Inflation Report ——— II/2020

Czech National Bank ——— Inflation Report ——— II/2020

CNB CZECH NATIONAL BANK

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This Inflation Report was approved by the CNB Bank Board on 14 May 2020 and – with some exceptions – contains the information available as of 24 April 2020. 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.

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Foreword

Dear Readers,

The Inflation Report is our key monetary policy publication. We have been publishing it since 1998. In each Report, we react to the latest developments. The content of this issue is significantly affected by the current dramatic situation regarding the coronavirus pandemic. Because of the pandemic, we have significantly shortened the passages in which we normally comment on the latest available data for previous quarters. These data have become highly outdated in terms of their effect on future developments, so we have left them out of this Report. We have also left out the detailed comparison of our new forecast with the previous one. On the contrary, alternative scenarios of future economic developments have moved to the forefront in an environment of high uncertainty depending on the duration of the quarantine measures and the further evolution of the epidemiological situation. 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 a brief summary of past 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 a structural macroeconomic model. The g3+ core model provides a comprehensive and consistent view of the relationships between nominal variables and the real economy. It 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, the structural linkages in the external economy affecting foreign trade and the koruna-euro exchange rate play an important role in the new model. Forward-looking expectations gradually reflecting outlooks for exogenous variables 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 an important feature 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 the current situation, the weight of the expert inputs in our forecast as opposed to the model mechanisms has naturally increased. In addition to the baseline scenario of the forecast, alternative or sensitivity scenarios are prepared as needed using the core projection model. This issue of the Inflation Report includes a longer-lasting pandemic scenario and a pandemic resurgence scenario.

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 (like in mid-March 2020), 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. The arrival of new information since the forecast was drawn up and the possibility of the Bank Board members assessing its risks differently mean that the decision we adopt may not fully match the message of the forecast prepared by our experts. The role of this qualitative assessment by the Bank Board is naturally stronger in periods of higher uncertainty like the current pandemic situation.

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 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. The exchange rate commitment was used until April 2017, when the Bank Board decided to discontinue it. 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. In this context, it is highly welcome that the Czech Parliament has approved an amendment to the Act on the CNB which broadens the range of our financial market operations and thereby the range of potential instruments to achieve the price stability objective, but also the financial stability objective, until the end of 2021.

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 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. I believe that our monetary policy framework will succeed in doing so even in the current difficult situation.

On behalf of the Czech National Bank

Jiří Rusnok
Governor

I. SUMMARY

Inflation will decline rapidly into the tolerance band and will be close to the CNB's 2% target over the monetary policy horizon (see Chart I.1). Consumer prices increased by 3.6% in 2020 Q1, driven by buoyant core inflation and faster growth in food prices and administered prices. Inflation will fall rapidly below the upper boundary of the tolerance band around the target in the coming months, mainly due to the generally anti-inflationary impacts of the coronavirus pandemic amid a deep decline in domestic economic activity. Growth in total costs will temporarily surge due to the recent sharp depreciation of the koruna. However, this will soon be outweighed by appreciably weaker domestic inflation pressures reflecting the impacts of the quarantine measures of the government and firms. This will lead to a further decline in inflation, which will temporarily fall slightly below the 2% target in late 2020/early 2021. The decline in inflation will also be fostered by a drop in fuel prices connected with the collapse of world oil prices and slower growth in administered prices. By contrast, food price inflation will remain high this year, owing to high consumer demand on the one hand and as a result of labour shortages in agriculture, cold weather in early spring and international transport restrictions due to the coronavirus pandemic on the other. The decline in inflation will also be slowed this year and the next by the expected price impacts of changes to indirect taxes. As a result, inflation will be close to the 2% target in 2021 amid significantly accommodative monetary conditions. Monetary policy-relevant inflation will be slightly lower than headline inflation (see Chart I.2).

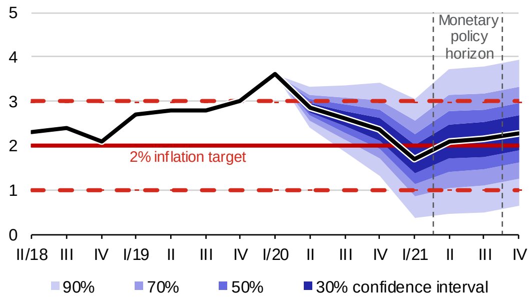
The Czech Republic has been hit significantly by the coronavirus pandemic, and the decline in the global and domestic economy will be exceptionally deep this year (see Chart I.3). The anti-pandemic measures adopted by the government caused the shutdown of a large part of the domestic economy in March. According to the assumptions of the forecast, the epidemiological situation will allow the restrictions to be gradually lifted and most sectors to start up again during Q2. However, the negative impacts of higher unemployment and the unfavourable overall perception of the economic situation among households and firms will persist. The previously very tight labour market will thus cool down rapidly. GDP will fall by 8% overall this year and, despite a gradual return to growth, economic activity will not return to the pre-pandemic level before the end of next year. This will be due chiefly to fixed investment. Its return to growth will be dampened by the deep decline in external demand associated with the significant deterioration in global economic sentiment. Exports of goods and services can therefore be expected to drop sharply. This will be reflected in a negative contribution of net exports to GDP growth this year. Following an initial decline, household consumption will fare somewhat better, supported by decreasing but still positive wage growth and massive stabilising budgetary measures. In addition to programmes to support the liquidity of households and firms hit by the pandemic, government expenditure will rise owing to a previously approved increase in non-market sector wages, pensions and public investment.

Over the entire forecast horizon, the exchange rate will remain close to the current level to which it weakened after the pandemic broke out (see Chart I.4). The exchange rate forecast for 2020 Q2

Chart I.1 Headline inflation forecast

Headline inflation will fall rapidly for the rest of this year and will be close to the CNB's 2% target next year

(year on year in %)

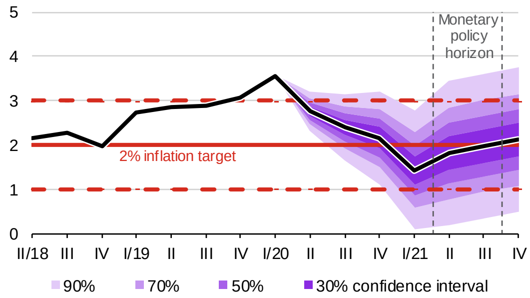


Note: The confidence intervals of the headline inflation forecast reflect the predictive power of past forecasts and are symmetric. They are widening only for the first five quarters and then stay constant. This is consistent with both the past predictive power and the stabilising role of monetary policy.

Chart I.2 Monetary policy-relevant inflation forecast

Monetary policy-relevant inflation will be slightly lower than headline inflation and will also be close to the CNB's 2% target over the monetary policy horizon

(year on year in %)

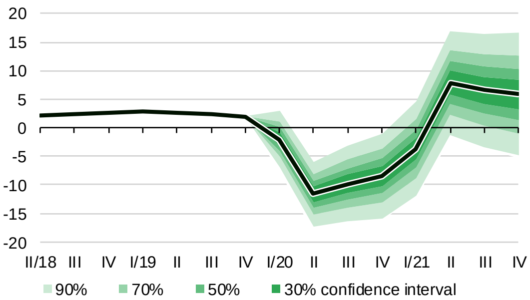


Note: The confidence intervals of the monetary policy-relevant inflation forecast reflect the predictive power of past forecasts and are symmetric. They are widening only for the first five quarters and then stay constant. This is consistent with both the past predictive power and the stabilising role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

Chart I.3 GDP growth forecast

The Czech economy will contract this year due to the coronavirus pandemic; its growth will resume next year, but from a substantially lower base

(annual percentage changes; seasonally adjusted)



Note: The current uncertainty regarding future GDP growth is much higher than implied by the historical forecast errors. The confidence intervals of the GDP growth forecast have therefore been widened significantly to reflect this increased uncertainty.

is set at CZK 27.2 to the euro and thus reflects the sharp weakening of the koruna at the end of Q1 caused by the outbreak of the coronavirus pandemic. The exchange rate will remain close to its current level over the entire forecast horizon due to the worse foreign and domestic economic outlook and narrower interest rate differential.

Consistent with the forecast is a further decline in domestic market interest rates in Q2 (see Chart I.5). This decline in rates is a continuation of the sharp drop recorded in March and reflects the effects of government quarantine measures in the domestic economy as well as the significantly worse external outlook. These factors will lead to a significant cooling of the labour market and worsening sentiment among households and firms. This will have significant anti-inflationary consequences. However, the decline in rates will be slowed by the recent sharp weakening of the koruna, which is contributing to an easing of the overall monetary conditions. Rates will then remain broadly stable over the rest of the forecast horizon.

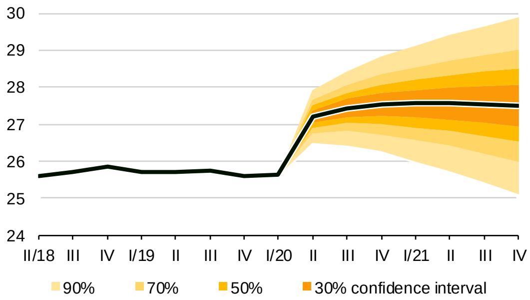
At its May monetary policy meeting, the CNB Bank Board lowered the two-week repo rate by 75 basis points to 0.25%. At the same time, it lowered the Lombard rate to 1.00%. The discount rate remains unchanged at 0.05%. Five members voted in favour of this decision, and two members voted for lowering the repo rate by 50 basis points. The new interest rate levels come into effect on 11 May 2020.

The Bank Board assessed the risks to the forecast in the current extraordinary situation as being unprecedentedly high. The risks are connected with the course of the pandemic and especially with the duration and size of the impacts of the quarantine measures on the global and Czech economy. These risks require an even greater easing of the monetary conditions compared with the baseline scenario of the forecast.

Chart I.4 Exchange rate forecast

The exchange rate of the koruna will remain close to its current weakened level due to unfavourable economic developments

(CZK/EUR)

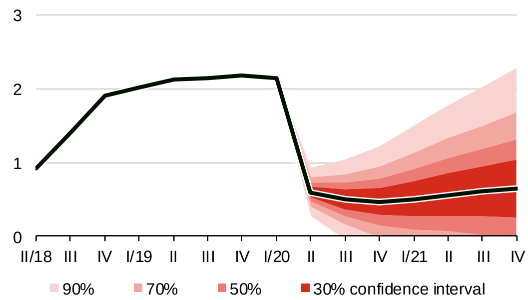


Note: The confidence intervals of the CZK/EUR exchange rate reflect the predictive power of past forecasts (with the exception of the exchange rate commitment period). They are symmetric and linearly widening.

Chart I.5 Interest rate forecast

After the sharp fall in domestic market interest rates recorded in March, consistent with the forecast is a further decline in 2020 Q2 followed by broad 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, linearly widening and limited below by the zero lower bound.

II. THE FORECAST, ITS CHANGES AND RISKS

II.1 DEVELOPMENTS ABROAD AND EXTERNAL ASSUMPTIONS OF THE FORECAST

The global economy will contract significantly this year due to the Covid-19 pandemic, but will return to growth next year. The euro area, one of the hardest-hit areas of the world, will experience a deep economic decline in the first half of this year. The situation will then gradually stabilise and economic growth will resume next year. Producer prices are expected to fall substantially this year, owing to the unprecedented drop in economic activity and the collapse of oil prices. Consumer price inflation will slow almost to zero this year. The ECB has launched massive securities purchases. Short-term euro rates remain negative, as does their outlook. A radical monetary policy easing in the USA has led to a further decline in US interest rates. The euro-dollar exchange rate will appreciate slightly.

II.1.1 Economic developments abroad

The output of the world economy will decrease markedly this year due to the pandemic, but its growth will recover next year.[1] Europe and the USA are the most severely hit areas of the world. Among the largest economies, only China, India and Brazil will make positive contributions to global growth. Overall, the weighted decline in the economies monitored is expected to reach about 1.5% this year. The world economy is expected to grow by 5.5% next year[2] (see Chart II.1.1).[3]

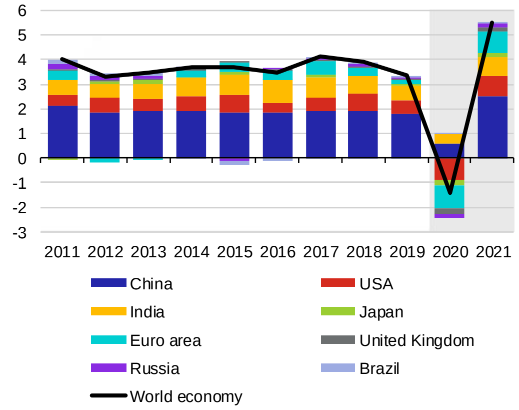
The solid economic activity seen in the euro area in early 2020 was hit by measures introduced to counter the spread of the virus. The April Purchasing Managers' Index (PMI) in manufacturing (see Chart II.1.2) indicates that the decline in industrial production will approach double figures. The unemployment rate hit an all-time low in February (7.3%). However, unemployment remained relatively high in countries that were subsequently hit the most by the coronavirus. Now it can be expected to rise sharply.

GDP in the effective euro area[4] will drop markedly in Q2, but its year-on-year decline will then start to moderate (see Chart II.1.3). The economic impacts of governments' quarantine measures to combat the pandemic will be partly offset by the fiscal measures being adopted by individual euro area countries. From 2020 Q3 onwards, the moderation of the year-on-year decline in GDP will be driven mainly by improving household consumption, while corporate investment will remain subdued for longer as a result of high uncertainty and negative sentiment. The euro area economy in effective terms will contract by almost 7% overall this year. Next year, it will partly recover from an extremely low level, rising by more than 4%. The risks to the outlook are currently extreme and tilted towards lower growth. They are described by

Chart II.1.1 World economy growth outlook

The world economy will contract this year and recover next year

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

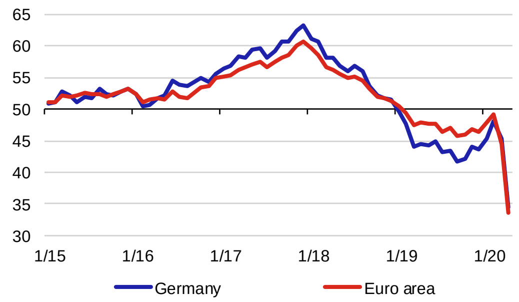


Note: World economy growth is proxied by the growth of the eight largest economies, which account for around 75% of global GDP. The weights of the individual economies are calculated on the basis of nominal GDP at purchasing power parity. The sources of the outlooks are CF and EIU.

Chart II.1.2 PMI in manufacturing

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

(Purchasing Managers' Index; source: Bloomberg)



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

2 The CF and EIU outlooks for this year converted into the effective euro area are rather more optimistic than the external assumptions of the forecast, but the difference is not substantial.

3 The outlook is indicated by the grey area in the chart. This convention is used throughout this Report.

4 For the purposes of the forecast, external real and price developments are proxied by effective euro area indicators (see the Glossary).

two scenarios in section II.3 (*Longer-lasting pandemic scenario* and *Pandemic resurgence scenario*).[5]

The impacts of government quarantine measures and company shutdowns will differ across the Czech Republic's trading partner countries. While the quarantine measures (see Box 1) in Italy and Spain have halted economic activity except in a few key sectors, the restrictions in Slovakia and Germany have been much softer. As a result, the year-on-year contraction in GDP this year will be below 6% in Germany and Slovakia, whereas in Italy and Spain it will exceed 11%. From a sectoral perspective, travel has been hit in a fundamental manner and a more permanent loss of output can be expected there. The economic impacts of the pandemic will be partly offset by fiscal measures, which are expected to exceed 1% of GDP in Italy, Spain, France and Slovakia. So far, Germany has approved the largest additional expenditure, totalling almost EUR 105 billion (3% of GDP), focused on direct support for firms and state-subsidised shorter working hours ("Kurzarbeit").

Economic activity in the Czech Republic's main trading partner countries will recover rapidly after the pandemic subsides. However, the recovery will not be enough for GDP in the effective euro area to return to the pre-pandemic level (see Chart II.1.4). The output gap will thus remain negative over the entire forecast horizon and will close only gradually.

BOX 1 The impacts of the Covid-19 pandemic in the Czech Republic's main trading partner countries

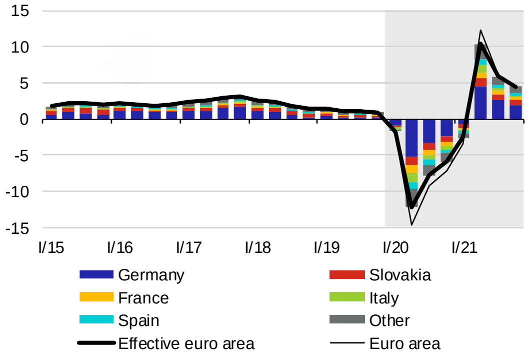
The Covid-19 pandemic has fundamentally affected all European economies, most of all the Italian and Spanish ones (see Chart 1). These two countries, along with Germany, France and Slovakia, rank among the Czech Republic's largest trading partners and proxy for external demand for the purposes of the forecast. This box therefore focuses on them. In just a few days in early March, Italy saw a dramatic rise in infections and the virus spread to other EU states. Most countries responded by introducing social distancing measures and travel restrictions to slow the spread of the pandemic as much as possible. Spain and Slovakia brought in restrictions less than a week after Italy, while Germany did not clamp down until 20 March, when the number of cases was already high relative to other countries. In most of these countries, the numbers of new cases peaked in late March/early April (see Chart 2). In France, the reversal was less pronounced and the growth in the number of cases may stay high for longer. Given this trend, it can be assumed that most countries will reach the overall peak of the pandemic (as measured by the number of active cases) by May.

The sharp rise in the number of cases and deaths led to the introduction of a range of quarantine measures. Social contact has been restricted the most in Italy and Spain, where social

Chart II.1.3 Euro area GDP growth outlook

Economic activity will drop sharply during the first half of this year and its year-on-year decline will then start to moderate gradually

(annual percentage changes; contributions in percentage points to growth in the effective euro area; seasonally adjusted; CNB calculation)



Note: Other comprises 12 other euro area countries. Its forecasted growth corresponds to the average growth of the five countries shown in the chart.

Chart II.1.4 Effective euro area GDP outlook

The recovery in growth in the second half of this year will not be enough for GDP to return to the pre-pandemic level over the forecast horizon

(index; 2000 = 100)

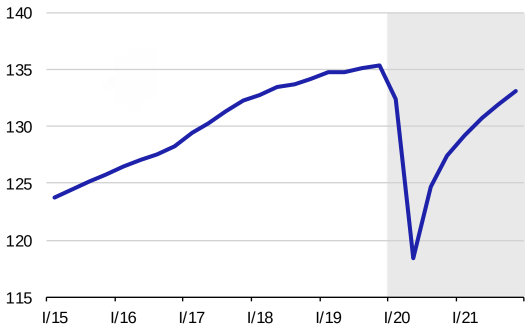
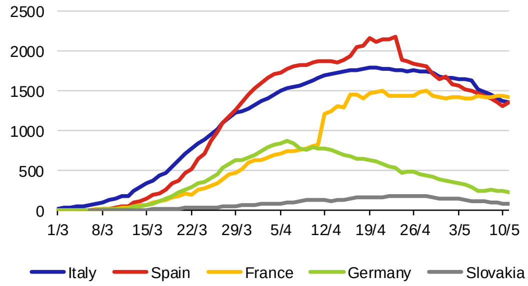


Chart 1 (BOX) Numbers of active cases in the Czech Republic's largest trading partner countries in the euro area

The Covid-19 pandemic has hit Italy and Spain particularly hard, while in Slovakia the pandemic has been very limited

(number of active cases per million inhabitants)



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5 The risks associated with Brexit and trade wars have been significantly overshadowed by the latest economic developments.

life has virtually ground to a halt and economic activity has frozen. In Italy the situation is expected to last at least until the end of April, while Spain has already started easing the restrictions in some sectors (construction and manufacturing). By contrast, other countries have introduced more moderate restrictive measures. Shops and restaurants are closed, but tourism has also suffered. Moreover, many car manufacturers and their suppliers have shut down production in Europe. Germany started to lift its restrictions in late April (when small shops were reopened), while France is not expected to do so until May. The Slovak government has announced a four-step plan for gradually relaxing its restrictions, with full lifting planned for early June.

