INFLATION REPORT / I

2019

CZECH NATIONAL BANK

INFLATION REPORT / I

2019

CZECH NATIONAL BANK

This Inflation Report was approved by the CNB Bank Board on 14 February 2019 and – with some exceptions – contains the information available as of 25 January 2019. 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 our 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 also published there.

Dear Readers,

The Inflation Report is our key monetary policy publication. We have been publishing it since 1998 and have gradually developed it over the years. It gained its current form at the start of 2017. Section I of the Report presents the message of our new quarterly forecast and the reasons behind the monetary policy decision adopted by the CNB Bank Board. In section II you will find a detailed description of the new forecast and its risks. Section III contains our assessment of past economic and monetary developments.

According to the Czech Constitution and the Act on the CNB, our primary objective is to maintain price stability. In addition, we maintain financial stability and see to the sound and smooth operation of the financial system in the Czech Republic. Without prejudice to our primary objective, we also aim to support the general economic policies of the Government leading to sustainable economic growth. By maintaining price stability, we assist Czech firms and households in their decision-making and planning, which ultimately results in greater stability of the entire Czech economy. Our independence is a necessary condition for successful implementation of monetary policy focused on price stability. For that reason, we are not allowed to seek or take instructions from the President of the Republic, from the Government, from Parliament, from administrative authorities or from any other body.

We have been maintaining price stability in the inflation targeting regime since 1998. The main features of this regime are a publicly announced inflation target, a focus on forecasts of the future path of inflation, and open communication with the public. We set the inflation target as year-on-year growth in consumer prices of 2% starting from 2010. We endeavour to ensure that actual inflation does not differ from this target by more than one percentage point on either side. Most advanced economies have similar inflation targets. There are several reasons why we define price stability as slight growth in prices rather than zero inflation. Inflation measures tend to be distorted upward because of imperfect adjustment for the impacts of changes in the quality of goods and services, where growth in quality is sometimes statistically captured as growth in prices. This distortion is also due to an assumption of constant weights in the consumer basket, whereas in reality people have a natural tendency to move away from goods and services whose prices are rising faster to those which are recording below-average growth or even falling. Last but not least, if we were to target an inflation rate that was too low or even zero, there would often be a threat of deflation, which has very harmful consequences for society as a whole. In such situations, moreover, the central bank would repeatedly hit the zero lower bound on interest rates and would often have to use other, less conventional instruments.

Changes in the monetary policy settings manifest themselves in the economy with a lag. Therefore, it is the future evolution of the Czech economy, rather than its current situation, that is of prime importance for the CNB Bank Board's decisions. The forecast for inflation at the "monetary policy horizon" (about 12–18 months ahead) is of greatest relevance to our decision-making. Our forecast tells us the most likely future course of the economy. It is drawn up by experts from the Monetary Department using the "g3" structural macroeconomic model. The core model captures the basic characteristics of the Czech economy as described by key variables such as prices, wages, GDP components in both nominal and real terms, the koruna exchange rate and nominal interest rates. Given the openness of the Czech economy, foreign trade and the koruna-euro exchange rate play an important role in the model. The structural linkages in the model provide a comprehensive and consistent view of the relationships between nominal variables and the real economy. From the viewpoint of economic theory, g3 is a dynamic stochastic general equilibrium (DSGE) model. Forward-looking expectations and their interaction with monetary policy, which reacts to economic shocks through changes in interest rates in an effort to stabilise inflation close to 2% at the monetary policy horizon, are important features of the model. The main forecasting inputs are an assessment of the current state of the economy (the initial state), projected developments abroad, and the outlook for administered prices and domestic fiscal policy. Based on this input information, and using the model and additional detailed analyses drawn up by economists from the Monetary Department, a forecast of the most likely course of the Czech economy is then compiled. In addition to the baseline scenario of the forecast, alternative or sensitivity scenarios are prepared as needed using the core prediction model.

The forecast is the key, but not the only, input to our monetary policy decision-making. Unless the economic situation requires an extraordinary monetary policy meeting, the Bank Board meets eight times a year to discuss monetary policy issues. At four of the meetings (in February, May, August and November) we discuss a new forecast, while at the other four (in March, June, September and December) we discuss the risks and uncertainties of the most recent forecast in the light of newly available information on domestic and foreign economic developments. Due to the arrival of new information since the forecast was drawn up and to the possibility of the Bank Board members assessing its risks differently, the decision we adopt may not fully correspond to the message of the forecast prepared by our experts.

The CNB's main monetary policy instrument is the two-week repo rate. We also set the discount rate and the Lombard rate. By changing these monetary policy rates, we influence financial market interest rates from which commercial banks derive their loan and deposit rates for their customers. A rate increase leads – via the "transmission mechanism" – to slower demand growth in the economy, which, in turn, causes inflation to go down. Lowering the repo rate has the opposite effect. If the forecast indicates growing inflation pressures which might cause inflation to exceed the 2% target, this is a signal that our monetary policy should be more restrictive, i.e. that interest rates should be raised. The opposite applies, of course, if inflationary tendencies decrease, as monetary policy in the (future) inflation-targeting regime is symmetrical in both directions. The exception is a situation where inflation is affected by extraordinary supply-side shocks which we cannot influence and which will cause it to deviate from the target only temporarily. Changes to indirect taxes and sharp swings in oil prices are typical examples of such shocks. Attempts to keep inflation on target despite such shocks would lead to unnecessary volatility in economic growth and employment. We therefore usually look past the first-round effects of such factors in our decision-making and tolerate a temporary deviation of inflation from the target due to such price shocks. Inflation then returns to the target after the shocks fade away.

We have a whole range of other instruments besides the monetary policy rates described above. These we can use in situations where the use of interest rates is not enough to reach the inflation target. One such situation was the adoption of the exchange rate commitment in autumn 2013, which we did after monetary policy rates had been lowered to "technical zero" in November 2012 and the situation called for a further easing of the monetary conditions. This instrument was used until 6 April 2017, when the Bank Board decided to discontinue the exchange rate commitment. In the standard managed float exchange rate regime to which we have returned, we can moreover respond to potential excessive fluctuations of the koruna exchange rate by intervening in the foreign exchange market. We use these instruments primarily to deliver price stability; to maintain financial stability we use a separate set of instruments called macroprudential tools. However, monetary policy and macroprudential policy affect one another, as monetary policy decisions have an impact on the financial sector and, conversely, macroprudential policy decisions influence the economy and inflation. We therefore take the interactions between the two policies into account.

We are proud of the fact that the CNB is one of the most transparent central banks in the world according to renowned international analyses. We publish our forecast and its risks – and subsequently also an explanation of the reasons for the Bank Board's decision – in order to make our monetary policy as transparent, comprehensible, predictable and therefore credible as possible. We are convinced that credible monetary policy effectively anchors inflation expectations and thereby significantly helps to maintain price stability and overall macroeconomic stability in the Czech Republic.

On behalf of the Czech National Bank

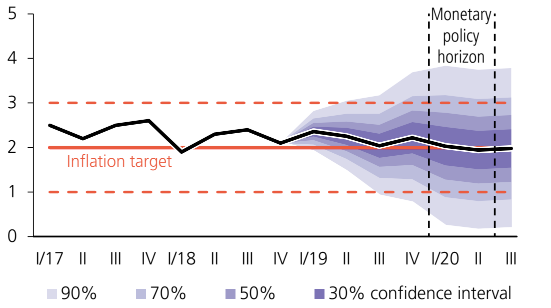
Jiří Rusnok

Governor

CHART I.1

HEADLINE INFLATION FORECAST

Following a temporary increase in early 2019, inflation will be very close to the CNB's 2% target
(year on year in %)

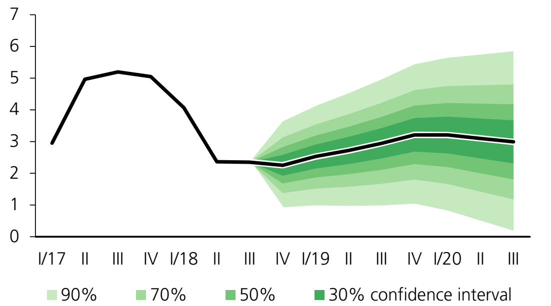


Note: The confidence intervals of the headline inflation forecast reflect the predictive power of past forecasts. They are symmetric and widening only for the first five quarters and then stay constant. This is consistent with both the past predictive power and the stabilising role of monetary policy.

CHART I.2

GDP GROWTH FORECAST

The growth of the Czech economy slowed last year; GDP will grow at a rate of around 3% in the coming two years
(annual percentage changes; seasonally adjusted)



Note: The confidence intervals of the GDP growth forecast reflect the predictive power of past forecasts. They are symmetric and linearly widening.

I. SUMMARY

Following a temporary increase in early 2019, inflation will return to the 2% target and stay very close to it over the monetary policy horizon (see Chart I.1). Inflation fell slightly in 2018 Q4 owing to fading growth in food prices and a decline in fuel price inflation. Conversely, core inflation increased slightly further and administered price inflation remained broadly stable. The overall inflation pressures remained strong, owing mainly to buoyant wage growth and continued growth of the domestic economy. By contrast, the inflationary effect of import prices weakened. Inflation will rise temporarily at the start of this year. In the subsequent period, however, the overall inflation pressures will ease. This will be due initially to an intensifying decline in import prices, reflecting renewed appreciation of the koruna and a fall in inflation abroad. In addition, domestic inflation pressures will start to weaken slowly as a result of gradually falling wage growth. This will cause inflation to stabilise very close to the CNB's 2% target. As regards the structure of inflation, administered price inflation will rise markedly in the near future, driven by electricity and natural gas prices. Food price inflation will also increase on the back of an expected rise in food commodity prices. By contrast, core inflation will decline gradually owing to an easing of the overall inflation pressures. The recent sizeable drop in global oil prices will be reflected in a year-on-year fall in fuel prices over the next two years.

Growth of the Czech economy of close to 3% this year and the next will be consistent with the long-run equilibrium growth rate (see Chart I.2). The increase in domestic economic activity will be driven mainly by growth in household consumption, which will continue to reflect buoyant growth in household income and optimistic expectations. Rising demand and increasingly distinct labour shortages are motivating domestic firms to invest, which will help to improve labour efficiency. Government investment expenditure will also grow further, mainly as a result of higher drawdown of EU funds. Fiscal policy will also contribute to domestic demand growth this year via a significant rise in public sector pay, pensions and social benefits. The economy will also benefit from continued, albeit slowing, demand growth in the Czech Republic's main trading partner countries. Nevertheless, net exports will dampen economic growth this year, owing to growth in import-intensive components of domestic demand and muted export growth. Their negative contribution to GDP growth will dissipate next year owing to stronger export growth. The monetary conditions, in particular their exchange rate component, will tighten once the koruna starts to appreciate again. The continued economic growth is reflected in a tight labour market. The unemployment rate is at a record low and there is little room for it to decrease further. This will lead to slower employment growth and continued high, albeit gradually moderating, wage growth.

The koruna will return to appreciation this year (see Chart I.3). The exchange rate forecast for 2019 Q1 (at CZK 25.6/EUR) takes into account the developments until mid-January. The forecast assumes that the negative sentiment on foreign exchange markets and the outflow of short-term capital from emerging markets to assets that investors perceive as less risky will gradually fade out in the quarters ahead. This will create room for renewed appreciation of the koruna, supported by a wider interest rate differential vis-à-vis the euro area. Next year, the koruna will appreciate more gradually, in line with continued real convergence of the Czech economy coupled with growth in labour efficiency.

Consistent with the forecast is broad interest rate stability (see Chart I.4). Upward pressure is being exerted on rates primarily by the currently weakened koruna, which is dampening the anti-inflationary effect of import prices. The strong domestic inflation pressures and the gradual pass-through of the higher administered price inflation into other components of inflation are acting in the same direction. Renewed appreciation of the koruna amid persisting negative interest rates in the euro area until the end of 2020 will subsequently have the opposite effect on rates.

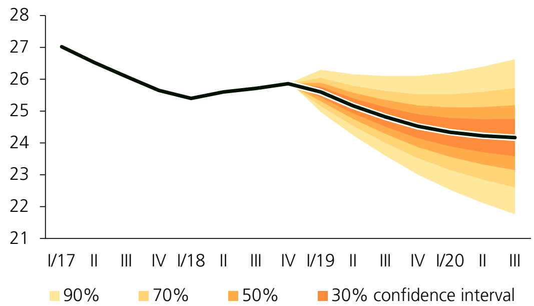
At its monetary policy meeting in February, the CNB Bank Board decided to keep interest rates unchanged. The two-week repo rate thus remains at 1.75%, the discount rate at 0.75% and the Lombard rate at 2.75%. Five members voted in favour of this decision, and two members voted for increasing rates by 25 basis points.

The Bank Board assessed the risks to the forecast as being slightly inflationary and tilted towards slightly higher interest rates compared to the forecast. Potential slower appreciation of the koruna in the course of this year compared to the forecast is a risk in this direction. Another risk is a disorderly Brexit, which could lead to a marked slowdown of the Czech economy and also to a weakening of the koruna. The impacts of protectionist measures in global trade remain a source of external uncertainty.

CHART I.3

EXCHANGE RATE FORECAST

The koruna will return to an appreciation trend this year
(CZK/EUR)

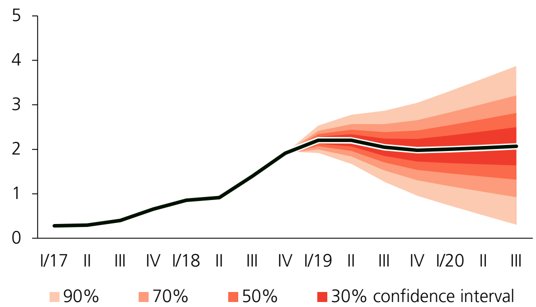


Note: The confidence intervals of the CZK/EUR exchange rate reflect the predictive power of past forecasts (with the exception of the exchange rate commitment period). They are symmetric and linearly widening.

CHART I.4

INTEREST RATE FORECAST

Consistent with the forecast is broad interest rate stability
(3M PRIBOR in %)



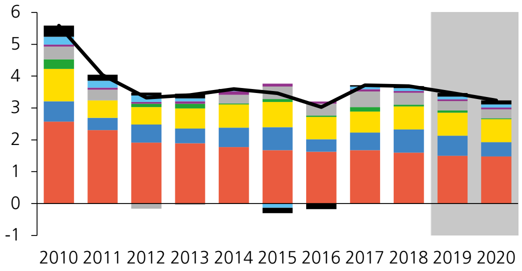
Note: The confidence intervals of the 3M PRIBOR forecast reflect the predictive power of past forecasts (with the exception of the exchange rate commitment period). They are symmetric and linearly widening.

CHART II.1.1

WORLD ECONOMY GROWTH OUTLOOK

The growth of the world economy will moderate this year and the next

(annual percentage changes in real GDP; contributions in percentage points; source: EIU, CF, CNB calculation)



Note: World economy growth is proxied by the growth of the eight largest economies, which account for around 75% of global GDP. The weights of the individual economies are calculated on the basis of nominal GDP at purchasing power parity. The sources of the outlooks are CF and EIU.

CHART II.1.2

STRUCTURE OF ANNUAL GDP GROWTH IN THE EURO AREA

Euro area GDP growth slowed further in 2018 Q3, owing mainly to the contribution of net exports turning negative

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

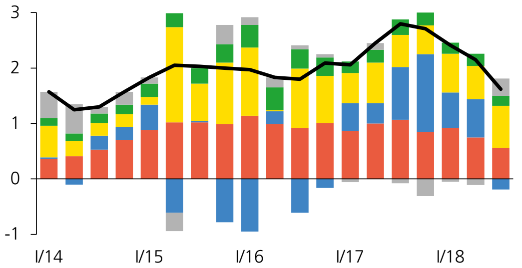
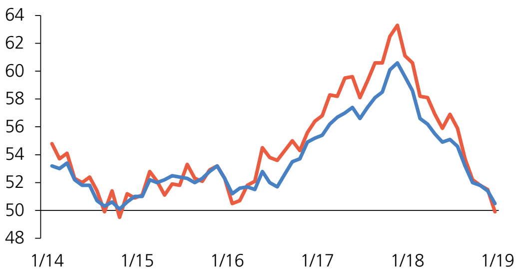


CHART II.1.3

PMI IN MANUFACTURING

Industrial production can be expected to slow further both in Germany and in the euro area as a whole

(Purchasing Managers' Index; source: Bloomberg)



II. THE FORECAST, ITS CHANGES AND RISKS

II.1 DEVELOPMENTS ABROAD AND EXTERNAL ASSUMPTIONS OF THE FORECAST

The growth of the world economy will slow slightly this year and the next. Economic growth in the euro area started to moderate last year. This was reflected in the euro weakening against the dollar. Producer and consumer price inflation both decreased in late 2018, mainly because of lower energy prices resulting from a drop in the price of crude oil. The oil price is expected to remain stable at around USD 60 a barrel over the forecast horizon. Euro area consumer price inflation will be below 2% over the next two years. The ECB ended its asset purchase programme but stated that it would not start increasing interest rates until quite some time later. According to the current market outlook, the 3M EURIBOR will thus remain negative until the end of 2020. Nonetheless, the negative differential between the short-term euro rate and the equivalent dollar rate will narrow as a result of an expected decrease in the dollar rate next year. A gradual slight strengthening of the euro is therefore expected over the forecast horizon.

II.1.1 Economic developments abroad

The growth of the world economy slowed in the second half of last year, and this trend is expected to continue over the next two years.[1] China will remain the main driver of global growth, although it will continue to slow gradually, due not only to changes in its trade relations with the USA, but also to a slowdown in domestic demand. In the USA, the effects of last year's fiscal expansion will gradually fade out. On the other hand, the pace of monetary policy tightening will be slower according to the Fed. Overall, the weighted growth of the monitored economies is expected to reach 3.5% this year and slow to 3.2% in 2020 (see Chart II.1.1). There are considerable risks surrounding global economic growth, stemming above all from uncertainty in international trade and the unfinished negotiations on the form of Brexit. These factors are being reflected in worsening sentiment indicators, and the question is to what extent they are affecting or will affect consumption and investment on the global scale. On the other hand, global economic growth may be supported by a longer period of lower oil prices.

The euro area economy slowed again in 2018 Q3. GDP growth fell from 2.2% to 1.6% in year-on-year terms (see Chart II.1.2). It continued to be driven by a still positive, albeit slightly lower, contribution of domestic demand. The contribution of net exports turned negative for the first time in a long time. Among the major countries of the monetary union, Germany and Italy were the main contributors to the slowdown in growth, recording quarter-on-quarter declines in GDP of 0.2% and 0.1% respectively. In Germany, this probably reflected temporary problems in

1 A more detailed description of expected developments abroad, updated every month, is available in Global Economic Outlook.

the automotive industry related, among other factors, to the switch to new emission standards and a drop in production in the chemical industry caused by drought-related river transport problems. The annual growth of the German economy thus slowed sharply to 1.2%. Economic slowdowns were also recorded in France (to 1.4%) and Italy (to 0.7%). By contrast, growth in Slovakia picked up slightly to 4.5%.

Data from the end of last year suggest continued gradual expansion in the euro area in 2018 Q4.[2] Economic sentiment was again adversely affected by uncertainty related to protectionism, Brexit and the unclear budget situation in Italy. The Italian budget was ultimately approved in December in a form compliant with EU fiscal rules. Industrial production in Germany was negatively affected by one-off factors relating to the switch to new emission standards in the automotive industry and also by lower exports to China. The French economy was hit at the year-end by the yellow vest protests, which may also have a longer-term impact due to slower implementation of reforms. All these factors were reflected in the industrial production index, which fell by 1.7% month on month (and 3.3% year on year) in the euro area in November. The PMI in manufacturing (see Chart II.1.3) followed the downward trend observed since the start of 2018 and was only just above the stagnation level in January. Conversely, despite lower sentiment indicators, the consumer sector saw positive developments, with retail sales increasing for the second consecutive month in November (by 0.6% month on month). The unemployment rate fell further to 7.9%.

GDP growth in the effective euro area[3] **will slow to 1.5% this year and edge up to 1.7% in 2020**[4] (see Chart II.1.4). In the euro area proper, by contrast, slightly lower growth rates are expected for both years. A slowdown is expected this year for most of the Czech Republic's trading partner countries, in particular Germany, where growth will slow to a six-year low of 1.4%.

CHART II.1.4

EURO AREA GDP GROWTH OUTLOOK

Growth in economic activity will slow until mid-2019 and then accelerate again

(annual percentage changes; seasonally adjusted)

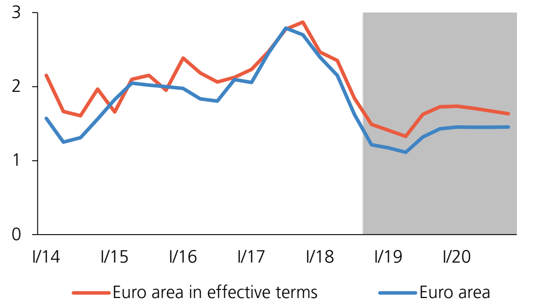


CHART II.1.5

PRICES OF CRUDE OIL AND OTHER COMMODITIES

The crude oil price is expected to be close to USD 60 a barrel over the next two years

(oil in USD/barrel; other commodities: index [January 2014 = 100]; average price of natural gas in Europe; source: Bloomberg, World Bank, CNB calculation)

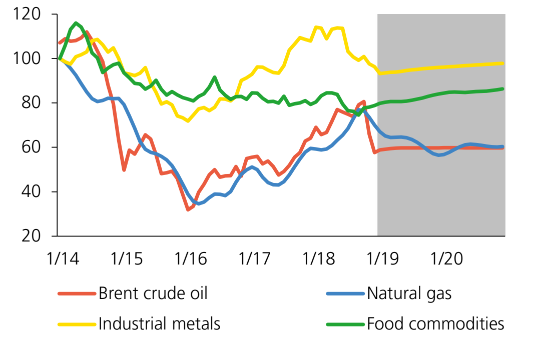
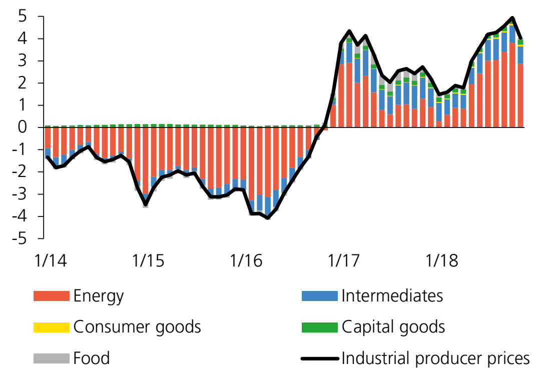


CHART II.1.6

INDUSTRIAL PRODUCER PRICES IN THE EURO AREA

Industrial producer price inflation went down in November owing to a lower contribution of energy prices

(annual percentage changes; contributions in percentage points; source: Eurostat, CNB calculation)



Note: Food prices including beverages and tobacco; consumer goods excluding food.

2 According to a Eurostat flash estimate, annual growth in the euro area decreased to 1.2%. In quarter-on-quarter terms, GDP growth stayed at 0.2%.

3 For the purposes of the forecast, external real and price developments are proxied by effective euro area indicators (see also the Glossary). In these indicators, the Czech Republic's major trading partners (especially Germany and Slovakia) have larger weights (50% and 14% respectively) than their shares in the euro area proper (the weights used in the calculation of the effective indicators are equal to the shares of the euro area countries in total Czech exports to the euro area). The outlooks for GDP, PPI and CPI in the individual euro area countries are based on the January Consensus Forecasts (CF). The outlooks for government bond yields, the euro-dollar exchange rate and the NEER are constructed on the same basis. The scenarios for the future paths of the 3M EURIBOR and 3M USD LIBOR and the Brent crude oil price are derived from prices of market contracts as of 14 January 2019. The outlook is indicated by the grey areas in the charts. This convention is used throughout this Report.

4 The forecast for effective euro area GDP this year and the next has undergone a downward expert adjustment of 0.3 and 0.1 percentage point respectively relative to the January CF forecast, as the CF analysts did not take sufficient account of the continued deterioration in the observed data and leading indicators, especially in industry.

