NBP Narodowy Bank Polski

Monetary Policy Council

July 2020

Inflation Report

The Inflation Report presents the Monetary Policy Council's assessment of the macroeconomic developments influencing inflation. The projection of inflation and GDP presented in Chapter 4 was prepared at the Economic Analysis Department of Narodowy Bank Polski (NBP). In terms of the contents, works on the projection were supervised by Piotr Szpunar, Director of the Economic Analysis Department. The projection was prepared with the use of the NECMOD macroeconomic model. The NBP Management Board approved the submission of the projection to the Monetary Policy Council. The projection of inflation and GDP is one of the inputs to the Monetary Policy Council's decision-making process.

The time frame of the analysis presented in the *Report* is conditioned by the availability of macroeconomic data. In turn, the periodisation of the analysis (breakdown into sub-periods) is conditioned by the development of particular variables. The cut-off date for the data in this *Report* was 2 July 2020.

This *Inflation Report* is a translation of NBP *Raport o inflacji* in Polish. In case of discrepancies, the original prevails.

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Summary

Since the publication of the previous *Report*, in response to the Covid-19 pandemic, many countries introduced restrictions aimed at stabilising the epidemic situation. Combined with a sharp increase in uncertainty and concerns about the current and future economic situation from companies and households, this led to the collapse of global economic activity at the turn of 2020 Q1. In view of the improving epidemic situation in some economies and the progressive easing of the restrictions, since May 2020 signs have been appearing of a gradual recovery in global economic activity. This is supported by the fiscal measures taken in many countries in order to mitigate the effects of the pandemic and stimulate the economy, as well as the strong monetary policy easing in response to the pandemic-related economic threats. However, global economic activity remains significantly lower than a year ago, and uncertainty about the pace and persistence of the improvement in economic conditions persists.

Inflation in the world economy has significantly declined since the publication of the previous *Report*. This was mainly driven by a strong fall in energy price growth, triggered by the drop in energy commodity prices in the global markets. Core inflation indicators have also decreased, yet moderately in many economies up to now. At the same time, food price growth in many economies has increased.

In response to the spread of the Covid-19 pandemic, many central banks – in both advanced and emerging market economies – have embarked on an unprecedented easing of monetary policy, cutting interest rates, launching or extending asset purchases, and undertaking other measures.

In March and April 2020, sentiment in global financial markets deteriorated sharply: the bond yields of many emerging market economies rose and global equity prices drop sharply. However, amid the significant easing of monetary policy by central banks and the gradual restoration of economic activity in many economies, in May and June the bond yields of many emerging market economies decreased below the levels prior to the pandemic. At the same time, global equity prices rose, yet remained lower than the average in February 2020. Since the publication of the previous *Report,* the US Treasury bond yields have fallen to record low levels, while yields on 10-year German bonds remained significantly negative.

In Poland, consumer price growth decreased significantly in recent months. In June 2020 – according to the Statistics Poland (GUS) flash estimate – it stood at 3.3% y/y. Since the publication of the previous *Report*, available measures of inflation expectations also decreased. The fall in inflation compared to 2020 Q1 was mainly driven by the decline in fuel prices for personal transport equipment as a result of the sharp drop in global oil prices, but also – to a lesser extent – by the decrease in food price growth. According to data as of May 2020, the fall in inflation was in turn contained by the increase in service price growth, including the prices of administered housing services.

At the beginning of 2020, economic conditions in Poland continued to be relatively favourable. However, from the middle of March 2020, economic activity declined sharply due to the Covid-19 pandemic, its adverse impact on economic agents' sentiment and the measures taken around the world and in Poland to limit the spread of the pandemic. The economic consequences of the pandemic were reflected to a

limited extent in the GDP data for 2020 Q1, according to which economic growth slowed down to 2.0% y/y (from 3.2% y/y in 2019 Q4). Both consumption growth (1.2% y/y against 3.3% y/y in 2019 Q4) and investment growth (0.9% y/y against 6.1% y/y 2019 Q4) decreased.

Available data for 2020 Q2 indicate a sharp fall in economic activity, with the largest contraction taking place in April. In May and June 2020, economic conditions improved along with the lifting of restrictions and some recovery in sentiment, although in annual terms a significant fall in activity persisted. Particularly large deterioration in economic conditions was seen in services most affected by the restrictions: accommodation and food, entertainment and passenger transport. Incoming data indicate also a marked fall in consumption in 2020 Q2, which may be associated with the restrictions imposed due to the pandemic, a deterioration in the labour market situation and a slowdown in consumer credit growth. There was a sharp drop in both industrial output and external trade, while economic activity in construction declined to a lesser extent.

Under these circumstances, the situation in the labour market deteriorated, although relatively slightly. In particular, the number of employed people fell, unemployment rose, and wage growth declined. In May, the seasonally adjusted registered unemployment rate amounted to 6.1% (against 5.1% in March 2020). Its rise was contained by a reduction in working hours and more frequent use of sickness or care allowance. Data for the first months of 2020 Q2 from the enterprise sector also show a decline in nominal wage growth in this sector. In May, it amounted to 1.2% y/y (against 6.3% y/y in March 2020).

Since the publication of the previous *Report*, the Monetary Policy Council has eased monetary policy. The NBP reference rate has been lowered to 0.1% (from 1.5% at the beginning of March 2020) and the purchases of government securities and government-guaranteed debt securities in the secondary market have been conducted. Financial market participants now expect the NBP interest rates to be kept unchanged in the coming quarters.

Against this background, yields on Polish government bonds have declined markedly. This occurred despite the persistently high risk aversion in the global financial markets conducing to temporary surges in bond yields of some emerging market economies. The exchange rate of the zloty, after some weakening against the major currencies in March 2020, saw a slight appreciation in the subsequent months. Consequently, the scale of adjustment of the zloty exchange rate to the global shock caused by the pandemic and to the NBP monetary policy easing was limited.

Broad money (M3) growth in the economy accelerated since the publication of the previous *Report*. In particular, there was a temporary marked rise in demand for cash and the growth rate of corporate and households deposits increased. The rise in net credit to the central government had the highest share in the M3 aggregate growth. At the same time, demand for household loans slowed down due to a lower pace of consumption loan growth and stabilisation of housing loan growth. Also the rate of growth of corporate loans decelerated.

