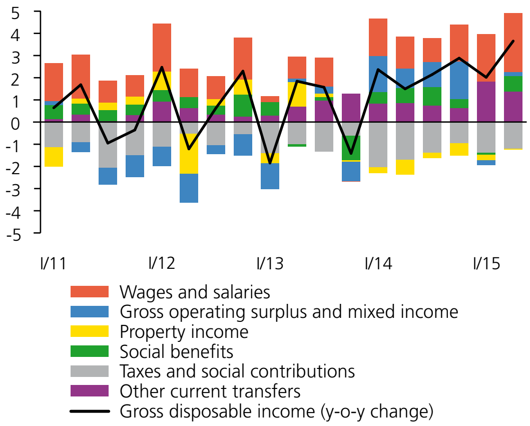


CHART III.3.5

STRUCTURE OF HOUSEHOLD CONSUMPTION

Household consumption expenditure increased in all categories in 2015 Q2
(annual percentage changes; contributions in percentage points; constant prices; seasonally unadjusted data)

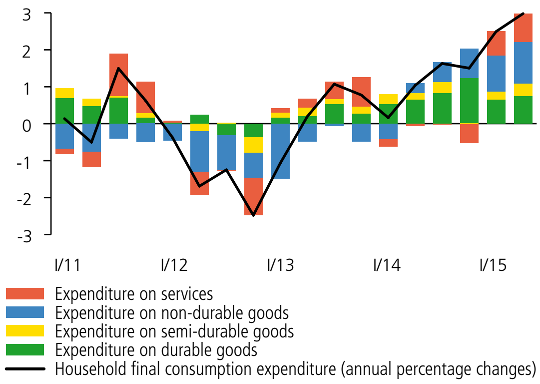


CHART III.3.6

CONFIDENCE INDICATORS

Consumer confidence maintained its previous high levels in 2015 Q3
(2005 average = 100; source: CZSO)

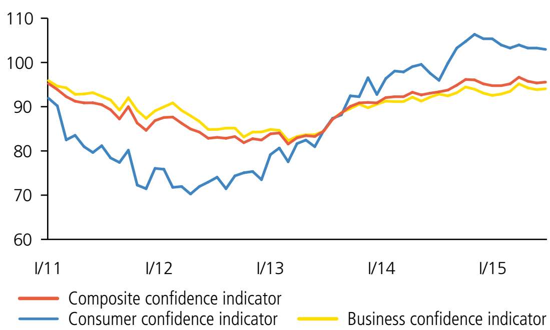


CHART III.3.7

INVESTMENT BY SECTOR

The buoyant growth in fixed investment in 2015 Q2 was due mostly to non-financial corporations and general government

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

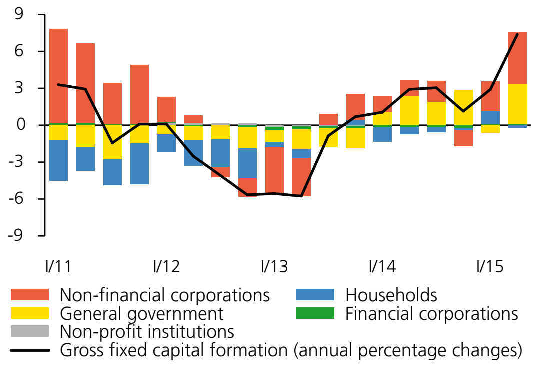


CHART III.3.8

FIXED CAPITAL FORMATION

Investment in buildings and structures and machinery and equipment increased in particular

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

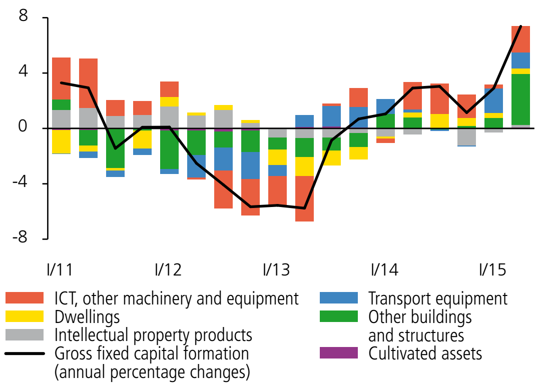
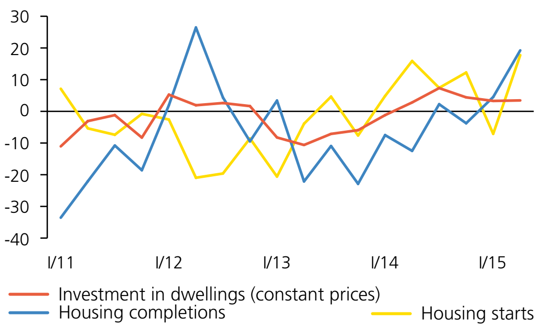


CHART III.3.9

INVESTMENT IN DWELLINGS

Investment in dwellings continued to rise in 2015 Q2, and the number of housing starts and completions increased significantly

(annual percentage changes)



was channelled mostly into buildings and structures. This probably reflected increased efforts to draw down EU structural funds for infrastructure projects in time (see Chart III.3.8).

The contribution of investment by the **non-financial corporations sector**, which rose by 6.4% year on year in 2015 Q2, was also significant.[29] Compared with the previous quarter, their investment was again channelled to a larger extent into machinery and equipment and only a smaller part was realised through purchases of transport equipment and construction of buildings and structures. Non-financial corporations' view of 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 2015 Q3, according to which non-financial corporations expect continued growth in investment at both the six-month and twelve-month horizons.

Only investment by the **household sector** decreased moderately in 2015 Q2, following a marked increase early this year (see Chart III.3.7). In the breakdown, however, investment in dwellings, which accounts for a significant proportion of the total fixed investment of households, showed year-on-year growth for the fifth consecutive quarter[30] (see Chart III.3.9). Furthermore, some other indicators are pointing to continued growth in household investment in dwellings in the period ahead. This is indicated above all by households' confidence in future growth of the economy and employment, which is at the high pre-crisis levels. Financing conditions for investment in dwellings are still favourable and are being accompanied by continued growth in new mortgage loans (see section III.5.2). A fresh surge in the number of housing starts (of 17.7% year on year in 2015 Q2) was also recorded.

The continued strong GDP growth in 2015 Q2 was also due to annual growth in **inventories**, although to a considerably lesser extent than in the previous quarter (with a contribution of 0.6 percentage point; see Chart III.3.2). According to CZSO data, year-on-year growth in inventories was observed in both the manufacturing and trade sectors, most notably with regard to materials, work in progress and goods.

III.3.2 Net external demand

Net exports of goods and services[31] increased modestly in 2015 Q2 after two quarters of annual decline. The net export surplus increased year on year by CZK 2.4 billion (see Chart III.3.10). This was due to the balance of services, whose surplus increased after having declined for more than a year. Nevertheless, its positive contribution was approximately 50% offset by a decrease in the real goods surplus.

29 According to seasonally unadjusted data at constant prices.
30 In 2015 Q2 alone, their annual growth reached 3.4%.
31 At 2010 prices, seasonally adjusted.

Unlike in the previous quarter, the contribution of net exports to GDP growth was thus slightly positive (0.3 percentage point; see Chart III.3.2).

The year-on-year increase in net exports in 2015 Q2 was a result of a decrease in the lead of import growth over export growth (to 0.2 percentage point; see Chart III.3.11). Annual growth in total trade turnover slowed, mainly as a result of imports. **Total exports** rose by 6.9% year on year, down by 0.2 percentage point from the previous quarter. The slight slowdown in export growth occurred despite a modest pick-up in external demand growth in the Czech Republic's major trading partner countries. Turning to the structure of total exports, the moderation in their growth was due solely to weaker growth in goods exports (of 6.4%), while services exports increased markedly faster than in the previous quarter.

The moderation of the growth rate of **total imports** in 2015 Q2 was more pronounced than that of total exports. Imports recorded annual growth of 7.1%, representing a slowdown of 1.5 percentage point compared to a quarter earlier. The continued relatively buoyant growth in total imports was associated mainly with a rapid growth in total domestic demand, which slowed only slightly in 2015 Q2. The slower growth in total imports was due to both goods and services imports. As for the structure of goods imports, imports for final consumption and investment grew much faster than imports for intermediate consumption.

III.3.3 Output

Annual growth in **gross value added** at basic prices continued to accelerate gradually in 2015 Q2 (see Chart III.3.12). Its annual growth rate reached 3.8%, up by 0.4 percentage point on the previous quarter. In quarter-on-quarter terms, however, gross value added growth slowed slightly (to 0.9%). The favourable trend in value added was supported by rising domestic and external demand.

Within **industry**, the effect of rising demand on output was apparent in manufacturing, where annual gross value added growth accelerated to a sizeable 7% in 2015 Q2. With a contribution of 1.8 percentage points, this sector accounted for almost half of the overall annual growth in gross value added (see Chart III.3.12). Gross value added in mining and energy supply continued to fall, but its negative contribution was insignificant given the small weight of this sector.

The continuing gross value added growth in industry was consistent with the data on **industrial production**, whose annual real growth rate accelerated to 5.1% in 2015 Q2 (according to seasonally adjusted data). This rise continued to be mostly due to production in **manufacturing**, whose year-on-year growth reached 6.3%. In terms of use, production for investment continued to rise the fastest. Its growth rate increased by 1.8 percentage points to 7.9% compared to

CHART III.3.10

NET EXPORTS

Net exports recorded a modest year-on-year increase in 2015 Q2
(seasonally adjusted data; constant prices)

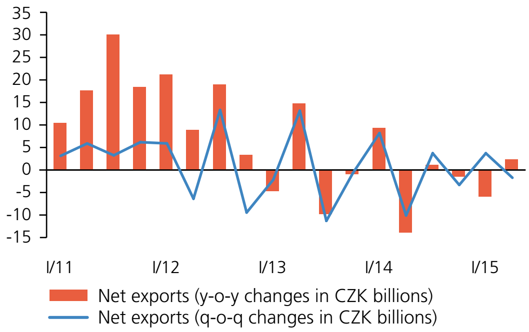


CHART III.3.11

EXPORTS AND IMPORTS

Growth in trade turnover slowed slightly in 2015 Q2, with import growth continuing to outpace export growth
(annual percentage changes; percentage points; constant prices; seasonally adjusted data)

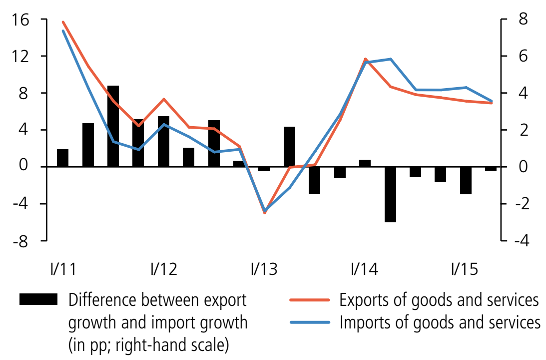


CHART III.3.12

CONTRIBUTIONS OF BRANCHES TO GVA GROWTH

Manufacturing and services contributed in equal measure to the growth in added value
(annual percentage changes; contributions in percentage points)

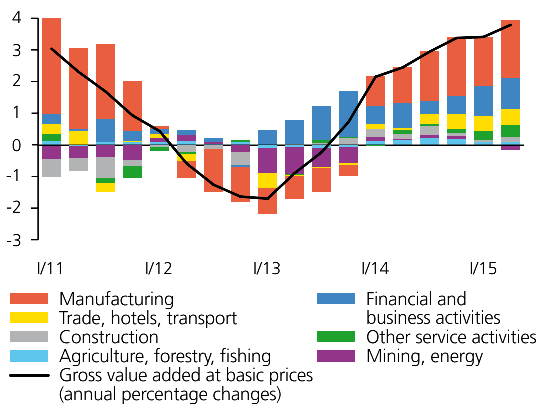


CHART III.3.13

INDUSTRIAL PRODUCTION

Industrial production continued to rise rapidly year on year, and production capacity utilisation remained high
(basic index; year 2010 = 100)

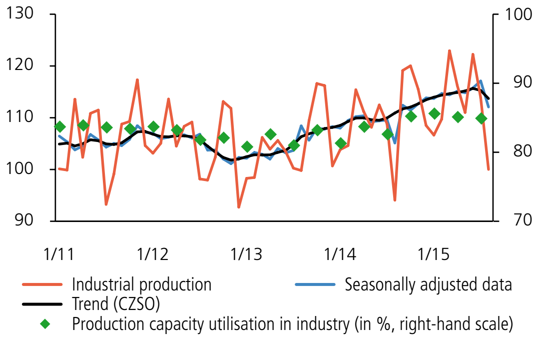


CHART III.3.14

NEW ORDERS IN INDUSTRY

Growth in new orders in industry was driven solely by orders from abroad in August
(annual percentage changes)

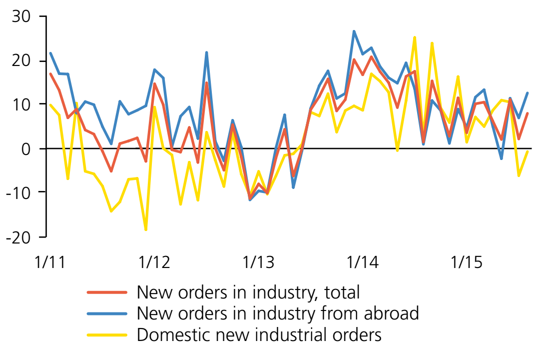
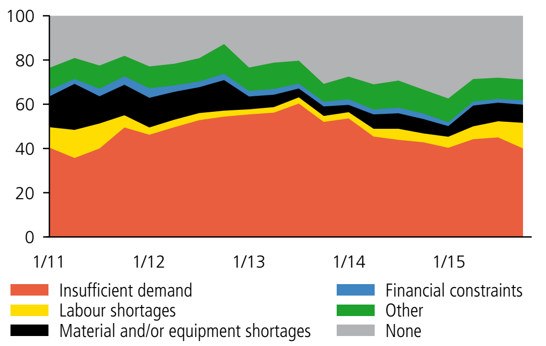


CHART III.3.15

BARRIERS TO GROWTH IN INDUSTRY

The effect of insufficient demand as the main barrier to growth in industrial production decreased, but labour shortages simultaneously grew in significance
(percentages)



the previous quarter. Production for intermediate consumption also grew faster than in the previous quarter (by 6.1% year on year), while growth in production for long-term and short-term consumption was broadly flat year on year at the Q1 levels (4.3% and 4.9% respectively). The growth in manufacturing output was still quite broad-based, with most of the industries under review contributing to it.[32]

According to the latest available **monthly indicators**, annual real growth of seasonally adjusted industrial production picked up further in July (to 6.9%) and saw only a minor correction in August (to 6.6%; see Chart III.3.13). At the same time, however, **sales from industrial activity** slowed considerably (to 0.9% in August at current prices) due to a decrease in domestic sales, whereas direct export sales continued to rise rapidly. New **industrial orders**, which primarily indicate future production and sales, rose by a significant 7.9% in August, following a temporary slowdown in July. Their increase was entirely due to foreign orders (which grew by 12.5% year on year), as domestic orders declined year on year for the second consecutive month (by 6.1% and 0.7% respectively; see Chart III.3.14).

According to the October results of the CZSO's business survey, the number of businesses in industry reporting **insufficient demand as a barrier to growth** decreased markedly (see Chart III.3.15). After having increased slightly in the previous two quarters, this indicator decreased by 5 percentage points in October to its lowest value in four years. At the same time, however, the barrier to growth due to shortages of labour increased, so the proportion of firms not constrained by any barriers was approximately unchanged. At the same time, capacity utilisation both in industry as a whole and in its main component – manufacturing – decreased slightly in October, but remained at a high level.

The overall contribution of **trade, hotels and restaurants, transport and other services** to annual gross value added growth at basic prices was the same as that of manufacturing for the second consecutive quarter (1.8 percentage points in 2015 Q2; see Chart III.3.12). As in previous quarters, the value added growth was due to all branches of the tertiary sector under review, most notably trade, transport and hotels and restaurants (0.5 percentage point) followed by professional, scientific, technical and administrative activities (0.4 percentage point[33]). These facts suggested a sizeable broad-based pass-through of the accelerating economic growth (in particular in industry) to branches of services in the past two quarters.

32 Production decreased year on year only in wood processing excluding manufacture of furniture, in printing and reproduction of recorded media and in repair and installation of machinery and equipment.

33 In this sector, value added increased by a substantial 5.9% year on year in 2015 Q2.

The contribution of **construction** to gross value added growth also increased in 2015 Q2 (to 0.2 percentage point, with annual growth of 3.1%), mainly due to fast growth in civil engineering output. According to the latest available monthly CZSO data, construction output growth was very uneven in July and August; after surging in July (to 13.8% year on year)[34] it fell short of 5% in August. This swing was caused by a slump in building construction output in August, while civil engineering growth stayed in double figures despite slowing somewhat. However, a lower approximate value of building notifications[35] and public contracts and a lower number of building permits – reflecting, among other things, an expected decrease in investment in the government sector owing to the only gradual start of drawdown of EU funds under the new programme period – will be a factor dampening the recovery in construction output next year.

An **international comparison of economic sentiment** reveals a slight decrease in the business indicator for the Czech Republic during 2015 Q3. Nevertheless, from a longer-term perspective this indicator has been broadly flat over the past year. In Germany and the EU, by contrast, economic sentiment has been on a modest growth trend over the past year and surged upwards in Germany in September (see Chart III.3.16).

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

According to the **Cobb-Douglas production function** calculation, potential output grew by 2.1% year on year in 2015 Q2 (see Chart III.3.17). The strong annual growth in economic activity observed in the first half of 2015 resulted in significant closure of the output gap, which, however, remained negative (-0.7% of potential output; see Chart III.3.18). This method suggests a further gradual pick-up in potential output growth to 2.4% in the remainder of this year and in 2016; potential output growth will rise slightly further to 2.5% in 2017.