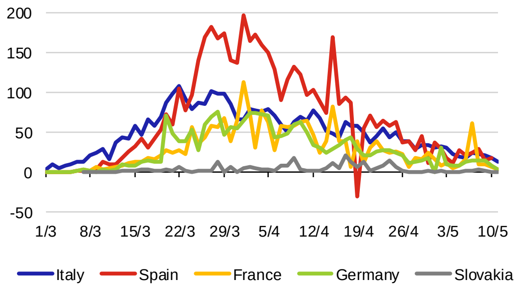
The expected economic consequences depend on the assumptions made about the course of the pandemic and the government measures. The impacts of the pandemic on each economy can be estimated on the basis of an analysis of gross value added by sector. Restrictions had been in force in all the economies under review for 2–4 weeks at the end of Q1 and will remain in effect until at least either the end of April or mid-May. Although some of them may be softened before the end of Q2, the recovery in the sectors concerned will be gradual. The size of the downturn in each sector was selected on the basis of available estimates of the expected duration and effectiveness of the restrictive measures in each country.

The analysis reveals that the measures have had a sizeable impact on services, which play a less important role than goods in Czech exports. As the restrictions were most pronounced in Spain and Italy (a complete halt of the economy with the exception of essential sectors), the downturn will have affected virtually every sector of their economies already in 2020 Q1 (see Chart 3). The forecast assumes that the structure of the contraction will be similar in Q2. Wholesale and retail trade, transport, and hotels and restaurants will therefore be hit hard, as will many services, while demand for goods in the economies under review will decline slightly less. Demand for Czech exports from the Czech Republic's main trading partner countries is thus expected to decline less than proportionately to the contraction in their economic activity.

Chart 2 (BOX) Numbers of new cases in the Czech Republic's largest trading partner countries in the euro area

The numbers of new cases have peaked in most countries, but growth in infections remains high in some countries

(numbers of new cases per million inhabitants)

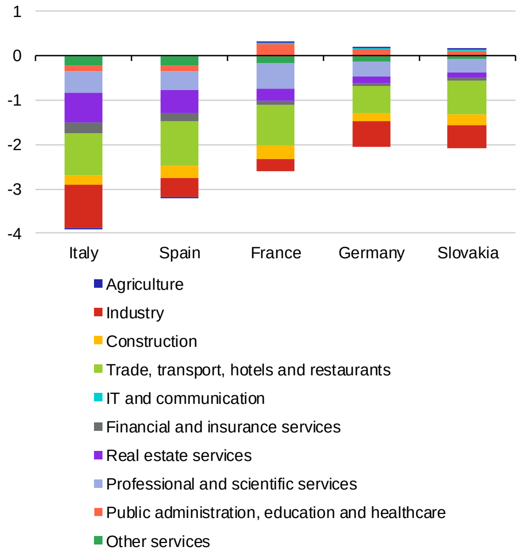


Note: The one-off fluctuation to negative values for Spain reflects a change in the methodology for the time series.

Chart 3 (BOX) Contributions of sectors to the expected decline in gross value added in 2020 Q1

In the Czech Republic's trading partner countries, the pandemic has hit services hardest

(contributions in percentage points to quarter-on-quarter decline in gross value added)



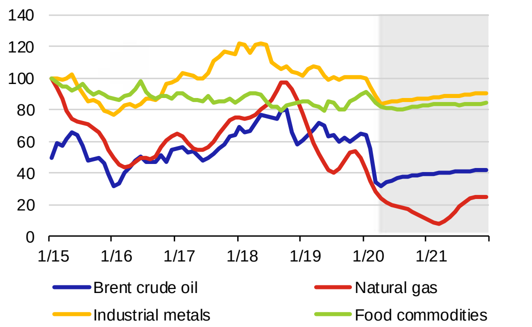
II.1.2 Price developments abroad

The price of oil fell by 65% in 2020 Q1 and will start rising again in mid-2020. After failed OPEC+ talks in early March, the decline accelerated and the Brent crude oil price dropped below USD 23 a barrel at the month-end. Further OPEC+ and G20 talks in mid-April produced a deal on an unprecedented production cut. However, this cannot offset the drop in demand. Its decline is a consequence of the economic impacts of the measures to counter the pandemic and is estimated at as much as one-third year on year. The situation on the physical oil market is even worse due to rapidly diminishing storage capacity, and spot prices are well below futures prices. As a result, production will decrease even in countries that do not want to limit output administratively. The IEA expects the situation to improve from mid-2020, when demand could start to recover and oil inventories

Chart II.1.5 Prices of crude oil and other commodities

The Brent crude oil price dropped in Q1 and is expected to gradually revert to growth, while natural gas prices in Europe are expected to continue declining this year

(oil in USD/barrel; other commodities: index [January 2015 = 100]; average price of natural gas in Europe; source: Bloomberg, World Bank, CNB calculation)



could decline. In the second half of April, the Brent market curve was signalling a gradual rise to around USD 39 a barrel at the close of 2020 and USD 42 a barrel at the end of 2021 (see Chart II.1.5).

The two non-energy commodity price sub-indices also declined at the start of 2020 and their outlook is slightly rising (see Chart II.1.5). The food commodity price sub-index lost 9%, due mainly to prices of pork and beef, sugar, maize, cocoa, coffee and soy. The price of wheat was virtually unchanged and the price of rice went up. Most components of the industrial metals price sub-index fell by about 15% due to low activity in manufacturing. The price decline halted in late March as production resumed in China. Rubber and cotton prices showed a similar pattern (falling by more than 20%).

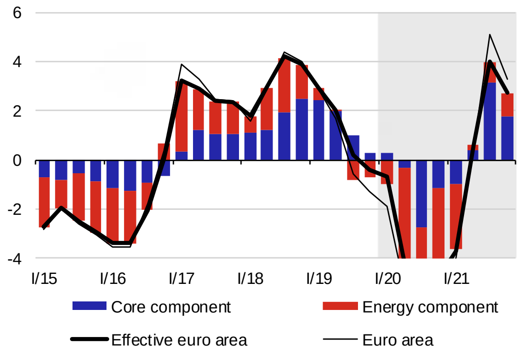
The decline in industrial producer prices is gradually deepening and will bottom out in the second half of this year (see Chart II.1.6). This is due mainly to a negative contribution of the energy component caused by the collapse of oil prices. Later on, the core component will also contribute to the overall decline in producer prices in the effective euro area due to the expected fall in economic activity. The negative demand pressures will be augmented by a downturn in investment activity amid substantial growth in uncertainty. Some time later, the expected decline in core prices will also reflect the second-round cost effects of the low price of oil and, to a lesser extent, other inputs, such as industrial metals. These effects will outweigh the initial negative supply shock, which will foster price growth due to disruptions to the supply of industrial products and possible temporary shortages of those products in the market.[6] Overall, producer prices in the effective euro area will decline by 4% in 2020 as a whole and rise by 1% in 2021.

Consumer price inflation in the euro area will slow considerably this year (see Chart II.1.7). Headline inflation stood at only 0.7% in March. This slowdown was due mainly to a negative contribution of energy prices. Core inflation also slowed, suggesting persisting subdued inflation pressures and low inflation expectations. The forthcoming sharp slowdown in inflation will be due to the above-mentioned fall in energy prices and negative demand pressures. Consumer price inflation will thus almost halt at the end of this year. This year, prices will grow the most in Slovakia, while declines are forecasted for Italy and Spain. A partial correction of this year's fall in consumer demand combined with the fade-out of the decrease in oil prices will lead to a temporary recovery in inflation to 2% in the effective euro area in 2021.

Chart II.1.6 Industrial producer prices in the euro area

The collapse of energy prices and the expected fall in economic activity will lead to a sizeable decline in industrial producer prices this year

(annual percentage changes; contributions in percentage points to growth in the effective euro area; seasonally adjusted; CNB calculation)

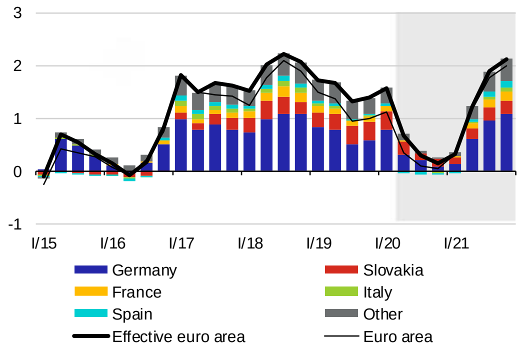


Note: The energy component is determined by developments in industries strongly linked to the oil price. The rest of the PPI index in effective terms is the core component.

Chart II.1.7 Consumer price inflation outlook in the euro area

Inflation will slow considerably this year and return to 2% during 2021

(HICP; annual percentage changes; contributions in percentage points to growth in the effective euro area; seasonally adjusted; CNB calculation)



Note: Other comprises 12 other euro area countries. Its forecasted growth corresponds to the average growth of the five countries shown in the chart.

6 The PMI survey indicates a significant increase in delays in supplier relationships between industrial firms. Unlike in the past, when a deterioration in this sub-index was accompanied by demand-driven price growth, it is now being accompanied by a decline in industrial producer prices. This is because industrial firms are offering discounts to boost their sales and reduce inventories. Discount policies are also being reported by firms in the services sector. On top of that, declining labour costs are fostering lower corporate costs.

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.1.8).[7] The spread of the coronavirus pandemic beyond China visibly affected sentiment on financial and commodity markets in March. Growth in risk aversion led to capital being transferred into safe assets. Yields on US and German government bonds fell to all-time lows, while those on riskier government bonds (Italy, Greece) briefly increased. The ECB responded to the situation in two steps. At its regular meeting in March, it announced support measures, including an increase in asset purchases totalling EUR 120 billion. Following a further deterioration of the economic and financial situation, it announced a new, EUR 750 billion Pandemic Emergency Purchase Programme (PEPP) at an extraordinary meeting.[8] The announcement of the programme was accompanied by an assurance that the ECB would do everything necessary to support the euro area so that all economic sectors could absorb the pandemic-related shock. The market responded with a decline in yields on risky bonds, especially Italian and Greek ones. Conversely, increases were recorded for returns on safe assets, including the ten-year German government bond. Its yield is expected to rise only gradually from its current negative levels to zero at the end of 2021 (see Chart II.1.9).

The 3M USD LIBOR dropped sharply following radical measures taken by the Federal Reserve (see Chart II.1.8). At extraordinary meetings in March and April, the Fed cut the interest rate target range progressively to zero and announced unlimited asset purchases under various programmes. It also adjusted the conditions for short-term funding and supported dollar liquidity through new or enhanced swap lines and repos. These measures helped stabilise financial markets, especially segments related to corporate securities. The current market outlook for the 3M USD LIBOR is broadly stable at the one-year horizon. The spread vis-à-vis the euro rate with the same maturity should thus remain below one percentage point.

According to the April CF outlook, the euro will appreciate slightly against the dollar (see Chart II.1.10). The euro is also expected to strengthen in effective terms, mainly due to appreciation against the Chinese and British currencies. The financial market turmoil fostered volatility of the USD/EUR currency pair (among others). Currency markets did not calm until central banks took coordinated action in March. This intervention helped stabilise demand for dollar liquidity mainly through swap lines. News from the USA (a rise in the number of unemployed persons and complex talks about public support for the US economy) and the

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7 Given the financial market stress, short-term unsecured EURIBOR rates are increasing while secured segments are remaining stable. The 3M EURIBOR is therefore temporarily proxied in the forecast by the outlook for the EONIA rate with the relevant spread. This forecast takes into account expectations regarding the ECB's asset purchase programme through expert adjustments using shadow interest rates, which are significantly lower than market rates.

8 Besides the assets previously purchased by the ECB, the list of eligible assets under the PEPP includes non-financial commercial paper and Greek bonds. Standards for collateral in refinancing operations have also been lowered – bond purchases have been extended to include lower-rated bonds (speculative-grade BB+ or higher).

Chart II.1.8 3M EURIBOR and 3M USD LIBOR

The radical monetary policy easing in the USA was reflected in a decline in the spread between 3M rates in the USA and the euro area

(percentages; differences in percentage points)

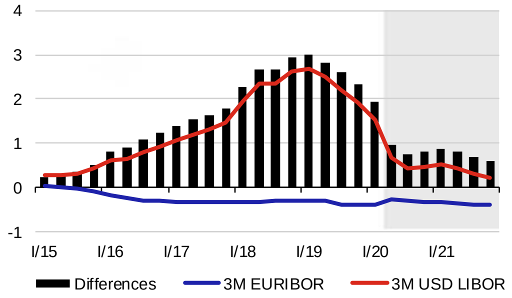


Chart II.1.9 10Y government bond yields

The spread between ten-year government bond yields in the USA and Germany narrowed

(percentages; differences in percentage points)

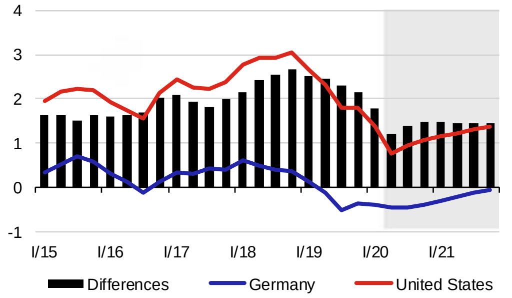
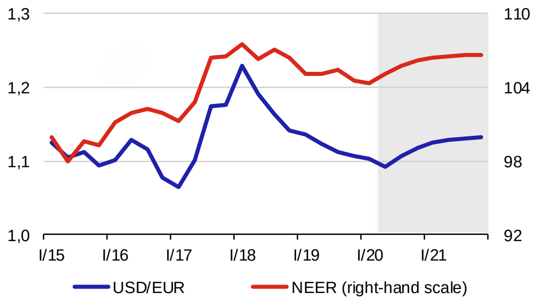


Chart II.1.10 Euro exchange rate

The CF analysts expect the euro to appreciate against the dollar and other currencies

(USD/EUR; NEER of euro against currencies of euro area countries' 18 main partners; 2015 Q1 = 100; right-hand scale)



peaking of the pandemic in the euro area also contributed to the subsequent correction. The key factor for the currency pair going forward will be how the USA and the euro area deal with the economic impacts of the coronavirus pandemic.

II.2 THE FORECAST

Inflation will fall below the upper boundary of the tolerance band around the 2% target in the coming months, mainly due to the generally anti-inflationary impacts of the coronavirus pandemic amid a deep decline in domestic economic activity.[9] The latter will drop sharply in 2020 H1 as a result of measures taken by the government and firms to counter the spread of the virus. Despite stabilising fiscal, monetary and macroprudential policy measures, the labour market will be visibly affected. It will cool quickly in the first half of the year and continue to do so in 2021 despite a modest economic recovery. The cooling of the labour market will significantly dampen wage growth and thus largely also the related recovery in household consumption growth. Investment activity will also remain weak in the coming quarters, due in part to worse business sentiment. It will recover only partially next year. Goods and services exports will also fall very sharply. A pronounced cooling of the overall price pressures will cause inflation to return close to the 2% target in late 2020/early 2021. This will be also be fostered by a drop in fuel prices and slower growth in administered prices. After the sharp fall in domestic market interest rates recorded in March, consistent with the forecast is a further decline in 2020 Q2 followed by broad stability. The exchange rate of the koruna, which depreciated sharply at the end of Q1 due to the outbreak of the coronavirus pandemic, will remain close to its current level until the end of 2021.

BOX 2 Direct impacts of the Covid-19 pandemic on the Czech economy

The Czech Republic – like the rest of the world – is facing the coronavirus pandemic. The government has responded by introducing measures that have temporarily frozen economic activity in some sectors. This has been amplified by the spontaneous decisions of some firms to temporarily suspend production. This box complements Box 1 on the impacts of the pandemic in the Czech Republic's main trading partner countries by summarising the measures taken locally and estimating their direct impact on the domestic economy.

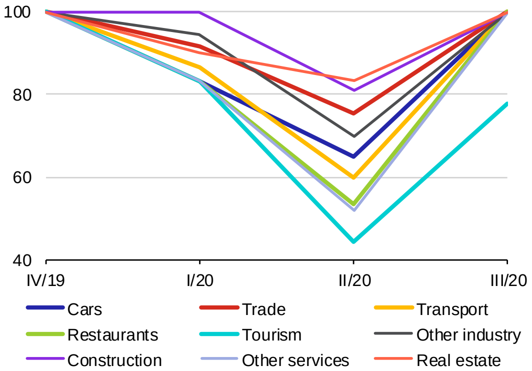
In mid-March, the government declared a state of emergency and took a number of measures to curb the pandemic. Schools, restaurants, hotels, service providers and most shops[10] were gradually closed and all mass events cancelled. The national borders were closed to passenger transport at the same time. At company level, decisions were made to temporarily suspend or significantly cut production in the Czech automotive industry and other industrial sectors. The measures have affected about 40% of the Czech economy overall and will cause total economic activity to decline in 2020 Q1 and especially in 2020 Q2. The drop in output will occur mainly in services and industry. In Q2, however, it will also affect construction, primarily due to restrictions on the movement of foreign nationals (see Chart 1).

As regards the expenditure components of GDP, household consumption, exports and investment will be hit hardest in H1. Symmetric input-output tables are used to calculate the impact of the decline in gross value added in the sectors under

Chart 1 (BOX) Direct impact of the measures on gross value added

The measures will have the strongest effect on services, especially tourism

(index; unrestricted operation = 100)



Note: The return to 100 in 2020 Q3 means a return to operation unrestricted by the quarantine measures of the government and firms, not to the pre-coronavirus output level.

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9 The economic impacts of the global coronavirus pandemic and the quarantine measures subsequently introduced by individual governments make it difficult to produce a forecast for macroeconomic variables based on standard model mechanisms. The current situation has thus made it necessary to make greater use of expert judgements in the forecast, especially this year.

10 Except for food retailers, pharmacies, drugstores and some others.

consideration on the expenditure components of GDP. In Q1, according to the estimate, declines were recorded mainly by household consumption and exports (see Table 1). This reflects developments in other services, wholesale and retail trade, and tourism. In Q2, more capital-intensive sectors (industry and construction) will be affected to a greater extent as well. This will lead to a substantial decline in investment. In Q3, the lifting of the measures of the government and firms will help revive growth in these expenditure components.