In 2020 Q1, the current account balance grew to 1.3% of GDP (against 0.5% of GDP in 2019 Q4), and the total balance of the current and capital account increased to 3.5% of GDP (against 2.5% in 2019 Q4). Preliminary data for April 2020 show that the two balances remained positive and higher than a year ago. External balance indicators in 2020 Q1 evidenced that the Polish economy was well balanced. Poland's external debt to GDP ratio stayed lower than in the previous years and the ratio of net international investment position to GDP improved markedly.

The *Report* is structured as follows: Chapter 1 presents the analysis of economic conditions in the external environment of the Polish economy in terms of their impact on inflation developments in Poland. These developments and the domestic factors that might affect them have been described in Chapter 2. Chapter 3 includes *Minutes of the Monetary Policy Council decision-making meetings* held between March and June 2020, together with the *Information from the meeting of the Monetary Policy Council* in July 2020. Chapter 5 presents the Monetary Policy Council voting records from the meetings held between February and April 2020. Furthermore, the *Report* includes two boxes: *Monetary policy across the world in response to the Covid-19 pandemic* and *Monetary policy of Narodowy Bank Polski in response to the Covid-19 pandemic*.

Chapter 4 of the *Report* presents the projection for inflation and GDP based on the NECMOD model, which is one of the inputs into the Council's decision-making process on the NBP interest rates. In line with the July projection – prepared under the assumption of unchanged NBP interest rates and taking into account data available until 30 June 2020 – there is a 50-percent probability that the annual price growth will be in the range of 2.9–3.6% in 2020 (against 3.1–4.2% in the March 2020 projection), 0.3–2.2% in 2021 (compared to 1.7–3.6%) and 0.6–2.9% in 2022 (against 1.3–3.4%). At the same time, the annual GDP growth – according to this projection – will be with a 50-percent probability in the range of -7.2 – -4.2% in 2020 (against 2.5–3.9% in the March 2020 projection), 2.1–6.6% in 2021 (compared to 2.1–3.9%) and 1.9–6.0% in 2022 (against 1.8–3.7%).

1. External developments

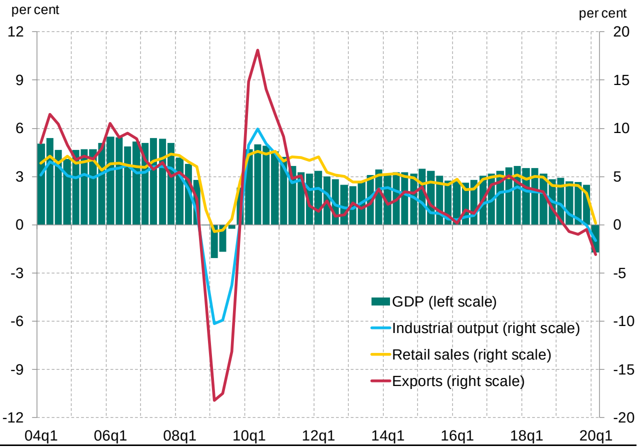
1.1 Economic activity abroad

Since the publication of the previous *Report*, global economic activity has collapsed (Figure 1.1) as a result of the Covid-19 pandemic.[1] In order to stabilise the epidemic situation, many countries introduced restrictions, including those on the movement and gathering of people, the closure of educational institutions and the temporary suspension of certain types of economic activity. Combined with a sharp increase in uncertainty and concerns about the current and future economic situation of companies and households, this led to the collapse of global economic activity at the turn of 2020 Q1.

In view of the improving epidemic situation in some economies and the progressive easing of the restrictions, since May 2020 signs have appeared of a gradual recovery of global economic activity. This has been supported by the fiscal measures taken in many countries in order to mitigate the effects of the pandemic and stimulate the economy, as well as the strong monetary policy easing in response to the pandemic-related economic threats. However, global economic activity remains significantly lower than a year ago and uncertainty about the pace and sustainability of the improvement in economic conditions persists.

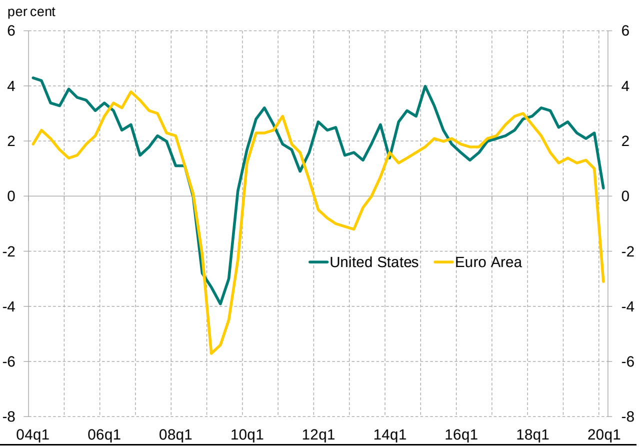
In the euro area, where the majority of the containment measures were introduced in March 2020, GDP decreased by 3.1% y/y in 2020 Q1[2] following growth of 1.0% y/y in 2019 Q4 (Figure

Figure 1.1 GDP growth and global economic activity indicators (y/y)



Source: Bloomberg, Centraal Planbureau, Eurostat and IMF data, NBP calculations.
GDP, industrial output and retail sales – average annual growth in economies comprising 80% of global GDP in 2017, weighted by GDP. Exports – global export growth rate estimated by Centraal Planbureau.

Figure 1.2 Economic growth in selected advanced economies (y/y)



Source: Bloomberg data.

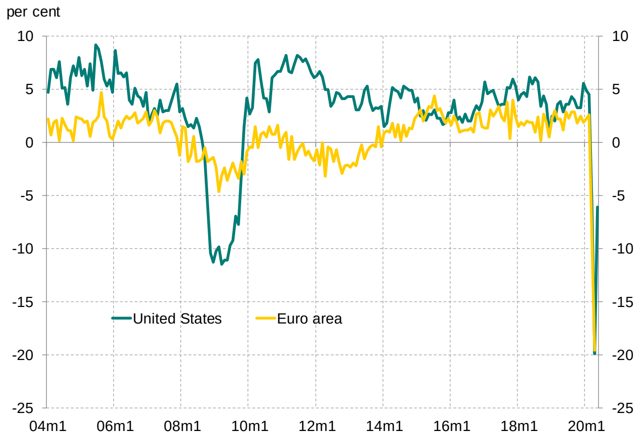
[1] On 11 March 2020 the World Health Organisation announced the Covid-19 outbreak as a pandemic.
[2] GDP decreased in the majority of economies of the euro area. The biggest falls in GDP were in France, Spain and Italy, countries which imposed the most stringent restrictions due to the difficult epidemiological situation.