CHART II.1.7

PPI IN THE EURO AREA

The currently elevated growth in industrial producer prices will slow below 2% this year
(year on year in %; seasonally adjusted)

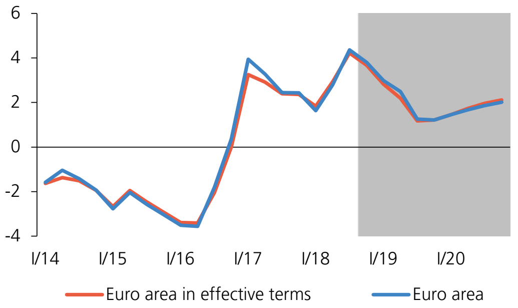
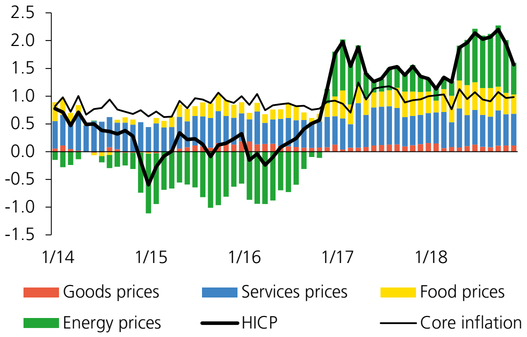


CHART II.1.8

INFLATION IN THE EURO AREA

Consumer price inflation has decreased in recent months due to a lower contribution of energy prices
(annual percentage changes; contributions in percentage points; source: Eurostat, CNB calculation)

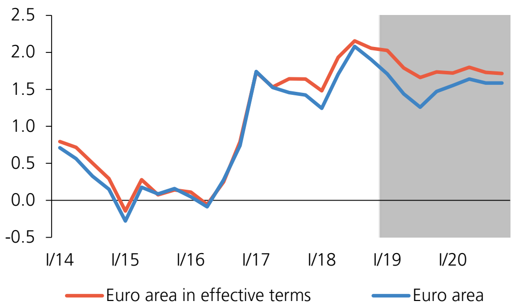


Note: Core inflation is calculated on the basis of the HICP excluding prices of energy, food, alcohol and tobacco.

CHART II.1.9

CONSUMER PRICE INFLATION OUTLOOK IN THE EURO AREA

Inflation will be below 2%
(HICP; year on year in %; seasonally adjusted)



II.1.2 Price developments abroad

The price of Brent crude oil fell sharply at the close of 2018, but the outlook expects it to be stable close to USD 60 a barrel (see Chart II.1.5). The EIA estimates that global oil stocks rose by 1 million barrels a day on average in 2018 Q4 on the back of record extraction in the USA, Saudi Arabia and Russia. In addition, the fall in oil prices was fostered by growth in monetary policy rates in the USA and a decrease in speculative funds' net long positions in oil in a situation of sell-offs of risky assets on financial markets. At Christmas, the Brent crude oil price thus hit a 17-month low of USD 50.5 a barrel. It then reversed, stabilising at roughly USD 60 a barrel in mid-January. Besides a calming of the financial market situation, the oil price was supported by a sharp decline in OPEC output in December, a slight depreciation of the dollar and promising progress in trade talks between the USA and China. The market futures curve suggests a stable average Brent crude oil price of USD 60 a barrel for 2019 and 2020. The EIA predicts only a slight excess of oil on the market and an average Brent price of USD 61 a barrel for this year rising to USD 65 a barrel in 2020.

The aggregate non-energy commodity price index fluctuated slightly with no visible trend in the second half of 2018. This was also true in early 2019. Its sub-indices showed opposite trends (see Chart II.1.5). After hitting a low in September, the food commodity price index returned to growth, whereas the industrial metals price index mostly declined. The outlook for both sub-indices is rising. Prices of industrial metals will remain squeezed by the weakening global manufacturing outlook and concerns regarding the trade disputes between the USA and China.

Annual industrial producer price inflation in the euro area was rising until October but slowed to 4% in November (see Chart II.1.6). The November figure mainly reflected a drop in the contribution of energy prices. Adjusted for energy prices, industrial producer price inflation remained flat.

Annual industrial producer price inflation in the effective euro area will weaken further (see Chart II.1.7). Industrial producer price inflation will slow to 1.9% on average in 2019, primarily reflecting lower oil prices. During 2020, it will start rising slightly again, but it will not reach this year's average level.[5] The patterns for the euro area proper and the effective euro area will be similar.

Consumer price inflation in the euro area fell to 1.6% in December (see Chart II.1.8). The main reason was the drop in energy prices. Core inflation still remains relatively low at around 1%. Underlying inflation pressures thus remain muted, even with regard to nominal wage growth, which is increasing only slowly.

5 Owing to the significantly lower oil price outlook, the forecast for industrial producer price inflation in the effective euro area contains an expert adjustment on top of the January CF/EIU. The forecasted PPI growth has been lowered by 0.4 percentage point for this year and 0.1 percentage point for next year.

The effective indicator of consumer price inflation in the euro area will fluctuate below 2% over the forecast horizon (see Chart II.1.9). This indicator will slow further in the next few quarters, reflecting the drop in oil and other energy prices. In mid-2019, inflation will stabilise around 1.7%. The effective indicator of consumer price inflation will be above the standard inflation measure for the euro area, as higher inflation is expected in the Czech Republic's main trading partner countries than in the rest of the euro area.

II.1.3 Financial developments abroad

According to the market outlook, the 3M EURIBOR will remain negative over the entire forecast horizon (see Chart II.1.10). Although the ECB ended its net asset purchase programme at the end of 2018, the principal payments from maturing securities will be reinvested for an extended period of time after the ECB raises its key interest rates.[6] At its January meeting, the ECB confirmed that it would not raise rates before summer 2019. The market outlook expects this step to be taken as late as the second half of 2020, owing mainly to the risks to the euro area economic outlook. Compared to the market outlook, the analysts' predictions in the January CF suggest a slightly earlier monetary policy tightening, with the 3M EURIBOR expected to stand at -0.3% at the three-month horizon and -0.1% at the one-year horizon. The yield on the ten-year German government bond is expected to rise gradually, reaching 0.8% at the one-year horizon (see Chart II.1.11).

Expectations of the end of the Fed's monetary policy tightening cycle are reflected in the market outlook for the 3M USD LIBOR (see Chart II.1.10). As expected, the US central bank raised the target range for its policy rates by 25 basis points to 2.25%–2.50% in December. Two further increases of the same magnitude in 2019 can be expected according to the FOMC members' median estimates. The current market outlook expects the 3M USD LIBOR to be stable this year. The slight decline in this rate expected by the market in 2020 will foster a gradual decrease in the differential vis-à-vis the euro rate with the same maturity.

According to the January CF outlook, the euro will gradually strengthen against the dollar (see Chart II.1.12). The negotiations on Brexit and the Italian budget and the tensions in US-Chinese trade relations fostered increased foreign exchange market volatility at the close of 2018. The euro will be adversely affected by the slowdown in euro area economic growth, whereas sharper appreciation of the dollar will be prevented by the expected end of the Fed's monetary policy tightening cycle. The euro will thus strengthen slightly against the dollar overall. In effective terms, however, the euro will depreciate gradually.

6 As in previous forecasts, this prediction takes into account the impacts and repercussions of the ECB's asset purchase programme through expert adjustments using shadow interest rates, which are lower than market rates.

Chart II.1.10

3M EURIBOR AND 3M USD LIBOR

The currently high spread between 3M rates in the USA and the euro area will narrow gradually
(in %, differences in percentage points)

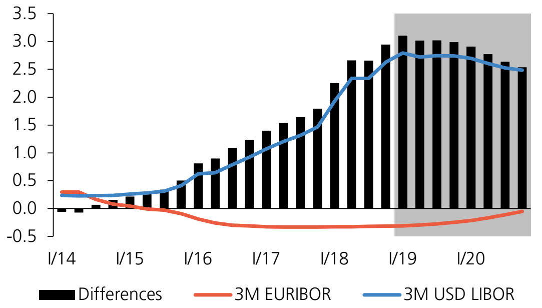


Chart II.1.11

10Y GOVERNMENT BOND YIELDS

Ten-year government bond yields in the USA and Germany are expected to rise, with their positive differential narrowing gradually
(in %, differences in percentage points)

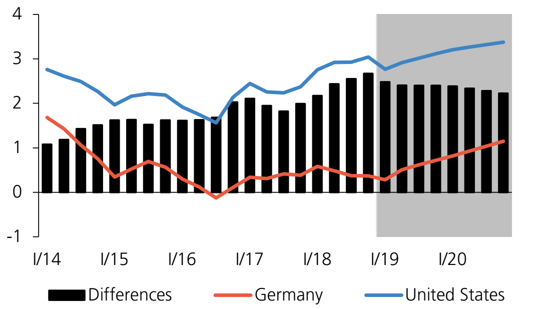


Chart II.1.12

EURO EXCHANGE RATE

The euro will strengthen slightly against the dollar but will weaken gradually in effective terms
(USD/EUR, NEER of euro against currencies of euro area countries' 18 main partners; 2012 Q1 = 100; right-hand scale)

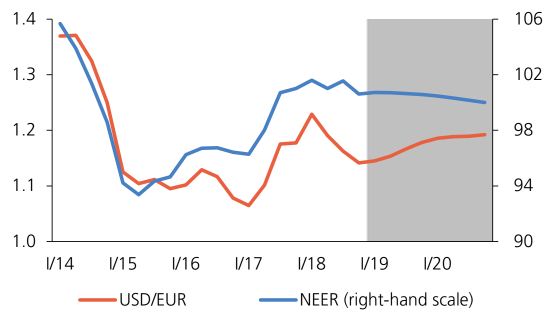


TABLE II.2.1

FORECASTS OF SELECTED VARIABLES

The continuing tightening of domestic monetary conditions will help stabilise inflation at the target and GDP near its potential

(annual percentage changes unless otherwise indicated)

	2017 actual	2018 actual	2019 forecast	2020 forecast
Headline inflation	2.5	2.1	2.2	2.0
GDP	4.5	2.8	2.9	3.0
Average nominal wage	7.0	8.4	6.9	5.4
Exchange rate (CZK/EUR)	26.3	25.6	25.0	24.2
3M PRIBOR (in %)	0.4	1.3	2.1	2.1

Note: The figures for GDP and the average nominal wage in 2018 are expected outturns.

CHART II.2.1

HEADLINE INFLATION AND MONETARY POLICY-RELEVANT INFLATION

Following a temporary increase in early 2019, inflation will be very close to the CNB's 2% target

(annual percentage changes)

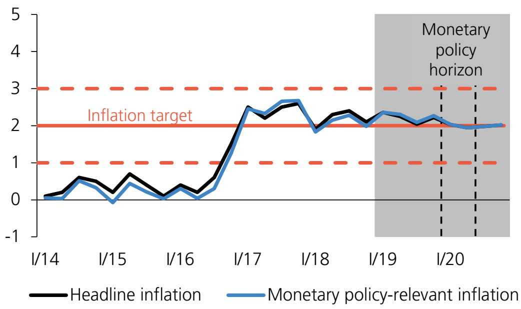
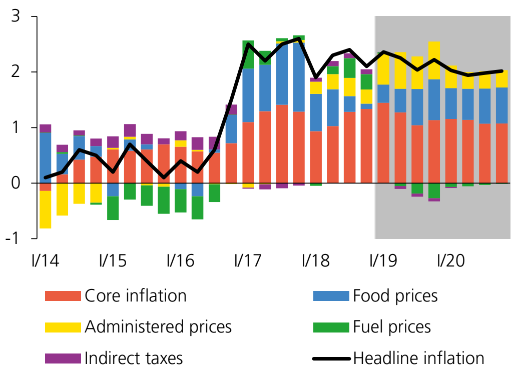


CHART II.2.2

STRUCTURE OF INFLATION AND THE INFLATION FORECAST

Inflation will continue to be driven mainly by core inflation, but the contributions of food prices and administered prices will also rise

(annual percentage changes; contributions in percentage points)



Note: Food prices also include prices of alcoholic beverages and tobacco. Indirect taxes relate to non-administered prices.

II.2 THE FORECAST

Inflation will rise temporarily at the start of this year and will be very close to the CNB's target in the following period. The strong domestic inflation pressures continue to reflect above all a tight labour market, characterised by rapid wage growth and very low unemployment. However, the inflation pressures from the domestic economy will be partly offset this year by an increasing anti-inflationary effect of import prices connected with slowing growth in foreign prices and renewed appreciation of the koruna. Together with slowing wage growth, this will lead to a decrease in the overall inflation pressures and thereby to stabilisation of inflation close to the CNB's 2% target. The renewed appreciation of the koruna will be linked with a gradual fading of negative global sentiment, a wider positive interest rate differential vis-à-vis the euro and continued real convergence of the Czech economy. Consistent with the forecast is broad interest rate stability. The growth of the Czech economy at a rate of around 3% over the next two years will be driven mainly by rising household consumption and investment activity.

II.2.1 Inflation and monetary policy

Following a temporary increase in early 2019, inflation will return to the 2% target and stay very close to it over the monetary policy horizon (see Chart II.2.1). The increase in inflation will be fostered above all by faster growth in administered prices and a recovery in food price inflation, with the contribution of core inflation remaining dominant. A deepening year-on-year decline in fuel prices will act in the opposite direction this year. Headline inflation will stabilise at the target next year as the decline in fuel prices abates and the high administered price inflation simultaneously comes down (see Chart II.2.2). Strong domestic inflation pressures will manifest themselves over the entire forecast horizon, temporarily intensifying at the start of this year owing to a further increase in the minimum wage and a higher-than-usual increase in old age pensions. A gradual pass-through of higher administered price inflation into the other components of inflation will act in the same direction. On the other hand, the overall inflation pressures will be dampened by a negative contribution of import prices as a result of a drop in inflation abroad and renewed appreciation of the koruna. The earlier interest rate increases will also contribute to the inflation target being hit at the start of next year. Monetary policy-relevant inflation, i.e. inflation adjusted for the first-round effects of changes to indirect taxes, will be only marginally higher than headline inflation this year.[7]

7 This is due to the impacts of a decrease in VAT in public transport from 15% to 10% with effect from February 2019. The impact of this tax change on inflation is -0.06 percentage point. The forecast expects that the VAT decrease will not be reflected in consumer prices. The forecast also incorporates last year's increase in excise duty on tobacco products, which will fade out at the start of 2019 Q2.

Core inflation will briefly increase at the start of this year and will then be close to 2%. Persisting strong domestic inflation pressures will affect prices in services in particular. This sector will be affected by strong demand pressures and robust wage growth stemming from the tight labour market. These factors, together with the effects of the low comparison base at the start of 2018, will cause core inflation to rise to 2.6% at the start of this year (see Chart II.2.3). Core inflation will then fluctuate around 2%, mainly because of a renewed decline in import prices as the koruna starts to appreciate and foreign inflation goes down. Gradually diminishing domestic inflation pressures will act in the same direction.

Food price inflation will increase markedly on the back of a rise in food commodity prices due to last year's poor harvest. Faster growth in food prices will also be fostered by persisting strong inflation pressures from the domestic economy. Food price inflation is expected to peak at 2.7% at the end of this year (see Chart II.2.3). It will then slow a little as growth in agricultural producer prices unwinds and the koruna returns to appreciation.

Fuel prices are heading towards a year-on-year decline, which will deepen gradually this year. According to short-term indicators,[8] fuel prices at filling stations saw only a slight year-on-year increase in January. The forecast expects the sizeable drop in global oil prices and renewed appreciation of the koruna against the dollar to manifest themselves in the quarters ahead. Fuel prices will thus start decreasing year on year, particularly in the second half of this year (see Chart II.2.3).

The previous rapid rise in world prices of energy commodities will foster a marked increase in administered price inflation this year. The current electricity price growth will go up significantly further on the back of price increases announced by large distributors for 2019 Q1. In addition to a slight rise in the administered component of the price, this primarily reflects the previous strong growth in electricity generation prices on exchanges. Gas prices for households have been declining moderately year on year up to now, but the forecast expects the recent high gas prices on global markets to feed through to retail prices. Heat prices for households are also expected to pick up pace in reaction to higher prices of energy inputs. By contrast, administered price inflation will be held in check for most of this year by falling prices of transport services, which have been affected by the introduction of fare discounts for students and senior citizens in September last year. The marked rise in electricity generation prices will fade out next year. This will cause administered price inflation to decline. Overall, this means that administered prices will rise by 4% this year, slowing to 2.2% next year (see Table II.2.2).

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

CHART II.2.3

COMPONENTS OF INFLATION

Food price inflation will rise, while the year-on-year decline in fuel prices will start to deepen; following a brief increase, core inflation will stabilise close to 2%
(annual percentage changes)

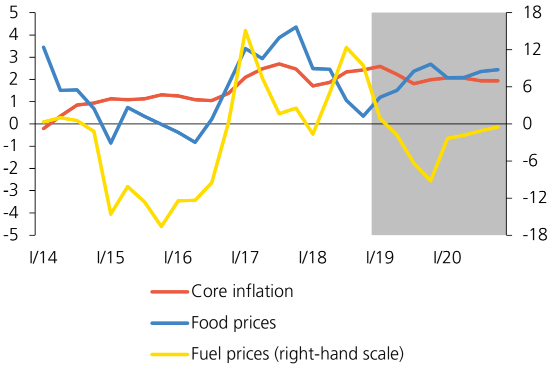


TABLE II.2.2

FORECAST OF ADMINISTRATIVE EFFECTS

Growth in administered prices will accelerate markedly this year, owing mainly to higher energy prices
(annual average percentage changes; contributions to headline inflation in percentage points)

	2017 actual		2018 actual		2019 forecast		2020 forecast	
ADMINISTERED PRICES[a)]	0.0	0.00	1.8	0.27	4.0	0.61	2.2	0.33
of which (main changes):								
electricity	0.3	0.01	4.4	0.19	10.0	0.43	2.6	0.11
natural gas	-2.8	-0.08	-0.7	-0.02	3.1	0.08	1.2	0.03
heat	-1.6	-0.03	-0.1	0.00	2.3	0.04	1.5	0.03
water	1.4	0.01	1.7	0.01	2.2	0.02	2.3	0.02
health care	4.5	0.05	5.0	0.06	3.2	0.04	3.5	0.04
transport	0.2	0.00	-1.9	-0.03	-4.4	-0.07	1.8	0.03

a) including effects of indirect tax changes

CHART II.2.4

EXCHANGE RATE FORECAST

The koruna will return to an appreciation trend this year
(CZK/EUR and CZK/USD)

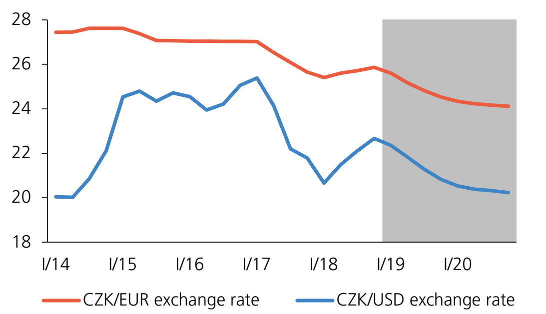


CHART II.2.5

INTEREST RATE FORECAST

Consistent with the forecast is broad interest rate stability
(percentages)

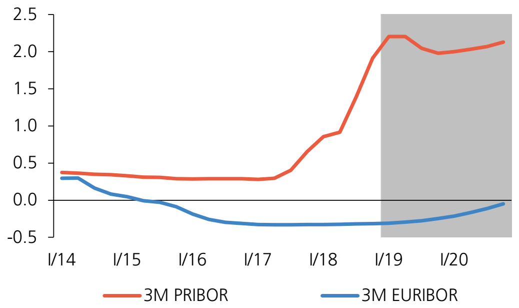


CHART II.2.6

COSTS IN THE CONSUMER SECTOR

The currently strong inflation pressures will moderate, owing mainly to a deepening decline in import prices and, to a lesser extent, to slowing growth in domestic costs
(nominal quarterly percentage changes; contributions in percentage points; annualised)

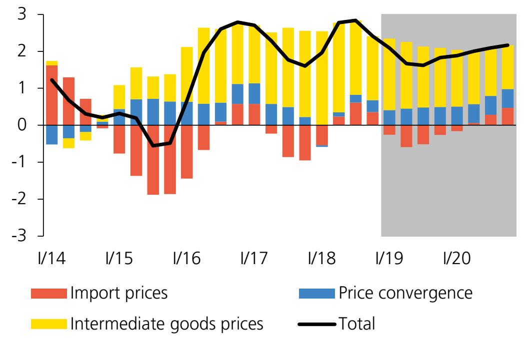
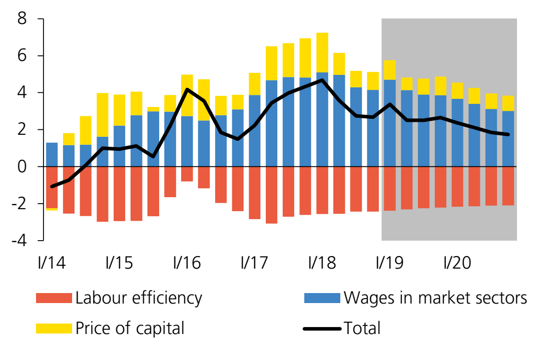


CHART II.2.7

COSTS IN THE INTERMEDIATE GOODS SECTOR

Growth in domestic costs remains strong at the start of this year but will gradually weaken, mainly as a result of gradually falling wage growth; this trend will become more pronounced in 2020
(nominal quarterly percentage changes; contributions in percentage points; annualised)



The koruna will return to appreciation this year (see Chart II.2.4). The exchange rate forecast for 2019 Q1 (at CZK 25.6/EUR) takes into account the developments until mid-January. The forecast assumes that the negative sentiment on foreign exchange markets and the outflow of short-term capital from emerging markets to assets that investors perceive as less risky will gradually fade out in the quarters ahead. This will create room for renewed appreciation of the koruna, supported by a wider interest rate differential vis-à-vis the euro area. Next year, the koruna will appreciate more gradually, in line with continued real convergence of the Czech economy coupled with growth in labour efficiency.

Consistent with the forecast is broad interest rate stability (see Chart II.2.5). Upward pressure is being exerted on rates primarily by the currently weakened koruna, which is dampening the anti-inflationary effect of import prices. The strong domestic inflation pressures and the gradual pass-through of the higher administered price inflation into other components of inflation are acting in the same direction. Renewed appreciation of the koruna amid persisting negative interest rates in the euro area until the end of 2020 will subsequently have the opposite effect on rates.

II.2.2 Costs and the labour market

Growth in total costs will slow in the course of this year owing to a strengthening anti-inflationary effect of import prices (see Chart II.2.6). Growth in total costs in the consumer sector peaked in mid-2018. It will continue to slow gradually, mainly because of renewed appreciation of the koruna, which, together with a decrease in inflation abroad, will be reflected in a strengthening anti-inflationary effect of import prices. The fundamental domestic inflation pressures so far remain strong, though, as a result of persisting labour market tightness and continued growth of the real economy. However, the domestic pressures will also start to weaken gradually in mid-2019 and more markedly in 2020. At the same time, though, the contribution of import prices will turn positive again, reflecting stable growth in foreign prices amid a temporary slowdown in the appreciation of the koruna. Total nominal costs will thus accelerate slightly next year. Price convergence will foster higher total costs over the entire forecast horizon.

The strong domestic inflation pressures, reflecting labour market developments, will not weaken until next year (see Chart II.2.7). Growth in nominal marginal costs in the intermediate goods sector slowed in the second half of 2018. This was due to both lower nominal wage growth in market sectors and a lower contribution of the price of capital, which was affected by weaker growth in economic activity. Inflation pressures were meanwhile dampened by still rising labour efficiency, reflecting buoyant growth in private investment in machinery and equipment. Labour efficiency growth will not weaken significantly over the forecast horizon either. A further increase in the minimum wage will have an effect in 2019 Q1, but wage growth in market sectors will then start to slow again gradually. Continued growth in domestic demand will be reflected in a stable contribution of the price of capital. Growth in domestic costs will thus drop towards 2% next year on account of slowing wage growth.

Employment growth will slow further due to labour shortages. Even so, the employment growth rate will remain strongly positive (see Chart II.2.8). Tightness in the labour market, linked with a record-low unemployment rate, will be reduced only partially by growth in the labour force. The latter will continue to be fostered by a gradual increase in the statutory retirement age. In addition, growth in the number of employees converted into full-time equivalents will slacken further. A modest increase in average hours worked will foster growth in the converted number of employees. However, this effect will be relatively weak, as the cyclical increase in average hours worked will continue to be largely offset by an upward trend in the number of part-time jobs.

The now record-low unemployment rate is preventing unemployment from falling significantly further. The general unemployment rate will go down only slightly, reaching 1.8% by the end of next year (see Chart II.2.8). The forecast also expects a slight decline in the share of unemployed persons. This will reflect an only marginal decrease in the number of registered job applicants amid a continued gradual decline in the population aged 15–64.