The government is dampening the negative impact on firms and the labour market using measures to support the economy and maintain liquidity. The government measures are having major budgetary impacts. They include an employment protection programme (Antivirus),[11] assistance for the self-employed[12] and payment of an attendance allowance[13] after schools were closed. In 2021, legal entities and individuals will be able to recover this year's tax loss against taxes paid for 2018 and 2019 ("loss carryback").[14] This is expected to boost private investment and household consumption. The coronavirus-related fiscal measures included in the forecast[15] amount to 2% of GDP in 2020 and 0.4% of GDP in 2021 (see Table 2). On top of this, further programmes have been introduced that have no immediate impact on the budget but do affect the liquidity situation of firms and the consumption of households, such as a moratorium on loan payments and guarantees for corporate loans.[16]

The current situation will also be reflected in the components of inflation. On the one hand, food prices will go up, mainly due to higher transport costs and shortages of seasonal agricultural workers in Europe. On the other hand, prices of services will dampen inflation during the spring and summer months. Given the expected sustained downturn in international tourism, this will not be fully offset later this year. Lower inflation will also be fostered by a decline in fuel prices linked with the fall in crude

Table 1 (BOX) Direct impacts of the measures on the components of GDP

The measures taken will substantially dampen economic activity in 2020 H1

(impacts in percentage points on quarterly GDP growth; constant prices)

	1Q20	2Q20	3Q20
Household consumption	-2.8	-4.6	7.8
Gross fixed capital formation	-1.4	-4.9	6.9
Exports	-1.7	-3.8	6.2

Table 2 (BOX) Fiscal measures to support the economy and maintain liquidity

The volume of fiscal stabilisation measures will be exceptionally high this year

(% of nominal GDP)

	2020	2021
Extension and increase in attendance allowance	0.3	0.0
Wage subsidies for companies (Kurzarbeit)	0.7	0.0
Cancelling of social and health contributions for self-employed	0.4	0.0
One-off benefit for self-employed (25k Programme)	0.4	0.0
Increase in health care and emergency services expenditure	0.2	0.0
"Loss carryback" – recoverable tax loss	0.0	0.4
Total	2.0	0.4

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11 This involves a wage subsidy graded according to the reason for introducing Kurzarbeit (such as insufficient demand, input shortages and business closures due to government resolutions).

12 This involves the cancellation of minimum social and health insurance contributions for the self-employed and the payment of a one-off benefit (the 25k Programme).

13 Unlike the other compensation programmes, neither the attendance allowance nor the wage subsidy for quarantined individuals will be included in the average wage statistics, so wage growth will drop significantly and subsequently become volatile next year. This will be amplified by cases where employers reimburse wages only partially.

14 The approval of this measure is uncertain. Although it was announced by the Ministry of Finance in "Liberation Package II", a draft legal amendment has yet to be submitted at a government meeting.

15 The forecast includes the measures known as of 21 April. However, take-up of some of them is currently rather lower than the government assumed.

16 The indirect support includes government guarantees for preferential loans to firms ranging from several tens to hundreds of billions of koruna (COVID programmes). The potential future payment of these guarantees represents a risk of worse public finance performance than previously expected.

oil prices, which to some extent also reflects the global economic contraction caused by the coronavirus pandemic.

The Czech government started to ease some of its quarantine measures in April. Selected shops were gradually reopened. Based on the epidemiological situation, most of the original measures were expected to be relaxed in five stages by 8 June[17] (the restrictions relating to the cross-border movement of persons, schools and mass cultural, sports and social events are likely to stay in place longer). This will lead to a gradual recovery of the Czech economy in 2020 H2. The forecast assumes that the government restrictions will have been fully lifted by Q3, with the exception of tourism-related sectors, which will be affected for longer.

The coronavirus pandemic will also have an indirect effect on economic activity. Despite the government support measures, the labour market situation will worsen quite considerably, due largely to adverse developments abroad. The general unemployment rate will rise significantly and the previously very tight labour market will cool down. Both business and consumer sentiment will meanwhile deteriorate considerably.

II.2.1 Inflation and monetary policy

Headline inflation will fall below the upper boundary of the tolerance band in Q2 and return close to the target in 2021 (see Chart II.2.1). Inflation will slow in the remainder of this year. This will be due to all its components except food prices, whose growth will temporarily rise in Q2. In addition to a marked cooling of domestic price pressures, the weakening core inflation will be due to households' concerns about the coronavirus pandemic, which will be reflected mainly in tourism-related prices. The previously buoyant growth in administered prices will also weaken as the high growth in energy prices subsides. Fuel prices, which fell in April, will stay at low levels for the rest of the year (see Chart II.2.2). Food price inflation will slow at the end of this year. Inflation will thus temporarily drop slightly below 2% at the start of 2021, despite an easing of the monetary conditions in both the exchange rate and interest rate components. It will then increase slightly. Monetary policy-relevant inflation[18] will be below headline inflation over the entire forecast horizon, as the first-round effects of changes to indirect taxes[19] will be slightly positive.

Core inflation will slow considerably on account of declining domestic price pressures. It will near 2% in Q2 (see Chart II.2.3). In addition to the expected price decline in services (especially tourism), this will be due to the gradually worsening labour market

Table II.2.1 Forecasts of selected variables

GDP will fall sharply this year and return to growth in 2021

(annual percentage changes unless otherwise indicated)

	2019 actual	2020 forecast	2021 forecast
Headline inflation	2.8	2.8	2.1
GDP	2.5	-8.0	4.0
Average nominal wage	7.1	2.5	5.8
Exchange rate (CZK/EUR)	25.7	26.9	27.5
3M PRIBOR (in %)	2.1	0.9	0.6

Chart II.2.1 Headline inflation and monetary policy-relevant inflation

Headline inflation will fall quickly and will be close to the 2% target at the monetary policy horizon

(annual percentage changes)

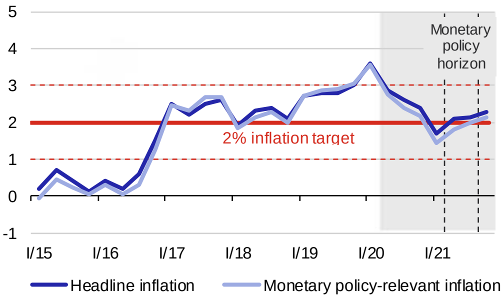
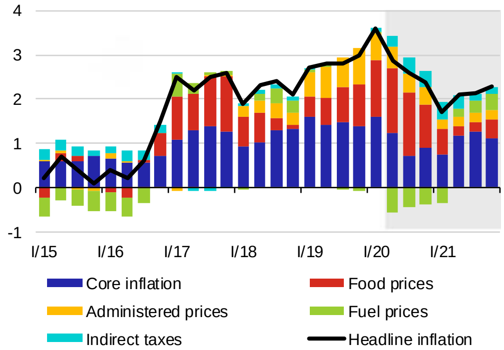


Chart II.2.2 Structure of inflation and the inflation forecast

Inflation will slow this year mainly due to a decline in core inflation and a fall in fuel prices

(annual percentage changes; contributions in percentage points)



Note: Food prices also include prices of alcoholic beverages and tobacco. The contribution of the first-round effects of changes to indirect taxes relates to non-administered prices.

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17 According to the updated version of the government's plan for the gradual easing of quarantine measures from the end of April, most restrictions should be lifted as early as 25 May.

18 Monetary policy-relevant inflation is inflation adjusted for the first-round effects of changes to indirect taxes. The difference between headline and monetary policy-relevant inflation is equal to the size of the first-round tax effect.

19 The effect of changes to indirect taxes in 2020 on the inflation forecast was described in detail in a box in IR III/2019.

situation. Although positive second-round effects of the lower VAT on some services (e.g. restaurants and hairdressing) will affect core inflation from May 2020 onwards, with substantial depreciation of the koruna also acting in the same direction, they will only partly offset the downward pressure on core inflation. Core inflation will thus be fluctuating around 1.5% from 2020 H2. As economic activity gradually recovers and price pressures re-emerge, core inflation will pick up to 2% in 2021 Q2 and remain close to this level until the end of 2021.

Food price inflation will reflect supply-side constraints and strong demand in the near future and not decrease until late 2020 and early 2021. The almost 6% growth in prices will be due to high demand for food, labour shortages in agriculture in Europe and international transport restrictions due to the coronavirus pandemic. Cold weather (morning frost) in early spring is another factor that will lead to growth in prices, especially those of fruit. Growth in food prices will also be fostered in the second half of the year by renewed growth in agricultural producer prices. These factors will fade out next year and food price inflation will drop significantly (see Chart II.2.3).

Domestic fuel prices will fall significantly due to the collapse of global oil prices. This year's global oil price developments have pushed fuel prices into a sharp year-on-year decline. That decline will be deepest in Q2 (see Chart II.2.3) but will stay in double figures for the rest of the year, despite considerable depreciation of the koruna against both the euro and the dollar. Fuel prices will start growing again in year-on-year terms in 2021.

The recent high growth in administered prices will slow further this year. This will be due mainly to a gradual decline in the currently high growth in electricity prices and a decrease in heat prices. Next year, they will be joined by a fall in gas prices for households, reflecting an observed drop in the exchange price. Overall, administered price inflation will thus decrease to 1.5% in early 2021 and stay there throughout 2021 (see Table 2.2).

Over the entire forecast horizon, the exchange rate will remain close to the current level to which it weakened after the pandemic broke out (see Chart II.2.4). The exchange rate forecast for 2020 Q2 is set at CZK 27.2 to the euro and thus reflects the sharp weakening of the koruna at the end of Q1 caused by the outbreak of the coronavirus pandemic. The exchange rate will remain close to its current level over the entire forecast horizon due to the worse foreign and domestic economic outlook and narrower interest rate differential.

Consistent with the forecast is a further decline in domestic market interest rates in Q2 (see Chart II.2.5). This decline in rates is a continuation of the sharp drop recorded in March and reflects the effects of government quarantine measures in the domestic economy as well as the significantly worse external outlook. These factors will lead to a significant cooling of the labour market and worsening sentiment among households and firms. This will have significant anti-inflationary consequences. However, the decline in rates will be slowed by the recent sharp weakening of the koruna, which is contributing to an easing of the overall monetary conditions. Rates will then remain broadly stable over the rest of the forecast horizon.

Chart II.2.3 Components of inflation

The already strong growth in food prices will briefly increase further, while core inflation will decrease and fuel prices will continue to decline sharply for the rest of this year

(annual percentage changes)

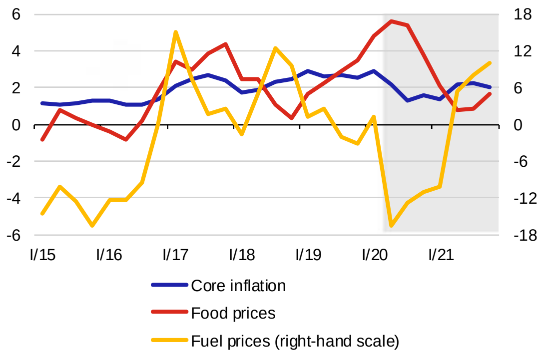


Table II.2.2 Forecast of administrative effects

Administered price inflation will slow and continue to be driven mainly by electricity prices

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

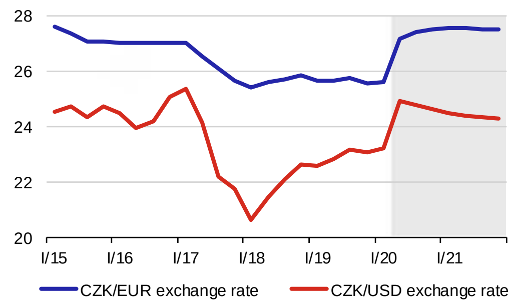
	2019 actual		2020 forecast		2021 forecast	
ADMINISTERED PRICES[a)]	4.4	0.69	3.2	0.47	1.5	0.21
of which (main changes):						
electricity	10.6	0.45	7.8	0.30	2.0	0.08
natural gas	3.3	0.08	0.6	0.01	-2.3	-0.05
heat	4.6	0.08	-1.4	-0.02	2.4	0.04
water	2.6	0.02	2.6	0.02	1.7	0.01
health care	2.3	0.03	2.2	0.03	2.8	0.04
transport	-5.0	-0.08	1.7	0.02	2.0	0.03

a) including effects of indirect tax changes

Chart II.2.4 Exchange rate forecast

The exchange rate of the koruna will remain close to its current weakened level due to unfavourable economic developments

(CZK/EUR and CZK/USD)



The new forecast contains a dramatically lower path of domestic interest rates due to the economic impacts of the pandemic (see Chart II.2.6). The contribution of the worse external demand outlook is the dominant factor fostering lower market interest rates than in the previous forecast. Reduced outlooks for foreign producer prices, oil prices and foreign shadow interest rates also shift the domestic interest rate path downwards. The contribution of the short-term inflation outlook fosters slightly lower interest rates, too. The effect of the sharp reduction in interest rates at the end of Q1, which is captured in the interest rate rule as a short-term monetary policy shock, also contributes in the same direction this year, as the significant decline in rates in the second half of March naturally had only a limited effect on their average level in Q1. Expert adjustments act overall towards higher rates this year, mainly due to a significant decrease in labour efficiency during the quarantine restrictions. The expert adjustments also take into consideration the anti-inflationary effects of the sharp contraction of the Czech economy and the cooling of the labour market this year due to the coronavirus pandemic. These effects will recede only slowly, still fostering lower domestic interest rates in 2021.

II.2.2 Costs and the labour market

Growth in costs will initially surge temporarily on the back of a weaker exchange rate, but will later slow sharply due to subdued domestic inflationary pressures (see Chart II.2.7). At the start of this year, growth in total costs in the consumer sector decreased further as the decline in energy import prices deepened and growth in domestic costs slowed. In 2020 Q2, however, growth in total costs will surge temporarily on the back of a noticeable weakening of the koruna. This will be reflected in a significantly positive contribution of core import prices and will also partly offset the decline in oil prices within energy import prices. Conversely, domestic inflationary pressures will ease significantly over the course of this year. This, together with a stable exchange rate, will lead to a sharp slowdown in total cost growth in Q3. The resumption of GDP growth in the second half of this year will manifest itself in a recovering contribution of the domestic economy. Growth in total costs will thus gradually accelerate to close to its steady-state level, where it will remain next year. The contribution of price convergence will be constantly positive over the entire forecast horizon.

Growth in domestic costs will initially almost come to a halt due to the freeze of the economy, and then gradually return to its steady-state level (see Chart II.2.8). Growth in domestic nominal marginal costs in the intermediate goods sector slowed in the first quarter of this year as a result of government quarantine measures leading to a freeze of economic activity in many sectors. This was manifested via a fall in domestic demand in a decline in the contribution of the price of capital deep into negative territory. At the same time, it was only partly offset by continued wage growth and a significant decline in labour efficiency linked with the limited usability of employees in workplaces affected by quarantine measures. The effect of government restrictions dampening economic activity on the one hand and reducing labour efficiency on the other will be even more pronounced in Q2. However, these conflicting effects in terms of cost growth will

Chart II.2.5 Interest rate forecast

After the sharp fall in domestic market interest rates recorded in March, consistent with the forecast is a further decline in 2020 Q2 followed by broad stability

(percentages)

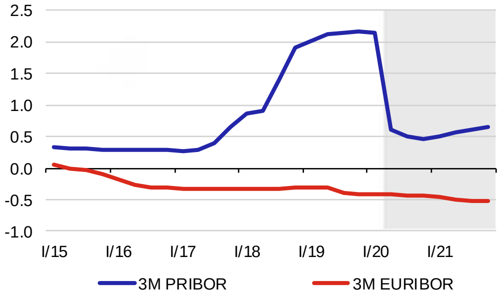


Chart II.2.6 Decomposition of changes in the interest rate forecast

Compared to the previous forecast, the worse external outlook is the dominant factor fostering significantly lower rates

(3M PRIBOR; percentage points)

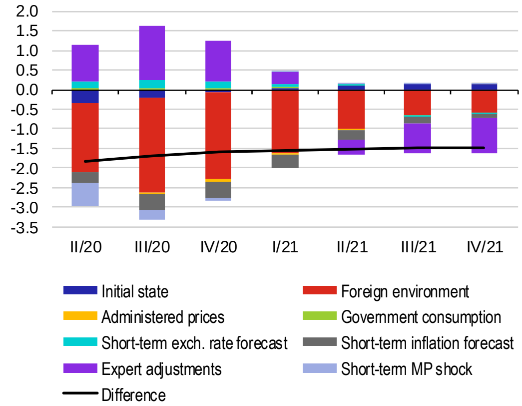
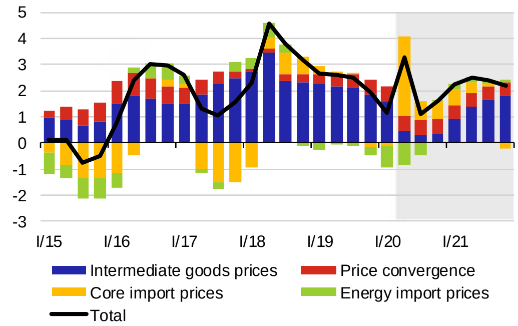


Chart II.2.7 Costs in the consumer sector

Growth in costs will initially surge on the back of a temporary increase in the contribution of core import prices, but will later slow sharply due to subdued domestic inflation pressures

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



continue to roughly offset each other. The rapid cooling on the labour market will be reflected in a decrease in the contribution of wages. As a result, growth in domestic costs will almost come to a halt in Q2. It will recover in the second half of this year, when the previous effects will fade due to the economic recovery. The re-emergent growth in the price of capital and wages will meanwhile be offset by renewed growth in labour efficiency. Growth in domestic costs will thus gradually return to its steady-state level, where it will remain in 2021.

Employment will decline appreciably almost until the end of next year owing to the fall in economic activity (see Chart II.2.9). This will primarily be the result of a significant decline in economic activity amid a downturn in domestic and external demand this year. Next year, as economic growth resumes, demand for labour will stop declining further. This will cause growth in employment to turn slightly positive again at the close of the year. The number of employees converted into full-time equivalents will fall more significantly than the physical number of employees this year, due to a reduction in average hours worked. From a sectoral point of view, industry and market services will contribute roughly equally to the decline in the converted number of employees.

The unemployment rate will increase rapidly, peaking at the start of next year (see Chart II.2.9). Despite the government's employment protection measures, the general unemployment rate will rise rapidly to about 5% due to the sharp economic downturn. This will be reflected mainly in a significant increase in the number of unemployed, accompanied by a slight reduction in the workforce. More marked growth in unemployment will be prevented by lay-offs of foreign workers and a high initial number of vacancies. In 2021 H2, conversely, a recovery in demand for work will be reflected in a slight decrease in the number of unemployed. The share of unemployed persons will follow a similar path as the general unemployment rate. The economic downturn is reflected over the forecast horizon in a marked increase in the number of registered job applicants amid a continued slight decline in the population aged 15–64.

Wage growth will slow significantly this year owing to the rapid cooling of the labour market and government quarantine measures, and will then recover (see Chart II.2.10). The average wage in market sectors will decrease in Q2. This will be due mainly to the statistical effect of a short-term drop in the wages of employees drawing attendance allowance or wage compensation in the event of quarantine. A drop in wages can be expected for employees not working as a result of obstacles to work on the employer's part connected with the pandemic and the government measures to counter it. Some of these employees are receiving only partial wage compensation.[20] This statistical effect is clear from Chart II.2.11, which shows the average wage in absolute terms. Conversely, the further increase in the minimum

20 Methodologically, the attendance allowance and compensation for mandatory quarantine are not components of wages, so drawdown of these benefits reduces the average wage, similar to the payment of only partial wage compensation to employees by firms impacted by the coronavirus. This effect will be most noticeable in 2020 Q2. Firms are partially reimbursed for the provision of wage compensation under the Antivirus programme.