1.2). The downturn in economic activity deepened in April 2020: retail sales were 19.6% lower in this month than a year ago (Figure 1.3), while industrial production was 28.0% lower (Figure 1.4). This was accompanied by an increase in unemployment. However, taking into account the scale of the collapse in economic activity, the increase in unemployment was relatively small due to employment support programmes introduced by the individual states. Economic indicators show that, beginning in May 2020, activity in the euro area recovers following the gradual easing of the containment measures; however, it remains markedly lower than a year ago.

In Germany, GDP fell in 2020 Q1 to a lesser extent than the euro area average (by 2.3% y/y in 2020 Q1 following growth of 0.4% y/y in 2019 Q4). In April 2020, economic activity in the German economy continued to decline;[3] yet from May – along with lifting of some of the restrictions – economic indicators, including household and corporate sentiment, have improved. In May, retail sales grew by 7,2% y/y, but many indicators remained markedly lower than before the pandemic, and the restoration of activity in some sectors, including in the important for the German economy automotive sector, proceeds slowly.[4]

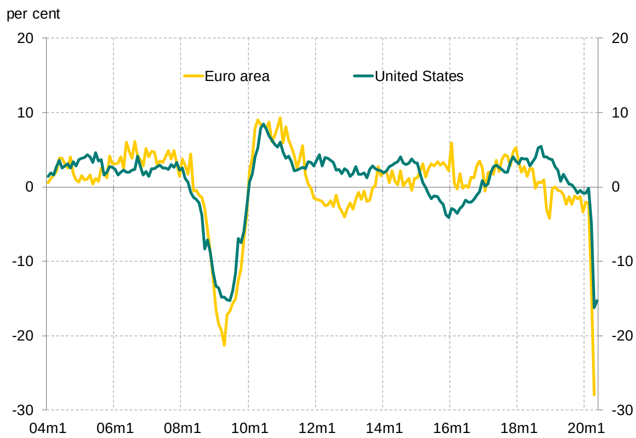
In March 2020, the Covid-19 pandemic also took a heavy toll on economic activity in Central and Eastern Europe, resulting in a slowdown in GDP growth in 2020 Q1 (Figure 1.5). In April 2020, the collapse in activity in the Central and Eastern European countries deepened and double digit falls in industrial output and retail sales were recorded, while in some countries there was also a significant increase in unemployment. The lifting of the containment measures began in May and was accompanied by an improvement in corporate and

Figure 1.3 Retail sales in selected advanced economies (y/y)



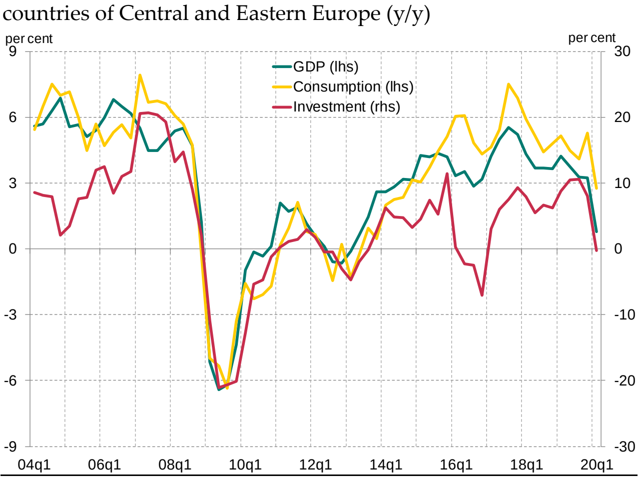
Source: Bloomberg data.

Figure 1.4 Industrial production in selected advanced economies (y/y)



Source: Bloomberg data.

Figure 1.5 Economic growth and its selected components in countries of Central and Eastern Europe (y/y)



Source: Eurostat data, NBP calculations.

GDP-weighted annual growth rate of the total GDP, private consumption and gross fixed capital formation in non-euro area Central and Eastern European EU member states (excluding Poland): Bulgaria, Czech Republic, Croatia, Hungary and Romania.

[3] Manufacturing output in Germany fell in April 2020 by 31.2% y/y (including a 74.4% y/y fall in car production, which was affected by the production stoppages introduced during the pandemic by the automotive companies) and retail sales by 6.1% y/y. Construction output registered slight growth (of 0.9% y/y).

[4] According to the estimates of Association of the Automotive Industry (Verband der Automobilindustrie), growth of car production in May remained strongly negative, amounting to -66% y/y.

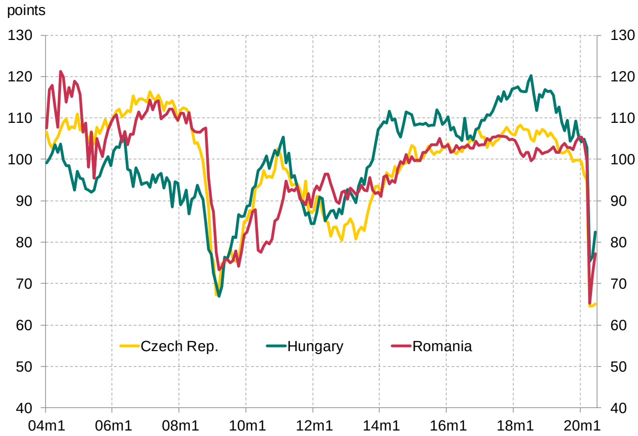
consumer sentiment, which nevertheless remains at a low level (Figure 1.6).

In March 2020, activity also began to decline rapidly in the United States. Yet with robust activity growth in the first months of 2020, annual GDP growth in the whole of 2020 Q1 remained positive (0.3% y/y against 2.3% y/y in 2019 Q4). The lockdown of the economy was accompanied by a sharp drop in employment. In April, the unemployment rate soared to 14.7% (from 3.5% in February).[5] The falls in industrial output, retail sales and construction activity indicators also deepened. In May, the easing of the restrictions in certain states was accompanied by an improvement in some economic indicators; however, retail sales and industrial output remained significantly lower than a year before. In spite of the solid employment growth in May and June, unemployment rate remained elevated (11.1% in June).

In China, where the Covid-19 pandemic caused GDP to fall by 6.8% y/y in 2020 Q1 (Figure 1.7), most sanitary restrictions had already been lifted at the end of 2020 Q1. In April and May, industrial output and investment recorded positive annual growth, and from May sentiment indicators in services and industry remain above the levels recorded just before the outbreak of the pandemic. However, weak foreign demand adversely affects the activity of companies. The recovery in consumer demand is relatively slow (annual retail sales growth in April and May remained negative), and the unemployment rate remains higher than before the pandemic.