Wage growth in market sectors, reflecting the tight labour market and the increase in the minimum wage, will start to slow this year. Wage growth in market sectors remained stable at 7.8% in 2018 Q4 (see Chart II.2.9). This was probably due in part to payments of extraordinary bonuses. In addition to persisting labour market tightness, wage growth will be affected in 2019 by the January increase in the minimum wage of CZK 1,150 to CZK 13,350. Tightening monetary conditions and firms' efforts to maintain their price competitiveness and profitability will act in the opposite direction. Wage growth will thus gradually slow this year but will stay well above its long-run equilibrium level of 5%. It will gradually near that level in 2020. Pronounced, albeit visibly slowing, wage growth will continue in non-market sectors this year, mainly reflecting an increase in the wages of teachers and, to a lesser extent, other public employees. The forecast expects wage growth in the non-market segment of the economy to slow further to just below 5% in 2020.

II.2.3 Economic activity

GDP will pick up slightly to close to 3% in the next two years, driven by all components of domestic demand. Amid a still tight labour market, household consumption and corporate investment will be supported by persisting optimism and continued, albeit slowing, growth in external demand. The economy will also be stimulated by a positive fiscal impulse this year. Tighter monetary policy will act in the opposite direction. Net exports will hinder economic growth this year due to subdued export growth. The negative contribution of net exports to GDP growth will disappear in 2020 (see Chart II.2.10). GDP growth of close to

CHART II.2.8

LABOUR MARKET FORECAST

Total employment will rise at a substantially slower pace than before, while the decline in the unemployment rate will be only weak

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

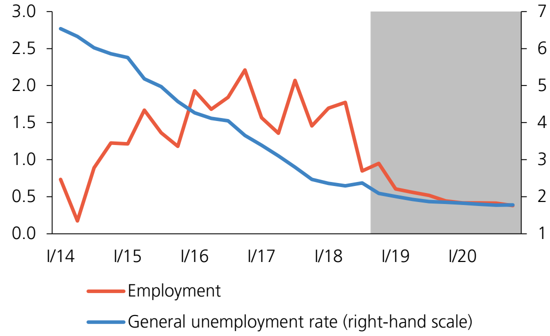


CHART II.2.9

AVERAGE NOMINAL WAGES

Wage growth will slow from its current high rates in market sectors and even more so in non-market sectors

(annual percentage changes; total wages – source: CZSO; wages in market and non-market sectors – source: CNB calculation)

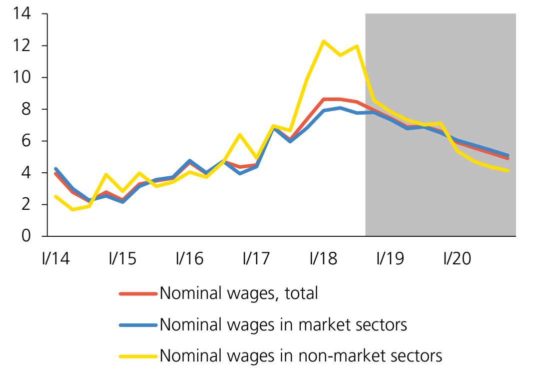


CHART II.2.10

ANNUAL GDP GROWTH STRUCTURE

Consumption and fixed investment will be the main contributors to GDP growth over the entire forecast horizon

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

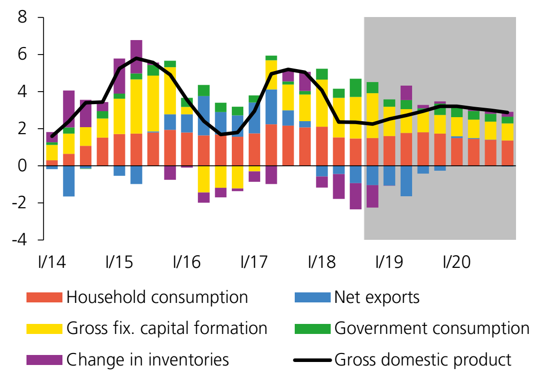


CHART II.2.11

REAL HOUSEHOLD AND GOVERNMENT CONSUMPTION

Household consumption growth will outpace government consumption growth

(annual percentage changes; seasonally adjusted)

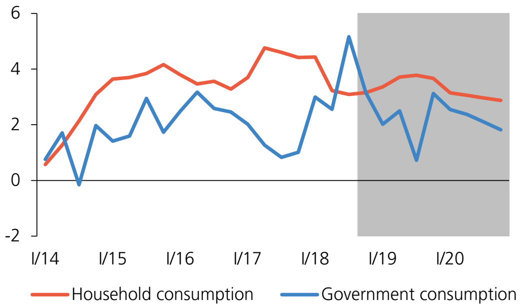
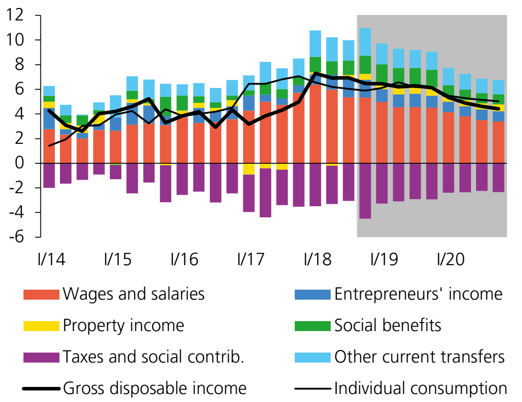


CHART II.2.12

NOMINAL DISPOSABLE INCOME

The still solid growth in disposable income will be a result of continued, albeit gradually slowing, growth in wages and salaries and other income

(annual percentage changes; contributions in percentage points)



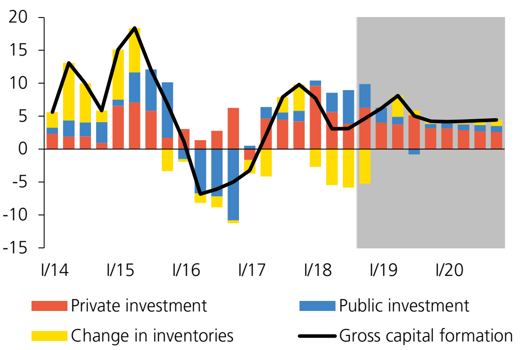
Note: Entrepreneurs' income comprises gross operating surplus and mixed income.

CHART II.2.13

INVESTMENT DECOMPOSITION

Gross capital formation will rise due to continued growth in both private and government investment

(annual percentage changes; contributions in percentage points; constant prices; seasonally adjusted; source: CZSO; contributions of private and government investment: CNB calculation)



3% will be consistent with the long-run equilibrium growth rate of the Czech economy.

The continued household consumption growth will reflect rapid, albeit gradually slowing, growth in wages and salaries and other income. Annual growth in household consumption stayed just above 3% in 2018 Q4. Household consumption growth will remain more than solid in the period ahead (see Chart II.2.11). Household budgets will continue to be supported by brisk disposable income growth connected with continued strong growth in wages and salaries and rising income of entrepreneurs (see Chart II.2.12). Social benefit income will also make a positive contribution. Growth in private consumption will also be fostered this year by an extraordinary increase in pensions in January going beyond the usual indexation, as households of old-age pensioners have a high propensity to consume. Overall, household consumption will grow by 3.6% this year and slow to 3% in 2020, amid an increased saving rate.

Real government consumption will continue to rise, due to both growth in non-wage expenditure and wage growth in the government sector. Growth in real government consumption rose to more than 3% last year (see Chart II.2.11). It will lose momentum this year and the next. Government consumption expenditure will increase mainly on the back of rapid growth in compensation of employees. In real terms, though, government consumption growth will be dampened by faster growth in the deflator. Current expenditure and social transfers in kind will continue to increase.

Gross capital formation will continue to be supported by both private and government investment. Growth in total investment was dampened last year by a negative contribution of inventories, while fixed investment continued to grow apace (see Chart II.2.13). Still solid growth in external demand combined with a tight domestic labour market will lead to continued elevated investment activity in the business sector, fostering further growth in labour efficiency. Conversely, the previous interest rate increases will have a slightly dampening effect on investment. The buoyant growth in government investment will continue to be due to a recovery in absorption of EU funds. The effect of release of the large stock of inventories built up at the end of last year will fade out at the same time. Growth in total investment will thus surge to 6% this year. Slower external demand growth and partly also base effects in government investment will be apparent next year, as a result of which total investment growth will slow to 4%.

The currently muted export growth will not recover until next year. The negative effect of the introduction of stricter environmental standards in the automotive industry disappeared at the end of 2018. However, the continued weaker export growth will be affected by other factors. They include production capacity constraints coupled with labour shortages, slower growth in external demand and a gradual deterioration in Czech exporters' price competitiveness. This stems from long-running buoyant growth in wage costs amid slowing growth in foreign prices and renewed appreciation of the koruna. Exports of goods and services will go up by 4% this year. A renewed increase in external demand growth will emerge in 2020 amid steady growth in private investment. Overall, this will cause export growth to rise to 6% (see Chart II.2.14).

Continued solid growth in domestic demand and later also a recovery in exports will result in strong import growth. Imports will be driven this year mainly by a rise in import-intensive investment and household consumption, which will be aided by renewed appreciation of the koruna. Overall, goods and services imports will grow by around 6% this year. Total imports will grow at roughly the same rate next year, while faster export growth will act against slower growth in domestic demand (see Chart II.2.14).

The contribution of net exports to GDP growth will remain negative this year. Imports will outpace exports. In 2020, the growth rates of exports and imports will converge and the contribution of net exports to GDP growth will be zero on average.

II.2.4 The balance of payments

According to preliminary figures, the current account surplus dropped significantly to 0.5% of GDP in 2018. The goods surplus (see Table II.2.3) decreased slightly year on year due to a rise in the deficit on mineral fuels as a result of oil prices being elevated for most of the year. The services surplus also decreased slightly. The primary income deficit widened. This was linked with a lower surplus on compensation of employees and a larger deficit on investment income. Conversely, an only slight fall in the secondary income deficit connected with the recovery in absorption of EU funds fostered an increase in the current account surplus.

The forecast expects the current account surplus to decrease further, albeit only marginally, to 0.4% of GDP in 2019 (see Chart II.2.15). The goods surplus will fall slightly below the 2018 level, with a year-on-year switch of the terms of trade to positive levels associated with a fall in oil prices being outweighed by slower growth in external demand. By contrast, the services surplus will increase slightly. At the same time, the secondary income deficit will shrink further due to an expected switch of net drawdown of EU funds to a surplus. By contrast, the primary income deficit will widen due to an increase in payments of direct investment income to non-residents.

The forecast expects the current account surplus to be flat at the 2019 level in absolute terms in 2020. A rising goods and services surplus due to a slowdown in domestic demand growth and a slight increase in external demand is expected to foster an increase in the surplus. However, the goods and services surplus will be reduced by the expected renewed appreciation of the koruna at the forecast horizon. In addition, the current account surplus will be moderated by growth in the

CHART II.2.14

REAL EXPORTS AND IMPORTS

The temporarily subdued growth in exports will gradually pick up and converge towards import growth, reflecting solid growth in both external and domestic demand
(annual changes in per cent and CZK billions; seasonally adjusted)

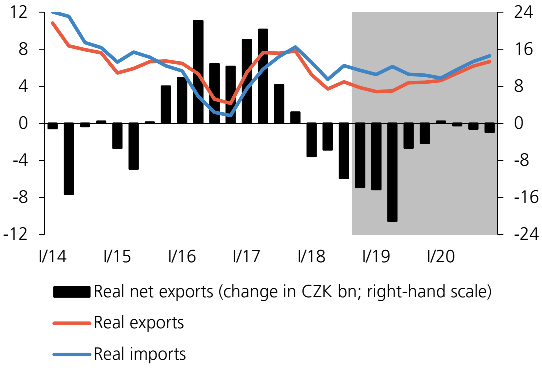


TABLE II.2.3

BALANCE OF PAYMENTS FORECAST

The current account surpluses this year and the next will be only marginally lower than in 2018, while the financial account balance will fluctuate due mainly to portfolio investment
(CZK billions)

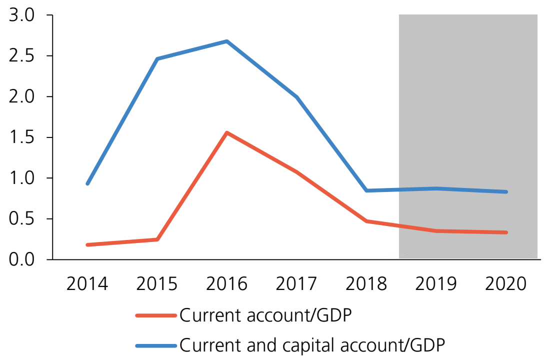
	2017 actual	2018 exp. outcome	2019 forecast	2020 forecast
A. CURRENT ACCOUNT	54.2	25.0	20.0	20.0
Goods	240.9	230.0	225.0	235.0
Services	122.0	115.0	120.0	125.0
Primary income	-260.8	-280.0	-290.0	-300.0
Secondary income	-47.9	-40.0	-35.0	-40.0
B. CAPITAL ACCOUNT	46.5	20.0	30.0	30.0
C. FINANCIAL ACCOUNT[a)]	117.1	25.0	-35.0	70.0
Direct investment	-135.3	-60.0	-70.0	-60.0
Portfolio investment	-268.3	-10.0	-100.0	-10.0
Financial derivatives	-14.2	-	-	-
Other investment	-711.5	35.0	40.0	40.0
Reserve assets	1246.4	60.0	95.0	100.0

a) forecast excluding operations of banking sector and financial derivatives

CHART II.2.15

RATIOS OF THE BALANCE OF PAYMENTS ACCOUNTS TO GDP

The ratios of the current account surplus and the current and capital account surpluses to GDP will remain near their 2018 levels
(percentages)



Note: The figures for 2018 are expected outcomes.

income deficit (an increase in the investment income deficit and in private transfers abroad).

The capital account surplus continues to be affected mainly by drawdown of EU funds. The drawdown was only gradual last year, as is usual in the first half of the programme period, and is expected to pick up in the years ahead. The surplus may also be affected by trading in emission permits. However, the size of such trading is hard to estimate, so the forecast for 2019 and 2020 excludes it.

A modest net capital outflow was recorded on the financial account in 2018 despite the sizeable increase in domestic interest rates. The aggregate capital outflow reflected a slight current and capital account surplus, an excess of domestic deposits over loans, the Czech Republic's currently low attractiveness for direct investment and a large amount of foreign short-term capital in the Czech Republic. The net inflow of direct investment dropped sharply compared to 2017. This was due mainly to a large fall in the inflow of debt capital into the Czech Republic and increased investor interest in investing abroad. The completion of a major investment by Korean company Nexen in the Czech Republic acted in the opposite direction. The total net inflow of direct investment capital was significantly smaller than the balance of reinvested earnings. Residents' investment abroad therefore currently exceeds new foreign direct investment in the Czech Republic. The net capital inflow also fell in the portfolio investment area. On the one hand, non-residents' interest in domestic bonds (especially government bonds) declined, and on the other, domestic investors responded to the rapid growth in Czech interest rates by transferring part of their investments back into the Czech Republic. Banking sector accounting operations relating to optimisation of contributions to the Resolution Fund continued to foster a net capital inflow.[9] Under other investment (excluding the banking sector), there was a renewed outflow of capital in the corporate sector. On the other hand, the government sector took advantage of the favourable foreign currency financing conditions and took out a short-term foreign loan. As the real capital outflow exceeded the current and capital account surplus, the banking sector increased its short-term foreign liabilities. The growth in the CNB's reserve assets reflected returns on international reserves and net operations vis-à-vis the EU.

The financial account will record a net capital inflow this year, due mainly to portfolio investment. The inflow of direct investment capital into the Czech Republic will increase slightly, due mainly to disinvestment by ČEZ. Slower global growth will be reflected in a lower volume of direct investment at home and abroad. The forecast continues to expect a net capital outflow for new direct investment (net of reinvested earnings). As

9 These operations are recorded on the other banking sector investment account in the same amount as under portfolio investment, but with the opposite sign. However, this account is not part of the forecast.

regards portfolio investment, the forecast expects residents' holdings of foreign securities to record a further decline on the asset side. The liabilities side will be affected only by the usual accounting operations. A net outflow of other investment capital, associated with activities of the corporate sector, is still expected. In the government sector, a short-term foreign loan is expected to be revolved due to persisting favourable foreign currency financing conditions. The forecasted higher growth in reserve assets than in 2018 is associated with an expected slight increase in returns on the CNB's reserves and a year-on-year increase in the surplus on operations vis-à-vis the EU.

A sharp decrease in the inflow of portfolio investment and a renewed overall net outflow on the financial account are expected for 2020. As regards portfolio investment, residents' interest in investing abroad will recover. This will lead to a decline in the total net inflow of such investment. The net inflow of direct investment is expected to fall slightly as one-off effects fade out (the above-mentioned disinvestment by ČEZ and probably also final operations connected with the Nexen investment). The other financial account items are predicted to stay broadly at their 2019 levels.

II.2.5 Fiscal developments

The government budget surpluses, primarily reflecting growth in tax revenues, will persist. By the CNB's estimation, the general government budget ended last year in a surplus of 1.4% of GDP. The general government surplus will be only slightly lower both this year and the next (see Table II.2.4). The general government revenue side is being bolstered by the continuing economic growth. According to the forecast, the shifting of public transport fares to the second reduced VAT rate will have a slight opposite effect on revenues. Government spending will rise this year due mainly to strong wage growth in the government sector and continued growth in government investment supported by co-financing from EU funds. The fare discounts for students and senior citizens introduced last year and increases in social benefits connected with this year's more generous pension indexation[10] and an increase in the care allowance will act in the same direction.

Favourable fiscal developments will also be apparent in continued structural surpluses and a further drop in government debt. The general government structural surpluses will fluctuate around 1% of GDP. The medium-term objective of a structural deficit of no more than 1% of GDP will thus also be comfortably met at the forecast horizon. Government debt will gradually decline further to below 30% of GDP in 2020. This will be a result of general government primary surpluses amid

10 In 2019, the flat-rate component of pensions increases from 9% to 10% of the average wage and senior citizens aged over 85 will receive an extra CZK 1,000 a month. This will increase pension spending by 0.3% of GDP.

TABLE II.2.4

FISCAL FORECAST

The government budget balance will remain in surplus
(% of nominal GDP)

	2017 actual	2018 exp. outcome	2019 forecast	2020 forecast
Government revenue	40.5	41.7	41.5	41.5
Government expenditure	39.0	40.3	40.3	40.1
of which: interest payments	0.7	0.7	0.7	0.6
GOVERNMENT BUDGET BALANCE	1.5	1.4	1.2	1.3
of which:				
primary balance[a)]	2.3	2.1	1.8	2.0
one-off measures[b)]	0.1	0.0	0.1	0.1
ADJUSTED BUDGET BALANCE[c)]	1.5	1.4	1.1	1.3
Cyclical component (ESCB method)[d)]	0.3	0.4	0.4	0.3
Structural balance (ESCB method)[d)]	1.2	1.0	0.7	1.0
Fiscal stance in pp (ESCB method)[e)]	0.5	-0.2	-0.3	0.3
Cyclical component (EC method)[d)]	0.1	0.0	0.0	0.0
Structural balance (EC method)[d)]	1.3	1.4	1.1	1.3
Fiscal stance in pp (EC method)[e)]	0.7	0.0	-0.2	0.2
GOVERNMENT DEBT	34.7	32.7	30.6	28.7

a) government budget balance minus interest payments
b) This item consists of expected revenue from sales of emission permits, expenditure on the (New) Green Savings Programme, guarantees and revenue from the sale of frequency bands to mobile operators.
c) adjusted for one-off measures; CNB estimate
d) CNB estimate
e) year-on-year change in structural balance

TABLE II.2.5

FISCAL IMPULSE

The fiscal impulse will again be positive this year due to the support of household consumption and growth in government investment
(contributions to GDP growth in percentage points)

	2017 actual	2018 exp. outcome	2019 forecast	2020 forecast
FISCAL IMPULSE[a)]	0.2	0.8	0.4	0.0
of which impact through:				
private consumption	0.2	0.4	0.3	0.0
private investment	-0.1	0.0	0.0	0.0
government investment, domestic	0.0	0.2	0.0	0.0
government investment, EU funded	0.0	0.2	0.1	0.0

a) Figures may not add up owing to rounding.

still low interest rates on government debt and buoyant nominal GDP growth.

Fiscal policy will again be expansionary this year and roughly neutral in 2020 (see Table II.2.5). The expansionary effect of fiscal policy this year is linked mainly with the higher-than-usual increase in old-age pensions, continued growth in government investment and rapid wage growth in the government sector.

II.3 COMPARISON WITH THE PREVIOUS FORECAST

The biggest change by comparison with the previous forecast is a lowered outlook for external variables. In particular, the outlook for euro area interest rates has been shifted downwards significantly and external producer price inflation has been reduced due to falling oil prices. External economic activity will also grow more slowly. Another change compared with the previous forecast is later renewal of appreciation of the koruna. The strength of the domestic inflation pressures has been revised downwards slightly, mainly as a result of somewhat lower growth in domestic economic activity. The inflation forecast has shifted to lower levels this year, reflecting lower observed figures and a stronger anti-inflationary effect of import prices. An increased outlook for administered prices is acting in the opposite direction. The new forecast leads to a slightly higher interest rate path at the start of this year, due mainly to a weaker initial exchange rate of the koruna and a higher outlook for administered prices. Owing to the lower path of foreign rates, the new forecast no longer expects domestic interest rates to rise next year.

The outlook for foreign variables has been revised quite significantly in the anti-inflationary direction. The path of the 3M EURIBOR has been shifted lower – by almost 0.4 percentage point at the end of 2020 (see Chart II.3.1). Euro area interest rates will thus remain negative until the end of the forecast horizon, in contrast to the previous forecast. This mainly reflects weaker price-cost pressures stemming from a significantly lowered outlook for the Brent crude oil price (by about USD 20 a barrel). Again due to changes in demand, the external price pressures are more subdued owing to lower economic growth in the effective euro area (of 0.4 percentage point this year). Both these factors are reflected in the outlook for consumer and especially industrial prices, whose year-on-year growth is 0.7 percentage point lower this year than in the previous forecast. The stronger anti-inflationary price pressures are slightly dampened over the entire forecast horizon by a weaker exchange rate of the euro against the dollar (by 2% on average).

The forecast for domestic economic growth this year and the next has shifted lower (see Chart II.3.2). The slower GDP growth this year and the next reflects both lower growth in external demand and worse price competitiveness of domestic producers (due to lower growth in foreign prices). Both will lead to a lower contribution of net exports to GDP growth. By contrast, growth in household consumption has been revised up slightly for this year due to lower growth in consumer prices. Faster dissipation of the negative contribution of additions to inventories will be reflected in brisker growth in gross capital formation this year. In 2020, by contrast, lower external demand will give rise to slightly weaker growth in gross capital formation. Government consumption will foster slightly lower economic growth overall in 2019–2020.