The contribution of productivity to potential output growth will increase **over the forecast horizon**, amid a slightly declining contribution of employment (see Chart III.3.19). The contribution of capital will rise on the back of accelerating investment. According to the production function, the output gap will thus close further in the coming quarters and turn slightly positive in the second half of next year.

34 Seasonally adjusted.
35 Accumulated for January–August.

CHART III.3.16

ECONOMIC SENTIMENT

Economic sentiment fell slightly in the Czech Republic in 2015 Q3, but increased in the EU and Germany
(long-term average = 100; seasonally adjusted data; source: Eurostat)

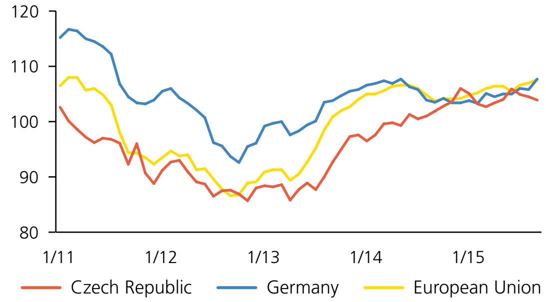


CHART III.3.17

POTENTIAL OUTPUT

The rate of growth of potential output was close to 2% in 2015 Q2 according to all the methods used
(annual percentage changes)

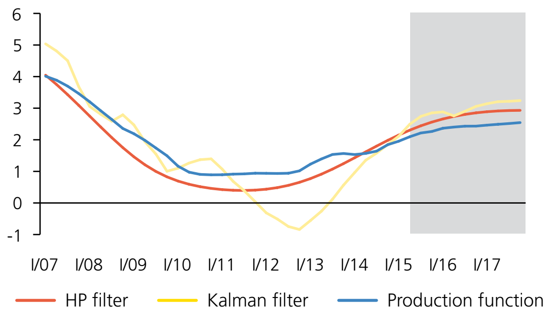


CHART III.3.18

OUTPUT GAP

According to the production function estimate, the output gap will close at the end of 2016, but according to the other methods it will close this year
(in % of potential output)

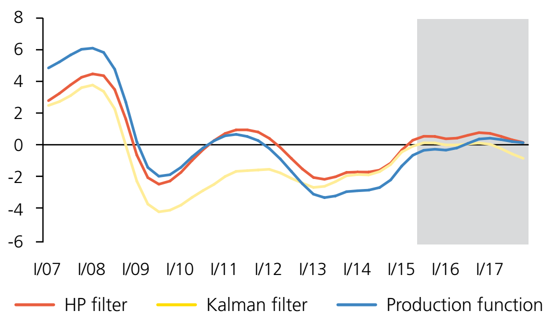
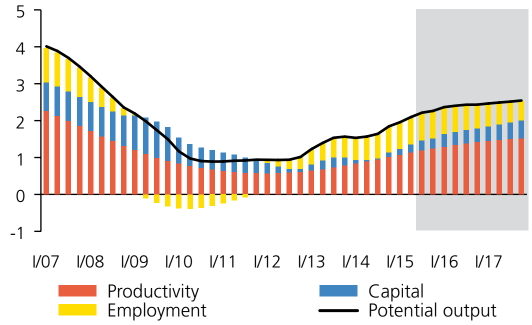


CHART III.3.19

CONTRIBUTIONS TO POTENTIAL OUTPUT GROWTH

The contributions of productivity and capital will gradually increase over the forecast horizon
(production function baseline variant; annual percentage changes)



An alternative estimate using the **HP filter**[36] indicates a slightly higher growth rate of potential output (2.3% in 2015 Q2) than that calculated using the production function. According to this method, the output gap closed in 2015 Q2 due to the very strong GDP growth recorded in the first half of this year. The calculation of potential output using the **Kalman filter** suggests an even higher annual growth rate of potential output in 2015 Q2 (2.5%) over the entire forecast horizon. According to this method, the output gap probably closed in 2015 Q3.

36 The estimate using the HP filter used coefficient $\lambda = 1{,}600$.

III.4 THE LABOUR MARKET

Labour market developments indicated a continuing rise in labour demand on the back of strengthening economic growth. Growth in total employment and the number of employees converted into full-time equivalents picked up further in 2015 Q2. 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 2015 Q3, too. Annual growth in the average wage in Q2 picked up markedly in both the business and non-business sectors. Amid a sizeable pick-up in annual growth in economic activity, whole-economy productivity maintained a fairly brisk rate of growth and unit labour costs continued to fall.

III.4.1 Employment and unemployment

The significant rise in **total unemployment** seen in the previous two quarters increased further in 2015 Q2 (to 1.7%; see Chart III.4.1). Employment also increased significantly in quarter-on-quarter terms (by 0.3% when adjusted for seasonal effects). Only the category of employees saw an increase, whereas the number of entrepreneurs continued to decrease year on year, particularly in construction.

Unlike in previous quarters, the tertiary sector was the biggest contributor to the year-on-year growth in employment in 2015 Q2, although the contribution of the secondary sector was only slightly smaller (see Chart III.4.2). The **primary sector** also contributed to the increase in total employment for the second consecutive quarter. Given its low weight, however, this contribution was relatively weak, even though employment in this sector increased by a full 12.4% year on year in Q2.

Employment in the **secondary sector** recorded the same rate of growth in 2015 Q2 as in the previous quarter (1.7% year on year). With employment in construction falling, its growth was entirely due to industry. Within industry, the number of employed persons grew fastest in manufacturing, which saw continued strong annual growth in production. According to the latest data for July and August, the registered number of employees[37] rose further in industry (by 3.3% and 3.2% year on year respectively), while continuing to decrease in construction (by 2.1% and 2.9% respectively).

The rise in employment growth in the **tertiary sector** (to 1.1% year on year in 2015 Q2) was associated with an increase in the number of persons employed in market services, whereas the number of employed in non-market services went down year on year (see Chart III.4.2). As regards market services, employment growth in trade increased markedly further, and professional and scientific

CHART III.4.1

LABOUR MARKET INDICATORS

Growth in total employment and in the number of employees converted into full-time equivalents picked up, while nominal unit labour costs went down further
(annual percentage changes)

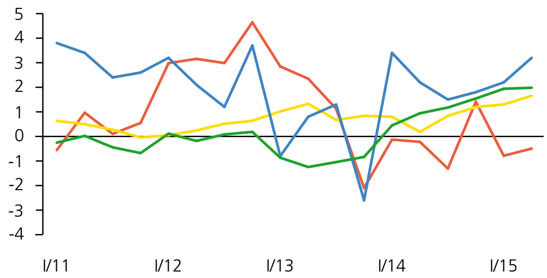
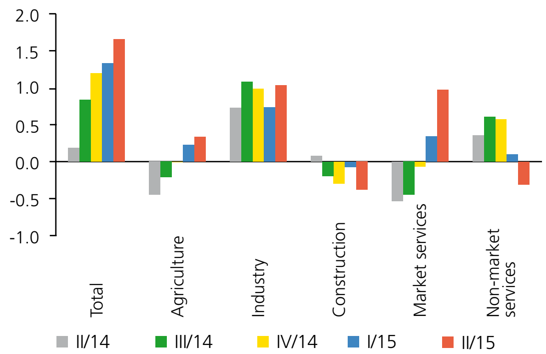


CHART III.4.2

EMPLOYMENT BREAKDOWN BY BRANCHES

There was continued strong growth in total employment in industry and market services
(contributions in percentage points to annual change; selected branches; source: LFS)



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

CHART III.4.3

NUMBER OF EMPLOYEES (FULL-TIME EQUIVALENT)

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

(annual percentage changes; contributions in percentage points)

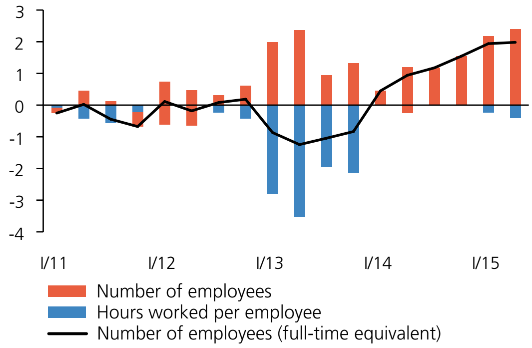


CHART III.4.4

UNEMPLOYMENT INDICATORS

The general unemployment rate decreased appreciably and the share of unemployed persons also went down

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

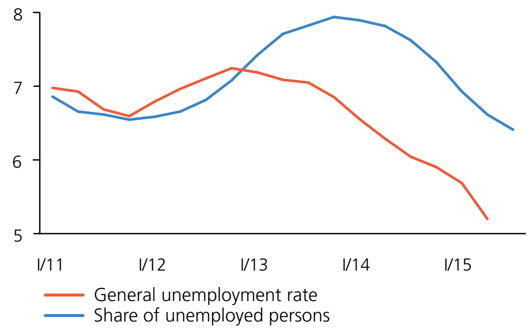
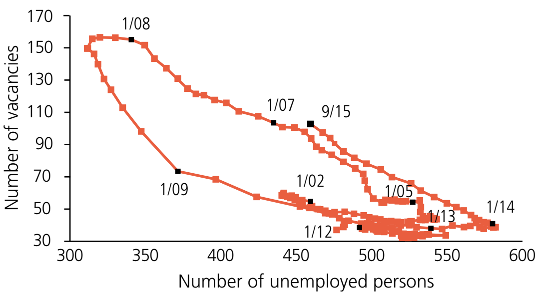


CHART III.4.5

BEVERIDGE CURVE

The number of vacancies has been rising steadily and the number of unemployed persons falling since the start of 2014

(seasonally adjusted numbers in thousands; source: MLSA)



activities and accommodation and food services activities also made significant contributions. The decrease in employment in non-market services following a period of sustained growth was due to a decline in employment in education, health and social care, and public administration and defence.

The increase in economic activity in 2015 Q2 was accompanied by continuing strong year-on-year growth in the **number of employees converted into full-time equivalents** (of 2%; see Chart III.4.3). As in previous quarters, this was due mainly to the business sector and, within it, manufacturing in particular, which accounted for more than two-fifths of the total annual growth in this indicator. Also significant was the contribution of the converted number of employees in trade and in administration and supporting services, where employment growth was closely linked with a rise in the number of agency workers. 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 this indicator fell year on year again in 2015 Q2.

Overall, the growth in the converted number of employees in 2015 Q2 was driven exclusively by growth in the number of employees amid a further slight shortening of average hours worked per employee. This was observed **in most sectors** of the economy. However, in **non-market services**, where the number of employees fell year on year, average hours worked per employee increased.

Amid faster growth in employment than in the labour force, the **general unemployment rate**[38] fell further in 2015 Q2 (to 5.2%; see Chart III.4.4). Thereafter, the general unemployment rate was broadly flat compared with the previous quarter according to the latest July and August data. The **rate of economic activity**,[39] which has gradually increased in recent quarters to the highest level in the history of the Czech Republic (74% in 2015 Q2 after seasonal adjustment), was driven mainly by the growing economic activity of women and an increase in the retirement age. The latest available data for July and August indicated a continuing upward trend in the rate of economic activity in 2015 Q3.

Like the general unemployment rate, the **share of unemployed persons**[40] (MLSA) decreased in 2015 Q2 (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, this unemployment indicator decreased further to 6.4% on average in 2015 Q3 (according to seasonally adjusted data).

38 In the 15–64 age category. Measured by the ILO methodology (LFS). The data are seasonally adjusted.

39 The rate of economic activity is defined as the ratio of employed and unemployed persons to the population in each age category.

40 The share of unemployed persons is the ratio of available job applicants aged 15–64 to the population of the same age.

A marked improvement in the labour market situation is also indicated by a shift of the **Beveridge curve**[41] in the north-westerly direction. This shift is due to a cyclical decrease in the seasonally adjusted number of registered job applicants coupled with growth in the number of vacancies (see Chart III.4.5).[42]

BOX

Employment of foreign and agency workers and their effect on the employment statistics

Whereas total **employment** according to the LFS has in recent quarters been nudging at the historical highs recorded in 2008, it has not yet reached its pre-crisis levels according to the national accounts methodology (see Chart 1). One of the factors explaining this difference is the different methods used to acquire data on the number of foreign employees. The national accounts data on employment of foreigners are acquired directly, whereas the LFS data cover foreign nationals working in the Czech Republic to only a limited extent, as this survey is usually conducted among persons living in family houses and apartment blocks.[43]

Employment of foreigners[44] changed substantially during the period under review **as regards their country of origin** and as regards the classification of employment (CZ-ISCO).[45] Owing to strong economic growth, employment of foreign workers peaked in 2008 (see Chart 2). Approximately half of these workers came from the EU and other EEA countries. The economic contraction in the following years resulted in a marked decrease in the number of foreign workers. This affected workers from non-EU/EEA countries to a greater extent. The renewed surge in the number of foreign workers in 2014 reflected a strong recovery in domestic economic activity and a related positive turnaround on the labour market. This growth was driven mainly by an increase in the number of workers from the EU and other EEA countries. Overall, the number of workers from the EU and other EEA countries thus increased compared with 2008, primarily thanks to employees from Slovakia and to a lesser extent from Romania and Bulgaria.

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

42 In September 2015, the number of registered unemployed persons was 90,400 lower year on year after seasonal adjustment, while the number of vacancies offered via labour offices was 49,200 higher.

43 The survey is not conducted in hostels, where foreign workers – especially those in less-skilled jobs – are often accommodated.

44 Given the limited availability of data on employment of foreigners, this box works with year-end data. After 2011, these are MLSA estimates, not hard data.

45 The pre-2011 data were processed using the KZAM methodology.

CHART 1 (BOX)

EMPLOYMENT ACCORDING TO LFS AND NATIONAL ACCOUNTS

The different levels of employment according to the LFS and the national accounts are due mainly to the different methods used to acquire data on foreign employees

(numbers of persons in thousands; seasonally adjusted data; source: CZSO)

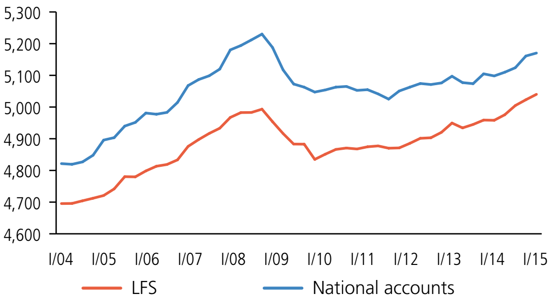


CHART 2 (BOX)

EMPLOYMENT OF FOREIGNERS

Citizens of EU and other EEA countries accounted for most of the growth in the number of foreign workers in 2014

(numbers of persons in thousands; MLSA data and estimates)

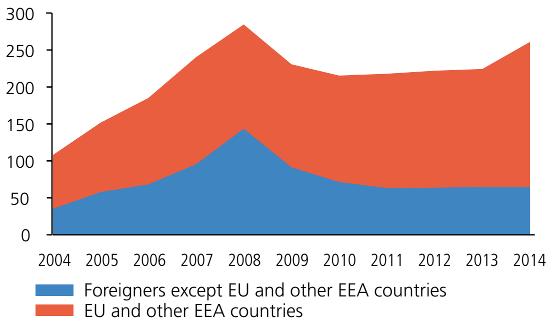
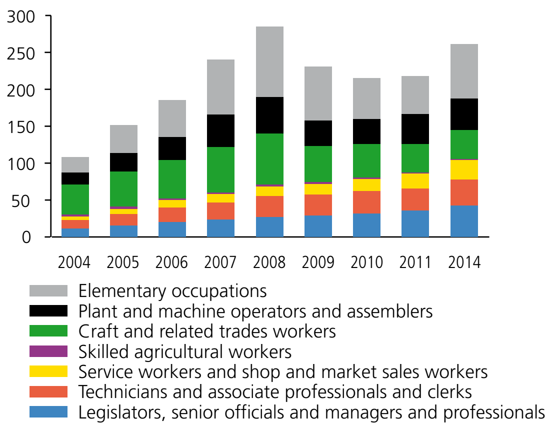


CHART 3 (BOX)

PROFESSIONAL STRUCTURE OF FOREIGN WORKERS

The employment structure of foreign workers has shifted towards high-skilled professions

(numbers of persons in thousands; according to CZ-ISCO/KZAM; MLSA data and estimates)

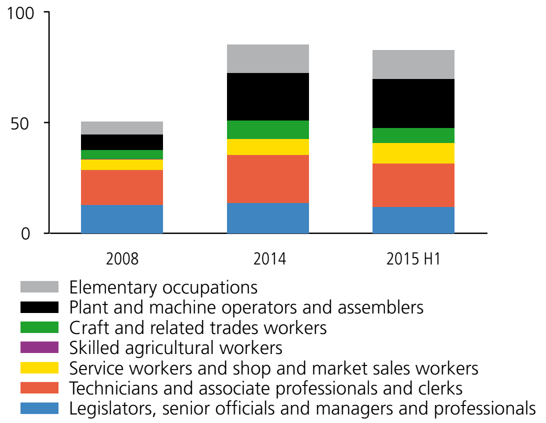


Note: Data are not available for 2012 and 2013.

Chart 4 (BOX)

STRUCTURE OF AGENCY WORKERS

The sizeable growth in the number of agency workers compared to 2008 was due primarily to less-skilled workers
(numbers of persons in thousands; according to CZ-ISCO/KZAM; source: AEIS, CNB calculation)



However, this was more than offset by a large decrease in the number of workers from Ukraine (of more than half compared with 2008) and from Vietnam and Mongolia. Consequently, the total number of foreigners working in the Czech Republic last year was still below the 2008 level.

As regards the classification of employment (CZ-ISCO), a larger share of high-skilled foreign workers (i.e. professionals, technicians, clerks, service workers and shop and market sales workers) in the total number of foreign workers was recorded in 2014 compared with 2008 (see Chart 3). By contrast, a markedly lower number of foreign workers were employed as craft and related trades workers, as plant and machine operators and in elementary occupations.