Chart II.2.8 Costs in the intermediate goods sector

The economic freeze will be reflected – via a decline in the contribution of the price of capital and a decrease in the contribution of wages – in a temporary halt in growth of domestic costs, which will be partially offset by the related fall in labour efficiency

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

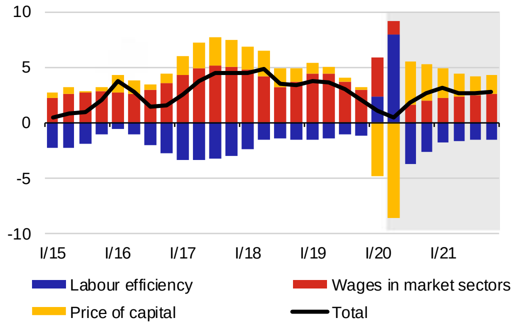


Chart II.2.9 Labour market forecast

Total employment will noticeably decrease, while the unemployment rate will increase markedly

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

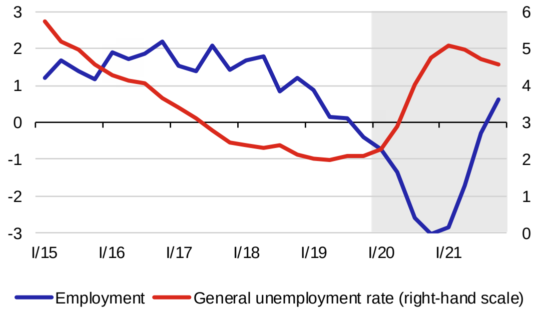
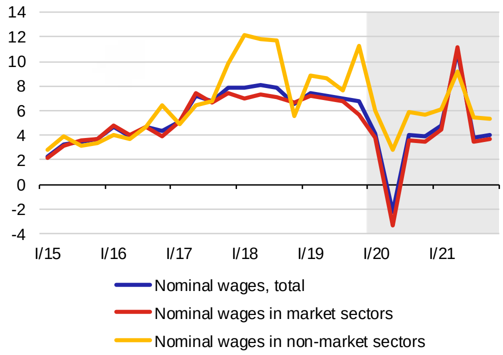


Chart II.2.10 Average nominal wages

Wage growth will slow significantly in both market and non-market sectors, but will be highly volatile over the entire forecast horizon

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

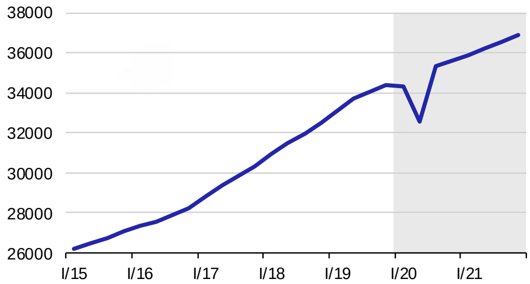


wage introduced at the start of this year[21] and the compositional effect[22] connected with the marked rise in unemployment will act in the opposite direction. Growth of the average wage in market sectors will thus slow below 2% for the whole of this year due to the above combination of factors and the cooled labour market. Wage growth will then pick up again next year. The effect of this year's low comparison base (resulting from the above-mentioned drop in incomes captured in the wage statistics) will also contribute to this. Wage growth in non-market sectors will remain high this year, reflecting both a significant increase in the salaries of teaching and non-teaching staff in the education system, and a fixed salary increase for other employees of institutions financed directly from the state budget.[23] As in the case of market wages, the above statistical effect will cause wage growth in non-market sectors to fluctuate, but to a lesser extent.

Chart II.2.11 Average nominal wages in market sectors

The average wage will be affected this year by a drop in wages linked with the pandemic and statistical effects

(CZK billions; in market sectors; seasonally adjusted)



II.2.3 Economic activity

The Czech economy will fall into a deep decline this year as result of the coronavirus pandemic (see Chart II.2.12). GDP will fall by 8% this year. A large part of the economy has been "switched off" since the end of Q1 due to government quarantine measures, production shutdowns in some companies and a drop in external demand. All expenditure components except government consumption will contribute to a significant drop in GDP in the first half of this year. After the expected easing of government restrictions in the domestic economy during the spring, the decline in economic activity will begin to moderate in the second half of the year, partly due to a recovery in external demand.

The output gap will open into significantly negative values in the first half of this year, and potential output will also decrease temporarily. The fall in economic activity in the first half of this year will lead to a modest decline in potential output. In addition to the longer-term impacts of the pandemic on some sectors (such as international tourism), this will reflect a decline in corporate investment due to deteriorating sentiment. At the same time, the output gap will open into significantly negative values (see Chart II.2.13). Economic activity will begin to recover in the second half of the year. This will lead to renewed growth of potential output and simultaneously to a gradual closing of the negative output gap. However, the gap will not have closed entirely even by the end of 2021.

The depth of the economic contraction will meanwhile depend on how long the quarantine measures remain in place. As the level charts in Block 1 show, economic activity will start to increase again in the middle of this year. This will initially primarily reflect the easing of the restrictive government measures. However, overall economic activity will not have reached the end-2019 level even by the end of the forecast horizon. This will be prevented mainly by a drop in fixed private investment, as the resumption of

Chart II.2.12 Annual GDP growth structure

Only government consumption will make a positive contribution to GDP growth in 2020; the other components will resume positive contributions next year

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

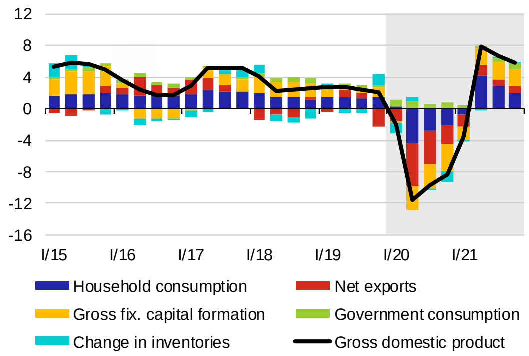
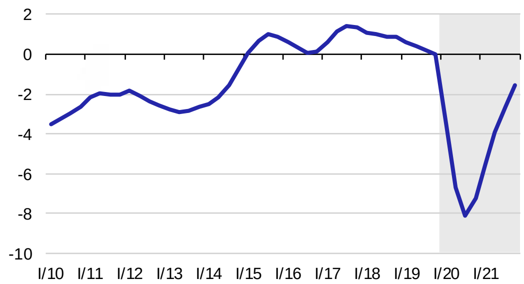


Chart II.2.13 Output gap as measured by the small structural model

The output gap will remain negative over the entire forecast horizon

(% of potential output)



21 The minimum wage was increased by CZK 1,250 to CZK 14,600 in January 2020.

22 The statistical distortion of the average wage due to the dismissal of low-income employees.

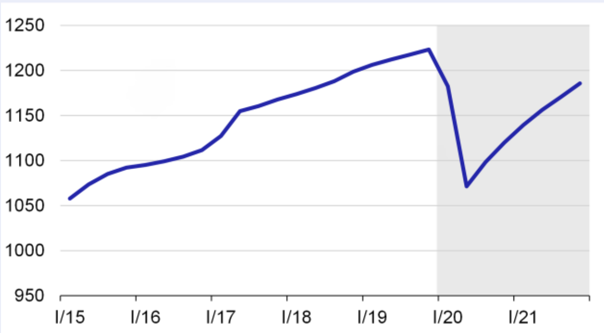
23 In connection with the pandemic, the forecast also assumes a temporary increase in compensation for front-line employees (staff of public hospitals and the emergency services).

its growth will be hindered by dramatically worsening corporate sentiment. Household consumption will also be below the pre-pandemic level at the end of the forecast horizon, albeit just barely. This will be due to the closure of many businesses, especially in the services sector, and a decline in wage growth. Exports of goods and services will be strongly affected by the drop in external demand and the restrictions on the international movement of persons.

Block 1: Selected indicators in levels

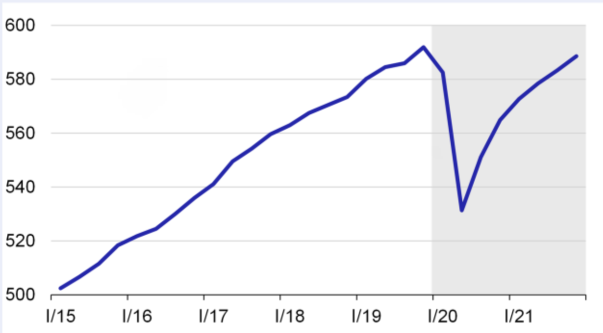
GDP

(CZK billions; constant prices; seasonally adjusted)



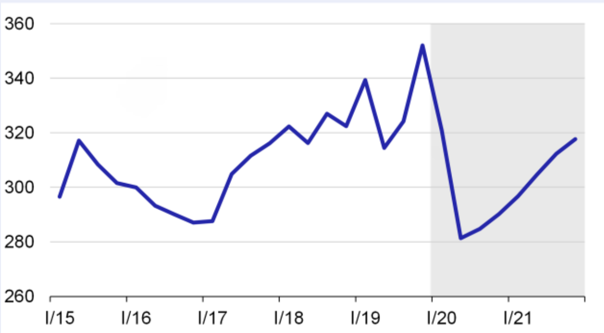
Household consumption

(CZK billions; constant prices; seasonally adjusted)



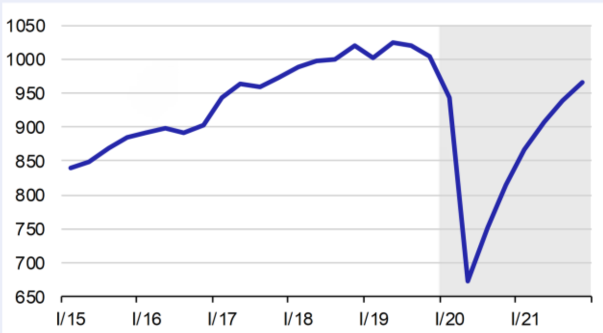
Gross capital formation

(CZK billions; constant prices; seasonally adjusted)



Exports of goods and services

(CZK billions; constant prices; seasonally adjusted)

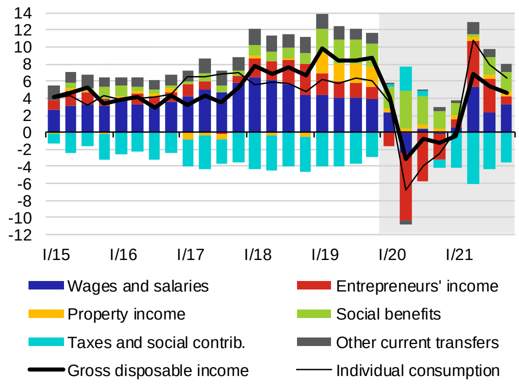


Household consumption will slow this year as a result of the government measures and the subsequent abrupt cooling of the labour market. The income situation of households will worsen. The previously robust growth in nominal gross disposable income will come to a halt, mainly reflecting a drop in entrepreneurs' income and in wages and salaries (see Chart II.2.14). Many firms and households have already run into liquidity problems. For this reason, increased social allowances will act in the opposite direction. In addition, private consumption expenditure will be supported by other (previously approved as well as completely new) government measures.[24] After the impact of the quarantine measures subsides and services get up and running, the decline in household consumption will begin to moderate. Next year, consumption will grow at a rate of more than 4% overall (see

Chart II.2.14 Nominal disposable income

Disposable income will return to positive growth next year, when this year's drop in wages and salaries and entrepreneurs' income will fade out

(annual percentage changes; contributions in percentage points)



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

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24 These include the increase in parental allowance and the higher-than-usual increase in old-age pensions approved last year and the newly adopted extended attendance allowance, moratorium on loan repayments, cancellation of health and social security contributions for the self-employed and (as yet uncertain) tax loss carryback.

Chart II.2.15). After a temporary rise this year reflecting cautious behaviour and sharply deteriorating sentiment of households, the saving rate will return to a similar level as at the start of the year.

Government consumption will be the only component of demand to maintain a positive contribution to GDP growth this year. Its real growth will rise to 4% on average this year (see Chart II.2.15). In nominal terms, government consumption will be affected mainly by increased spending on health care, including wages of employees in this sector. Growth in the government consumption deflator will nevertheless slow. This will be due to a drop in the salaries of some government employees drawing attendance allowance due to school closures. Real government consumption will fall to 2% in 2021.

The effects of the coronavirus pandemic and the sharp deterioration in corporate sentiment will be adversely reflected in private investment activity. The decline in private sector investment this year will be caused by the domestic quarantine measures and the production stoppages in some firms. The deep decline in external demand associated with the global spread of the coronavirus pandemic and the significant deterioration in global economic sentiment will have the same effect. In contrast to the two preceding factors, this one will persist longer. Government investment will conversely maintain modest growth, which will continue to be supported by drawdown of EU funds. Next year, private investment will benefit from renewed economic growth abroad and will also be supported by the previous easing of domestic monetary conditions. Tax loss carryback will also have a favourable, though limited, effect.[25] The year-on-year fall in overall gross capital formation will reach more than 11% this year (see Chart II.2.16). In 2021, gross capital formation growth will be positive, with a dominant contribution from private investment.

Exports of goods and services will drop sharply as a result of the freeze in external demand. The fall in exports to the 2010 level will not be significantly affected even by the improvement in domestic exporters' price competitiveness resulting from the depreciation of the koruna. Following the expected fading of the coronavirus pandemic in both the domestic and foreign economies, the dynamics of exports will begin to recover in the second half of this year (see Chart II.2.17). Next year, they will strengthen further and then return to growth in line with external demand. However, the drop in tourism income (under exports of services) will be more protracted.

Import growth will decrease significantly this year due to the drop in domestic demand and exports. The expected unfavourable trend in exports and investment by Czech firms will lead to a decrease in imports of almost 20% due to their high import intensity (see Chart II.2.17). External and domestic demand will return to positive growth next year. This will lead to a recovery in import growth.

The contribution of net exports to GDP growth will be negative this year. Both sides of foreign trade will fall sharply, while the decline in exports will be deeper than that in imports. In 2021, their

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25 If approved.

Chart II.2.15 Real household and government consumption

Growth in government consumption will remain positive, while household consumption will drop sharply this year

(annual percentage changes; seasonally adjusted)

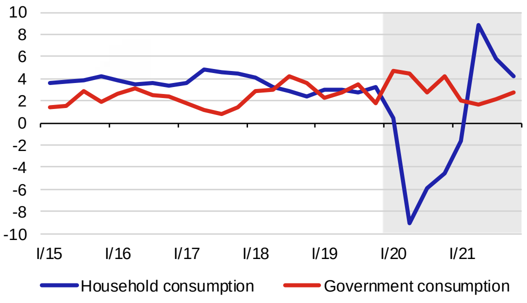


Chart II.2.16 Investment decomposition

The deep decline in gross capital formation will fade away in 2021, with a renewed positive contribution of private investment

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

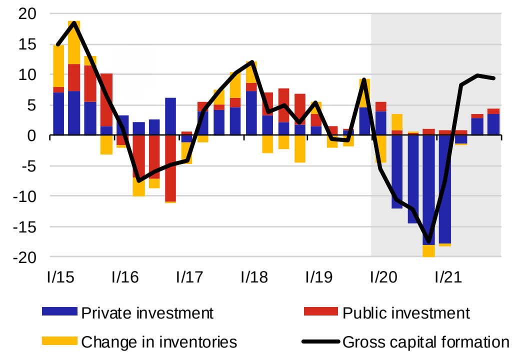
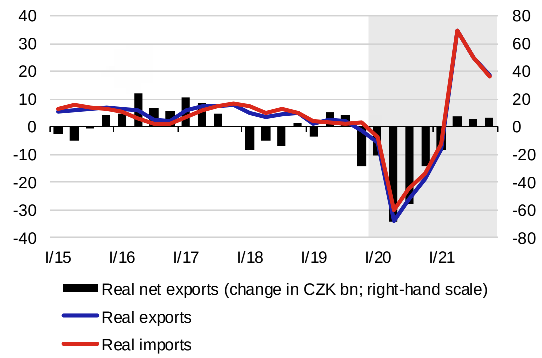


Chart II.2.17 Real exports and imports

The current strongly negative pace of growth in both exports and imports will not turn positive until next year

(year-on-year changes in per cent and CZK billions; seasonally adjusted)



dynamics will converge and the contribution of net exports to GDP growth will thus be roughly neutral.

II.2.4 The balance of payments

Compared with 2019, the current account deficit will increase slightly this year, with significantly lower turnovers in almost all sub-items. The deficit-to-GDP ratio will reach -0.6% (see Chart II.2.18). The drop in external demand will impact the Czech export-oriented economy very strongly. Exports of goods will decrease by around 25% and exports of services (especially in the tourism sector) by more than 30%. The current account deficit (see Table II.2.3) will widen only slightly, because, just like external demand, domestic demand and associated imports of goods and services will go down. Furthermore, commodity prices on world markets (oil and gas in particular) have decreased dramatically. The mild winter moreover reduced the need to import natural gas. A decline in the primary income deficit, where the direct investment earnings deficit will fall sharply, will also help keep the current account deficit only slightly below last year's level. The secondary income deficit will also narrow, as the European Commission has made it easier to draw down unused EU funds in the current programming period.

In 2021, the current account deficit will decrease (to 0.2% of GDP), mainly due to a marked improvement in the goods and services balance. This will be due above all to renewed growth in external demand. A widening of the primary income deficit, associated primarily with the high share of non-residents in key sectors of the economy and growth in their earnings, will act in the opposite direction, but to a much lesser extent. The one-off effect of accelerated drawdown of unused European funds will fade.

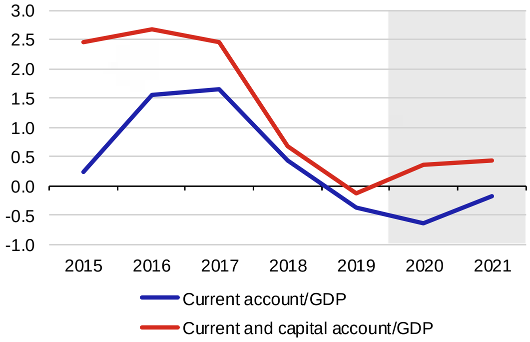
The capital account surplus will increase sharply this year and drop next year. This will be linked primarily with the above-mentioned accelerated drawdown of unused European funds. This year, the increase in the capital account surplus will also be affected by a decline in net payments for emission permits (a sharp fall in prices and lower emissions).

The financial account (excluding banking sector operations) will be balanced in 2020. The net outflow of capital under other investment and reserve assets will be roughly equal to the net inflow of direct and portfolio investment. The overall direct investment balance (see Chart II.2.19) will decrease only slightly compared with 2019, but both the inflow and the outflow will decrease in terms of both new capital and reinvestment. As for portfolio investment (see Chart II.2.20), the forecast expects a slight year-on-year increase in the net inflow. Unlike last year, however, the dominant factor underpinning the inflow will be a rapidly growing volume of foreign government funding rather than a highly positive interest rate differential. The net outflow of capital under other investment excluding banking sector operations will be associated mainly with a reversal of the flow of investment in the business sector (a sharp increase in claims abroad under trade credits). The increase in reserve assets will be slightly smaller than in 2019 (despite a significant increase in the balance vis-à-vis the EU) due to a sharp decline in the return on the CNB's foreign exchange reserves.

Chart II.2.18 Ratios of the balance of payments accounts to GDP

The current account will run a slight deficit in relation to GDP in both forecast years

(percentages)



Note: The figures for 2019 are preliminary.