The wage growth forecast is little changed (see Chart II.3.3). Available short-term indicators suggest that wage growth was slightly higher at the end of last year than expected by the previous forecast due to slightly higher payments of one-off bonuses. This effect will gradually

CHART II.3.1

CHANGE IN THE 3M EURIBOR FORECAST

Lower inflation in the euro area is reflected in a lower outlook for foreign market interest rates, which will remain negative over the entire forecast horizon
(percentages; differences in percentage points)

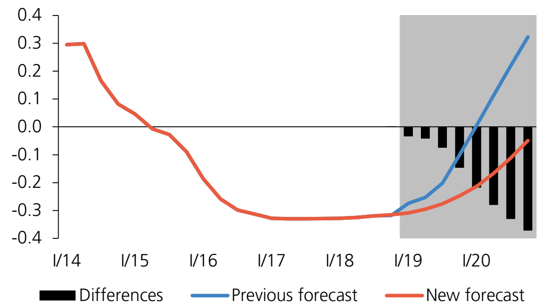


CHART II.3.2

CHANGE IN THE GDP FORECAST

The forecast for domestic economic growth has shifted lower
(annual percentage changes; differences in percentage points – right-hand scale; seasonally adjusted)

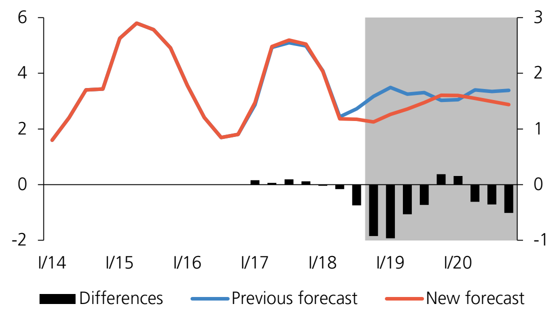


CHART II.3.3

CHANGE IN THE FORECAST FOR NOMINAL WAGES IN MARKET SECTORS

The wage growth forecast is little changed
(annual percentage changes; differences in percentage points – right-hand scale; seasonally adjusted)

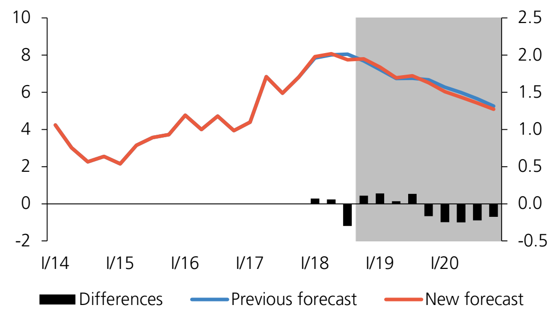


CHART II.3.4

CHANGE IN THE HEADLINE INFLATION FORECAST

The headline inflation forecast is lower this year due to a combination of factors, while the changes at the longer horizon are negligible

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

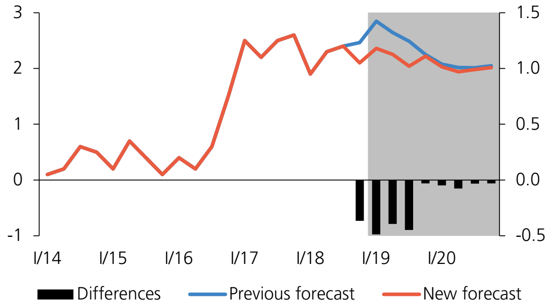


CHART II.3.5

CHANGE IN THE EXCHANGE RATE FORECAST

The koruna will initially be weaker due to longer-lasting negative sentiment on financial markets; it returns to the levels of the previous forecast at the longer horizon

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

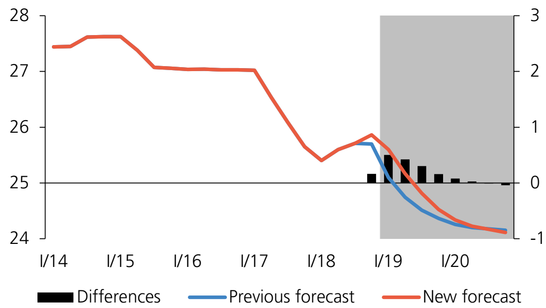
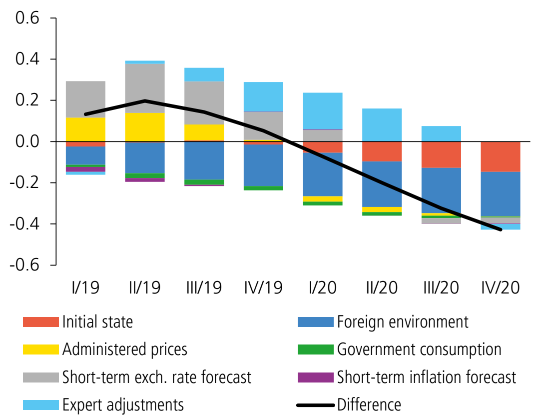


CHART II.3.6

DECOMPOSITION OF CHANGES IN THE INTEREST RATE FORECAST

The initially slightly higher interest rate outlook is due mainly to a weaker koruna, including the related expert adjustment, and to administered prices, while the foreign interest rate outlook, which will prevail at the longer end, is acting in the opposite direction

(3M PRIBOR, percentage points)



fade away and wage growth will conversely be more moderate from the end of this year due to lower domestic economic activity. Wage growth will thus return to its long-term equilibrium rate somewhat faster. Overall, domestic inflation pressures will be slightly weaker over the next two years than in the previous forecast, not only as a result of more moderate wage growth, but also because of a lower outlook for domestic economic growth.

The inflation forecast is lower for this year but is almost unchanged at the longer horizon (see Chart II.3.4). The reduction in the inflation outlook for 2019 compared to the previous forecast is due mainly to the lower levels observed at the end of last year, when growth in food and fuel prices slowed unexpectedly. In addition, domestic inflation will reflect lower growth in foreign producer prices, fostered also by lower oil prices, through a sharper decline in import prices. The effect of the lower external price pressures will be partly absorbed by a weaker koruna this year. By contrast, the outlook for growth in administered prices is distinctly higher than in the previous forecast due to stronger forecasted growth in electricity prices. At the longer horizon, the inflation outlook is broadly in line with the previous forecast. The forecast newly incorporates the reduction of the VAT rate in public transport, although its impact is negligible. The outlook for monetary policy-relevant inflation has therefore been revised almost identically to that for headline inflation.

The new forecast for the koruna exchange rate for the coming quarters takes into account its markedly weaker observed levels compared to the previous prediction. The forecast expects the effect of negative sentiment, which has so far dampened the appreciation of the koruna, to fade away a quarter later than assumed by the previous forecast. The koruna will thus be slightly weaker in the coming quarters than in the previous prediction (see Chart II.3.5). In the course of next year, the exchange rate path will return to the levels of the previous forecast.

The forecast implies a slightly higher domestic interest rate path this year but a slightly lower path next year (see Chart II.3.6). The initially higher rates are due mainly to a weaker koruna than in the previous forecast and, to a lesser extent, to the pass-through of the faster growth in administered prices to other components of inflation. Expert adjustments also have an upward effect on rates as from the second half of this year. Those adjustments include in particular the assumption of a later fade-out of negative sentiment on the foreign exchange market. By contrast, the downward revision of the external outlook – especially the markedly reduced path of euro area interest rates – fosters lower rates over the entire horizon. The initial state acts towards marginally lower rates overall.[11]

11 In the structure of the initial state, the effect of the lower economic growth at the end of 2018 is initially almost fully offset by higher wage growth in the same period. However, this compensating effect will fade away next year and the initial state fosters marginally lower rates compared to the previous forecast.

II.4 RISKS AND UNCERTAINTIES OF THE FORECAST

The Bank Board assessed the risks to the forecast as being slightly inflationary and tilted towards slightly higher interest rates compared to the forecast. A path of the koruna exchange rate in the coming quarters is a risk in this direction. The outlooks of other entities indicate a distinctly weaker exchange rate at the one-year horizon than the CNB forecast amid slightly higher interest rates and a similar inflation prediction. The exchange rate uncertainty is described by a sensitivity scenario. A major risk – described in another sensitivity scenario – is the potential materialisation of a disorderly Brexit. The impacts of protectionist measures in global trade remain a source of external uncertainty.[12]

II.4.1 Risks perceived by the CNB

A significant uncertainty of the forecast – captured by a sensitivity scenario – is the path of the exchange rate. In the variant with a weaker exchange rate, the symmetric sensitivity scenario assumes that the exchange rate will stay at its initial level of CZK 25.6 to the euro in 2019 Q2 and then gradually return to an appreciation path over the forecast horizon. The simulation results, expressed as deviations from the baseline scenario of the forecast, are given in Table II.4.1. The variant with a stronger nominal exchange rate has the same results but with the opposite sign.

The weaker koruna in the exchange rate sensitivity scenario leads to a higher interest rate path than in the forecast. Monetary policy thus responds to the fact that the weaker exchange rate dampens the fall in import prices and leads to higher inflation pressures overall. Inflation therefore goes up by about 0.2 percentage point at the one-year horizon compared to the forecast. Another effect of the depreciation is a short-lived improvement in exporters' price competitiveness, which contributes to slightly higher-than-forecasted GDP growth via higher net exports. In the longer term, by contrast, the effect of higher interest rates will prevail and the rate of GDP growth will slow slightly below the forecasted level. The stabilising effect of monetary policy thus leads to inflation returning to the target, albeit a little later than in the baseline scenario.

A major external risk is described in the sensitivity scenario of a disorderly Brexit. A disorderly Brexit means that the UK will leave the EU without a withdrawal agreement. This would damage relations between the UK and its main trading partners, the euro area countries. The economic growth of, and outlook for, the euro area would also be negatively affected by this damage, so the sensitivity scenario first of all quantifies the impact of a disorderly Brexit on Czech exports to the euro area. The scenario simultaneously quantifies the downward effect of a disorderly Brexit on demand for domestic production intended for

TABLE II.4.1

EXCHANGE RATE SENSITIVITY SCENARIO

The weaker exchange rate in the sensitivity scenario leads to higher interest rates and slightly higher inflation
(deviations from baseline scenario paths)

	CPI inflation (in pp)	3M PRIBOR (in pp)	GDP growth (in pp)	Nominal exchange rate (CZK/EUR)
I/19	0.0	0.3	0.0	0.0
II/19	0.1	0.4	0.1	0.4
III/19	0.1	0.4	0.1	0.3
IV/19	0.2	0.4	0.1	0.2
I/20	0.2	0.3	0.0	0.1
II/20	0.1	0.1	-0.1	0.1
III/20	0.1	0.0	-0.2	0.1
IV/20	0.0	0.0	-0.1	0.1

12 The protectionist measures already introduced or being considered were described in a box in IR III/2018.

CHART II.4.1

MODEL-BASED IMPACT OF A DISORDERLY BREXIT ON GDP GROWTH

The negative impact on GDP growth can be expected to be stronger in the UK than in the euro area
(deviations from the forecast in percentage points; source: CNB calculation)

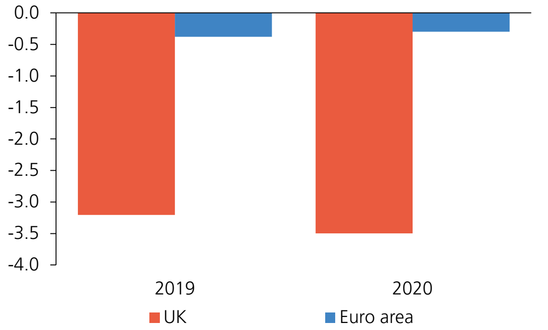


TABLE II.4.2

DISORDERLY BREXIT SENSITIVITY SCENARIO – EXTERNAL VARIABLES

A disorderly Brexit will manifest itself in the euro area in both lower economic growth and higher inflation; the euro-dollar exchange rate will be weaker
(deviations from baseline scenario paths)

	Effective PPI inflation (in pp)	3M EURIBOR (in pp)	Effective GDP growth (in pp)	Exchange rate USD/EUR (in %)
I/19	0.0	0.0	0.0	0.0
II/19	0.5	0.0	-0.4	-4.8
III/19	0.7	0.1	-0.5	-5.3
IV/19	0.9	0.1	-0.6	-5.5
I/20	0.9	0.1	-0.6	-5.7
II/20	0.4	0.1	-0.3	-5.6
III/20	0.0	0.1	-0.2	-5.8
IV/20	-0.2	0.1	-0.1	-5.8

TABLE II.4.3

DISORDERLY BREXIT SENSITIVITY SCENARIO – DOMESTIC ECONOMY

Monetary policy responds to the shock from abroad (which leads to a weaker koruna and lower GDP growth) with an increase in rates, so inflation remains – as in the forecast – close to the target
(deviations from baseline scenario paths)

	CPI inflation (in pp)	3M PRIBOR (in pp)	GDP growth (in pp)	Nominal exchange rate (CZK/EUR)
I/19	0.0	0.2	-0.1	0.2
II/19	0.0	0.3	-0.8	0.3
III/19	0.0	0.4	-0.9	0.4
IV/19	0.1	0.4	-1.1	0.4
I/20	0.1	0.4	-1.0	0.5
II/20	0.1	0.3	-0.5	0.5
III/20	0.1	0.2	-0.4	0.5
IV/20	0.1	0.1	-0.4	0.6

direct export to the UK.[13] The scenario thus quantifies the aggregate impacts on the most important domestic variables through the channel of the Czech Republic's external trade relations.

A disorderly Brexit is reflected in a fall in trade between the UK and the euro area and a worse outlook for the euro area. In the scenario, UK exports to the euro area and euro area exports to the UK are reduced sharply in 2019 Q2. This assumption is based on the absence of mutual contractual trade arrangements and simulates the effect of the initial chaos at borders and the related complications for foreign trade in goods and services. The size of the negative impact on total exports is six times larger for the UK than it is for the euro area, for which the UK represents a much less significant export market than the euro area does for the UK.[14] To a lesser extent, the sensitivity scenario also takes into account growth in tariffs between the two economies through an increase in goods import prices. Coupled with an assumed strong depreciation of sterling against both the dollar and the euro (of about 17% and 13% respectively), this would result in inflation being about 1.2 percentage points higher in the UK in 2019. In the longer run, negative demand-pull pressures would predominate and inflation in the UK would fall to roughly the same extent. GDP in the UK would contract by 1.3% in 2019 and 1.8% in 2020. This is more than 3 percentage points lower in both years compared to the situation where a disorderly Brexit does not materialise (see Chart II.4.1).[15] A disorderly Brexit affects the effective euro area through both higher inflation and lower economic growth (see Table II.4.2). The positive inflation deviation would peak in late 2019 and early 2020 and then disappear rapidly. Inflation would be supported by a 5% weaker euro-dollar exchange rate than in the baseline scenario. The negative impact on GDP growth in the effective euro area would also peak at the turn of 2020 and then gradually fade away. The ECB's monetary policy would meanwhile remain almost unchanged.

The slowdown of the UK economy due to a disorderly Brexit would have only a limited impact on the Czech economy through direct exports from the Czech Republic to the UK. Based on the long-term relationship, Czech exports to the UK are estimated to fall by about CZK 3.5 billion in response to a fall in UK GDP growth of 1 percentage point. Again, the effect of worse sentiment is not included in this estimate. A drop in UK economic growth of around 3 percentage points in both 2019 and 2020 (see above) implies a decline in Czech exports of about CZK 10 billion in both years. This is an insignificant drop in terms of total Czech exports, although the UK is a major trading partner for some sectors (see the Box in section III.2).

13 The scenario abstracts from other potential impacts, which are difficult to quantify and relate mainly to a significant deterioration in sentiment throughout Europe.
14 The share of the euro area in total UK exports is 42%, whereas the euro area exports just 7% of its total exports to the UK.
15 For comparison, GDP in the UK decreased by 0.3% and 4.2% respectively in the years of the global financial and economic crisis (2008 and 2009).

Overall, a disorderly Brexit leads to a worse outlook for the Czech economy with a different monetary conditions structure compared to the forecast. The drop in demand for Czech exports from the UK and especially from the euro area, which is substantial overall, is reflected in a weaker koruna. Coupled with higher foreign prices, the weaker koruna increases the inflation pressures stemming from import prices. This results in a distinctly higher path of domestic interest rates relative to the baseline scenario of the forecast. The disorderly Brexit scenario thus leads to a different structure of the domestic monetary conditions, although the resulting deviation of inflation from the forecast is negligible. Czech economic growth decreases relative to the baseline scenario as a result of a sharper fall in the contribution of net exports and hence weaker domestic demand. In particular, growth in household consumption falls due to lower wage growth. Investment growth also slows. The simulation results, expressed as deviations from the forecast, are given in Table II.4.3.

The Bank Board assessed the risks to the forecast as being slightly inflationary and tilted towards slightly higher interest rates compared to the forecast. Potential slower appreciation of the koruna in the course of this year compared to the forecast is a risk in this direction. Another risk is a disorderly Brexit, which could lead to a marked slowdown of the Czech economy and also to a weakening of the koruna. The impacts of protectionist measures in global trade remain a source of external uncertainty.

II.4.2 Risks signalled by other entities' forecasts

Inflation expectations in the economy continue to be firmly anchored by the CNB's 2% target. Inflation forecasted by financial market analysts is currently only just above the CNB's 2% target at the one-year horizon. At the three-year horizon, it is exactly at the target. The inflation expectations of business managers are also close to the central bank's target at the one-year horizon (see Table II.4.4).

The indicators of inflation perceived and expected by households have changed little recently. The still slightly positive level of perceived inflation suggests that households overall felt that prices rose over the last 12 months, though only slightly (see Chart II.4.2). Expected inflation increased negligibly on average. Its level signals that the proportion of respondents who expect inflation to stay the same or increase over the next 12 months is still higher and slightly rising.

The analysts estimate that the Czech economy will show growth of just under 3% this year (see Table II.4.4). According to the survey results, GDP growth continues to be driven most of all by household consumption and corporate investment. According to the respondents, increased interest rates, labour and production capacity shortages, weakening external demand and slack in drawdown of EU funds are preventing higher growth. However, the currently strong corporate investment is expected to lead to higher potential output and hence create favourable conditions for faster growth of the domestic economy

TABLE II.4.4

EXPECTED INDICATORS OF FMIE, CF AND CORPORATIONS

The analysts' inflation expectations are close to the CNB's 2% target at both the one-year and three-year horizons; the analysts believe that the economy will grow at a pace of just under 3%

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

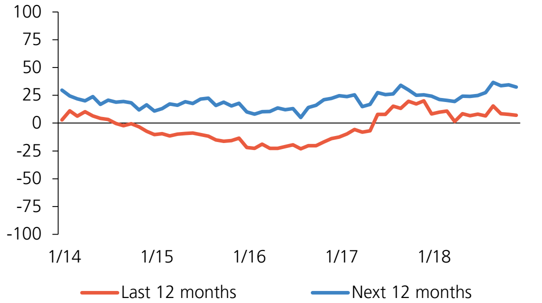
	9/18	10/18	11/18	12/18	1/19
FMIE:					
CPI	2.1	2.1	2.2	2.2	2.1
CPI, 3Y horizon	2.0	2.0	2.0	2.0	2.0
Real GDP in 2018	3.1	3.1	3.0	2.9	
Real GDP in 2019	2.9	3.0	2.9	2.8	2.7
Nominal wages in 2018	8.2	8.3	8.4	8.3	
Nominal wages in 2019	6.3	6.4	6.5	6.7	6.8
CZK/EUR exchange rate (level)	24.8	24.9	25.1	25.1	25.1
2W repo rate (in per cent)	2.2	2.3	2.3	2.3	2.3
1Y PRIBOR (in per cent)	2.5	2.6	2.7	2.7	2.6
Corporations:					
CPI	2.2			2.2	
CPI, 3Y horizon	2.8			2.8	
CF:					
Real GDP in 2018	3.2	3.1	3.0	2.9	
Real GDP in 2019	3.0	3.0	3.0	2.9	2.8
Nominal wages in 2018	8.1	8.3	8.4	8.3	
Nominal wages in 2019	6.5	6.5	6.6	6.7	6.8
CZK/EUR exchange rate (level)	25.1	25.1	25.1	25.3	25.2
3M PRIBOR (in per cent)	2.2	2.3	2.4	2.5	2.5

CHART II.4.2

PERCEIVED AND EXPECTED INFLATION

The indicators of perceived and expected inflation were little changed

(balance of answers; source: European Commission Business and Consumer Survey)



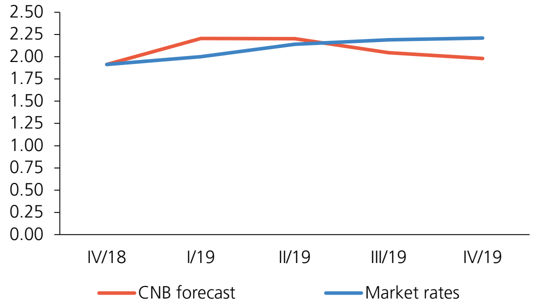
in the coming years. Although the labour market conditions are still assessed as tight, nominal wage growth is expected to slow this year. The analysts on average forecast the koruna to appreciate to CZK 25 to the euro at the one-year horizon. Potential global risks (trade wars, Brexit and public finance vulnerability in some EU countries) may in their view undermine interest in regional currencies and thus prevent faster appreciation. These uncertainties are also reflected in the expected range between the maximum and minimum values of the koruna.[16] Most of the analysts in the January FMIE survey were expecting the CNB Bank Board to raise key interest rates by 0.25 percentage point at the February meeting, while a minority were expecting them to be left unchanged.[17] Their average estimate of the 2W repo rate at the one-year horizon was 2.3%.

CHART II.4.3

FRA RATES VERSUS THE CNB FORECAST

The market outlook for interest rates is gradually rising; at the one-year horizon it is only slightly above the rates contained in the CNB forecast

(percentages)



Note: Market rates represent for 2018 Q4 and 2019 Q1 the 3M PRIBOR and for 2019 Q2–2019 Q4 the average values of the FRA 3*6, 6*9 and 9*12 rates for the last 10 trading days as of 25 January 2019.

Compared to the CNB, the analysts expect slightly lower GDP growth and almost the same inflation, but with a different monetary conditions structure. The exchange rate at the one-year horizon is distinctly weaker on average in the analysts' predictions than in the CNB forecast, while the interest rate forecast is slightly higher. The analysts' wage expectations are broadly in line with the CNB forecast.

The current market outlook for 3M rates implies a gradual increase over the one-year horizon. Consistent with the forecast is broad interest rate stability. The market outlook is thus slightly lower at first and slightly higher at the one-year horizon (see Chart II.4.3).

16 The range is CZK 24.1–26.0 to the euro in the January FMIE survey and CZK 24.5–26.3 to the euro in the CF survey.

17 The cut-off date for this survey was 15 January. Most respondents in the subsequent polls released by news agencies just before the Bank Board meeting, i.e. in early February, were expecting the CNB's key rates to be left unchanged.

III. CURRENT ECONOMIC DEVELOPMENTS

III.1 PRICE DEVELOPMENTS

Observed inflation differed little from the summer 2017 forecast, a retrospective assessment of which is relevant for evaluating the current fulfilment of the inflation target. With the benefit of hindsight, the CNB's monetary policy in the past period can be assessed as having been appropriate. Inflation declined to 2.1% on average in 2018 Q4. The price growth was driven mainly by core inflation, which, moreover, increased gradually. By contrast, the positive contribution of food prices disappeared almost entirely. Together with gradually fading fuel price inflation and a slight slowdown in administered price inflation, this contributed to the decline in headline inflation. Core inflation was driven solely by non-tradables prices, pointing to still strong domestic demand amid rising wage costs. On the property market, growth in asking prices dropped below 10% and converged towards the rate of growth of transaction prices. A weaker koruna coupled with peaking foreign industrial producer price inflation led to a further pick-up in import price inflation last autumn. However, the fall in global oil prices started to be reflected in a marked decrease in industrial producer price inflation at the very end of last year. Agricultural producer price inflation recovered on the back of higher growth in crop product prices. In an environment of increasing demand and wages, construction work prices also recorded a substantial upswing. Growth in prices of services for the business sector remains more modest.

III.1.1 Fulfilment of the inflation target

In 2018 Q4, inflation was slightly above the level projected in the forecast published in IR III/2017[18] and just above the CNB's target (see Chart III.1.1). The forecast had expected inflation to stay in the upper half of the tolerance band around the CNB's 2% target and to return to the target in early 2018. Inflation had been expected to be just below the target over the monetary policy horizon. The growing domestic economy had been expected to foster higher costs and hence higher consumer prices, mainly via rising wage growth. Conversely, import prices had been expected to have an anti-inflationary effect due to subdued growth in foreign producer prices coupled with expected appreciation of the koruna.

Inflation was close to, or slightly above, the forecast during the period under review. The gap between actual inflation and the forecast

18 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 it is appropriate to analyse retrospectively the forecasts and the Bank Board's decisions based thereon in the past. To assess the fulfilment of the target in 2018 Q4, we have to examine – in view of the monetary policy transmission lag – the period from April to December 2017 (the "reference period"). For the sake of clarity, the analysis of the fulfilment of the forecasts in this section is limited to a comparison of Inflation Report III/2017 with subsequent inflation.