In the remaining major emerging market economies, the impact of the pandemic on GDP growth in 2020 Q1 remained limited. However, in 2020 Q2 the epidemic situation in the majority of the emerging economies, including in India, Russia, Brazil and other South American countries,

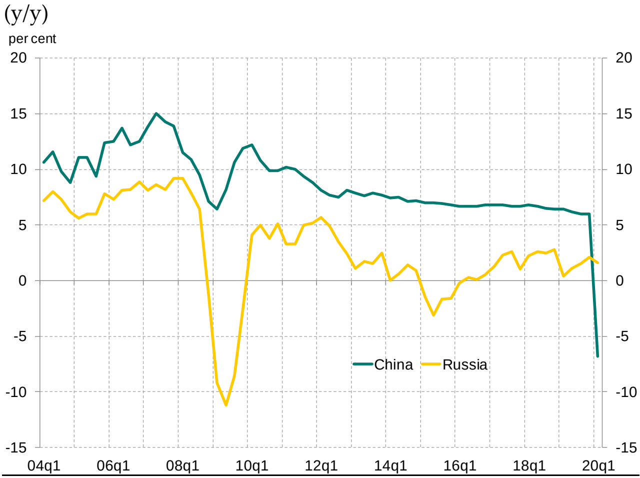
Figure 1.6 Economic Sentiment Indicator by the European Commission in Central and Eastern Europe countries (y/y)



Source: Eurostat data.

Economic Sentiment Indicator published by the European Commission is a composite indicator based on surveys of enterprises and households. Value of 100 points represents a long-term mean, increase in the indicators' value means improving sentiments.

Figure 1.7 Economic growth in selected emerging market economies (y/y)



Source: Bloomberg data.

[5] The unemployment rate recorded in the United States in April was the highest since its records began in 1948.

deteriorated significantly, bringing about a collapse in economic activity indicators.

1.2 Inflation developments abroad

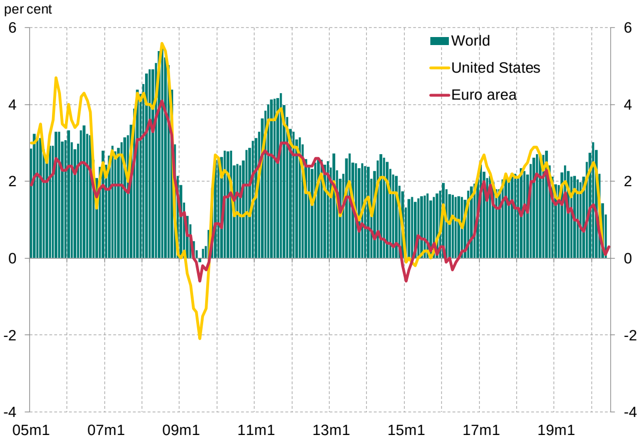
Since the publication of the previous *Report*, inflation in the global economy has significantly declined (Figure 1.8). This was mainly driven by a strong fall in energy price growth, triggered by the drop in energy commodity prices in the global markets (see Chapter 1.3 *Global commodity markets*). Core inflation indicators have also declined, yet up to now in many economies this decrease has been moderate.[6] At the same time, food price growth in many economies has increased.

HICP inflation in the euro area declined in recent months to 0.3% y/y in June 2020, while in many euro area economies it was negative in year-on-year terms. Falling energy prices were the main driving force behind lower inflation, whereas a marked increase in the prices of unprocessed food acted in the opposite direction. Core inflation posted a slight decline[7] (Figure 1.9).

In Central and Eastern European countries, consumer price growth also slowed down in recent months (Figure 1.10), showing similar trends in energy and food prices and core inflation as in the euro area. In May 2020, inflation in the Czech Republic declined to 2.9% y/y (from 3.7% y/y in February 2020), in Romania to 2.3% y/y (compared to 3.1% y/y in February 2020) and in Hungary to 2.2% y/y (compared to 4.4% in February 2020).

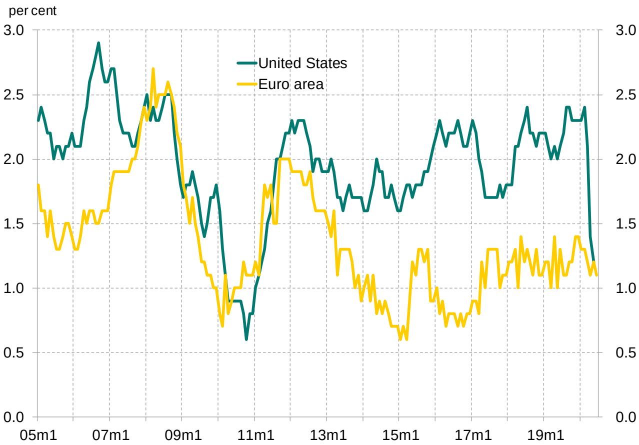
Since the publication of the previous *Report*, CPI inflation in the United States has fallen markedly (from 2.3% y/y in February 2020 to 0.1% y/y in May 2020). Apart from the energy price decline, this was due to a sharp drop in core inflation.[8] Prices in

Figure 1.8 CPI inflation globally and in selected economies (y/y)



Source: Bloomberg and IMF data, NBP calculations.
World – average consumer price inflation in economies comprising over 80% of global GDP, weighted by GDP (2017). The United States – annual CPI inflation. Euro area – annual HICP inflation.

Figure 1.9 Core inflation in the United States and the euro area (y/y)



Source: Bloomberg and Eurostat data.
The United States – annual CPI inflation less food and energy. Euro area – HICP inflation excluding energy and unprocessed food.

[6] Inflation measures are affected by the methods adopted by the statistical offices for quoting goods and services prices which could not be traded due to the imposed restrictions.
[7] Goods and services whose prices were imputed by the statistical offices of the euro area countries due to the lack of possibility of measurement accounted for as much as 24% of the HICP basket in May 2020, and 12% in June.
[8] In April 2020, core inflation in the United States posted the sharpest decline in month-on-month terms in the history of inflation readings, i.e. since 1957.

services sectors affected by the pandemic and the related restrictions (among others, prices of air tickets, accommodation, and car insurance), as well as prices of some goods (clothing and footwear) saw a significant fall in year-on-year terms.

1.3 Global commodity markets

Since the publication of the previous *Report*, both energy and agricultural commodity prices have fallen considerably as a result of the slump in demand driven by the Covid-19 pandemic.

