Inflation Report —— IV/2020

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

CNB CZECH NATIONAL BANK

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This Inflation Report was approved by the CNB Bank Board on 12 November 2020 and – with some exceptions – contains the information available as of 21 October 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. Section I of the Report presents the message of our new quarterly forecast and the reasons behind the monetary policy decision adopted by the CNB Bank Board. In section II you will find a detailed description of the new forecast and its risks. Section III contains our assessment of past economic and monetary developments.

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

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

Changes in the monetary policy settings manifest themselves in the economy with a lag. Therefore, it is the future evolution of the Czech economy, rather than its current situation, that is of prime importance for the CNB Bank Board's decisions. The forecast for inflation at the "monetary policy horizon" (about 12–18 months ahead) is of greatest relevance to our decision-making. Our forecast tells us the most likely future course of the economy. It is drawn up by experts from the Monetary Department using 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 addition to the baseline scenario of the forecast, alternative or sensitivity scenarios are prepared as needed using the core projection model.

The forecast is the key, but not the only, input to our monetary policy decision-making. Unless the economic situation requires an extraordinary monetary policy meeting, the Bank Board meets eight times a year to discuss monetary policy issues. At four of the meetings (in February, May, August and November) we discuss a new forecast, while at the other four (in March, June, September and December) we discuss the risks and uncertainties of the most recent forecast in the light of newly available information on domestic and foreign economic developments. 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 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.

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.

On behalf of the Czech National Bank

Jiří Rusnok
Governor

I. SUMMARY

The economic situation and outlook are being fundamentally affected by the ongoing coronavirus pandemic. The forecast is based on assumptions regarding the future course of the pandemic and the epidemiological measures adopted, and the outlook for the main macroeconomic variables is conditional on the fulfilment of these assumptions. According to the assumptions of the baseline scenario of the forecast, the restrictive effect of the government's autumn measures and restrictions will peak in November 2020. These restrictions will be partly relaxed before Christmas. During the first half of 2021, the measures will be eased further to this summer's level, owing to an expected improvement in the epidemic situation.

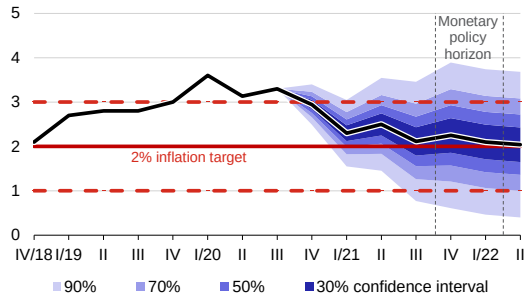
Inflation will decrease into the tolerance band in late 2020 and early 2021 and return close to the CNB's 2% target over the monetary policy horizon (see Chart I.1). Consumer prices increased by 3.3% in 2020 Q3, driven mainly by high core inflation and still buoyant – albeit slowing – growth in food prices. By contrast, consumer price inflation was dampened significantly by a continued fall in fuel prices. The elevated administered price inflation stabilised. Inflation will decrease below the upper boundary of the tolerance band in late 2020 and early 2021. This will be due to the anti-inflationary demand effects of the second wave of the coronavirus pandemic amid subdued external and above all domestic economic activity. However, the overall price pressures will remain elevated for some time. A cooling labour market and muted wage growth will dampen growth in domestic costs, but this will be offset by the recent significant depreciation of the koruna. Inflation will thus keep falling next year due to the fade-out of the high growth in market prices seen in early 2020 and subsequently also to a moderation of total cost growth. This will be due mainly to renewed appreciation of the koruna. The contribution of the domestic economy to growth in total costs will increase again next year, due to a gradual recovery in domestic economic activity and related stabilisation of the labour market as the impacts of the pandemic subside. Inflation will decrease towards the target over the monetary policy horizon, i.e. in late 2021 and early 2022, and remain close to the target in the rest of 2022. Monetary policy-relevant inflation will merge with headline inflation in mid-2021. Until then, the currently only marginal first-round effects of changes to indirect taxes will continue to fade. As regards the structure of inflation, the decrease will be driven by falling core inflation and, to a lesser extent, by slowing growth in food prices. Administered price inflation will also decrease due to slower growth in electricity prices and a decline in gas prices. By contrast, the fall in fuel prices, reflecting the previous collapse of global oil prices, will dissipate.

GDP will drop sharply this year due to the coronavirus pandemic, but its growth will recover next year (see Chart I.2). Although the economy partly began to breathe again during the summer months after most of the epidemiological restrictions were lifted, economic output will decline again in the autumn. This is due to the strong impact of the second wave of the pandemic and the reintroduced measures to counter the pandemic, including across-the-board restrictions with major economic impacts. The economic downturn is particularly visible in market and non-

Chart I.1 Headline inflation forecast

Headline inflation will decrease into the tolerance band in late 2020 and early 2021 and will be close to the CNB's 2% target over the monetary policy horizon

(year on year in %)

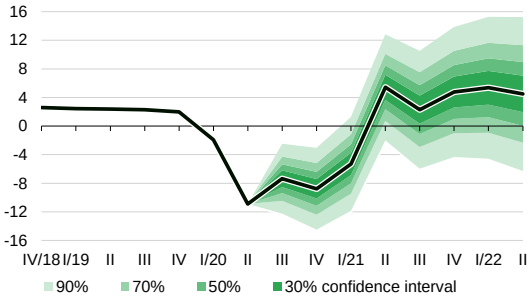


Note: The confidence intervals of the headline inflation forecast reflect the predictive power of past forecasts and are symmetric. They are widening only for the first five quarters and then stay constant. This is consistent with both the past predictive power and the stabilising role of monetary policy.

Chart I.2 GDP growth forecast

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

(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.

market services and in retail and wholesale trade, which have been hit much harder by the government's anti-epidemic measures than industry. The latter will be affected less than in the spring given the so far limited economic impacts of targeted anti-epidemic measures abroad and the functioning global supply chains. The income situation of firms and households is getting worse, and their confidence in a favourable future is undergoing a strong – albeit probably only temporary – shock. GDP will decline by more than 7% overall this year, with all demand components except government consumption contributing to the contraction. The reduced external demand is adversely affecting the export performance of Czech firms, as reflected in a negative contribution of net exports to GDP growth. The deep downturn in domestic and external economic activity connected with the worse overall perceptions of the economic situation among Czech firms is reflected in a decline in private investment. By contrast, the negative impacts of the coronavirus pandemic are being softened by faster growth in government consumption coupled with stabilising budgetary measures, which are partly slowing the drop in household consumption. The forecast expects the negative economic impacts of the second wave of the pandemic to subside during the first half of next year, when GDP will return to growth amid rising external demand. However, the economy will not reach the pre-pandemic level even by the end of 2022. The above developments will result in a marked cooling of the until recently highly overheated labour market and a rise in the unemployment rate. Wage growth will remain muted this year, especially in market sectors.

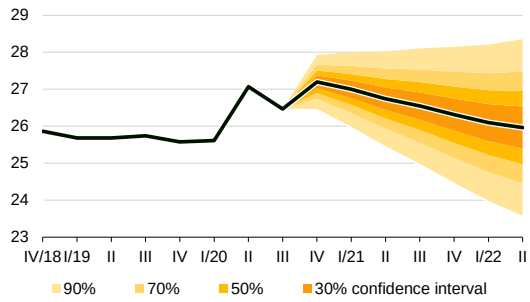
The koruna will start to appreciate gradually again next year (see Chart I.3). The exchange rate forecast for 2020 Q4 is set at CZK 27.2 to the euro. It thus reflects the pronounced depreciation recorded in the autumn, which was due to the reversal in global sentiment resulting from the start of the second wave of the coronavirus pandemic in the Czech Republic and other European countries. The expected gradual calming of the epidemic situation in Europe and the Czech Republic next year will foster renewed gradual appreciation to just below CZK 26 to the euro at the end of 2022. This will be caused by a widening interest rate differential amid a recovery in external demand and, in turn, domestic economic activity. The appreciating koruna will help inflation return to the 2% target next year.

Consistent with the forecast is stability of market interest rates initially, followed by a gradual rise in rates in 2021 (see Chart I.4). The until recently strong inflationary effect of the domestic economy will be dampened significantly by a deteriorating epidemic situation at the year-end, which will negatively affect the domestic economy in the coming quarters. The expected fading of the negative effects of the second wave of the pandemic in the quarters ahead, inflation stabilising subsequently close to the target, and a continued return of domestic and external economic activity towards pre-crisis levels will then allow a gradual increase in (normalisation of) interest rates to start during 2021. However, this interest rate path is conditional on the assumptions about the course of the epidemic situation and the anti-pandemic measures made in the baseline scenario of the forecast.

Chart I.3 Exchange rate forecast

The koruna will start to appreciate gradually again next year

(CZK/EUR)

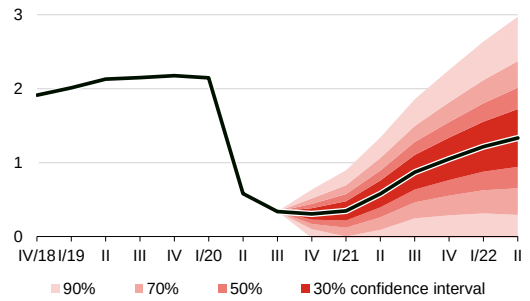


Note: The confidence intervals of the CZK/EUR exchange rate reflect the predictive power of past forecasts (with the exception of the exchange rate commitment period). They are symmetric and linearly widening.

Chart I.4 Interest rate forecast

Consistent with the baseline scenario of the forecast is stability of market interest rates initially, followed by a gradual rise in rates in 2021

(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.

At its November monetary policy meeting, the Bank Board of the Czech National Bank unanimously kept interest rates unchanged. The two-week repo rate thus remains at 0.25%, the discount rate at 0.05% and the Lombard rate at 1%.

The Bank Board assessed the risks and uncertainties of the baseline scenario of the forecast as being substantial. A possible further worsening of the course of the second wave of the pandemic in the Czech Republic and especially abroad poses a considerable anti-inflationary risk going beyond the baseline scenario. A further escalation of the pandemic could lead in many European countries to even more intensive implementation of strict epidemiological measures with significant economic impacts. These could include broad-based and long-lasting shutdowns of economies, which would further worsen business and household sentiment. An opposite risk to some extent is associated with domestic fiscal policy next year. The structure of the supply and demand factors underlying the observed and expected domestic and foreign inflation remains an uncertainty. The uncertainty associated with the internal political situation in the USA and the risk of a no-deal Brexit have also been increasing recently. In light of these significant uncertainties, the Bank Board considers it likely that interest rates will be left at a low level for longer than assumed in the baseline scenario of the forecast.

II. THE FORECAST, ITS CHANGES AND RISKS

II.1 DEVELOPMENTS ABROAD AND EXTERNAL ASSUMPTIONS OF THE FORECAST

The global economy is recording an unprecedented contraction this year owing to the coronavirus pandemic. Most countries, including the euro area, bottomed out in Q2 and their economies were gradually recovering from the quarantine restrictions and lockdowns during the summer with fiscal and monetary policy support. However, the economic recovery will be held back in many countries at the year-end by a second wave of the pandemic with adverse effects on consumer demand and firms' willingness to invest. Producer prices in the euro area will drop in 2020 as a whole owing to low oil prices and weak demand pressures in the production sector. However, these anti-inflationary effects will partly fade away next year. In most euro area countries, consumer prices also fell into deflation in Q3, owing in part to the euro appreciating against the dollar. However, their growth will recover again during 2021. Central banks are keeping their monetary conditions extremely easy. Short-term euro rates remain negative, as does their outlook. The euro will appreciate slightly against the dollar.

II.1.1 Economic developments abroad

All the major economies except China will contract this year due to the COVID-19 pandemic.[1] The UK and India will see the biggest decreases (around 10%), while economic growth in China will slow to 2.3%. The global recovery in 2021 will be more or less broad-based. Overall, the weighted decline in the economies monitored will reach around 4% this year. The world economy will grow by 6% in 2021 and just under 4% in 2022 (see Chart II.1.1).[2]

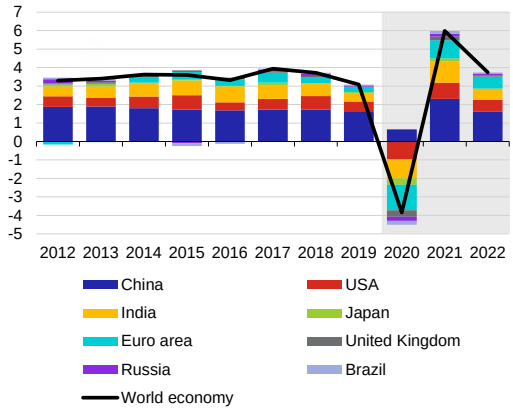
The euro area economy recorded its biggest-ever downturn in 2020 Q2 (see Chart II.1.2). It fell by 14.7% year on year, with Spain, France and Italy being among the hardest-hit economies. The government measures to counter the pandemic affected all components of GDP, especially household consumption and investment. The contribution of government consumption was negative in the euro area as a whole, but was positive in some countries (e.g. Germany and Spain). From a sectoral perspective, activity in services declined, especially in wholesale and retail trade, transport, and accommodation and food service activities. As in Q1, plant shutdowns in production chains were reflected in a negative contribution of industry.

The available business indicators are signalling a sharp recovery in economic activity in Q3. Industrial production expanded strongly in the summer following the easing of government restrictions, but was still below last year's level in August. Robust recoveries of industry in Italy and Slovakia came as a particular surprise. Purchasing managers' expectations were also positive, with the PMI indicator lying in the expansion band from July onwards (see Chart II.1.3). Expectations in the services sector started worsening in July as they began to reflect the worsening epidemic situation in some euro area countries and concerns of a second wave of the pandemic and the reintroduction of government measures. Spain was the first to

Chart II.1.1 World economy growth outlook

The recovery of the world economy will be broad-based next year

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

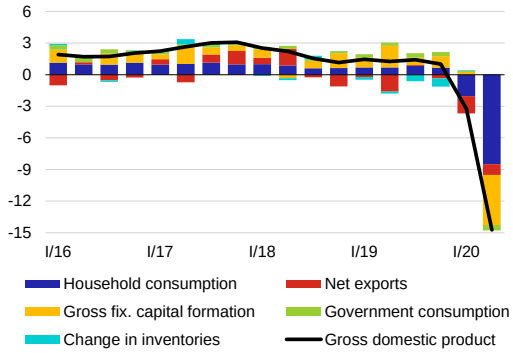


Note: World economy growth is proxied by the growth of the eight largest economies, which account for around 75% of global GDP. The weights of the individual economies are calculated on the basis of nominal GDP at purchasing power parity. The sources of the outlooks are CF and EIU.

Chart II.1.2 Structure of annual GDP growth in the euro area

Euro area GDP slumped in Q2, owing mainly to a decline in household consumption and investment

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



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

2 The outlook, including the expected outcome, is indicated by the grey area in the chart. This convention is used throughout this Report.

tighten measures. Moreover, it is experiencing large shortfalls in tourism income. Consumer demand is rather more favourable. Retail sales in the euro area returned to year-on-year growth during Q3. According to a European Commission survey, though, consumer sentiment remains mostly negative and is improving only slowly. The economic downturn was dampened to some extent by fiscal measures, which also partly stabilised the labour market in a number of countries. The unemployment rate in the euro area increased only slightly, reaching 8.1% in August.

The effective euro area economy3 bottomed out in Q2 and its decline will moderate in the rest of the year despite the onset of the second wave of the pandemic (see Chart II.1.4). Overall, the effective euro area economy will decline by more than 7% this year and grow by almost 5% next year. The German economy will shrink by 6% this year, and the contractions in Italy, Spain and France will exceed 10%. A robust recovery from Q3 onwards will be dampened by persisting poor consumer sentiment. The second wave of the pandemic, the magnitude of which is not yet entirely clear, will adversely affect consumer demand and the firms' willingness to invest. The effect of partially deferred consumption will be felt more strongly next year. However, it will be dampened by a worsening labour market situation. The euro area economy will also be supported by recovering external demand, especially from China. Still very accommodative fiscal policy in many euro area countries will be complemented by the gradual start of drawdown from the Recovery and Resilience Facility (Next Generation EU) at the beginning of 2021. However, the expected recovery will not be enough for the currently highly negative output gap to close before the end of 2022. From the sectoral perspective, services will be hit the hardest, in particular accommodation and food service activities, which will be affected by voluntary social distancing in addition to government measures. One risk to this outlook is a rapid deterioration in the epidemic situation in Europe, as described by a scenario in section II.4. Other risks in the external economic environment are described in Box 1.

Chart II.1.3 PMI in manufacturing

Purchasing managers' expectations improved swiftly in Germany and the euro area

(Purchasing Managers' Index; source: Bloomberg)

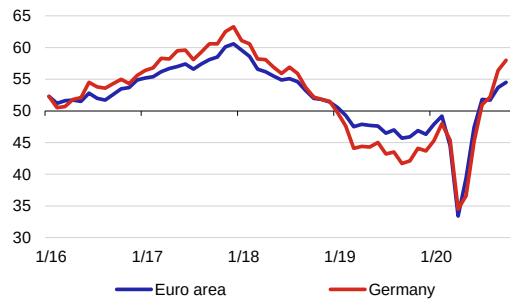
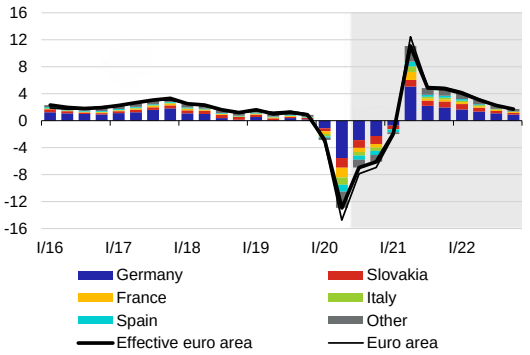


Chart II.1.4 Euro area GDP growth outlook

The year-on-year decline in GDP will moderate in the second half of this year and switch to growth next year

(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.

BOX 1 Uncertainties in the external economic environment against the backdrop of the coronavirus crisis

Long-term uncertainties and risks persist in the external environment against the backdrop of the COVID-19 pandemic. These are fostering higher price pressures and lower economic growth in the long run. They include above all Brexit, trade wars, deglobalisation and new environmental measures.

The transitional period for the trade arrangements between the EU and the UK will end in December 2020. Unless a trade agreement is signed, customs checks and tariffs under the general rules of the World Trade Organisation will be

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

introduced between the EU and the UK on 1 January 2021. Numerous rounds of negotiations between EU and UK representatives have failed to make tangible progress so far. The main sticking points include a level playing field for competition (especially in the field of state aid), supervision of compliance with agreements, and fishing rights in British waters. The situation has also been unfavourably affected by a draft UK internal market bill, which could eliminate the legal force of part[4] of the Brexit deal ratified last year.

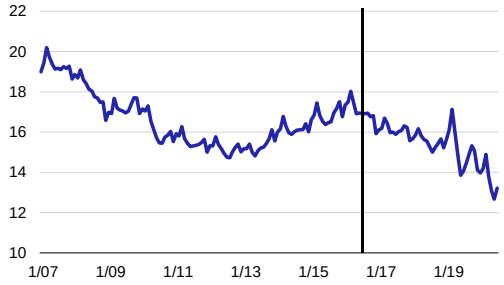
The EU summit in mid-October stated that progress in the talks was still not sufficient for the planned trade deal with the UK to be reached. October is considered the deadline for reaching an agreement. It is generally expected that a Brexit with no agreement on long-term bilateral trade relations would adversely affect investment and mutual trade, which has already been hit by four years of uncertainty since the Brexit referendum (see Chart 1). Studies[5] indicate that goods trade between the EU and the UK would drop significantly without a deal. The independent National Institute of Economic and Social Research (NIESR) projects a fall of 50%–60% and foresees a similar drop in services trade. The UK government has estimated the total decline in trade between the UK and the EU at 37%. This would adversely affect economic growth in both territories, but the impacts on the UK would be greater. Germany – the Czech Republic's biggest trading partner – would be the hardest hit country in the EU. The CNB's estimates indicate that the impacts on the Czech economy would not be negligible either.[6] From the sectoral perspective, the adverse effect on the automotive industry would be particularly strong.

There are continuing trade tensions between the USA and China and between the USA and Europe. Although the phase one trade deal of January 2020 is holding, President Trump stated in July that he saw a phase two deal as unlikely. The main disagreements now concern technology. Restrictions in this area could slow global technological progress. The US government is seeking to ban the activities of several Chinese firms (ByteDance – TikTok, WeChat and Huawei) in the US market. In September, moreover, it restricted US supplies to Chinese chip makers (SMIC) on grounds of national security. The rising mistrust is reflected in rapidly shrinking capital flows between the two countries (see Chart 2). The outcome of the US election in November will probably affect the dynamics and specific areas of trade and political disputes but is unlikely to significantly change the overall course of US–China relations. In addition, there is uncertainty regarding trade relations

Chart 1 (BOX) Share of exports from the EU27 to the UK in total exports from the EU27

The share of exports from the EU27 to the UK in total exports from the EU27 has been falling in recent years

(percentages; three-month moving average; source: Eurostat)

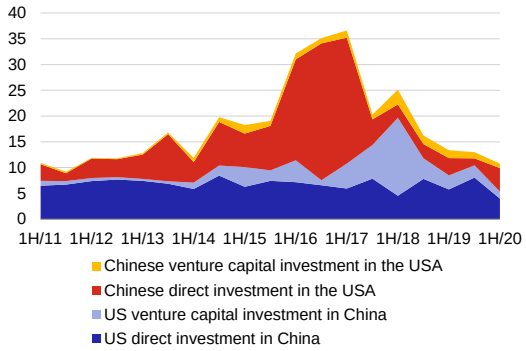


Note: The vertical line denotes the Brexit referendum (23 June 2016).

Chart 2 (BOX) Mutual investment between the USA and China

The volume of investment between the two countries has been falling since 2018 and hit a nine-year low in 2020 H1

(USD billions; source: US-China Investment Hub)



4 Specifically the Protocol on Ireland and Northern Ireland, the main goal of which is to avoid a hard border between Ireland and Northern Ireland and safeguard the all-island economy.

5 Hantzsche, A. (2019): *Briefing: Industry and regional effects of a no-deal Brexit*, National Institute of Economic and Social Research, 12 September 2019.

HM Government (2018): *EU exit: Long-term economic analysis*. November 2018.

6 See the disorderly Brexit scenario in IR IV/2019.

between the USA and Europe, especially in the digital taxation area. The discussed – and in some countries already introduced[7] – digital tax has major implications for US firms. The retaliatory measures being considered by the USA are broader in nature and could include customs barriers.

The drive towards green energy, and especially the pressure to cut greenhouse gas emissions, is another burden on EU economies. In early September 2020, the European Parliament passed a stricter emissions reduction proposal than planned by the Commission. Emissions are to be reduced by at least 55% by 2030 compared with 1990 levels. The decarbonisation of human activities will require a fundamental transformation of entire economies, from heat generation through to car production. These structural changes will have to be supported by a green fiscal stimulus, managed progressively by increasing carbon prices and by making compensation transfers to poor households. These efforts will clearly put a burden on European industry. However, the additional cost shock of the higher carbon tax may be offset by green R&D subsidies and by the benefits of firms' innovation activities.

The new environmental requirements affect the automotive industry above all. After the outbreak of the pandemic, Europe recorded the lowest new car sales in decades (see Chart 3). Moreover, according to recently approved EU regulations, automakers will soon face higher costs in the form of penalties for making insufficiently green cars. The demand situation is little better. This is due to the high price elasticity of demand for cars relative to other goods, the very high car ownership rates among households and firms in key markets (especially Germany), and above all to the general economic uncertainty going forward. Provided that the second wave of the pandemic does not involve long shutdowns of the economy and the situation soon improves, the pandemic might spur innovation. Fiscal stimuli are also likely to be directed at supporting green policy. In June, the German government approved a fiscal stimulus targeted primarily at electromobility, while a scrapping fee for combustion engines was repeatedly rejected. France has also moved in this direction.

Chart 3 (BOX) Car registrations in the EU

The coronavirus crisis caused the largest fall in new car registrations

(annual percentage changes; three-month moving average; source: European Automobile Manufacturers' Association)

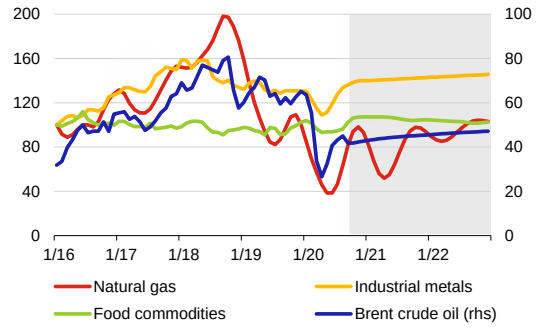
II.1.2 Price developments abroad

The Brent crude oil price recovered partially in 2020 Q3 and its outlook is slightly rising. The price of oil went up during the summer months but temporarily dipped in September because of worsening financial market sentiment and concerns about slower growth in demand for oil owing to the epidemic situation in Europe and the USA. On the supply side, oil price growth is being dampened by a renewed increase in production in Libya after a ceasefire was agreed, and by a planned rise in OPEC+ output in January 2021. According to the EIA, the heavily increased global oil inventories during Q2 were drawn at a rate

Chart II.1.5 Prices of crude oil and other commodities

The outlook for the Brent crude oil price is slightly rising from an initial level of around USD 40 a barrel; gas prices react to oil prices with a lag

(oil in USD/barrel (right-hand scale); other commodities: index [January 2016 = 100]; average price of natural gas in Europe; source: Bloomberg, World Bank, CNB calculation)



7 https://crsreports.congress.gov/product/pdf/IF/IF11564

of 3.1 million barrels a day on average in Q3, and a similar decline is expected in the rest of this year. Inventory draws are expected to slow significantly next year. The EIA expects the Brent price to remain at its current level of around USD 42 a barrel until the end of this year and rise to USD 49 a barrel at the end of 2021. The October CF expects similar levels. The current futures curve is only slightly rising, signalling Brent prices of USD 43 a barrel at the close of 2020 and USD 45 a barrel at the end of 2021 (see Chart II.1.5).