CHART III.1.1

FORECAST VERSUS ACTUAL HEADLINE INFLATION

Actual inflation was close to, or slightly above, the forecast
(year on year in %)

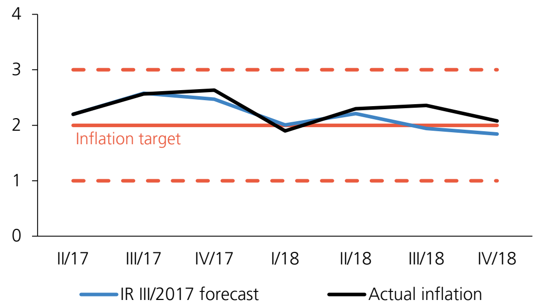


TABLE III.1.1

FULFILMENT OF THE INFLATION FORECAST

Actual inflation was slightly above the forecast in Q4; the deviations of the individual components partly offset each other
(annual percentage changes, contributions in percentage points)

	IR III/2017 forecast	2018 Q4 outturn	Contribution to total difference
CONSUMER PRICES	1.8	2.1	0.3
of which:			
administered prices	1.2	1.7	0.1
first-round impacts of changes to indirect taxes[a)]	0.1	0.1	0.0
core inflation[b)]	2.0	2.4	0.3
food prices[b)]	1.9	0.4	-0.4
fuel prices[b)]	-0.6	9.5	0.3

a) impact on headline inflation except administered prices
b) excluding the first-round effects of changes to indirect taxes

TABLE III.1.2

FULFILMENT OF THE EXTERNAL ASSUMPTIONS

External economic activity rose more strongly than forecasted; the oil price was also higher, which resulted in higher producer price inflation
(annual percentage changes unless otherwise indicated; p – prediction, o – outturn)

		III/17	IV/17	I/18	II/18	III/18	IV/18
GDP in euro area[a), b), c)]	p	2.2	2.2	2.1	2.0	2.0	2.0
	o	2.8	2.9	2.5	2.4	1.8	-
PPI in euro area[b), c)]	p	3.1	2.2	0.5	1.3	1.6	1.9
	o	2.4	2.4	1.8	2.9	4.2	-
3M EURIBOR	p	-0.3	-0.3	-0.3	-0.2	-0.2	-0.1
(percentages)	o	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
USD/EUR exchange rate	p	1.13	1.12	1.13	1.12	1.12	1.12
(levels)	o	1.18	1.18	1.23	1.19	1.16	1.14
Brent crude oil price	p	47.3	48.2	48.9	49.6	50.1	50.5
(USD/barrel)	o	52.2	61.5	67.2	75.0	75.8	68.6

a) at constant prices
b) seasonally adjusted
c) IR III/2017 outlook for effective indicator

TABLE III.1.3

FULFILMENT OF THE FORECAST FOR KEY VARIABLES

The monetary conditions were easier in the exchange rate component and tighter in the interest rate component
(p – prediction, o – outturn)

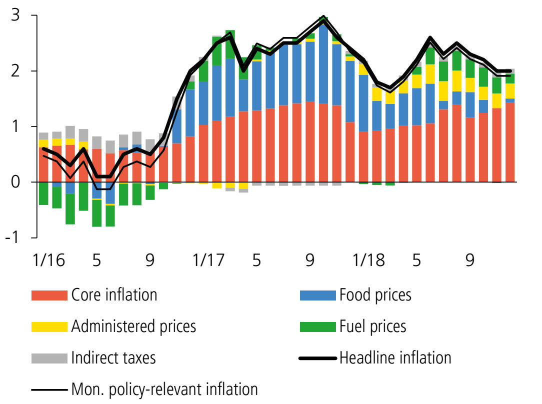
		III/17	IV/17	I/18	II/18	III/18	IV/18
Consumer price index	p	2.6	2.5	2.0	2.2	1.9	1.8
(annual perc. changes)	o	2.6	2.6	1.9	2.3	2.4	2.1
3M PRIBOR	p	0.6	0.6	0.6	0.6	0.7	1.0
(percentages)	o	0.4	0.7	0.9	0.9	1.4	1.9
CZK/EUR exchange rate	p	26.0	25.3	25.0	24.9	24.9	24.9
(levels)	o	26.1	25.7	25.4	25.6	25.7	25.9
Real GDP[a)]	p	3.8	4.0	3.2	2.8	3.3	3.5
(annual perc. changes)	o	5.2	5.0	4.1	2.4	2.4	-
Nominal wages[b)]	p	6.4	6.9	6.8	6.3	6.2	5.8
(annual perc. changes)	o	6.0	6.8	7.9	8.1	7.8	-

a) seasonally adjusted
b) in market sectors

CHART III.1.2

STRUCTURE OF INFLATION

Inflation decreased to 2% in Q4; an increase in the contribution of core inflation was outweighed by a decline in the contribution of food and fuel prices
(annual percentage changes; contributions in percentage points)



Note: Food prices also include prices of alcoholic beverages and tobacco. Indirect taxes relate to non-administered prices.

in 2018 Q4 was 0.3 percentage point (see Table III.1.1). Deviations from the forecast were recorded for all consumer basket items (except for the effects of changes to indirect taxes). The higher-than-expected inflation at the end of 2018 was due to unexpectedly high year-on-year growth in fuel prices. Core inflation and growth in administered prices, in particular electricity prices, were also above the forecast. Food price inflation had the opposite effect.

Turning to external factors, stronger external demand was initially a major deviation from the forecast. Together with a much higher Brent crude oil price, it was gradually reflected in faster-than-forecasted growth in producer prices in the effective euro area. This was the case even though the observed growth in foreign prices was dampened by the exchange rate of the euro against the dollar, which was much stronger than forecasted for most of the period under review despite still very accommodative ECB monetary policy. In addition, the forecast that foreign interest rates would remain at negative levels[19] materialised almost fully (see Table III.1.2). Overall, according to the assessment based on the CNB's core prediction model, the effect of external developments on domestic inflation was slightly inflationary and also fostered slightly greater appreciation of the koruna and somewhat higher domestic interest rates.

Domestic economic activity and wages fostered higher-than-forecasted inflation. The higher GDP growth in 2017 H2 and 2018 Q1 was associated mainly with sizeable growth in private investment and a recovery in the positive contribution of net exports due to higher external demand. More robust growth in household consumption also fostered stronger domestic economic activity. Conversely, domestic economic growth was slowed in 2018 by one-off falls in growth in inventories and net exports. Growing labour shortages led to much faster wage growth than expected.

The structure of the monetary conditions deviated partially from the forecast over time. The exchange rate initially appreciated more gradually than forecasted and even weakened unexpectedly in spring 2018 as a result of global factors. Monetary policy responded with an earlier and faster increase in interest rates than forecasted (see Table III.1.3). The monetary conditions were thus easier than expected in the exchange rate component at the end of the period under review, whereas the interest rate component was shifted towards a neutral stance more quickly than forecasted.

The monetary policy pursued by the CNB between April and December 2017 can be assessed as appropriate. In addition to the forecast, an assessment of the risks associated with the forecast is

19 The observed 3M EURIBOR market rates do not fully reflect the introduction of the ECB's unconventional measures. These measures are captured in the forecast by shadow rates, which were more negative.

important for the Bank Board's decisions on monetary policy settings. In the period under review, the Bank Board assessed the risks to the forecasts largely as being skewed in a mildly inflationary direction. Observed inflation was just above the CNB's 2% inflation target in 2018 Q4. With the benefit of hindsight, therefore, monetary policy can be assessed as having been appropriate in the said period.

III.1.2 Consumer prices and property prices

Consumer price inflation dropped to 2% in Q4. Core inflation maintained the largest contribution, while the previous food price increase virtually disappeared (see Chart III.1.2). Strong consumer demand and rapid wage growth brought about a rise in core inflation, whose contribution to headline inflation gradually increased in Q4. Food prices were affected by the previous decline in agricultural commodity prices and by the volatile prices of some food items of the consumer basket. Fuel price inflation fell sharply in response to the fall in oil prices. Conversely, administered price inflation gradually increased. Monetary policy-relevant inflation was around 0.1 percentage point lower than headline inflation.[20]

The growth in core inflation was driven by a rising contribution of non-tradables prices (see Chart III.1.3). In this category, prices of imputed rents saw a further significant rise compared to September 2018. However, prices in restaurants and cafés, recreational and cultural services and other services also recorded faster growth. The observed rapid growth in non-tradables prices is due to strong consumer demand, which has been bolstered by strong wage growth some time now. The decline in tradables prices initially deepened slightly in Q4, but these prices increased somewhat in December.

Growth in food prices virtually halted at the end of 2018 (see Chart III.1.4). This was due mainly to fruit prices, which switched from previously solid growth to a double-digit decline in December. Prices of milk, cheese and eggs and also wine recorded similar, albeit less pronounced, changes in trend. Prices of sugar continued to decline steadily due to the previous abolition of milk production quotas in the EU, which led to an excess of this commodity on global markets. On the other hand, a slowdown of the previous decline in prices of bakery products, together with continued growth in prices of spirits, tobacco, beer and especially vegetables, fostered an increase in food price inflation.

Administered price inflation was again significantly dampened by fare discounts in Q4 (see Chart III.1.4). The discounts apply to bus and train fares for students and senior citizens and were introduced by the government in September 2018. Administered prices in transport thus

20 The tax impact is due to rises in excise duty on cigarettes and tobacco in January 2018.

CHART III.1.3

CORE INFLATION

The increase in core inflation was driven mostly by faster growth in non-tradables prices; tradables prices remained broadly flat in year-on-year terms at the end of last year
(annual percentage changes)

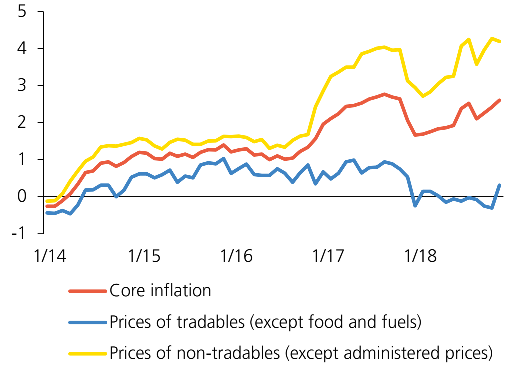


CHART III.1.4

FOOD PRICES, ADMINISTERED PRICES AND FUEL PRICES

Following a previous rapid increase, fuel prices saw a sharp fall in growth at the year-end; growth in food prices halted, while administered price inflation was practically unchanged
(annual percentage changes)

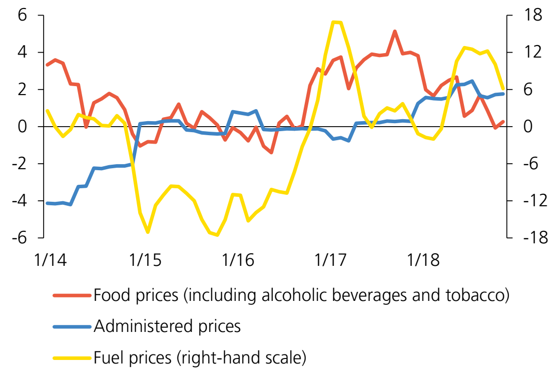


CHART III.1.5

TRANSACTION AND ASKING PRICES OF HOUSING

Growth in both asking and transaction prices fluctuated around 9% in Q3
(annual percentage changes)

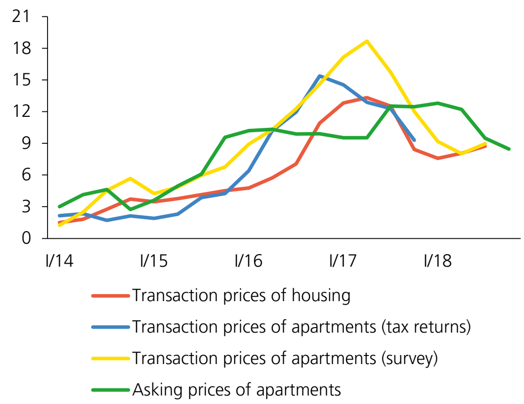


CHART III.1.6

THE EXPERIMENTAL CPIH PRICE INDEX

Growth in the CPIH index rose to a similar extent as consumer price inflation in 2018 Q3
(annual percentage changes)

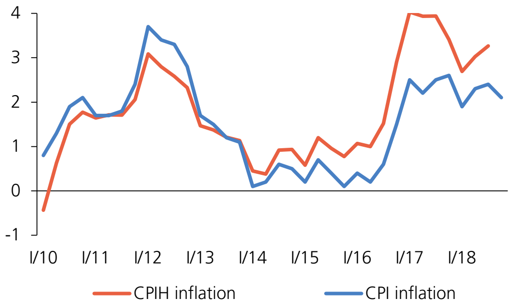
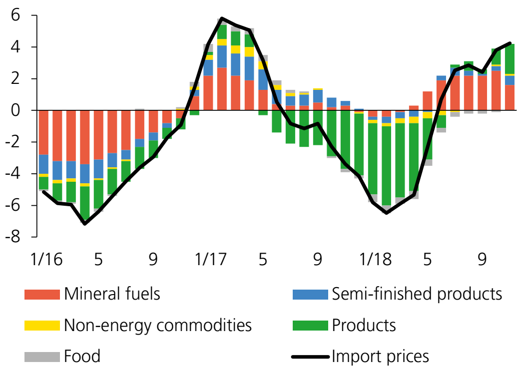


CHART III.1.7

IMPORT PRICES

An increase in the contribution of product prices had a dominant upward effect on import price inflation
(annual percentage changes; contributions in percentage points)

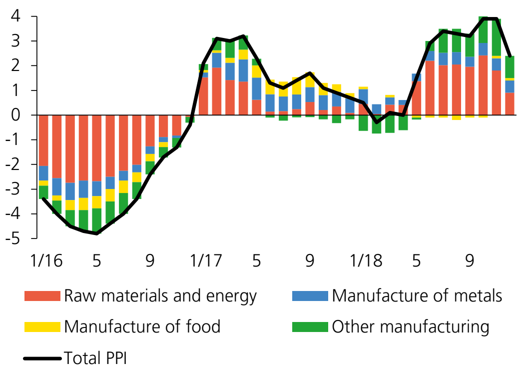


Note: Food also includes beverages and tobacco.

CHART III.1.8

INDUSTRIAL PRODUCER PRICES

Industrial producer prices slowed sharply at the end of last year due to rapid disappearance of the contribution of raw materials and energy
(annual percentage changes; contributions in percentage points)



dropped by more than 7% year on year in Q4. Still declining retail gas prices also had an anti-inflationary effect. Conversely, prices of heat started to go up gradually after previously stagnating. Growth of around 5% in prices of electricity and administered items in health care also fostered higher administered prices. Overall, administered prices rose by 1.8% in December.

The sharp change in oil price growth was quickly reflected in fuel prices (see Chart III.1.4). Fuel prices responded with only a small lag to the sharp slowdown in year-on-year oil price growth recorded on global markets in November and the subsequent year-on-year decrease in oil prices seen in December. The previous double-digit growth in fuel prices slowed to 6.1% in December amid depreciation of the koruna against the dollar of almost 5%.

The recent strong growth in property asking prices slowed gradually in the course of last year and converged towards the growth of transaction prices (see Chart III.1.5). Apartment prices rose by around 9% year on year on average in Q3. The growth in prices was even across the regions under review in the case of asking prices but mixed in the case of transaction prices. Growth in transaction prices of older apartments was much slower in Prague than outside the capital. New apartments in Prague were being sold at much higher prices than in the previous year, recording growth of more than 16% year on year in Q3.

Year-on-year growth in the experimental CPIH index rose in line with consumer price inflation in 2018 Q3. The alternative CPIH index, consisting of prices of both new and older property as well as land (see Box 1 in IR III/2017), recorded an upswing in growth to 3.3% last summer (see Chart III.1.6). Growth in the CPIH index was almost 1 percentage point higher than CPI inflation in Q3.

III.1.3 Import prices and producer prices

Import price inflation picked up further last autumn due to rapid growth in producer prices in the effective euro area (see Chart III.1.7). However, faster growth in import prices was also fostered by the disappearance of the anti-inflationary effect of the koruna's exchange rate. Import prices of chemicals rose particularly briskly, but prices of machinery and transport equipment also contributed to the increase in import prices. This led to a rise in the contribution of prices of imported products. The contribution of prices of semi-finished products increased modestly. Conversely, the previously strong contribution of commodities and energy started to decline rapidly at the year-end.

Industrial producer price inflation responded mainly to movements in commodity and energy prices in Q4 (see Chart III.1.8). Like import prices, producer prices were affected by the previous surge in oil prices and growth in producer prices abroad. However, the rise in energy commodity prices also pushed up prices in related areas of industrial production (manufacture of chemical products and rubber and plastic products). Prices of electronic and optical equipment grew faster due mainly to exchange rate movements. Prices of transport equipment also rose for the first time in more than three years. However, the previously strong year-on-year growth in global oil prices switched to a decline in December. This caused the contribution of commodities and energy to industrial producer price inflation, which fell significantly at the year-end, to disappear quite quickly.

Agricultural producer price inflation recovered on the back of higher growth in crop product prices (see Chart III.1.9). As in the case of import prices, growth in these prices was affected at the year-end by the depreciation of the koruna. The upswing in crop product prices was due to faster growth in grain prices and renewed growth in oilseed prices. This was linked with a lower domestic harvest and especially with a decline in production by major global producers (Australia and Russia), which resulted in a decrease in global stocks. As for crop production, growth in vegetable prices also rose significantly further in year-on-year terms. Conversely, prices of most other items of crop production kept falling. Prices of most livestock products saw a persisting sharp decline caused by various factors. These included overproduction of milk in the EU following the abolition of production quotas and lower demand for exports of milk and pork to China.

Construction work prices rose substantially, while growth in prices of market services for businesses was more modest (see Chart III.1.10). Growth in construction work prices increased to slightly above 4%, its highest level since 2009. This reflected rising demand for construction output and fast growing prices of materials and products used in the construction industry. Turning to market services for businesses, insurance, employment placement services and postal and courier services recorded sizeable growth in prices. Conversely, prices of telecommunication services and storage and transport services kept falling.

CHART III.1.9

AGRICULTURAL PRODUCER PRICES

Agricultural producer price inflation recovered at the end of 2018 on the back of higher growth in crop product prices
(annual percentage changes)

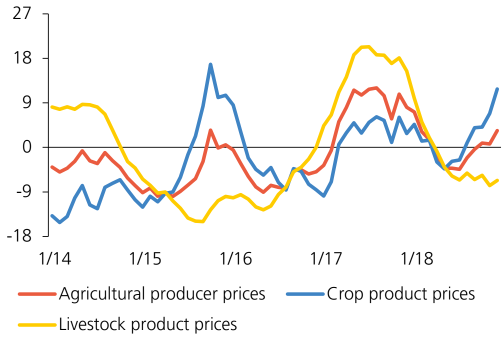
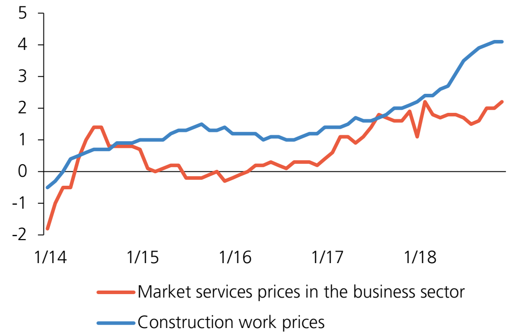


CHART III.1.10

MARKET SERVICES PRICES IN THE BUSINESS SECTOR AND CONSTRUCTION WORK PRICES

The buoyant growth in construction work prices rose slightly further, while growth in prices of market services remains more modest
(annual percentage changes)



III.2 ECONOMIC DEVELOPMENTS

The positive output gap of the Czech economy is gradually closing. GDP growth stayed at 2.4% in 2018 Q3. Households' consumption continued to increase robustly, reflecting strong growth in their income and still optimistic expectations. Economic activity was also supported by brisk growth in private and government investment. Government consumption contributed significantly, too. Conversely, a negative contribution of net exports, linked partly with one-off factors, fostered slower GDP growth. As regards the creation of value added, the contribution of manufacturing decreased. This was offset, however, by an increase in output in the energy sector and services. Still positive business sentiment and solid growth in monthly production and sales indicators are signalling continued stable economic growth at the end of 2018.

III.2.1 The cyclical position of the economy

The positive output gap of the Czech economy is gradually closing. According to the small structural model, it was close to 1% in 2018 Q3 (see Chart III.2.1). This is consistent with the slower GDP growth last year coupled with the still tight situation on the Czech labour market. Rising demand in the wake of the crisis resulted in the output gap gradually opening into positive figures. Accommodative monetary policy and, in 2015, the one-off effect of absorption of EU funds also contributed to this trend. In 2016, a negative fiscal impulse conversely resulted in the economy temporarily nearing its potential output level from above. However, this effect faded out in 2017 and the positive output gap opened up again. The output gap will gradually close over the forecast horizon in response to tighter monetary conditions and gradually slowing external demand, while the fiscal impulse will remain positive until the end of this year. An alternative estimate using the production function, which does not take the inflation rate and the effect of monetary policy directly into account, conversely indicates that the economy will be close to its potential over the entire forecast horizon.

Estimated potential output growth stood close to 4% in the second half of last year. It accelerated gradually to this level in previous years after the repercussions of the economic crisis subsided and pronounced growth in economic activity resumed amid muted inflation pressures (see Chart III.2.2). According to both methods, potential output growth will return to 3% at the forecast horizon. As regards the factors entering the production function, the labour market has improved in recent years, with a rising participation rate causing faster growth in equilibrium employment. Investment by non-financial corporations has also seen renewed growth, although total fixed investment has been volatile due to the EU funding cycle. Growth in the capital stock will continue to have a positive effect, fostering growth in labour productivity.

CHART III.2.1

OUTPUT GAP

According to the small structural model, the previously very positive output gap will gradually close further; according to the production function, the economy will be close to its potential over the entire forecast horizon
(% of potential output)

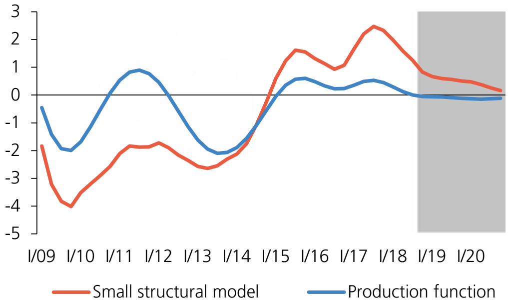
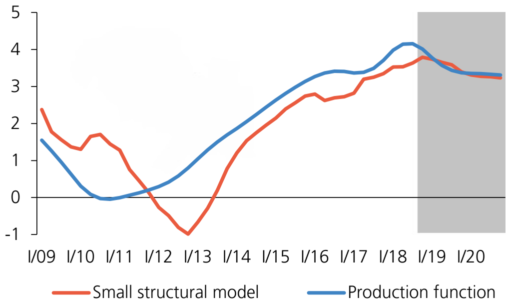


CHART III.2.2

POTENTIAL OUTPUT

Potential output growth rose gradually until Q3 and will later slow to 3%
(annual percentage changes)



III.2.2 The expenditure side of the economy

GDP growth stayed at 2.4% in 2018 Q3 (see Chart III.2.3). Household consumption growth remained robust, but its contribution to GDP growth dropped slightly compared to 2017. Growth was also dampened by an increase in the negative contribution of net exports, which resulted from renewed import growth amid still subdued export growth. While fixed investment continued to grow apace, additions to inventories decreased. Conversely, the contribution of government consumption increased sharply.

Despite a slight slowdown, household consumption growth remains solid in all segments. Expenditure on short-term consumption and services rose the most. Spending on semi-durable and durable goods also made a positive contribution to total growth.

Growth in household consumption continued to lag behind the strong growth in gross disposable income. The latter continued to be supported most strongly by rapid growth in wages and salaries, the contribution of which, however, declined slightly in Q3 (see Chart III.2.4). Conversely, the contribution of entrepreneurs' income recorded a small increase.

Consumer confidence dropped somewhat in 2018 Q4 but remains high from the long-term perspective. Its modest decrease at the end of 2018 was due mainly to a worse outlook for the overall economic situation (see Chart III.2.5). Despite that, Czech households expect their financial situation to remain good and the unemployment rate to stay low. This is reflected in strong growth in retail sales, among other things. Given the currently dynamic growth in income, households' intention to save is increasing. The already observed slight increase in savings is linked with this.

Real government consumption growth and government investment growth both surged in Q3. The increase in government consumption in nominal terms was driven mainly by fast growing wages in the public sector. They, however, also led to higher growth in the government consumption deflator. Growth in non-wage expenditure also picked up within government consumption. Growth in public investment is rising at both the general and especially local government levels, aided by increasing drawdown of EU funds.

The growth in private investment was due mainly to investment by non-financial corporations (see Chart III.2.6). As regards the material breakdown, all components again contributed to the increase in fixed investment. In addition to investment in buildings and structures, investment in machinery and equipment and investment in transport equipment continued to rise. This reflects continued growth in domestic and external demand and firms' efforts to streamline production amid an exhausted labour market.