Table II.2.3 Balance of payments forecast

The forecast expects a slightly wider current account deficit this year compared with 2019

(CZK billions)

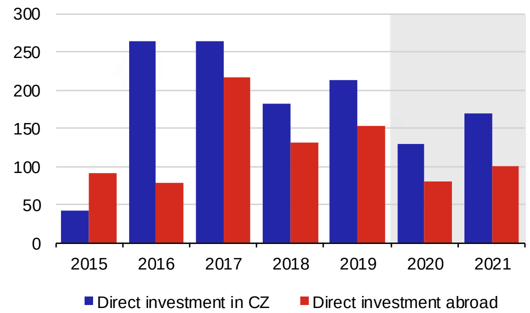
	2019 prelim. outcome	2020 forecast	2021 forecast
A. CURRENT ACCOUNT	-21.2	-35.0	-10.0
Goods	239.8	130.0	170.0
Services	103.7	65.0	85.0
Primary income	-324.1	-215.0	-230.0
Secondary income	-40.6	-15.0	-35.0
B. CAPITAL ACCOUNT	14.1	55.0	35.0
C. FINANCIAL ACCOUNT[a)]	32.8	0.0	0.0
Direct investment	-61.0	-50.0	-70.0
Portfolio investment	-117.6	-140.0	-70.0
Financial derivatives	1.0	-	-
Other investment	102.1	95.0	60.0
Reserve assets	108.3	95.0	80.0

a) forecast excluding operations of banking sector and financial derivatives

Chart II.2.19 Direct investment structure

The net inflow of direct investment into the Czech Republic will decrease only slightly compared with 2019

(CZK billions)



Note: The figures for 2019 are preliminary.

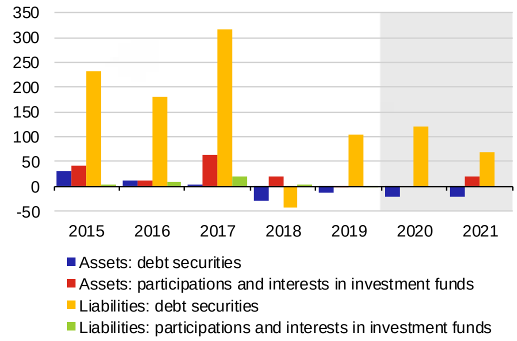
The forecast sees the financial account being balanced in 2021 as well. An increase in the overall net inflow and relatively strong growth in turnover is expected for direct investment. On both the inflow and outflow side, the amount of acquisitions will rise, especially in sectors hit by the coronavirus pandemic. A disinvestment by ČEZ, which was originally planned for an earlier date but will be postponed until next year due to the pandemic, will also foster an increase in the net capital inflow. Under portfolio investment, by contrast, the capital inflow will slow substantially. This will be due mainly to lower supply of government bonds and, to a lesser extent, to the expected end of sales of foreign assets by residents, as investment in foreign shares will become more attractive to residents owing to their low prices. As regards other investment (excluding banking sector operations), the outflow of capital will decrease significantly. This will be due mainly to a decrease in trade credits provided by Czech exporters to foreign partners owing to an improvement in the economic situation and payment discipline in Europe. Growth in reserve assets will slow further (owing to a decline in the surplus on operations vis-à-vis the EU).

Despite an initial deep decline in exports, the Czech economy will not need foreign financing. According to the forecast, the government's rising foreign debt will be fully eliminated by an increase in the creditor position of the CNB and other sectors. After the financial market situation calms, the favourable macroeconomic characteristics of the Czech Republic and its external balance should make koruna assets an attractive investment in Europe, despite a decrease in the CNB's monetary policy rates. Given the high volume of short-term foreign capital in the Czech Republic, its movements may be a significant factor affecting the exchange rate.

Chart II.2.20 Portfolio investment structure

The net inflow of portfolio investment in 2020 will be driven by foreign investment in the rapidly rising government debt

(CZK billions)



Note: The figures for 2019 are expected outcomes.

II.2.5 Fiscal developments

The general government sector will run large deficits due to the current pandemic and fiscal stabilisation measures. The forecast expects a deficit of 4.8% of GDP this year. This will be due to a marked drop in tax revenues owing to the temporary shutdown of economic activity in some sectors and the fiscal measures adopted to support the economy in this situation. Once most of the support measures have been phased out, the deficit will fall to 3.4% of GDP next year (see Table II.2.4).

The fiscal stabilisation measures will amount to 2% of GDP this year and 0.4% of GDP next year. The employment support programme (Antivirus), the support for the self-employed[26] and the payment of increased attendance allowance while schools are closed will have the biggest fiscal impacts this year. Government consumption will reflect a rise in expenditure on materials in the health and emergency services and temporarily higher compensation of front-line state employees. In 2021, legal entities and individuals will be able to recover this year's tax loss against taxes paid for 2018 and 2019 ("loss carryback").[27] On top

Table II.2.4 Fiscal forecast

The general government sector will run large deficits over the forecast horizon

(% of nominal GDP unless otherwise indicated)

	2019 actual	2020 forecast	2021 forecast
Government revenue	42.1	43.3	43.3
Government expenditure	41.9	48.1	46.7
of which: interest payments	0.7	0.8	0.8
GOVERNMENT BUDGET BALANCE (CZK in bn)	15.4	-258.9	-198.4
GOVERNMENT BUDGET BALANCE	0.3	-4.8	-3.4
of which:			
primary balance[a]	1.0	-4.0	-2.7
one-off measures[b]	0.2	0.2	0.2
ADJUSTED BUDGET BALANCE[c]	0.0	-5.0	-3.6
Cyclical component (disaggregated method)[d]	1.4	-1.0	-0.6
Structural balance (disaggregated method)[d]	-1.3	-4.0	-3.0
Fiscal stance in pp (disaggregated method)[e]	-0.8	-2.7	1.0
Cyclical component (aggregated method)[d]	0.3	-1.5	-0.6
Structural balance (aggregated method)[d]	-0.3	-3.5	-3.0
Fiscal stance in pp (aggregated method)[e]	-0.7	-3.2	0.5
GOVERNMENT DEBT (CZK in bn)	1738.7	2031.8	2236.8
GOVERNMENT DEBT	30.8	37.6	38.6

a) government budget balance minus interest payments

b) This item consists of expected revenue from primary 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; the disaggregated method is based on the evolution of the individual tax bases in the business cycle; the aggregated method defines the position of the cycle on the basis of the output gap only.

e) year-on-year change in structural balance

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26 This involves the half-year cancellation of minimum social and health insurance contributions for the self-employed and the payment of a one-off benefit (the 25k Programme).

27 The approval of this measure is uncertain. Although it was announced by the Czech Ministry of Finance in "Liberation Package II", a draft legal amendment has yet to be submitted at a government meeting.

of the above-mentioned support measures, the previously approved higher-than-usual increase in pensions,[28] increase in parental allowance[29] and increase in salaries of teachers in the education system will manifest themselves this year. As of this year, general government revenues have been influenced by an increase in excise duty on cigarettes and alcohol, restrictions on the exemption for winnings in games of chance from income tax, an increase in tax rates on lotteries and gambling,[30] a change in the method of creation and tax deductibility of technical reserves of insurance companies and, as from 1 August 2020, by the launch of the third and fourth phases of ESR (delayed by three months compared with the original schedule).[31] A further hike in excise duty on cigarettes is expected in January 2021.

Fiscal stabilisation policy is being implemented through substantial support for household consumption this year (see Table II.2.5). This year, the positive fiscal impulse is largely a result of the extraordinary measures taken to support the economy due to the pandemic.[32] As most of the support measures will be temporary, the forecast expects the fiscal impulse to be negative in 2021. Only tax loss carryback, which will reduce the negative contribution of fiscal policy to economic growth, will have a supportive effect next year.

The general government sector will also run a deep deficit in structural terms and the government debt will rise substantially. The general government structural deficit will markedly exceed the medium-term objective – a structural deficit of 0.75% of GDP from 2020 – this year. However, due to the ongoing coronavirus pandemic, this situation will be evaluated as justified. A change to the Budget Responsibility Act has been approved for next year allowing a structural deficit of up to 4% of GDP. Consolidation of public finances should subsequently start under a European Council regulation.[33] Government debt will grow to 38.6% of GDP by the end of 2021 owing to high primary deficits and rising debt service costs[34] and this year due in large measure to a drop in nominal GDP as well.

Table II.2.5 Fiscal impulse

The fiscal impulse will be strongly positive this year and negative to almost the same extent next year due to the unwinding of most of the stabilisation measures taken this year

(contributions to GDP growth in percentage points)

	2019 actual	2020 forecast	2021 forecast
FISCAL IMPULSE	0.5	1.1	-0.8
of which impact through:			
private consumption	0.4	1.2	-1.0
private investment	0.0	0.0	0.1
government investment, domestic	0.1	-0.1	0.0
government investment, EU funded	0.0	0.0	0.1

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28 In January 2020, pensions were raised: the average old-age pension went up by CZK 900 (increasing pension spending by some 0.1% of GDP).

29 With effect from 1 January 2020, the total parental allowance was increased from CZK 220,000 to CZK 300,000, which means an increase in expenditure on social benefits of approximately 0.1% of GDP.

30 These proposed tax changes form part of a "rate package". The most important change in terms of budgetary impact is the increase in excise duty on cigarettes (0.13% of GDP).

31 The third and fourth phases of ESR should contribute about 0.1% of GDP to the growth in tax revenues. However, this impact will be largely offset by the reassignment of selected goods and some services to the reduced VAT rate in May 2020.

32 The fiscal impulse does not cover the guarantees provided by the Czech-Moravian Guarantee and Development Bank (ČMZRB) for preferential loans to firms (the COVID programmes), as these do not directly affect the government deficit or the government debt. The potential future payment of these guarantees represents a risk of worse public finance performance.

33 Pursuant to European Council Regulation No. 1466/97, public finances will be consolidated by at least 0.5 percentage point of GDP a year until the medium-term objective is met again.

34 Debt service costs will rise due to expected significant growth in government debt. The effective interest rate will fall slightly, as new debt will be financed by issuing government bonds with yields lower than the average yield on the existing debt.

II.3 RISKS AND UNCERTAINTIES OF THE FORECAST

The Bank Board assessed the risks to the forecast in the current extraordinary situation as being unprecedentedly high. The risks are connected with the course of the pandemic and especially with the duration and size of the impacts of the quarantine measures on the global and Czech economy. These risks require an even greater easing of the monetary conditions compared with the baseline scenario of the forecast.

II.3.1 Risks perceived by the CNB

The risks to the forecast are exceptionally high. Their quantification is associated with a high degree of uncertainty. The risks are described by two scenarios. Under the first scenario, the current pandemic and its economic impacts will last longer than the forecast expects. The second scenario assumes that the pandemic will resurge in the autumn.

The longer-lasting pandemic scenario assumes that the pandemic recedes more slowly and has longer-lasting negative impacts abroad. In this scenario, the government restrictions in Germany and Slovakia will be extended by two to three weeks. The scenario therefore assumes a slower return of economic activity in the effective euro area to growth (see Table II.3.1). A longer-lasting pandemic will also worsen consumer confidence and business sentiment compared with the baseline scenario. Due to the worse economic growth and demand outlooks, the oil price is lower than in the forecast. This will be reflected in a sharper fall in the energy component of the PPI. The recovery of the core component of the PPI will also be slower than in the baseline scenario due to more subdued demand pressures. A similar pattern can be expected for consumer prices in the euro area, which will grow at a slower rate this year and the next due to a deeper and longer-lasting drop in demand and energy prices. In addition to the already announced measures, the ECB will respond to the worse economic growth outlook for the euro area by broadening and prolonging its asset purchases under the PEPP programme, especially in areas with a direct impact on the corporate sector (short-term commercial paper). Purchases at 2020 Q2 levels are thus extended until the end of the year, their total annual amount being much higher than in the baseline scenario. Asset purchases will be gradually reduced in 2021, but the effect of the ECB's accommodative monetary policy will last until the end of 2022. The ECB's response will be reflected in the shadow 3M EURIBOR rate, which will be lower than in the baseline scenario over the entire forecast horizon.

Table II.3.1 Comparison of scenarios – selected foreign variables

A more adverse course of the pandemic and especially a resurgence will lead to a deeper drop in euro area GDP than in the baseline scenario

(annual percentage changes unless otherwise indicated)

	2019 actual	2020 forecast	2021 forecast
PPI in the effective euro area			
Baseline	1.2	-4.1	0.9
Longer-lasting pandemic scenario	1.2	-4.9	0.6
Pandemic resurgence scenario	1.2	-5.7	0.0
GDP in the effective euro area			
Baseline	1.2	-6.9	4.4
Longer-lasting pandemic scenario	1.2	-8.7	3.4
Pandemic resurgence scenario	1.2	-11.4	-1.8
Brent crude oil price (USD/barrel)			
Baseline	64.2	40.1	40.7
Longer-lasting pandemic scenario	64.2	35.8	38.7
Pandemic resurgence scenario	64.2	34.6	35.7
Shadow 3M EURIBOR (%)			
Baseline	-0.5	-1.9	-2.0
Longer-lasting pandemic scenario	-0.5	-1.9	-2.3
Pandemic resurgence scenario	-0.5	-2.4	-3.7

The domestic epidemiological measures are also phased out more gradually in the longer-lasting pandemic scenario. The scenario assumes that the epidemiological situation will start to improve a little later. This will prevent the government from lifting its quarantine restrictions according to the initial plan made public in mid-April. The timetable (see Box 2 in section II.2) will be moved back by about one month relative to the baseline scenario. Except for tourism-related measures, the restrictions should be fully lifted by the end of the summer holidays. The longer-lasting measures will lead to a larger decline in economic activity (see Table II.3.2) and a greater deterioration in the labour market situation than in the baseline scenario. This will be accompanied by a longer-lasting deterioration in both household and business sentiment.

A longer-lasting pandemic will be reflected in a deeper economic decline this year. The larger drop in economic activity, particularly in 2020 Q2 and 2020 Q3, will reflect the direct impacts of the longer-lasting government quarantine measures. The measures will lead to a bigger decline in household consumption than in the baseline scenario. At the same time, the GDP growth projection is lower over the entire forecast horizon due to much worse-than-forecasted household and business sentiment, which will be mirrored in a slower recovery in private investment growth. Wage growth will also be more gradual due to a greater cooling of the labour market both this year and the next. The fall in tax revenue will increase, while government expenditure on support measures will rise more. General government will thus record a wider deficit and faster growth in government debt than under the baseline forecast scenario. Despite a weaker koruna, inflation will be lower due to the lower wage growth and weaker domestic price pressures. The weaker koruna will meanwhile improve Czech exporters' price competitiveness and thus at least partly neutralise the impacts of the lower external demand on the domestic economy. Compared with the baseline scenario, the longer-lasting pandemic scenario requires greater monetary policy easing in the interest rate component. This will foster a return of inflation close to the 2% target from below over the monetary policy horizon.

The second scenario expects the first wave of the pandemic to recede more gradually and a second wave to emerge in late 2020. The forecast for the external environment in this scenario first incorporates an extension of government measures across the effective euro area during the spring months. In addition, the scenario assumes that Europe will be hit by a resurgence of the pandemic at the end of this year. Government quarantine measures will be reintroduced for about two months, but on a much smaller scale than during the first wave. However, the longer period of uncertainty and the resurgence of the pandemic will be gradually reflected in a structural change in the global economic environment. Trade mobility will drop, the movement of persons and capital will slow, and the interconnectedness between countries will be limited by less permeable borders. This will lead to a drop in potential output growth. This deglobalisation trend will foster lower growth in economic activity and, conversely, higher inflation. The negative impacts will fade only very gradually due to stronger growth in uncertainty and more sustained worse household and business sentiment. Despite the deeper economic contraction, the core component of the PPI follows roughly the same path this year as in the previous two scenarios, as the GDP drop in the pandemic resurgence scenario (see Table II.3.1) is so large that some supplier relationships will break down irreversibly, resulting in upward pressure on selected product prices. The oil price will respond to the deeper economic contraction with a larger fall. Its recovery will be prevented by the double-dip in GDP combined with high oil stocks. As a result, the energy component of the PPI will be affected more significantly. In this scenario, the ECB makes unlimited asset purchases but keeps the deposit rate unchanged. The 3M EURIBOR shadow rate thus falls well below zero and the effect of the ECB's easier monetary policy lasts until late 2023.

Table II.3.2 Comparison of scenarios – selected domestic variables

In response to the deep fall in economic activity, the central bank eases monetary conditions to mitigate the fall in inflation below the 2% target

(annual percentage changes unless otherwise indicated)

	2019 actual	2020 forecast	2021 forecast
Headline inflation			
Baseline	2.8	2.8	2.1
Longer-lasting pandemic scenario	2.8	2.6	1.8
Pandemic resurgence scenario	2.8	2.5	1.7
GDP			
Baseline	2.5	-8.0	4.0
Longer-lasting pandemic scenario	2.5	-10.1	3.2
Pandemic resurgence scenario	2.5	-13.5	-1.5
Average wage in market sectors			
Baseline	6.6	1.9	5.6
Longer-lasting pandemic scenario	6.6	0.2	5.7
Pandemic resurgence scenario	6.6	-2.2	4.1
Exchange rate (CZK/EUR)			
Baseline	25.7	26.9	27.5
Longer-lasting pandemic scenario	25.7	27.5	28.6
Pandemic resurgence scenario	25.7	28.5	31.6
3M PRIBOR (in %)			
Baseline	2.1	0.9	0.6
Longer-lasting pandemic scenario	2.1	0.6	0.0
Pandemic resurgence scenario	2.1	0.0	-1.7
Government budget balance (in % of GDP)			
Baseline	0.3	-4.8	-3.4
Longer-lasting pandemic scenario	0.3	-6.1	-4.3
Pandemic resurgence scenario	0.3	-8.3	-5.3
Government debt (in % of GDP)			
Baseline	30.8	37.6	38.6
Longer-lasting pandemic scenario	30.8	39.7	41.6
Pandemic resurgence scenario	30.8	43.0	47.3
Current account (in % of GDP)			
Baseline	-0.4	-0.6	-0.2
Longer-lasting pandemic scenario	-0.4	-0.9	-0.4
Pandemic resurgence scenario	-0.4	-1.3	-0.9

The pandemic resurgence scenario assumes that the government quarantine measures in the Czech Republic will be renewed from October until Christmas. This scenario's assumptions regarding the first wave of the pandemic are the same as in the longer-lasting pandemic scenario, so here too the government restrictions are eased rather more gradually during the spring months than in the baseline scenario. In addition, the pandemic resurges in the autumn and the government responds by freezing some segments of the domestic economy again. This wave of closures and restrictions is smaller in both scale and duration than the spring one, as all entities are better prepared and react more effectively. The measures will thus be lifted during December 2020. The resurgence of the pandemic, coupled with the worse external outlook, has an even more adverse impact on the entire domestic economy, including the labour market, than in the previous scenarios. On the fiscal policy side, supportive expenditure measures are introduced, though to a lesser extent than during the first wave due to the risk of high deficits and rapidly rising debt.