Prices on other commodity markets also switched to growth in Q3. The price of natural gas in Europe recorded strong growth in September. This was due to lower LNG imports from the USA and limited pipeline gas supplies from Russia and Norway due to maintenance. The outlook for average natural gas prices is again very volatile and is being pushed down temporarily by low oil prices (from which prices of long-term contracts are derived with a lag), while the market outlook for spot prices is driving up expected average gas prices in the longer term. The price of coal increased to a lesser extent in September, due to restricted supplies from Australia. Prices of non-energy commodities also increased. At first, the growth was driven mainly by rising metals prices, but food commodity prices had the dominant effect in September and October. However, the outlook for prices of non-energy commodities is flat overall, with a slightly rising outlook for industrial metals prices offset by a slightly falling path of expected food commodity prices (see Chart II.1.5). Prices of basic metals continued to be supported by the global manufacturing recovery. As for food commodities, strong price growth was recorded for grains (except for flat rice prices), while sugar and meat prices also rose. By contrast, coffee and cocoa prices fell.

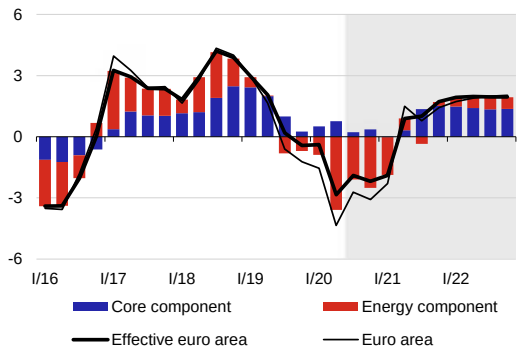
The year-on-year decline in industrial producer prices bottomed out in 2020 Q2 (see Chart II.1.6). The year-on-year fall in prices in the effective euro area slowed to 1.7% in August. Prices dropped sharply in Italy and Spain, while being flat year on year in Slovakia. This is reflected in a significantly higher indicator for the effective euro area than the euro area proper (see Chart II.1.6). Declines were recorded both for energy prices and for prices of intermediate goods, while the growth rates of other categories of producer prices slowed. The strong negative contribution of the energy component reflected the previous oil price collapse and its only partial subsequent correction. The core component of producer prices will also be subdued over the outlook horizon, due to a widening of the negative output gap in the effective euro area in Q2 and its only gradual closure. The production environment is still characterised by weak demand and strong competitive pressures, which are preventing stronger price growth. That growth is also being dampened by a strong year-on-year appreciation of the euro against the dollar since mid-2020. Producer prices in the effective euro area will decline by 1.8% in 2020 as a whole. They will start rising again in 2021 (to 0.4% on average), owing to the expected economic recovery coupled with rebounding growth in core prices and increasing oil prices. Producer prices will grow by around 2% in 2022.

Consumer price inflation in the effective euro area is slowing considerably this year (see Chart II.1.7). The price level was broadly flat year on year in September, with prices even

Chart II.1.6 Industrial producer prices in the euro area

Industrial producer prices will decline this year due to a negative contribution of the energy component; producer price inflation will start rising again next year as this effect fades and growth in the currently subdued core component picks up again

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

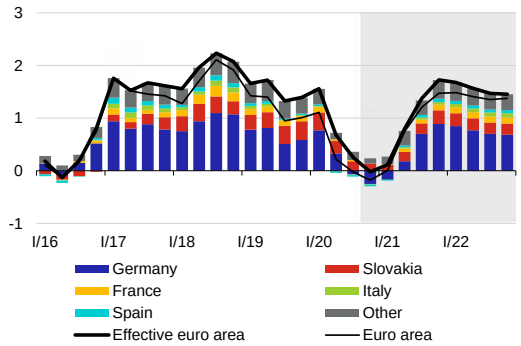


Note: The energy component is determined by developments in industries strongly linked to the oil price. The rest of the PPI index in effective terms is the core component.

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

Inflation will slow further at the end of this year and rise next year

(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.

recording a slight annual decline in the euro area proper due to negative contributions from prices of energy and, to a lesser extent, industrial goods. The positive contribution of services prices meanwhile decreased, while food price inflation went up. Core inflation gradually dropped to 0.2%. Most euro area countries, including Germany, where VAT rates were temporarily reduced in July, fell into deflation. Consumer prices are expected to bottom out at the end of this year. In 2021, they will return to growth, which will temporarily converge to the ECB's inflation target. This rebound will be fostered by the expected economic recovery, the unwinding of the slump in oil prices, and by a renewed VAT rate increase in Germany. Inflation in the effective euro area will rise by 1% and 1.5% in 2021 and 2022 respectively. It will be somewhat lower in the euro area proper.

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). The ECB's communication is not entirely clear, but there are signals of a further easing of its monetary policy. After its October monetary meeting, the ECB announced it would recalibrate all its instruments and a revision would be announced in December. President Christine Lagarde also said that the euro area economic recovery was losing momentum more rapidly than expected and the ECB was prepared to respond flexibly to developments. At the same time, its representatives are verbally endorsing the fiscal stimuli in place and their continuation. Government bond yields have declined recently, so markets expect an increase in the ECB's asset purchases under the Pandemic Emergency Purchase Programme (PEPP) and the Asset Purchase Programme (APP).[8] The ECB is signalling that the bond purchases might focus on green finance. Ten-year German government bond yields remain negative over almost the entire outlook and are currently attacking historical lows. Their lag behind US government bond yields is widening as the horizon lengthens (see Chart II.1.9).

The 3M USD LIBOR is only slightly positive, due to the Fed's easy monetary policy (see Chart II.1.8). The US central bank expects zero rates until the end of 2022, even though the labour market is recovering swiftly and unemployment is decreasing.

According to the current outlook, the euro will appreciate slightly against the dollar (see Chart II.1.10). This reflects the disputes between the Republicans and the Democrats over fiscal measures to support the US economy and also the uncertainty surrounding the US presidential election. The euro is expected to be broadly stable in effective terms.

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

The spread between 3M rates in the USA and the euro area will remain broadly stable

(percentages; differences in percentage points)

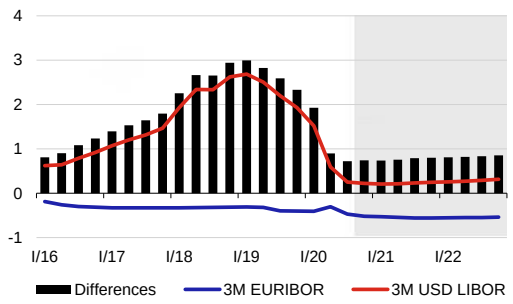


Chart II.1.9 10Y government bond yields

The outlook for the currently narrowed spread between ten-year government bond yields in the USA and Germany is widening again gradually

(percentages; differences in percentage points)

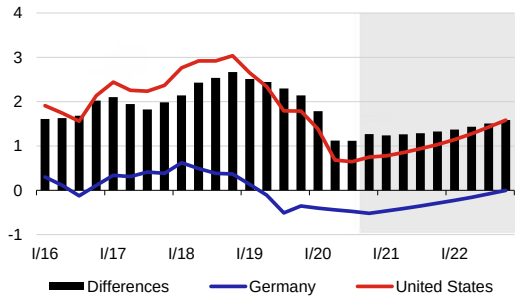
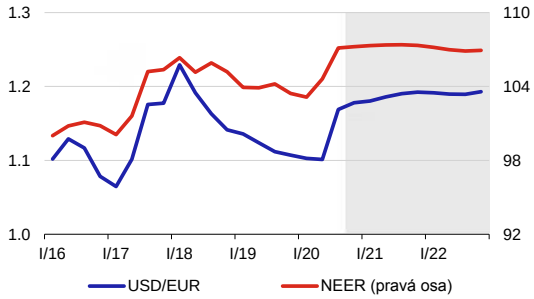


Chart II.1.10 Euro exchange rate

The CF analysts expect the euro to appreciate slightly against the dollar and to remain broadly stable against other currencies

(USD/EUR; NEER of euro against currencies of euro area countries' 18 main partners; 2016 Q1 = 100; right-hand scale)



8 The ECB's asset purchase programme is incorporated into the forecast by means of shadow interest rates, which are significantly lower than market rates.

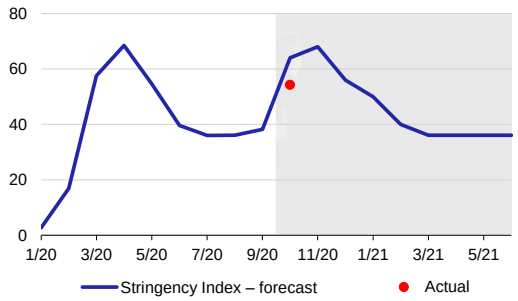
II.2 BASELINE SCENARIO OF THE FORECAST

The economic situation and outlook are being fundamentally affected by the ongoing coronavirus pandemic. The baseline scenario of the forecast is based on assumptions regarding the future course of the pandemic and the epidemiological measures adopted (see the box below), and the outlook for the main macroeconomic variables is conditional on the fulfilment of those assumptions. According to the baseline scenario of the forecast, inflation will decrease into the upper half of the tolerance band around the inflation target in late 2020 and early 2021, partly due to the anti-inflationary effects of the second wave of the pandemic amid subdued external and above all domestic economic activity. After a short summer breather, the Czech economy will contract markedly again at the close of this year owing to reintroduced and retightened measures to counter the pandemic. However, the overall price pressures will remain elevated in the coming quarters. A cooling labour market and muted wage growth will dampen growth in domestic costs, but this will be offset by a significantly weaker koruna. The impacts of the second wave of the pandemic will continue to be felt next year in the form of shaken confidence and a worse income situation of businesses and consumers. This is because the above developments will result in a marked cooling of the labour market, which will lead to a further increase in the unemployment rate and ongoing muted wage growth. After having a strong stabilising effect this year, fiscal policy will be highly restrictive in 2021 owing to the gradual termination of most of this year's government support programmes. Economic growth will therefore be subdued next year and the domestic economy will not reach the pre-pandemic level even by the end of 2022. The modest recovery of the Czech economy next year will be reflected in a gradual revival of domestic cost growth. By contrast, growth in total costs will slow towards its steady-state level on account of renewed appreciation of the koruna. This will cause inflation to return to the target at the end of next year. Given the assumptions about the course of the pandemic, consistent with the baseline scenario of the forecast is stability of market interest rates initially, followed by a gradual rise in rates in the course of 2021.

Assumptions regarding the course of the epidemic situation and government measures are an important part of the baseline scenario of the forecast. The strength of restrictive epidemiological measures[9] is indicated by the Stringency Index.[10] This is a set of 18 indicators reflecting the restrictions on everyday life and the economy resulting from government recommendations and measures. Its course in the Czech Republic so far, along with the outlook until mid-2021, is illustrated in Chart II.2.1. The index reached its highest level to date in April 2020 during the first wave of the coronavirus pandemic, when most services and a large proportion of retail and wholesale trade closed and production in major industrial firms halted. As the pandemic eased during the summer, the government restrictions were partly lifted and the index fell by

Chart II.2.1 Stringency Index

According to the assumptions of the baseline scenario of the forecast, the restrictive effect of the government's autumn measures and restrictions will peak in November 2020



9 The baseline scenario was prepared as of 21 October 2020, the day the Czech government announced a further tightening of its epidemiological measures. Among other things, these measures limited social contact and closed many retail outlets and other services. However, the adoption of a set of measures and restrictions had been anticipated during the preparation of the forecast, taking into account the observed and expected course of the pandemic. The baseline scenario therefore anticipates the negative effects of the reintroduced epidemiological measures.

10 The index is compiled by the University of Oxford. Its full name is the Oxford COVID-19 Government Response Tracker. For more details see https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker

almost one-half. The individual epidemiological measures are gradually being tightened or renewed as the second wave of the pandemic takes hold. In November, the Stringency Index will reach similarly high levels as in April according to the assumptions of the baseline scenario of the forecast. However, the average October level lagged behind this assumption of the forecast. Some restrictions will be partly relaxed before Christmas according to the assumptions of the baseline scenario of the forecast. During the first half of next year, the measures will be eased further to this summer's level, owing to an expected improvement in the epidemic situation.[11]

The epidemiological measures will have substantial negative impacts on gross value added until the end of this year (see Chart II.2.2). The time course of the direct economic impacts on each sector over time is derived from the expected path of the Stringency Index. Like during the spring wave of the pandemic, retail and wholesale trade, passenger transport, accommodation and food services, tourism, and sports, culture and entertainment will be hit the hardest. In these sectors, the size of the direct impacts will be similar as in the first wave. By contrast, manufacturing will be affected less than in the spring according to the baseline scenario of the forecast, given the so far rather limited economic impacts of targeted anti-epidemic measures abroad and the functioning global supply chains. For example, freight transport, agriculture and construction should remain little affected. According to the assumptions of the baseline scenario, the adverse effects of the second wave will have dissipated by mid-2021 and the sectors affected will return to the August 2020 – i.e. still not pre-pandemic – level. The domestic economy will then continue to recover gradually.

Chart II.2.2 Impacts of the pandemic on gross value added

The anti-epidemic measures during the second wave will hit trade and services the hardest

(changes in level in %; impacts in percentage points; February 2020=100)

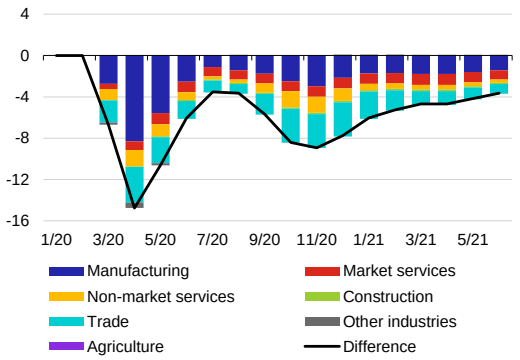


Table II.2.1 Forecasts of selected variables

GDP will fall sharply this year and return to modest growth next year

(annual percentage changes unless otherwise indicated)

	2019 actual	2020 forecast	2021 forecast	2022 forecast
Headline inflation	2.8	3.2	2.3	2.0
GDP	2.3	-7.2	1.7	4.2
Average nominal wage	6.4	3.3	2.8	3.9
Exchange rate (CZK/EUR)	25.7	26.6	26.6	25.9
3M PRIBOR (in %)	2.1	0.8	0.7	1.4

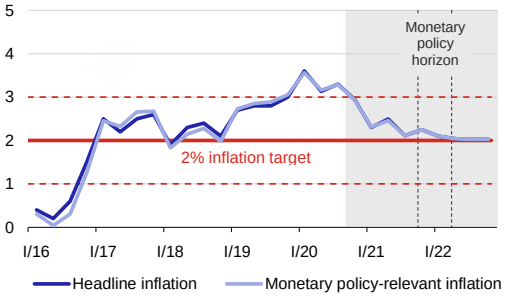
II.2.1 Inflation and monetary policy

Headline inflation will decrease below the upper boundary of the tolerance band in late 2020 and early 2021 and return close to the target by the end of 2021 (see Chart II.2.3). Following a slight increase in 2020 Q3, inflation will slow to around 3% at the close of this year. This will be partly due to a sizeable fall in administered price inflation owing to a decrease in gas prices for households and continued moderation of growth in electricity prices. Growth in market prices will stay at the current elevated levels until the year-end. As the high growth in market prices observed in early 2020 unwinds, market price inflation will start to slow in 2021 onwards, helping headline inflation return into the tolerance band around the target. A continued decrease in food price inflation will foster slower growth in prices roughly

Chart II.2.3 Headline inflation and monetary policy-relevant inflation

Inflation will decrease into the tolerance band in late 2020 and early 2021 and will be close to the 2% target over the monetary policy horizon

(annual percentage changes)



11 The worse pandemic scenario in section II.4 describes the risk of a more serious second wave in the Czech Republic and especially abroad going beyond the assumptions of the baseline scenario. In the worse pandemic scenario, the Stringency Index stays close to its peak until the end of this year and then gradually falls towards the baseline scenario levels. The further restrictions approved by the Czech government with effect from 28 October may indicate a shift in the domestic situation towards the worse pandemic scenario. On top of the previous restrictions, the measures include a curfew, restricted opening hours for still open food retailers, and a call for greater use of working from home in both the public and private sectors.

until mid-2021. The fall in fuel prices will conversely weaken (see Chart II.2.4). Weaker domestic demand resulting from the adverse effects of the coronavirus pandemic, coupled with renewed exchange rate appreciation during 2021, will lead to a decline in core inflation and a return of headline inflation close to the target in 2021 H2. Inflation will then stay close to the target over the monetary policy horizon, i.e. in late 2021 and early 2022, or more precisely in 2022 as a whole. Monetary policy-relevant inflation[12] will be equal to headline inflation over the monetary policy horizon, due to the unwinding of the positive first-round effects of this year's changes to indirect taxes.

In contrast to the spring wave of the pandemic, the second wave will have clear anti-inflationary effects. In the spring, firms and households drew on previously created reserves, so most of them managed to cope with the difficult period – partly thanks to fiscal stabilisation measures – moreover with the prospect that it was a one-off matter. However, many of them are likely to exhaust their reserves during the autumn wave. At the same time, the new (unexpectedly strong) impact of the pandemic will shake business and consumer confidence in a favourable future. Strong negative cyclical effects will then occur on the labour market, dampening inflation to a greater extent than in the spring.

Core inflation will remain elevated until the end of this year. This will reflect the fading strong demand pressures connected with the until recently tight labour market. Core inflation will start to moderate appreciably next year. This will be due mainly to the expected negative impacts of the autumn wave of the pandemic on the income situation and sentiment of households. These will push core inflation down to 2% in 2021 H2 (see Chart II.2.5). A gradual economic recovery and a related resurgence of domestic cost pressures will keep core inflation close to 2% in 2022.

Growth in food prices will slow further at the end of this year as one-off factors fade out. The until recently high prices of potatoes started to fall with the new harvest. The lower price pressures are also due to a decline in pork prices, which previously increased because of African swine fever in South-East Asia. Slowing food import prices and lower domestic demand pressures will foster a decline in food price inflation towards 2% early next year, despite renewed growth in agricultural producer prices and world prices of agricultural commodities (especially wheat). Their stronger growth will manifest itself with a lag in 2021 H2, when food price inflation will also rise temporarily (see Chart II.2.5).

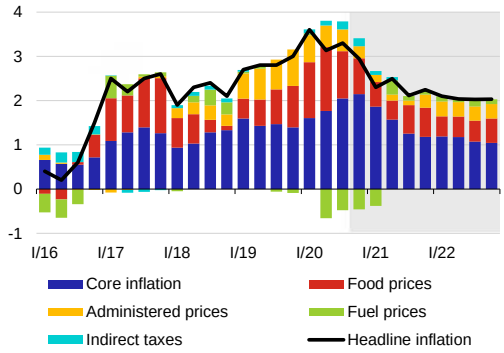
The decline in fuel prices resulting from the previous collapse of global oil prices will fade out next year. Prices at filling stations will switch to strong short-term growth in 2021 Q2, due mainly to base effects (see Chart II.2.5). Thereafter, fuel prices will grow slightly on the back of a gradual rise in global oil and petrol prices.

12 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.

Chart II.2.4 Structure of inflation and the inflation forecast

Inflation will continue to be affected mainly by core inflation 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 II.2.5 Components of inflation

Core inflation will fall and growth in food prices will slow further next year, whereas the decline in fuel prices will fade out

(annual percentage changes)

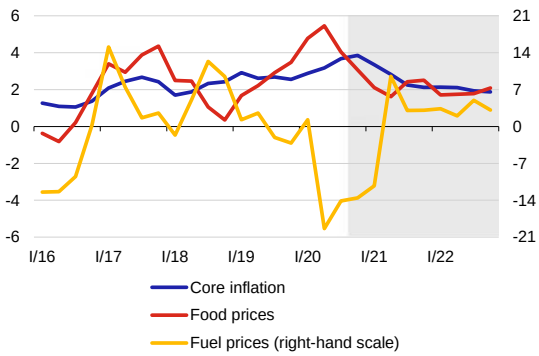


Table II.2.2 Forecast of administrative effects

Administered price inflation will weaken as a result of energy price developments

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

	2019 actual		2020 forecast		2021 forecast		2022 forecast	
ADMINISTERED PRICES[a)]	4.4	0.69	3.2	0.47	1.2	0.17	2.3	0.33
of which (main changes):								
electricity	10.6	0.45	7.2	0.28	0.0	0.00	2.7	0.10
natural gas	3.3	0.08	-0.4	-0.01	-2.4	-0.05	1.2	0.03
heat	4.6	0.08	-1.2	-0.02	0.9	0.01	1.5	0.02
water	2.6	0.02	2.9	0.02	1.8	0.01	3.0	0.02
health care	2.3	0.03	3.5	0.05	5.6	0.08	3.4	0.05
transport	-5.0	-0.08	1.3	0.02	2.0	0.03	2.1	0.03

a) including effects of indirect tax changes

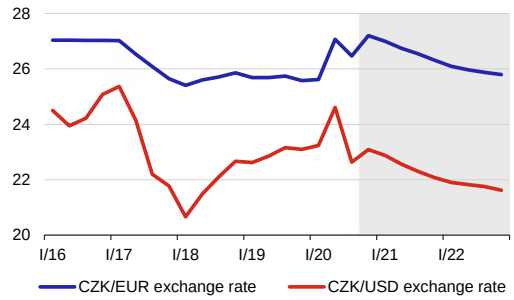
The until recently strong administered price inflation will slow markedly at the end of this year. This will be due mainly to a decline in the currently high growth in electricity prices and a decrease in gas prices for households reflecting developments on the exchange. Electricity prices will stagnate next year, so administered price inflation will temporarily fall below 1%. From the end of next year onwards, growth in administered prices will be slightly above 2% owing to renewed growth in energy prices (see Table II.2.2).

The koruna will start to appreciate gradually again next year (see Chart II.2.6). The exchange rate forecast for 2020 Q4 is set at CZK 27.2 to the euro. It thus reflects the pronounced depreciation recorded in the autumn, which was due to the reversal in global sentiment resulting from the start of the second wave of the coronavirus pandemic in the Czech Republic and other European countries. The expected gradual calming of the epidemic situation in Europe and the Czech Republic next year will foster renewed gradual appreciation to just below CZK 26 to the euro at the end of 2022. This will be caused by a widening interest rate differential amid a recovery in external demand and, in turn, domestic economic activity. The appreciating koruna will help inflation return to the 2% target next year.

Chart II.2.6 Exchange rate forecast

The koruna will start to appreciate gradually again next year

(CZK/EUR and CZK/USD)

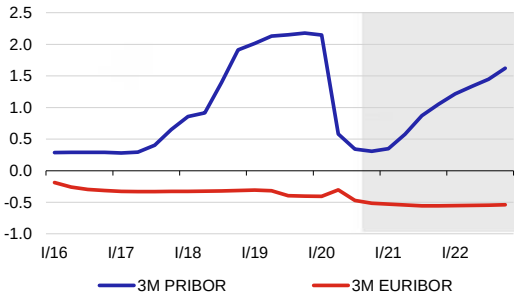


Consistent with the forecast is stability of market interest rates initially, followed by a gradual rise in rates in 2021 (see Chart II.2.7). The until recently strong inflationary effect of the domestic economy will be dampened significantly by a deteriorating epidemic situation at the year-end, which will negatively affect the domestic economy in the coming quarters. The expected fading of the negative effects of the second wave of the pandemic in the quarters ahead, inflation stabilising subsequently close to the target, and a continued return of domestic and foreign economic activity towards pre-crisis levels will then allow a gradual increase in (normalisation of) interest rates to start during 2021. However, this interest rate path is conditional on the assumptions about the course of the epidemic situation and the anti-pandemic measures made in the baseline scenario of the forecast.[13]

Chart II.2.7 Interest rate forecast

Consistent with the baseline scenario of the forecast is stability of market interest rates initially, followed by a gradual rise in rates in 2021

(percentages)



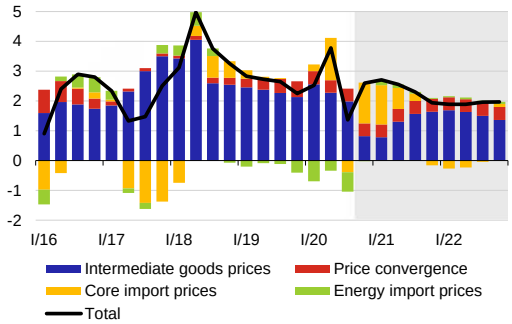
II.2.2 Costs and the labour market

Growth in total costs will pick up temporarily due to a pronounced weakening of the exchange rate, then slow to its steady-state level (see Chart II.2.8). Growth in total costs in the consumer sector slowed temporarily in 2020 Q3, due mainly to the appreciation of the koruna, which was reflected in a negative contribution of import prices and energy prices. The contribution of domestic costs to the overall inflation pressures also decreased slightly. Growth in total costs will increase again in late 2020/early 2021, due mainly to a very positive effect of core import prices. It will reflect the current depreciation of the koruna connected with the worsening epidemic situation. The previous negative contribution of energy import prices will fade

Chart II.2.8 Costs in the consumer sector

Growth in costs will pick up temporarily due mainly to a weakening of the exchange rate, whereas the contribution of the domestic economy will decrease significantly owing to the second wave of the pandemic

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



13 A potential more serious-than-expected second wave is described in the worse pandemic scenario in section II.4. The interest rate path consistent with that scenario is also presented there.

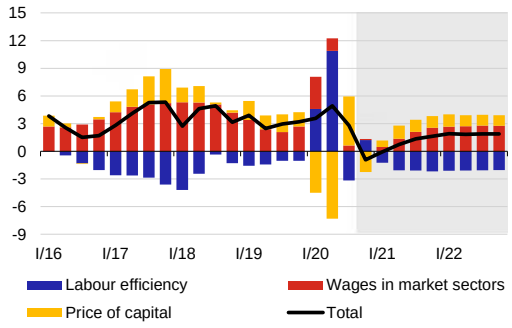
out owing to an increase in oil prices. By contrast, the contribution of the domestic economy to the evolution of total costs will decrease significantly in the coming quarters, owing to the negative demand impacts of the second wave of the coronavirus pandemic. The growth rate of total costs will start to moderate gradually in 2021 Q2 to close to its steady-state level, where it will remain in 2022. This will be due mainly to renewed appreciation of the koruna, which will be reflected in a lower contribution of core import prices. By contrast, the contribution of the domestic economy to growth in total costs will increase again next year, due to a gradual recovery in economic activity after the impacts of the second wave of the pandemic subside. In this context, the labour market situation will also improve gradually.