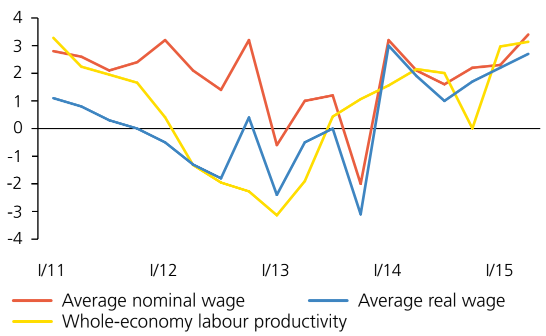
However, the marked recovery in economic activity was associated with a **resurgence in demand for less-skilled workers**. Unlike in 2008, this demand was apparently met by agency workers (predominantly Czechs) amid a still relatively low number of foreign workers in these positions. This is indicated by AEIS data,[46] according to which the number of agency workers increased significantly compared with 2008, especially in less-skilled jobs (see Chart 4).[47] According to a CZSO survey, the number of agency workers increased sharply in industry in particular, on the back of buoyant growth in economic activity.

The plethora of information on labour shortages in the labour market (especially in technical professions) indicates that the interest of firms in foreign workers and employment agency services may increase further. Given the weaker position of these groups of workers on the labour market, reflected, among other things, in lower wages, this may dampen the currently observed increasing upward pressure on wages.

Chart III.4.6

AVERAGE WAGE AND WHOLE-ECONOMY LABOUR PRODUCTIVITY

Average wage growth increased in 2015 Q2, while productivity growth rose only slightly
(annual percentage changes)



III.4.2 Wages and productivity

Following subdued growth in the previous three quarters, the annual growth rate of the **average nominal wage** rose noticeably in 2015 Q2 (to 3.4%; see Chart III.4.6). This was due to a more pronounced rise in the average wage both in the business and non-business sectors. Wages in the non-business sector continued to grow faster than those in the business sector (see Table III.4.1). With annual inflation low, the **real average wage** increased by 2.7% overall (see Table III.4.1).

46 The data in this box acquired from the MLSA cover approximately one-half of the employees working in the waged sector and have not been converted to the entire population.
47 The data for 2015 H1 have a different seasonal component than the data for 2008 and 2014, which relate to the year-end.

Annual average wage growth in the **business sector** went up by 1 percentage point to just above 3% in 2015 Q2 (see Table III.4.1). In real terms, the average wage rose by 2.5%. The increase in the average wage was due mostly to the services sector and, to a lesser extent, industry. However, annual growth in the average wage continued to be very mixed across the branches of the economy, as evidenced by a significant rise in wages in accommodation and food services activities, construction and health care on the one hand and a decline in wages in mining and energy on the other hand. The latest July and August data on the average wage in industry do not indicate stronger growth in the average wage in this sector in 2015 Q3.

Annual average wage growth in the **non-business sector** rose noticeably in 2015 Q2 (from 3% in 2015 Q1 to 4.3%), mainly due to higher wage growth in public administration and defence and, to a lesser extent, in health care. Wages in education maintained the moderate growth rate observed in the previous quarter. Owing to low inflation, annual growth in the real average wage in the non-business sector amounted to 3.6% in 2015 Q2 (see Table III.4.1).

The marked rise in annual real GDP growth, accompanied by a further upswing in employment,[48] was reflected in an only marginal pick-up in **whole economy labour productivity**[49] in 2015 Q2. However, it still grew at a fast pace of 3.1% (see Chart III.4.6). Labour productivity rose fastest in construction (by 5.2% year on year), where growth in value added continued to be accompanied by a decline in employment. Productivity also increased noticeably in industry (by 3.6%; see Chart III.4.7). Growth in **hourly labour productivity** slowed due to renewed growth in the number of hours worked (from 4.2% to 2.4% year on year). This was due mainly to services, as growth in hourly productivity strengthened slightly in industry (with manufacturing recording the same growth rate as in the previous quarter).

The rapid growth in economic activity, which outpaced the pronounced increase in the wage bill,[50] fostered a continued annual decline in nominal unit labour costs in 2015 Q2 (of 0.5%; see Chart III.4.8). This was a result of still declining **nominal unit labour costs** in industry and construction, while nominal unit labour costs in market and non-market services, where the wage bill grew faster than value added, increased in year-on-year terms.

48 According to the CZSO's national accounts.
49 Productivity is calculated on the basis of seasonally unadjusted data. 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).
50 The wage cost-output ratio as measured by nominal unit labour costs was calculated on the basis of seasonally unadjusted data.

Table III.4.1

WAGES, PRODUCTIVITY, UNIT LABOUR COSTS

Average wage growth increased in both the business and non-business sectors
(annual percentage changes)

	III/14	IV/14	I/15	II/15
Average wage in Czech Republic				
nominal	1.6	2.2	2.3	3.4
real	1.0	1.7	2.2	2.7
Average wage in business sector				
nominal	1.5	1.8	2.2	3.2
real	0.9	1.3	2.1	2.5
Average wage in non-business sector				
nominal	1.8	3.9	3.0	4.3
real	1.2	3.4	2.9	3.6
Whole-economy labour productivity	2.0	0.0	3.0	3.1
Nominal unit labour costs	-1.3	1.4	-0.8	-0.5

Chart III.4.7

PRODUCTIVITY IN BRANCHES

Labour productivity rose in all the monitored branches in 2015 Q2
(annual percentage changes)

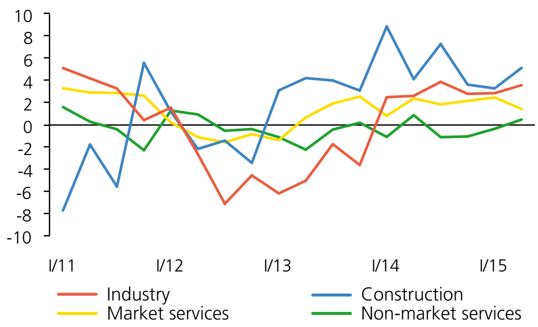


Chart III.4.8

UNIT LABOUR COSTS

Faster growth in economic activity than in the wage bill led to a fall in nominal unit labour costs
(contributions in percentage points; annual percentage changes)

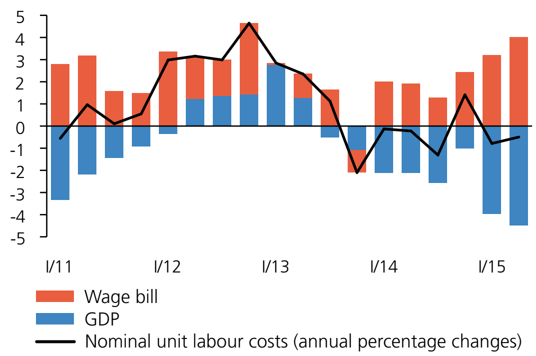


CHART III.5.1

MONETARY AGGREGATES

Money aggregate growth continued to rise in conditions of robust economic growth
(annual percentage rates of growth)

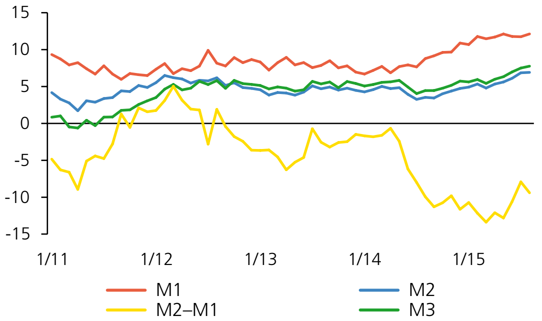


CHART III.5.2

MAIN COMPONENTS OF M2

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

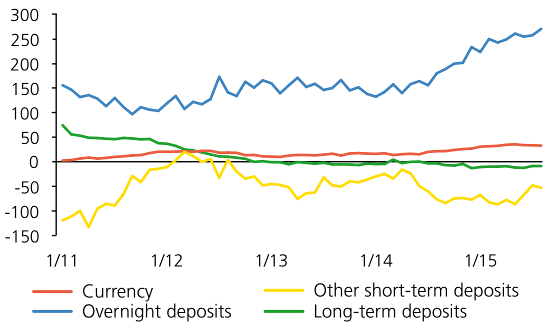
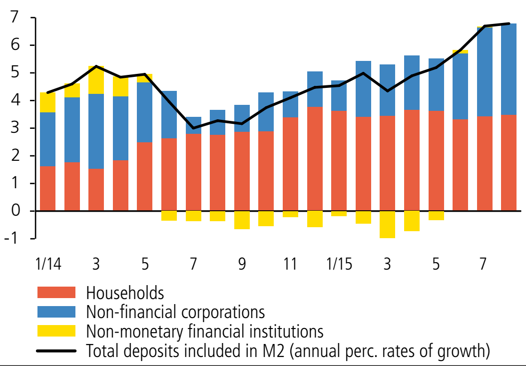


CHART III.5.3

DEPOSIT STRUCTURE OF M2

M2 growth was fostered by deposits of non-financial corporations and households in equal measure
(contributions in percentage points; annual percentage rates of growth)



III.5 FINANCIAL AND MONETARY DEVELOPMENTS

The growth rates of M2 and M3 are increasing further in an environment of robust economic growth. This is being fostered by growth in overnight deposits of non-financial corporations and also growth in household deposits. At the same time, growth in the net financial assets of households slowed due to faster growth in households' financial liabilities. The monetary developments reflected accelerating growth in loans, which reached its highest level since 2009. Growth in loans to corporations picked up significantly, mainly due to investment loans and loans with longer maturities. The annual growth rate of loans to households also went up, due to a further pick-up in loans for house purchase, which is being accompanied by a continued rise in residential property prices. Banks further eased their credit standards for corporate loans, while keeping those for house purchase loans to households unchanged and expecting them to tighten towards the end of 2015. Client interest rates remained close to record-low levels. Government bond yields dropped again and were negative for the shortest maturities in September 2015. The koruna appreciated to the level of the CNB's exchange rate commitment and this resulted in automatic foreign exchange interventions. Growth in the main indicators of the financial performance of corporations picked up and the acid-test ratio of corporations increased.

III.5.1 Money

M2 growth continues to accelerate. The annual growth rate of M2 increased further in 2015 Q3, reaching 6.9% in August, the highest level since 2009 (see Chart III.5.1). On the bank asset side, the M2 growth mainly reflected higher growth in loans to the private sector amid renewed modest growth in net external assets due mainly to an increase in the CNB's reserve assets. However, portfolio investment continued to record an outflow of capital, reflecting purchases of foreign debt securities, shares and investment fund units by residents. The money stock grew slightly faster than nominal GDP in 2015 Q2. This was reflected in a decline in the velocity of money. The annual growth rate of **M3** has also increased recently (to 7.8% in August) and was roughly 3 percentage points higher than that in the euro area.

As in the euro area, growth in broader money is being fostered by an increase in the **highly liquid money aggregate M1** in the Czech Republic. The annual growth rate of M1 amounted to a sizeable 12.1% in August 2015 (see Chart III.5.1). This mainly reflected increased demand for overnight deposits among households and non-financial corporations in an environment of low interest rates (see Chart III.5.2). The growth rate of currency in circulation slowed, but remains high. This is consistent with the growth in household consumption. Other short-term and long-term deposits continued to decline year on year.

Turning to the **sector structure of deposits**, deposits of households and non-financial corporations contributed to the M2 growth (see Chart III.5.3). Growth in corporate deposits continued to accelerate on the back of improved (operating and financial) profits of corporations. This was reflected in an increase in their acid-test ratio. The persisting elevated growth in household deposits reflects the positive labour market situation. The share of foreign currency deposits in total resident deposits remained close to 10%.

III.5.2 Credit

The growth rate of **loans to the private sector** is continuing to increase in an environment of strong economic growth and easy credit and monetary conditions. The annual growth rate of loans rose noticeably further in 2015 Q3, reaching almost 9% in August, i.e. around 4 percentage points higher than at the start of this year. The growth rate of loans thus reached its highest level since 2009.[51]

According to the **bank lending survey**, banks further eased their credit standards for loans to non-financial corporations and consumer credit in 2015 Q3. Standards applied to loans to households for house purchase were unchanged following a previous easing. The easing of standards was fostered by competition and more favourable risk perceptions, whereas increased bank financing costs acted in the opposite direction in the period under review. Banks continued to reduce their interest margins across the board. Demand for corporate loans and loans for house purchase increased, albeit less broadly than in previous quarters. Banks also expect credit standards to ease and demand to grow towards the end of 2015, although part of the market now expects credit standards applied to loans for house purchase to tighten (see Table III.5.1).

Growth in loans to the private sector is continuing to recover gradually in the **euro area**. The annual growth rate of loans was just under 1% in August (when adjusted for securitisation). Credit growth was fostered by a decrease in client interest rates due to the ECB's monetary policy measures (see section III.5.3 and Chart III.5.14). The divergence in bank lending rates across euro area countries narrowed further. Banks in the euro area further eased their credit standards for corporate loans, while tightening them for loans to households for house purchase in 2015 Q3. Banks' average interest margins also continued to fall. Demand for loans rose in all segments of the euro area credit market, mainly because of low interest rates, and banks expect a similar tendency in 2015 Q4.

Annual growth in **loans to non-financial corporations** in the Czech Republic surged, reaching almost 12% in August 2015, the highest level recorded since the start of 2009 (see Chart III.5.4). Corporations mainly took out loans with longer maturities. Investment loans, which account for almost 60% of total corporate loans, rose by almost 14%

51 In real terms, loans to the private sector grew slightly faster than GDP in 2015 Q2 (by 5.1%, as against 4.6% for GDP, adjusted by the GDP deflator).

TABLE III.5.1

CHANGES IN BANKS' CREDIT CONDITIONS

Banks further relaxed their credit standards for corporate loans and left them unchanged for house purchase loans in 2015 Q3; demand for such loans rose less broadly than in previous quarters

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

	Credit supply: of which			Demand for loans
	Credit standards	Average margin on loans	Margin on riskier loans	
Loans to non-financial corporations				
IV/14	-35 (-38)	-46	-6	55 (51)
I/15	-44 (-61)	-46	-24	33 (1)
II/15	-36 (-41)	-57	-15	14 (72)
III/15	-17 (-35)	-88	-17	3 (34)
IV/15	(-36)			(63)
Loans for house purchase				
IV/14	-9 (-11)	-46	24	24 (8)
I/15	-17 (-18)	-41	22	62 (0)
II/15	-23 (-31)	-26	0	69 (22)
III/15	0 (0)	-48	-23	11 (47)
IV/15	(13)			(16)
Consumer credit				
IV/14	-47 (-27)	-40	-25	4 (-28)
I/15	-56 (-31)	-34	25	30 (20)
II/15	-31 (-40)	-70	-25	12 (26)
III/15	-25 (-31)	-30	-23	-15 (7)
IV/15	(-38)			(67)

Note: Net percentages are calculated as the difference between the percentage share of loans provided by banks reporting that standards/conditions have been tightened (or demand increased) and the percentage share of loans provided by banks reporting that standards/conditions have been eased (or demand decreased). The individual responses are thus weighted by the volumes of loans of a given type. Banks' expectations for the current period reported in the previous quarter's survey are given in parentheses.

CHART III.5.4

LOANS TO NON-FINANCIAL CORPORATIONS

Growth in corporate loans surged

(annual percentage rates of growth)

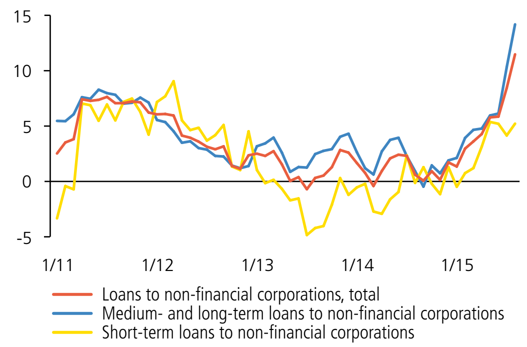


CHART III.5.5

INVESTMENT LOANS TO NON-FINANCIAL CORPORATIONS

Growth in investment loans increased significantly in most sectors

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

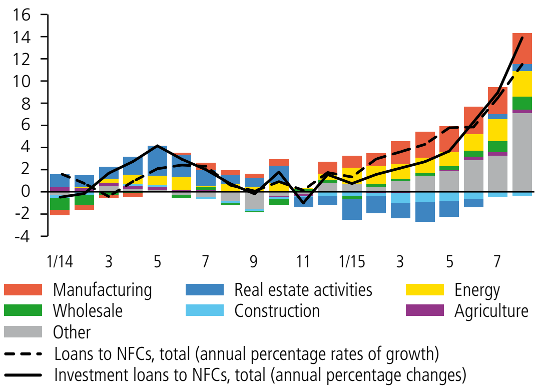


TABLE III.5.2

CREDIT STANDARDS AND SELECTED CREDIT CONDITIONS BY CORPORATION SIZE

Average interest margins applying to both small and large corporations decreased across the board due to competition and more favourable risk perceptions

(net percentages; positive value = tightening standards/conditions; negative value = easing standards/conditions)

	I/15	II/15	III/15	IV/15[a]
Credit standards				
Small and medium-sized enterprises	-44	-18	0	(-36)
Large corporations	-44	-46	-17	(-36)
Banks' average margin on loans				
Small and medium-sized enterprises	-44	-15	-67	
Large corporations	-46	-76	-88	
Size of loans				
Small and medium-sized enterprises	-18	-18	-17	
Large corporations	-18	-18	-36	
Collateral requirements				
Small and medium-sized enterprises	-18	-18	-17	
Large corporations	-18	-18	-17	

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

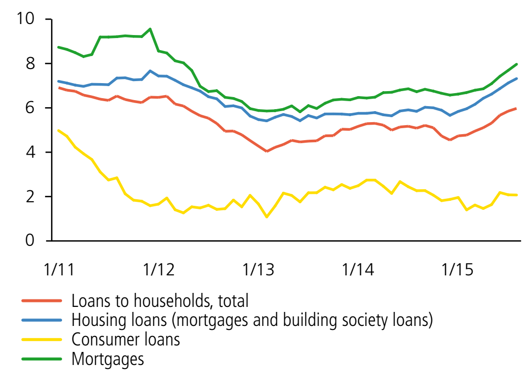
a) Banks' expectations for the current period reported in the III/15 survey are given in parentheses.