CHART III.2.3

GROSS DOMESTIC PRODUCT

Czech economic growth stabilised amid an increase in the contribution of final domestic demand and a deepening decline in net exports
(annual percentage changes; contributions in percentage points; seasonally adjusted)

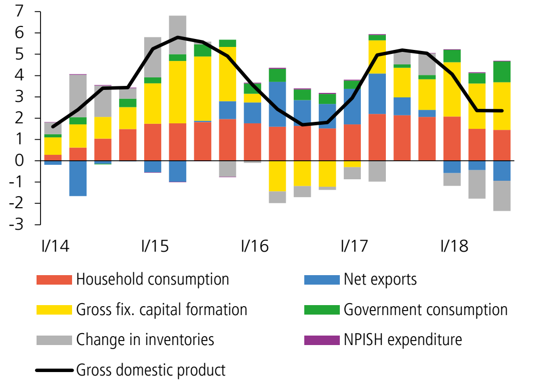
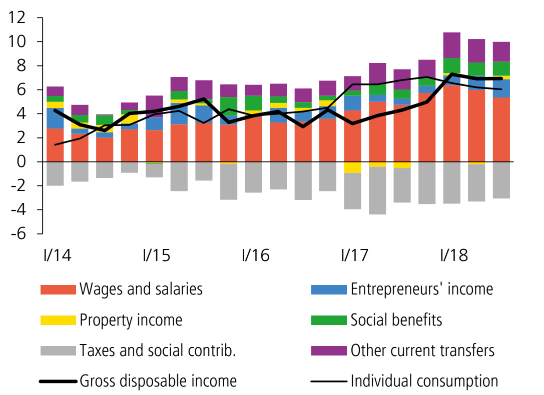


CHART III.2.4

DISPOSABLE INCOME

Disposable income continued to grow at a pace of around 7%; slightly slower growth in wages and salaries was offset by an increase in the contribution of income of entrepreneurs
(annual percentage changes; contributions in percentage points; current prices; seasonally unadjusted)

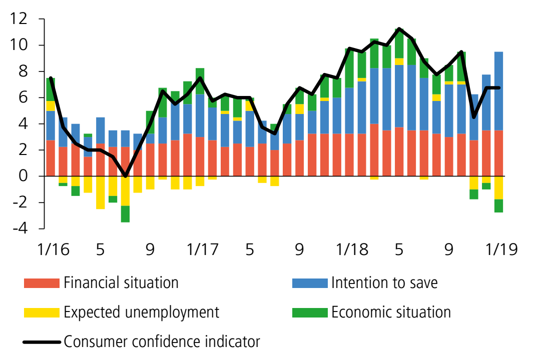


Note: Entrepreneurs' income comprises gross operating surplus and mixed income.

CHART III.2.5

CONSUMER CONFIDENCE BALANCE

Despite a decline, consumer confidence remains strong
(balance is difference in per cent between answers expressing improvement and deterioration in expected and ongoing tendencies)



Note: Expectations 12 months ahead.

Chart III.2.6

INVESTMENT BY SECTOR

Growth in investment by non-financial corporations and households slowed slightly, while government investment picked up significantly
(annual percentage changes; contributions in percentage points; constant prices; seasonally adjusted)

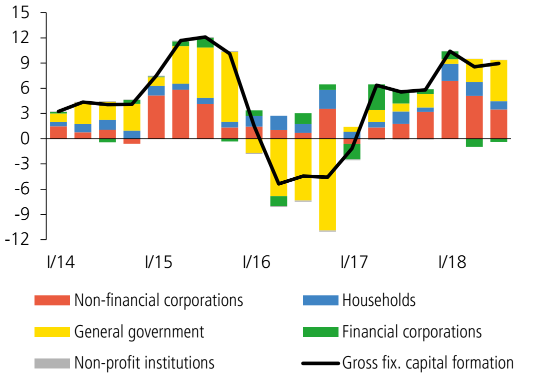
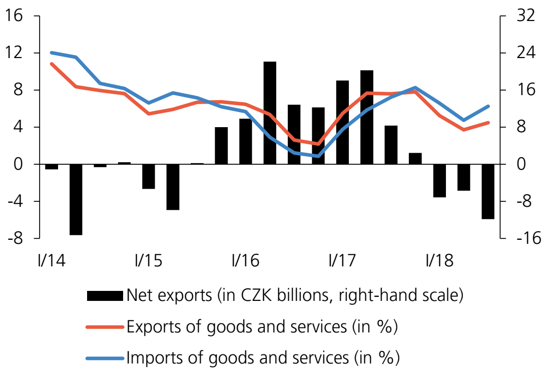


Chart III.2.7

EXPORTS AND IMPORTS

Export growth stayed below import growth and net exports thus continued to decrease year on year
(annual changes in per cent and CZK billions; constant prices; seasonally adjusted)



Despite a slight slowdown in Q3, growth in household investment remains strong. This is reflected in the material structure of fixed capital formation, where investment in dwellings makes a significant growth contribution. A positive signal on the property supply side is continued brisk growth in the number of apartment starts and completions. Conversely, household demand for housing is beginning to be dampened somewhat by tighter conditions applying to mortgage lending.

The contribution of additions to inventories to GDP growth remained very negative. It has been negative since early 2018, when the large stock of inventories built up in the past probably started to be released. This is going on in a situation of high production capacity utilisation and still strong demand.

The year-on-year decline in net exports deepened further due to changes in the services balance (see Chart III.2.7). Despite picking up slightly in 2018 Q3, growth in exports of goods and services remained subdued. This was due mainly to slower growth in external demand and production capacity constraints. These factors were joined in Q3 by the effect of the introduction of new emission regulations for manufactured cars, and exports of motor vehicles thus continued to record a modest year-on-year decline. The continued growth in exports was again driven mainly by machinery and electrical engineering products. Pronounced growth in imports of goods and services was fostered by the strong domestic demand combined with the muted growth in exports. In addition, imports of services recorded a one-off increase in Q3. The above factors together resulted in an increase in the negative contribution of net exports to GDP growth. Given the approaching Brexit date, BOX – summarising trade between the Czech Republic and the UK in recent years – has been prepared in addition to the sensitivity scenario in section II.4.

BOX The Czech Republic's trade relations with the UK in recent years

The UK Parliament's rejection of the Brexit deal in January prolonged the period of uncertainty. The future arrangement of relations between the EU and the UK was thus still unknown. Before the vote in the UK Parliament, the European Commission had called on the EU Member States to approve legislative exemptions that would enable some aspects of the status quo to be extended even in the event of a no-deal Brexit, thereby preventing immediate adverse effects. Nonetheless, the persisting period of uncertainty started by the outcome of the Brexit referendum in mid-2016 is affecting the entire European economy. The unending period of uncertainty is naturally having a creeping negative effect on the sentiment, consumer behaviour and investment activity of UK entities and hence on UK economic growth.

A disorderly Brexit would also be a strong negative economic shock to growth in the EU, including the Czech Republic.[21] This box aims to show in this context how direct trade relations between the Czech Republic and the UK have evolved in recent years.

The UK is currently the fifth-largest trading partner for Czech exporters. However, the UK's share in total Czech exports has shrunk compared to 2015 and amounted to 4.5% in 2018.[22] Imports from the UK meanwhile accounted for just 1.8% of total Czech goods imports. Trade relations between the Czech Republic and the UK are thus very asymmetrical. This is also evidenced by the goods surplus (see Chart 1). It was increasing until the end of 2015 but has been broadly flat since the start of 2016. A similar trend applies to the services surplus, which amounted to CZK 7.8 billion in 2018,[23] due mostly to the transport sub-item.

Goods exports to the UK have seen virtually no change in structure in recent years. In 2018, machinery and transport equipment were the most important item of both exports and imports. They made up 70% of total goods exports to the UK, with passenger cars accounting for almost one-third of that figure (CZK 45 billion in absolute terms). Machinery and transport equipment also recorded the largest surplus of all the trade categories (see Table 1); one-half of this surplus was due to a surplus for road vehicles. By contrast, chemicals recorded the widest deficit.

Mutual trade is being negatively affected by the uncertainty of UK firms and households about the future situation. This is being reflected in a downturn in demand for imports to the UK and a marked depreciation of sterling against other currencies, including the Czech koruna. The UK economy grew by 2.5% a year on average in 2013–2015, faster than Germany and the USA, but its growth has slowed to 1.6% on average in three recent years.[24] This is lower than in the said countries.

CHART 1 (BOX)

GOODS TRADE BETWEEN THE CZECH REPUBLIC AND THE UK

The Czech Republic's high trade surplus with the UK has been flat since 2016

(annual moving totals in CZK billions; under the national approach)

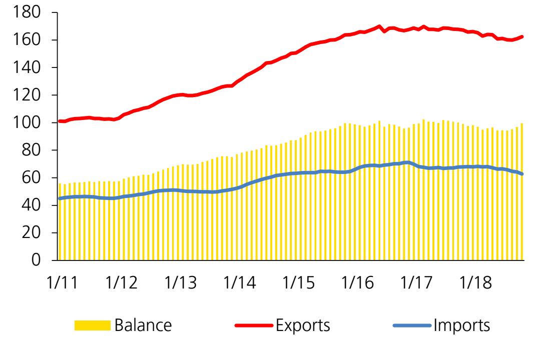


TABLE 1 (BOX)

STRUCTURE OF THE BALANCE OF GOODS BETWEEN THE CZECH REPUBLIC AND THE UK

The UK is a major target market for the Czech automotive industry

(cumulatively in CZK billions for the period 12/2017–11/2018; cross-border statistics)

SITC		Exports	Imports	Balance
0	Food and live animals	4.0	3.2	0.9
1	Beverages and tobacco	0.4	0.8	-0.4
2	Crude materials except fuels	0.8	0.8	0.0
3	Mineral fuels and lubricants	0.6	0.4	0.2
4	Animal and vegetable oils	0.0	0.1	-0.1
5	Chemicals	6.3	14.8	-8.4
6	Manufactured goods	23.8	11.2	12.6
7	Machinery and transport equipment	143.7	45.3	98.3
8	Miscellaneous manufactured articles	25.6	8.6	17.0
9	Commodities not classified	0.2	0.2	-0.1
	Total	205.4	85.5	120.0

III.2.3 The output side of the economy

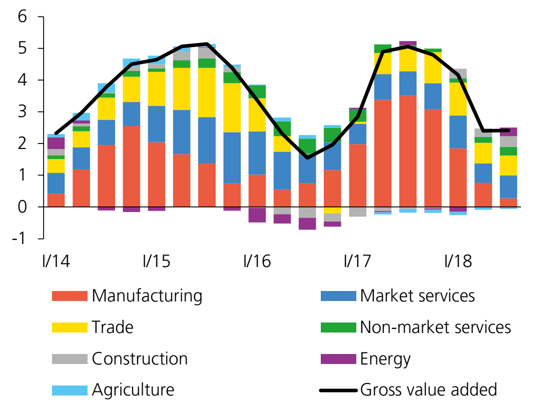
Growth in gross value added stabilised in 2018 Q3 despite a substantial drop in the contribution of manufacturing (see Chart III.2.8). The loss of the dominant position held by manufacturing continuously since the end of 2016 can be attributed to several factors. Besides weaker external demand and domestic production capacity

CHART III.2.8

CONTRIBUTIONS OF BRANCHES TO GVA GROWTH

Gross value added growth was flat despite a further drop in the contribution of manufacturing, while the contributions of the energy industry and services acted in the opposite direction

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



Note: Trade also includes hotels and restaurants and transport. Energy also includes mining and quarrying.

21 These impacts are examined in the disorderly Brexit sensitivity scenario in section II.4.
22 The calculation was performed using the moving total for the period from December 2017 to November 2018.
23 The calculation was performed using the moving total for the period from 2017 Q4 to 2018 Q3.
24 The growth estimate for 2018 was taken from the Economist Intelligence Unit.

CHART III.2.9

INDUSTRIAL PRODUCTION AND CONSTRUCTION OUTPUT

Growth in industrial production and particularly construction output accelerated in Q3, but the November data indicate a slowdown
(annual percentage changes)

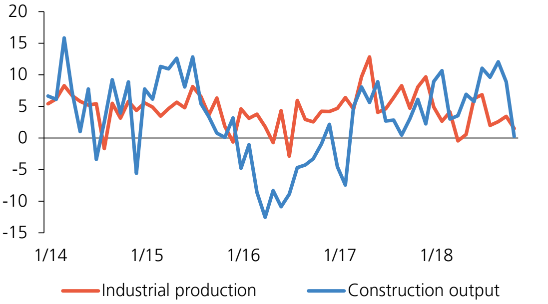


CHART III.2.10

BARRIERS TO GROWTH IN INDUSTRY

Labour shortages are still the main barrier to industrial production, while the effect of material shortages is increasing
(percentages)

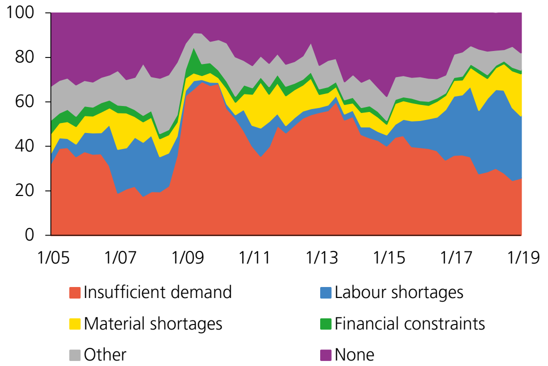
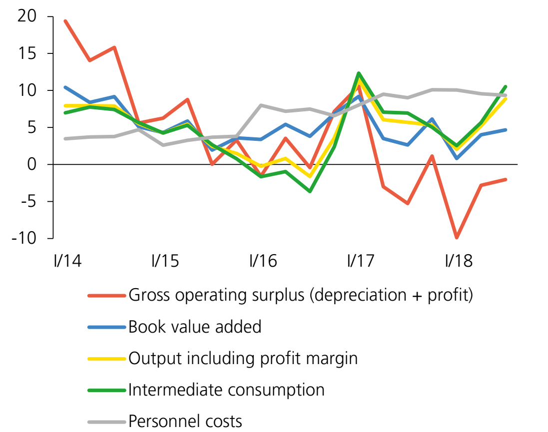


CHART III.2.11

KEY FINANCIAL INDICATORS

The decline in the gross operating surplus of non-financial corporations, which reflects constant rapid growth in personnel costs, is being moderated by rising output growth
(annual percentage changes)



constraints, they include the negative impacts of the introduction of environmental regulations in the automotive industry and base effects. However, the decrease in the contribution of manufacturing was offset by an increase in energy production and partly also by a rise in the contributions of construction and services. The contributions of other sectors were approximately flat.

Sales rose in both services and industry. Information and communication technology recorded the biggest increase. Transport and storage also kept rising at a brisk pace. Only real estate activities saw sales drop.

Industrial production rose by 3.8% in Q3, increasing across all segments (see Chart III.2.9). The energy industry recorded the fastest growth. The highest-weight category of manufacturing grew by 3.3%. The October and November data and an increasing number of new orders both indicate that the favourable trend will continue, albeit at a more moderate rate due to weakening external demand.

According to the January business survey, labour shortages are still the main barrier to growth of industrial corporations (see Chart III.2.10). Insufficient demand is a relatively small constraint from the long-term perspective due to the favourable overall economic situation and strong labour market. Businesses see material shortages as a gradually escalating problem. Capacity utilisation in industry remains just below 85%.

Construction output growth rose sharply in Q3, although the November data indicate a correction (see Chart III.2.9). The buoyant growth in construction output in the previous months was due to stronger growth in building and civil engineering. Output growth in the latter area was supported by government investment co-financed from EU funds. However, the latest monthly data, coupled with weaker growth in the value of new orders, suggest that year-on-year growth in construction output is probably slowing slightly.

Business sentiment in Q4 remained at a high level comparable with the end of 2017. Business confidence in wholesale and retail trade and industry, where businesses are facing production capacity constraints, decreased slightly compared to the previous quarter. However, this drop was more than offset by an improvement in sentiment in construction and services.

The gross operating surplus of non-financial corporations has mostly been falling since 2017, although the rate of decline has recently slowed (see Chart III.2.11). This was linked with a gradual increase in growth in book value added due to accelerating output growth coupled with slightly falling but still very high growth in personnel costs. The gross operating surplus was favourably affected by construction in 2018 Q3. By contrast, profitability in manufacturing firms decreased.

III.3 THE LABOUR MARKET

The Labour Utilisation Composite Index continues to indicate a very tight labour market situation overall, with some indicators now suggesting that it is nearing the peak of the current cycle. Employment growth moderated further and the unemployment rate remained close to historical lows. Firms are finding it increasingly difficult to fill vacancies, as the labour force is not growing sufficiently to meet demand for labour. This situation is exerting strong upward pressure on wages, bolstered by growth in the minimum wage in recent years. Average wage growth amounted to 8.5% in 2018 Q3. The strongest growth was recorded in non-market sectors, where wages increased by 12% year on year. Growth in whole-economy labour productivity went up moderately. At the same time, a slowdown in the wage bill fostered a modest decrease in growth in nominal unit labour costs. However, labour productivity growth still lags well behind wage growth overall.

III.3.1 Employment and unemployment

The continued growth in economic activity is maintaining the tightness in the labour market (see Chart III.3.1). Employment growth fell to 0.8% in Q3 due to labour shortages. Only in services did employment continue to rise. In industry and construction, by contrast, it declined (see Chart III.3.2).[25] In industry, the decline in employment was driven mainly by manufacturing. However, other segments also acted in the same direction. Wholesale and retail trade, information and communication activities and accommodation were the biggest contributors in market services, while education made the largest contribution in non-market services. Growth in the labour force and a drop in the number of unemployed contributed in roughly equal measure to the increase in total employment across all sectors. The potential labour force reserve, consisting of persons who are not actively seeking a job but are willing to work, fell again.

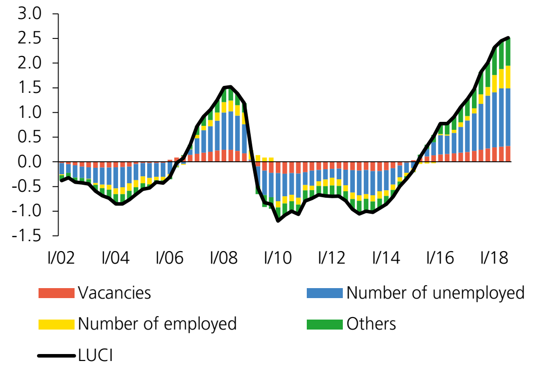
A slowdown in growth in the converted number of employees was partly dampened by increasing average hours worked per person employed (see Chart III.3.3). On the one hand, this reflected a modest decline in the upward trend in the number of part-time jobs. On the other, it was also due to cyclical upward pressure on average hours worked as a result of continued tightness in the labour market. Average hours worked lengthened mainly in industry. By contrast, most of the growth in the converted number of employees was due to the services sector, where the number of employees rose sharply amid

25 According to the CZSO, however, the figures for these sectors may have been affected by the methodology used in the Labour Force Survey (LFS). The survey only covers persons living in apartments; data on persons staying at accommodation facilities are not collected. However, these facilities often accommodate foreign nationals, who are employed mainly in the secondary sector. This is also indicated by the Business Statistics data and the national accounts, where industry accounts for more than one-third of the employment growth.

CHART III.3.1

LUCI – LABOUR UTILISATION COMPOSITE INDEX

The current labour market tightness markedly exceeds the peak of the previous cycle
(standard deviations from long-term average)



Note: The contributions are a result of the aggregation of the contributions of the individual time series in the given categories.

CHART III.3.2

EMPLOYMENT BREAKDOWN BY BRANCHES

The growth in employment in Q3 was due solely to the services sector; employment decreased in the other sectors
(contributions in percentage points to annual change; selected branches; source: LFS)

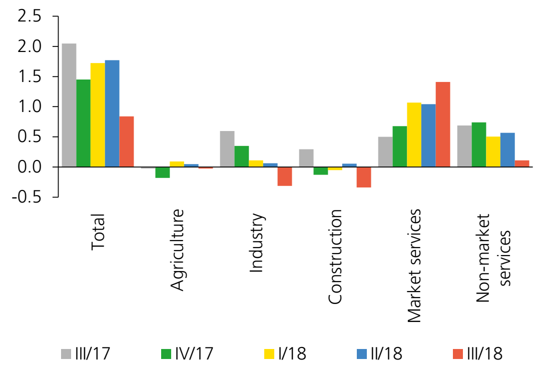


CHART III.3.3

NUMBER OF EMPLOYEES (FULL-TIME EQUIVALENT)

Growth in the number of employees slowed considerably in Q3, but average hours worked rose for the first time in a long time
(annual percentage changes; contributions in percentage points)

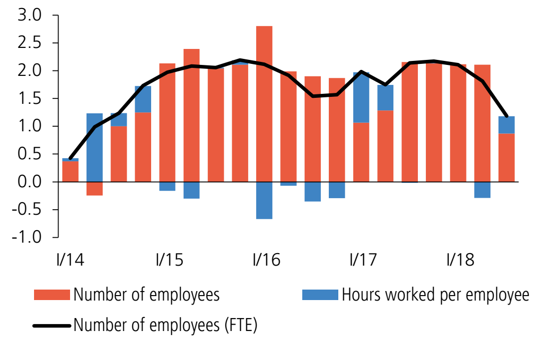


CHART III.3.4

UNEMPLOYMENT INDICATORS

The general unemployment rate remains close to its trough, while the share of unemployed persons has fallen slightly further
(percentages; seasonally adjusted; source: MLSA, CZSO)

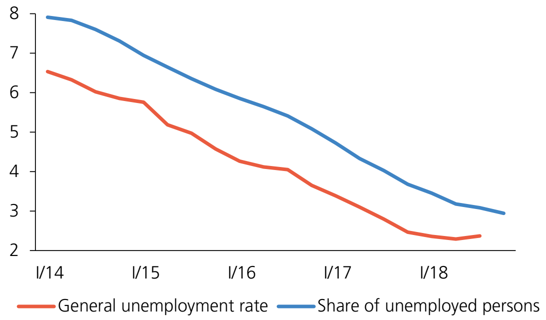


CHART III.3.5

BEVERIDGE CURVE

The number of vacancies is at a record high, while the number of unemployed is much lower by comparison
(numbers in thousands; seasonally adjusted; annual percentage changes for core inflation; source: MLSA, CZSO)

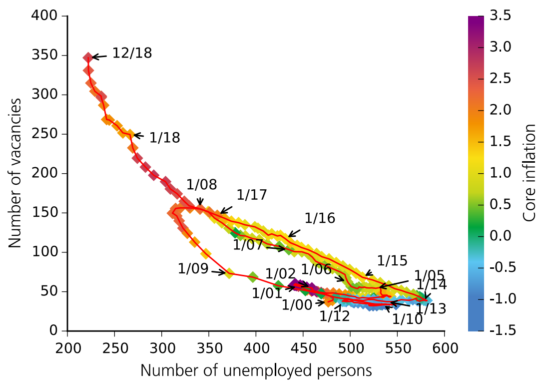
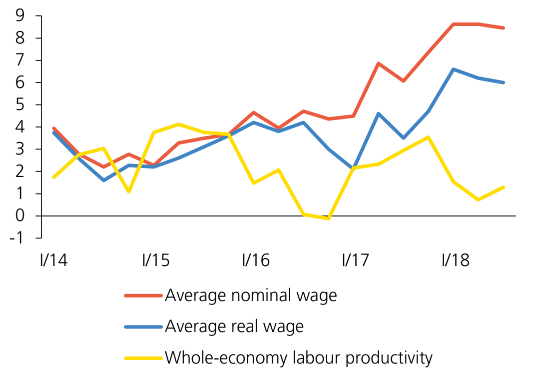


CHART III.3.6

AVERAGE WAGE AND WHOLE-ECONOMY LABOUR PRODUCTIVITY

Labour productivity growth is still lagging well behind wage growth
(annual percentage changes)



a slight fall in average working hours. The increase in the converted number of employees in market services was due mainly to wholesale and retail trade, while that in non-market services was due to education, public administration and health care.

The general unemployment rate remains close to its trough, and the share of unemployed persons even fell slightly further (see Chart III.3.4). The general unemployment rate remains the lowest in the EU. Its year-on-year drop is due mainly to a continued decline in the number of long-term unemployed, which accounted for more than half of the decrease in the number of unemployed persons in Q3. The labour market tightness is being partially eased by moderate growth in the number of economically active persons. This was reflected in the rate of economic activity, which reached a historical high of 77% in November. According to labour offices, the seasonally adjusted share of unemployed persons stayed at 2.9% in December after having declined in previous months. This reflected very weak growth in the number of available job applicants and in the population aged 15–64.

The number of vacancies rose again, while the number of unemployed stopped falling. The largest number of vacancies offered via labour offices was registered in manufacturing. There is also strong demand for new employees in wholesale and retail trade and in construction. In December, almost 60% of vacancies were for employees with basic education and another one-sixth were for employees with vocational training with a school leaving certificate. Viewed in terms of the Beveridge curve (see Chart III.3.5), the number of vacancies is currently at an all-time high and the number of unemployed persons at an all-time low, amid record-high employment and labour force levels. This is being reflected in marked wage growth, which is fostering further gradual growth in core inflation. Although the labour market situation is now much tighter than it was during the peak of the previous cycle in 2008, core inflation is at a comparable level.