Domestic costs will decline temporarily at the end of this year, but their growth will then steadily increase (see Chart II.2.9). Growth in domestic costs slowed in 2020 Q3 but remained solid. The easing of anti-epidemic measures and the reopening of the economy in the summer led to a renewal of the positive contribution of the price of capital and the dampening effect of labour efficiency. Growth in fundamental wage costs almost halted, and the contribution of wages to growth in total costs thus fell significantly. Domestic costs will decrease slightly in late 2020 and early 2021 due to the anti-inflationary demand impacts of the second coronavirus wave. This will reflect a temporarily negative effect of the price of capital and still subdued wage growth. A temporary decline in labour efficiency will conversely have a slight inflationary effect, as firms will only partially succeed in making up for their restricted operation and lower sales by cutting their workforces and wage costs. As a result of a gradual recovery in domestic economic activity next year, growth in domestic costs will return to its steady-state level from below and remain there in 2022. This will be aided by an increase in the price of capital and a gradual resumption of wage growth amid a constantly dampening contribution of rising labour efficiency.

Chart II.2.9 Costs in the intermediate goods sector

Domestic costs will decline temporarily; their renewed growth next year will reflect a gradual recovery in domestic economic activity and growth in wages

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

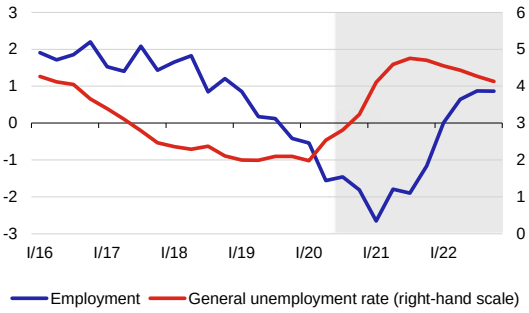


Employment will decline appreciably year on year until the start of 2022 owing to this year's fall in economic activity (see Chart II.2.10). After a temporary stabilisation of the labour market in the summer, employment will decrease again significantly. This will be the result of a significant decline in economic activity amid the second wave of the pandemic. After economic growth resumes in 2021 H2, the decline in demand for labour will halt. Growth in employment will thus turn slightly positive again at the start of 2022. The number of employees converted into full-time equivalents will initially fall even more significantly than the physical number of employees until mid-2021, due to a forced reduction in average hours worked necessitated by the circumstances. Subsequently, however, it will turn positive in early 2022. The growth in full-time equivalents will again be more pronounced than the growth in the physical number of employees, owing to renewed growth in average hours worked. From a sectoral point of view, the decline in the converted number of employees will be due mainly to market services (hit hard by the pandemic), where the physical number of employees will decrease. Temporary decreases in working hours rather than lay-offs are expected in industrial firms. This

Chart II.2.10 Labour market forecast

Total employment will decrease this year and the next, while the unemployment rate will increase markedly further

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



was seen in the spring, and the forecast expects it to occur in the coming months, too.

The unemployment rate will continue to increase substantially until 2021 H2 (see Chart II.2.10). Despite the government's employment protection measures, the general unemployment rate will rise to almost 5% due to this year's sharp economic downturn. The rise in the unemployment rate will reflect a significant increase in the number of unemployed, accompanied by a reduction in the workforce. In particular, a high initial number of vacancies and lay-offs of foreign workers will have a dampening effect. From the end of 2021, conversely, a recovery in demand for labour will start to emerge, leading to a gradual decrease in the jobless total. The share of unemployed persons will follow a similar path as the general unemployment rate, peaking at 5.5% in 2021 Q3. An economic wobble in late 2020 and early 2021 will foster a further increase in the number of registered job applicants amid a continued slight decline in the population aged 15–64.

Growth in fundamental market wages will slow until mid-2021 due to a continued cooling of the labour market. The overall year-on-year growth (see Chart II.2.11) is very volatile due 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. Wages also dropped for employees not working as a result of pandemic-related obstacles to work; some of these employees are receiving only partial wage compensation.[14] This statistical effect is clear from Chart II.2.12, which shows the actual average wage in absolute terms compared with the wage level adjusted for these statistical effects and – for the near future – for extraordinary bonuses in health care (fundamental wage growth). Fundamental wage growth is affected by the dampening effect of the cooling labour market. Conversely, the further increase in the minimum wage introduced at the start of this year,[15] the compositional effect[16] connected substantial labour shedding, and extraordinary bonus payments made to health care and social services workers[17] due to the epidemic situation are acting in the opposite direction. Overall, average wage growth in market sectors will thus slow to 2.7% for this year as a whole. The growth rate will be similar next year. Wage growth in market sectors will pick up to around 4% in 2022.

High wage growth will continue in non-market sectors this year. It will reflect 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

Chart II.2.11 Average nominal wages

Wage growth in both market and non-market sectors will be highly volatile over the entire forecast horizon, albeit significantly lower on average than in previous years

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

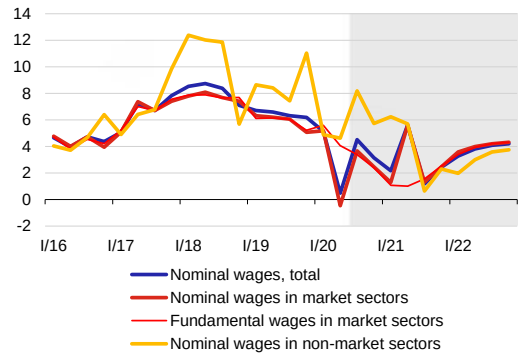
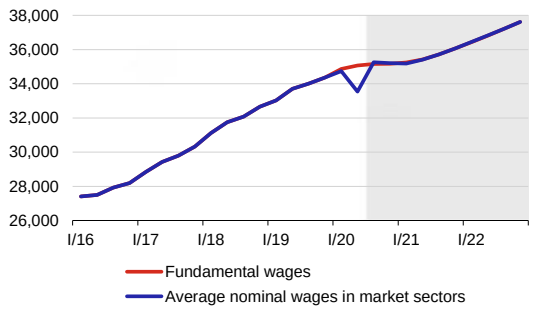


Chart II.2.12 Average nominal wages in market sectors

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

(CZK, seasonally adjusted)



14 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 was strongest in 2020 Q2 and will make wage growth more volatile next year, too. Firms are partially reimbursed for the provision of wage compensation under the Antivirus programme.

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

16 The statistical effect on the average wage due to the dismissal of low-income employees.

17 The CNB classifies "NACE Q – Health" as a whole as a market sector due to the prevailing number of private entities in this sector.

directly from the state budget.[18] The still relatively brisk growth in non-market wages will be maintained next year by a further increase in salaries of teachers and, to a lesser extent, other public sector employees. Wage growth in these sectors will slow more considerably in 2022 (see Chart II.2.11). As in the case of market wages, wage growth in non-market sectors will fluctuate, due in part to the above statistical effect.

II.2.3 Economic activity

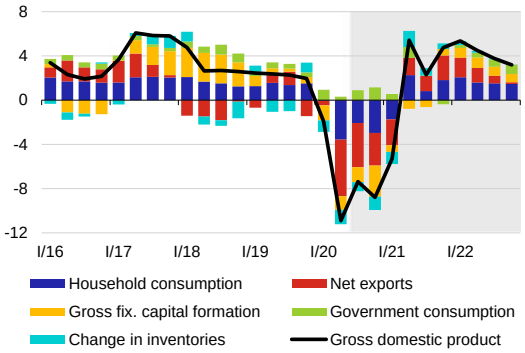
Domestic economic activity will suffer a sizeable contraction this year as a result of the coronavirus pandemic (see Chart II.2.13). The Czech economy began to breathe again in the summer as government anti-epidemic measures were lifted and external demand recovered. However, domestic economic activity will fall again at the end of 2020 owing to the rapid spread of the disease in the Czech Republic. Broad-based anti-epidemic measures and the spontaneous reactions of firms and households, combined with worsening sentiment, will hit some sectors of the economy hard. According to the forecast, the negative impacts of the second wave on economic activity will fade away in mid-2021 and the domestic economy will continue to recover gradually, amid a slowly closing negative output gap. The drop in economic activity of more than 7% this year will be due to all GDP components except government consumption. GDP growth of almost 2% next year will be driven mainly by household consumption and net exports. GDP growth will pick up further in 2022.

Despite a recovery in household consumption and exports, the economy will not converge to its pre-crisis level until the end of 2022. As the level charts in Block 1 show, economic activity increased in 2020 Q3. This primarily reflected the lifting of the spring government and corporate quarantine measures and a recovery in external demand. However, the increase in GDP will be halted by the second wave of the pandemic in Q4. Owing to the worse epidemic situation and stricter restrictions in the Czech Republic than in its major trading partners, the second wave will primarily affect domestic demand – most of all household consumption and private investment activity. Closely linked with this is a renewed deterioration of household and business sentiment. Despite numerous temporary government support measures, household consumption will not return to the pre-pandemic level until the end of 2022. This will be due mainly to a cooling of the labour market and lacklustre wage growth lasting until mid-2021. Exports of goods and services will also be strongly affected, but they will recover fairly fast due to a better epidemic situation abroad and expected continued border permeability and functionality of global production chains. Exports will thus reach their pre-coronavirus level in 2022 H2.

Chart II.2.13 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)



18 In connection with the pandemic, the forecast also assumes a temporary increase in compensation of emergency services employees.

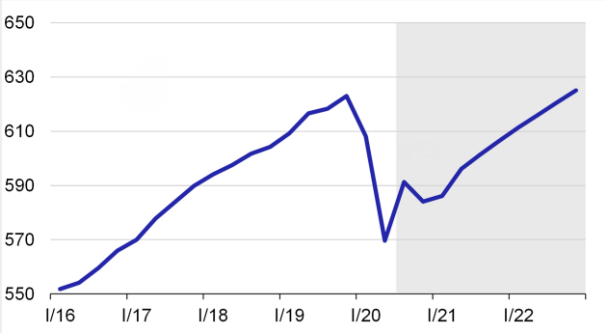
Block 1: Selected indicators in levels

GDP

(CZK billions; constant prices; seasonally adjusted)

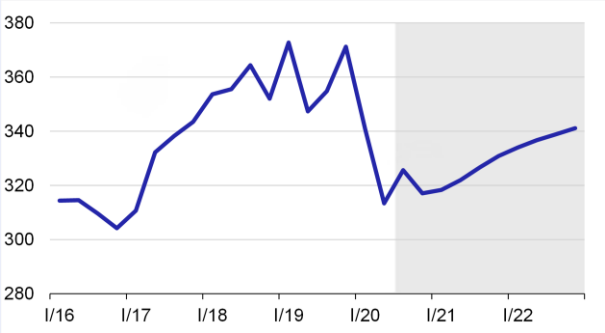
Household consumption

(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)

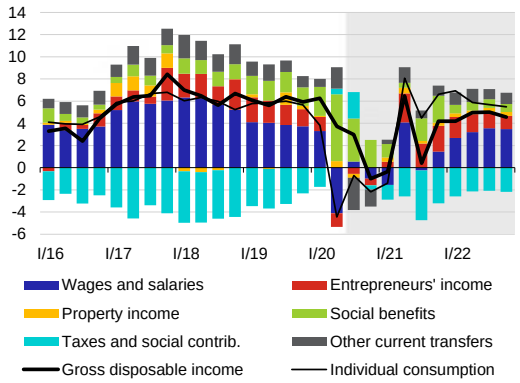
Household consumption will drop this year as a result of the pandemic and a further cooling of the labour market. The until recently favourable income situation of Czech households will be exposed to a second negative shock in the autumn. This will be manifested in a modest decline in nominal gross disposable income in late 2020 and early 2021 (see Chart II.2.14), reflecting a persisting drop in entrepreneurs' income and a decrease in wages and salaries. The deterioration in the income situation and liquidity of many households and firms will be partly offset by increased social benefits and other government support measures. After the impact of the epidemiological measures subsides and retail trade and services get up and running in 2021 Q2, the decline in household consumption will begin to moderate. Consumption will increase slightly next year and its growth rate will rise in 2022 (see Chart II.2.15). The saving rate will continue to decrease, following a marked increase in the spring that mainly reflected deferral, or a forced reduction, of consumption due to closures of some shops. However, the autumn coronavirus wave and the related precautionary motive of households will slow the return of the saving rate to the end-2019 level. Household consumption will reach its pre-coronavirus level in 2022.

Government consumption will be the only expenditure component to maintain a positive contribution to GDP growth this year. Its real growth will rise slightly above 4% this year (see Chart II.2.15). In nominal terms, government consumption will be affected mainly by increased spending on health care and the

Chart II.2.14 Nominal disposable income

Disposable income growth will halt in the coming quarters; households' income situation will then improve only slightly

(annual percentage changes; contributions in percentage points)



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

emergency services. 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 during the spring and autumn months. Real government consumption will slow below 2% in 2021, reflecting this year's base effect. Government consumption will rise by 2.5% in 2022.

Private investment activity will be adversely affected by the impacts of the pandemic and a repeated decline in business confidence. Private investment will decline slightly less in the coming quarters than it did during the spring wave, as external demand will be affected more moderately by the second wave of the pandemic and the complete production shutdowns in some investment-intensive industrial sectors will not be repeated, either. The decline in gross fixed capital formation will be partly offset this year by government investment, which will continue to grow modestly thanks in part to solid absorption of EU funds (see Chart II.2.16). By contrast, the contribution of change in inventories will remain negative. Business sentiment will recover only gradually from the current shock next year. Despite brisk growth in external demand and easy domestic monetary conditions, this will only lead to a slower decline in private investment compared with this year. Total fixed investment will thus continue to decrease, despite slightly faster growth in its government component. Gross capital formation will be broadly flat next year due to the contribution of change in inventories turning positive. In 2022, total gross capital formation will rise by around 4% on the back of increasing private investment activity.

Exports of goods and services will drop sharply this year (see Chart II.2.17). According to the forecast, total exports will decline only slightly at the year-end, following a sizeable decrease during the spring wave of the pandemic and a recovery in Q3. Given the still relatively mild course of the second wave of the pandemic in the Czech Republic's major trading partners, external demand will continue to grow and stimulate export-oriented domestic manufacturing. The latter should be affected to an only limited extent by the autumn domestic epidemiological measures. Nonetheless, services exports will drop substantially, due mainly to a repeated fall in tourism. The expected lifting of government restrictions and an improvement in the epidemic situation in the whole of Europe will restart the domestic economy at the beginning of next year. Combined with base effects, this will result in total exports rising by more than 6%. In the whole-year terms, exports will grow at a similar pace in 2022.

Export growth will fall significantly this year, due to a decrease in domestic demand and exports. Both import-intensive private investment and household consumption will decline at the end of 2020. However, the decline in imports will also be due to a swing in exports. External and domestic demand will return to growth next year. This will lead to a recovery in import growth. The latter will then slow in 2022 (see Chart II.2.17).

The contribution of net exports to GDP growth will be strongly negative this year and slightly positive in the next two years. Both sides of foreign trade will fall sharply this year, while the decline in export growth will be deeper than that in import growth. In

Chart II.2.15 Real household and government consumption

Household consumption will drop sharply this year, while growth in government consumption will pick up; they will both stabilise by the end of 2022

(annual percentage changes; seasonally adjusted)

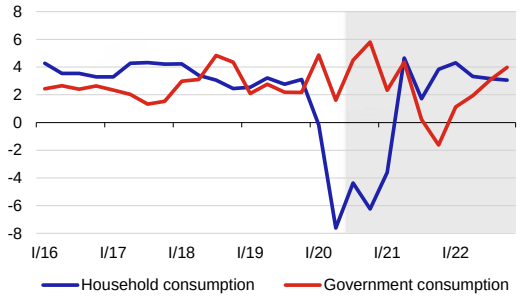


Chart II.2.16 Investment decomposition

The deep decline in gross capital formation will fade away during 2021, with renewed positive contributions of private investment and inventories

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

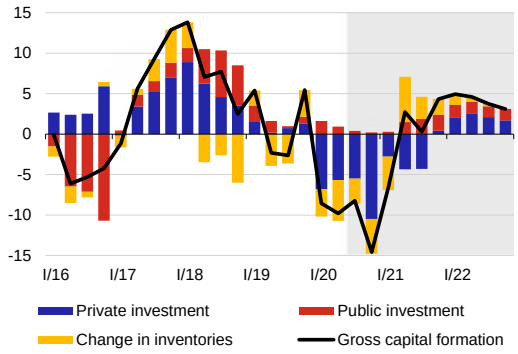
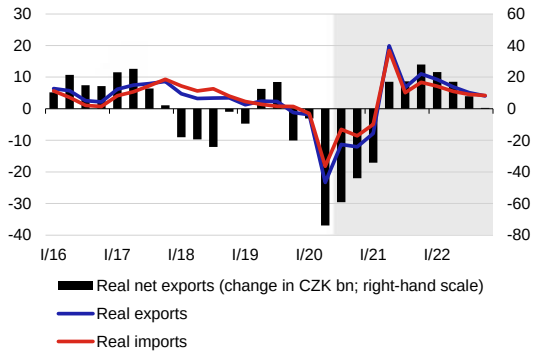


Chart II.2.17 Real exports and imports

The current deeply 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)



2021, on the other hand, exports will recover slightly faster than imports, which will lead to a slightly positive contribution of net exports. The same will hold in 2022.

II.2.4 The balance of payments

The current account will return to a surplus of 0.7% of GDP this year (see Chart II.2.18). The drop in external demand connected with the coronavirus pandemic – and also with new environmental standards in the automotive industry – will have a negative effect on Czech exports. However, the impact will vary from sector to sector. The forecast expects the total year-on-year decline in goods exports not to exceed 10%. Like external demand, though, domestic demand is also going down, which in turn is reducing goods imports. What is more, the balance of trade is being increased by a sizeable decline in commodity prices on global markets (oil and gas prices in particular). The mild winter moreover reduced natural gas consumption and imports. The goods surplus will nonetheless decrease by around one-quarter (see Table II.2.3), due mainly to a decline in the surplus on cars and car parts. Exports of services will also decrease. The balance of services is forecasted at slightly below last year's level. It will be increased by growth in the surplus on IT and manufacturing services, while a decline in the surplus on tourism and, to a lesser extent, transport will act in the opposite direction. The change in the current account balance as a whole will thus be due mostly to a sizeable decrease in the direct investment earnings deficit under the primary income balance. The surplus on compensation of employees will also rise slightly. The secondary income deficit will widen due to a significant increase in private transfers.

In 2021, the current account will reach a surplus of 0.4% of GDP amid changes in its structure. A rise in the goods and services surplus, associated primarily with a recovery in external demand and related exports (more pronounced for goods, more gradual for services), and a decline in the secondary income deficit (due to an increase in income from the EU) will foster an increase in surplus. In the primary income balance, a rise in direct investment earnings of non-residents and a slight fall in the surplus on compensation of employees in particular will act towards a lower current account surplus.

The forecast expects the current account surplus to fall slightly further to 0.3% of GDP in 2022. According to the forecast, exports and imports of goods and services will see relatively significant growth amid a slight rise in the surpluses on the two balances. However, the primary income deficit will widen even further.

The capital account surplus will double this year and continue to increase modestly in the following two years. The sharp rise in the surplus this year is due mainly to a marked decline in expenditure on emission permits and, to a lesser extent, to expected growth in income from EU funds. A further slight increase in the surplus in the following years is related to expected substantial growth in income from the EU.

The financial account (excluding short-term banking sector operations) will be balanced this year. The business sector

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

The current account will run a slight surplus over the forecast horizon

(percentages)

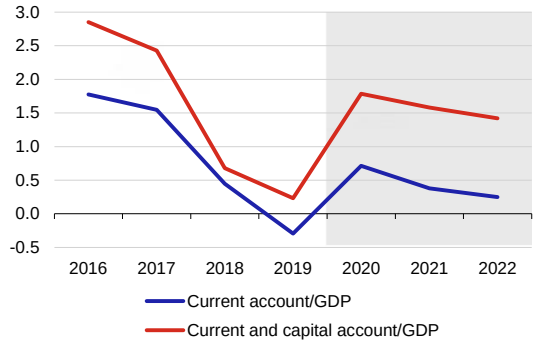


Table II.2.3 Balance of payments forecast

The forecast expects the current account to switch from a slight deficit in 2019 to slight surpluses in the following years

(CZK billions)

	2019 actual	2020 forec.	2021 forec.	2022 forec.
A. CURRENT ACCOUNT	-17.0	40.0	22.0	15.0
Goods	236.1	180.0	200.0	210.0
Services	104.4	95.0	97.0	100.0
Primary income	-324.4	-180.0	-240.0	-260.0
Secondary income	-33.0	-55.0	-35.0	-35.0
B. CAPITAL ACCOUNT	30.2	60.0	70.0	70.0
C. FINANCIAL ACCOUNT[a)]	44.6	0.0	40.0	40.0
Direct investment	-61.0	-50.0	-70.0	-70.0
Portfolio investment	-117.6	-75.0	-50.0	-60.0
Financial derivatives	1.0	-	-	-
Other investment	112.0	50.0	40.0	40.0
Reserve assets	110.2	75.0	120.0	130.0

a) forecast excluding operations of banking sector and financial derivatives

(under portfolio and other investment) and growth in the CNB's reserve assets will foster a net capital outflow. By contrast, capital inflows will be ensured by direct investment (net reinvested earnings and the net inflow of debt capital) and significant government borrowing in the form of bonds issued and loans drawn. The overall direct investment balance (see Chart II.2.19) will fall only slightly compared with 2019, but there will be a marked decline in turnovers, i.e. both inflows and outflows, under both new capital and reinvestment. In the area of real flows, debt capital flows will be dominant.[19] As for portfolio investment (see Chart II.2.20), there will be a slight decrease in the net inflow. A sharp decrease in the interest rate differential, a sizeable decline in share prices, especially in Europe (making equities an attractive buy), and limited opportunities to make returns on capital will lead to a reversal of flows on the asset side out of the country. Residents will purchase foreign shares and the decline in foreign bond holdings will halt. However, a significant year-on-year increase in the inflow of capital on the liabilities side partly offsets these effects. The dominant factor underpinning the total inflow will be a rapidly growing Czech government debt 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 (an increase in claims abroad under trade credits). However, this will be partially offset by foreign borrowing by the Czech government sector. The increase in reserve assets will be slightly smaller than in 2019 due to a decline in returns on the CNB's international reserves.

The financial account forecast for 2021 and 2022 expects a net capital outflow, due mainly to growth in reserve assets. The inflow and outflow of capital will both increase for direct investment, while the higher net inflow will be associated mostly with growth in net reinvested earnings. The amount of acquisitions will also rise, especially in sectors hit by the coronavirus pandemic.[20] Under portfolio investment, by contrast, the net capital inflow will weaken substantially next year, mainly due to a lower supply of domestic government bonds. Capital flows will also be influenced by a gradual rise in the interest rate differential in 2022. As regards other investment (excluding banking sector operations), the outflow of capital will fall in 2021 (in particular a decrease in trade credits provided by Czech exporters abroad). According to the forecast, foreign loan financing of the government will halt in 2022. A high surplus on operations vis-à-vis the EU and persisting gradual growth in returns on the CNB's international reserves will continue to be reflected in the evolution of reserve assets.

Despite this year's deep decline in exports, the supply of foreign currency in the Czech economy will marginally exceed demand.

Chart II.2.19 Direct investment structure

The net inflow of direct investment into the Czech Republic will decrease only slightly this year compared with 2019, while turnovers will drop much more substantially and in subsequent years will increase again

(CZK billions)

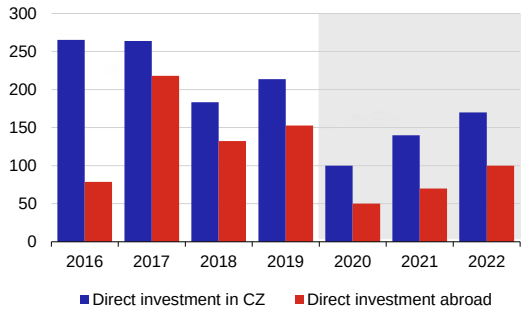
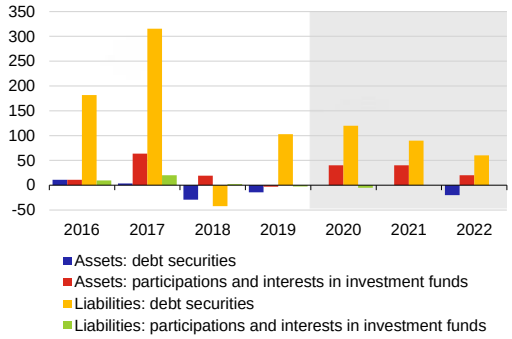


Chart II.2.20 Portfolio investment structure

The net inflow of portfolio investment in 2020 will be driven by investment by non-residents in the rapidly rising domestic government debt

(CZK billions)



19 The debt capital flows are probably due to the negative interest rates on large deposits in the euro area.

20 The direct investment forecast does not include the planned sale of ČEZ's foreign assets in Bulgaria, Romania and Poland, with an estimated total value of CZK 50 billion. ČEZ does not urgently need these funds and prices are currently low. It can be expected that the majority of the assets will be sold by the end of 2022. In the most advanced phase, the sale of assets in Romania is estimated at up to CZK 40 billion.

Current and capital account surpluses roughly consistent with the forecasted net inflow of payments from the EU are expected over the entire forecast horizon. This surplus will be reflected in growth in the CNB's reserve assets. The government's rising external borrowing and the net inflow of direct investment will therefore enable an increase in the creditor position of firms and a reduction in the net indebtedness of the banking sector. The slight excess supply of foreign currency expected in 2021 and 2022, absorbed by the banking sector, should lead to modest appreciation pressure on the koruna.

II.2.5 Fiscal developments

The government sector will fall into a large deficit this year due to the pandemic and fiscal stabilisation measures. The forecast expects a deficit of 6.3% of GDP this year. This will be due to a marked drop in tax revenues owing to the decline in the economy and the fiscal stabilisation measures adopted on both the revenue and expenditure sides of public budgets. Once most of the currently running support programmes have been phased out, the deficit will fall to 4.9% of GDP next year and decline further to 4.3% of GDP in 2022 (see Table II.2.4).

The fiscal stabilisation measures will amount to 3.4% of GDP this year. The employment support programme (Antivirus A–C), the support for the self-employed,[21] the payment of attendance allowance while schools are closed, the tax loss carryback, the cancellation of real estate transfer tax, the payment of a one-off bonus to pensioners in December and the subsidies targeted at sectors affected by government restrictions[22] have the biggest fiscal impacts. Government consumption will reflect a rise in expenditure on materials in the health and emergency services and extraordinary compensation of employees. On top of the above-mentioned support measures, the previously approved higher-than-usual increase in pensions,[23] increase in parental allowance[24] and increase in salaries of teachers in regional education systems will have an effect 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,[25] a change in the method of the creation and tax deductibility of technical reserves of insurance companies, and the reclassification of selected goods and some services into the reduced VAT rate category.