CHART III.5.6

LOANS TO HOUSEHOLDS

Growth in loans to households rose further, mainly as a result of rising growth in mortgages

(annual percentage rates of growth)



(see Chart III.5.5). This rise was fostered by loans to industry, trade, developers and some other sectors (e.g. communication activities). Koruna loans recorded an increase; at the same time, the interest of some Czech corporations in foreign currency loans persists. Nevertheless, the volumes of new corporate loans are below their pre-crisis levels. This is consistent with corporations' still heightened caution about their debt levels and with their high acid-test ratio. As a result of the economic growth and the related improvement in the financial condition of corporations, the non-performing loan ratio dropped further to 5.7%. Corporate solvency increased further.

The growth in corporate loans reflected growth in **demand for loans**. According to the bank lending survey, demand for financing of mergers and acquisitions and corporate and debt restructuring increased in 2015 Q3. Corporations' demand for loans to finance fixed investment and working capital saw no major changes in 2015 Q3 after increasing in the previous period. Banks further eased their credit standards, especially with regard to large corporations (see Table III.5.2). More favourable credit conditions were recorded for all corporations in terms of their size. This resulted in a broad-based decrease in the average interest margins of banks. Part of the banking market also lowered interest margins on riskier loans and relaxed the non-interest terms and conditions.

Loans represented the main source of **external financing** of corporations in 2015 Q2. Corporations primarily used loans from domestic banks. Loans from abroad declined (by around 18%). This reflected a decrease in loans from non-resident banks amid slower growth in foreign direct investment loans. Loans from domestic non-banks increased further (by 10%) and related mainly to financial leasing. By contrast, growth in corporate bond issuance has slowed considerably this year (to 0.3%) amid a renewed increase in the issuance of shares.

The annual growth rate of **loans to households** rose further in 2015 Q3, reaching 6% in August 2015 (see Chart III.5.6). This reflected growing household demand for house purchase loans. That demand was supported by favourable prospects for the residential property market and increased consumer confidence accompanied by a continued improvement in the labour market situation. Mortgage loans grew at the fastest rate in three years. Banks left their credit standards unchanged in 2015 Q3 following a previous easing. Part of the market expects standards to be tightened at the end of this year.

The volumes of **new mortgage loans** are at an 11-year high this year in an environment of historically low interest rates (see Chart III.5.7). The number of new mortgage loans for both home-ownership and investment purposes is increasing. Transaction prices of new and older apartments are rising (see section III.5.7). The growth in new loans for house purchase has increasingly been fostered recently by "net" new loans, which account for 61% of these loans (see Chart III.5.8).

The annual growth rate of **consumer credit** was stable at around 2% in 2015 Q3 (see Chart III.5.6). Growth in consumer credit has recently been fostered mainly by an increase in "net" new loans. According to banks' perceptions, household demand for consumer credit has been volatile recently. It decreased again in 2015 Q3 following a previous rise. Banks further eased their credit standards. Credit obtained by households from non-banks decreased in year-on-year terms in 2015 Q2.

Total household debt increased slightly to around 65% of total annual aggregate nominal disposable income in 2015 Q2 (see Chart III.5.9). As regards its structure, household debt increased further due to loans for house purchase, while consumer credit remained virtually unchanged relative to income. This indicates still relatively moderate household interest in credit financing of consumption. The net bank interest burden on Czech households (comprising interest expenses and income on bank loans and deposits) was unchanged in Q2 following an increase at the start of this year. Underlying this was growth in income coupled with an increase in interest expenses due to higher indebtedness and a decrease in interest income on bank deposits. The interest burden is currently close to the average for the last four years.

III.5.3 Interest rates

Monetary policy interest rates

The **monetary policy decision-making** of the CNB Bank Board in 2015 Q3 was based on the macroeconomic forecast published in the previous Inflation Report. The forecast assumed that market interest rates would be flat at their current 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 amid modest appreciation of the koruna in 2017.

At its **August meeting**, the Bank Board of the Czech National Bank decided unanimously to keep **key interest rates** unchanged at their current level, i.e. at technical zero[52] (see Chart III.5.10). The Bank Board also decided to continue using the **exchange rate as an additional instrument** for easing the monetary conditions and confirmed the Czech National Bank's commitment to intervene on the foreign exchange market if needed to weaken the exchange rate so that the koruna is kept close to CZK 27 to the euro. The risks of the previous forecast were assessed as being broadly balanced at the monetary policy horizon, although a modest downside risk might arise from the decline in oil prices. In this situation, the Bank Board emphasised that the Czech National Bank would not discontinue the use of the exchange rate as a monetary policy instrument before the

52 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.

CHART III.5.7

NEW MORTGAGES

Volumes of new mortgages are at an 11-year high so far this year in an environment of record-low interest rates
(x-axis – volumes of new mortgages in CZK billions; y-axis – interest rates on new mortgages in %)

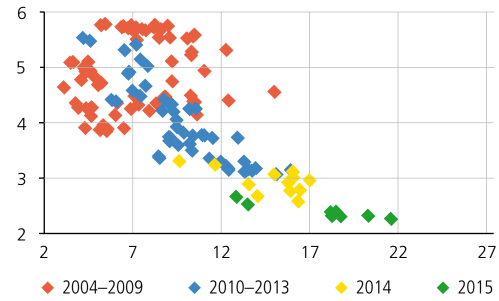


CHART III.5.8

STRUCTURE OF NEW LOANS FOR HOUSE PURCHASE

Growth in new loans for house purchase is being fostered mainly by new loans, while the contributions of refinancing and other renegotiation are less significant
(new business; contributions in percentage points and annual percentage changes)

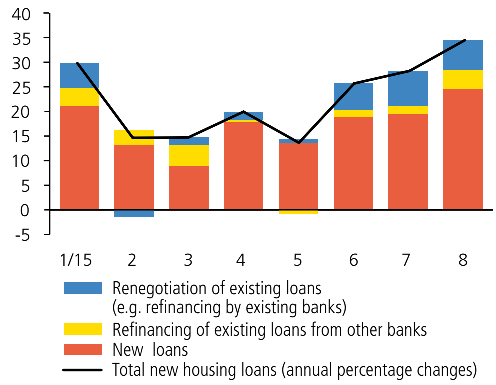
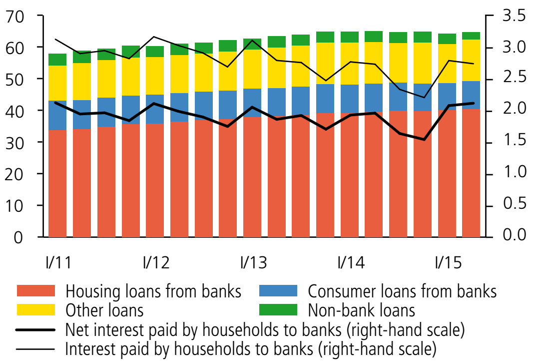


CHART III.5.9

HOUSEHOLD DEBT

Households' debt-to-income ratio increased slightly in 2015 Q2 and their interest burden was flat
(quarterly data; percentage ratios to gross disposable income)



Note: Net interest paid represents the difference between households' loan interest expenses and bank deposit interest income. Interest paid consists of households' borrowing-related interest expenses.

CHART III.5.10

CNB KEY RATES

The CNB left its key interest rates at "technical zero" in 2015 Q3
(percentages)

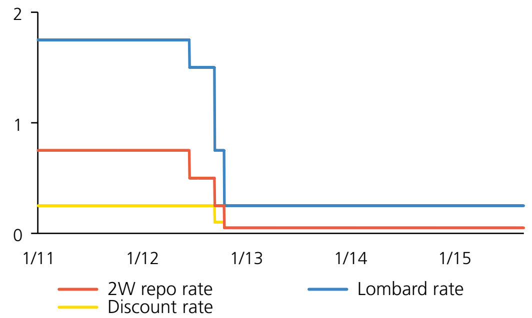
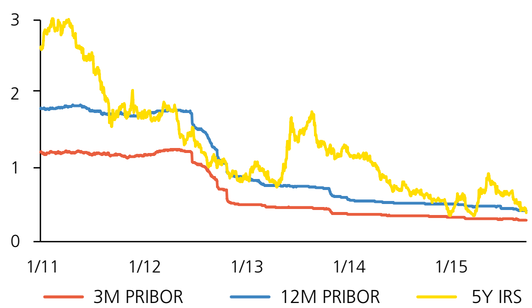


CHART III.5.11

MARKET INTEREST RATES

Money market interest rates were flat at historical lows, while rates with longer maturities went down
(percentages)



second half of 2016. The exchange rate would therefore be at CZK 27 to the euro or weaker at least until mid-2016. A need to maintain significantly expansionary monetary conditions persisted. The previous exchange rate appreciation was assessed by the Bank Board as an unfavourable factor that was tightening the monetary conditions and hence postponing achievement of the inflation target.

At its **meeting in September**, the Bank Board again decided unanimously to leave key interest rates unchanged. At the same time, it confirmed the above exchange rate commitment. In September, the balance of risks to the previous forecast was assessed as being anti-inflationary over the next few quarters. In this situation, the Bank Board stated again that the CNB would not discontinue the use of the exchange rate as a monetary policy instrument before the second half of 2016.

At its monetary policy meeting on 5 November 2015, 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 significantly expansionary monetary conditions persists. The likelihood that it will be necessary to discontinue the exchange rate commitment earlier than assumed in the forecast is decreasing over time. The Bank Board assessed the risks to the forecast at the monetary policy horizon as being balanced. Slowing demand in emerging countries is a downside risk to economic growth and consequently inflation. Materialisation of that risk could contribute, via lower global demand and commodity prices, to continued very subdued producer price inflation in the euro area, for which the forecast assumes a recovery. On the other hand, an upside risk to domestic inflation is that the assumed decrease in natural gas prices for households at the start of next year may not materialise. In this situation, the Bank Board discussed extending the duration of the exchange rate commitment. It agreed that its discontinuation would probably shift to around the end of 2016.

Financial market interest rates

PRIBOR rates remained at historical lows at all maturities in 2015 Q3 (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.

FRA derivative rates decreased at all maturities by 0.1 percentage point overall.[53] The market outlook for 3M rates according to end-October FRA quotations thus implies a minor decrease in the 3M PRIBOR at the one-year horizon. This is broadly in line with expectations of stable monetary policy interest rates at least until the same date amid a marginal decline in the money market premium. The expected market rates are thus slightly below the interest rate path expected in the new CNB forecast over the 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 expectations regarding future monetary policy developments in these economies) amid interest rate stability in the Czech Republic. However, the changes were not big: the differentials vis-à-vis euro rates increased marginally, while those vis-à-vis the dollar became slightly more negative (see Chart III.5.12). The 3M PRIBOR–3M EURIBOR interest rate differential was 0.3 percentage point on average in 2015 Q3 and was at the same level at the end of October.

Domestic **interest rates with longer maturities** declined somewhat overall, in line with rates abroad. During the summer months, markets abroad responded mainly to the turbulence on the Chinese financial market (the stock market crash and depreciation of the renminbi), which was associated with slower economic growth in China and subsequently with concerns of a global economic slowdown. Other factors included expectations of a possible expansion of the ECB's quantitative easing programme following the publication of data on persisting low inflation in the euro area, and the postponed rate hike in the USA. The completed negotiations between Greece and lenders' representatives on the conditions of the third rescue package might also have had an effect. Turning to domestic factors, the decline in IRS rates and especially bond yields was fostered by increasing liquidity in the banking sector due to foreign exchange interventions and the conversion of euros from EU funds by the CNB. This also affected primary government bond auctions, in which negative average yields were recorded for the first time ever: -0.001% to -0.32% on bonds with residual maturities of between two and three years. Overall, domestic IRS rates have dropped by 0.1–0.4 percentage point since the start of July (see Chart III.5.11), while government bond yields on the secondary market have fallen by as much as 0.7 percentage point. The positive slope of the IRS yield curve thus decreased slightly and the government bond yield curve shifted to negative levels at its shorter end (see Chart III.5.13).

53 Owing to the launch of interventions by the CNB aimed at defending the level of the exchange rate commitment in July 2015 and the related growth in koruna liquidity, interest rates on some financial market instruments (cross currency basis swaps and FX swaps) even turned negative.

CHART III.5.12

INTEREST RATE DIFFERENTIALS

Interest rate differentials vis-à-vis the euro were at slightly positive levels
(percentage points)

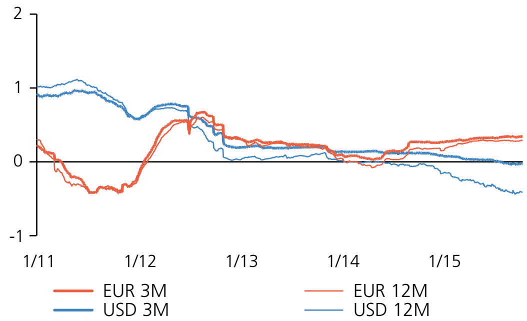


CHART III.5.13

GOVERNMENT BOND YIELD CURVE

The government bond yield curve turned negative at the shortest maturities
(percentages)

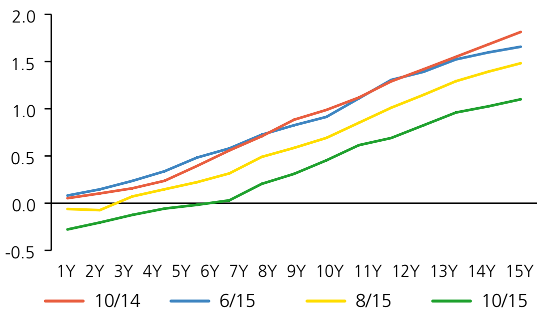


CHART III.5.14

CLIENT INTEREST RATES IN THE CZECH REPUBLIC AND THE EURO AREA

The interest rate on loans to non-financial corporations edged down further in 2015 Q3 in both the Czech Republic and the euro area, while the rate on loans for house purchase increased slightly

(cost of borrowing indicators; new business; percentages)

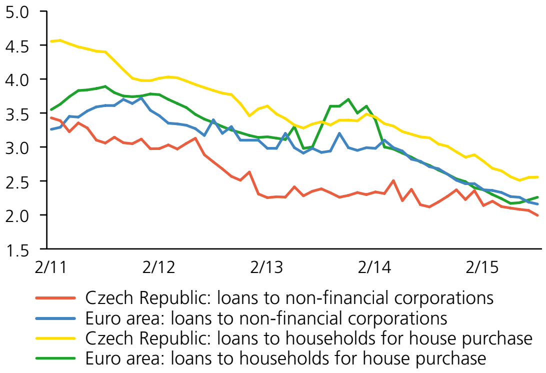


CHART III.5.15

INTEREST RATES ON LOANS TO CORPORATIONS

The interest rate on domestic koruna and euro loans to non-financial corporations is still close to 2%

(new business; percentages)

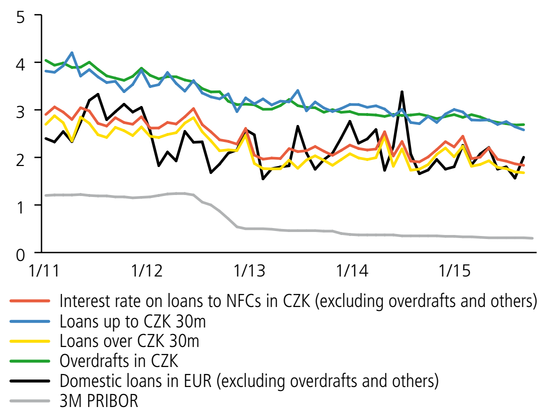
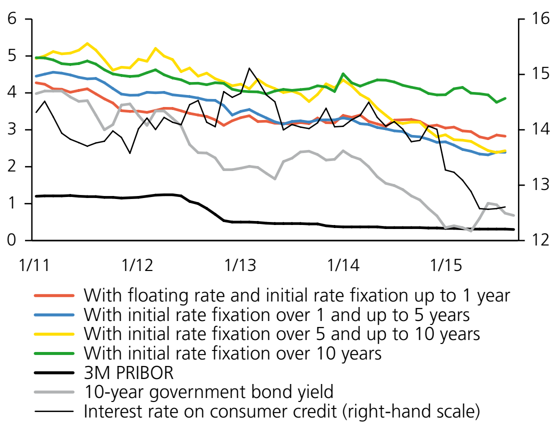


CHART III.5.16

INTEREST RATES ON LOANS TO HOUSEHOLDS

Interest rates on loans to households for house purchase and for consumption remained close to their lows in 2015 Q3

(new business; percentages)



Nine auctions of fixed coupon bonds and three auctions of variable coupon bonds were held on the primary **government bond market** in 2015 Q3 and October 2015. The total volume of bonds issued was CZK 61.8 billion.[54] Demand exceeded supply in almost all the auctions; the average bid-to-cover ratio was 2.2. Demand from foreign investors remained high; they continued to account for around half of domestic bonds subscribed for since the launch of the programme of purchases of government bonds and other securities in the euro area. There was a decrease in average yields at the auctions, reflecting developments in the secondary market.

Client interest rates

Client interest rates on new loans in nominal terms edged down further for loans to non-financial corporations while increasing slightly for loans to households in 2015 Q3 (see Chart III.5.14). Overall, however, interest rates remain at record-low levels, reflecting a decrease in rates with longer fixations in all segments of the credit market. Following a short-lived increase, the ten-year government bond yield started to decrease again (to 0.68% in September 2015). The short end of the government bond yield curve also fell and was more affected by speculation about the exit from the CNB's exchange rate commitment and related foreign exchange interventions. The two-year government bond yield turned negative in September (-0.3%). Subsequently, the short end of the government bond yield curve rose again slightly as the derivatives market stabilised. Client interest rates on deposits stayed at 0.5% on average.