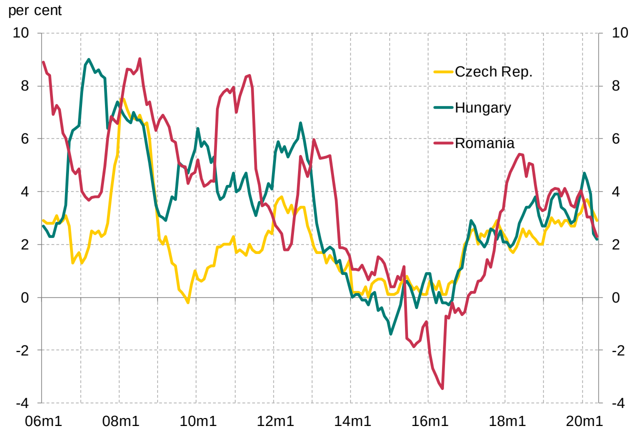
March 2020 saw a strong drop in the Brent crude oil prices, and in the second half of April these prices were approx. 70% lower than at the beginning of the year (Figure 1.11). Although prices of this commodity posted a slight increase along with the gradual unlocking of the global economy in May and June, at the beginning of July the Brent crude oil price was still at a considerably lower level than a year before (by approx. 35%).

In the analysed period, also the decisions of the OPEC+ countries to cut oil production as from beginning of May (followed by the decisions to extend this period until the end of July),[9] as well as extraction cuts by oil producers in other countries, limited the decline in oil prices.

Sharply falling economic activity, combined with higher temperatures in the winter season than the previous years' average, put a downward pressure also on the prices of hard coal and natural gas. As a result, natural gas prices remain at a low level, which is additionally supported by large stocks of this commodity in Europe. The decline in coal prices, in turn, was additionally driven by increased production of renewable energy. Prices of both commodities picked up slightly in June as a result of restarting economic activity.

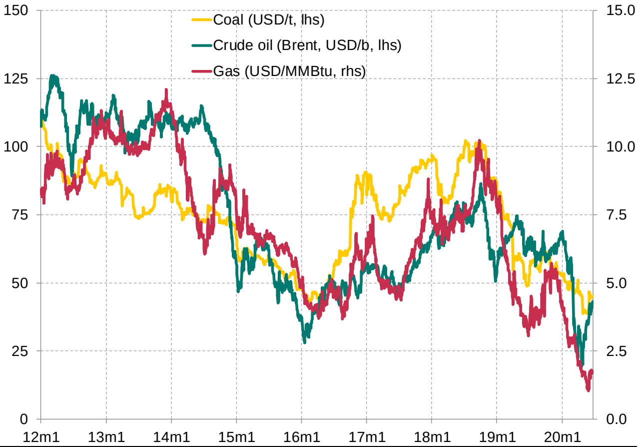
Similarly, since the publication of the previous *Report*, prices of the majority of commodities

Figure 1.10 CPI inflation rates in the Czech Republic, Romania and Hungary (y/y)



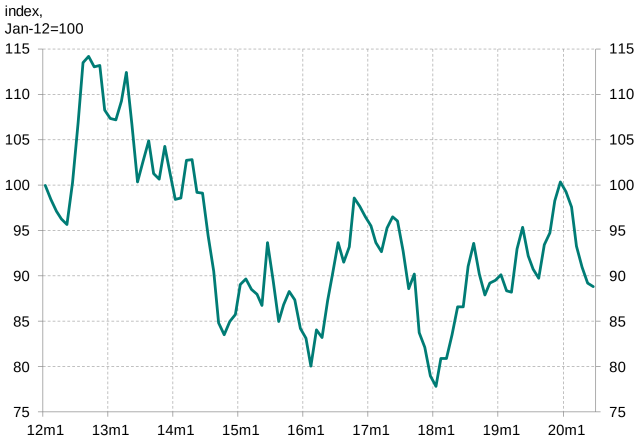
Source: Bloomberg data.

Figure 1.11 Energy commodity prices



Source: Bloomberg data, NBP calculations.
USD/b – price expressed in US dollar per barrel of oil. USD/t – price expressed in US dollar per metric tonne. USD/MMBtu – price expressed in US dollar per million of British Thermal Unit, i.e. unit representing a quantity of energy required to raise the temperature of 1 pound (approx. 0.45 kg) of water by 1°F (slightly more than 0.5°C).

Figure 1.12 Index of agricultural commodity prices



Source: Bloomberg data, NBP calculations.
Index of agricultural prices includes prices of wheat, colza, pork, potatoes, sugar, cocoa, coffee, skimmed milk powder, butter and frozen concentrated orange juice. The weights reflect the consumption structure of Polish households.

[9] These decisions provide for a gradual increase in production in the subsequent months.

included in the index of agricultural commodity prices posted a decline[10] (Figure 1.12). This decline was observed amid reduced private consumption in many economies and considerably lower demand from the "accommodation and food service activities" sector as well as the stocks of agricultural products remaining large.

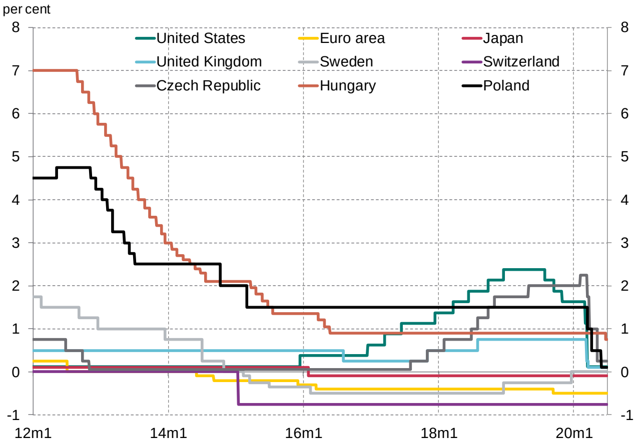
1.4 Monetary policy abroad

In response to the spread of the Covid-19 pandemic, many central banks – in both advanced and emerging market economies – have embarked on an unprecedented easing of monetary policy, cutting interest rates, launching or extending asset purchases, and undertaking other measures that increase liquidity in the banking sector (Figure 1.13; Figure 1.14).

Since interest rates in the euro area have already stayed below zero for a long time (with the deposit rate currently at -0.5%), the European Central Bank has kept them unchanged in recent months. However, the scale of the asset purchase programme has been increased significantly (by a total of EUR 1,470 billion until June 2021).[11] In addition, the Governing Council of the ECB has eased the terms of the TLTRO-III credit support scheme[12] and announced additional long-term operations supplying banks with liquidity (LTRO and PELTRO), operations supplying liquidity in US dollars as part of the swap lines with the Fed and repo operations supplying liquidity in euro to foreign central banks.