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 forec.	2021 forec.	2022 forec.
Government revenue	41.5	41.9	42.3	41.9
Government expenditure	41.3	48.2	47.2	46.3
of which: interest payments	0.7	0.7	0.7	0.7
GOVERNMENT BUDGET BALANCE (CZK in bn)	15.3	-355.1	-283.4	-265.4
GOVERNMENT BUDGET BALANCE	0.3	-6.3	-4.9	-4.3
of which:				
primary balance[a)]	1.0	-5.6	-4.1	-3.6
one-off measures[b)]	0.2	0.2	0.3	0.1
ADJUSTED BUDGET BALANCE[c)]	0.0	-6.6	-5.1	-4.5
Cyclical component (disaggregated method)[d)]	1.8	-0.8	-1.3	-0.8
Structural balance (disaggregated method)[d)]	-1.8	-5.7	-3.8	-3.7
Fiscal stance in pp (disaggregated method)[e)]	-1.0	-4.0	1.9	0.2
Cyclical component (aggregated method)[d)]	0.4	-1.1	-1.1	-0.2
Structural balance (aggregated method)[d)]	-0.4	-5.5	-4.0	-4.3
Fiscal stance in pp (aggregated method)[e)]	-0.9	-5.1	1.5	-0.3
GOVERNMENT DEBT (CZK in bn)	1738.5	2150.5	2433.7	2698.9
GOVERNMENT DEBT	30.2	38.4	41.7	43.9

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.

—

21 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).

22 The COVID – Sport, COVID – culture, COVID – spas, COVID – rent and COVID – BUS Programmes, support for accommodation facilities, tourism and the food industry, etc.

23 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).

24 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.

25 These 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).

Fiscal stabilisation policy is being implemented primarily through substantial support for household consumption this year (see Table II.2.5). This year, the highly positive fiscal impulse is largely a result of the extraordinary measures taken to support the economy in connection with the fight against the coronavirus. As most of the support programmes will only be temporary, the forecast conversely expects the fiscal impulse to be strongly negative in 2021.[26] In 2022, the fiscal impulse will be slightly negative. This is related mainly to the end of the tax loss carryback.

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 outcome will be evaluated as justified. For next year, the amended Budget Responsibility Act allows a structural deficit of up to 4% of GDP, which, according to the CNB forecast, should not be exceeded. Consolidation of public finances should subsequently start, but the CNB forecast does not anticipate such a move. Government debt will grow to 43.9% of GDP by the end of 2022 owing to high primary deficits and this year to a drop in nominal GDP as well.

Table II.2.5 Fiscal impulse

The fiscal impulse will be strongly positive this year and markedly negative 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 forec.	2021 forec.	2022 forec.
FISCAL IMPULSE	0.5	2.0	-1.3	-0.3
of which impact through:				
private consumption	0.4	1.8	-1.3	-0.3
private investment	0.0	0.2	-0.1	-0.1
government investment, domestic	0.1	-0.1	0.0	0.0
government investment, EU funded	0.0	0.1	0.1	0.1

26 The fiscal scenario in section II.4 describes the impact of possible additional budgetary measures which would lead overall to a neutral fiscal impulse next year.

II.3 COMPARISON WITH THE PREVIOUS FORECAST

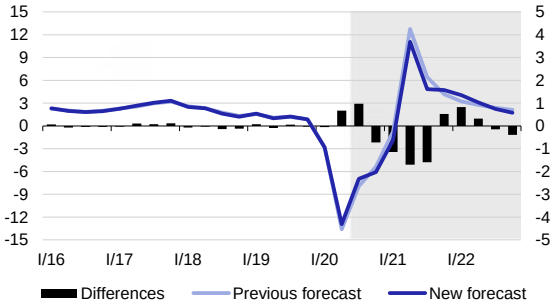
The changes by comparison with the previous forecast stem on the one hand mainly from an upward revision of the initial fundamental inflation pressures and on the other primarily from the anti-inflationary effects of the newly incorporated second wave of the coronavirus pandemic. This year the effects of the overall price pressures have shifted upwards on average, mainly due to a more gradual than expected decline in fundamental wage growth. The domestic and foreign economies both picked up more strongly in the summer than expected in the previous forecast. The weaker koruna is also having an inflationary effect. However, the resurgence of the pandemic in the autumn will lead to distinctly lower GDP growth next year, which will be reflected in substantially weaker domestic price pressures. The outlook for domestic inflation is slightly lower than in the previous forecast, owing initially to lower growth in administered prices and a deeper fall in fuel prices and, in the longer run, due mostly to the decision not to raise excise duties on cigarettes any further. The last factor does not, however, affect monetary policy-relevant inflation, so its forecast is virtually unchanged. The new forecast contains moderately higher domestic interest rates from 2021 Q2 onwards compared with the previous outlook.

As regards the external assumptions of the forecast, GDP growth in the effective euro area will recover more gradually compared with the previous forecast (see Chart II.3.1). This is linked mainly with the currently deteriorating epidemic situation and increased uncertainty in many European countries. Furthermore, industrial producer price inflation in the effective euro area is slower. Compared with the previous forecast, the outlook for the exchange rate of the euro against the dollar is marginally stronger over the entire forecast horizon. The forecast for the Brent crude oil price is virtually unchanged. The market outlook for 3M EURIBOR rates is only slightly lower over the entire forecast horizon, while the path of shadow interest rates is higher until mid-2021 than in the previous forecast. This is due to lower-than-expected asset purchases by the ECB. By contrast, shadow interest rates are much more negative in the longer term than in the previous forecast. This is related to the expected expansion of the asset purchase programme at one of the next meetings of the ECB in response to the resurgence of the pandemic.

Chart II.3.1 Change in the forecast for the GDP of the effective euro area

GDP growth in the effective euro area will recover more slowly due to the second wave of the coronavirus pandemic

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

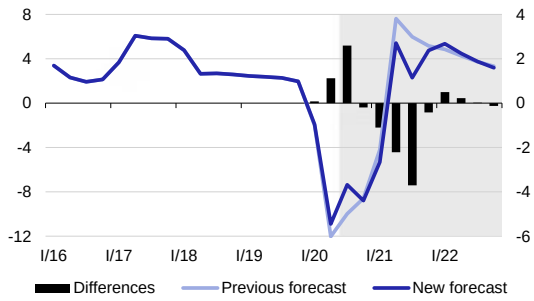


The forecast for domestic economic activity has been revised down until the end of 2021 (see Chart II.3.2). The decline in GDP so far this year has been less pronounced in all its components than in the previous forecast owing to a stronger economic recovery in the summer. However, due to the impacts of the second wave of the coronavirus pandemic, economic activity will fluctuate and GDP will drop below the level of the previous forecast in late 2020 and early 2021. Economic growth will therefore be appreciably slower next year and will be broadly in line with the previous forecast in 2022. The autumn wave of the pandemic will cause the effects of deteriorating business sentiment to fade out only gradually and investment growth to be more subdued than in the previous forecast. The same applies to household consumption, which will be supported by a slightly higher fiscal impulse for the rest of this year than previously expected. However, the government measures taken to support the economy will fade out, and the fiscal impulse will, by contrast, depress consumption more significantly in the next two years. Export and import growth will also decline next year. Government consumption will contribute to GDP growth similarly as in the previous forecast.

Chart II.3.2 Change in the GDP forecast

The outlook for domestic economic activity is lower next year due to the impacts of the second wave of the pandemic in late 2020 and early 2021

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



Wage growth resumed more quickly in the summer compared with the previous forecast, but is lower in 2021 (see Chart II.3.3). Average wage growth adjusted for the statistical effects of the drop in wage income of employees receiving attendance allowance or partial wage compensation slowed less significantly in 2020 Q3 than expected in the previous forecast. In the first half of next year, however, fundamental wage growth will slow more sharply and recover more gradually than in the previous forecast owing to the impacts of the resurgence of the pandemic. This is also reflected in weaker domestic cost pressures compared with the previous forecast.

The inflation outlook is lower over almost the entire forecast horizon (see Chart II.3.4). Headline inflation rose rather less markedly in 2020 Q3 than in the previous forecast, but in a situation of higher-than-expected core inflation, which primarily reflected stronger cost pressures stemming from a more gradual cooling of the labour market. The lower observed headline inflation was due to slower growth in food prices and a deeper decline in fuel prices. Inflation is also slightly lower at the forecast horizon than in the previous forecast. This is due initially to a deeper decline in fuel prices and a more pronounced slowdown in growth in administered prices (as a result of electricity and gas prices). The anti-inflationary demand effects of the second wave of the pandemic and the impact of the abandoned plan to increase excise duties on cigarettes in the years ahead also contribute. These factors will be partly offset in 2021 by the inflationary impacts of a weaker koruna. The forecast for growth in food prices is higher next year, due to higher production and transport costs linked to a large extent with the coronavirus pandemic. Monetary policy-relevant inflation – unlike headline inflation – will remain broadly unchanged compared with the previous forecast. The anti-inflationary impacts of the second wave of the pandemic are almost fully offset by the inflationary effect of the initial state, a weaker koruna and the expected faster growth in food prices compared with the previous forecast.

The exchange rate forecast has been revised towards a weaker koruna until the end of next year (see Chart II.3.5). The previous forecast had expected the koruna to appreciate over the entire forecast horizon due to an improvement in the external and domestic economic situation and a fade-out of the negative sentiment related to the first wave of the pandemic in the spring. The adoption of the Recovery and Resilience Facility (Next Generation EU) and the related appreciation of the euro against the dollar led to a greater-than-expected strengthening of the koruna during the summer, against a backdrop of a slightly faster than expected recovery of the domestic economy following the lifting of quarantine measures. However, due the change in global sentiment caused by the onset of the second wave of the pandemic, the koruna has weakened distinctly against the euro in recent months, and the forecast for 2020 Q4 is thus 50 hellers higher than the previous forecast. According to the new forecast, the koruna will appreciate over the forecast horizon as the pandemic gradually subsides in Europe and in the Czech Republic, albeit from a weaker initial level compared with the previous forecast. In 2022, the exchange rate will appreciate slightly faster than in the previous forecast due to

Chart II.3.3 Change in the forecast for nominal wages in market sectors

The lower wage growth forecast reflects milder fundamental wage pressures due to the second wave of the pandemic

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

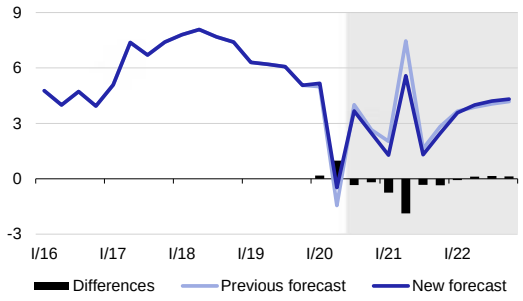


Chart II.3.4 Change in the headline inflation forecast

The headline inflation forecast is lower, owing initially to a decrease in the outlook for administered prices and fuel prices, and later to the decision not to increase excise duties further

(year on year in %; differences in percentage points)

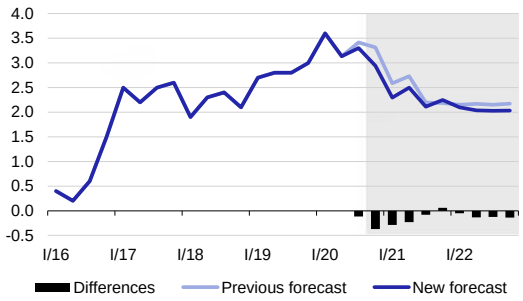
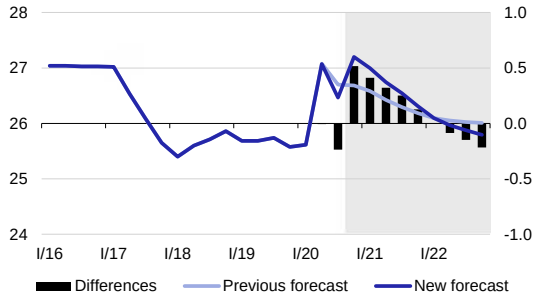


Chart II.3.5 Change in the exchange rate forecast

The koruna will appreciate slowly against the euro; its weaker initial level is due mainly to the change in sentiment on financial markets after the outbreak of the second wave of the pandemic

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



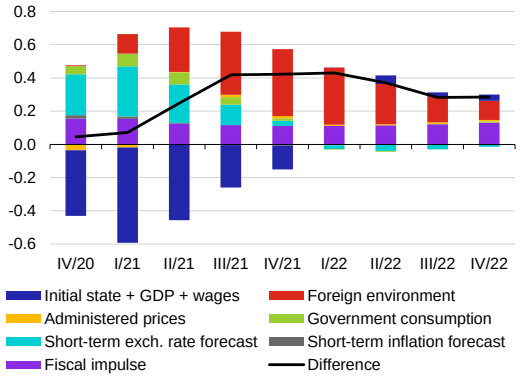
a somewhat larger widening of the interest rate differential vis-a-vis the euro area.

The new forecast contains a slightly higher domestic interest rate path from 2021 Q2 onwards than the previous one (see Chart II.3.6). A strongly inflationary effect of the initial state (contained in the aggregate contribution of the initial state and expert GDP and wage forecasts) is the dominant factor fostering higher rates in the next few quarters. It captures the previous, stronger than previously forecasted fundamental price pressures manifesting themselves in higher-than-expected core inflation and a more gradual cooling of the labour market. Conversely, the strongly anti-inflationary impacts of the second wave of the pandemic foster lower domestic rates than in the previous forecast via domestic real economic developments. This will outweigh the above inflationary effect of the initial economic situation in the aforementioned overall contribution of the initial state and the expert GDP and wage forecasts. The short-term koruna outlook for 2020 Q4, which is markedly weaker than previously forecasted, also exerts upward pressure on rates. Higher interest rates are also fostered over the entire forecast horizon by somewhat more expansionary domestic fiscal policy and, from next year, by some parts of the changed external outlook. The latter include worsening competitiveness of Czech exporters as a result of slower growth in core foreign producer prices and a more negative foreign output gap. In normal circumstances, these changes in the external outlook would have an anti-inflationary effect on the domestic economy. However, given the ECB's limited room for manoeuvre, they are not fully reflected in a corresponding drop in the outlook for foreign interest rates. In the forecast, this exerts additional depreciation pressure on the koruna. Its effect will outweigh the anti-inflationary effect of the above external factors. As a result, the change in the external outlook fosters slightly higher domestic rates, especially in the longer term.

Chart II.3.6 Decomposition of changes in the interest rate forecast

The interest rate outlook is slightly higher from spring 2021 onwards due mainly to stronger initial domestic price pressures and a weaker koruna, despite the significant anti-inflationary impacts of the second wave of the pandemic in late 2020 and early 2021

(3M PRIBOR; percentage points)



II.4 RISKS AND UNCERTAINTIES OF THE FORECAST

The Bank Board assessed the risks and uncertainties of the baseline scenario of the forecast as being substantial. A possible further worsening of the course of the second wave of the pandemic in the Czech Republic and especially abroad poses a considerable anti-inflationary risk going beyond the baseline scenario. A further escalation of the pandemic could lead in many European countries to even more intensive implementation of strict epidemiological measures with significant economic impacts. These could include broad-based and long-lasting shutdowns of economies, which would further worsen business and household sentiment. An opposite risk to some extent is associated with domestic fiscal policy next year. The structure of the supply and demand factors underlying the observed and expected domestic and foreign inflation remains an uncertainty. The uncertainty associated with the internal political situation in the USA and the risk of a no-deal Brexit have also been increasing recently.[27] In light of these significant uncertainties, the Bank Board considers it likely that interest rates will be left at a low level for longer than assumed in the baseline scenario of the forecast.

II.4.1 Risks perceived by the CNB

A worse course of the second wave of the coronavirus pandemic in the Czech Republic and especially abroad is a major risk to the forecast. This risk is described by a worse pandemic scenario. As regards the external assumptions of the forecast (see Table II.4.1), the worse pandemic scenario considers a major impact (stronger than in the baseline scenario) on the global economy in late 2020 and particularly early 2021. The governments of countries hit by the pandemic will try to cope with the renewed deterioration in the epidemic situation initially using targeted and less drastic measures. After their experience of the first wave, which involved broad-based shutdowns of economies at enormous economic cost, they will initially resist repeating such steps. However, the scenario assumes that this strategy will prove ineffective. Governments will therefore have to resort to stricter measures again, which they will subsequently tighten or ease on an ongoing basis depending on the course of the pandemic. They will do so in an effort to prevent a renewed surge in new cases and the related strong pressure on rapidly shrinking health care capacity. The largest negative economic impacts will occur in 2021 Q1, due, among other things, to winter in the northern hemisphere. The economic impacts will abate only gradually in the following quarters of next year as the governments of individual countries lift their restrictions very cautiously.

A worse course of the second wave of the pandemic will be characterised by stronger and longer-lasting anti-inflationary demand effects.[28] The negative demand shock reflects a drop in private consumption and investment, bolstered by a persistent shock to the investment risk premium taking into account negative (strongly shaken) business and household sentiment.

Table II.4.1 Comparison of scenarios – selected foreign variables

A worse course of the second wave of the pandemic will lead to a deeper decline in euro area GDP than in the baseline scenario

(annual percentage changes unless otherwise indicated)

	2019 actual	2020 forecast	2021 forecast	2022 forecast
PPI in effective euro area				
Baseline	1.2	-1.8	0.4	2.0
Worse pandemic scenario	1.2	-1.9	-1.4	0.7
Fiscal scenario	1.2	-1.8	0.4	2.0
GDP in effective euro area				
Baseline	1.2	-7.2	4.5	2.8
Worse pandemic scenario	1.2	-8.2	-1.3	6.8
Fiscal scenario	1.2	-7.2	4.5	2.8
Brent crude oil price (USD/barrel)				
Baseline	64.2	42.5	44.5	46.5
Worse pandemic scenario	64.2	42.1	41.8	45.4
Fiscal scenario	64.2	42.5	44.5	46.5
Shadow 3M EURIBOR (in %)				
Baseline	-0.4	-2.0	-2.5	-2.2
Worse pandemic scenario	-0.4	-2.2	-5.3	-5.5
Fiscal scenario	-0.4	-2.0	-2.5	-2.2

27 This risk was analysed in IR IV/2019 and its overall message remains valid.

28 The global economic impacts are simulated using the NiGEM model. This is a global econometric model that captures the interconnectedness of all territories of the global economy in detail. The direct negative demand effect on energy commodity prices reflecting the resulting drop in economic activity in the NIGEM model was modelled using a three-country DSGE model available to the CNB.

In these conditions, the foreign output gap will open into negative territory due to strongly increasing negative demand pressures amid a slower drop in supply (a negative supply shock in the form of disruption of global supply chains). The sharp decline in economic activity will be slightly dampened by the positive effect of higher government consumption, as governments are expected to prioritise support for economic growth over maintenance of fiscal discipline during the pandemic. The simulation also involves an endogenous monetary policy response with a limit at the zero lower bound on interest rates.

Economic activity in the effective euro area is markedly lower in the worse pandemic scenario than in the baseline scenario (see Table II.4.2). This will also be reflected in a deeper fall in foreign producer prices due to a drop in energy prices amid subdued growth in core prices. A similar pattern can be expected for consumer prices.[29] The year-on-year drop in effective euro area GDP will taper out in 2022, but the previous decline will be offset only partially. The ECB responds to the escalated situation by easing monetary conditions further using unspecified unconventional instruments. Shadow interest rates thus move even further into negative territory. Due to the different structures of the euro area and US economies, with the latter geared more towards domestic consumption, the euro area will see a higher contribution of net exports in the event of a sharper drop in investment and consumption. This will be reflected in a slightly stronger euro against the dollar over the entire forecast horizon.

For the domestic economy, the scenario expects the restrictive measures to be in effect for longer and have more negative economic impacts (see Table II.4.3). According to the assumptions of the worse pandemic scenario, the Stringency Index[30] in the Czech Republic will remain close to the highs recorded this spring in 2020 Q4 and only later decline gradually to the baseline scenario levels.[31] The stronger pressure on the public budget balance due to the worse economic situation in the worse pandemic scenario makes it no longer possible to sufficiently stimulate the domestic economy by relaxing fiscal policy. The scenario therefore assumes that the Czech government implements no further fiscal stabilisation measures going beyond those already in place in the baseline scenario.[32] Owing to the disruption of global supply chains, domestic manufacturing will also be affected more severely than in the baseline scenario – to a similar extent as in the spring months. However, the negative impacts will last longer than in the spring

Table II.4.2 Worse pandemic scenario – foreign variables

The sharper decline in euro area GDP is reflected in more subdued producer price inflation than in the baseline scenario; shadow interest rates drop deeper into negative territory

(deviations from baseline scenario paths)

	Effective GDP (y-o-y in pp)	Effective PPI (y-o-y in pp)	Shadow 3M EURIBOR (pp)	USD/EUR cross rate (%)
IV/20	-4.0	-0.4	-0.7	0.9
I/21	-7.4	-1.1	-1.6	0.9
II/21	-8.0	-1.8	-2.2	1.1
III/21	-6.6	-2.3	-3.6	1.3
IV/21	-1.0	-2.3	-3.7	1.4
I/22	4.0	-1.9	-3.6	1.5
II/22	4.4	-1.5	-3.4	1.5
III/22	4.1	-1.1	-3.1	1.6
IV/22	3.6	-0.7	-2.8	1.6

Table II.4.3 Comparison of scenarios – selected domestic variables

More restrictive measures to curb the spread of the coronavirus have significant economic impacts in the worse pandemic scenario; by contrast, the deviations of the main variables in the fiscal scenario are less pronounced

(annual percentage changes unless otherwise indicated)

	2019 actual	2020 forec.	2021 forec.	2022 forec.
Headline inflation				
Baseline	2.8	3.2	2.3	2.0
Worse pandemic scenario	2.8	3.2	2.0	2.1
Fiscal scenario	2.8	3.2	2.4	2.2
GDP				
Baseline	2.3	-7.2	1.7	4.2
Worse pandemic scenario	2.3	-7.9	-2.7	6.4
Fiscal scenario	2.3	-7.2	2.4	4.0
Average wage in market sectors				
Baseline	5.9	2.7	2.6	4.0
Worse pandemic scenario	5.9	2.5	1.2	3.6
Fiscal scenario	5.9	2.7	2.6	4.0
Exchange rate (CZK/EUR)				
Baseline	25.7	26.6	26.6	25.9
Worse pandemic scenario	25.7	26.6	29.1	28.2
Fiscal scenario	25.7	26.6	26.4	25.8
3M PRIBOR (in %)				
Baseline	2.1	0.8	0.7	1.4
Worse pandemic scenario	2.1	0.7	0.2	1.5
Fiscal scenario	2.1	0.9	1.4	2.0

—

29 The oil price outlook is slightly lower than in the baseline scenario, especially next year, due to a sharp drop in global economic activity and demand for oil.

30 This is an indicator reflecting the restrictiveness of the epidemiological measures adopted (see also the box in section II.2).

31 The further restrictions approved by the Czech government with effect from 28 October may indicate a shift in the domestic situation towards the worse pandemic scenario. On top of the previous restrictions, the measures include a curfew, restricted opening hours for still open food retailers, and a call for greater use of working from home in both the public and private sectors.

32 The effect of less restrictive fiscal policy in 2021 against the backdrop of epidemic and macroeconomic developments is quantified by the fiscal scenario later in this section.

pandemic wave. Market services will also be hit harder than in the baseline scenario. The anti-epidemic measures will be gradually lifted from the start of next year. As in the baseline scenario, the impacts of the second wave of the coronavirus on the domestic economy will fade out in June 2021, when the sectors affected will recover to their summer 2020 levels. They will then continue to return gradually to pre-pandemic levels.

The worse second wave leads to much more subdued developments in the Czech economy than in the baseline scenario (see Table II.4.4). The drop in external demand will be reflected mainly in a sharper drop in net exports in late 2020 and early 2021 than in the baseline scenario. However, it will also manifest itself in lower private investment activity. The longer-lasting second wave and period of constant uncertainty will also lead to lower household consumption than in the baseline scenario. The more dramatic epidemic situation will also be reflected in a more pronounced cooling of the labour market, a greater deterioration in households' income situation and more shaken confidence of both households and firms. Economic performance will thus decline significantly further next year and will not start growing again until 2022. Lower growth in domestic costs in an environment of temporarily highly subdued demand pressures will be reflected in the inflation outlook, which will be lower than in the baseline scenario. The response of domestic monetary policy in the form of a temporary drop in market interest rates to slightly negative levels combined with a distinctly weaker exchange rate in this scenario will support a gradual recovery of domestic economic activity amid a return of inflation to the target and subsequent stabilisation at the target.

The fiscal scenario describes the eventuality of less restrictive or neutral fiscal policy in 2021. It considers the adoption of additional budgetary measures to offset the negative fiscal impulse expected next year in the baseline scenario. This impulse stems from the unwinding of the effect of the temporary stabilisation measures adopted in 2020 to support the economy during the pandemic.[33] These additional measures amount to almost CZK 130 billion (2.2% of GDP). The list and specific form of the measures is to a large extent inspired by the proposals currently being discussed in the media and by the government. They include a proposal to abolish the super-gross wage while maintaining the current personal income tax rate (of 15%) for two years, an increase in the minimum living level and minimum subsistence level, and an increase in child allowance. The scenario also considers continued support for the self-employed, employers and firms in selected sectors in 2021 H1 and a further cut in VAT on selected services next year. In addition, it assumes a much faster start to the implementation of government investment projects funded from the Recovery and Resilience Facility (Next Generation EU). However, most of the additional expansionary measures considered in the fiscal scenario are again assumed to be temporary, delaying the

Table II.4.4 Worse pandemic scenario – domestic variables

The response to the more subdued domestic economic activity involves lower market interest rates and a markedly weaker exchange rate; this limits the deviation of inflation from the baseline scenario

(deviations from baseline scenario paths)

	CPI inflation (pp)	3M PRIBOR (pp)	GDP (y-o-y in pp)	Nominal exch. rate (CZK/EUR)
IV/20	-0.1	-0.8	-2.7	0.0
I/21	-0.2	-0.8	-5.0	1.8
II/21	-0.3	-0.7	-5.6	2.6
III/21	-0.4	-0.4	-5.2	2.7
IV/21	-0.3	-0.2	-1.6	2.6
I/22	-0.1	0.0	1.6	2.4
II/22	0.0	0.1	2.3	2.3
III/22	0.1	0.1	2.6	2.2
IV/22	0.1	0.1	2.3	2.2

33 This is not a full alternative scenario (i.e. the second most probable outlook) for developments in the fiscal policy area. The scenario aims to show the size of the further measures that would have to be adopted to prevent fiscal policy from having a restrictive effect on the economy in 2021, and the fiscal and economic consequences of such measures.

restrictive effect of fiscal policy until 2022 and 2023. The assumptions regarding pandemic and foreign developments in the fiscal scenario are the same as in the baseline scenario of the forecast.