The **interest rate on loans to non-financial corporations** fell slightly, standing close to 2% in nominal terms (see Chart III.5.15). As regards its structure, rates with longer fixations have come down recently, while short-term rates have been flat. The spread between these rates has almost disappeared. The share of new loans with longer fixations is thus increasing (around 20% on average this year), although new loans with rates fixed for up to one year still account for the largest share. The interest rates on small loans and large loans were 2.6% and 1.7% respectively. The spread between these rates is slightly below the long-term average. The rate on new domestic euro-denominated loans is similar to that on koruna loans (2%). Rates on corporate loans in the euro area also recorded a further slight decrease (to 2.2%) and moved closer to rates in the Czech Republic.

The **interest rate on loans for house purchase** for households remained close to its low, reaching 2.6% in August 2015 (2.3% for mortgages). The rate on loans fixed for over one year and up to five years, which account for 65% of all house purchase loans, was flat at 2.4%. Rates with some longer fixation periods edged up (see Chart III.5.16). Almost a third of new loans for house purchase

54 The Czech Republic's Funding and Debt Management Strategy for 2015 assumes issues of medium- and long-term government bonds amounting to CZK 130–180 billion. Bonds totalling CZK 146.4 billion have been issued since the start of 2015.

have rates fixed for over five years, and the share of these loans has increased recently. The rate on loans for house purchase reflected increased bank financing costs recorded in mid-2015. However, long-term government bond yields have recently started to decrease again. According to current Fincentrum Hypoindex data, the mortgage rate was unchanged in September 2015. The spread between short-term client and market rates was flat, and for long-term rates it was the same as in the same period a year earlier. Following a previous decline, the rate on house purchase loans in the euro area is also close to a historical low (2.3%), but it has long been slightly lower than that in the Czech Republic.

The **interest rate on consumer credit** stabilised following a previous decrease, reaching 12.6% in August (see Chart III.5.16). It has recently been affected by increased competition among banks and non-banks and by more favourable risk perceptions regarding the overall economic situation and the creditworthiness of some clients. Nevertheless, the rate on consumer credit remains well above the euro area level.

With expected inflation unchanged, **real client interest rates**[55] showed similar developments as nominal rates. Real rates on new loans averaged 0.9% in August (see Chart III.5.17). The real interest rate on corporate loans was 0.4% and that on house purchase loans for households was 0.9%. Real rates on time deposits remained negative.

III.5.4 The exchange rate

The average **exchange rate of the koruna against the euro** was CZK 27.1 in 2015 Q3. This represents a year-on-year appreciation of 2.0% and a quarter-on-quarter appreciation of 1.1% (see Chart III.5.18). In early July, the koruna appreciated from CZK 27.3 to CZK 27.1 to the euro and later fluctuated between CZK 27.0 and CZK 27.1 until late September. It temporarily depreciated back to CZK 27.3 to the euro but then returned quite quickly to just above the exchange rate commitment of CZK 27 to the euro. It stood at the same level in the second half of October, too.

On world financial markets, the currencies of numerous emerging economies depreciated sharply against the two major international reserve currencies in 2015 Q3 (the Brazilian real weakened the most – by more than 22%). The depreciation of emerging economies' currencies was associated with a deteriorating economic situation, an outflow of short-term capital and worsening current account balances. The currencies of major commodity exporters from advanced countries (the Australian and Canadian dollar and the Norwegian krone in particular) also weakened quite significantly (by 8%–9%).

55 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.

CHART III.5.17

EX ANTE REAL RATES

Ex ante real interest rates on new loans were slightly below 1%, while rates on time deposits remained negative
(percentages)

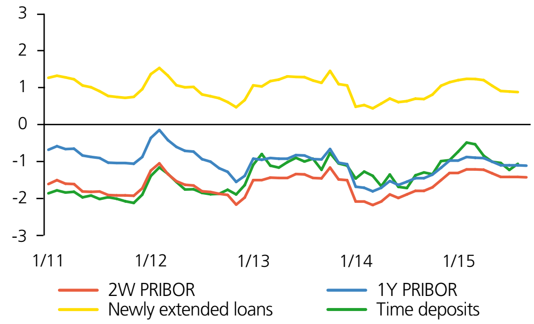
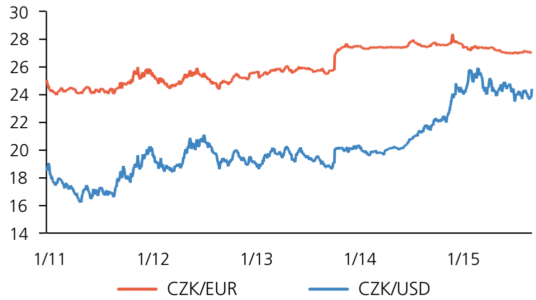


CHART III.5.18

CZK/EUR AND CZK/USD EXCHANGE RATES

The koruna appreciated slightly against the euro and the dollar in 2015 Q3



This reflected a marked decline in prices of most commodities on global markets in 2015 Q3. The currencies of China, the UK and Switzerland also weakened by 4%–5% due to a worsening economic situation and monetary policy measures.

The **appreciation of the koruna** to the level of the CNB's exchange rate commitment led to automatic interventions for the first time since November 2013. These interventions, which took place between 17 July 2015 and September, totalled around EUR 7 billion. The testing of the level of CZK 27 to the euro in 2015 Q3 was due among other things to the very positive economic developments in the Czech Republic this year. It was also attributable to the still very easy monetary conditions in advanced countries, especially the euro area. Furthermore, market expectations regarding growth in monetary policy rates in the USA and the UK fell significantly in the quarter under review, while expectations of a further monetary policy easing by the ECB increased. The gradual deterioration of the economic situation in most emerging economies resulted in a stronger outflow of capital from these countries and significant depreciation of their currencies. A strong outflow of short-term capital is also visible in China, where the central bank even intervened to counter the weakening of the renminbi in the summer months (which led to a substantial fall in its foreign exchange reserves). With its independent currency and non-negative rates, the fast-growing Czech economy thus became an attractive target for foreign short-term capital.

The average **exchange rate of the koruna against the dollar** was CZK 24.4 in 2015 Q3. This represents a year-on-year depreciation of 16.8% and a quarter-on-quarter appreciation of 1.8%. In 2015 Q3, the koruna appreciated slightly against the dollar to roughly the same extent as it did against the euro, although with greater volatility. The movements of the dollar against European currencies in the period under review reflected gradually abating fears about the situation in Greece, a fading probability of an early increase in monetary policy rates in the USA and, conversely, growing expectations of an expansion of the quantitative easing programme in the euro area. The dollar started to depreciate slightly against European currencies in early October. Shortly after mid-October it depreciated against the koruna from CZK 24.3 to CZK 23.8.

III.5.5 Economic results of non-financial corporations

The **financial results** of non-financial corporations with 50 employees or more[56] in 2015 Q2 reflected the continuing growth in economic activity, which led to faster annual growth in the main output and profit indicators (see Chart III.5.19). Growth in gross operating surplus (operating profit) increased (to 9.2%), driven primarily by a decline

56 The segment of corporations with 50 employees or more consisted of more than 9,000 non-financial corporations at the end of 2015 Q2.

CHART III.5.19

KEY FINANCIAL INDICATORS

Growth in the main financial indicators of non-financial corporations increased in 2015 Q2

(annual percentage changes)

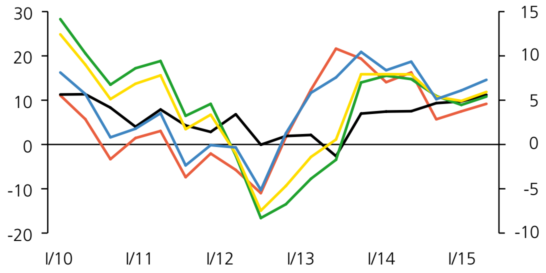


TABLE III.5.3

PERFORMANCE INDICATORS OF NON-FINANCIAL CORPORATIONS

The material and personnel cost-output ratios decreased

	2014 Q2 CZK billions	2015 Q2 CZK billions	Annual percentage changes
Output incl. profit margin[a)]	1,473.0	1,560.3	5.9
Personnel costs	213.3	225.2	5.6
Intermediate consumption	1,067.2	1,125.0	5.4
Book value added	405.8	435.4	7.3
Sales	1,946.7	2,065.5	6.1
Gross operating surplus	192.5	210.2	9.2
	%	**%**	**Annual changes in pp**
Material cost-output ratio	72.5	72.1	-0.4
Personnel cost-output ratio	14.5	14.4	-0.1
Ratio of book value added to output	27.5	27.9	0.4
Ratio of personnel costs to value added[a)]	52.6	51.7	-0.8
Ratio of gross operating surplus to value added	47.4	48.3	0.8

a) CNB calculation

in the material cost-output ratio.[57] This also led to an increase in the annual growth rate of book value added and a rise in its share in output (see Table III.5.3).

With output rising faster than intermediation consumption, the year-on-year decline in the **material cost-output ratio** strengthened slightly to -0.4 percentage point in 2015 Q2 (see Table III.5.3). The persisting decline in this indicator was mainly due to a marked drop in import prices of production inputs (energy and non-energy commodities), which has been recorded since the end of 2014. Following a year-on-year stagnation at the start of the year, the **personnel cost-output ratio**[58] also fell slightly in Q2. This was due to faster growth in output than in personnel costs, reflecting a rising number of employees and an increasing average wage.

From the sectoral perspective, the annual growth in sales, output and operating profit in 2015 Q2 was again driven chiefly by corporations in manufacturing (see Chart III.5.20). Their share in total annual operating surplus growth increased somewhat. However, the growth in gross operating surplus was also attributable to other sectors, with the exception of the energy supply industry. With regard to the **ownership structure of corporations**, the growth in this indicator was again due above all to foreign-owned corporations, whose production is largely export-oriented.

Data for the narrower **segment of large corporations** (with 250 employees or more)[59] indicate similar trends in the main financial indicators in 2015 Q2 as in the larger segment of corporations. Annual growth in gross operating surplus also rose significantly in this segment of corporations (to 8.8%). The annual growth rate of personnel costs also increased. Unlike in corporations with 50 employees or more, it was due entirely to faster growth in wages rather than employment.

III.5.6 Financial position of corporations and households

The annual growth rate of **financial liabilities of non-financial corporations** increased to 1.5% in 2015 Q2 (see Chart III.5.21). This was due to a larger increase in loans and faster growth in shares and other equity, including new issuance of quoted shares and taking account of the impact of revaluation. Annual growth in the **financial assets of non-financial corporations** rose to 3.7% in Q2. This was primarily due to shares and loans. The contribution of currency and deposits was slightly lower, but stable over time. Financial assets again increased faster than liabilities in this quarter, resulting in a further reduction in the overall negative net financial position of corporations.

CHART III.5.20

OPERATING PROFIT BY SECTOR

The contribution of corporations in manufacturing to growth in operating profit remained the highest

(annual percentage changes; contributions in percentage points)

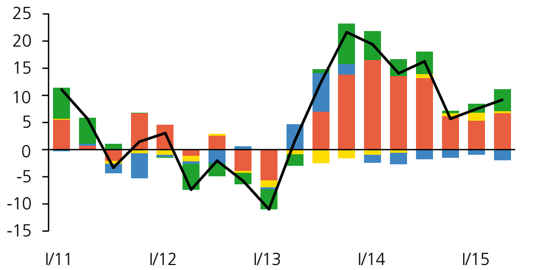
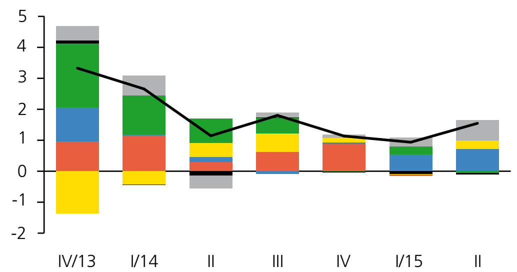


CHART III.5.21

FINANCIAL LIABILITIES OF NON-FINANCIAL CORPORATIONS

Loans and shares, including quoted shares, contributed to the growth in the financial liabilities of corporations in 2015 Q2

(annual percentage changes; contributions in percentage points)



57 The material cost-output ratio defined as the ratio of intermediate consumption to output.
58 The personnel cost-output ratio defined as the ratio of personnel costs to output.
59 The segment of corporations with 250 employees or more consisted of more than 1,700 non-financial corporations at the end of 2015 Q2.

CHART III.5.22

STRUCTURE OF HOUSEHOLD FINANCIAL ASSETS

Growth in the net financial assets of households slowed, owing to faster growth in their financial liabilities
(contributions in percentage points; annual percentage changes and percentage ratios)

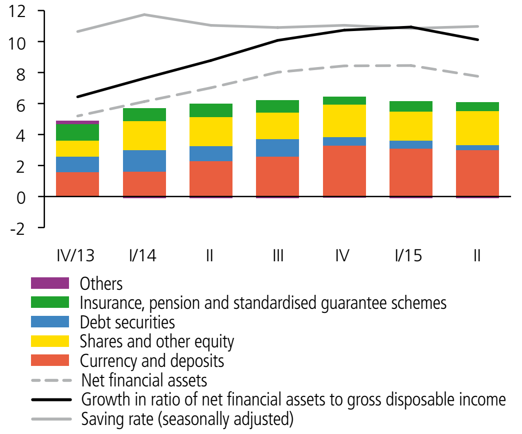
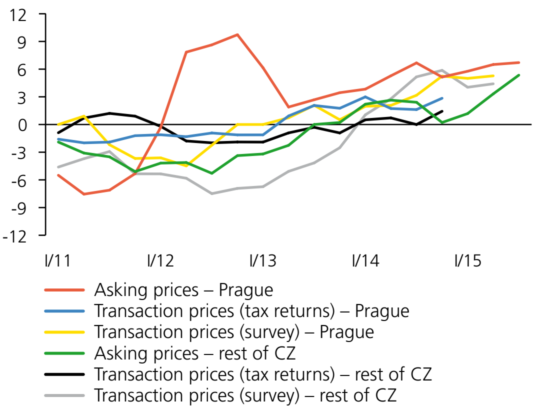


CHART III.5.23

TRANSACTION AND ASKING PRICES OF APARTMENTS

Prices continued to rise in Prague and the rest of the Czech Republic, but asking prices were increasing faster than transaction prices
(annual percentage changes; source: CZSO)



The main **trends in the balance sheets** of non-financial corporations are reflected in their financial indicators. The acid-test ratio[60] of corporations edged up further to 231%, the highest figure in three years. Corporate solvency – as measured by the ratio of total financial assets to liabilities excluding shares and other equity – remained almost unchanged at 116%. The market-based financing ratio[61] increased quarter on quarter (from 9.4% to 9.9%) as a result of higher issuance of quoted shares.

Households are traditionally net creditors in the national economy. Annual growth in the **net financial assets of households** slowed to 7.8% in 2015 Q2, owing to faster growth in their financial liabilities. Growth in net financial assets compared to the same period of 2014 accounted for 10% of the annual gross disposable income of households (see Chart III.5.22). Gross financial assets again increased by 6% year on year in 2015 Q2. This was mainly due to currency, deposits and shares and other equity. The growth in shares and other equity was due chiefly to investment in quoted shares as well as shares and units of domestic and foreign investment funds. The contributions of the liquid and investment components[62] of household portfolios have been the same over the last year. Annual growth in the **financial liabilities of households** increased compared to the previous quarter to 2.3%.[63] This was due to long-term loans, which are the dominant item of household financial liabilities.

III.5.7 The property market

According to CZSO data, **asking prices of apartments** continued to increase in 2015 Q3 (see Chart III.5.23). The strongest growth was again recorded in Prague, where it accelerated slightly to 6.7% year on year compared to the previous quarter. The previously only very modest rate of growth of these prices in the rest of the Czech Republic saw a larger increase, to 5.3%.

The continuing apartment price growth is confirmed by data on **transaction prices of older apartments from the CZSO survey**, available for 2015 Q2 (see Chart III.5.24). Following a revision of the estimates published in 2015 Q1, annual growth in these prices rose slightly to 5.3% in Prague and 4.4% in the rest of the Czech Republic.

Overall, the CZSO data thus show that the differences in apartment price growth rates between the capital and the rest of the Czech Republic are shrinking. In Prague, however, the gap between asking

60 A ratio with currency in circulation, transferable deposits, short-term debt securities and short-term loans provided in the numerator and short-term debt securities issued and short-term loans accepted in the denominator.
61 The ratio of the sum of bonds issued and quoted shares issued to total liabilities.
62 The latter is made up of shares, debt securities and insurance, pension and standardised guarantee schemes.
63 The dynamics of households' disposable income increased to 3.7%.

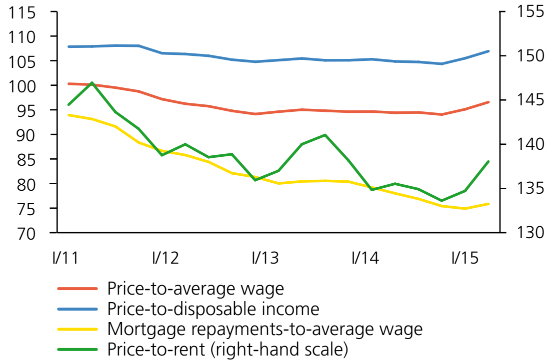
prices and actual transaction prices is widening further. Asking prices of apartments in Prague have risen by 27% from their cyclical trough, but transaction prices are only 8% higher.[64] Outside Prague, by contrast, asking and transaction prices are both 8% higher.[65]

According to preliminary data, the growth in apartment prices in 2015 Q3 was also reflected in a slight deterioration of the **indicators of housing affordability and apartment purchase profitability**, although this came after a long-running improvement in these indicators. The price-to-average wage ratio and the price-to-disposable income ratio[66] rose by 2.3% and 2.0% year on year respectively. According to IRI data, the price-to-rent ratio also increased year on year (by 1.9%). The mortgage repayments-to-average wage ratio[67] fell by 2.7% year on year, but in quarter-on-quarter terms it rose by 1.3%.