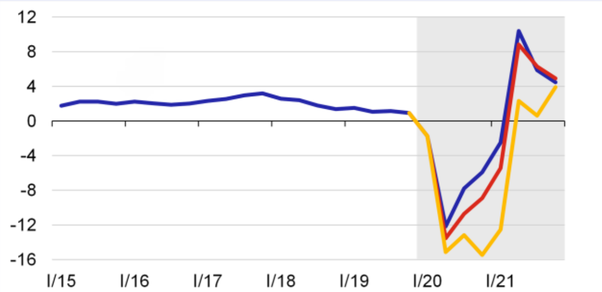
The resurgence of the pandemic and the emergent deglobalisation will lead to an even deeper and longer-lasting domestic economic downturn (see Table II.3.2). The repeated coronavirus blow will be felt as early as late 2020 and even more strongly in 2021. Many economically exhausted businesses will close. This will lead to a dramatic cooling on the labour market, a deterioration in households' income situation and strongly negative sentiment. Wage growth will thus be much lower than in the longer-lasting pandemic scenario, with the average wage in market sectors even declining in absolute terms in 2020 as a whole. All this will foster significantly lower household consumption growth both this year and the next than in the preceding scenarios. Government consumption will grow this year on the back of increased health care expenditure. Next year, however, it will be flat. The need to consolidate public finances and slow the growth in government debt will give rise to fiscal austerity measures. For the same reason, government investment financed from domestic sources will also fall next year. Following a deep fall in 2020 H1, firms' investment activity will not recover this year amid a longer lasting and stronger deterioration in sentiment. Its only very slow recovery next year will reflect the breakdown of global production chains on the one hand and transfers of production from other continents back to Europe on the other. Lower growth in domestic costs amid non-existent demand pressures will be reflected in the outlook for inflation, which will temporarily dip below the lower boundary of the tolerance band around the target early next year. A markedly weaker exchange rate and a hypothetically deeply negative path of market interest rates will support a gradual recovery in economic activity and help inflation return to the 2% target at the end of next year. The pandemic resurgence scenario would thus most probably require monetary policy to be markedly eased using an unspecified unconventional instrument. All three scenarios are illustrated graphically for the main foreign and domestic macroeconomic indicators in Blocks 2 and 3 below.

The Bank Board assessed the risks to the forecast in the current extraordinary situation as being unprecedentedly high. The risks are connected with the course of the pandemic and especially with the duration and size of the impacts of the quarantine measures on the global and Czech economy. These risks require an even greater easing of the monetary conditions compared with the baseline scenario of the forecast.

Block 2: Comparison of scenarios – main foreign macroeconomic indicators

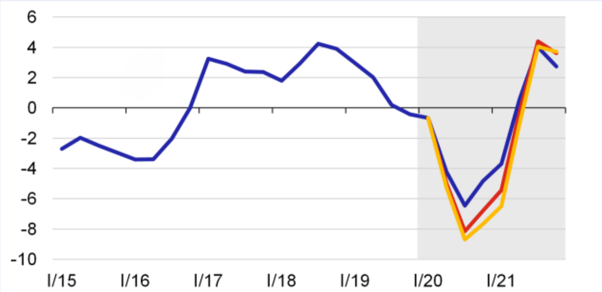
GDP in the effective euro area

(annual percentage changes)



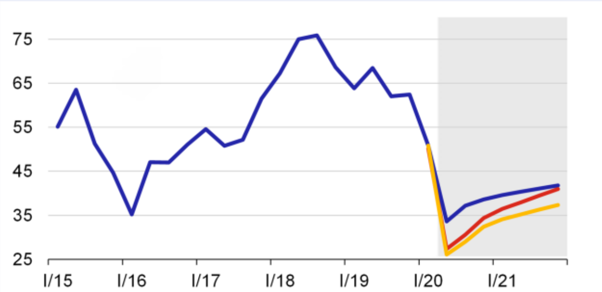
PPI in the effective euro area

(annual percentage changes)



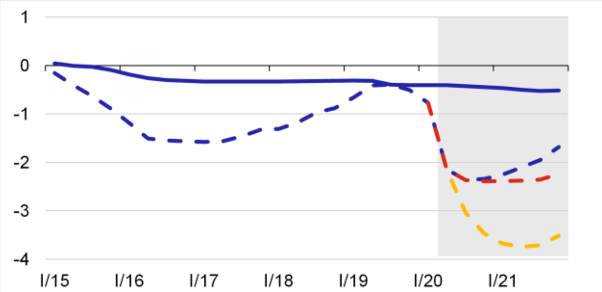
Brent crude oil price

(USD/barrel)



3M EURIBOR

(percentages)

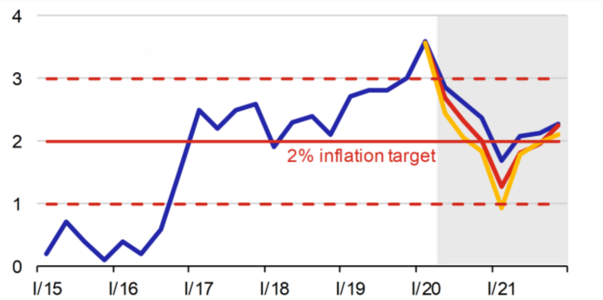


Baseline — Longer-lasting pandemic scenario
Pandemic resurgence scenario — Shadow rates

Block 3: Comparison of scenarios – main domestic macroeconomic indicators

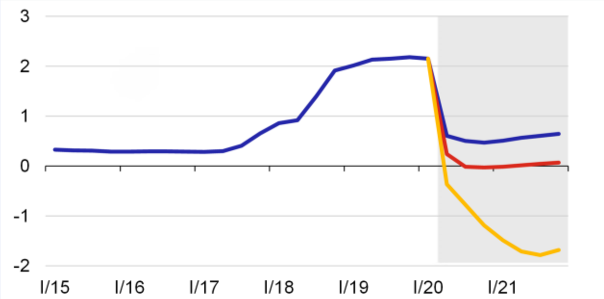
Headline inflation

(percentages)



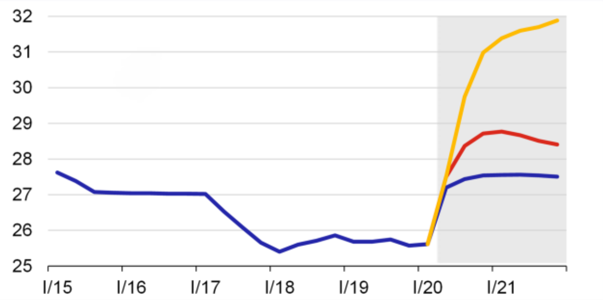
3M PRIBOR

(percentages)



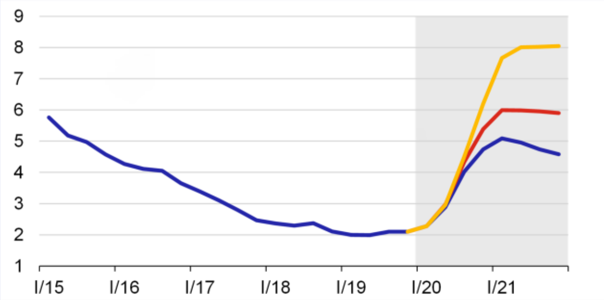
CZK/EUR exchange rate

(CZK/EUR)



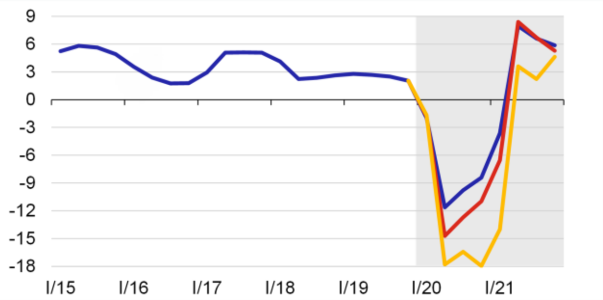
General unemployment rate

(percentages)



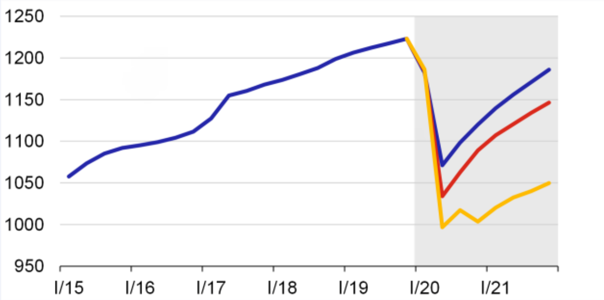
GDP

(annual percentage changes)



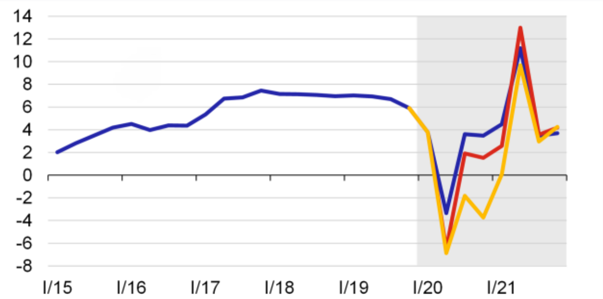
GDP

(CZK billions)



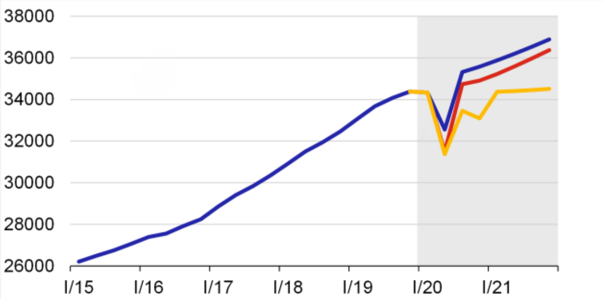
Average nominal wages in market sectors

(annual percentage changes)



Average nominal wages in market sectors

(CZK)



Baseline — Longer-lasting pandemic scenario — Pandemic resurgence scenario

II.3.2 Risks signalled by other entities' forecasts

Inflation expectations in the economy continue to be anchored by the CNB's 2% target. Inflation forecasted by financial market analysts is currently slightly below the CNB's 2% target at the one-year horizon. At the three-year horizon, it is exactly at the target (see Table II.3.3). According to the analysts, inflation will slow rapidly in the coming months. The slowdown will be due to a deep decline in economic activity, which will subsequently spill over into a deterioration in the labour market situation, unemployment growth, slower nominal wage growth and subdued household consumption. The recent collapse of oil prices will meanwhile be reflected in a decline in fuel prices. However, these effects will be dampened by the currently weak koruna.

The analysts estimate that the Czech economy will contract by 6%–7% this year (see Table II.3.3). Most of them believe that the economy will return to growth next year after the pandemic recedes, although from a substantially lower initial base. The economic contraction will also be reflected in the labour market. The unemployment rate will rise, easing the previously very tight conditions on the domestic labour market and simultaneously weakening the bargaining power of employees when asking for pay rises.

The analysts on average forecast appreciation of the koruna and a decline in interest rates at the one-year horizon. Although the analysts consider the current depreciation of the koruna as only temporary, they believe that the risks are tilted towards sustained weaker levels.[35] The perceived uncertainties are reflected in a wide expected range between the maximum and minimum values of the koruna at the one-year horizon.[36] Almost all the analysts in the April FMIE survey were expecting the CNB Bank Board to cut key interest rates at the May meeting by 0.25–0.75 percentage point. Only two analysts were expecting the rates to remain unchanged. Their average estimate of the 2W repo rate at the one-year horizon was 0.4%.

The analysts thus predict lower inflation, a more moderate drop in GDP and a stronger koruna compared with the CNB forecast. The analyst predict the koruna to strengthen again on average, while the CNB forecast assumes it will stay close to the weaker levels recorded in late April 2020. The analysts' one-year outlook for interest rates is almost the same as the central bank's forecast (see Table II.3.3). The analysts' wage expectations are higher than the CNB forecast for this year and lower for next year.

The current market outlook for 3M rates implies a decline over the one-year horizon. After the sharp fall in domestic market interest rates recorded in March, consistent with the forecast is a further decline in 2020 Q2 followed by broad stability. From mid-2020 onwards, the market outlook is thus slightly below the interest rates contained in the CNB forecast (see Chart II.3.1).

Table II.3.3 Expected indicators of FMIE, CF and corporations

The analysts' inflation expectations are slightly below the CNB's 2% target at the one-year horizon and at the target at the three-year horizon; the analysts expect the economy to contract sharply this year and the koruna to strengthen at the one-year horizon

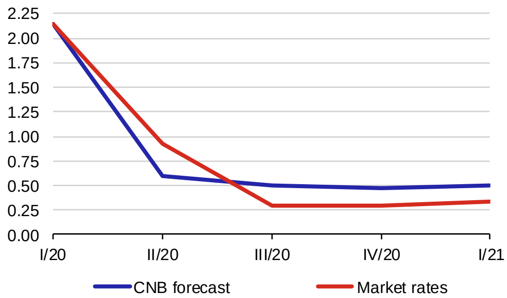
(at 1Y; annual percentage changes unless otherwise indicated)

	12/19	1/20	2/20	3/20	4/20
FMIE:					
CPI	2.3	2.2	2.2	1.9	1.6
CPI, 3Y horizon	2.0	2.0	2.0	1.9	2.0
Real GDP in 2020	2.1	2.2	2.1	0.7	-7.2
Real GDP in 2021		2.3	2.3	2.2	5.8
Nominal wages in 2020	5.7	5.9	5.8	5.2	3.8
Nominal wages in 2021		4.9	4.9	4.1	3.2
CZK/EUR exchange rate (level)	25.4	25.1	24.9	25.5	26.0
2W repo rate (in per cent)	2.0	2.1	2.2	1.4	0.4
1Y PRIBOR (in per cent)	2.3	2.3	2.3	1.7	0.8
Corporations:					
CPI	2.2			2.2	
CPI, 3Y horizon	2.6			2.7	
CF:					
Real GDP in 2020	2.1	2.2	2.1	1.2	-6.1
Real GDP in 2021		2.4	2.4	2.5	5.3
Nominal wages in 2020	5.9	5.8	5.9	5.6	4.1
Nominal wages in 2021		4.8	4.8	4.5	3.5
CZK/EUR exchange rate (level)	25.2	25.4	25.3	25.2	25.7
3M PRIBOR (in per cent)	2.2	2.2	2.2	1.9	0.7

Chart II.3.1 FRA rates versus the CNB forecast

The market outlook for interest rates is falling; from mid-2020 onwards it is slightly below the rates contained in the CNB forecast

(percentages)



Note: Market rates represent for 2020 Q1 and 2020 Q2 the 3M PRIBOR and for 2020 Q3–2021 Q1 the average values of the FRA 3*6, 6*9 and 9*12 rates for the last 10 trading days as of 30 April 2020.

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35 The koruna might not strengthen if – in addition to adverse global economic developments and higher risk aversion on financial markets – the plant shutdowns in the car industry, in which the Czech economy largely specialises, were to be extended, for example.

36 At the one-year horizon, the range was CZK 25.1–26.8 to the euro in the April FMIE survey and CZK 24.7–27.0 to the euro in the CF survey.

III. CURRENT ECONOMIC DEVELOPMENTS

III.1 INFLATION AND INFLATION TARGET FULFILMENT

Inflation was appreciably above the upper boundary of the tolerance band around the target in the first months of this year, averaging 3.6% in Q1. Core inflation was still the biggest contributor to the continued high price growth in Q1, but rapidly rising food prices also fostered growth. By contrast, the previous very brisk growth in administered prices slowed gradually and fuel prices switched to a decline. The fall in oil prices was strongly reflected in both importer and industrial producer prices. By contrast, construction work prices and prices of market services in the business sector kept rising apace in Q1. The impact of the coronavirus pandemic on inflation was very limited in the observed data, but stronger effects can be expected in the months ahead.

Observed inflation was much higher than the forecast published in autumn 2018, which is relevant for evaluating the current fulfilment of the inflation target. This was due chiefly to unexpectedly high growth in food prices combined with higher core inflation. However, the other components of inflation also grew faster than expected. All external factors deviated considerably from the assumptions of the forecast. Overall, external developments fostered more gradual depreciation of the koruna and lower domestic interest rates and had a slightly negative impact on inflation. Observed domestic real GDP growth was weaker than forecasted. The exchange rate remained significantly weaker than in the forecast due to negative global sentiment and a declining outlook for external economic and price growth, which domestic monetary policy took into account by raising interest rates rather faster than forecasted. With the benefit of hindsight, the CNB's monetary policy in the past period can be assessed as having been insufficiently tight as regards the fulfilment of the inflation target. Even so, it can be said that monetary policy had created enough room in the past to allow it to relax interest rates during the coronavirus pandemic. The Bank Board used part of this room at an extraordinary and a regular meeting in March, cutting monetary policy rates by 1.25 percentage points overall.

Chart III.1.1 IR IV/2018 forecast versus actual headline inflation

The deviation of observed inflation from the autumn 2018 forecast has increased significantly over time, amounting to 1.5 percentage points in 2020 Q1

(year on year in %)

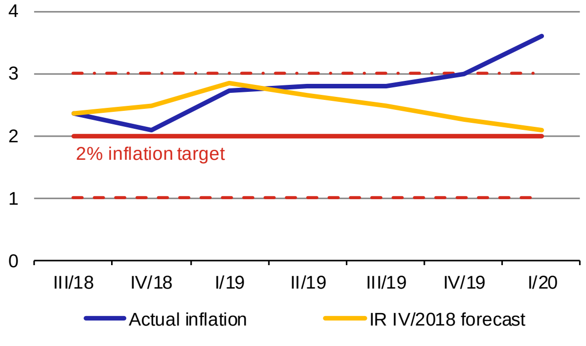


Table III.1.1 Fulfilment of the IR IV/2018 inflation forecast

The positive deviation of actual inflation from the forecast was due to all inflation components but most of all to unexpectedly strong food price growth and higher core inflation

(annual percentage changes; contributions in percentage points)

	IR IV/2018 forecast	2020 Q1 outturn	Contribution to total difference
CONSUMER PRICES	2.1	3.6	1.5
of which:			
administered prices	1.8	4.2	0.3
first-round impacts of changes to indirect taxes[a)]	0.0	0.1	0.1
core inflation[b)]	2.2	2.9	0.4
food prices[b)]	2.4	4.8	0.6
fuel prices[b)]	-2.0	1.3	0.1

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 IR IV/2018 external assumptions

External factors lagged behind the forecast assumptions due to weaker demand pressures and a markedly lower GDP growth rate in the effective euro area

(annual percentage changes unless otherwise indicated; p – prediction, o – outturn)

		IV/18	I/19	II/19	III/19	IV/19	I/20
GDP in euro area[a), b), c)]	p	2.0	2.0	2.0	1.9	1.9	1.9
	o	1.4	1.5	1.0	1.1	0.9	-
PPI in euro area[b), c)]	p	4.0	3.5	3.0	2.1	1.7	1.6
	o	3.9	3.0	2.0	0.2	-0.4	-
3M EURIBOR (percentages)	p	-0.3	-0.3	-0.3	-0.2	-0.1	0.0
	o	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4
USD/EUR exchange rate (levels)	p	1.16	1.17	1.18	1.19	1.20	1.21
	o	1.14	1.14	1.12	1.11	1.11	1.10
Brent crude oil price (USD/barrel)	p	83.6	82.8	81.9	80.9	79.9	78.8
	o	68.6	63.8	68.5	62.0	62.4	50.2

a) at constant prices
b) seasonally adjusted
c) IR IV/2018 outlook for effective indicator

Table III.1.3 Fulfilment of the IR IV/2018 forecast for key variables

Observed domestic real GDP growth was weaker than forecasted; the monetary conditions were easier in the exchange rate component and tighter in the interest rate component

(p – prediction, o – outturn)

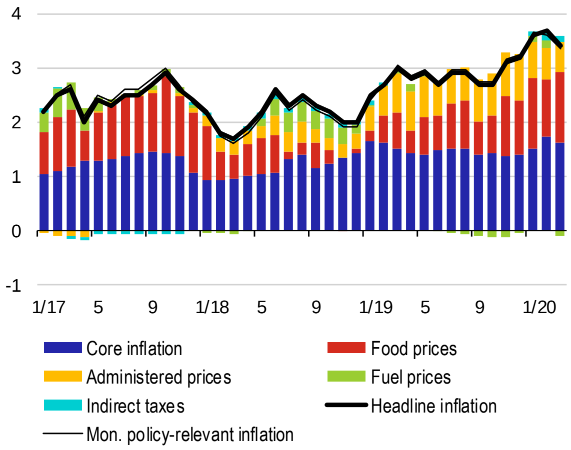
		IV/18	I/19	II/19	III/19	IV/19	I/20
Consumer price index (annual perc. changes)	p	2.5	2.8	2.6	2.5	2.2	2.1
	o	2.1	2.7	2.8	2.8	3.0	3.6
3M PRIBOR (percentages)	p	1.9	2.1	2.0	1.9	1.9	2.1
	o	1.9	2.0	2.1	2.2	2.2	2.2
CZK/EUR exchange rate (levels)	p	25.7	25.1	24.7	24.5	24.4	24.3
	o	25.9	25.7	25.7	25.7	25.6	25.6
Real GDP[a)] (annual perc. changes)	p	3.2	3.5	3.2	3.3	3.0	3.1
	o	2.6	2.8	2.7	2.5	2.0	-
Nominal wages[b)] (annual perc. changes)	p	7.7	7.2	6.7	6.8	6.7	6.3
	o	6.7	7.2	6.9	6.8	5.7	-

a) seasonally adjusted
b) in market sectors

Chart III.1.2 Structure of inflation

Inflation was well above the 3% level in 2020 Q1 due to the core component and growth in food prices

(annual percentage changes; contributions in percentage points)

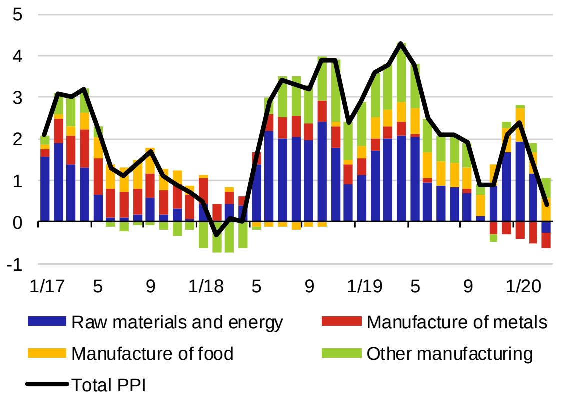


Note: Food prices also include prices of alcoholic beverages and tobacco. The contribution of the first-round effects of changes to indirect taxes relates to non-administered prices.