The additional fiscal measures will lead to slightly stronger inflation pressures and higher interest rates than in the baseline scenario. The expansionary budgetary measures considered will next year mainly affect consumption and, to a lesser extent, investment activity (see Table II.4.5), which will be reflected in faster economic growth. This will in turn affect tax revenues, whose increase due to the more favourable economic developments will slightly soften the negative impact of the additional budgetary measures on the general government balance. Compared with the baseline scenario, the general government deficit will thus widen by almost 2 percentage points to 6.7% of GDP and the debt will grow to 43.4% of GDP in 2021. The additional fiscal measures increase the domestic inflation pressures relative to the baseline scenario. The return of inflation close to the target at the monetary policy horizon will therefore require higher market interest rates from the start of next year in the fiscal scenario. The earlier and larger increase in market interest rates will foster stronger appreciation of the koruna than in the baseline scenario. The tighter two components of the monetary conditions in the fiscal scenario soften the inflationary impacts of the faster GDP growth. As a result, the overshooting of the inflation target at the monetary policy horizon is limited in its extent. Conversely, the rather more restrictive fiscal policy in 2022 will be reflected in slightly lower GDP growth than in the baseline scenario. The simulation results, expressed as deviations from the baseline scenario of the forecast, are given in Table II.4.6.

The Bank Board assessed the risks and uncertainties of the baseline scenario of the forecast as being substantial. A possible further worsening of the course of the second wave of the pandemic in the Czech Republic and especially abroad poses a considerable anti-inflationary risk going beyond the baseline scenario. A further escalation of the pandemic could lead in many European countries to even more intensive implementation of strict epidemiological measures with significant economic impacts. These could include broad-based and long-lasting shutdowns of economies, which would further worsen business and household sentiment. An opposite risk to some extent is associated with domestic fiscal policy next year. The structure of the supply and demand factors underlying the observed and expected domestic and foreign inflation remains an uncertainty. The uncertainty associated with the internal political situation in the USA and the risk of a no-deal Brexit have also been increasing recently. In light of these significant uncertainties, the Bank Board considers it likely that interest rates will be left at a low level for longer than assumed in the baseline scenario of the forecast.

Table II.4.5 Fiscal scenario – fiscal impulse assumptions

The fiscal impulse contained in the scenario differs from the forecast mainly in its effect on household consumption

(contributions to GDP growth in percentage points; deviations from baseline scenario paths)

	2020		2021		2022	
FISCAL IMPULSE	2.0	0.0	0.0	1.3	-0.4	-0.2
of which impact through:						
private consumption	1.8	0.0	-0.1	1.2	-0.4	-0.1
private investment	0.2	0.0	0.0	0.1	-0.2	-0.1
government investment, domestic	-0.1	0.0	0.0	0.0	0.0	0.0
government investment, EU funded	0.1	0.0	0.1	0.1	0.2	0.0

Table II.4.6 Fiscal scenario – domestic variables

The additional expansionary measures in the fiscal scenario lead to higher interest rates and a stronger koruna; this softens the inflationary impacts of faster GDP growth

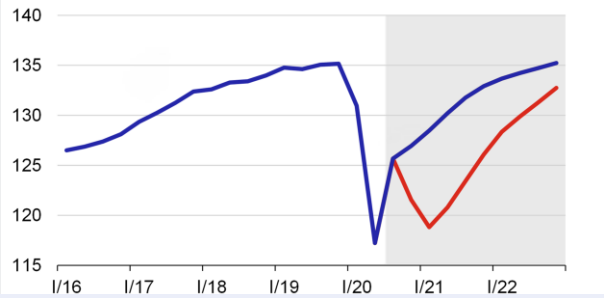
(deviations from baseline scenario paths)

	CPI inflation (pp)	3M PRIBOR (pp)	GDP (y-o-y in pp)	Nominal exch. rate (CZK/EUR)
IV/20	0.0	0.1	0.0	0.0
I/21	0.0	0.5	1.0	-0.2
II/21	0.1	0.8	1.0	-0.3
III/21	0.2	0.7	0.5	-0.2
IV/21	0.2	0.7	0.5	-0.2
I/22	0.2	0.6	-0.5	-0.1
II/22	0.2	0.6	-0.4	-0.1
III/22	0.1	0.6	0.0	-0.1
IV/22	0.1	0.6	0.0	-0.1

Block 2: Comparison of scenarios – main foreign macroeconomic indicators

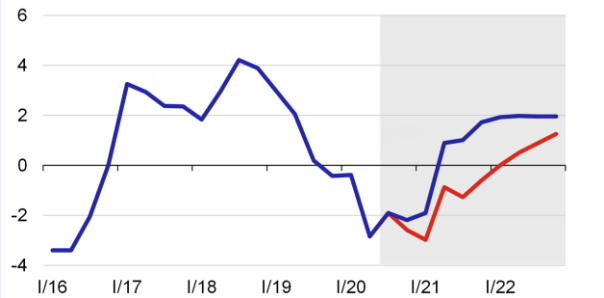
GDP in the effective euro area

(index; 2000=100)



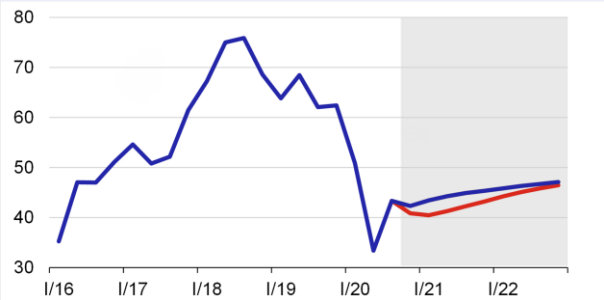
PPI in the effective euro area

(annual percentage changes)



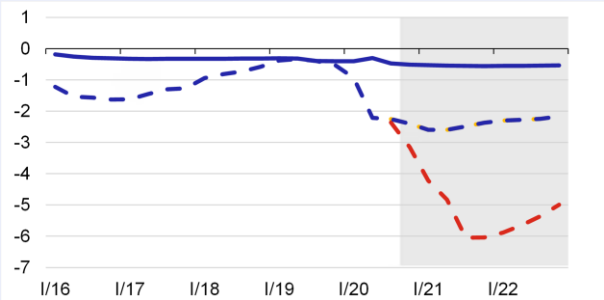
Brent crude oil price

(USD/barrel)



3M EURIBOR

(percentages)



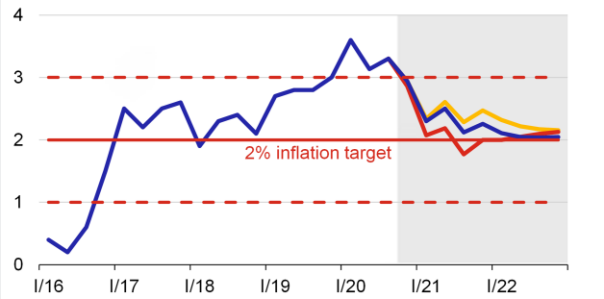
Baseline scenario — Worse pandemic scenario — Fiscal scenario — Shadow rates

Note: The assumptions regarding external developments and the epidemic situation in the fiscal scenario are the same as those in the baseline scenario.

Block 3: Comparison of scenarios – main domestic macroeconomic indicators

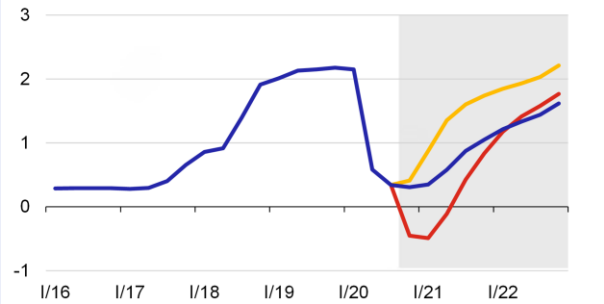
Headline inflation

(percentages)



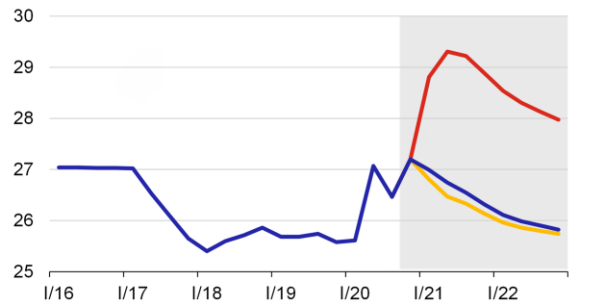
3M PRIBOR

(percentages)



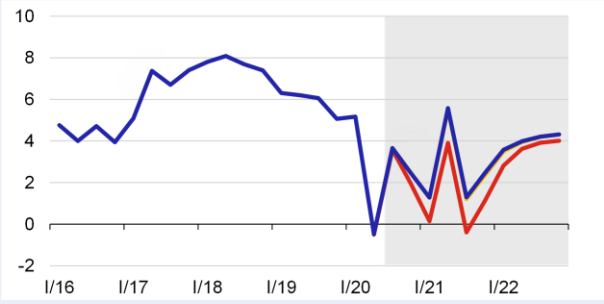
CZK/EUR exchange rate

(CZK/EUR)



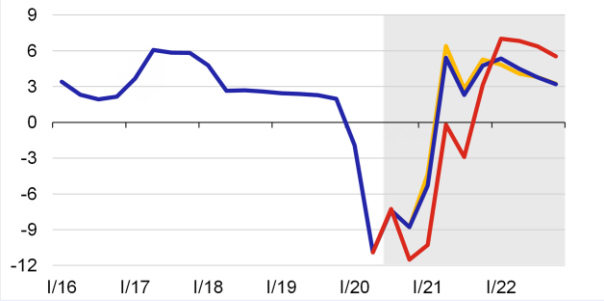
Average nominal wages in market sectors

(annual percentage changes)



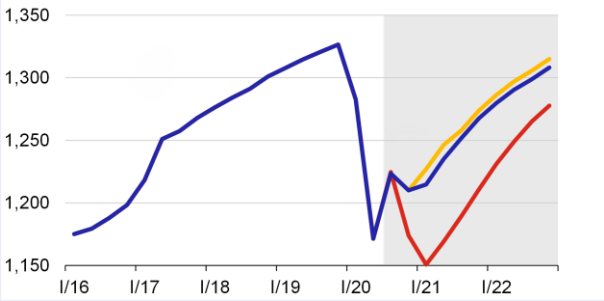
GDP

(annual percentage changes)



GDP

(CZK billions)



Baseline scenario — Worse pandemic scenario — Fiscal scenario

II.4.2 Risks signalled by other entities' forecasts

Inflation expectations in the economy continue to be anchored to the CNB's 2% target. Inflation forecasted by financial market analysts is currently exactly at the CNB's 2% target at both the one-year and three-year horizons (see Table II.4.7). The respondents feel that current inflation is still being strongly affected by the labour market situation and strong domestic demand prevailing before the crisis. However, unemployment will increase gradually, and this will be reflected in weakening consumer demand and, in turn, in falling inflation. Lower inflation will also be fostered by a drop in prices of commodities, particularly oil, according to the respondents. On the other hand, the fall in inflation might be slowed by the currently weak koruna. Some of the respondents believe there is a prevailing risk of undershooting the inflation target due to weak domestic demand; the inflation rate expected at the one-year horizon is in the range of 1.1%–2.5%.

The indicators of inflation perceived and expected by households decreased. The level of perceived inflation suggests that the number of households that felt that prices rose significantly over the last 12 months remains significant (see Chart II.4.1). The indicator of expected inflation fell significantly in Q3. However, its level signals that respondents who expect inflation to stay the same or increase over the next 12 months still predominate.

The analysts estimate that the Czech economy will contract by about 7% this year (see Table II.4.7). This year's economic downturn reflects both the government and corporate quarantine measures introduced during the spring and autumn months,[34] and the increased uncertainty, which is stifling corporate investment activity and household consumption (due, among other things, to the fear of business closure or loss of employment). The recovery expected next year will depend mainly on the course of the pandemic in the Czech Republic and abroad. Some of the analysts are of the opinion that there is quite a high risk that, instead of recovering rapidly, the economy will stagnate as the number of infected people rises. The economic contraction will also be reflected in the labour market and lead to a slowdown in wage growth. According to the analysts, wages will grow mainly in the public sector.

The analysts on average forecast slight appreciation of the koruna and broad stability of interest rates at the one-year horizon. The analysts are still convinced that the koruna will show a long-term appreciation trend. In the short term, however, unexpected events may deflect the koruna from this trend. These currently include an increase in risk aversion on the global financial market, and also the risk assessment of the Czech Republic due to the rapid spread of the coronavirus. The high uncertainty is reflected in a wide range between the minimum and maximum values of the koruna expected at the one-year horizon.[35] Almost all the analysts in the October FMIE

Table II.4.7 Expected indicators of FMIE, CF and corporations

The analysts' inflation expectations are at the CNB's target at both the one-year and three-year horizons; according to the analysts, the economy will grow again next year after the sharp drop this year and the koruna will strengthen

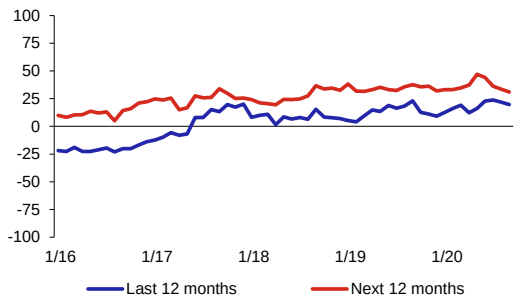
(at 1Y; annual percentage changes unless otherwise indicated)

	6/20	7/20	8/20	9/20	10/20
FMIE:					
CPI	1.6	1.7	1.8	1.9	2.0
CPI, 3Y horizon	1.9	2.0	2.0	2.0	2.0
Real GDP in 2020	-7.9	-8.0	-7.2	-6.5	-7.1
Real GDP in 2021	5.6	5.6	5.0	4.5	4.3
Nominal wages in 2020	3.2	3.1	3.5	3.1	2.7
Nominal wages in 2021	2.8	2.9	3.2	2.9	2.9
CZK/EUR exchange rate (level)	26.0	25.9	25.8	25.8	25.9
2W repo rate (in per cent)	0.1	0.2	0.3	0.3	0.2
1Y PRIBOR (in per cent)	0.4	0.5	0.5	0.5	0.5
Corporations:					
CPI	2.4			2.4	
CPI, 3Y horizon	2.6			2.6	
CF:					
Real GDP in 2020	-7.2	-7.4	-6.9	-6.6	-6.5
Real GDP in 2021	5.1	5.2	5.1	5.0	4.6
Nominal wages in 2020	3.1	3.1	3.0	3.3	2.5
Nominal wages in 2021	2.9	3.2	3.2	3.3	2.7
CZK/EUR exchange rate (level)	26.3	26.1	25.9	25.7	25.7
3M PRIBOR (in per cent)	0.3	0.4	0.5	0.5	0.4

Chart II.4.1 Perceived and expected inflation

Inflation perceived and expected by households fell

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



34 The cut-off date of the survey was 15 October 2020, i.e. before the Czech government announced a further tightening of epidemiological measures that led to the closure of many shops and other services.

35 At the one-year horizon, the range was CZK 25.0-26.8 to the euro in the October FMIE survey and CZK 24.2-27.5 to the euro in the CF survey.

survey were expecting the CNB Bank Board to leave key interest rates unchanged at the November meeting. Only one analyst was expecting the 2W repo rate to be lowered to 0.05%. The prevailing view among the analysts is that the CNB regards the current monetary policy stance as consistent with the current economic situation and will leave key interest rates unchanged for at least a year. Their average estimate of the 2W repo rate at the one-year horizon was 0.2%. However, if the pandemic worsens, the CNB is likely to cut the 2W repo rate to 0.05% and, if necessary, use unconventional monetary policy instruments, according to the analysts.

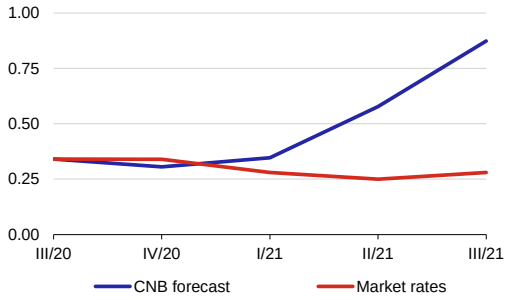
The analysts predict slightly lower inflation and a stronger koruna compared with the CNB forecast. Their one-year outlook for interest rates is significantly lower than that in the baseline scenario of the central bank's forecast. In the shorter term, their interest rate expectations are in line with the CNB outlook. The analysts' expectations regarding this year's GDP decline and wages do not differ much from the CNB's forecast.

The current market outlook for the 3M PRIBOR implies broad stability over the one-year horizon. Consistent with the baseline scenario of the forecast is stability of market interest rates initially, followed by a gradual rise in rates in 2021. The market path is thus lower in 2021 (see Chart II.4.2).

Chart II.4.2 FRA rates versus the CNB forecast

The market outlook for interest rates is stable; during 2021, it gradually deviates from the rate path contained in the baseline scenario of the CNB forecast

(percentages)



Note: Market rates represent for 2020 Q3 and 2020 Q4 the 3M PRIBOR and for 2021 Q1–2021 Q3 the average values of the FRA 3*6, 6*9 and 9*12 rates for the last 10 trading days as of 31 October 2020.

III. CURRENT ECONOMIC DEVELOPMENTS

III.1 INFLATION AND INFLATION TARGET FULFILMENT

Consumer prices increased by 3.3% on average in 2020 Q3. Observed inflation was above the forecast published in spring 2019, a retrospective assessment of which is relevant for evaluating the current fulfilment of the inflation target. The deviation from the forecast is particularly significant this year. 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. The still elevated consumer price inflation was due mainly to high core inflation and still buoyant, albeit slightly slowing, growth in food prices. Administered price inflation stabilised. The fall in fuel prices slowed but continued to dampen the overall rise in consumer prices significantly. Growth in import prices and industrial producer prices decreased in Q3, due mainly to a previous drop in oil prices and a temporary shift of the koruna's exchange rate to stronger levels. Agricultural producer prices also continued to decline, while the until recently strong growth in prices of construction work and market services started to fall due to the economic contraction.

III.1.1 Fulfilment of the inflation target

In 2020 Q3, observed inflation was well above the forecast published in Inflation Report II/2019 (see Chart III.1.1).[36] The gap between actual inflation and the forecast gradually widened, reaching 1.3 percentage points in 2020 Q3 (see Table III.1.1). This was due mainly to an unexpectedly sharp rise in food prices and surprisingly high core inflation. However, administered prices also increased faster than expected. By contrast, fuel prices reflected the decline in global oil prices seen at the start of 2020.

External developments deviated considerably from the assumptions of the forecast (see Table III.1.2). The slowdown in industrial producer price inflation in the effective euro area was more pronounced, due both to weaker demand pressures connected with lower GDP growth and to supply pressures stemming from lower Brent crude oil prices. Industrial producer prices have been declining since the end of 2019. This decline intensified as economic activity dropped owing to the outbreak of the coronavirus pandemic. The monetary policy easing by the ECB was more pronounced in reality than implied by the path of foreign 3M interest rates, due to a renewal of its asset purchase programme.[37] Overall, according to a simulation performed using the CNB's model, the observed external developments fostered a weaker koruna and lower domestic interest rates compared with the forecast, amid a dampening impact on inflation.

Chart III.1.1 Forecast versus actual headline inflation

The positive deviation of observed inflation from the forecast has increased since the start of 2020

(year on year in %)

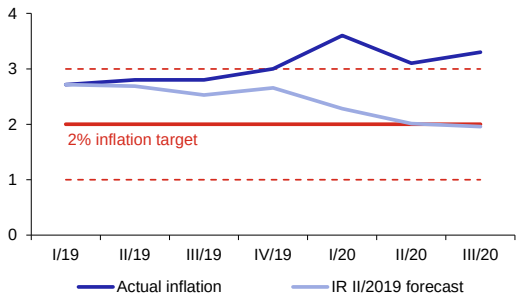


Table III.1.1 Fulfilment of the inflation forecast

Growth in most inflation components – most of all core inflation – exceeded expectations

(annual percentage changes; contributions in perc. points)

	IR II/2019 forecast	2020 Q3 outturn	Contribution to total difference[c)]
CONSUMER PRICES	2.0	3.3	1.3
of which:			
administered prices	2.0	3.4	0.2
first-round impacts of changes to indirect taxes[a)]	0.0	0.2	0.2
core inflation[b)]	2.2	3.7	0.9
food prices[b)]	2.2	4.0	0.5
fuel prices[b)]	-4.2	-14.1	-0.4

a) impact on headline inflation except administered prices
b) excluding the first-round effects of changes to ind. taxes
c) Figures may not add up owing to rounding.

Table III.1.2 Fulfilment of the ext. assumptions

External factors lagged behind the forecast assumptions

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

		II/19	III/19	IV/19	I/20	II/20	III/20
GDP in euro area[a), b), c)]	p	1.0	1.3	1.4	1.5	1.6	1.6
	o	1.0	1.2	0.9	-2.8	-12.9	-
PPI in euro area[b), c)]	p	2.8	2.1	2.1	2.6	2.3	2.2
	o	2.0	0.2	-0.4	-0.4	-2.8	-
3M EURIBOR (percentages)	p	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2
	o	-0.3	-0.4	-0.4	-0.4	-0.3	-0.5
USD/EUR exchange rate (levels)	p	1.13	1.14	1.15	1.16	1.17	1.18
	o	1.12	1.11	1.11	1.10	1.10	1.17
Brent crude oil price (USD/barrel)	p	70.4	69.4	68.5	67.6	66.7	65.8
	o	68.5	62.0	62.4	50.8	33.4	43.3

a) at constant prices
b) seasonally adjusted
c) IR II/2019 outlook for effective indicator

—

36 This section of the Inflation Report briefly analyses the contribution of the CNB's monetary policy to this situation. In order to assess the effect of monetary policy on the fulfilment of the inflation target it is appropriate to analyse retrospectively the forecasts and the Bank Board's decisions based thereon in the past. To assess the fulfilment of the target in 2020 Q3, we have to examine – in view of the monetary policy transmission lag – the period from January to September 2019 (the "reference period"). For the sake of clarity, the analysis of the fulfilment of the forecasts in this section is limited to a comparison of Inflation Report II/2019 with subsequent inflation.

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

Domestic real GDP grew more slowly over the entire period compared with the forecast, recording an unprecedented drop in 2020 H1. Household consumption and investment fell dramatically in 2020 compared with the forecast under assessment, due to the shutdown of part of the economy and the uncertain outlook. On the other hand, growth in government consumption exceeded the original expectations over the entire forecast horizon. It reflected a more pronounced increase in wage and non-wage expenses and also additional coronavirus-related expenses incurred so far this year. The drop in external demand was reflected in lower foreign trade turnovers. Observed wage growth was also lower than forecasted. It was significantly affected in Q2 by pandemic-related statistical effects.[38]

The structure of the domestic monetary conditions deviated from the forecast. Contrary to expectations, the exchange rate did not appreciate last year and remained stable. Monetary policy responded to the uncertain evolution of global factors (the worsening sentiment and external demand outlook) with increased caution, and interest rates were slightly lower than forecasted (see Table III.1.3). In response to the outbreak of the coronavirus pandemic and the subsequent measures in the domestic and foreign economy, the CNB started to lower interest rates significantly in March 2020, a process accompanied by a marked weakening of the koruna. This significantly eased the overall monetary conditions.

The monetary policy pursued by the CNB between January and September 2019 can be assessed as having been insufficiently tight as regards the fulfilment of the inflation target. In addition to the forecast, an assessment of the risks associated with the forecast is important for the Bank Board's decisions on monetary policy settings. In the said period, the Bank Board assessed the risks to the forecast in three cases as balanced, twice as slightly inflationary and once as slightly anti-inflationary. Interest rates were raised once by the standard 0.25 percentage point in this period. Observed inflation was above the upper boundary of the tolerance band around the CNB's 2% target in 2020 Q3. From this perspective, therefore, it can be said that monetary policy should have been tighter in the said period. However, inflation expectations remain firmly anchored to the 2% target and the CNB is fulfilling its price stability mandate. With the benefit of current knowledge of the strong effects and risks associated with this year's pandemic and economic situation, it can also be said that monetary policy had created sufficient room for relaxing interest rates, room which it used this spring.

III.1.2 Consumer prices and property prices

Inflation was slightly above 3% in Q3, as it has been for most of the year (see Chart III.1.2). Elevated core inflation was still the biggest contributor to the continued high – albeit gradually

38 This involved a short-term drop in the wages of employees drawing attendance allowance or wage compensation in the event of quarantine and employees not working as a result of obstacles to work on the employer's part.