Chart III.5.24

APARTMENT PRICE SUSTAINABILITY INDICATORS

The affordability and profitability of buying an apartment deteriorated slightly following a long period of improvement
(average for 2000–2007 and 2004–2007 = 100 respectively; source: CZSO, CNB, Institute for Regional Information)



64 Part of the increase in asking prices in Prague was due to their sharp year-on-year growth in 2012, which may have been a statistical anomaly in the CZSO data (see Inflation Report I/2013).
65 Asking prices in Prague and the rest of the Czech Republic recorded their troughs in 2011 Q4 and 2013 Q1 respectively. Transaction prices recorded their troughs in 2012 Q3 and 2013 Q4 respectively.
66 To calculate these indicators, apartment prices are approximated by tax return and survey-based transaction prices and by asking prices, depending on availability.
67 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 2015 Q3.

Chart III.6.1

CURRENT ACCOUNT

The current account balance increased year on year into slightly positive figures in 2015 Q2, mainly due to a decline in the primary income deficit
(CZK billions)

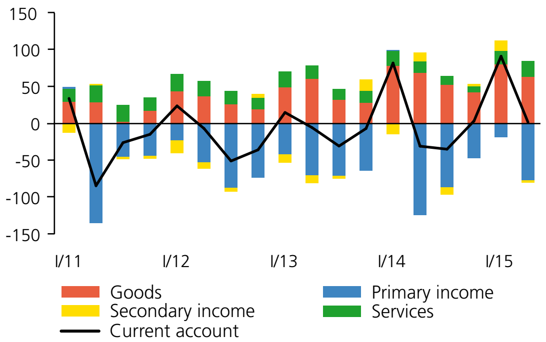


Chart III.6.2

EXTERNAL GOODS TRADE BY SITC

The year-on-year decrease in the mineral fuels deficit was outweighed by a decline in the balances of other key goods categories in 2015 Q2
(Q2 of relevant year in CZK billions; national concept)

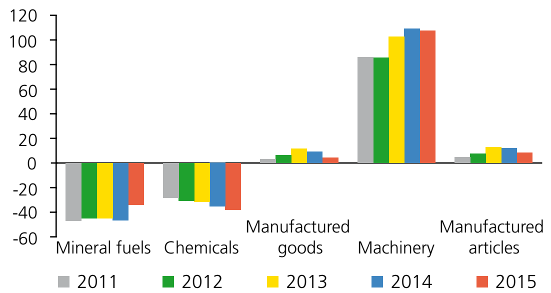
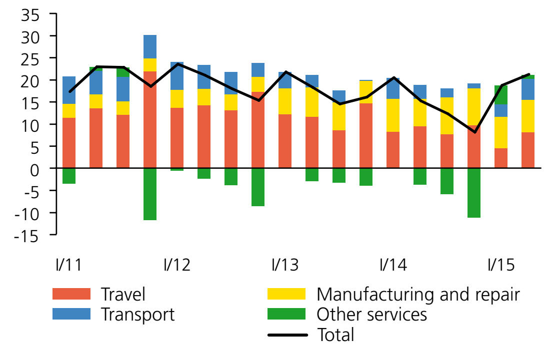


Chart III.6.3

SERVICES

All four sub-balances contributed to the services surplus in 2015 Q2
(CZK billions)



III.6 THE BALANCE OF PAYMENTS

The balance of payments in 2015 Q2 was again characterised by a large goods and services surplus, which increased marginally in year-on-year terms owing to the evolution of services. However, its effect on the current account was largely offset by a primary income deficit, associated mainly with direct investment income. This deficit did, however, narrow year on year. The capital account ended in a high surplus as a result of high drawdown of funds from the EU budget. The largest financial account item was a rise in reserve assets. However, this rise and the also significant net lending abroad (a net outflow) on portfolio investment were partly offset by net borrowing from abroad (a net inflow) on other investment, associated with a change in the position of the banking sector including the CNB vis-à-vis non-residents.

III.6.1 The current account

In 2015 Q2, the **current account** recorded a surplus (CZK 3.1 billion) for the third consecutive quarter. In year-on-year terms, the current account balance increased by more than CZK 32 billion. The switch from deficit to surplus in year-on-year terms was due chiefly to a decline in the primary income deficit (see Chart III.6.1). The ratio of the annual moving current account surplus to GDP reached 1.5%, up by 0.7 percentage point compared to the previous quarter.

The **goods** balance ended Q2 in a surplus of CZK 62.8 billion, down by more than CZK 5 billion following four years of annual growth. The decrease in the goods surplus was due to a price effect associated with a negative year-on-year change in the terms of trade and with developments in real terms. Annual growth in nominal trade turnover was 7%, falling slightly compared to the previous quarter owing to slower growth in exports. The halt in the year-on-year weakening of the koruna against the euro and a persisting decrease in exports to Russia and Ukraine led to a slowdown in nominal goods export growth to 6.4% despite stronger demand growth in the euro area. By contrast, goods import growth remained unchanged from the previous quarter (at 7.8%), mainly because of continued rapid growth in total domestic demand. The effect of the year-on-year weakening of the koruna against the dollar on nominal import growth continued to be offset by a drop in world energy commodity prices. Turning to the commodity structure, a moderation of the surplus on manufactured goods classified by material was the biggest contributor to the year-on-year decline in the overall trade surplus (see Chart III.6.2). The total goods surplus continued to fall year on year during 2015 Q3, decreasing by more than CZK 5 billion in July–August.

The goods and services surplus was also due to a CZK 21.2 billion surplus on **services** (see Chart III.6.3). Following five quarters of year-on-year decline, the services surplus increased by CZK 6 billion in 2015 Q2. As in the previous quarter, all four component balances contributed to the surplus. Travel recorded the largest surplus (CZK 8.2 billion). However, the annual growth in the overall surplus was mostly due to other services, which switched from deficit to slight surplus (mainly on account of lower debits on financial services and higher credits on business services).

In contrast to the goods and services surplus, **primary income** ended as usual in a high deficit of CZK 77.6 billion. However, the deficit narrowed by almost CZK 48 billion year on year. The decline in the overall deficit was mainly due 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 89.2 billion. Portfolio investment income also recorded a slight deficit, linked mainly with interest on bonds paid to non-residents. By contrast, surpluses on compensation of employees and income on reserve assets were the main factor fostering a moderation of the overall deficit.

Secondary income also ended 2015 Q2 in a slight deficit (CZK 3.3 billion), down by almost CZK 16 billion year on year amid a switch from surplus to deficit. Its main component was net income on current international cooperation, which reached almost CZK 10 billion. In the quarter under review, however, it was outweighed by deficits on the other components, above all VAT- and GNI-based payments to the EU budget. Net drawdown of funds from the EU budget recorded under secondary income totalled only CZK 2.8 billion, down by almost CZK 16 billion year on year. The year-on-year change in secondary income was therefore linked mainly with considerably lower net income from the EU budget recorded in this section of the balance of payments.

III.6.2 The capital account

The **capital account** recorded a sizeable surplus of CZK 52.6 billion in 2015 Q2, resulting almost exclusively from drawdown of funds from the EU budget. This represents a sizeable year-on-year increase from the very low level recorded last year.

III.6.3 The financial account

The **financial account** recorded net lending abroad (a net outflow) of CZK 62.4 billion in 2015 Q2, linked above all with a rise in reserve assets and a net outflow of portfolio investment. Only net borrowing from abroad (a net inflow) under other investment fostered a reduction in the overall net outflow (see Chart III.6.5).

Following five quarters of net inflow, **direct investment** also recorded a slight net outflow (CZK 4.2 billion; see Chart III.6.6). Its evolution in the quarter under review was characterised by a return of Czech

CHART III.6.4

PRIMARY INCOME

Within primary income, the investment income deficit decreased year on year in 2015 Q2
(CZK billions)

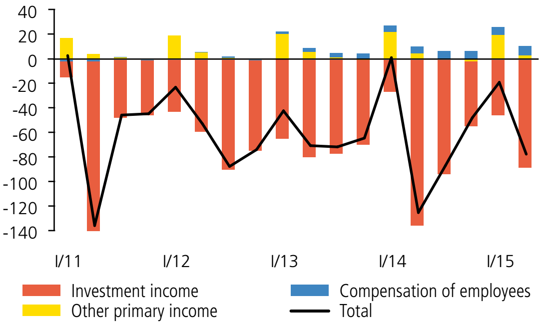


CHART III.6.5

FINANCIAL ACCOUNT

Growth in reserve assets was the largest item on the financial account in 2015 Q2
(CZK billions)

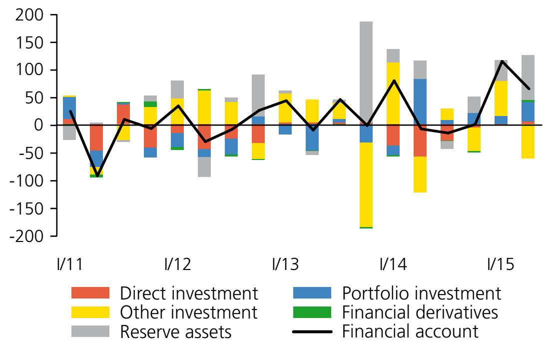


CHART III.6.6

DIRECT INVESTMENT

A net outflow of equity and investment fund shares was the sole contributor to the net outflow of direct investment in 2015 Q2
(CZK billions)

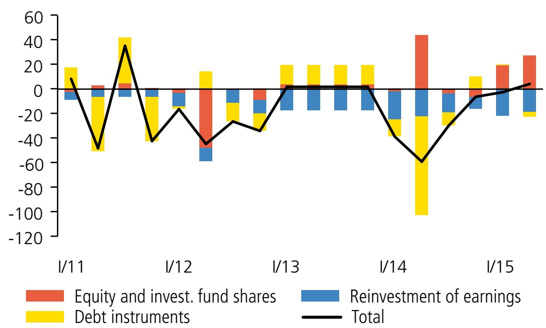
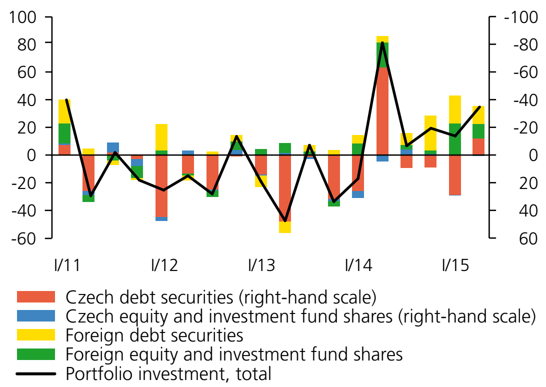


Chart III.6.7

PORTFOLIO INVESTMENT

Portfolio investment recorded a net outflow in 2015 Q2, primarily due to purchases of foreign securities by residents
(CZK billions)



investment from abroad back into the Czech Republic and above all by a reverse flow of foreign investment from the Czech Republic abroad. The outflow of foreign investment from the Czech Republic reached CZK 11.5 billion and pertained to equity and debt instruments (where repayments exceeded drawdown), only partly offset by an inflow of reinvestment of earnings. The decline in Czech investment abroad was due to repayments outweighing lending within debt instruments. A year-on-year change in the direct investment balance (of more than CZK 63 billion) from a net inflow to a net outflow was related mainly with changes in credit relations.

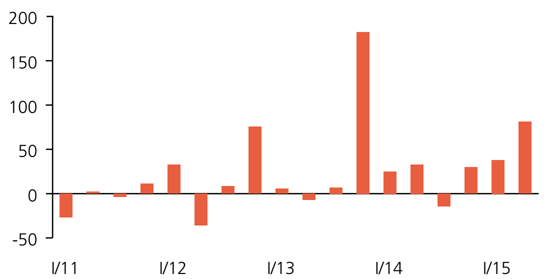
Portfolio investment recorded net lending abroad (i.e. a net outflow) for the fifth consecutive quarter. It amounted to CZK 34.8 billion in Q2 alone; this was, however, more than CZK 46 billion less than in the same period of last year (see Chart III.6.7). The biggest transactions were purchases of foreign securities by residents, which exceeded CZK 23 billion, with bond purchases slightly exceeding purchases of equity and investment fund shares. By contrast, sales dominated trading in domestic securities by foreign investors. They were related exclusively to a decrease in holdings of Czech bonds, whereas in the case of equity and investment fund shares purchases slightly outweighed sales. The year-on-year moderation of the overall net outflow was due primarily to last year's repayments of government and corporate bonds issued on foreign markets.

Settlement of **financial derivatives and employee stock options** also led to moderate net lending abroad (a net outflow) totalling CZK 4.4 billion. By contrast, a slight net inflow from abroad had been recorded in the same period of last year.

Chart III.6.8

RESERVE ASSETS

Reserve assets increased again in 2015 Q2 due to a surplus on transactions for CNB clients
(CZK billions)



Other investment recorded net borrowing from abroad (a net inflow) of CZK 62.2 billion, representing an only modest year-on-year decline. The overall net borrowing was due solely to a net inflow of CZK 77.7 billion in the banking sector including the CNB. It was associated chiefly with an increase in short-term deposits accepted from abroad. By contrast, the corporate sector saw a net outflow of funds (CZK 15.1 billion), due mainly to repayments to non-residents of long-term loans. General government also recorded marginal net lending abroad.

As in the previous two quarters, **reserve assets** increased (by CZK 81.2 billion), driven by high net drawdown of funds from the EU budget and a related surplus on transactions executed for CNB clients (see Chart III.6.8).

III.7 THE EXTERNAL ENVIRONMENT

Economic growth in the euro area accelerated again in year-on-year terms in 2015 Q2, driven chiefly by household consumption. The economy was stimulated by the ECB's ongoing easy policy, low energy prices and a weak euro, which manifested itself among other things in renewed growth in German net exports. Economic growth in the USA remains relatively high, but it is being supported solely by domestic demand, as exports are being dampened by a strong dollar. Inflation is close to zero in both the euro area and the USA, but is expected to rise next year; this rise will be more pronounced in the USA. The euro is expected to weaken slightly against the dollar at the one-year horizon. Excess supply on the oil market will probably persist until the end of 2016, preventing stronger price growth from the current levels below USD 50 a barrel.

III.7.1 The euro area

Annual growth in **euro area GDP** accelerated further to 1.9% in 2015 Q2, the highest annual figure since 2011 (see Chart III.7.1). By contrast, economic growth slowed marginally in quarter-on-quarter terms (to 0.4%). As in the previous quarters, household consumption, which rose by 2.3% year on year, was the main source of growth. The contributions of the other GDP components except change in inventories were also positive. Household consumption is expected to remain the driver of overall economic growth in 2015 Q3, as suggested by a further acceleration in annual real retail sales in July and August. Turning to individual countries, Ireland, Spain and Slovakia recorded the highest growth rates. By contrast, economic activity in Finland recorded year-on-year stagnation in 2015 Q2.

The **forecasts of the monitored institutions** for 2015 agree that euro area GDP growth will reach 1.5% (see Chart III.7.2). In 2016, it is expected to accelerate slightly further. The annual growth rate of industrial production increased in August, but remains relatively low. However, the September PMI in manufacturing suggests an improvement in industrial production in the months ahead. Low prices of oil (and other energy) and the ECB's easy monetary policy, which is fostering a weaker exchange rate of the euro against the dollar, should continue to boost the economy. The unemployment rate fell to 11% in July and stayed at that level in August.

Very **subdued inflation** is expected this year. Inflation is expected to reach 1% in 2016. Following five months of modest growth, consumer prices fell by 0.1% year on year in September, owing to a decrease in energy prices. Inflation excluding energy and food prices was flat at 0.9% in September. The annual decline in industrial producer prices deepened to 2.6% in August (see Chart III.7.3).

CHART III.7.1

GDP IN THE EURO AREA

Household consumption was the main component of the accelerating GDP growth in 2015 Q2
(annual percentage changes; contributions in percentage points; seasonally adjusted; source: Datastream, CNB calculation)

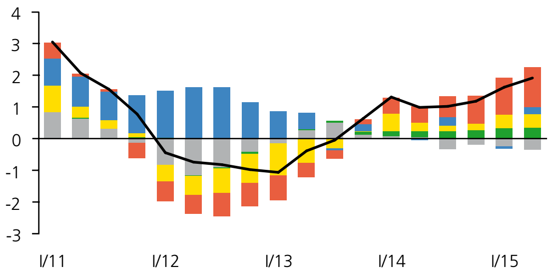
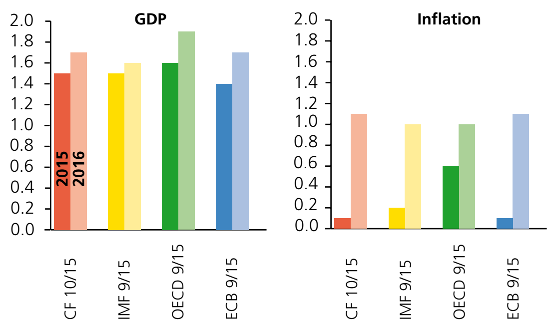


CHART III.7.2

EURO AREA GDP AND INFLATION OUTLOOKS FOR 2015 AND 2016

Euro area GDP growth is expected to reach 1.5% in 2015 and accelerate further next year, while inflation will rise from this year's low level
(annual percentage changes; source: CF, IMF, OECD, ECB)

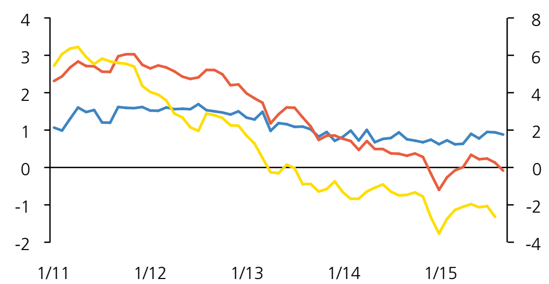


Note: Horizontal axis shows most recent forecast data in format "Source month/year of publication". Midpoint of range for ECB.