Chart III.1.3 Industrial producer prices

Industrial producer price inflation slowed significantly in Q1, mainly due to fade-out of the contribution of prices of raw materials and energy

(annual percentage changes; contributions in percentage points)



III.2 ECONOMIC DEVELOPMENTS

The growth of the Czech economy slowed to 2% in 2019 Q4, lagging slightly behind the estimated rate of growth of potential output, so the slightly positive output gap narrowed further. All components of domestic demand, most notably household consumption, made positive contributions to the continuing GDP growth. However, the contribution of net exports fell deep into negative territory, mainly due to fading export growth related to persisting subdued growth in external economic activity. Government consumption growth also weakened. By contrast, a recovery in gross capital formation growth due to an upswing in fixed investment and a renewed positive contribution of change in inventories had a positive effect on domestic economic growth. From the supply-side perspective, the tertiary sector was the main driver of gross value added growth. The contribution of industry, linked to the weakening growth in external demand, had the opposite effect. Production in this sector fell not just at the end of last year, but also in January and February this year. Construction performed well in the first months of this year, with civil engineering showing particularly brisk growth. Retail sales were also favourable. Both consumer and business confidence cooled gradually early in the year and fell dramatically in April.

Chart III.2.1 Gross domestic product

Solid growth in domestic demand combined with subdued growth in economic activity abroad led to a fall in the contribution of net exports, which was the main cause of the GDP slowdown

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

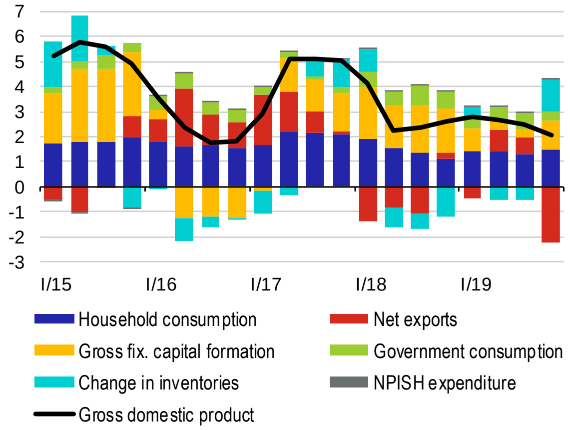


Chart III.2.2 Gross value added

On the supply side of the domestic economy, the slowdown in external demand was reflected in the contribution of industry turning slightly negative

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

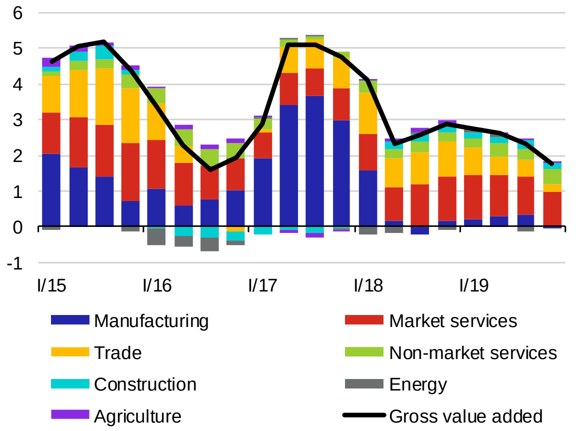


Chart III.2.3 Industrial production and construction output

Industrial production decreased slightly again at the start of this year, while construction maintained a rapid rate of growth

(annual percentage changes)

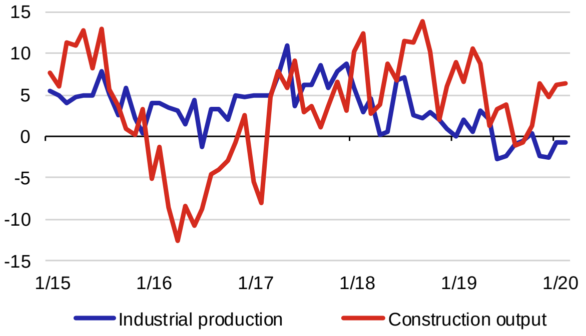
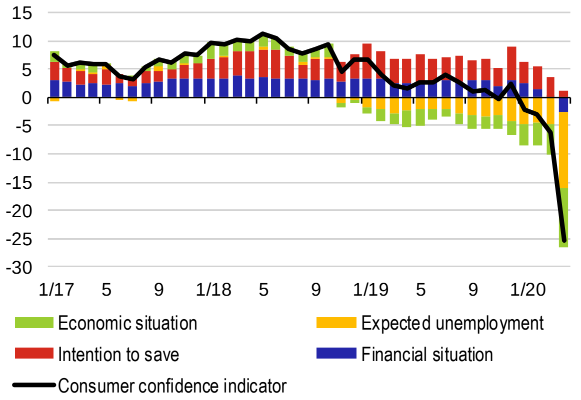


Chart III.2.4 Consumer confidence balance

Consumer confidence fell unprecedently in April due to the coronavirus pandemic

(balance is difference in per cent between answers expressing improvement and deterioration in expected and ongoing tendencies)



Note: Expectations 12 months ahead.

III.3 THE LABOUR MARKET

The labour market was still very tight at the end of 2019, as can be seen from the composite LUCI indicator. Employment decreased slightly and the unemployment rate stayed close to a historical low. The number of job vacancies was still high. This situation, coupled with growth in the minimum wage, exerted continued strong upward pressure on wages. Despite slowing slightly, wage growth stood at 6.7% in Q4. This was due to slower wage growth in market sectors. By contrast, wage growth in non-market sectors accelerated further. Growth in whole-economy labour productivity still lagged behind average real wage growth, so nominal unit wage costs continued to grow at a brisk pace.

Chart III.3.1 LUCI – Labour Utilisation Composite Index

Despite easing slightly, overall labour market tightness remained high at the end of last year

(index; vertical axis shows standard deviations)

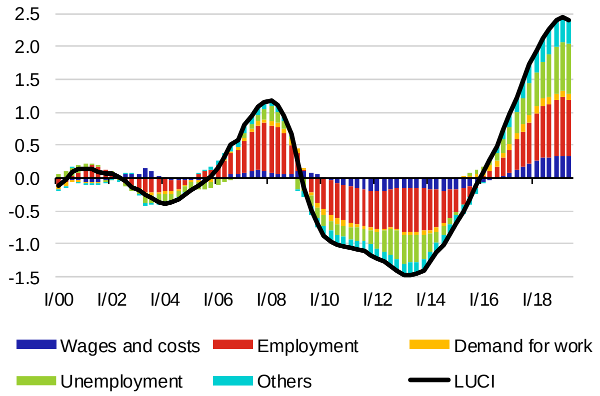


Chart III.3.2 Number of employees (full-time equivalent)

Growth in the converted number of employees remained subdued, with an increase in average hours worked outweighing a slight decrease in the number of employees

(annual percentage changes; contributions in percentage points)

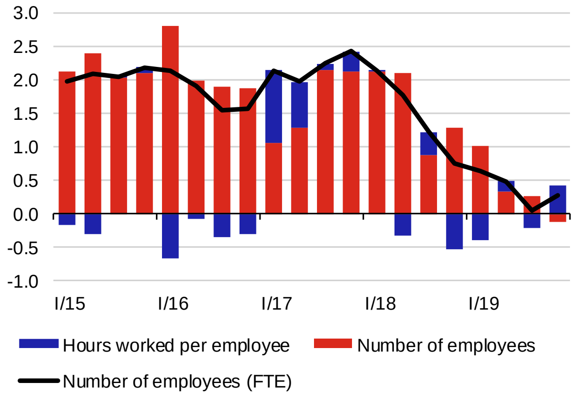


Chart III.3.3 Beveridge curve

The number of vacancies was still much higher than the number of registered unemployed persons, amid higher core inflation

(numbers in thousands; seasonally adjusted; annual percentage changes for core inflation; source: MLSA, CZSO)

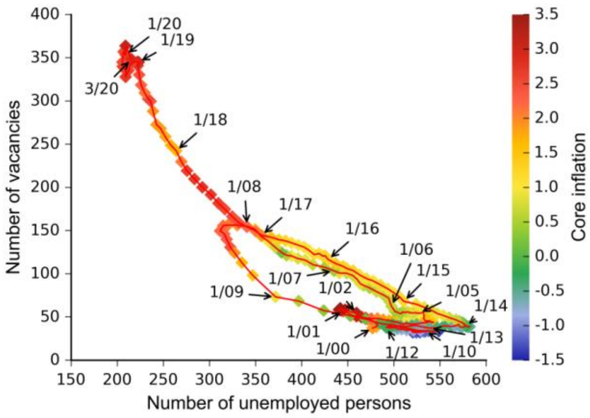
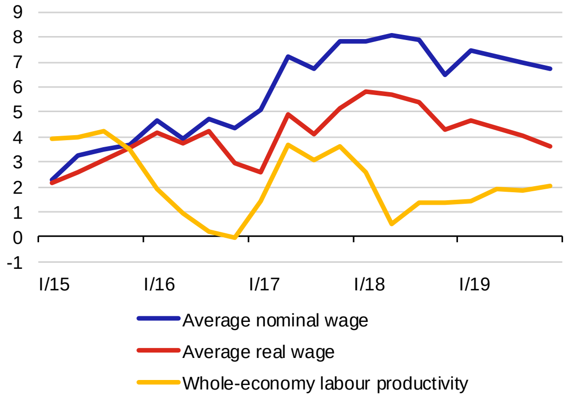


Chart III.3.4 Average wage and whole-economy labour productivity

Labour productivity growth still lagged well behind real wage growth

(annual percentage changes; whole-economy productivity – seasonally adjusted)



III.4 FINANCIAL AND MONETARY DEVELOPMENTS

Concerns about the massive spread of Covid-19 and the economic impacts of the quarantine measures resulted in high volatility on global markets, general sell-offs of risky assets, and a rush to safe havens. Central banks responded to the situation by cutting interest rates[37] and adopting other measures, while governments came up with extensive fiscal stimuli to support their economies. The market volatility was amplified by a price war between Saudi Arabia and Russia on the oil market. The market situation calmed in early April as the first signals that the pandemic was being brought under control in the hardest-hit areas began to appear.

The CNB raised monetary policy rates by 25 basis points at its February meeting. It then cut rates significantly in two steps in March in response to the dramatic evolution of the coronavirus pandemic. The 2W repo rate thus fell to 1%. The Bank Board simultaneously adopted further stabilising monetary, macroprudential and microprudential policy measures[38] aimed at softening the impacts of the pandemic on price and financial stability and the Czech economy. As a result of this, and due to a financial market panic, domestic market interest rates dropped markedly at all maturities in just a few days. As for client interest rates, the financial market developments were partly reflected in loans to corporations, while the mortgage rate was little changed. Year-on-year growth in genuinely new mortgages remained in double figures in March, while growth in foreign currency loans to corporations accelerated.[39] The interest rate differential of koruna rates vis-à-vis both euro and dollar rates fell markedly. The differential vis-à-vis the dollar turned negative again after almost a year. The koruna weakened sharply – against the euro from the second half of February and against the dollar from mid-March. The turbulence calmed in mid-April. The CNB Bank Board lowered key interest rates further at its meeting in May. The two-week repo rate was set at 0.25% and the Lombard rate at 1.00% with effect from 11 May 2020. The discount rate remains unchanged at 0.05%.

Chart III.4.1 Interest rates

Interest rates declined at all maturities in March

(percentages)

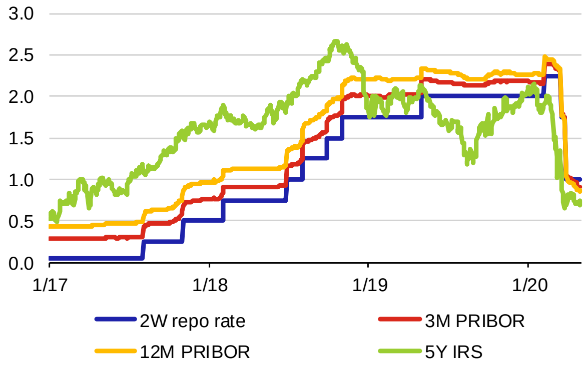
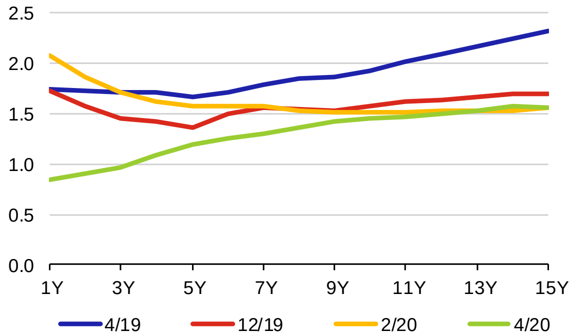


Chart III.4.2 Government bond yield curve

The previously negative slope of the yield curve turned positive

(percentages)



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37 In the euro area interest rates declined only slightly overall (deeper into negative territory), while in the USA they fell markedly.

38 Among other things, the CNB lowered the countercyclical capital buffer rate, relaxed the recommendations for the assessment of new mortgages, allowed banks to postpone loan payments where clients suffer a temporarily loss of income as a result of the coronavirus pandemic or the preventive measures, and increased the frequency of the liquidity-providing repo facility to three a week (on top of the existing instruments for providing liquidity to the banking sector).

39 The share of foreign currency loans in total corporate loans rose to around 36%.

Chart III.4.3 CZK/EUR and CZK/USD exchange rates

The koruna weakened sharply against both the euro and the dollar in 2020 Q1

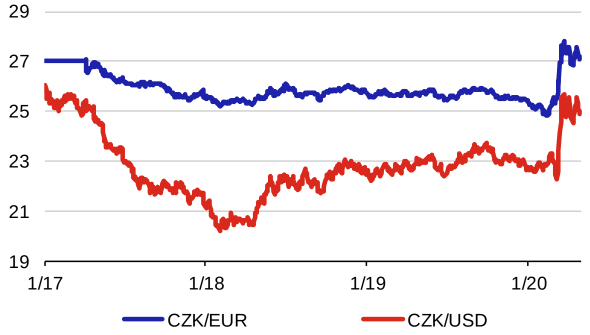


Chart III.4.4 Interest rate differentials

The previously highly positive koruna-euro interest rate differential decreased, while the koruna-dollar differential turned slightly negative after almost a year

(percentage points)

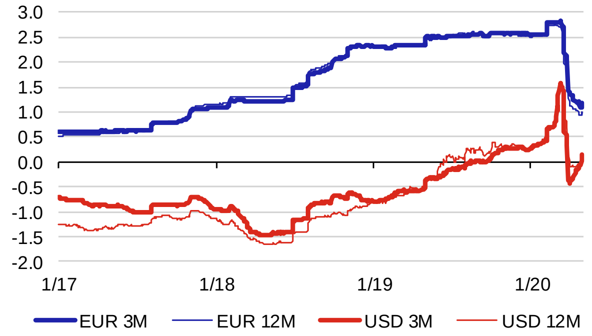


Table III.4.1 Client interest rates on new loans and deposits

Interest rates on genuinely new loans to corporations started to decline gradually, while those on mortgages were unchanged

(interest rates in percentages; changes in percentage points)

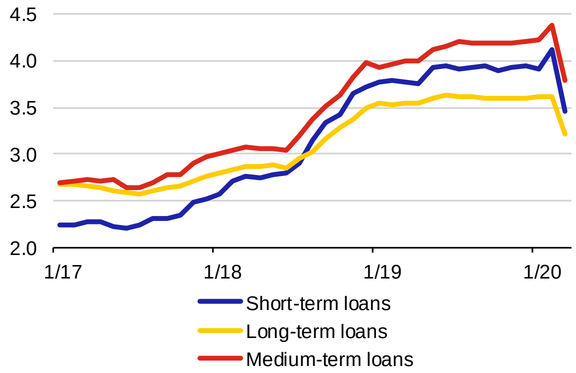
	Interest rate	Change since	
	3/20	2/20	11/16
HOUSEHOLDS			
Mortgages	2.4	0.0	0.5
New mortgages (genuinely)	2.4	0.0	0.6
Consumer credit	8.1	0.1	-2.0
Deposits			
Overnight deposits	0.3	0.0	0.1
Deposits with agreed maturity	1.4	-0.3	0.4
NON-FINANCIAL CORPORATIONS			
Total loans to firms	3.2	-0.1	1.3
Total new loans (genuinely)	3.3	-0.4	1.3
Small loans (up to CZK 30 million)	3.8	-0.3	1.4
Large loans (over CZK 30 million)	3.1	-0.1	1.3

Note: The change in interest rates since November 2016, when rates on corporate and mortgage loans were close to their historical lows.

Chart III.4.5 Interest rates on stocks of loans to corporations

Interest rates on stocks of loans to non-financial corporations fell at all maturities in March

(percentages)



Abbreviations

AEIS	Average Earnings Information System
BoE	Bank of England
BoJ	Bank of Japan
CF	Consensus Forecasts
CNB	Czech National Bank
Covid-19	disease caused by SARS-CoV-2 coronavirus
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
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
Ifo	index of economic confidence in Germany
ILO	International Labour Organization
IMF	International Monetary Fund
IR	Inflation Report
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+	The OPEC member countries and another ten oil-exporting countries (the most important being Russia, Mexico and Kazakhstan)
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

Glossary

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 change 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.