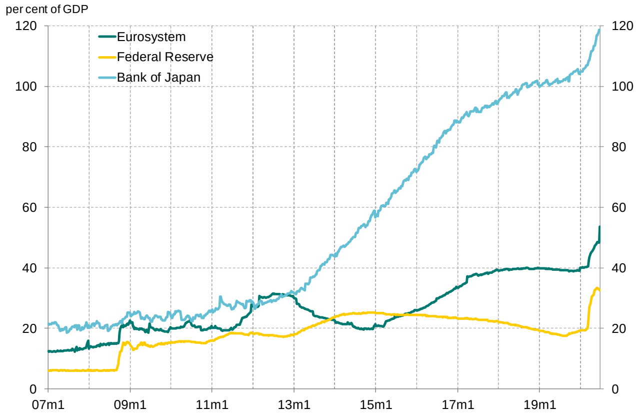
Market participants expect that ECB interest rates will remain at the current or lower levels for the next 3 years (Figure 1.15).

Figure 1.13 Interest rates of selected central banks



Source: Bloomberg data.
Central bank interest rate: for the United States – the midpoint of the *fed funds* range; for the euro area – the *deposit facility*; for the United Kingdom – the *Bank Rate*; for Japan – the *Complementary Deposit Facility*; for Sweden – the 1W repo rate; for Switzerland – the *policy rate*; for the Czech Republic – the 2W repo rate; for Hungary – the *base rate* (among others, interest on 1W deposit); for Poland – the NBP reference rate.

Figure 1.14 Total assets of major central banks as a per cent of GDP



Source: Bloomberg and OECD data, NBP calculations.
GDP data quarterly, annualised and seasonally adjusted.

[10] Price increases were noted in the case of two agricultural commodities included in the index of agricultural commodity prices: frozen orange juice – due to changing consumer preferences and to a small extent sugar – as a result of an expected production drop and an increase of demand for sugar as a biofuel.
[11] The ECB launched the PEPP (pandemic emergency purchase programme) with a current total value of EUR 1,350 billion and increased the scale of the already conducted APP (asset purchase programme) by EUR 120 billion.
[12] Above all, interest on loans under TLTRO-III was cut by a total of 0.5 percentage points. The minimum interest is 0.5 percentage points below the deposit rate (currently -1%), and the maximum is equal to the deposit rate (currently -0.5%).

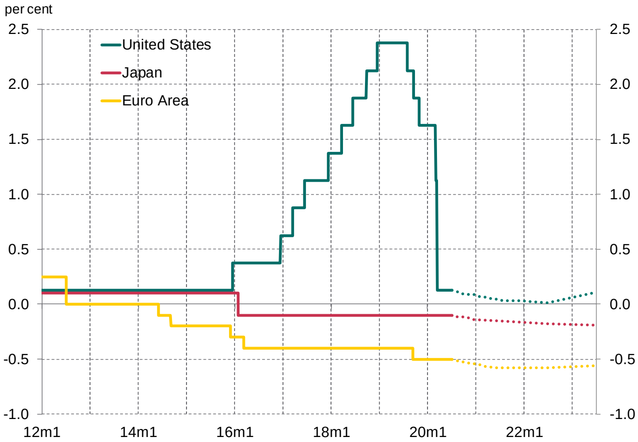
Since the publication of the previous *Report*, the US Federal Reserve (the Fed) has cut interest rates by 1.5 percentage points (to 0.00%-0.25%) and launched large-scale asset purchase programmes. Under these programmes the Fed is purchasing Treasury bonds, mortgage-backed securities (MBS) and corporate and municipal bonds.[13] Moreover, the scale of repo operations has been increased significantly and lending support programmes as well as swap lines with a dozen or so central banks have been announced. Market participants expect that the Fed will keep interest rates at the current or lower level for a minimum of 2 years.

The Bank of Japan has kept interest rates and the 10-year bond yield target unchanged (at -0.1% and 0%, respectively). However, it has increased the scale of purchases of corporate bonds and equities (ETFs), lifted the limit on purchases of government bonds, and launched credit support programmes.

In response to the Covid-19 pandemic, the central banks of the remaining advanced and emerging market economies, including the central banks of Central and Eastern European countries, have also eased monetary policy on an unprecedented scale (more information on the monetary policy of central banks in recent months can be found in the box "*Monetary policy across the world in response to the Covid-19 pandemic*").

In particular, after raising interest rates in February 2020, in subsequent months the Czech National Bank cut interest rates by a total of 2 percentage points to 0.25% and launched additional operations supplying banks with liquidity.

Figure 1.15 Historical and expected interest rates in the United States, euro area and Japan



Source: Bloomberg data.

Central bank interest rate: for the United States – the midpoint of the *fed funds* range; for the euro area – the *deposit facility*; for Japan – the *Complementary Deposit Facility*. Market expectations based on fed funds futures and forward contracts for the United States and OIS and forward contracts for the euro area and Japan.

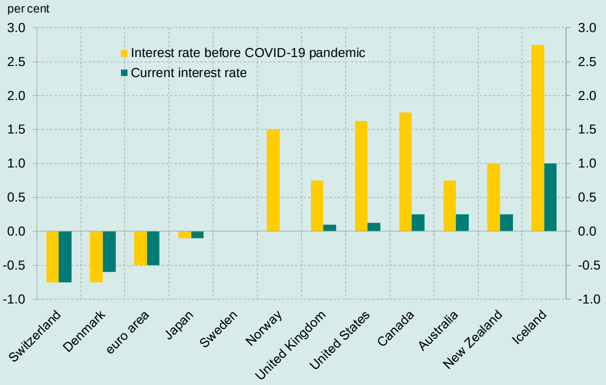
[13] The size of the corporate bond purchase programmes in the primary and secondary markets amounts to a total of USD 750 billion, while the size of the municipal bond purchase programme is USD 500 billion. The scale of the purchases of Treasury bonds and MBS has not been defined.