CHART III.7.3

INFLATION AND PRODUCER PRICES IN THE EURO AREA

Consumer prices fell slightly in September, while rising at a stable modest rate adjusted for energy and food
(annual percentage changes; source: Datastream)



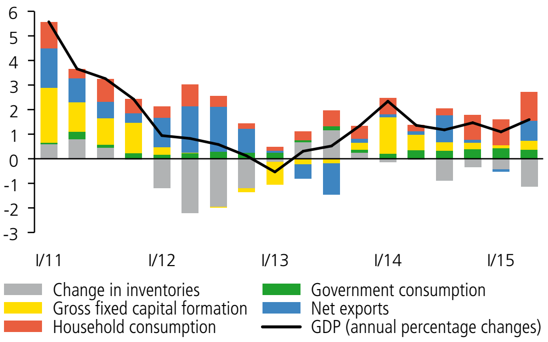
At its September meeting, the **ECB** decided to leave key interest rates unchanged and confirmed that its quantitative easing policy, i.e. its expanded bond purchase programme, would continue.[68] In a context of sharp swings on financial and commodity markets and falling inflation expectations, the ECB recalled that the asset purchase programme provided sufficient flexibility in terms of adjusting the size, composition and duration of the programme to the current needs of the euro area economy. At its October meeting, it left the parameters of the programme unchanged, but announced that it would consider all options for further easing the monetary conditions. The 3M EURIBOR therefore remains at slightly negative levels, where it should stay at the one-year horizon according to market outlooks. Annual M3 growth slowed to 4.8% in August. The October bank lending survey recorded a rise in demand for corporate loans and mortgages. At the same time, credit standards applied to corporate loans were eased in 2015 Q3, whereas those applied to mortgages were tightened.

CHART III.7.4

GDP IN GERMANY

Annual GDP growth increased in 2015 Q2, mainly due to strong growth in net exports

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



The quarterly and annual **growth rates of the German economy** increased from 0.3% to 0.4% and from 1.1% to 1.6% respectively in 2015 Q2 (see Chart III.7.4). This was mainly due to an increase in net exports, caused probably also by the depreciation of the euro. Despite weakening slightly, household consumption growth remains significant, supported by rising employment and stronger average real income growth. By contrast, a sharp decline in inventories slowed the economy. Overall, therefore, the contribution of domestic demand decreased, but it was outweighed by a marked rise in net exports. The strong economic growth is being accompanied by record-low unemployment, which reached 4.5% in September.

The **October CF** (like many other institutions) expects German GDP to rise by 1.8% in 2015 as a whole. However, this estimate assumes a marked acceleration of economic growth in the second half of the year, for which the quarterly growth rates would have to double. However, the signs of such a change occurring are not very clear. In July and August, the quarterly growth rate of industrial production and retail sales increased somewhat compared to the 2015 Q2 average, but this increase was only moderate. The leading indicators, which mostly declined considerably (except the Ifo), are not pointing to a marked acceleration either.

Economic developments in the period ahead will be affected by some new factors. A slowdown in Chinese growth and, to a lesser extent, the Volkswagen affair are the main negative risks. By contrast, a pro-growth fiscal impulse will be associated with the massive inflow of refugees from the Middle East and Africa to Germany.

68 According to the ECB's decisions so far, from March 2015 to September 2016 it will purchase bonds at a rate of EUR 60 billion a month, roughly EUR 50 billion of which will now be government bonds of euro area countries.

Despite rising prices of food and services, **German inflation** dropped further to zero in September as a result of a decrease in energy commodity prices, which led to a deepening of the decline in producer prices (see Chart III.7.5). The September CF lowered the consumer price inflation estimate for 2015 as a whole to 0.3%. Next year, inflation should rise to 1.4%.

The **Slovak economy** maintained high quarterly and annual growth rates in 2015 Q2. Net exports declined because of a strong increase in imports coupled with unchanged export dynamics. However, their negative contribution to GDP growth was outweighed by domestic demand growth, which increased significantly, mainly as a result of buoyant investment growth. The annual growth rate of the economy rose for the tenth consecutive quarter, this time by 0.2 percentage point to 3.1%. Quarterly growth was flat at 0.8%. The favourable economic developments are connected with a year-on-year decrease in the unemployment rate (which, at 11% in September, was nearly 2 percentage points lower than a year earlier) and a year-on-year rise in employment of 2%. According to the October CF, Slovak GDP growth should reach 3.1% in 2015 as a whole and accelerate to 3.3% next year.

The annual **decline in consumer prices in Slovakia** deepened to -0.5% in September as a result of a decrease in administered prices. According to the October CF, the average increase in consumer prices this year should be zero, but this forecast is unlikely to materialise, as inflation has been negative since December 2014 and the NBS does not see any demand-pull inflation pressures in the economy.

III.7.2 The United States

Annual **GDP growth in the USA** reached 2.7% in Q2 (see Chart III.7.6), a slight slowdown compared to the previous quarter, due mainly to a strong dollar and low oil prices. Growth continued to be driven by household consumption and, to a lesser extent, gross fixed capital formation. A rise in household and corporate investment in property is visible. The contribution of change in inventories fell compared to 2015 Q1 and that of government consumption remains low. Net exports lowered GDP growth for the third consecutive quarter.

In 2015 Q3, the US economy will continue to grow, but the pace of growth is expected to decrease further. Annual growth in industrial production slowed again in Q3, and its outlook worsened as well. The strong dollar and falling external demand are dampening exports, while low oil prices are having a marked unfavourable impact on the performance and investment of oil companies. Annual growth in retail sales stayed above 2% in 2015 Q3. Household demand was favourably affected by labour market developments, with unemployment falling to a seven-year low (of 5.1%) in August. On the other hand, employers in the USA slowed job creation in September for the second consecutive month, and the participation rate decreased further. Leading indicators

CHART III.7.5

INFLATION AND PRODUCER PRICES IN GERMANY

Inflation fell by a further 0.2 percentage point to zero in September, while the decline in industrial producer prices deepened

(annual percentage changes; source: Datastream)

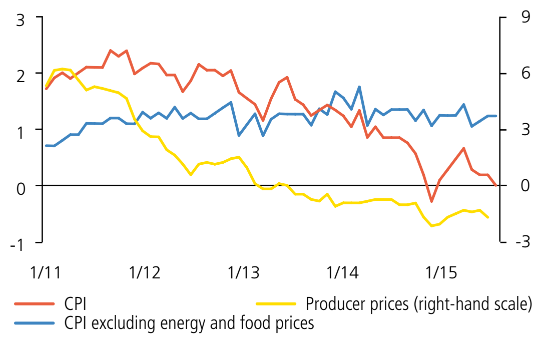


CHART III.7.6

GDP IN THE USA

The US economy continued to record quite buoyant growth in 2015 Q2

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

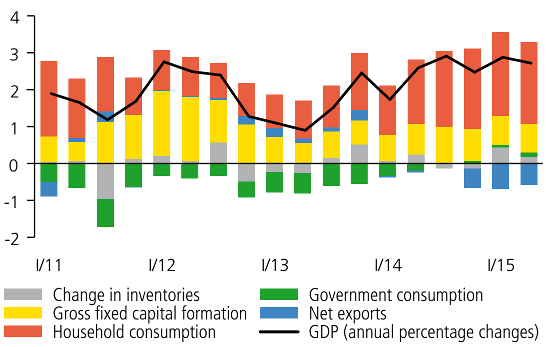
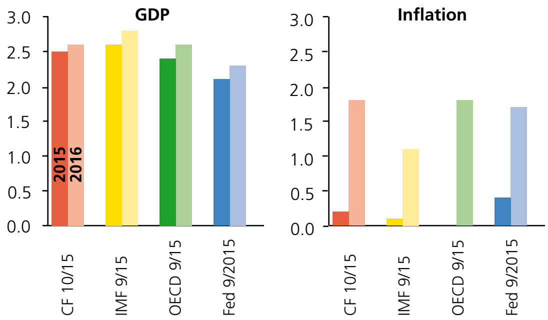


Chart III.7.7

US GDP AND INFLATION OUTLOOKS FOR 2015 AND 2016

GDP growth is expected to exceed 2% this year and accelerate slightly further in 2016. Inflation is expected to rise substantially next year

(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

Overall consumer price inflation continued to fluctuate around zero in 2015 Q3, while core inflation rose slightly

(annual percentage changes; source: Datastream)

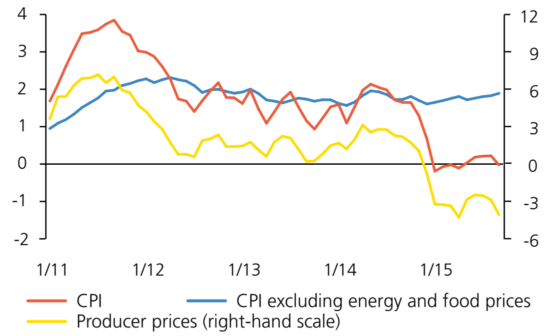
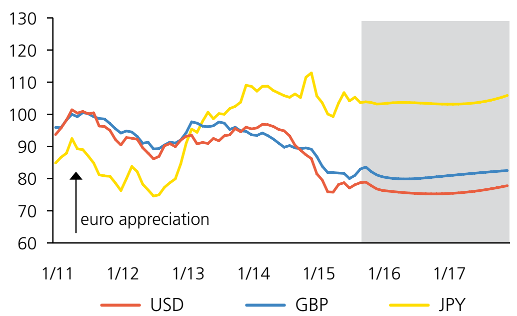


Chart III.7.9

EURO EXCHANGE RATE AGAINST MAJOR CURRENCIES

The euro reacted to the turbulence in China and to the postponement of interest rate increases by the Fed by appreciating against the dollar in 2015 Q3

(January 2010 = 100; source: Datastream; outlook from Consensus Forecasts; CNB calculation)



are mixed. The ISM PMI has been falling since June and approached 50 in September, with the inventories component falling the most. By contrast, consumer confidence rose between June and September, with the assessment of the current situation improving in particular. The monitored outlooks expect the US economy to grow by between 2.1% and 2.5% in 2015 as a whole (see Chart III.7.7). Next year, GDP growth is expected to pick up pace by about 0.2 percentage point.

Inflation in the USA remained subdued in 2015 Q3. Annual inflation dropped to zero after two months at 0.2% (see Chart III.7.8). Inflation excluding energy and food prices edged up to 1.9% in September. The year-on-year decline in producer prices deepened again. The outlooks of the monitored institutions suggest that inflation will remain low until the end of this year. In 2016, however, it is expected to accelerate substantially to levels close to the Fed's 2% target.

At its September meeting, the **Fed** decided to maintain the target range for its key rate at 0%–0.25%. It stated that an interest rate hike was conditional on a favourable outlook for the US economy and a gradual return of inflation to the 2% target. A slowdown in Chinese growth, with a potential impact on other emerging economies and global growth, is seen as a new risk.

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

The **euro appreciated against the dollar** in 2015 Q3 (see Chart III.7.9). US economic growth exceeded expectations in 2015 Q2 and the US labour market is still developing favourably despite sizeable data revisions. Because of the deteriorating economic situation in China, however, the Fed has not increased its interest rates so far and the likelihood that the first hike will take place this year is falling gradually according to market outlooks. The euro reacted to the turbulence in China by appreciating against the dollar. By contrast, the previous calming of the situation in Greece did not have a significant impact on the exchange rate. At its September meeting, the ECB somewhat simplified the conditions for asset purchases in its quantitative easing programme.

The exchange rate of the euro against the **British pound** appreciated slightly in the same period. Quarterly growth in Britain's GDP picked up pace in 2015 Q2 (to 0.7%). However, inflation was close to zero in Q3, reaching a slightly negative level in September. Monetary policy tightening in the UK will therefore probably be postponed until next year.

The euro depreciated slightly against the **Japanese yen** during 2015 Q3. The Japanese economy recorded a contraction in 2015 Q2 (of 0.3% quarter on quarter) and annual headline inflation dropped to 0.2% in September. The central bank has not taken any stimulus measures so far, but Prime Minister Abe introduced a new "three arrows" programme aimed at boosting nominal output.

In the **first half of October 2015**, the euro strengthened slightly further against the US dollar. This was due chiefly to the increasing conviction that the Fed will not tighten monetary policy until next year, owing to concerns of an adverse effect of the economic slowdown on emerging markets, but also on account of falling inflation. However, this exchange rate movement was reversed after the ECB announced surprisingly strongly at its October meeting that it would analyse other options for easing monetary policy.

The **October CF** expects the euro to weaken against the dollar to USD 1.07 at the one-year horizon. The euro is expected to depreciate by 3.5% against the British pound and by 0.8% against the Japanese yen at the same horizon.

III.7.4 Prices of oil and other commodities

The **price of Brent crude oil** fell sharply in the course of July (see Chart III.7.10). This was due mainly to a surprising rise in oil stocks and the rig count in the USA and a price decrease on the Chinese stock market. The price of Brent crude oil has been fluctuating without a clear trend just below USD 50 a barrel on average since early August. However, it has been alternating between relative stability and stronger volatility. In the second half of August, the Brent crude oil price initially dropped sharply to its lowest level since March 2009[69] following a weakening of the Chinese renminbi and reports of high extraction in OPEC countries. However, a sharp correction occurred at the end of August, when the oil price increased by more than USD 10 a barrel in three days in reaction to renewed growth in global stock markets. The swing was amplified by hedge funds, which initially speculated on a further drop in oil prices and then quickly closed massive short positions. For most of September, the Brent price stayed within a relatively narrow band of USD 47–50 a barrel before surging above USD 53 a barrel again in early October. However, it returned equally quickly to its previous levels by mid-October.

The fundamental **excess of oil in the market persists**, but according to OPEC representatives it is now starting to shrink (as a result of solid growth in global demand and falling extraction in non-OPEC countries). By the end of 2016, demand for OPEC oil could be in line with its current production. However, global stocks of oil and oil products, which are currently at record highs, will continue to rise, albeit at a falling pace compared to this year. Goldman Sachs analysts estimate that WTI prices would have to stay between USD 40 and USD 45 a barrel for an extended period for US production to fall sufficiently and bring supply into line with demand. There are currently two different views of future developments on the market. The first view emphasises the continuing decline in the US rig count,

69 It dropped to USD 42.7 a barrel. The WTI oil price even fell below USD 40 a barrel for three days.

CHART III.7.10

OIL AND NATURAL GAS PRICES IN USD

The price of Brent crude oil is expected to rise very slowly from its current level of below USD 50 a barrel

(oil in USD/barrel; natural gas [Russian in Germany] in USD/1,000 m³ – right-hand scale; source: IMF, Bloomberg, CNB calculation)

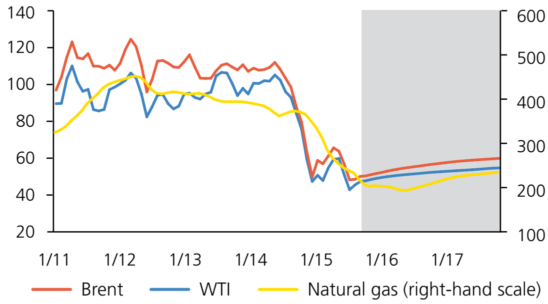
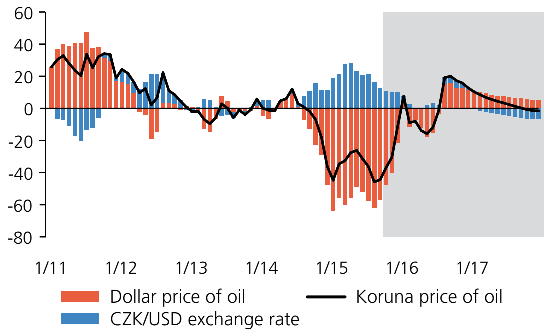


CHART III.7.11

DECOMPOSITION OF KORUNA OIL PRICE GROWTH

The year-on-year fall in koruna prices of oil is significantly smaller than the decline in dollar prices this year as a result of a weakening of the koruna-dollar exchange rate

(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)



which should cause the current decline in oil extraction to accelerate. By contrast, the second view attaches greater weight to the persisting rise in global stocks, which can be expected to continue for at least one year. Consequently, prices sometimes fluctuate sharply depending on which side the market inclines to on the basis of recent news.

The market **price forecast** for Brent crude oil based on the futures curve of 12 October implies an average price of about USD 55 a barrel this year and the next. This implies a gradual rise from current levels. The EIA continues to expect faster price growth to USD 59 a barrel on average in 2016. The October CF expects the price of Brent crude oil to stand at USD 58 a barrel at the one-year horizon. However, great uncertainty[70] persists regarding future developments in both supply and demand.

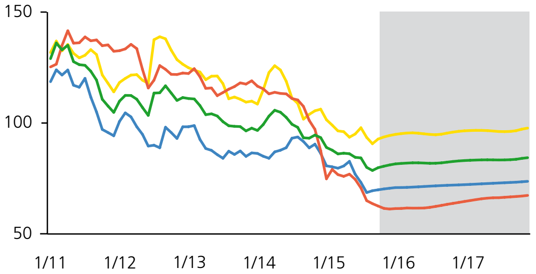
The **non-energy commodity price index** declined only slowly between January and June 2015, with the fluctuations in its components broadly offsetting each other (see Chart III.7.12). The decline accelerated in July and August, but this was followed by a slight increase. The food commmodity price sub-index returned to its previous downward trend following temporary growth between mid-June and mid-July. However, it has been rising again since early September, owing mainly to prices of wheat, maize, sugar and pork. The industrial metals sub-index responded to a temporary rise in energy prices by increasing modestly in late April and early May, but then decreased all the faster until the end of August and stabilised thereafter. The market outlooks for all three indices are only modestly rising. Despite growing demand, stronger growth in food commodity prices will be prevented by high global stocks following this year's harvest. As a result of weakening manufacturing in China, prices of industrial metals will remain under pressure despite decreases in production capacity on the part of some producers.