Table III.1.3 Fulfilment of the forecast for key variables

Monetary conditions were easier than forecasted in both the interest and exchange rate components

(p – prediction, o – outturn)

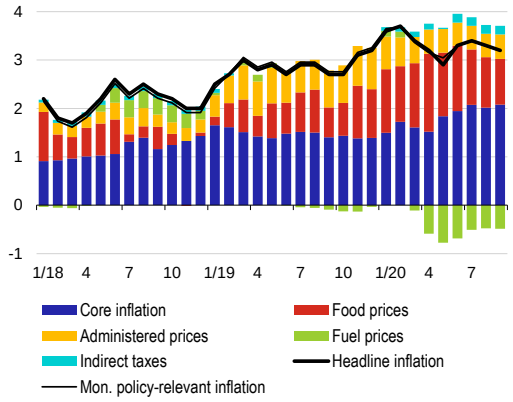
		II/19	III/19	IV/19	I/20	II/20	III/20
Consumer price index (annual perc. changes)	p	2.7	2.5	2.7	2.3	2.0	2.0
	o	2.8	2.8	3.0	3.6	3.1	3.3
3M PRIBOR (percentages)	p	2.4	2.4	2.4	2.4	2.3	2.1
	o	2.1	2.2	2.2	2.2	0.6	0.3
CZK/EUR exchange rate (levels)	p	25.5	25.2	24.9	24.8	24.7	24.6
	o	25.7	25.7	25.6	25.6	27.1	26.5
Real GDP[a)] (annual perc. changes)	p	2.5	2.4	2.4	2.6	2.9	3.0
	o	2.4	2.3	2.0	-1.9	-10.9	-
Nominal wages[b)] (annual perc. changes)	p	6.2	6.2	6.1	5.4	5.3	5.0
	o	6.2	6.1	5.1	5.2	-0.5	-

a) seasonally adjusted
b) in market sectors

Chart III.1.2 Structure of inflation

Inflation fluctuated above 3% in Q3, driven mostly by higher core inflation and rising food prices; a fall in fuel prices acted in the opposite direction

(annual percentage changes; contributions in percentage points)

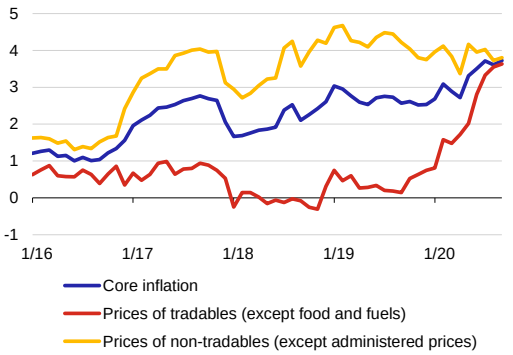


Note: Food prices also include prices of alcoholic beverages and tobacco. The contribution of the first-round effects of changes to indirect taxes relates to non-administered prices.

Chart III.1.3 Core inflation

Core inflation remained elevated, due to price growth in both components; tradables inflation picked up significantly compared with last year

(annual percentage changes)



slowing during the summer – price growth. Food price inflation remained buoyant, despite slowing a little. By contrast, consumer price inflation continued to be dampened by a significant fall in fuel prices. Monetary policy-relevant inflation was slightly below headline inflation on average in Q3.[39]

Core inflation remained elevated, due mainly to fading strong demand amid an increase in costs in the spring. Core inflation reflected accelerating growth in goods prices, while growth in services prices slowed slightly (see Chart III.1.3). The upswing in tradables inflation in Q3 was supported most of all by a rise in prices of used cars, fostered by a significantly lower supply of older vehicles on the domestic market, and by an increase in prices of clothing and footwear and leisure-related goods. Prices of household equipment and furnishings also steadily increased. The rise in prices of these items reflected, among other things, the previous depreciation of the koruna. By contrast, the temporary appreciation of the koruna against the euro and especially against the dollar during the summer has not been reflected in goods prices yet. Services price growth slowed slightly, but still stood close to 4%. The strong growth in non-tradables prices was due mainly to solid growth in housing-related prices, despite a gradual moderation. Growth in prices in restaurants and cafés, hair salons and personal grooming establishments meanwhile remained buoyant. In an environment of still solid consumer demand, prices of these services reflected operators' increased margins and costs relating to the first wave of the pandemic.

Administered price inflation stabilised in Q3 (see Chart III.1.4). Growth in administered prices was driven predominantly by increasing electricity prices. By contrast, growth in gas prices remained subdued and prices of heat for households recorded a year-on-year decrease.

Fuel prices continued to drop sharply, owing to a previous fall in global oil prices (see Chart III.1.4). The drop moderated in Q3 compared with the spring, but remained in double figures. The fall in global oil prices was associated mainly with the decline in global demand caused by the coronavirus pandemic.

The until recently strong food price growth slowed in Q3 (see Chart III.1.4). It reflected the fading of the elevated cost pressures linked with the spring coronavirus pandemic. The impact of the African swine fever in China on pork prices also disappeared at the same time. The until recently high prices of potatoes fell markedly due to this year's solid harvest. As a result, growth in meat prices slowed and vegetable prices started to fall year on year. Food prices were affected in the same direction by slower growth in fruit prices, which, however, remained above 20%.

Growth in the CPIH index was 0.7 percentage point higher than consumer inflation in 2020 Q2 (see Chart III.1.5). This was due to continued brisk growth in property prices (of just below 8%). As in other countries, property prices have shown no major reaction to the coronavirus pandemic and the related temporary freeze of

39 The first-round effect of changes to indirect taxes was slightly positive during the summer.

Chart III.1.4 Food prices, administered prices and fuel prices

Administered price inflation stabilised, while food price growth slowed and the fall in fuel prices moderated

(annual percentage changes)

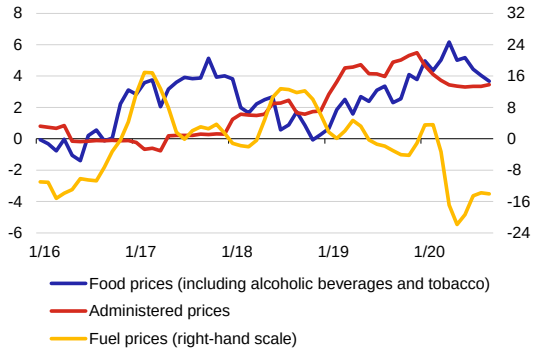


Chart III.1.5 The experimental CPIH price index

The CPIH index slowed in Q2, its growth remaining almost one percentage point above inflation

(annual percentage changes)

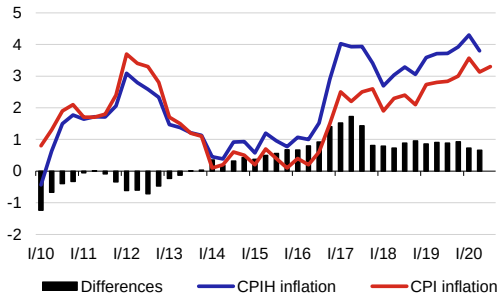
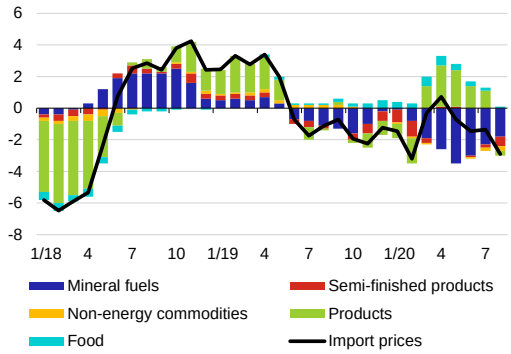


Chart III.1.6 Import prices

The decline in import prices was largely due to prices of mineral fuels

(annual percentage changes; contributions in percentage points)



Note: Food also includes beverages and tobacco.

the property market. Growth in the experimental CPIH, consisting of prices of both new and older property including land, stood at 3.8% in 2020 Q2 and so, like consumer inflation, slowed compared with the previous quarter.

III.1.3 Import prices and producer prices

Import prices continued to fall year on year during Q3 (see Chart III.1.6). This reflected a decline in foreign producer prices in the effective euro area and a gradually abating drop in global oil prices, coupled with appreciation of the koruna against the US dollar. The trend in oil prices was most visible in a gradually moderating – albeit still significantly negative – contribution of import prices of mineral fuels. The appreciation of the koruna in August was also reflected in a negative impact of import prices of finished and semi-finished products. The positive contribution of food import prices gradually decreased, mainly due to falling import prices of meat and a substantial slowdown in the year-on-year growth in vegetable prices.

Industrial producer prices also continued to record a year-on-year decline in Q3 (see Chart III.1.7). As in the case of import prices, the appreciation of the koruna and low oil and gas prices – reflected in declining prices of raw materials and energy – contributed to the negative growth in prices in industry. A decline in prices in metal manufacturing continued to contribute to the negative growth in industrial producer prices. The previous substantial growth in food prices meanwhile subsided. The contribution of prices in other manufacturing was positive, due mainly to growth in prices of transport equipment and furniture.

On average, the slight decline in agricultural producer prices has persisted so far this year (see Chart III.1.8). The previous sharp drop in crop producer prices – associated since the end of 2019 with a decline in prices of cereals due to last year's good harvest in the Czech Republic and around the world – almost faded out in Q3. Livestock product prices have been falling since Q2. The surge in prices of slaughter pigs, which had been due to a swine fever epidemic going on in a number of South-East Asian countries since mid-2019, faded away. Prices of most other items of livestock production, most notably milk, bovine animals and poultry, also decreased in H1 as a whole.

Growth in prices of construction work and market services slackened on average in Q3 (see Chart III.1.9). A downturn in construction output caused growth in construction work prices to decline, but it still remained relatively buoyant. Prices of materials and products consumed in the construction industry even declined slightly year on year on average in Q3. Growth in prices of market services also slowed somewhat, fluctuating around 2% on average in Q3. At the same time, prices of storage and support services in transport continued to grow significantly, as did management consultancy fees. By contrast, the robust growth in prices in the area of employment services seen in previous years gradually subsided, while prices for advertising services and market research even switched to a year-on-year decline.

Chart III.1.7 Industrial producer prices

Industrial producer prices dropped due to a decline in prices of raw materials and energy

(annual percentage changes; contributions in percentage points)

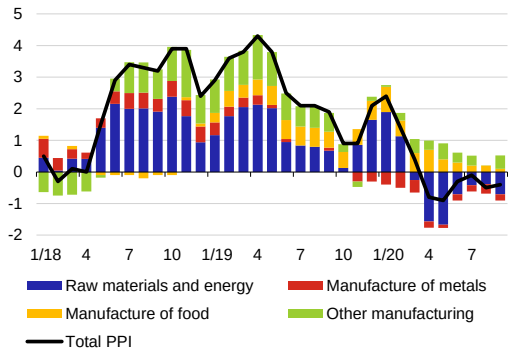


Chart III.1.8 Agricultural producer prices

Agricultural producer prices are falling slightly overall, amid contrary movements in the prices of its two components

(annual percentage changes)

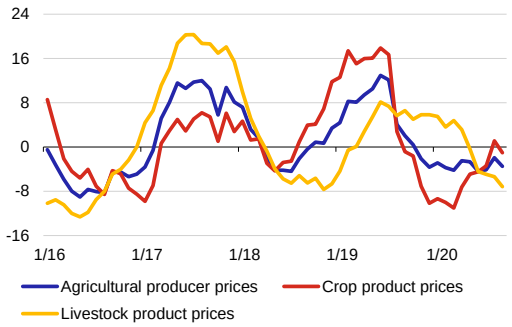
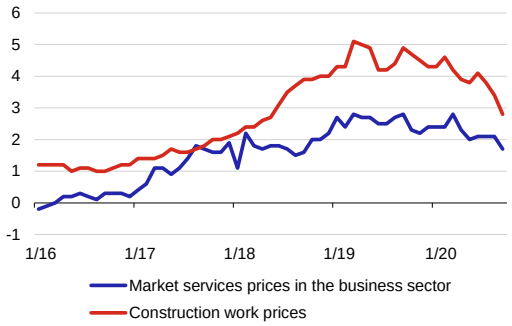


Chart III.1.9 Market services prices in the business sector and construction work prices

The economic contraction was reflected in a modest slowdown in growth in prices of market services for businesses and a significant decrease in growth in construction work prices

(annual percentage changes)



III.2 ECONOMIC DEVELOPMENTS

The contraction of the Czech economy increased to almost 11% year on year in Q2 owing to the ongoing global coronavirus pandemic. This, the biggest decline in economic activity in modern times, led to a substantial opening of the negative output gap and simultaneously – owing to shutdowns of firms and even entire sectors – to a further reduction in potential output. Large negative contributions of net exports, household consumption and investment were reflected in a sharp year-on-year decline in GDP in the spring. Only government consumption continued to rise, albeit at a much slower pace. On the supply side of the economy, domestic and foreign measures related to the coronavirus were reflected most strongly in a decline in industry and in the wholesale and retail, transport, and accommodation and food service sectors. Based on the summer results, industrial production subsequently recovered quickly from the temporary downturn. By contrast, the decline in construction is fading only gradually. Business and consumer sentiment improved rapidly at the start of the summer, as reflected, among other things, in increased household willingness to spend. This was confirmed by year-on-year retail sales growth in the non-automotive segment in August. According to the CZSO's preliminary data, GDP increased by 6.2% quarter on quarter in Q3 and its year-on-year decline thus moderated to 5.8%.[40] However, at the beginning of the autumn, with the epidemic resurging, there was a sharp deterioration in consumer sentiment and partially in business sentiment. The epidemiological measures introduced in the autumn have reduced population movement, though to a lesser extent so far than in the spring months.

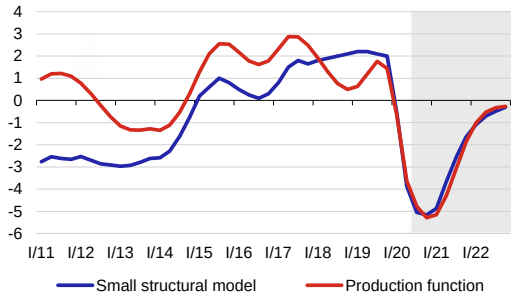
III.2.1 The cyclical position of the economy

The Czech economy is still well below its potential output level. The implementation of quarantine measures resulted in an unprecedented opening of the negative output gap in the first half of this year. This went hand in hand with a gradual cooling of the labour market, which was, until recently, overheated. However, as the pandemic resurges, the output gap will widen again slightly and reach its trough at the year-end (see Chart III.2.1). Next year, the domestic economy will begin to recover gradually and return to its potential as the epidemiological measures are relaxed and sentiment improves. However, the negative output gap will not close fully until beyond the forecast horizon. The structural model-based estimate of the output gap indicates a comparable profile to that suggested by an alternative estimate using the production function, which does not take inflation and the effect of monetary policy directly into account.

Chart III.2.1 Output gap

The negative output gap will widen in late 2020 and early 2021 and subsequently start to close

(% of potential output)

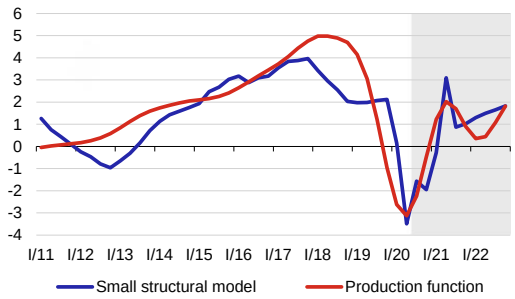


Potential output growth remains in deeply negative territory and will not turn positive until next year (see Chart III.2.2). The year-on-year decline recorded in early 2020 deepened further in Q2 as a result of the measures introduced in response to the coronavirus pandemic. The unprecedented fall in potential output was due mainly to shutdowns of the economy during the spring months. An improvement in the pandemic situation in Q3 led to a partial reversal of the previous significant decline in the potential output of the Czech economy. However, according to the small structural model, the fall in potential output will intensify temporarily again in late 2020 and early 2021 due to the second wave of the pandemic. As the pandemic subsides, the negative year-on-year growth in potential output will

Chart III.2.2 Potential output

Potential output has bottomed out; its year-on-year growth will turn positive again during 2021 after showing some volatility during the coming two quarters

(annual percentage changes)



40 These figures were released on 30 October 2020. As the forecast was closed before this date, they do not form part of its baseline scenario presented in section II.2.

gradually moderate. Year-on-year growth in potential output will later turn positive again, amid a recovery in external demand and an improvement in domestic economic activity next year. A similar trend in potential output is expected according to the production function.

III.2.2 The expenditure side of the economy

The measures introduced in the spring to combat the coronavirus pandemic resulted in the largest-ever contraction of the domestic economy in Q2 (see Chart III.2.3). The deepening of the year-on-year decline in GDP to almost 11% was due mostly to an increase in the negative contribution of net exports coupled with a sharp acceleration of the decline in household consumption. The sharper drop in domestic demand was due to a decline in growth in government consumption, which nonetheless remained the only growing component of demand. In addition, the negative contribution of change in inventories increased slightly further. Only a slight moderation of the year-on-year decline in fixed investment acted in the opposite direction.

The sharp drop in household consumption in Q2 was due mainly to closures in the services sector in the spring. The income situation of households remained relatively favourable thanks to the government's support and stabilisation measures, amid an only gradually worsening labour market situation. These factors were reflected in an only modest slowdown in households' nominal gross disposable income, the growth of which far exceeded the decline in consumption (see Chart III.2.4). The saving rate therefore rose sharply. In addition to forced curtailment of consumption, this reflected the precautionary motive stemming from worse consumer sentiment. Households were most concerned about a rise in unemployment and a deterioration in the economic situation. From April onwards, the pessimistic mood in the country was mostly diminishing (see Chart III.2.5), giving rise to year-on-year growth in retail sales in the summer. In October, however, sentiment deteriorated sharply once again.

The adverse situation also affected government consumption, which recorded a substantial decline in growth. The slower growth in nominal government consumption was due to non-wage expenditure. This was partly suspended or transferred to the health care sector in the form of coronavirus-related emergency spending. Despite slowing slightly, growth in the government consumption deflator remained high on the back of continued robust growth in compensation of government sector employees. As a result, real government consumption growth slowed sharply.

Despite a significant worsening of business sentiment, the decline in investment activity did not deepen further during the spring months (see Chart III.2.6). Despite the government restrictions and a further decline in external demand, the negative contribution of investment by non-financial corporations partly decreased compared with Q1. By contrast, investment by financial institutions led to a sharper decline in overall investment activity. Household investment also decreased year on year, though not significantly compared with the corporate sector. The subdued investment activity in the

Chart III.2.3 Gross domestic product

The significant deepening of the decline in GDP was due mostly to stronger negative contributions from household consumption and net exports

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

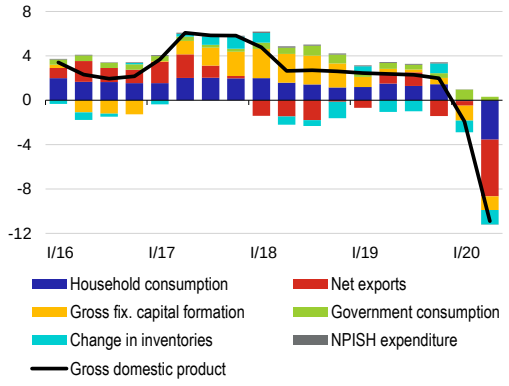
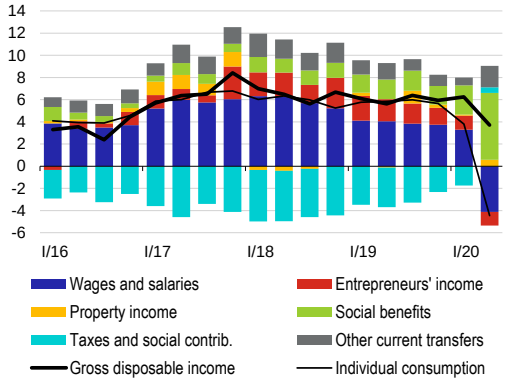


Chart III.2.4 Disposable income

In contrast to household consumption, growth in nominal disposable income remained positive, mainly due to government fiscal measures

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

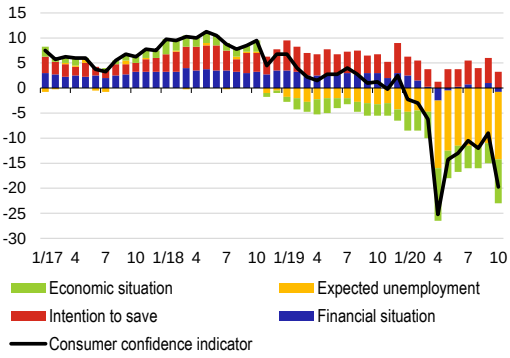


Note: Entrepreneurs' income comprises gross operating surplus and mixed income.

Chart III.2.5 Consumer confidence balance

Consumer confidence mostly improved after the first wave of the pandemic subsided; it collapsed again in October

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



private sector was partially offset by government investment, which continued to increase with significant support from European funds.

The contribution of change in inventories to GDP growth remained slightly negative in Q2. Additions to inventories also remained subdued, fostering a decline in GDP.

The negative contribution of net exports increased in Q2 amid a sharp decline in exports and imports (see Chart III.2.7). A further weakening of external demand led to a bigger decline in both goods and services exports. The hardest hit segment was the automotive industry, whose subdued output was noticeably affected by production shutdowns at the individual company level. The drop in total imports was due not only to a decline in import-intensive exports, but also to a deep decline in import-intensive domestic demand. Owing to the only gradual cooling of the Czech labour market and the better epidemic situation in the spring relative to other countries, imports nonetheless fell less markedly than exports. As a result, the contribution of net exports fell by about five percentage points.

III.2.3 The output side of the economy

Gross value added declined by almost 11% in 2020 Q2, due mainly to manufacturing and wholesale and retail trade (see Chart III.2.8). The negative contributions of both sectors increased substantially. This was due to the persisting restriction or complete shutdown of production in the spring months, coupled with a further decline in external demand. Government shutdowns, which lasted until mid-May, had an adverse effect on wholesale and retail trade and services, as did the only gradual opening of borders, which continued to dampen activity in the tourism and hospitality industries. Other segments also contributed to the overall decline in GVA, with the exception of agriculture, which had a neutral effect.

The decline in industrial production reached record levels in Q2 (see Chart III.2.9). The unprecedented fall in April was due mainly to shutdowns in the automotive industry and a further weakening of external demand. The decline in industry gradually slowed in the months that followed. August's results were the exception, but this was due to some extent to Škoda Auto's decision to move company holidays more into August compared with last year.

Insufficient demand continued to be the biggest barrier to growth in production for industrial firms in October. However, only around one-third of firms now gave this as a limiting factor, a considerable improvement on July, when half of the respondents had given this answer. Shortages of labour, material and equipment hindered production to an increased extent. These barriers limited businesses somewhat more than in the summer. This is related to the recovery in production by industrial firms. A substantial rise in the proportion of companies not perceiving any barriers to growth in production was also observed.

The construction sector saw a milder decline in production than industry in the spring, but its contraction is longer-lasting (see

Chart III.2.6 Investment by sector

The decline in investment activity remained similar to that in the previous quarter and was again due primarily to subdued investment by non-financial corporations

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

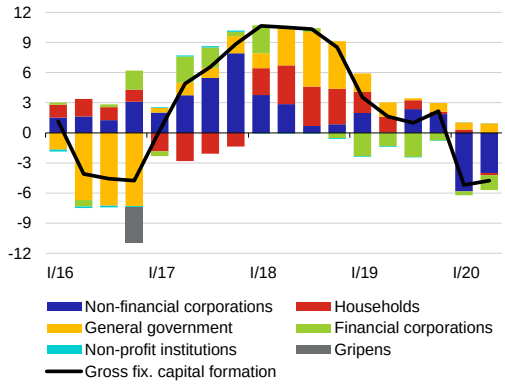


Chart III.2.7 Exports and imports

Net exports fell significantly, the decline in exports being somewhat larger than that in imports

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

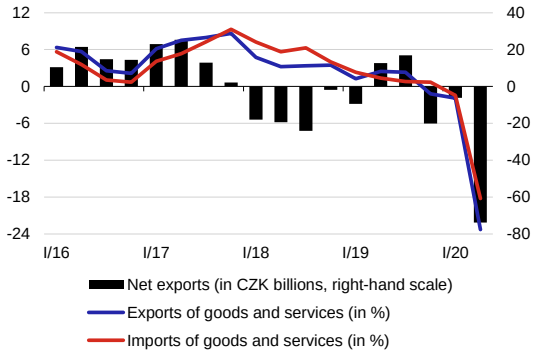
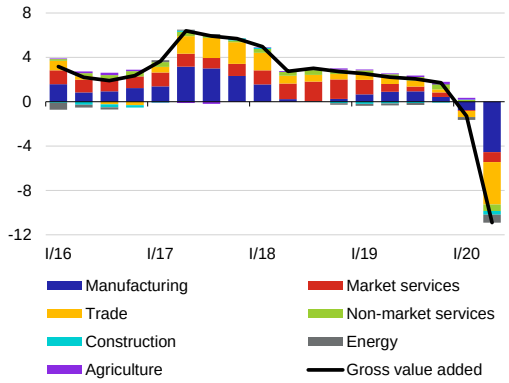


Chart III.2.8 Contributions of sectors of activity to GVA growth

The decline in gross value added was due mainly to wholesale and retail trade and industry

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



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

Chart III.2.9). The situation in the construction sector mostly reflected a double-digit decline in building construction, but also a decrease in civil engineering output during the spring months. Construction output reacted to the current crisis with a slight lag and did not bottom out until June. The July and August data point to only a slow recovery in construction output so far.

Sales in services were hit harder than retail sales by the spring shutdowns. The decline in retail sales including the automotive segment began to slow gradually in May, and by August sales were broadly flat year on year. Sales in the non-automotive segment were rather more favourable. By contrast, sales in services are recovering relatively slowly, and the August data also point to only a very gradual moderation of their year-on-year decline.

Business sentiment has yet to fully recover from its record plunge. The lowest point was reached in May, after which business confidence started to recover gradually. Industry and wholesale and retail trade saw a significant decrease in pessimistic sentiment. Conversely, sentiment was slowest to improve in construction and services, in line with their slow recovery from the first wave of the pandemic. The October data showed a substantial deterioration in consumer sentiment to just above the April level, due to the resurgence of the pandemic. By contrast, business sentiment recorded only a relatively slight decline in October, mainly reflecting a deterioration in the services sector.

Growth in gross operating surplus in non-financial corporations turned negative in Q2 (see Chart III.2.10). The year-on-year declines in output and intermediate consumption accelerated, outpacing those of the other indicators. Growth in gross value added and compensation of employees, which had slowed visibly in Q1 due to the pandemic, switched to a year-on-year decline in Q2.

The epidemiological measures introduced in the autumn have reduced population movement, albeit less so than in the spring (see Chart III.2.11). This is due to the more targeted nature of the recent measures. The use of satellite navigation decreased the most in October, but outdoor leisure activity is shrinking visibly as well. There has also been a significant reduction in office working. However, the presence of seasonal factors should be taken into account in relation to this data.