Industrial producer prices in the euro area: Divided into their energy and core components for the purposes of the g3+ projection model. The core component approximates price developments in foreign industrial sectors affecting the price competitiveness of Czech exports. By contrast, the energy component captures price developments in foreign industrial sectors most sensitive to oil prices.

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. In addition, the import sector is divided into a component importing energy and a component importing other goods and services. Import prices are divided analogously (for a more detailed description of the breakdown of foreign prices into their core and energy components, see “Industrial producer prices in the euro area”). 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 (both seasonally adjusted).

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).

Key macroeconomic indicators

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
DEMAND AND SUPPLY												
Gross domestic product												
GDP	CZK bn, constant p. of 2010, seas. adjusted	4028.8	3999.6	3980.2	4088.2	4308.4	4409.9	4610.5	4740.8	4859.1	**4472.0**	**4652.2**
GDP	%, y-o-y, real terms, seas. adjusted	1.8	-0.7	-0.5	2.7	5.4	2.4	4.5	2.8	2.5	**-8.0**	**4.0**
Household consumption	%, y-o-y, real terms, seas. adjusted	0.3	-1.2	0.5	1.8	3.8	3.5	4.4	3.1	3.0	**-4.8**	**4.2**
Government consumption	%, y-o-y, real terms, seas. adjusted	-3.2	-2.0	2.5	1.1	1.9	2.7	1.3	3.4	2.6	**4.0**	**2.1**
Gross capital formation	%, y-o-y, real terms, seas. adjusted	1.8	-3.8	-5.1	8.6	13.1	-4.4	4.3	5.5	3.3	**-11.5**	**4.6**
Gross fixed capital formation	%, y-o-y, real terms, seas. adjusted	0.9	-3.0	-2.5	3.9	10.3	-3.2	4.0	7.5	2.7	**-9.8**	**4.8**
Exports of goods and services	%, y-o-y, real terms, seas. adjusted	9.2	4.4	0.2	8.7	6.2	4.1	7.1	4.4	1.0	**-21.4**	**15.6**
Imports of goods and services	%, y-o-y, real terms, seas. adjusted	6.7	2.8	0.1	10.1	6.9	2.6	6.3	5.9	1.5	**-18.3**	**16.0**
Net exports	CZK bn, constant p. of 2010, seas. adjusted	193.5	245.8	249.5	232.7	225.0	282.8	330.2	291.7	276.0	**101.9**	**102.7**
Coincidence indicators												
Industrial production	%, y-o-y, real terms	5.9	-0.8	-0.1	5.0	4.3	3.4	6.5	3.0	-0.2	**-**	**-**
Construction output	%, y-o-y, real terms	-3.6	-7.6	-6.7	4.3	6.8	-5.6	3.3	9.2	2.7	**-**	**-**
Receipts in retail sales	%, y-o-y, real terms	1.7	-1.1	1.2	5.5	7.7	6.1	4.5	2.7	3.7	**-**	**-**
PRICES												
Main price indicators												
Inflation rate	%, end-of-period	1.9	3.3	1.4	0.4	0.3	0.7	2.5	2.1	2.8	**-**	**-**
Consumer Price Index	%, y-o-y, average	1.9	3.3	1.4	0.4	0.3	0.7	2.5	2.1	2.8	**2.8**	**2.1**
Regulated prices (14.58%)*	%, y-o-y, average	4.7	8.6	2.2	-3.0	0.0	0.2	0.0	1.8	4.4	**3.2**	**1.5**
Food prices (incl. alcoholic beverages and tobacco) (26.41%)*	%, y-o-y, average	4.3	2.9	3.1	1.8	0.1	0.2	3.6	1.6	2.6	**4.9**	**1.3**
Core inflation (55.61%)*	%, y-o-y, average	-0.4	-0.3	-0.5	0.5	1.2	1.2	2.4	2.1	2.7	**2.0**	**1.9**
Fuel prices (3.40%)*	%, y-o-y, average	7.2	6.0	-2.1	0.2	-13.5	-8.5	6.7	6.3	-0.4	**-9.8**	**3.3**
Monetary policy-relevant inflation	%, y-o-y, average	1.9	2.1	0.6	0.2	0.2	0.5	2.5	2.1	2.9	**2.7**	**1.8**
GDP deflator	%, y-o-y, seas. adjusted	0.0	1.5	1.4	2.5	1.2	1.3	1.4	2.6	3.5	**4.1**	**2.9**
Partial price indicators												
Industrial producer prices	%, y-o-y, average	5.6	2.1	0.8	-0.8	-3.2	-3.3	1.8	2.0	2.6	**0.5**	**0.6**
Agricultural prices	%, y-o-y, average	22.1	3.3	-12.1	4.7	-6.2	-6.0	7.4	-0.2	5.8	**-0.3**	**0.5**
Construction work prices	%, y-o-y, average	-0.5	-0.7	-1.1	0.5	1.2	1.1	1.7	3.2	4.6	**-**	**-**
Brent crude oil (in USD/barrel)	%, y-o-y, average	38.2	0.7	-2.6	-8.5	-46.1	-16.0	21.7	30.5	-10.3	**-37.5**	**1.5**
LABOUR MARKET												
Average monthly wage	%, y-o-y, nominal terms	2.5	2.5	-0.1	2.9	3.2	4.4	6.7	7.6	7.1	**2.5**	**5.8**
Average monthly wage	%, y-o-y, real terms	0.6	-0.8	-1.6	2.6	2.8	3.8	4.3	5.4	4.2	**-0.4**	**3.7**
Number of employees	%, y-o-y	0.0	-0.1	1.6	0.6	2.2	2.1	1.7	1.6	0.4	**-1.5**	**-1.3**
Unit labour costs	%, y-o-y	0.4	3.3	1.0	0.8	-0.5	3.3	3.6	6.5	4.5	**9.0**	**0.5**
Unit labour costs in industry	%, y-o-y	0.8	5.7	5.2	-0.4	1.6	4.5	-0.9	7.0	4.2	**-**	**-**
Aggregate labour productivity	%, y-o-y	2.1	-1.1	-0.8	2.1	3.9	0.8	2.9	1.5	1.8	**-6.1**	**5.1**
ILO general unemployment rate	%, average, age 15–64	6.8	7.0	7.1	6.2	5.1	4.0	2.9	2.3	2.1	**3.5**	**4.8**
Share of unemployed persons (MLSA)	%, average	6.7	6.8	7.7	7.7	6.5	5.5	4.2	3.2	2.8	**4.1**	**5.6**
PUBLIC FINANCE												
Government budget balance (ESA2010)	CZK bn, current prices	-109.9	-159.6	-51.1	-90.6	-28.3	34.1	76.7	49.3	15.4	**-258.9**	**-198.4**
Government budget balance / GDP**	%, nominal terms	-2.7	-3.9	-1.2	-2.1	-0.6	0.7	1.5	0.9	0.3	**-4.8**	**-3.4**
Government debt (ESA2010)	CZK bn, current prices	1606.5	1805.4	1840.4	1819.1	1836.3	1755.1	1749.7	1734.6	1738.7	**2031.8**	**2236.8**
Government debt / GDP**	%, nominal terms	39.8	44.5	44.9	42.2	40.0	36.8	34.7	32.6	30.8	**37.6**	**38.6**
EXTERNAL RELATIONS												
Current account												
Trade balance	CZK bn, current prices	75.5	123.8	167.0	220.0	188.0	245.7	259.1	201.1	239.8	**130.0**	**170.0**
Trade balance / GDP	%, nominal terms	1.9	3.0	4.1	5.1	4.1	5.2	5.1	3.8	4.2	**2.4**	**2.9**
Balance of services	CZK bn, current prices	81.3	77.6	70.4	55.7	78.0	107.6	127.7	122.0	103.7	**65.0**	**85.0**
Current account	CZK bn, current prices	-84.8	-63.3	-21.8	7.9	11.3	74.2	83.5	22.6	-21.3	**-35.0**	**-10.0**
Current account / GDP	%, nominal terms	-2.1	-1.6	-0.5	0.2	0.2	1.6	1.7	0.4	-0.4	**-0.6**	**-0.2**
Foreign direct investment												
Direct investment	CZK bn, current prices	-46.8	-121.3	7.4	-80.4	49.7	-186.5	-45.9	-51.0	-61.0	**-50.0**	**-70.0**
Exchange rates												
CZK/USD	average	17.7	19.6	19.6	20.8	24.6	24.4	23.4	21.7	22.9	**24.4**	**24.4**
CZK/EUR	average	24.6	25.1	26.0	27.5	27.3	27.0	26.3	25.6	25.7	**26.9**	**27.5**
CZK/EUR	%, y-o-y, real (CPI euro area), avg.	-1.9	1.5	3.5	6.3	-0.9	-1.3	-3.4	-2.8	-1.2	**2.5**	**1.4**
CZK/EUR	%, y-o-y, real (PPI euro area), avg.	-3.0	2.2	2.4	5.1	-0.2	0.1	-1.8	-1.5	-1.2	**0.2**	**2.5**
Foreign trade prices												
Prices of exports of goods	%, y-o-y, average	1.7	2.9	1.2	3.5	-1.7	-3.1	-0.1	-0.3	0.9	**-0.5**	**2.2**
Prices of imports of goods	%, y-o-y, average	4.3	4.2	-0.2	1.9	-1.9	4.0	0.9	-0.7	0.3	**-1.5**	**2.2**
MONEY AND INTEREST RATES												
M3	%, y-o-y, average	1.0	5.1	5.1	5.1	7.3	9.1	11.7	6.7	6.3	**8.0**	**5.7**
2W repo rate	%, end-of-period, CNB forecast = average	0.75	0.05	0.05	0.05	0.05	0.05	0.50	1.75	2.00	**0.56**	**0.46**
3M PRIBOR	%, average	1.2	1.0	0.5	0.4	0.3	0.3	0.4	1.3	2.1	**0.9**	**0.6**

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

2017				2018				2019				2020				2021			
QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV
1127.3	1154.8	1160.5	1167.9	1173.6	1180.5	1188.0	1198.6	1206.3	1212.3	1217.4	1223.1	1182.5	1071.2	1098.2	1120.1	1139.5	1156.2	1170.8	1185.7
2.9	5.1	5.1	5.1	4.1	2.2	2.4	2.6	2.8	2.7	2.5	2.0	-2.0	-11.6	-9.8	-8.4	-3.6	7.9	6.6	5.9
3.6	4.8	4.6	4.4	4.1	3.3	2.9	2.4	3.0	3.0	2.7	3.2	0.4	-9.1	-5.9	-4.6	-1.7	8.9	5.8	4.2
1.7	1.2	0.8	1.5	2.9	3.0	4.2	3.6	2.3	2.8	3.5	1.7	4.7	4.5	2.8	4.2	2.0	1.7	2.2	2.7
-4.1	4.0	7.4	10.1	12.1	3.7	4.9	2.0	5.3	-0.6	-0.9	9.2	-5.4	-10.5	-12.2	-17.5	-7.5	8.3	9.7	9.4
-0.7	5.5	5.0	6.1	8.5	7.0	7.7	6.9	3.6	1.5	1.1	4.6	-0.9	-12.4	-11.9	-13.6	-6.8	8.6	9.6	9.2
5.8	7.3	7.6	7.7	4.9	3.6	4.3	4.8	1.3	2.6	1.9	-1.5	-5.8	-34.2	-26.3	-18.8	-8.0	34.7	24.9	18.4
3.6	5.9	7.1	8.4	7.3	5.1	6.3	4.9	2.1	1.7	1.1	1.4	-4.0	-30.0	-22.5	-16.8	-6.5	34.6	24.9	18.1
86.0	86.8	81.2	76.1	69.3	76.4	67.3	78.7	62.5	87.1	76.1	50.3	42.0	18.1	20.3	21.6	24.6	25.1	25.3	27.7
8.4	4.3	5.5	7.8	2.3	3.2	3.5	3.2	0.8	0.0	1.7	-3.3	-	-	-	-	-	-	-	-
0.9	7.2	1.6	3.0	14.1	7.8	12.3	4.9	3.6	3.8	1.4	2.7	-	-	-	-	-	-	-	-
7.0	3.5	3.3	4.6	2.8	3.2	2.5	2.2	3.3	3.0	5.4	3.3	-	-	-	-	-	-	-	-
1.2	1.7	2.2	2.5	2.3	2.3	2.3	2.1	2.3	2.5	2.6	2.8	3.1	-	-	-	-	-	-	-
2.5	2.2	2.5	2.6	1.9	2.3	2.4	2.1	2.7	2.8	2.8	3.0	3.6	2.9	2.6	2.4	1.7	2.1	2.1	2.3
-0.5	-0.1	0.2	0.3	1.4	1.8	2.1	1.7	3.7	4.5	4.3	5.3	4.2	3.3	2.9	2.6	1.5	1.4	1.5	1.5
3.4	2.9	3.9	4.4	2.5	2.5	1.1	0.4	1.7	2.2	2.9	3.5	4.8	5.6	5.4	3.8	2.1	0.8	0.8	1.7
2.1	2.5	2.7	2.4	1.7	1.9	2.3	2.4	2.9	2.6	2.7	2.6	2.9	2.2	1.3	1.6	1.4	2.1	2.3	2.0
15.1	7.5	1.7	2.6	-1.6	5.0	12.4	9.5	1.3	2.5	-2.1	-3.1	1.3	-16.5	-12.9	-11.1	-10.2	5.4	8.0	10.1
2.5	2.3	2.7	2.7	1.8	2.1	2.3	2.0	2.7	2.9	2.9	3.1	3.6	2.8	2.4	2.2	1.4	1.8	2.0	2.1
0.7	1.0	1.6	2.4	2.6	2.5	2.5	2.6	3.4	3.5	3.5	3.7	3.7	4.7	4.1	3.9	3.3	2.5	2.9	3.0
2.7	2.3	1.4	0.9	0.1	1.5	3.3	3.4	3.5	3.5	2.0	1.3	1.4	0.6	-0.6	0.6	-0.3	-0.2	1.7	1.2
0.2	10.1	11.4	8.2	4.0	-3.4	-2.3	1.7	6.9	11.1	6.0	-1.8	-3.6	-1.8	1.7	3.2	1.0	-0.6	-0.1	2.3
1.4	1.6	1.7	2.0	2.3	2.8	3.7	4.0	4.6	4.7	4.5	4.5	4.2	-	-	-	-	-	-	-
57.6	9.1	11.0	20.8	23.0	47.6	45.8	11.6	-4.8	-8.6	-18.3	-6.0	-19.3	-50.6	-39.9	-38.2	-16.3	20.4	10.4	8.3
5.1	7.2	6.7	7.8	7.8	8.1	7.9	6.5	7.5	7.2	7.0	6.7	4.2	-2.2	4.0	3.9	4.8	10.8	3.8	4.0
2.6	4.9	4.1	5.1	5.8	5.7	5.4	4.3	4.7	4.3	4.1	3.6	0.6	-5.1	1.4	1.5	3.1	8.7	1.7	1.7
1.1	1.3	2.2	2.1	2.1	2.1	0.9	1.3	1.0	0.3	0.3	-0.1	-0.5	-0.8	-1.8	-2.9	-2.7	-2.0	-0.7	0.4
3.5	3.0	3.1	4.7	5.9	7.7	7.2	5.2	4.8	4.5	4.1	4.5	6.3	9.0	11.8	8.7	4.8	0.6	-2.7	-0.6
0.5	-1.8	-2.7	0.4	4.4	8.7	8.4	6.6	5.0	4.3	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.4	3.7	3.1	3.6	2.6	0.5	1.4	1.4	1.4	1.9	1.9	2.0	-1.3	-10.2	-7.4	-5.7	-0.9	9.8	6.9	5.2
3.5	3.0	2.8	2.4	2.4	2.2	2.4	2.1	2.1	1.9	2.2	2.1	2.3	2.8	4.2	4.7	5.1	4.7	4.9	4.5
5.1	4.2	3.9	3.6	3.7	3.1	3.0	2.9	3.1	2.6	2.7	2.7	3.0	3.3	4.7	5.5	6.0	5.5	5.4	5.3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95.1	77.2	46.5	40.4	79.2	63.8	20.5	37.7	73.3	79.5	50.4	36.5	67.0	18.0	23.0	22.0	55.0	53.0	33.0	29.0
8.2	6.1	3.6	3.0	6.4	4.8	1.5	2.7	5.6	5.6	3.5	2.5	5.0	1.4	1.7	1.6	4.2	3.7	2.2	1.9
29.8	34.4	31.8	31.7	31.5	36.6	23.4	30.4	34.5	36.9	19.9	12.4	25.0	21.0	11.0	8.0	26.0	30.0	17.0	12.0
110.5	-2.1	-30.1	5.1	58.0	3.8	-58.7	19.6	40.0	25.5	-63.7	-23.1	41.0	-33.0	-41.0	-2.0	26.0	5.0	-35.0	-6.0
9.5	-0.2	-2.3	0.4	4.7	0.3	-4.3	1.4	3.1	1.8	-4.4	-1.6	3.1	-2.5	-3.0	-0.1	2.0	0.3	-2.4	-0.4
-40.3	-3.8	10.3	-12.0	17.7	-16.3	-27.0	-25.5	-4.5	-28.6	-26.6	-1.2	-	-	-	-	-	-	-	-
25.4	24.1	22.2	21.8	20.7	21.5	22.1	22.7	22.6	22.9	23.2	23.1	23.2	24.9	24.8	24.6	24.5	24.4	24.4	24.3
27.0	26.5	26.1	25.7	25.4	25.6	25.7	25.9	25.7	25.7	25.7	25.6	25.6	27.2	27.4	27.5	27.6	27.6	27.5	27.5
-0.7	-2.6	-4.3	-6.0	-6.3	-3.7	-1.6	0.8	0.2	-0.8	-1.4	-2.7	-2.2	3.5	4.0	5.0	5.7	0.2	0.1	-0.1
0.4	-1.3	-2.5	-3.7	-4.4	-2.1	-0.5	1.3	0.6	-1.1	-1.7	-2.8	-2.3	0.9	0.3	1.8	3.9	2.1	2.6	1.4
2.2	0.9	-1.1	-2.4	-4.4	-1.6	1.6	3.4	3.0	1.7	0.3	-1.4	-2.1	-0.3	-0.6	1.1	2.8	1.6	2.6	1.7
5.1	2.9	-0.9	-3.3	-6.1	-2.3	2.6	3.5	2.8	1.6	-1.2	-1.8	-2.4	-1.9	-1.3	-0.4	1.7	1.7	2.9	2.4
10.2	12.6	12.8	11.1	8.7	6.0	5.4	6.4	5.5	6.5	6.7	6.7	8.6	9.1	7.6	6.7	5.7	4.6	6.0	6.7
0.05	0.05	0.25	0.50	0.75	1.00	1.50	1.75	1.75	2.00	2.00	2.00	1.00	0.49	0.39	0.35	0.39	0.45	0.49	0.53
0.3	0.3	0.4	0.7	0.9	0.9	1.4	1.9	2.0	2.1	2.2	2.2	2.1	0.6	0.5	0.5	0.5	0.6	0.6	0.6

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Na Příkopě 28
115 03 Praha 1
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Contact:
COMMUNICATIONS DIVISION
GENERAL SECRETARIAT
Tel: +420 22441 3112
Fax: +420 22441 2179
www.cnb.cz

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