III.3.2 Wages and productivity

Year-on-year wage growth remained high in 2018 Q3. Besides strong pressures on the labour market, an increase in the minimum wage from CZK 11,000 to CZK 12,200 at the start of 2018 also contributed to the rapid wage growth. Wages in non-market sectors increased at a particularly high year-on-year rate (12% in 2018 Q3). The average growth in market sectors was just under 8%. As regards professions, wages grew the fastest in education and public administration. Wage growth in culture and health care was only slightly lower. The median wage went up by 9.8% year on year in 2018 Q3, exceeding the growth in the average wage by more than 1 percentage point. Wage differentiation thus continues to decrease.

The slight upswing in labour productivity growth was due to a slowdown in employment growth. Amid stable economic growth, whole-economy labour productivity rose by 1.3% in Q3 and thus still lags well behind growth in the average real wage (6%; see Chart III.3.6). The productivity trends across sectors were mixed (see Chart III.3.7). The strongest growth was recorded in construction, although its rate of growth fell slightly. The rise in whole-economy productivity in 2018 Q3 was due mainly to services. Labour productivity in industry was broadly flat year on year.

Growth in nominal unit labour costs declined slightly due to growth in the wage bill slowing more than GDP growth. Nominal unit labour costs increased by 6.8% year on year (see Chart III.3.8). They rose the fastest in non-market services (by almost 11%). The growth in other sectors was significantly lower. In industry and market services, nominal unit labour costs grew by about 6%. The growth in construction was moderate due to strong growth in labour productivity.

CHART III.3.7

PRODUCTIVITY BY SECTOR

Labour productivity was broadly flat in industry and non-market services and grew only slightly in market services; only in construction did productivity continue to rise apace
(annual percentage changes)

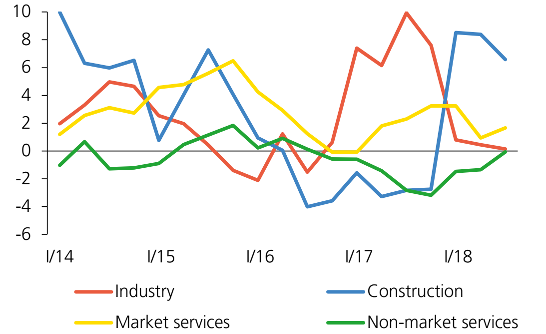
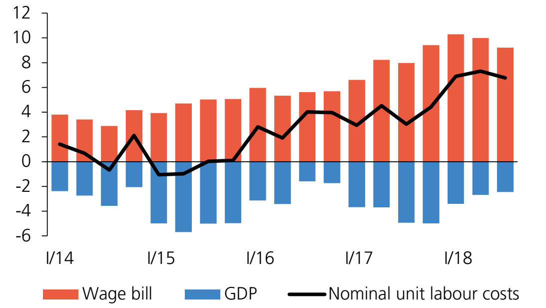


CHART III.3.8

UNIT LABOUR COSTS

A slowdown in the wage bill fostered a modest decrease in growth in nominal unit labour costs
(annual percentage changes; contributions in percentage points)



III.4 FINANCIAL AND MONETARY DEVELOPMENTS

The CNB raised monetary policy interest rates again in early November 2018. Money market rates responded to the rise. By contrast, interest rates with longer maturities fell considerably due to external factors. Client interest rates increased further. During Q4, the koruna initially depreciated and then conversely appreciated. Growth in loans to the private sector picked up slightly as a result of faster growth in loans to non-financial corporations amid a slight rise in growth in loans to households. M3 growth was slightly lower than credit growth.

III.4.1 Monetary policy and interest rates

After raising its monetary policy rates in November 2018, the CNB left them unchanged at its December and February meetings.[26] The November decision was the seventh increase in rates since the exit from the CNB's exchange rate commitment in early April 2017. Nominal interest rates thus continued to move gradually towards a long-run neutral stance.

Money market rates responded to the increase in the CNB's policy rates by rising further (see Chart III.4.1). The 3M PRIBOR was 1.9% on average in 2018 Q4 and has been very close to 2% since the start of November. The money market premium, as measured by the spread between the 3M PRIBOR and the 2W repo rate, thus remained close to 0.25 percentage point. FRA rates also moved higher at the start of the quarter. However, they have mostly declined since the end of November. The market thus responded to comments made by Bank Board members, according to whom the process of normalising the CNB's interest rates will continue, albeit at a slower pace than before. The end-January outlook for FRA rates implied expectations of only slight growth in the 3M PRIBOR over the one-year horizon.

Domestic interest rates with longer maturities reached local highs in mid-October and then fell sharply. Domestic rates mainly reflected external factors, which fostered a considerable drop in rates in the period under review. These factors included concerns about barriers to international trade, a slowdown in global growth and a related drop in demand for oil and a sharp fall in its price. The market also reacted to the approval of a Brexit deal by EU Member States and UK negotiators and the declaration of future arrangements between the EU and the UK, and subsequently to the rejection thereof in the UK Parliament in mid-January.[27] The compromise reached in the budget deficit negotiations in Italy also fostered lower rates. Overall, domestic IRS derivative rates have

CHART III.4.1

INTEREST RATES

Money market rates responded to the increase in the CNB's policy rates, while rates with longer maturities fell sharply
(percentages)

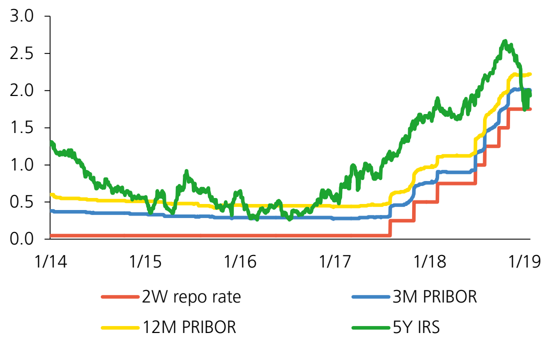
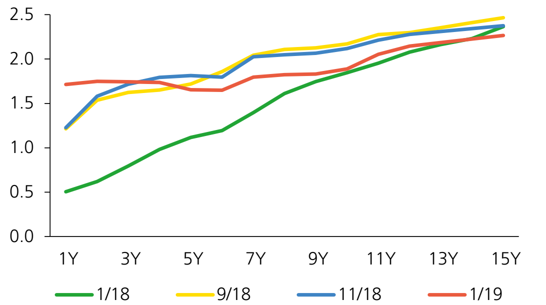


CHART III.4.2

GOVERNMENT BOND YIELD CURVE

The yield curve flattened out
(percentages)



26 The two-week repo rate was set at 1.75%, the Lombard rate at 2.75% and the discount rate at 0.75% with effect from 2 November 2018.

27 The protracted negotiations on the deal had a downward effect on rates. Financial markets interpreted the failure to approve the deal in the UK Parliament as a positive factor, as in their opinion it increased the likelihood of a softer Brexit or an extension of the March deadline.

fallen by 0.6 percentage point since the start of October 2018 (see Chart III.4.1). The drop in rates in the USA was of similar magnitude, while that in the euro area was somewhat smaller. Domestic government bond yields also moved lower, especially at medium and long maturities. The yield curve therefore flattened out distinctly (see Chart III.4.2).

The government's issuing activity on the primary government bond market decreased considerably at the end of last year.[28] This was due to a low government funding need given the slight state budget surplus.[29] All outstanding short-term T-bills issued during the year, in particular at its beginning, were repaid in December 2018. T-bills with negative yields maturing in early January were simultaneously issued at the end of December. Here, the Ministry of Finance took advantage of a temporary increase in investors' demand for financial market instruments connected with banks' contributions to the Resolution Fund. In 2018 Q4, government bonds with maturities of over one year were issued in much lower volumes than before. Demand in the auctions – even that from foreign investors – meanwhile remained high. Many of those who opened koruna positions while the CNB's exchange rate commitment was in place have probably adopted longer-term strategies and are trying to profit from the differential offering them a higher yield on koruna investments than on euro positions, for example. Non-residents' total holdings of government bonds have thus stabilised in recent months. They amounted to CZK 580 billion at the end of December; the share of non-residents in total government bond holdings was just over 40%. The sale of state saving bonds ("Republic Bonds") to the public was resumed after a several-year hiatus. These bonds have a six-year maturity and an average yield of 2.07%.

Interest rates on loans for house purchase increased further, whereas consumer credit was cheaper than in previous years. The rate on new mortgages was 2.8% in November. It was up by 1 percentage point compared with the end of 2016, when it had reached a historical low (see Table III.4.1). Banks raised mortgage rates further in response to the November increase in monetary policy rates. This is confirmed by the latest Fincentrum Hypoindex data, according to which the mortgage rate rose to 2.9% in December. The consumer credit rate fluctuated between 8% and 9% throughout 2018, close to a historical low.

The funding costs of non-financial corporations via bank loans increased last year. The average interest rate on corporate loans reached 3.1% in November. Rates on short-term loans recorded the highest growth. Total credit costs, as expressed by the cost of borrowing, rose gradually and were 1.5 percentage point higher than in the euro

28 T-bills totalling CZK 170 billion and government bonds with maturities of over one year totalling CZK 173 billion were issued in 2018 H1. The volumes issued between July and the end of 2018 were CZK 9 billion and CZK 77 billion respectively.
29 The state budget for 2018 was approved with a deficit of CZK 50 billion.

TABLE III.4.1

CLIENT INTEREST RATES ON LOANS AND DEPOSITS

The growth in the monetary policy rate is being reflected both in interest rates on corporate loans and house purchase loans for households and in time deposit rates
(interest rate in percentages in November 2018; change in percentage points)

	Interest rate	Change since 11/16	11/17
HOUSEHOLDS			
Mortgages	2.8	1.0	0.6
Mortgages with rate fixation 1–5 years	2.8	0.9	0.7
Mortgages with rate fixation 5–10 years	2.8	1.1	0.6
New mortgages	2.8	1.0	0.6
Refinanced mortgages	2.7	1.0	0.6
Consumer credit	8.6	-1.6	-0.2
Deposits			
Overnight deposits	0.1	0.0	0.0
New deposits with agreed maturity	1.3	0.2	0.7
NON-FINANCIAL CORPORATIONS			
Total new loans	3.1	1.3	0.9
Small loans (up to CZK 30 million)	3.6	1.2	0.9
Large loans (over CZK 30 million)	2.9	1.1	0.8
Total outstanding loans	3.5	1.0	0.8

CHART III.4.3

CLIENT INTEREST RATES IN THE CZECH REPUBLIC AND THE EURO AREA

The differences between client interest rates in the Czech Republic and the euro area are growing markedly
(cost of borrowing indicators; percentages)

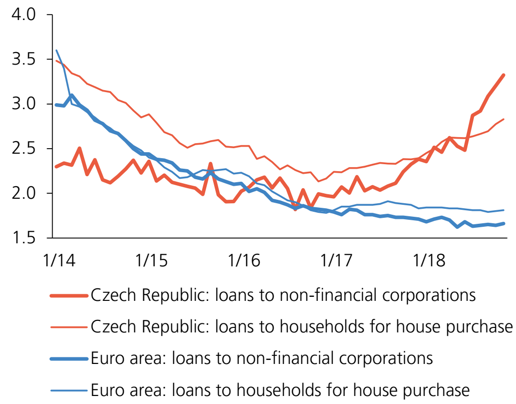


CHART III.4.4

CZK/EUR AND CZK/USD EXCHANGE RATES

The koruna initially depreciated slightly and then appreciated to roughly the same extent in Q4

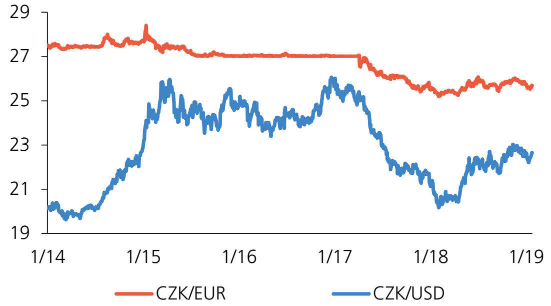


CHART III.4.5

INTEREST RATE DIFFERENTIALS

The interest rate differential of the koruna vis-à-vis the euro increased due to further growth in CNB rates; despite that, the negative differential vis-à-vis the dollar widened slightly
(percentage points)

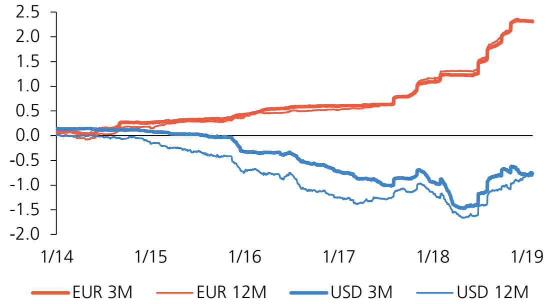
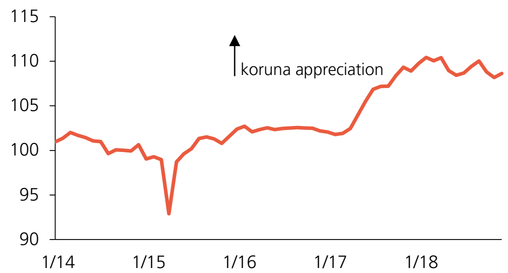


CHART III.4.6

NOMINAL EFFECTIVE KORUNA EXCHANGE RATE

The koruna weakened in effective terms in Q4; the extent of the change was due in large part to depreciation of the koruna against the Chinese renminbi in addition to the euro
(basic index; 2015 = 100)



Note: In the calculation of the nominal effective exchange rate of the koruna (NEER), the euro has the largest share in the basket (64.3%). The renminbi, the zloty, the pound, the forint, the dollar and the rouble have smaller, but still significant shares (2.6%–7.8%). The shares of the remaining six currencies range between 0.9% and 1.4%. The calculation method (as applied by the IMF) includes all SITC categories.

area in November (see Chart III.4.3). Interest margins on both new corporate loans and loans for house purchase increased further. Real interest rates on loans to Czech corporations and loans to households for house purchase are fluctuating around 1%.

The growth in monetary policy rates was also partly reflected in client deposit rates. The rate on new deposits with agreed maturity rose to 1.3%, while that on overnight current account deposits, which account for four-fifths of total household deposits, remains close to zero. Interest rates on total deposits thus remain very low – at 0.3% for households and 0.2% for non-financial corporations.

III.4.2 The exchange rate

The koruna depreciated slightly against the euro initially in Q4 but had erased its losses by the year-end. The koruna weakened gradually from CZK 25.8 to the euro in early Q4 to just above CZK 26 at almost the end of November (see Chart III.4.4). It then started to appreciate back towards its early October level (CZK 25.8 to the euro), which it reached at the year-end. The average exchange rate in Q4 was thus CZK 25.9 to the euro, which represents a slight depreciation in both year-on-year and quarter-on-quarter terms (of 0.8% and 0.6% respectively). In the first half of January, the koruna firmed against the euro by another 20 hellers or so and then reversed again.

The exchange rate was affected not only by negative global sentiment, but also by optimisation by banks before the year-end. Worse financial market sentiment about emerging market currencies continued to dampen the appreciation of the koruna. Acting in the same direction were banks' efforts to optimise their balance sheets before the year-end to minimise the contributions they have to pay to the Resolution Fund. However, these activities probably went on earlier than they had done in the previous year. The koruna was thus strengthening by the end of 2018.

The movements of the koruna against the dollar were qualitatively similar to those against the euro, although the year-end correction towards appreciation was more moderate (see Chart III.4.4). This was due to depreciation of the euro against the dollar in October. The initial weakening of the koruna by 80 hellers to CZK 23 to the dollar was followed by a correction of 50 hellers. The average exchange rate in Q4 was CZK 22.7 to the dollar, which represents a year-on-year depreciation of 4%. In the first half of January, the koruna continued to firm against the dollar and then weakened to a similar extent as it did against the euro.

The rise in the CNB's rates led to growth in the positive interest rate differential vis-à-vis the euro, but the negative differential vis-à-vis the dollar widened slightly. The difference between koruna and euro 3M interbank rates had widened to 2.3 percentage points by the end of the year in response to the CNB's monetary policy rate increase in November (see Chart III.4.5). The growth in the 3M koruna rate was reflected in the koruna-dollar interest rate differential. However, it was more than offset by growth in corresponding dollar rates. The short-term koruna-dollar interest rate differential was thus -0.8 percentage point in mid-January.

The koruna also depreciated in effective terms (see Chart III.4.6). In December, its nominal effective exchange rate was 1.3% weaker than in September. The main reason was a weakening against the euro and the Chinese renminbi. However, the koruna also depreciated against the other currencies of the NEER basket in the period under review, most of all the Russian rouble (by 4.1%). In year-on-year terms, the nominal effective exchange rate of the koruna was also weaker in December, though only slightly (by 0.2%), as the effect of the year-on-year weakening of the koruna against the euro and the dollar at this horizon was largely offset by appreciation against the Russian rouble, the Polish zloty and the Hungarian forint.

III.4.3 Credit

The annual rate of growth of loans to the private sector increased slightly in Q4, reaching 7.5% in November 2018. This growth was due to faster growth in loans to non-financial corporations coupled with buoyant growth in loans for house purchase and consumer credit (see Chart III.4.7). According to the Bank Lending Survey, credit standards for loans to households were further tightened on the supply side due to the implementation of the CNB's macroprudential measures regarding DTI and DSTI limits. The standards for loans to non-financial corporations remained unchanged (see Chart III.4.8).

Growth in loans for house purchase remains high (see Chart III.4.7). Their annual rate of growth increased slightly further to 8.7% in November. This was reflected in growth in total loans to households (see Chart III.4.9). By contrast, year-on-year growth in new loans for house purchase slowed noticeably to 4.5%. This was due mainly to a drop in demand after previous frontloading before the October date of effect of changes to the CNB's recommendations setting DTI and DSTI limits. Banks expect demand for housing loans to decline further in 2019 Q1.

Growth in consumer credit mostly accelerated last year. Household demand for loans in this segment has long been favourably affected by growth in consumption, persisting optimism and a decline in interest rates on these loans.

Total household indebtedness remains close to a historical high. The ratio of loans and other household obligations to aggregate disposable income has been close to 66% since mid-2018. However, households' financial obligations have long been growing at a slower rate than their financial assets.

CHART III.4.7

LOANS TO THE PRIVATE NON-FINANCIAL SECTOR

Credit growth was broadly balanced across all segments in Q4; growth in loans to non-financial corporations had recorded the fastest rise earlier in 2018

(annual percentage rates of growth)

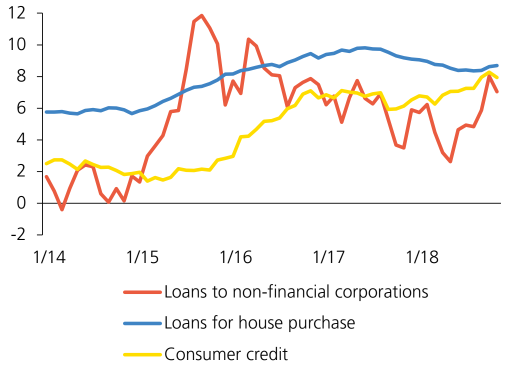


CHART III.4.8

CREDIT STANDARDS OF BANKS

Credit standards for loans to households were tightened due to the implementation of the CNB's macroprudential measures, while standards for corporate loans remain unchanged

(net percentages of banking market; positive value = tightening, negative value = easing)

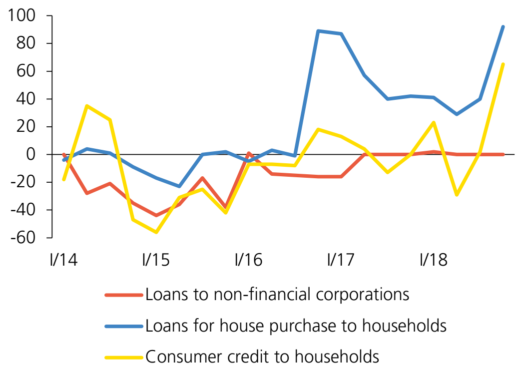


CHART III.4.9

LOANS TO HOUSEHOLDS

The contribution of loans for house purchase to the total growth in loans to households increased slightly, while that of other loans remained stable

(annual percentage rates of growth; contributions in percentage points; end-of-quarter data; most recent data are for November 2018)

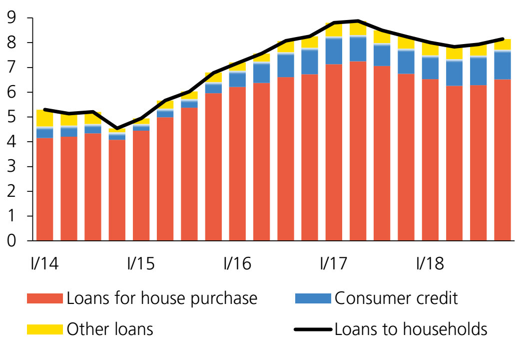
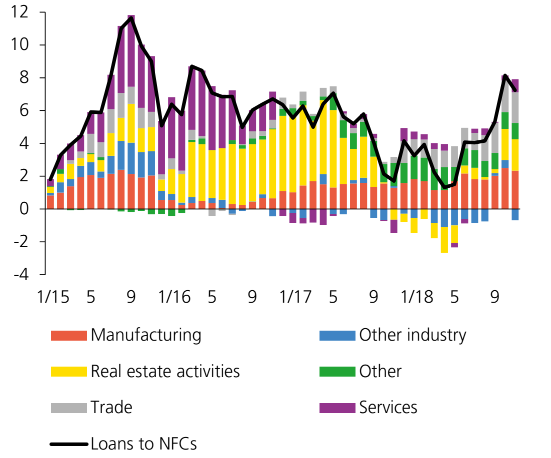


CHART III.4.10

LOANS TO NON-FINANCIAL CORPORATIONS BY SECTOR OF ACTIVITY

The contributions of loans in trade, services and particularly real estate activities have increased over the last three months amid a stable contribution of loans to manufacturing
(annual percentage changes; contributions in percentage points)

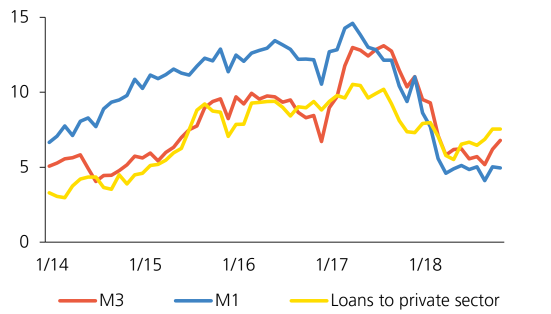


Note: Other comprises construction, agriculture and transport.

CHART III.4.11

MONETARY AGGREGATES AND LOANS

Money aggregate growth stayed below credit growth for most of last year
(annual percentage rates of growth)



Growth in loans to corporations accelerated on the whole last autumn. The annual growth rate of these loans reached 7% in November. Growth in loans in wholesale and retail trade and services increased amid continued rapid growth of loans in manufacturing and the real estate area (see Chart III.4.10). Demand for long-term loans to finance fixed investment increased. The share of foreign currency loans in total corporate loans remains high (31%), but their year-on-year growth slowed to 15%.

III.4.4 Money

M3 growth rose to 6.8% in Q4 (see Chart III.4.11). Following a correction of the high levels recorded in the period around the exit from the exchange rate commitment, M3 growth thus returned close to the average level observed since 2009. The highly liquid overnight deposits comprising M1 remain the biggest contributor to M3 growth. However, growth in deposits with an agreed maturity of up to two years has recently increased significantly amid growth in interest rates in this segment. Turning to the sector breakdown, the biggest contribution came from household deposits, whose rate of growth increased again after a previous slowdown, reaching 8.9% in November. Year-on-year growth in deposits of non-financial corporations also accelerated and amounted to 3.5% in November.