Box 1: Monetary policy across the world in response to the Covid-19 pandemic

In order to limit the adverse economic consequences of the pandemic, many central banks have eased monetary policy markedly in the past few months. The measures taken by central banks were unprecedented both in terms of scope and scale. They included interest rate cuts and the launch or extension of asset purchase programmes as well as other actions. In this box, an analysis was conducted of the actions taken in response to the Covid-19 pandemic by 31 central banks of selected economies.[14]

Since the beginning of the crisis caused by the Covid-19 pandemic,[15] all the central banks in question that maintained positive interest rates before the outbreak of the pandemic have reduced those rates. As a result, interest rates in most of the analysed economies are currently running at historically low levels, with near-zero interest rates observed in almost all advanced economies and some emerging market ones. In some advanced economies these rates are negative (Figure B.1.1; Figure B.1.2).

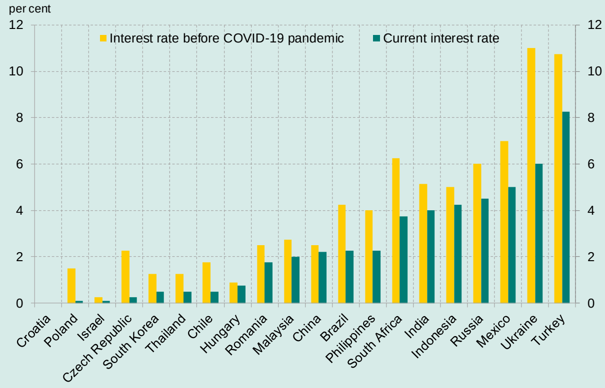
Figure B.1.1 Interest rates of selected advanced economy central banks now and before the Covid-19 pandemic



Source: Bloomberg data.

Central bank interest rate: for the United States – the midpoint of the *fed funds* range; for the euro area – the *deposit facility*; for the United Kingdom – the *Bank Rate*; for Japan – the *Complementary Deposit Facility*; for Sweden – the 1W repo rate; for Switzerland – the *policy rate*; for Canada – the *overnight rate target*; for Australia – the *cash rate*; for New Zealand – the *Official Cash Rate*; for Iceland – the *7D deposit rate*.

Figure B.1.2 Interest rates of selected emerging market economy central banks now and before the Covid-19 pandemic



Source: Bloomberg data.

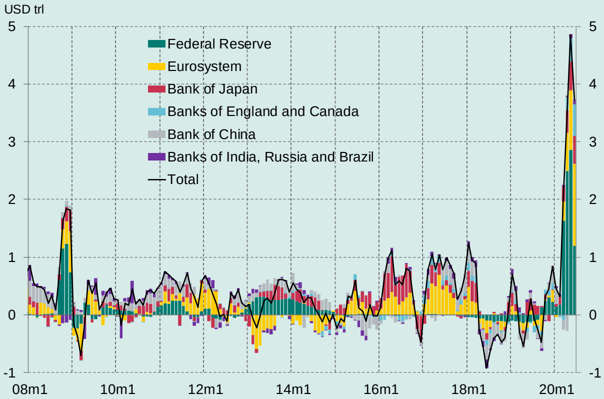
Central bank interest rate: for Brazil – the *Selic Rate Target*; for Russia – the 1W repo rate; for India – the repo rate; for China – the *7D reverse-repo rate*; for the Czech Republic – the 2W repo rate; for Romania – the *Policy rate*; for Hungary – the *base rate* (among others, interest on 1W deposit); for Israel – the *BOI interest rate*; for Turkey – the *1W* repo rate; for Indonesia – the *7D repo rate*; for Thailand – the *1D repurchase rate*; for Malaysia – the Overnight Policy Rate; for the Philippines – the *ON reverse-repo rate*; for Ukraine – the *key policy rate*; for Mexico – the *overnight interbank funding rate target*; for Korea – the *Base Rate*; for South Africa – the repo rate; for Chile – the *monetary policy interest rate*; for Croatia – the *O/N deposit rate,* for Poland – the NBP reference rate.

Asset purchase programmes

Due to the extent of the economic shock, many central banks have additionally eased their monetary policy by introducing or expanding asset purchase programmes. As a result, 20 of the analysed central banks, including 11 emerging market economy central banks, are currently running such programmes. Moreover, the overall global scale of these programmes is much greater than ever before (Figure B.1.3).

[14] The analysis covers measures launched by the central banks of the following advanced economies: Australia, Canada, Denmark, the euro area, Iceland, Japan, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States; and the following emerging ones: Brazil, Chile, China, Croatia, the Czech Republic, Hungary, India, Indonesia, Israel, Malaysia, Mexico, the Philippines, Romania, Russia, South Africa, South Korea, Thailand, Turkey and Ukraine.
[15] The box takes into account the decisions that central banks motivated with the spread of the coronavirus epidemic – in most cases, these decisions were made starting in the last week of February.

Figure B.1.3 3-month change in the total assets of the G-7 and BRIC central banks



Source: Bloomberg, Bank of England, Bank of Brazil and Bank of Russia data, NBP calculations.

Data for the Bank of England available from September 2013, for the Bank of Russia from December 2014 to May 2020, and for the Banks of China and Brazil until May 2020.

Under these asset purchase programmes, the analysed banks purchase mainly government bonds (Table B.1.1). Some central banks, particularly in the advanced economies, purchase also private sector securities (such as corporate bonds, commercial papers, covered bonds, mortgage bonds, mortgage backed securities) or municipal bonds.

Most central banks do not communicate their expectations concerning the target scale and pace of asset purchases under the programmes they conduct. Those central banks that release such information emphasise that the target amount may be increased.

The analysis of the implementation of the asset purchase programmes so far shows that the scale of the purchases varies across the economies (Figure B.1.4; Figure B.1.5). It was the largest in the case of the Federal Reserve, which has bought assets worth 11% of GDP (Figure B.1.4).[16] Considering the size of the US economy, it was also the largest nominal amount of asset purchases.