Chart III.7.12

COMMODITY PRICES

The decline in the overall non-energy commodity price index accelerated in July and August, but this was followed by a slight increase

(January 2010 = 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).

70 For example, Goldman Sachs analysts do not rule out a decline in oil prices to USD 20 a barrel if spare global storage capacity (currently estimated at around 370 million barrels) is exhausted. The EIA estimates that global stocks of oil and oil products rose by 1.8 million barrels a day in 2015 Q1, 2.3 million barrels a day in Q2 and 1.5 million barrels a day in H2. Growth in stocks is expected to slow to 800,000 barrels a day next year.

ABBREVIATIONS

AEIS	Average Earnings Information System
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
EIA	Energy Information Administration
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
Ifo	Institute for Economic Research
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
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
USD	US dollar
VAT	value added tax
WTI	West Texas Intermediate

Forecasts for general government debt and debt service, and sensitivity analyses	(Box)	I/2011
Price-setting behaviour in the Czech Republic (micro data evidence) in relation to the pricing mechanism in the g3 forecasting model	(Box)	II/2011
The relationship between the Brent crude oil price and the dollar exchange rate	(Box)	II/2011
The impacts of changes to VAT rates on the budget and inflation and their components in 2012 and 2013	(Box)	III/2011
Labour market developments during the economic recession and the subsequent recovery	(Box)	III/2011
The debt situation in Italy	(Box)	III/2011
Publication of the Graph of Risks to the Inflation Projection (GRIP)	(Annex)	III/2011
Pension system reform	(Box)	IV/2011
The credit rating of the Czech Republic	(Box)	IV/2011
Germany – the Czech Republic's main trading partner	(Box)	IV/2011
The pass-through of VAT to food prices at the end of 2011	(Box)	I/2012
Extraordinary revision of the quarterly national accounts	(Box)	I/2012
An analysis of the impacts of fiscal measures in the Czech Republic in 2001–2011	(Box)	I/2012
Revision of the consumer basket	(Box)	II/2012
Factors affecting retail fuel prices	(Box)	II/2012
The Bank Lending Survey	(Box)	III/2012
The CZK/USD exchange rate at a time of uncertainty	(Box)	III/2012
Easy monetary policy and commodity prices	(Box)	III/2012
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
The monetary conditions index for the euro area	(Box)	II/2015
The pass-through of the koruna-dollar exchange rate to prices of tradable goods	(Box)	III/2015
The equilibrium koruna-euro exchange rate	(Box)	III/2015
The German economy and the dollar-euro exchange rate	(Box)	III/2015
Employment of foreign and agency workers and their effect on the employment statistics	(Box)	IV/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.

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

							years					
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
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	**4,241.9**	**4,359.0**	**4,483.3**
GDP	%, y-o-y, real terms, seas. adjusted	5.5	2.5	-4.7	2.1	2.0	-0.8	-0.5	2.0	**4.7**	**2.8**	**2.9**
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	**3.2**	**3.1**	**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	**2.6**	**2.4**	**1.8**
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	**11.7**	**2.1**	**4.8**
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	**7.7**	**2.7**	**5.2**
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**	**8.6**	**6.7**
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	**8.3**	**9.1**	**7.5**
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	**230.4**	**236.1**	**223.3**
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	**-**	**-**	**-**
Construction output	%, y-o-y, real terms	7.1	0.0	-0.9	-7.4	-3.6	-7.6	-6.7	4.3	**-**	**-**	**-**
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	**-**	**-**	**-**
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	**-**	**-**	**-**
Consumer Price Index	%, y-o-y, average	2.8	6.4	1.1	1.5	1.9	3.3	1.4	0.4	**0.5**	**1.4**	**2.2**
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**	**-0.4**	**1.1**
Net inflation (81.30%)*	%, y-o-y, average	1.5	2.4	-0.9	0.0	1.3	1.0	0.5	0.9	**0.3**	**1.6**	**2.3**
Food prices (including alcoholic beverages and tobacco) (24.58%)*	%, y-o-y, average	3.8	3.0	-0.9	0.9	3.9	2.9	3.1	1.8	**0.4**	**1.7**	**2.2**
Adjusted inflation excluding fuels (53.32%)*	%, y-o-y, average	0.5	2.0	0.0	-1.2	-0.7	-0.3	-0.5	0.5	**1.1**	**1.6**	**2.3**
Fuel prices (3.39%)*	%, y-o-y, average	-0.1	4.3	-11.1	12.8	9.9	6.0	-2.1	0.2	**-12.8**	**-0.5**	**3.2**
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	**0.3**	**1.2**	**2.1**
GDP deflator	%, y-o-y, seas. adjusted	3.5	2.0	2.6	-1.4	-0.2	1.4	1.4	2.5	**1.1**	**1.8**	**2.0**
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	**-3.1**	**-0.1**	**1.7**
Agricultural prices	%, y-o-y, average	16.5	9.3	-24.9	7.1	22.1	3.3	5.0	4.7	**-7.4**	**0.7**	**2.2**
Construction work prices	%, y-o-y, average	3.9	4.5	1.2	-0.2	-0.5	-0.7	-1.1	0.5	**-**	**-**	**-**
Brent crude oil	%, y-o-y, average	9.9	35.4	-36.5	28.4	38.2	0.7	-2.6	-8.5	**-44.6**	**-1.0**	**7.7**
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	**3.3**	**4.4**	**4.7**
Average monthly wage	%, y-o-y, real terms	4.3	1.4	2.3	0.7	0.6	-0.8	-1.5	1.9	**2.8**	**3.0**	**2.5**
Number of employees	%, y-o-y	1.8	1.6	-2.2	-2.2	0.0	-0.1	1.6	0.6	**2.1**	**1.1**	**0.5**
Unit labour costs	%, y-o-y	2.6	4.7	3.0	-1.7	0.3	3.5	1.0	0.0	**0.1**	**3.2**	**2.8**
Unit labour costs in industry	%, y-o-y	3.4	-1.7	3.3	-6.2	0.7	5.5	4.9	-1.9	**-**	**-**	**-**
Aggregate labour productivity	%, y-o-y	3.4	0.5	-3.1	3.4	2.2	-1.3	-0.8	1.4	**3.3**	**1.8**	**2.3**
ILO general unemployment rate	%, average, age 15–64	5.4	4.4	6.7	7.4	6.8	7.0	7.1	6.2	**5.3**	**4.8**	**4.7**
Share of unemployed persons (MLSA)	%, average	4.9	4.1	6.2	7.0	6.7	6.8	7.7	7.7	**6.5**	**5.8**	**5.6**
PUBLIC FINANCE												
Public finance deficit (ESA 2010)	CZK bn, current p.	-26.6	-84.6	-216.2	-174.5	-110.1	-160.0	-51.0	-83.0	**-58.0**	**-30.3**	**-4.1**
Public finance deficit / GDP**	%, nominal terms	-0.7	-2.1	-5.5	-4.4	-2.7	-4.0	-1.3	-1.9	**-1.3**	**-0.6**	**-0.1**
Public debt (ESA 2010)	CZK bn, current p.	1,065.5	1,150.7	1,335.7	1,508.5	1,606.5	1,806.0	1,841.9	1,821.3	**1,842.9**	**1,864.0**	**1,884.6**
Public debt / GDP**	%, nominal terms	27.8	28.7	34.1	38.2	39.9	44.7	45.2	42.7	**40.9**	**39.5**	**38.1**
EXTERNAL RELATIONS												
Current account												
Trade balance	CZK bn, current p.	10.4	-4.4	65.0	40.4	75.5	123.8	167.0	238.9	**230.0**	**265.0**	**285.0**
Trade balance / GDP	%, nominal terms	0.3	-0.1	1.7	1.0	1.9	3.1	4.1	5.6	**5.1**	**5.6**	**5.8**
Balance of services	CZK bn, current p.	88.1	89.3	81.9	78.5	81.3	77.6	70.4	55.9	**70.0**	**70.0**	**70.0**
Current account	CZK bn, current p.	-164.5	-75.3	-89.2	-141.8	-84.8	-63.3	-21.8	26.1	**40.0**	**55.0**	**35.0**
Current account / GDP	%, nominal terms	-4.3	-1.9	-2.3	-3.6	-2.1	-1.6	-0.5	0.6	**0.9**	**1.2**	**0.7**
Foreign direct investment												
Direct investment	CZK bn, current p.	-179.1	-36.3	-37.7	-95.0	-46.8	-121.3	7.4	-133.6	**0.0**	**-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	**-**	**-**	**-**
CZK/EUR	average	27.8	25.0	26.5	25.3	24.6	25.1	26.0	27.5	**-**	**-**	**-**
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	**-**	**-**	**-**
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	**-**	**-**	**-**
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	**-1.5**	**0.2**	**0.0**
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	**-1.7**	**0.5**	**0.5**
MONEY AND INTEREST RATES												
M2	%, y-o-y, average	11.6	9.5	5.7	4.3	3.6	5.6	4.4	4.2	**6.3**	**6.6**	**6.4**
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**	**0.95**
3M PRIBOR	%, average	3.1	4.0	2.2	1.3	1.2	1.0	0.5	0.4	**0.3**	**0.3**	**1.2**

* 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
984.2	989.8	992.9	1,007.3	1,005.4	1,011.0	1,015.9	1,020.5	1,046.3	1,057.7	1,064.5	1,073.5	1,073.2	1,083.9	1,094.5	1,107.3	1,112.4	1,117.7	1,123.4	1,129.8
-2.1	-1.2	-0.3	1.4	2.2	2.1	2.3	1.3	4.1	4.6	4.8	5.2	2.6	2.5	2.8	3.2	3.7	3.1	2.6	2.0
-0.2	0.4	1.1	1.5	1.1	1.3	1.5	2.0	2.8	3.1	3.5	3.4	3.0	3.2	3.2	3.0	2.9	2.9	3.0	3.1
1.1	1.4	3.4	3.5	1.4	2.5	0.6	2.7	2.6	2.3	3.1	2.3	2.5	2.7	2.5	1.9	2.1	1.9	1.7	1.4
-6.9	-12.0	-1.8	0.7	1.7	10.7	5.7	0.1	11.4	9.4	10.0	15.9	4.0	2.2	3.2	-0.8	5.4	4.8	4.5	4.4
-3.9	-5.3	-2.5	0.8	0.7	2.9	2.7	1.9	3.0	7.3	7.9	12.5	6.3	2.9	2.9	-0.9	5.1	4.9	5.3	5.5
-5.0	0.0	0.2	5.1	11.7	8.7	7.8	7.5	7.1	6.9	7.7	7.1	6.2	8.4	9.5	10.4	9.0	7.5	6.1	4.5
-4.8	-2.2	1.7	5.7	11.3	11.7	8.3	8.3	8.6	7.1	8.5	9.0	7.3	9.4	10.4	9.2	9.2	8.0	7.0	6.0
58.5	71.7	60.4	59.7	67.9	57.8	61.6	58.2	61.9	60.2	60.6	47.6	57.0	57.4	58.8	62.9	60.1	57.0	54.1	52.0
-5.9	-2.8	3.7	5.0	6.9	6.0	4.0	3.2	4.8	5.3	-	-	-	-	-	-	-	-	-	-
-11.2	-11.7	-3.9	-3.1	13.3	5.6	2.9	0.7	7.7	9.8	-	-	-	-	-	-	-	-	-	-
-2.7	0.4	2.9	3.8	7.0	4.7	5.7	4.7	7.9	8.3	-	-	-	-	-	-	-	-	-	-
2.8	2.3	1.8	1.4	1.0	0.7	0.5	0.4	0.3	0.5	0.4	-	-	-	-	-	-	-	-	-
1.8	1.5	1.2	1.1	0.2	0.2	0.6	0.5	0.1	0.7	0.4	0.6	1.2	1.2	1.5	1.9	2.2	2.2	2.3	2.1
3.5	2.6	1.5	1.3	-4.1	-3.5	-2.2	-2.1	0.2	0.3	-0.2	-0.2	-0.3	-0.4	-0.5	-0.5	1.1	1.1	1.2	1.1
0.6	0.6	0.5	0.3	1.0	0.7	1.0	0.8	-0.2	0.5	0.3	0.6	1.3	1.2	1.7	2.1	2.3	2.4	2.4	2.3
3.0	3.8	3.3	2.4	3.5	1.5	1.5	0.7	-0.9	0.7	0.3	1.5	1.6	1.3	2.1	1.7	2.1	2.2	2.2	2.1
-0.4	-0.6	-0.7	-0.4	-0.2	0.4	0.8	0.9	1.1	1.1	1.1	1.1	1.2	1.4	1.6	2.1	2.3	2.4	2.4	2.3
-1.5	-3.8	-1.4	-1.7	0.3	1.0	0.5	-1.2	-14.6	-10.1	-12.6	-13.8	0.1	-4.0	-2.2	4.3	4.0	3.7	3.1	2.1
0.9	0.8	0.4	0.3	0.1	0.0	0.5	0.3	-0.1	0.4	0.2	0.5	1.1	0.9	1.3	1.6	2.1	2.2	2.2	2.1
1.3	1.1	1.2	1.9	2.2	2.8	2.9	2.0	1.3	0.7	0.9	1.3	1.5	2.0	2.0	1.9	1.2	1.6	2.4	2.7
1.2	0.5	0.7	0.8	-0.7	-0.2	-0.1	-1.9	-3.3	-2.3	-3.6	-3.1	-0.9	-1.3	0.3	1.6	1.9	1.8	1.7	1.6
14.5	9.3	1.5	-4.3	-4.4	-2.1	-2.3	-6.0	-9.3	-10.9	-6.4	-1.5	-2.4	0.4	2.3	3.5	3.0	2.1	2.0	1.8
-1.0	-1.3	-1.3	-0.8	-0.3	0.5	0.7	0.9	1.0	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	-33.1	-4.8	-14.9	8.7	11.9	11.5	10.8	10.1	9.5
-0.6	1.0	1.2	-2.0	3.2	2.1	1.6	2.2	2.3	3.4	3.6	3.9	4.2	4.5	4.6	4.5	4.7	4.7	4.8	4.8
-2.4	-0.5	0.0	-3.1	3.0	1.9	1.0	1.7	2.2	2.7	3.2	3.2	2.9	3.3	3.1	2.6	2.5	2.5	2.5	2.6
2.0	2.4	0.9	1.3	0.4	-0.2	1.0	1.2	2.2	2.4	2.2	1.8	1.3	1.2	1.1	0.9	0.6	0.6	0.5	0.5
2.8	2.3	1.1	-2.1	-0.1	-0.2	-1.3	1.4	-0.8	-0.5	1.0	0.6	3.3	3.5	3.2	2.8	2.2	2.6	3.0	3.4
6.0	6.1	4.1	3.4	-0.9	-1.4	-3.6	-1.9	-0.3	-0.3	-	-	-	-	-	-	-	-	-	-
-3.1	-1.9	0.4	1.1	1.6	2.1	2.0	0.0	3.0	3.1	3.2	3.9	1.4	1.5	1.9	2.3	2.9	2.5	2.2	1.7
7.5	6.8	7.0	6.8	6.9	6.1	6.0	5.8	6.0	5.0	5.1	5.0	5.2	4.7	4.7	4.7	5.1	4.6	4.7	4.7
8.0	7.5	7.5	7.8	8.5	7.6	7.4	7.2	7.5	6.4	6.1	6.1	6.5	5.7	5.5	5.6	6.2	5.4	5.3	5.4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48.4	59.7	31.7	27.3	77.4	68.2	51.7	41.6	79.4	62.8	45.0	42.8	83.0	76.0	55.0	51.0	88.0	81.0	60.0	56.0
5.1	5.9	3.1	2.5	7.9	6.4	4.7	3.7	7.7	5.6	3.9	3.6	7.7	6.5	4.5	4.1	7.8	6.6	4.7	4.3
21.7	18.2	14.5	16.0	20.4	15.2	12.2	8.1	18.7	21.2	16.0	14.2	20.0	20.0	15.0	15.0	20.0	20.0	15.0	15.0
16.5	-4.0	-29.1	-5.2	83.6	-29.2	-33.3	5.0	92.7	3.1	-31.0	-24.8	98.0	-14.0	-40.0	11.0	88.0	-14.0	-45.0	6.0
1.8	-0.4	-2.8	-0.5	8.5	-2.7	-3.0	0.5	8.9	0.3	-2.7	-2.1	9.1	-1.2	-3.3	0.9	7.8	-1.1	-3.5	0.5
1.9	1.9	1.9	1.9	-38.7	-59.0	-29.7	-6.3	-2.5	4.2	0.0	-	-	-	-	-	-	-	-	-
19.4	19.8	19.5	19.6	20.0	20.0	20.9	22.1	24.5	24.8	24.3	-	-	-	-	-	-	-	-	-
25.6	25.8	25.9	26.7	27.4	27.4	27.6	27.6	27.6	27.4	27.1	-	-	-	-	-	-	-	-	-
2.2	2.5	3.4	5.9	7.9	6.7	6.6	3.2	0.4	-0.7	-2.3	-	-	-	-	-	-	-	-	-
1.8	1.7	1.9	3.9	6.1	4.8	5.1	3.3	1.1	0.0	-0.7	-	-	-	-	-	-	-	-	-
0.9	0.6	0.4	2.9	4.1	3.4	4.7	2.0	-0.5	-0.5	-2.6	-2.5	-1.6	-0.8	1.3	1.8	0.8	0.1	-0.3	-0.4
-0.3	-0.7	-0.9	1.0	2.4	1.3	2.9	1.2	-1.5	0.0	-2.5	-2.9	-1.0	-1.1	1.4	2.7	1.5	0.7	0.1	-0.3
4.2	4.1	4.9	4.6	4.6	4.6	3.4	4.4	5.0	5.7	7.3	7.0	7.0	6.8	6.1	6.4	6.8	6.7	6.4	6.0
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	0.71	0.98	1.05	1.07
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	1.0	1.2	1.3	1.3

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