AEIS	Average Earnings Information System
BoE	Bank of England
BoJ	Bank of Japan
CEB	Czech Export Bank
CF	Consensus Forecasts
CNB	Czech National Bank
CPI	consumer price index
CPIH	experimental consumer price index incorporating prices of older properties
CZK	Czech koruna
CZSO	Czech Statistical Office
DSTI	debt service-to-income
DTI	debt-to-income
ECB	European Central Bank
EEA	European Economic Area
EIA	Environmental Impact Assessment
EIA	U.S. Energy Information Administration
EIU	Economist Intelligence Unit
ESA	European System of Accounts
ESCB	European System of Central Banks
ESR	electronic sales registration
EU	European Union
EUR	euro
EURIBOR	Euro Interbank Offered Rate
FDI	foreign direct investment
Fed	US central bank
FMIE	Financial Market Inflation Expectations
FOMC	Federal Open Market Committee
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
HPI	house price index
ICT	Information and communications technology
IEA	International Energy Agency
ILO	International Labour Organization
IMF	International Monetary Fund
IRI	Institute for Regional Information
IRS	interest rate swap
JPY	Japanese yen
LFS	Labour Force Survey
LIBOR	London Interbank Offered Rate
LTV	loan to value
LUCI	Labour Utilisation Composite Index
M1, M3	monetary aggregates
MFIs	monetary financial institutions
MLSA	Ministry of Labour and Social Affairs
NAIRU	non-accelerating inflation rate of unemployment
NBS	National Bank of Slovakia
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
repo rate	repurchase agreement rate
USD	US dollar
VAT	value added tax
WTI	West Texas Intermediate

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).

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.

Agricultural producer prices: Surveyed by the CZSO monthly on the basis of exercise contract prices (excluding their own consumption) of products intended solely for the domestic market excluding VAT.

Apartment asking prices: Asking prices of apartments as estimated by the CZSO.

Apartment transaction prices (returns): Prices based on Ministry of Finance statistics from property transfer tax returns and published by the CZSO. These prices are the closest to actual market prices of apartments in terms of methodology, but are published with a time delay.

Apartment transaction prices (survey): An alternative source of data on transaction prices of older apartments based on a CZSO survey in estate agencies and available with a shorter time delay.

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

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.

Core inflation: (formerly called 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.

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 equal to the shares of the individual euro area countries in the total exports of the Czech Republic to the euro area.

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.

Experimental CPIH price index: Unlike the Consumer Price Index (CPI), the CPIH includes prices of older property, i.e. the transactions that households carry out between themselves. The weight of housing is therefore substantially higher. This index can be viewed as an experimental analytical tool for macrofinancial considerations. For details, see Box 1 in Inflation Report III/2017.

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

Fiscal 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.

General unemployment rate: Covers the 15–64 age group (as measured by the ILO methodology in the LFS). It is the ratio of the number of unemployed persons to the labour force (i.e. the sum of employed and unemployed persons) in the given age group.

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.

Housing transaction prices: An internationally comparable House Price Index (HPI), which measures movements in the price level of apartments and houses including related plots of land according to a single harmonised EU standard. It includes both new and older (previously inhabited) residential property. The source of the data is the CZSO.

Industrial producer prices: Surveyed by the CZSO monthly on the basis of data provided by selected organisations. Industrial producer prices are those agreed upon between the supplier and the customer inland. They exclude VAT, excise tax, costs of transport to the customer and costs incidental to transport, and are invoiced for more important trade cases.

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: Determined in the CNB's modelling system by real marginal costs in the consumption sector and are divided into domestic (in the intermediate goods sector) and imported (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.

Labour efficiency: Affects the quantity of output per unit of labour. From a model perspective, it is the productivity of the production factor of labour in the Cobb-Douglas production function. A rise in labour efficiency enables a higher real volume of output to be produced using the same quantity of production factors. It therefore increases supply and causes the price of output relative to inputs to go down.

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

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

Market services prices: Surveyed by the CZSO monthly. Market services prices comprise prices of domestic freight transport, postal and telecommunications services, banking and finance and insurance and sewerage charges.

Monetary aggregates: Represent the amount of money in the economy and are calculated from the liquid liabilities of a monetary nature of resident monetary financial institutions (the "money-issuing" sector) to other resident sectors (the "money-holding" sector). Besides households, the latter include non-financial corporations and non-monetary financial institutions, as well as local government authorities and social security funds (excluding central government). The Eurosystem has defined a narrow (M1), an intermediate (M2) and a broad aggregate (M3). These aggregates differ with respect to the degree of moneyness of the assets of residents of the Czech Republic included. The monetary aggregates also include liquid assets denominated in foreign currency of residents of the Czech Republic which are held with monetary financial institutions located in the Czech Republic. Narrow money (M1) consists of currency in circulation and overnight deposits. Intermediate money (M2) comprises narrow money (M1) and, in addition, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months. Broad money (M3) comprises M2 and marketable instruments issued by the monetary financial institutions sector. Certain money market instruments, in particular money market fund shares/units, and repurchase agreements, which are close substitutes for deposits, are included in this aggregate.

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.

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 price convergence, 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 in the market sector and the price of capital. In addition to these components, they are determined by labour efficiency. In addition to domestic and external demand, the price of capital reflects the price deflator of fixed investment, which is affected by movements in the prices of imported capital goods.

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.

Non-tradables prices: Prices of items in the CZSO consumer basket which have the nature of services. These items can be divided into administered (e.g. water supply and sewerage collection charges, waste collection charges, public transport, electricity and gas, health care and education) and other (e.g. imputed rent proxying for housing prices, rental housing, repair services, recreation and accommodation, restaurants and canteens, body care services and financial and insurance services). These other items are included in core inflation.

Primary income: An item on the current account of the balance of payments comprising income from labour, capital, financial resources provided and non-produced non-financial assets (wages and salaries, dividends, reinvested earnings, interest, rent as well as taxes and subsidies on production and on imports, which represent a part of the financial flows vis-à-vis the EU budget). In a more detailed breakdown, primary income consists of three balances: compensation of employees, investment income and other primary income.

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.

Secondary income: An item on the current account of the balance of payments covering offsets to real and financial resources provided or acquired without a quid pro quo (subsidies and contributions vis-à-vis the EU budget and EU funds, pensions, foreign assistance, benefits, etc.)

Share of unemployed persons: The ratio of available job applicants aged 15–64 to the population of the same age.

Tradables prices: Prices of items of the CZSO consumer basket which are included in core inflation and have the nature of goods. They include, for example, clothing, footwear, equipment for housing and gardening, transport equipment and IT equipment. However, this category excludes prices of food, alcohol, tobacco and fuels, which follow specific patterns.

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.

Whole-economy labour productivity: Calculated as the ratio of seasonally adjusted 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.

		years										
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
DEMAND AND SUPPLY												
Gross domestic product												
GDP	CZK bn, constant p. of 2010, seas. adjusted	3958.4	4028.9	3999.6	3980.2	4088.2	4308.3	4409.9	4610.3	**4737.1**	**4872.2**	**5020.5**
GDP	%, y-o-y, real terms, seas. adjusted	2.1	1.8	-0.7	-0.5	2.7	5.4	2.4	4.5	**2.8**	**2.9**	**3.0**
Household consumption	%, y-o-y, real terms, seas. adjusted	1.0	0.3	-1.2	0.5	1.8	3.8	3.5	4.4	**3.5**	**3.6**	**3.0**
Government consumption	%, y-o-y, real terms, seas. adjusted	0.5	-3.2	-2.0	2.5	1.1	1.9	2.7	1.3	**3.5**	**2.1**	**2.2**
Gross capital formation	%, y-o-y, real terms, seas. adjusted	4.2	1.8	-3.9	-5.1	8.5	13.0	-4.3	4.1	**4.6**	**5.9**	**4.3**
Gross fixed capital formation	%, y-o-y, real terms, seas. adjusted	1.0	0.9	-2.9	-2.5	3.9	10.4	-3.3	4.1	**9.4**	**4.8**	**3.7**
Exports of goods and services	%, y-o-y, real terms, seas. adjusted	14.3	9.2	4.5	0.2	8.7	6.2	4.1	7.1	**4.3**	**3.9**	**5.7**
Imports of goods and services	%, y-o-y, real terms, seas. adjusted	14.4	6.7	2.8	0.1	10.1	6.9	2.6	6.3	**5.8**	**5.5**	**6.2**
Net exports	CZK bn, constant p. of 2010, seas. adjusted	121.1	193.5	246.5	250.4	233.8	226.8	283.9	333.0	**294.5**	**249.5**	**246.4**
Coincidence indicators												
Industrial production	%, y-o-y, real terms	8.6	5.9	-0.8	-0.1	5.0	4.3	3.4	6.5	-	-	-
Construction output	%, y-o-y, real terms	-7.4	-3.6	-7.6	-6.7	4.3	6.8	-5.6	3.3	-	-	-
Receipts in retail sales	%, y-o-y, real terms	1.5	1.7	-1.1	1.2	5.5	7.7	6.1	4.5	-	-	-
PRICES												
Main price indicators												
Inflation rate	%, end-of-period	1.5	1.9	3.3	1.4	0.4	0.3	0.7	2.5	2.1	-	-
Consumer Price Index	%, y-o-y, average	1.5	1.9	3.3	1.4	0.4	0.3	0.7	2.5	2.1	**2.2**	**2.0**
Regulated prices (18.70%)*	%, y-o-y, average	2.6	4.7	8.6	2.2	-3.0	0.0	0.2	0.0	1.8	**4.0**	**2.2**
Food prices (including alcoholic beverages and tobacco) (24.58%)*	%, y-o-y, average	0.9	4.3	2.9	3.1	1.8	0.0	0.2	3.6	1.6	**1.9**	**2.2**
Core inflation (53.32%)*	%, y-o-y, average	-1.2	-0.4	-0.3	-0.5	0.5	1.2	1.2	2.4	2.1	**2.2**	**2.0**
Fuel prices (3.39%)*	%, y-o-y, average	12.8	7.2	6.0	-2.1	0.2	-13.5	-8.5	6.7	6.3	**-4.1**	**-1.4**
Monetary policy inflation (excluding tax changes)	%, y-o-y, average	0.4	1.9	2.1	0.6	0.2	0.2	0.5	2.5	2.1	**2.3**	**2.0**
GDP deflator	%, y-o-y, seas. adjusted	-1.4	0.0	1.5	1.4	2.5	1.2	1.3	1.4	**2.6**	**3.7**	**2.1**
Partial price indicators												
Industrial producer prices	%, y-o-y, average	1.2	5.6	2.1	0.8	-0.8	-3.2	-3.3	1.8	2.0	**1.4**	**1.2**
Agricultural prices	%, y-o-y, average	7.1	22.1	3.3	-12.1	4.7	-6.2	-6.0	7.4	-0.2	**5.7**	**-0.9**
Construction work prices	%, y-o-y, average	-0.2	-0.5	-0.7	-1.1	0.5	1.2	1.1	1.7	3.2	-	-
Brent crude oil (in USD/barrel)	%, y-o-y, average	28.4	38.2	0.7	-2.6	-8.5	-46.1	-16.0	21.7	30.5	**-16.7**	**0.3**
LABOUR MARKET												
Average monthly wage	%, y-o-y, nominal terms	2.2	2.5	2.5	-0.1	2.9	3.2	3.7	7.0	**8.4**	**6.9**	**5.4**
Average monthly wage	%, y-o-y, real terms	0.7	0.6	-0.8	-1.5	2.5	2.9	3.0	4.4	**6.4**	**4.7**	**3.4**
Number of employees	%, y-o-y	-2.2	0.0	-0.1	1.6	0.6	2.2	2.1	1.7	**1.4**	**0.5**	**0.4**
Unit labour costs	%, y-o-y	-1.5	0.3	3.4	1.0	0.9	-0.5	3.2	3.8	**6.7**	**4.3**	**2.6**
Unit labour costs in industry	%, y-o-y	-6.2	0.7	5.9	5.1	-0.4	1.8	4.3	-0.4	-	-	-
Aggregate labour productivity	%, y-o-y	3.3	2.1	-1.2	-0.8	2.2	3.8	0.8	2.8	**1.2**	**2.3**	**2.6**
ILO general unemployment rate	%, average, age 15–64	7.4	6.8	7.0	7.1	6.2	5.1	4.0	2.9	**2.3**	**1.9**	**1.8**
Share of unemployed persons (MLSA)	%, average	7.0	6.7	6.8	7.7	7.7	6.5	5.5	4.2	3.2	**2.9**	**2.8**
PUBLIC FINANCE												
Government budget balance (ESA2010)	CZK bn, current prices	-166.0	-109.9	-159.6	-51.1	-90.6	-27.9	34.6	78.2	**75.0**	**66.5**	**79.9**
Government budget balance / GDP**	%, nominal terms	-4.2	-2.7	-3.9	-1.2	-2.1	-0.6	0.7	1.5	**1.4**	**1.2**	**1.3**
Government debt (ESA2010)	CZK bn, current prices	1480.2	1606.5	1805.4	1840.4	1819.1	1836.3	1754.9	1749.5	**1740.6**	**1734.3**	**1710.1**
Government debt / GDP**	%, nominal terms	37.4	39.8	44.5	44.9	42.2	40.0	36.8	34.7	**32.7**	**30.6**	**28.7**
EXTERNAL RELATIONS												
Current account												
Trade balance	CZK bn, current prices	40.4	75.5	123.8	167.0	220.0	188.0	245.7	240.9	**230.0**	**225.0**	**235.0**
Trade balance / GDP	%, nominal terms	1.0	1.9	3.0	4.1	5.1	4.1	5.2	4.8	**4.3**	**4.0**	**3.9**
Balance of services	CZK bn, current prices	78.5	81.3	77.6	70.4	55.7	78.0	107.6	122.0	**115.0**	**120.0**	**125.0**
Current account	CZK bn, current prices	-141.8	-84.8	-63.3	-21.8	7.9	11.3	74.2	54.2	**25.0**	**20.0**	**20.0**
Current account / GDP	%, nominal terms	-3.6	-2.1	-1.6	-0.5	0.2	0.2	1.6	1.1	**0.5**	**0.4**	**0.3**
Foreign direct investment												
Direct investment	CZK bn, current prices	-95.0	-46.8	-121.3	7.4	-80.4	49.7	-186.5	-135.3	**-60.0**	**-70.0**	**-60.0**
Exchange rates												
CZK/USD	average	19.1	17.7	19.6	19.6	20.8	24.6	24.4	23.4	21.7	**21.6**	**20.4**
CZK/EUR	average	25.3	24.6	25.1	26.0	27.5	27.3	27.0	26.3	25.6	**25.0**	**24.2**
CZK/EUR	%, y-o-y, real (CPI euro area), avg.	-4.5	-1.9	1.5	3.5	6.3	-1.2	-1.3	-3.4	-2.8	**-2.4**	**-3.1**
CZK/EUR	%, y-o-y, real (PPI euro area), avg.	-3.9	-3.0	2.2	2.4	5.1	-0.2	0.1	-1.8	-1.5	**-1.9**	**-2.7**
Foreign trade prices												
Prices of exports of goods	%, y-o-y, average	-1.0	1.7	2.9	1.2	3.5	-1.7	-3.1	-0.1	**-0.4**	**0.0**	**-0.8**
Prices of imports of goods	%, y-o-y, average	2.0	4.3	4.2	-0.2	1.9	-1.9	4.0	0.9	**-0.7**	**-0.7**	**-1.2**
MONEY AND INTEREST RATES												
M3	%, y-o-y, average	0.2	1.0	5.1	5.1	5.1	7.3	9.1	11.7	**6.7**	**7.5**	**9.4**
2W repo rate	%, end-of-period, CNB forecast = average	0.75	0.75	0.05	0.05	0.05	0.05	0.05	0.50	1.75	**1.85**	**1.80**
3M PRIBOR	%, average	1.3	1.2	1.0	0.5	0.4	0.3	0.3	0.4	1.3	**2.1**	**2.1**

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

2016				2017				2018				2019				2020			
QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV
1095.5	1099.2	1103.3	1112.0	1127.8	1153.8	1160.6	1168.1	1173.7	1181.0	1187.9	1194.4	1203.4	1213.1	1222.9	1232.8	1242.0	1250.7	1259.5	1268.3
3.6	2.4	1.7	1.8	3.0	5.0	5.2	5.0	4.1	2.4	2.4	2.3	2.5	2.7	2.9	3.2	3.2	3.1	3.0	2.9
3.8	3.5	3.6	3.3	3.7	4.8	4.6	4.4	4.4	3.2	3.1	3.2	3.4	3.7	3.8	3.7	3.1	3.1	3.0	2.9
2.5	3.2	2.6	2.5	2.0	1.3	0.8	1.0	3.0	2.6	5.2	3.1	2.0	2.5	0.7	3.1	2.5	2.4	2.1	1.8
1.1	-6.8	-6.1	-5.0	-3.2	2.2	7.9	9.8	7.7	3.1	3.1	4.6	6.2	8.1	5.0	4.2	4.2	4.2	4.3	4.4
1.5	-5.4	-4.4	-4.6	-1.2	6.4	5.6	5.8	10.4	8.6	9.0	9.9	6.3	4.9	4.3	3.8	3.9	3.8	3.6	3.5
6.5	5.4	2.6	2.2	5.5	7.7	7.6	7.8	5.2	3.7	4.5	3.9	3.4	3.5	4.4	4.4	4.6	5.4	6.2	6.7
5.7	2.9	1.2	0.8	3.7	5.8	7.2	8.3	6.6	4.7	6.2	5.7	5.3	6.1	5.3	5.2	4.9	5.8	6.7	7.3
65.9	69.1	71.2	77.8	83.9	89.4	79.5	80.2	76.8	83.7	67.6	66.4	62.5	62.6	62.3	62.1	62.9	62.2	61.1	60.2
3.2	6.1	0.8	3.5	8.4	4.3	5.5	7.8	1.9	2.9	3.5	-	-	-	-	-	-	-	-	-
-6.8	-8.8	-6.2	-1.6	0.9	7.2	1.6	3.0	11.9	6.7	12.1	-	-	-	-	-	-	-	-	-
7.1	8.5	4.7	4.3	7.0	3.5	3.3	4.6	2.7	2.9	2.3	-	-	-	-	-	-	-	-	-
0.4	0.3	0.4	0.7	1.2	1.7	2.2	2.5	2.3	2.3	2.3	2.1								
0.4	0.2	0.6	1.5	2.5	2.2	2.5	2.6	1.9	2.3	2.4	2.1	2.4	2.3	2.0	2.2	2.0	1.9	2.0	2.0
0.7	0.2	-0.1	-0.1	-0.5	-0.1	0.2	0.3	1.4	1.8	2.1	1.7	3.6	4.2	3.8	4.4	2.7	2.0	2.0	2.0
-0.4	-0.8	0.2	1.8	3.4	2.9	3.9	4.4	2.5	2.5	1.1	0.4	1.2	1.5	2.4	2.7	2.1	2.1	2.4	2.4
1.3	1.1	1.1	1.4	2.1	2.5	2.7	2.5	1.7	1.9	2.3	2.4	2.6	2.2	1.8	2.0	2.1	2.1	1.9	1.9
-12.4	-12.4	-9.5	0.2	15.1	7.5	1.7	2.6	-1.6	5.0	12.4	9.5	0.9	-1.8	-6.4	-9.2	-2.4	-1.8	-1.1	-0.5
0.3	0.0	0.3	1.3	2.5	2.3	2.7	2.7	1.8	2.1	2.3	2.0	2.4	2.3	2.1	2.3	2.0	1.9	2.0	2.0
1.4	1.1	1.3	1.2	0.7	1.0	1.7	2.4	2.5	2.4	2.2	3.5	3.6	4.3	4.1	2.7	2.5	2.2	1.9	1.8
-4.0	-4.6	-3.3	-1.1	2.7	2.3	1.4	0.9	0.1	1.5	3.3	3.4	2.7	1.7	0.6	0.4	0.9	1.0	1.3	1.5
-3.2	-8.2	-7.0	-4.9	0.2	10.1	11.4	8.2	4.0	-3.4	-2.3	1.7	5.5	9.3	6.8	0.6	-2.1	-1.8	-0.5	1.4
1.2	1.1	1.0	1.2	1.4	1.6	1.7	2.0	2.3	2.8	3.7	4.1	-	-	-	-	-	-	-	-
-36.3	-26.1	-7.6	16.0	57.6	9.1	11.0	20.8	22.9	47.6	45.8	11.6	-11.9	-20.2	-21.2	-10.5	1.1	0.1	0.0	0.0
4.7	4.0	4.7	4.4	4.5	6.9	6.1	7.4	8.6	8.6	8.5	7.9	7.4	6.9	6.9	6.6	5.9	5.6	5.2	4.9
4.2	3.8	4.2	3.0	2.1	4.6	3.5	4.7	6.6	6.2	6.0	5.9	5.0	4.6	4.9	4.4	3.9	3.6	3.3	2.9
2.8	2.0	1.9	1.9	1.1	1.3	2.2	2.1	2.1	2.1	0.9	0.7	0.5	0.4	0.6	0.4	0.4	0.4	0.4	0.3
2.8	1.9	4.0	4.0	2.9	4.5	3.0	4.4	6.9	7.3	6.8	6.1	4.9	4.3	4.2	3.7	3.0	2.7	2.5	2.3
6.4	3.1	5.4	2.5	-1.1	1.9	-2.9	0.1	5.6	6.3	6.1	-	-	-	-	-	-	-	-	-
1.5	2.1	0.1	-0.1	2.2	2.3	2.9	3.5	1.5	0.7	1.3	1.3	1.9	2.1	2.4	2.8	2.8	2.7	2.6	2.5
4.4	4.0	4.0	3.6	3.5	3.0	2.8	2.4	2.4	2.2	2.4	2.1	2.1	1.9	1.9	1.8	1.9	1.7	1.8	1.8
6.3	5.4	5.3	5.0	5.1	4.2	3.9	3.6	3.7	3.1	3.0	2.9	3.1	2.7	2.8	2.8	3.1	2.7	2.7	2.7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83.1	80.5	44.7	37.4	88.8	71.7	42.7	37.8	83.4	70.4	32.8	43.5	80.0	68.0	39.0	38.0	82.0	70.0	42.0	41.0
7.5	6.7	3.7	3.0	7.7	5.7	3.3	2.8	6.8	5.3	2.4	3.1	6.1	4.8	2.7	2.5	5.9	4.7	2.8	2.6
25.3	26.4	28.7	27.2	28.5	33.3	31.5	28.7	33.6	36.6	23.1	21.7	32.0	34.0	29.0	25.0	33.0	35.0	31.0	26.0
119.5	-10.0	-19.2	-16.1	97.5	-8.1	-34.5	-0.7	55.8	7.9	-44.7	6.0	93.0	-12.0	-51.0	-10.0	90.0	-15.0	-47.0	-8.0
10.8	-0.8	-1.6	-1.3	8.4	-0.6	-2.7	-0.1	4.5	0.6	-3.3	0.4	7.1	-0.8	-3.5	-0.7	6.5	-1.0	-3.1	-0.5
-1.8	-95.6	-63.0	-26.2	-62.7	-26.2	-12.1	-34.3	-9.6	-31.3	-2.6	-	-	-	-	-	-	-	-	-
24.5	23.9	24.2	25.1	25.4	24.1	22.2	21.8	20.7	21.5	22.1	22.7	22.4	21.8	21.3	20.8	20.5	20.4	20.3	20.2
27.0	27.0	27.0	27.0	27.0	26.5	26.1	25.7	25.4	25.6	25.7	25.9	25.6	25.2	24.8	24.5	24.3	24.2	24.2	24.1
-2.4	-1.5	-0.4	-0.7	-0.8	-2.6	-4.3	-6.0	-6.3	-3.8	-1.7	0.8	0.5	-1.7	-3.4	-4.9	-4.4	-3.5	-2.5	-1.8
-1.5	0.0	1.1	1.0	0.4	-1.3	-2.6	-3.7	-4.4	-2.1	-0.5	1.1	0.9	-1.3	-3.0	-4.4	-4.4	-3.0	-2.0	-1.1
-4.1	-4.3	-2.6	-1.3	2.2	0.9	-1.1	-2.4	-4.4	-1.6	1.6	3.2	2.7	0.7	-1.1	-2.4	-2.0	-1.2	-0.3	0.5
-5.7	-6.3	-3.7	-0.4	5.1	2.9	-0.9	-3.3	-6.1	-2.3	2.6	3.5	2.9	0.3	-2.5	-3.6	-2.7	-1.7	-0.6	0.4
9.7	9.6	9.0	8.0	10.2	12.7	12.8	11.1	8.6	6.1	5.4	6.8	6.8	7.2	7.7	8.2	8.9	9.4	9.7	9.6
0.05	0.05	0.05	0.05	0.05	0.05	0.25	0.50	0.75	1.00	1.50	1.75	1.95	1.94	1.79	1.72	1.74	1.77	1.81	1.87
0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.7	0.9	0.9	1.4	1.9	2.2	2.2	2.0	2.0	2.0	2.0	2.1	2.1

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

Contact:
COMMUNICATIONS DIVISION
GENERAL SECRETARIAT
Tel.: +420 22441 3112
Fax: +420 22441 2179

http://www.cnb.cz

Produced by: CZECH NATIONAL BANK
Design: Jerome s.r.o.

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