Chart III.2.9 Industrial production and construction output

The dramatic decline in industrial production gradually moderated from May onwards; the downturn in construction was more moderate and bottomed out later

(annual percentage changes)

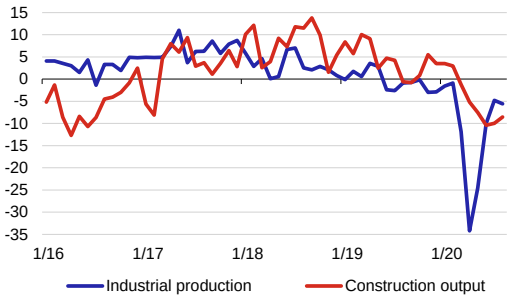


Chart III.2.10 Key financial indicators

All the financial indicators under review declined sharply

(annual percentage changes)

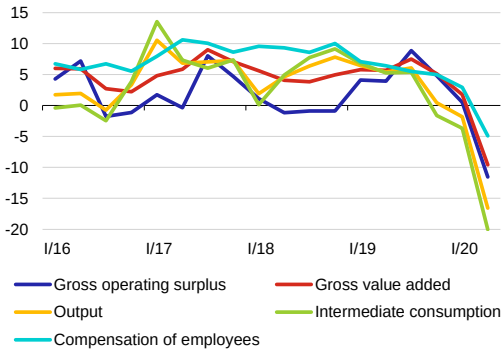
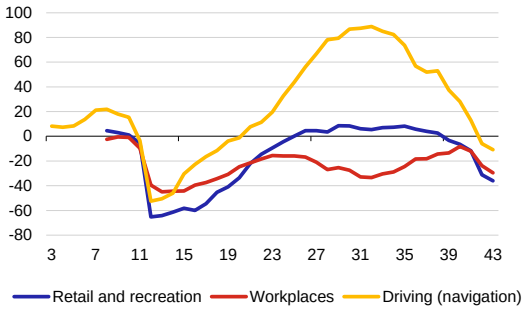


Chart III.2.11 Population mobility

The reduction in population movement is less pronounced than it was in the spring for now

(changes in per cent compared with standard activity; 2020 week order)



Note: The sources of the time series are data from Google and Apple.

III.3 THE LABOUR MARKET

The labour market was also hit in Q2 by the impacts of the coronavirus pandemic, which contributed to it cooling slightly. Despite countercyclical government measures, the decline in employment visibly deepened, while the unemployment rate rebounded from its previous record lows. Wage growth slowed significantly due a decline in income of employees receiving attendance allowance or partial wage compensation owing to the pandemic. The average wage in market sectors decreased moderately year on year. Wage growth in non-market sectors slowed but remained distinctly positive. As a result of shutdowns of firms and even entire sectors, whole-economy labour productivity saw a record fall and thus lagged well behind average real wage growth. The pace of growth in nominal unit wage costs therefore remained high. According to the available data for Q3, the rise in unemployment slowed markedly in an environment of persistent solid demand for labour, as indicated by a high number of job vacancies and renewed placement of job applicants. Wage growth in industry turned positive again during the summer months. On the eve of the second wave of the pandemic, the Czech labour market was therefore relatively stable, due in part to the government's employment protection measures.

III.3.1 Employment and unemployment

The labour market was affected in Q2 by the coronavirus pandemic, as illustrated by the composite LUCI indicator. This visibly declined across all its main components (see Chart III.3.1). Employment fell by 1.6% in 2020 Q2. From the sectoral point of view, market services, and to a lesser extent industry, were the biggest contributors to the decline in employment in Q2. By contrast, employment rose slightly in construction and in non-market services (see Chart III.3.2). About two-thirds of this decrease in employment was linked with a decline in the labour force. However, this largely reflected the freeze in the economy, as a result of which a proportion of those who lost their jobs were not actively seeking employment and were thus classified as economically inactive according to the Labour Force Survey (LFS) methodology. Monthly figures indicate a renewed increase in the labour force and in employment in Q3.

The reduction in the converted number of employees was due both to a lower number of employees and to shorter average working hours. The public health measures affected market services most of all, with the biggest decreases in employment seen in administrative and support services, accommodation and food service activities, wholesale and retail trade, and transport. Industry also recorded a significant drop in employment, although, unlike services, the decline in the converted number of employees was driven more by a drop in average hours worked than by a reduction in the physical number of employees.

Growth in unemployment slowed in Q3 after the first wave of the pandemic subsided (see Chart III.3.3). The seasonally adjusted share of unemployed persons was broadly flat at 3.8% in September. Job vacancies started to be filled again and the number of newly registered unemployed persons was reduced. The seasonally adjusted general unemployment rate showed a similar trend, recording only a slight increase between June and August and reaching 2.8%.

Despite the marked drop in GDP and the related cooling of the labour market, the number of vacancies remains high. Furthermore, there are considerably fewer unemployed persons

Chart III.3.1 LUCI – Labour Util. Comp. Index

The current LUCI values are still high from the historical perspective, but the labour market is now cooling slightly

(index; vertical axis shows standard deviations)

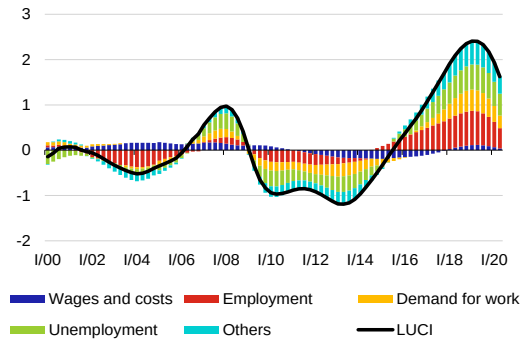


Chart III.3.2 Employment

The decline in overall employment deepened markedly in Q2

(contributions in percentage points to year-on-year change; selected sectors of activity; source: LFS)

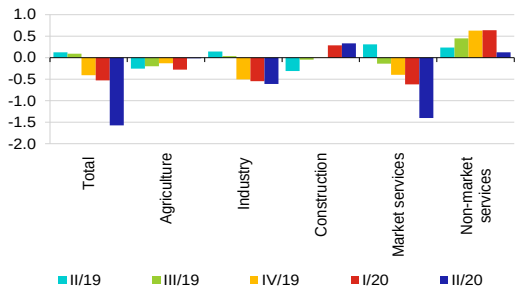
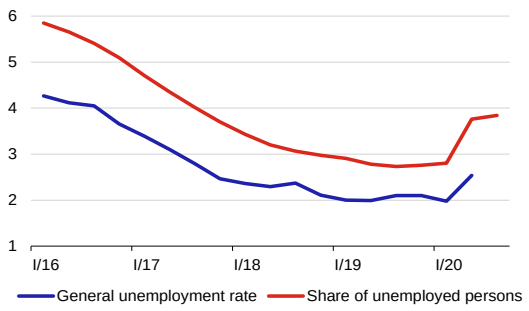


Chart III.3.3 Unemployment indicators

Unemployment indicators began to increase gradually owing to the economic contraction

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



per vacancy on average than at the peak of the previous cycle in 2008 (see Chart III.3.4). According to the latest data, the cooling of the labour market was reflected in a moderate decline in job vacancies in September. The until recently tight situation on the labour market is meanwhile still reflected in increased core inflation.

III.3.2 Wages and productivity

The previous buoyant growth in the average nominal wage slowed to 0.5% due to the epidemiological measures (see Chart III.3.5). This was because a large part of incomes – such as attendance allowance and sick pay during quarantine and isolation – were not included in the wage statistics due to the spring school closures and other measures introduced during the first wave of the pandemic. The slowdown was also fostered by a drop in incomes due to partial wage compensation for some pandemic-related obstacles to work. The average wage in market sectors decreased by 0.5% year on year. However, the wage dynamics varied significantly from sector to sector. The biggest wage drop (of almost 12%) was recorded in accommodation and food service activities despite the January increase in the minimum wage, the effect of which is disproportionately large compared with the rest of the economy in this sector, where average wages have long been the lowest. At the same time, however, accommodation and food service activities have been hit hard by the economic impacts of the pandemic, so the above "statistical" effects are stronger in this sector. These effects also caused wages to drop in manufacturing (by 4.9%). Wages fell at a similar pace in real estate activities due to a temporary freeze of the property market. On the other hand, wages in agriculture, administrative and support service activities, energy and health care continued to rise at a solid pace (by more than 4%). Wage growth in non-market sectors slowed slightly to 4.6%. From the sectoral point of view, wages in public administration and defence and education increased significantly (by more than 5%), while wages in culture decreased due to the impacts of the coronavirus pandemic. The median wage dropped slightly (by 0.2%) in Q2 and thus lagged behind the average wage in the economy. The monthly July and August data for industry indicate a partial unwinding of the "statistical" effects and a return of wage growth to positive values. The available monthly data for the construction industry suggest a similar trend.

Labour productivity fell considerably due to the production shutdowns and the drop in demand in many sectors. The year-on-year fall of 9.2% (see Chart III.3.5) was driven mainly by industry and, to a lesser extent, market services in Q2. However, labour productivity declined across all the main branches of the economy. The lag of productivity growth behind the dynamics of the average real wage (which declined by 2.5%) thus increased compared with Q1. The drop in productivity resulted in growth in nominal unit wage costs (see Chart III.3.6). Following an acceleration at the start of this year, growth in unit labour costs slowed only slightly to 5.4% in Q2 due to the outbreak of the pandemic. Elevated growth in nominal unit wage costs was observed particularly in industry and non-market services.

Chart III.3.4 Beveridge curve

The number of vacancies is still higher than the number of registered unemployed persons, amid still elevated core inflation

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

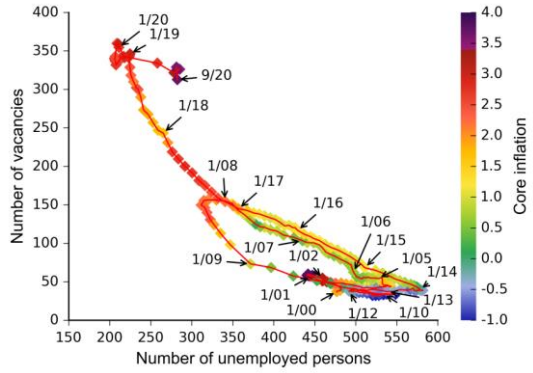


Chart III.3.5 Average wage and whole-economy labour productivity

The decline in labour productivity deepened markedly, still lagging well behind wage growth

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

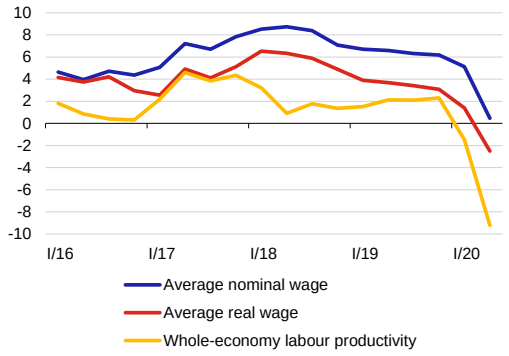
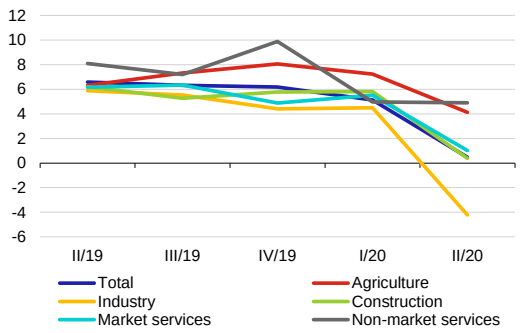


Chart III.3.6 Average wage by sector of activity

The previous buoyant growth in nominal wages slowed significantly in most sectors as a result of the pandemic; wage growth in industry turned negative in Q2

(annual percentage changes; in nominal terms; selected sectors)



III.4 FINANCIAL AND MONETARY DEVELOPMENTS

Money market rates remained stable in Q3. Rates with longer maturities increased slightly in the summer, but the worsening epidemic situation caused them to decrease in the autumn. Rates on loans to non-financial corporations declined further, and rates on loans for house purchase also fell modestly. However, banks' credit standards and lending conditions are stricter than before the outbreak of the coronavirus pandemic, especially in sectors hit hard by the crisis. The drop in economic activity is being reflected in slower growth in loans to corporations. By contrast, growth in housing loans accelerated. M3 growth reversed its previous slight slowdown. The high coronavirus-related uncertainty and deferred consumption and investment expenditure are being reflected in strong growth in household and corporate deposits. The koruna initially strengthened markedly against both the euro and the dollar in Q3 but then weakened again.

III.4.1 Monetary policy and interest rates

The CNB left its monetary policy interest rates unchanged at the August, September and November meetings. The two-week repo rate is thus set at 0.25%, the Lombard rate at 1% and the discount rate at 0.05% with effect from 11 May 2020. The 3M PRIBOR remained stable just above 0.3% in Q3 and in October[41] (see Chart III.4.1). During the summer months, the market partly speculated on a decrease in the key interest rates in the near future. However, the statements made at the time by some Bank Board members indicated that such an option was unlikely. In addition, the use of internally discussed unconventional instruments was repeatedly described as only hypothetical. The end-October outlook for FRA rates implied broad stability of the 3M PRIBOR over the one-year horizon and was therefore below the interest rate path contained in the new CNB forecast.

Domestic interest rates with longer maturities remained low, reflecting developments abroad. In the summer, cautious optimism and a belief that large-scale fiscal and monetary stimuli would soften the impacts of the pandemic on economies and support their recovery prevailed on the markets. Moderate growth in rates was dampened by concerns about the further spread of the coronavirus, the USA's disputes with China and nervousness related to the complicated negotiations on the terms of future trade relations between the UK and the EU after Brexit (see the box in section II.1). The worsening epidemic situation in some countries during September and October increased risk aversion and led to a drop in interest rates. However, the markets continued to regard it as relatively unlikely that the second wave of the pandemic would result in lockdowns of a similar magnitude as in the spring, despite the higher number of cases. Medium- and long-term interest rates in the euro area and the USA were almost unchanged overall in Q3. The same was true of domestic interest rates. The slope of the domestic IRS and government bond yield curves is distinctly positive (see Chart III.4.2).

The issuing activity of the Ministry of Finance on the primary market slackened considerably in Q3. This activity decreased gradually following the extraordinary amounts issued particularly

Chart III.4.1 Interest rates

Short-term interest rates remained stable, while rates with longer maturities were more volatile but were almost unchanged on average

(percentages)

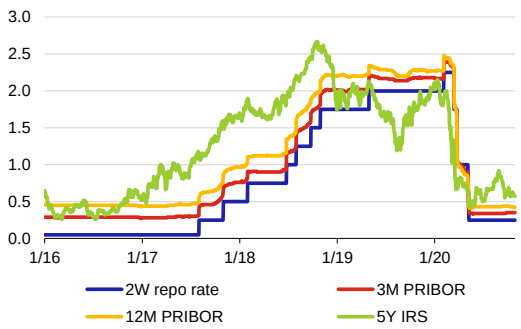
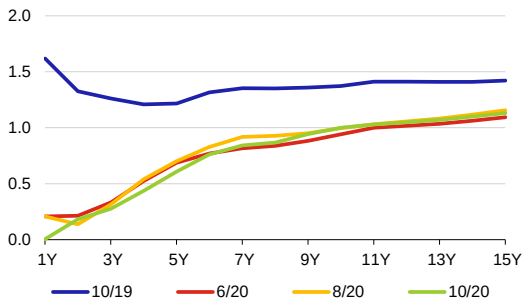


Chart III.4.2 Government bond yield curve

The slope of the yield curve is slightly positive

(percentages)



41 The money market premium, as measured by the spread between the 3M PRIBOR and the 2W repo rate, was thus only slightly positive.

in March and April. The Ministry of Finance has issued T-bills and bonds with various maturities totalling CZK 591 billion[42] since the start of 2020, thereby creating reserves to finance the fiscal stabilisation measures. Demand for bonds from investors (including foreign ones) remains strong and in some auctions was several times higher than the amounts supplied. State financing is very cheap,[43] but yields are still positive (unlike in 2015–2017). According to Ministry of Finance statistics, non-residents' total government bond holdings decreased to CZK 653 billion in September; non-residents accounted for 35% of total government bond holdings.

The interest rate on loans to non-financial corporations fell further to a historical low (see Table III.4.1). Since February, the rate on new loans has dropped by 1.9 percentage points to 1.5% and the rate on genuinely new corporate loans to 1.3%. This reflected the spring drop in monetary policy and market rates and recently to some extent also competition in the segment of large loans, whose share in total new loans increased in Q3. The interest rate on large loans decreased more significantly than the rate on small loans, which are usually provided to smaller firms with a higher risk margin. The spread between the rates on small and large loans thus rose above the pre-pandemic level amid increased prudence of banks. The difference in the total funding costs of corporations, as expressed by the cost of borrowing, compared with the euro area dropped to 0.4 percentage point (see Chart III.4.3). The ex ante real interest rate on loans to corporations turned slightly negative.

The interest rate on loans for house purchase also decreased slightly further in Q3 (see Table III.4.1). The rate on new mortgages was 2.2% and the rate on genuinely new mortgages 2.1% in August. According to Fincentrum Hypoindex data, the mortgage rate declined slightly further in September and some banks also lowered their rates in early October. By contrast, the interest rate on consumer credit went up slightly, in a situation where the creditworthiness of some clients is expected to deteriorate. Ex ante real interest rates are positive in both segments, reaching 0.5% in the case of housing loans.

Client interest rates on deposits were broadly unchanged in Q3 following a previous decline. The rate on new deposits with agreed maturity remained low. The average rate on total corporate and household deposits stood at 0.2% in August. Banks' interest margin, as expressed by the spread between rates on new loans and deposits, thus decreased significantly further close to 1 percentage point for corporate loans and fluctuated around 2 percentage points for housing loans. The margins in both segments are near the historical lows recorded in 2016. Ex ante real interest rates on deposits are negative.

Table III.4.1 Client interest rates on loans and deposits

Interest rates on loans to corporations declined further in Q3 and rates on loans for house purchase also dropped slightly

(interest rates in percentages; changes in percentage points; new business unless otherwise indicated)

	Interest rate	Change since		
	8/20	6/20	2/20	11/16
HOUSEHOLDS				
Mortgages	2.2	-0.1	-0.3	0.3
Mortgages with rate fixation 1–5 years	2.2	-0.2	-0.3	0.2
Mortgages with rate fixation 5–10 years	2.1	-0.1	-0.3	0.3
Genuinely new mortgages	2.1	-0.1	-0.3	0.3
Consumer credit	8.1	0.1	0.1	-2.0
Deposits (outstanding amounts, total)	0.3	0.0	-0.2	-0.1
Overnight deposits	0.1	0.0	-0.1	0.0
New deposits with agreed maturity	0.6	0.0	-1.1	-0.5
NON-FINANCIAL CORPORATIONS				
Total loans	1.5	-0.8	-1.9	-0.4
Small loans (up to CZK 30 million)	2.9	-0.2	-1.3	0.5
Large loans (over CZK 30 million)	1.2	-0.9	-2.0	-0.6
Genuinely new loans	1.3	-0.7	-1.9	-0.6
Total outstanding loans	2.5	-0.1	-1.3	0.0
Deposits (outstanding amounts, total)	0.1	0.0	-0.4	0.0
Overnight deposits	0.0	-0.1	-0.2	0.0
New deposits with agreed maturity	0.1	0.0	-1.6	-0.9

Note: Client interest rates were close to their historical lows in 2016.

Chart III.4.3 Client interest rates in the Czech Republic and the euro area

Despite a marked drop this year, client interest rates on loans in the Czech Republic are still slightly higher than those in the euro area, in the case of corporations due mainly to higher rates on overdrafts and revolving loans

(total credit costs as expressed by cost of borrowing; percentages)

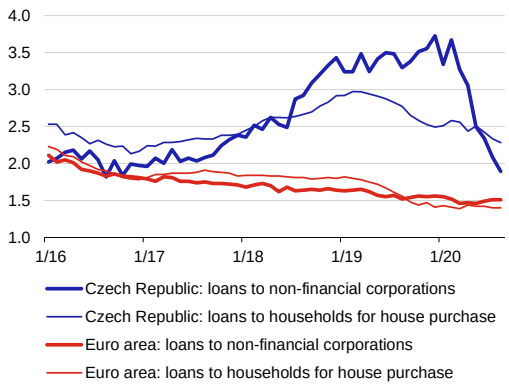
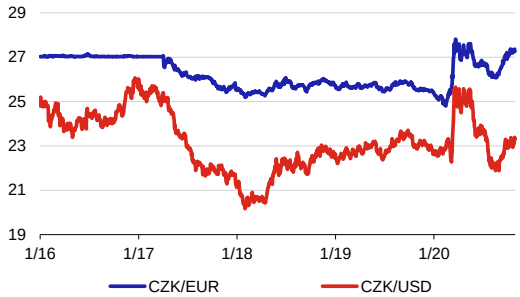


Chart III.4.4 CZK/EUR and CZK/USD exchange rates

The koruna initially appreciated markedly against both the euro and the dollar in Q3, but then weakened again



42 The Funding and Debt Management Strategy for 2020, updated at the end of June, assumed issues on the domestic market of at least CZK 480 billion.

43 A large majority of the yields in primary auctions did not exceed 1%. Only the longest bond (with a maturity of 20 years) was sold at an average yield of slightly over 1%.

III.4.2 The exchange rate

The koruna initially appreciated markedly against the euro in the summer but then started to depreciate due to a deterioration in the domestic epidemic situation (see Chart III.4.4). The koruna's appreciation from CZK 26.8 to the euro at the start of Q3 to CZK 26.3 to the euro was fostered mainly by the rapid conclusion of the agreement on a European recovery fund in July. The koruna also continued to strengthen modestly after that, reaching almost CZK 26 to the euro. In late August, however, the epidemic situation in the Czech Republic and the EU started to deteriorate sharply and the koruna reversed its path and weakened steadily in the following weeks, reaching CZK 27.2 to the euro in mid-October. The average exchange rate of the koruna against the euro was CZK 26.5 in Q3. The koruna weakened by 2.8% against the euro in year-on-year terms.

Against the dollar, the koruna followed a similar pattern as against the euro in Q3 (see Chart III.4.4). The dollar weakened quite considerably on global markets in July. This was due to the USA coping much worse with the epidemic situation than Europe, and particularly to the approval of a European recovery fund, which demonstrated an ability to ensure mutual fiscal assistance within the EU. The initial fast appreciation brought the koruna to just below CZK 22 to the dollar in mid-August. However, the koruna responded to the worsening epidemic situation in Europe and especially in the Czech Republic with a renewed weakening to around CZK 23 to the dollar. In year-on-year terms, the koruna strengthened by 2.2% on average against the euro in Q3.

The positive differential between koruna and euro interest rates increased slightly, while the differential vis-à-vis the dollar turned slightly positive (see Chart III.4.5). The positive differential between three-month koruna and euro rates increased slightly to 0.9 percentage point in 2020 Q3. The spread between three-month koruna and dollar rates shifted from slightly negative to slightly positive levels (0.1 percentage point).

The year-on-year depreciation of the nominal effective exchange rate of the koruna was 1.6% in September (see Chart III.4.6). The koruna weakened against eight currencies in the basket and strengthened against five in year on year terms. It depreciated significantly – by more than 3% – against the euro, the Danish krone, the Swiss franc and the Swedish krona. By contrast, it appreciated by more than 3% against the US dollar, the Hungarian forint and the Russian rouble. Its year-on-year appreciation against the rouble amounted to an exceptional 17.6%.[44]

III.4.3 Credit

The decline in economic activity is being reflected in slower growth in loans to corporations and loans to households for consumption (see Chart III.4.7). The annual rate of growth in loans to the private sector was 4.1% in August, with loans for house purchase contributing significantly. According to the Bank

Chart III.4.5 Interest rate differentials

The positive koruna-euro interest rate differential increased slightly, while the koruna-dollar differential turned from slightly negative to slightly positive

(percentage points)

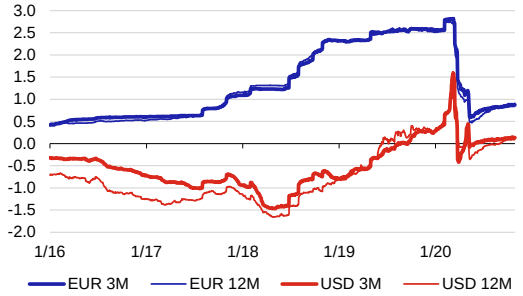
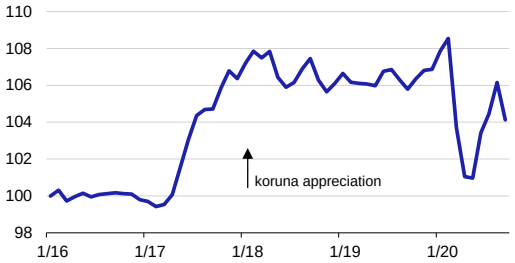


Chart III.4.6 Nominal effective koruna exchange rate

The koruna started to weaken again in nominal effective terms at the end of Q3

(basic index; January 2016=100)

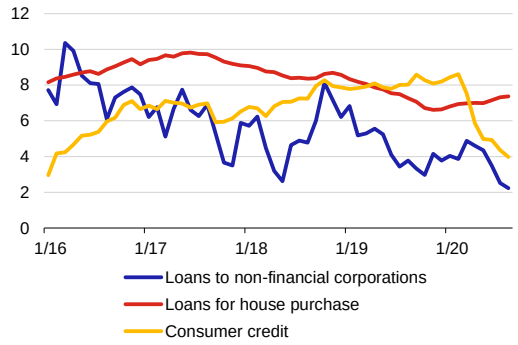


Note: In the calculation of the nominal effective exchange rate of the koruna (NEER), the euro has the largest share in the basket (64.3%). The renminbi, the zloty, the pound, the forint, the dollar and the rouble have smaller, but still significant shares (2.6%–7.8%). The shares of the remaining six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

Chart III.4.7 Loans to the private non-financial sector

Growth in corporate loans and consumer credit continued to slow in Q3, while growth in loans for house purchase accelerated

(annual percentage rates of growth)



44 This exchange rate change poses a risk for domestic exports to Russia, which accounted for 2.3% of total Czech exports in 2019.

Lending Survey, banks' lending policies are tighter than before the coronavirus pandemic due to the risks perceived in sectors hit by COVID-19. Credit standards and lending conditions tightened further in Q3, with the exception of consumer credit. However, a substantially smaller percentage of the banking market tightened standards and conditions than in Q2. Banks increased interest margins on riskier loans. The evolution of standards in the period ahead will depend on the economic impacts of the second wave of the coronavirus pandemic. Overall, instalments on loans of CZK 470 billion, or around 15% of total loans, have been postponed due to the coronavirus crisis. A proportion of these loans may be at risk of default after the loan moratorium ends at the end of October 2020.

Growth in loans to non-financial corporations slowed further in Q3. The year-on-year growth in corporate loans decreased to 2.2% in August.[45] The observed slowdown in the growth in corporate loans was quite broad-based as regards sectors (see Chart III.4.8). Corporate demand for loans declined further overall in Q3, due mainly to subdued fixed investment at a time of economic uncertainty. Growth in long-term loans thus slowed further. Activity in the area of mergers and acquisitions and corporate restructuring also dropped, albeit to a lesser extent. By contrast, demand for operational financing continued to grow as a direct result of the economic contraction and liquidity pressure. Despite the tightening of banks' lending policies, credit availability was assessed as normal or very good in Q3 by 76% of firms participating in a survey conducted by the CNB and the Confederation of Industry of the Czech Republic. The share of foreign currency loans in total loans to corporations dropped to 35%. The annual flows of total external financing of corporations also decreased in Q2.

Borrowing under guarantee schemes has not yet reached the expected levels. These schemes are aimed at making financing available to companies hit by the coronavirus pandemic. Take-up was CZK 33.8 billion at the start of October. These loans make up around 15% of genuinely new koruna loans to corporations (see Chart III.4.9) and simultaneously account for roughly 5% of the total funds in the scheme approved by the government and around 1% of companies' gross value added. These figures are quite low by international comparison (as they are in Germany). In the Czech Republic, the bulk of the funds has gone to manufacturing and wholesale and retail trade, and a smaller part to accommodation and food service activities and transport.

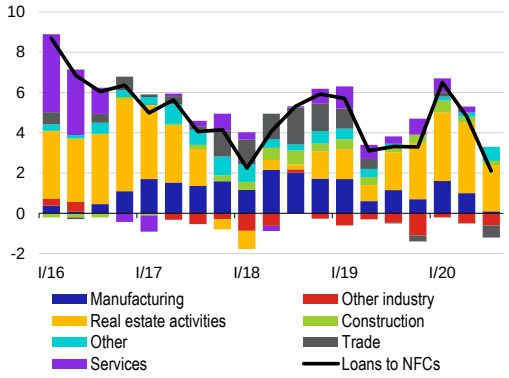
Growth in loans to households for house purchase increased in Q3. The annual growth rate of loans for house purchase reached 7.4% in August. Despite the ongoing coronavirus pandemic, the monthly volumes of genuinely new loans were relatively high and increased year on year (see Chart III.4.10). According to the Bank Lending Survey, this mainly reflected a drop in mortgage interest rates and also growing interest in property investment coupled with expected further growth in property prices and a slight improvement in household sentiment. On the supply

45 The accumulation of monthly flows of total loans to corporations (i.e. loans accepted and being repaid, adjusted for exchange rate movements and other non-transaction effects) amounted to CZK 27.1 billion in January–August 2020, as against CZK 43.1 billion in the same period a year earlier.

Chart III.4.8 Loans to non-financial corporations by sector of activity

The decline in growth in corporate loans is quite broad-based, but is strongest in manufacturing, the commercial property sector and wholesale and retail trade

(annual percentage changes; contributions in percentage points; end-of-quarter data; most recent data are for August 2020)



Note: Other comprises agriculture and transport.

Chart III.4.9 New loans to non-financial corporations and take-up of guaranteed loans

The contribution of loans granted under COVID-related guarantee schemes to the creation of corporate loans has been limited so far

(genuinely new koruna loans; volumes in CZK billions; figures for March–August of the years under comparison)

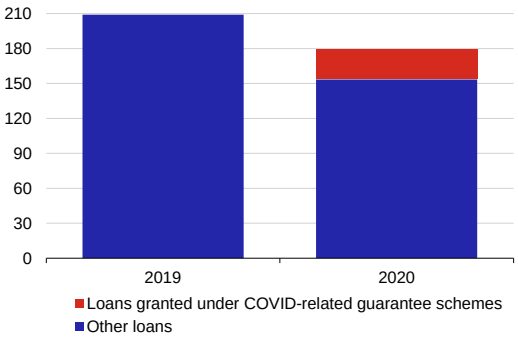
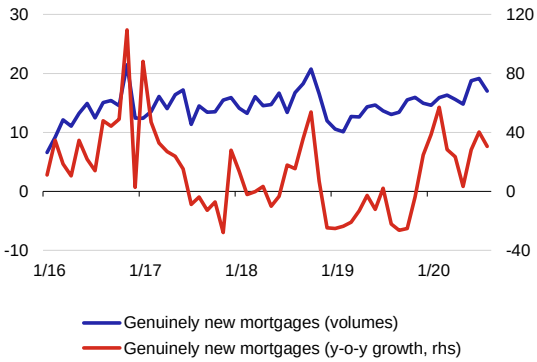


Chart III.4.10 New loans to households for house purchase

The volume of genuinely new mortgages provided to households for house purchase grew year on year in Q3

(monthly volumes in CZK billions; annual percentage changes)



side, however, credit standards and lending conditions – particularly the mechanisms for assessing client creditworthiness – were tightened further. By contrast, the rate of growth in loans for consumption fell further year on year to 4%.

III.4.4 Money

M3 growth accelerated again in Q3, with the coronavirus pandemic being reflected in strong growth in overnight deposits (see Chart III.4.11). The annual growth rate of M3 reached 9% in August. The growth in M3 is being fostered by sharp growth in government debt – especially through issues of government bonds in April, which were purchased largely by banks and also by non-residents and, to a lesser extent, financial corporations. However, in terms of money creation, the growth in the related bank assets continued to be largely offset in August by growth in central government deposits at banks and the CNB. The contribution of loans to the private sector to money growth stabilised at lower levels. M1 growth is being affected by a strong preference for highly liquid overnight deposits in an environment of great pandemic-related uncertainty and low interest rates. These deposits are contributing significantly to M3 growth. However, the growth is being dampened by a sharp fall in deposits with longer maturities amid a drop in interest rates on those products, and also by reallocation of part of financial corporations' deposits and marketable instruments to other forms of products, particularly government bonds, this spring. The growth rate of M1 was thus higher than that of M3, reaching 14.7% in August. Households and non-financial corporations both contributed to the growth in overnight deposits. The growth rate of currency in circulation slowed to 9.7% following a sharp increase in March–May related to COVID-19.

Household deposits are growing at their highest rate since 2009, and growth in deposits of non-financial corporations also rose (see Chart III.4.12). Household deposits with banks increased sharply in line with the high growth in the gross saving rate recorded in Q2. The highest growth rate of these deposits was recorded in April due to the closure of most shops and the related forced decline in, or deferral of, consumption expenditure. Growth in deposits then gradually increased as a result of households' increased prudence, reaching 11.3% in August. According to a survey, households indicate further growth in their intention to save in the next 12 months. Growth in deposits of non-financial corporations also went up in Q3 (mainly in manufacturing, real estate activities and wholesale and retail trade), reaching 9.6%. The accumulation of monthly flows of deposits was markedly higher in January–August 2020 than last year for both households and corporations. Households were forced to defer part of their expenditure due to the shutdowns of the economy. Corporations increased their deposits probably because they put off investment expenditure amid higher uncertainty due to the course of the pandemic.[46]

Chart III.4.11 Monetary aggregates and loans

M1 growth accelerated further due to strong growth in overnight deposits

(annual percentage rates of growth)

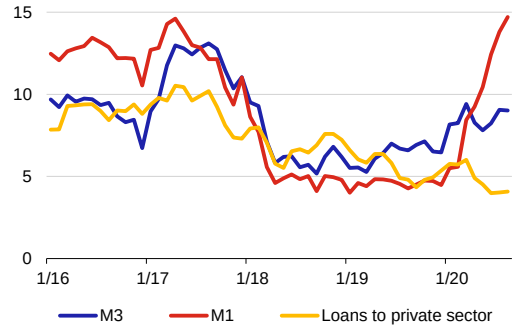
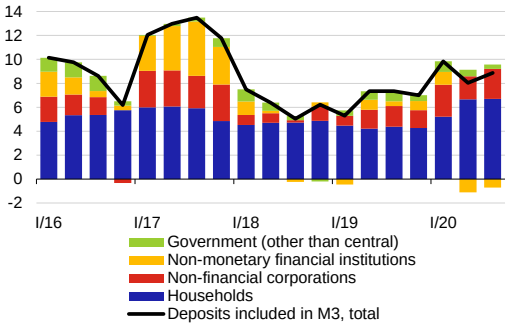


Chart III.4.12 Deposits included in M3

M3 growth was driven mainly by household deposits, due to subdued household consumption and government financial aid provided to households

(annual percentage rates of growth; contributions in percentage points; end-of-quarter data; most recent data are for August 2020)



46 The accumulation of monthly flows of deposits recorded in January–August 2020 amounted to CZK 230 billion (as against CZK 117 billion in 2019) for households and CZK 65 billion (as against CZK 21 billion in 2019) for non-financial corporations.

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	2022
DEMAND AND SUPPLY												
Gross domestic product												
GDP (CZK bn, constant p. of 2010, seas. adjusted)	4323.3	4292.6	4290.7	4387.7	4627.5	4740.7	4994.7	5152.7	5269.6	**4887.7**	**4968.8**	**5177.1**
GDP (%, y-o-y, real terms, seas. adjusted)	1.8	-0.7	0.0	2.3	5.5	2.4	5.4	3.2	2.3	**-7.2**	**1.7**	**4.2**
Household consumption (%, y-o-y, real terms, seas. adjusted)	0.4	-1.1	0.9	1.4	3.9	3.7	4.0	3.3	2.9	**-4.6**	**1.6**	**3.5**
Government consumption (%, y-o-y, real terms, seas. adjusted)	-3.5	-1.9	2.4	1.0	1.8	2.5	1.8	3.8	2.3	**4.2**	**1.3**	**2.5**
Gross capital formation (%, y-o-y, real terms, seas. adjusted)	1.8	-4.1	-4.3	7.1	13.1	-4.0	6.6	7.6	1.4	**-10.3**	**0.1**	**4.1**
Gross fixed capital formation (%, y-o-y, real terms, seas. adjusted)	1.1	-3.2	-2.2	3.3	9.8	-3.1	5.1	10.0	2.1	**-6.4**	**-1.4**	**3.5**
Exports of goods and services (%, y-o-y, real terms, seas. adjusted)	9.2	4.4	0.3	8.7	6.2	4.1	7.6	3.7	1.2	**-12.2**	**6.7**	**6.3**
Imports of goods and services (%, y-o-y, real terms, seas. adjusted)	6.7	2.7	0.1	10.0	6.9	2.7	6.5	5.8	1.3	**-8.7**	**6.2**	**5.3**
Net exports (CZK bn, constant p. of 2010, seas. adjusted)	230.1	289.0	295.6	283.1	276.4	337.4	400.7	337.3	337.1	**154.0**	**182.2**	**230.9**
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	**3.2**	**2.3**	**2.0**
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**	**1.2**	**2.3**
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	**4.3**	**2.2**	**1.8**
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	**3.4**	**2.6**	**2.0**
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	**-11.4**	**1.1**	**3.4**
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	**3.2**	**2.3**	**2.0**
GDP deflator (%, y-o-y, seas. adjusted)	0.0	1.4	1.4	2.6	1.0	1.1	1.3	2.6	3.9	**5.2**	**2.3**	**1.1**
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	**0.1**	**-0.8**	**1.1**
Agricultural prices (%, y-o-y, average)	22.1	3.3	-12.1	4.7	-6.2	-6.0	7.4	-0.2	5.7	**-2.0**	**2.3**	**-0.4**
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	**-33.8**	**4.7**	**4.5**
LABOUR MARKET												
Average monthly wage (%, y-o-y, nominal terms)	2.5	2.5	-0.1	2.9	3.2	4.4	6.7	8.2	6.4	**3.3**	**2.8**	**3.9**
Average monthly wage (%, y-o-y, real terms)	0.6	-0.8	-1.6	2.6	2.8	3.8	4.3	6.0	3.6	**0.0**	**0.5**	**1.8**
Number of employees (%, y-o-y)	0.0	-0.1	1.6	0.6	2.2	2.1	1.7	1.6	0.4	**-1.3**	**-1.9**	**0.4**
Unit labour costs (%, y-o-y)	0.5	3.5	0.8	1.6	-0.5	3.2	3.7	6.3	4.2	**7.2**	**-0.2**	**0.9**
Unit labour costs in industry (%, y-o-y)	0.3	6.6	3.4	1.7	0.9	3.0	1.8	6.2	2.2	**-**	**-**	**-**
Aggregate labour productivity (%, y-o-y)	2.0	-1.1	-0.4	1.7	4.0	0.8	3.7	1.8	2.0	**-5.9**	**3.6**	**3.6**
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	**2.6**	**4.5**	**4.4**
Share of unemployed persons (MLSA) (%, average)	6.7	6.8	7.7	7.7	6.5	5.5	4.2	3.2	2.8	**3.6**	**5.3**	**5.0**
PUBLIC FINANCE												
Government budget balance (ESA2010) (CZK bn, current prices)	-109.7	-159.3	-53.2	-90.2	-29.8	34.1	76.7	49.4	15.3	**-355.1**	**-283.4**	**-265.4**
Government budget balance / GDP** (%, nominal terms)	-2.7	-3.9	-1.3	-2.1	-0.6	0.7	1.5	0.9	0.3	**-6.3**	**-4.9**	**-4.3**
Government debt (ESA2010) (CZK bn, current prices)	1613.7	1805.3	1840.2	1818.9	1836.0	1754.7	1749.7	1734.6	1738.5	**2150.5**	**2433.7**	**2698.9**
Government debt / GDP** (%, nominal terms)	39.7	44.2	44.4	41.9	39.7	36.6	34.2	32.1	30.2	**38.4**	**41.7**	**43.9**
EXTERNAL RELATIONS												
Current account												
Trade balance (CZK bn, current prices)	75.5	123.8	167.0	220.0	187.7	258.5	259.3	200.9	236.1	**179.9**	**200.4**	**210.0**
Trade balance / GDP (%, nominal terms)	1.9	3.0	4.0	5.1	4.1	5.4	5.1	3.7	4.1	**3.2**	**3.4**	**3.5**
Balance of services (CZK bn, current prices)	81.3	77.6	70.4	55.7	86.6	106.6	124.6	120.0	104.4	**94.8**	**96.9**	**100.4**
Current account (CZK bn, current prices)	-84.8	-63.3	-21.8	7.9	20.7	85.2	79.1	24.1	-17.0	**40.0**	**22.0**	**15.0**
Current account / GDP (%, nominal terms)	-2.1	-1.5	-0.5	0.2	0.4	1.8	1.5	0.4	-0.3	**0.7**	**0.4**	**0.3**
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**	**-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	**23.4**	**22.5**	**21.8**
CZK/EUR (average)	24.6	25.1	26.0	27.5	27.3	27.0	26.3	25.6	25.7	**26.6**	**26.6**	**25.9**
CZK/EUR (%, y-o-y, real (CPI euro area), average)	-1.9	1.5	3.5	6.3	-0.9	-1.3	-3.4	-2.8	-1.2	**0.9**	**-0.7**	**-3.0**
CZK/EUR (%, y-o-y, real (PPI euro area), average)	-3.0	2.2	2.4	5.1	-0.2	0.1	-1.8	-1.5	-1.2	**1.6**	**1.4**	**-2.1**
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	**1.1**	**0.8**	**-0.1**
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	**-0.9**	**0.6**	**0.1**
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	**8.7**	**7.7**	**6.7**
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	**0.76**	**0.61**	**1.30**
3M PRIBOR (%, average)	1.2	1.0	0.5	0.4	0.3	0.3	0.4	1.3	2.1	**0.8**	**0.7**	**1.4**

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

Key macroeconomic indicators

	2020				2021				2022			
	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV
DEMAND AND SUPPLY												
Gross domestic product												
GDP (CZK bn, constant p. of 2010, seas. adjusted)	1282.7	1171.5	**1223.5**	**1210.0**	**1214.7**	**1234.9**	**1251.6**	**1267.6**	**1279.8**	**1290.4**	**1298.8**	**1308.2**
GDP (%, y-o-y, real terms, seas. adjusted)	-1.9	-10.9	**-7.4**	**-8.8**	**-5.3**	**5.4**	**2.3**	**4.8**	**5.4**	**4.5**	**3.8**	**3.2**
Household consumption (%, y-o-y, real terms, seas. adjusted)	-0.2	-7.6	**-4.4**	**-6.2**	**-3.6**	**4.6**	**1.7**	**3.8**	**4.3**	**3.3**	**3.2**	**3.1**
Government consumption (%, y-o-y, real terms, seas. adjusted)	4.9	1.6	**4.5**	**5.8**	**2.3**	**4.4**	**0.2**	**-1.6**	**1.1**	**1.9**	**3.1**	**4.0**
Gross capital formation (%, y-o-y, real terms, seas. adjusted)	-8.6	-9.8	**-8.2**	**-14.6**	**-6.6**	**2.7**	**0.3**	**4.3**	**4.9**	**4.6**	**3.7**	**3.1**
Gross fixed capital formation (%, y-o-y, real terms, seas. adjusted)	-5.2	-4.8	**-5.1**	**-10.3**	**-2.5**	**-2.9**	**-2.4**	**2.4**	**3.7**	**4.0**	**3.4**	**3.1**
Exports of goods and services (%, y-o-y, real terms, seas. adjusted)	-1.9	-23.3	**-11.3**	**-12.1**	**-7.8**	**19.9**	**6.7**	**11.0**	**9.3**	**6.9**	**5.1**	**4.0**
Imports of goods and services (%, y-o-y, real terms, seas. adjusted)	-1.4	-18.2	**-6.5**	**-8.6**	**-4.9**	**18.4**	**5.1**	**8.4**	**7.2**	**5.5**	**4.5**	**4.2**
Net exports (CZK bn, constant p. of 2010, seas. adjusted)	68.7	23.6	**32.4**	**29.3**	**34.6**	**40.7**	**49.7**	**57.2**	**57.7**	**57.8**	**57.7**	**57.8**
Coincidence indicators												
Industrial production (%, y-o-y, real terms)	-4.1	-23.5	-	-	-	-	-	-	-	-	-	-
Construction output (%, y-o-y, real terms)	2.7	-8.7	-	-	-	-	-	-	-	-	-	-
Receipts in retail sales (%, y-o-y, real terms)	-2.7	-12.2	-	-	-	-	-	-	-	-	-	-
PRICES												
Main price indicators												
Inflation rate (%, end-of-period)	3.1	3.1	3.3	-	-	-	-	-	-	-	-	-
Consumer Price Index (%, y-o-y, average)	3.6	3.1	3.3	**2.9**	**2.3**	**2.5**	**2.1**	**2.2**	**2.1**	**2.0**	**2.0**	**2.0**
Regulated prices (14.58%)* (%, y-o-y, average)	4.2	3.4	3.4	**1.9**	**1.1**	**0.9**	**0.7**	**2.0**	**2.3**	**2.3**	**2.2**	**2.3**
Food prices (incl. alcoholic beverages and tobacco) (26.41%)* (%, y-o-y, average)	4.8	5.5	4.0	**3.1**	**2.1**	**1.6**	**2.4**	**2.5**	**1.7**	**1.7**	**1.8**	**2.1**
Core inflation (55.61%)* (%, y-o-y, average)	2.9	3.2	3.7	**3.9**	**3.3**	**2.8**	**2.3**	**2.1**	**2.1**	**2.1**	**1.9**	**1.9**
Fuel prices (3.40%)* (%, y-o-y, average)	1.3	-19.4	-14.1	**-13.5**	**-11.3**	**9.5**	**3.0**	**3.1**	**3.4**	**2.0**	**5.0**	**3.1**
Monetary policy-relevant inflation (%, y-o-y, average)	3.6	3.2	3.3	**2.9**	**2.3**	**2.5**	**2.1**	**2.2**	**2.1**	**2.0**	**2.0**	**2.0**
GDP deflator (%, y-o-y, seas. adjusted)	3.7	4.2	**6.0**	**6.9**	**4.3**	**3.0**	**1.5**	**0.2**	**0.7**	**1.3**	**1.3**	**1.2**
Partial price indicators												
Industrial producer prices (%, y-o-y, average)	1.4	-0.6	-0.3	**-0.2**	**-1.6**	**-0.8**	**-0.5**	**-0.4**	**0.9**	**1.2**	**1.2**	**1.3**
Agricultural prices (%, y-o-y, average)	-3.6	-3.2	-3.2	**2.4**	**2.7**	**2.1**	**4.3**	**0.2**	**-2.0**	**-1.5**	**0.3**	**2.5**
Construction work prices (%, y-o-y, average)	4.4	3.9	3.3	-	-	-	-	-	-	-	-	-
Brent crude oil (in USD/barrel, %, y-o-y, average)	-19.3	-50.7	-29.9	**-32.3**	**-8.1**	**37.0**	**3.6**	**7.2**	**5.6**	**4.6**	**4.1**	**3.8**
LABOUR MARKET												
Average monthly wage (%, y-o-y, nominal terms)	5.1	0.5	**4.5**	**3.1**	**2.2**	**5.6**	**1.2**	**2.4**	**3.3**	**3.8**	**4.1**	**4.2**
Average monthly wage (%, y-o-y, real terms)	1.4	-2.5	**1.2**	**0.2**	**-0.1**	**3.1**	**-0.9**	**0.2**	**1.2**	**1.8**	**2.1**	**2.2**
Number of employees (%, y-o-y)	-0.5	-1.7	**-1.3**	**-1.9**	**-2.6**	**-1.8**	**-2.0**	**-1.4**	**-0.3**	**0.4**	**0.7**	**0.8**
Unit labour costs (%, y-o-y)	6.4	5.4	**8.9**	**8.0**	**3.1**	**1.3**	**-2.6**	**-2.4**	**-1.1**	**0.8**	**1.8**	**2.2**
Unit labour costs in industry (%, y-o-y)	5.2	6.5	-	-	-	-	-	-	-	-	-	-
Aggregate labour productivity (%, y-o-y)	-1.5	-9.2	**-5.9**	**-7.1**	**-2.6**	**7.3**	**4.2**	**5.9**	**5.3**	**3.8**	**2.9**	**2.3**
ILO general unemployment rate (%, average, age 15–64)	2.0	2.4	**2.9**	**3.1**	**4.2**	**4.4**	**4.9**	**4.6**	**4.7**	**4.2**	**4.4**	**4.1**
Share of unemployed persons (MLSA) (%, average)	3.0	3.6	3.8	**4.0**	**5.2**	**5.3**	**5.5**	**5.4**	**5.5**	**4.9**	**4.9**	**4.7**
PUBLIC FINANCE												
Government budget balance (ESA2010) (CZK bn, current prices)	-	-	-	-	-	-	-	-	-	-	-	-
Government budget balance / GDP** (%, nominal terms)	-	-	-	-	-	-	-	-	-	-	-	-
Government debt (ESA2010) (CZK bn, current prices)	-	-	-	-	-	-	-	-	-	-	-	-
Government debt / GDP** (%, nominal terms)	-	-	-	-	-	-	-	-	-	-	-	-
EXTERNAL RELATIONS												
Current account												
Trade balance (CZK bn, current prices)	68.2	32.1	**53.7**	**25.9**	**69.1**	**63.8**	**35.2**	**32.2**	**76.2**	**65.9**	**35.3**	**32.6**
Trade balance / GDP (%, nominal terms)	5.0	2.4	**3.7**	**1.8**	**5.2**	**4.4**	**2.3**	**2.1**	**5.4**	**4.3**	**2.2**	**2.0**
Balance of services (CZK bn, current prices)	38.7	27.9	**20.2**	**7.9**	**25.4**	**28.1**	**23.1**	**20.3**	**26.5**	**29.0**	**24.1**	**20.8**
Current account (CZK bn, current prices)	79.5	7.4	**-4.0**	**-43.0**	**57.0**	**-6.0**	**-38.0**	**9.0**	**59.0**	**-5.0**	**-48.0**	**9.0**
Current account / GDP (%, nominal terms)	5.9	0.6	**0.8**	**-2.6**	**5.6**	**1.0**	**-1.6**	**1.7**	**5.4**	**1.0**	**-2.2**	**1.7**
Foreign direct investment												
Direct investment (CZK bn, current prices)	0.2	-43.0	**-17.3**	**10.0**	**5.0**	**-25.0**	**-40.0**	**-10.0**	**5.0**	**-25.0**	**-40.0**	**-10.0**
Exchange rates												
CZK/USD (average)	23.2	24.6	22.6	**23.1**	**22.9**	**22.6**	**22.3**	**22.1**	**21.9**	**21.8**	**21.8**	**21.6**
CZK/EUR (average)	25.6	27.1	26.5	**27.2**	**27.0**	**26.7**	**26.5**	**26.3**	**26.1**	**26.0**	**25.9**	**25.8**
CZK/EUR (%, y-o-y, real (CPI euro area), average)	-2.2	2.9	-0.2	**3.3**	**3.2**	**-2.6**	**0.0**	**-3.3**	**-3.4**	**-3.2**	**-2.9**	**-2.5**
CZK/EUR (%, y-o-y, real (PPI euro area), average)	-2.0	3.1	1.2	**4.2**	**5.0**	**0.4**	**1.8**	**-1.5**	**-2.5**	**-2.4**	**-2.1**	**-1.6**
Foreign trade prices												
Prices of exports of goods (%, y-o-y, average)	-1.4	2.6	**0.3**	**2.9**	**3.2**	**-1.0**	**1.5**	**-0.5**	**-0.5**	**-0.2**	**0.0**	**0.4**
Prices of imports of goods (%, y-o-y, average)	-1.7	-0.5	**-2.1**	**0.5**	**1.3**	**-0.6**	**2.1**	**-0.3**	**-0.4**	**0.1**	**0.1**	**0.4**
MONEY AND INTEREST RATES												
M3 (%, y-o-y, average)	8.6	8.1	**8.6**	**9.2**	**8.6**	**8.1**	**7.3**	**6.6**	**6.5**	**6.6**	**6.7**	**6.9**
2W repo rate (%, end-of-period, CNB forecast = average)	1.00	0.25	0.25	**0.21**	**0.25**	**0.48**	**0.77**	**0.95**	**1.12**	**1.23**	**1.35**	**1.52**
3M PRIBOR (%, average)	2.1	0.6	0.3	**0.3**	**0.3**	**0.6**	**0.9**	**1.1**	**1.2**	**1.3**	**1.4**	**1.6**

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

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

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

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