Figure B.1.4 Scale of the asset purchase programmes conducted by central banks in the analysed advanced economies to date

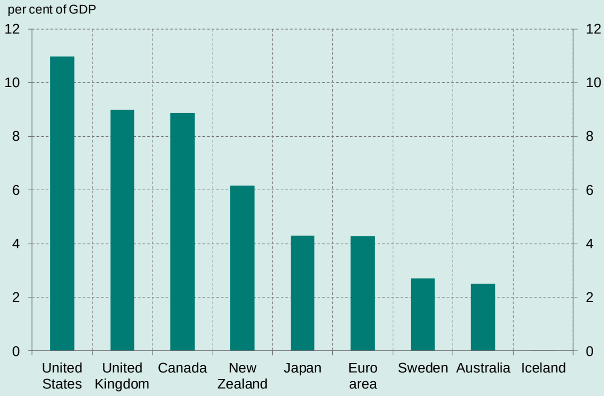
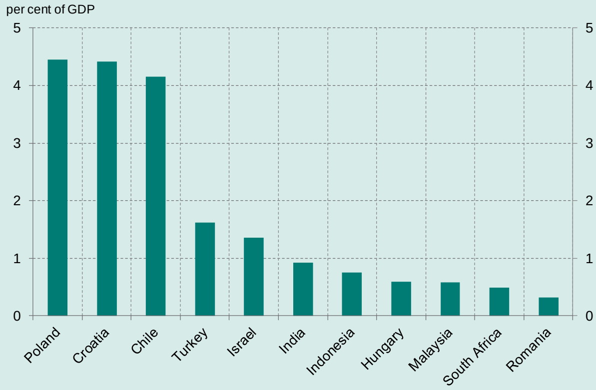


Figure B.1.5 Scale of the asset purchase programmes conducted by central banks in the analysed emerging market economies to date



Source: NBP compilation based on central bank websites; GDP data from OECD and Bloomberg.

Scale of the purchases to date – the last available data (as of 2 July in the case of data released on an ongoing basis and the euro area, third or fourth week of June in the case of weekly data, and end of May in the case of monthly data, 10 July in case of Poland).

[16] In relation to the 2019 GDP.

Other central bank measures

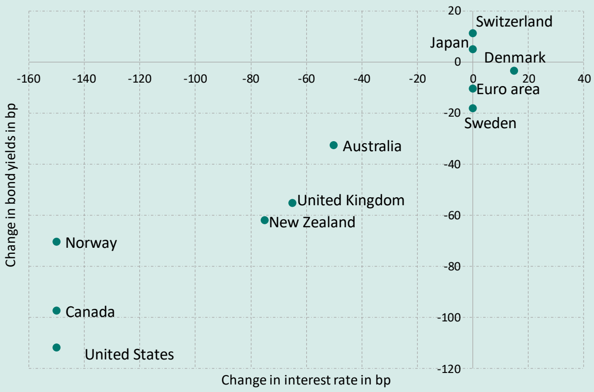
Apart from the above, almost all of the central banks under review have expanded the scope of their liquidity-providing operations, both unconditional ones and those contingent on banks increasing or not limiting their lending. At the same time, some central banks have carried out foreign exchange interventions. Moreover, in order to facilitate access to dollar funding, the Fed has announced the launch of USD-denominated repo transactions available for foreign central banks and established swap lines with several central banks. The ECB has launched similar measures to increase the availability of euro funding.

The effects of the central bank measures so far

It is difficult to assess the impact of the above central bank measures on asset prices and macroeconomic variables due to the simultaneous use of several instruments, the scale and the unprecedented nature of the current crisis, as well as the lags occurring in monetary policy transmission.

Nevertheless, it can be observed that in many economies the above listed central bank actions have been conducive to milder monetary conditions, which initially tightened as the pandemic spread. In particular, yields on government bonds have declined, both in the advanced and many of the emerging market economies, especially those with an investment grade rating (Figure B.1.6; Figure B.1.7). At the same time, prices of other assets, including shares, have risen (see chapter 1.5 *International financial markets*). By easing monetary conditions, the central bank actions in response to the Covid-19 pandemic are helping to contain the scale of the global recession and will support the return of the global economy to the growth path.

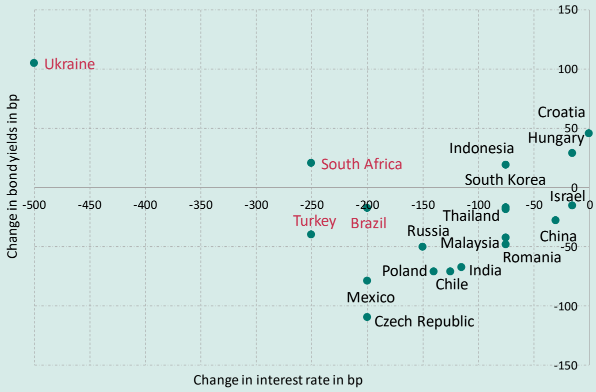
Figure B.1.6 Changes in yields on 10-year government bonds vs changes in the central bank interest rates in selected advanced economies



Source: NBP calculations based on Bloomberg data.

Note: The change in the bond yield is the difference of the yield of 2 July 2020 and the yield observed at the beginning of 2020. The yield for the euro area is calculated as the average yield in the six largest economies of the euro area weighted by the value of their central governments' debt securities.

Figure B.1.7 Changes in yields on 10-year government bonds vs changes in the central bank interest rates in selected emerging market economies



Source: NBP calculations based on Bloomberg data.

Note: Countries without an investment grade rating are marked in red. The change in the bond yield is the difference of the yield of 2 July 2020 and the yield observed at the beginning of 2020.

Table B.1.1 Central bank asset purchase programmes across the world in response to the Covid-19 pandemic

Advanced economies	Composition	Declared scale as % GDP	Purchases to date	
			Total	Government bonds
United States	government bonds, MBS, commercial papers, corporate bonds, municipal bills and bonds	Overall scale undeclared, declared for some of the assets (corporate and municipal bonds)	11.0% GDP	8.1% GDP
Euro area	government bonds, corporate bonds, commercial papers, covered bonds, ABS	14.9% GDP until June 2021	4.5% GDP	3.6% GDP
Japan	government bills and bonds, corporate bonds, commercial papers, shares (ETF), REIT	Overall scale undeclared, declared only for private assets	4.3% GDP	3.0% GDP
United Kingdom	government bonds, corporate bonds, commercial papers	13.6% GDP	9.0% GDP	NA
Sweden	government bonds, municipal bonds, mortgage bonds, commercial papers, corporate bonds	10.0% GDP	2.7% GDP	0.5% GDP
Canada	government bills and bonds, banker's acceptances, commercial papers, corporate bonds, mortgage bonds, municipal bonds	Overall scale undeclared, declared only for some of the assets (government, municipal and corporate bonds)	8.9% GDP	7.8% GDP
Australia	government bonds	Undeclared (target for 3Y bond yields)	2.5% GDP	2.5% GDP
New Zealand	government bonds, municipal bonds	18.9% GDP	6.2% GDP	5.9% GDP
Iceland	government bonds	5.2% GDP	0.02% GDP	0.02% GDP
Emerging economies	**Composition**	**Declared scale as % GDP**	**Purchases to date**	
			Total	Government bonds
Hungary	government bonds, mortgage bonds, corporate bonds	Overall scale undeclared, declared for corporate bonds	0.6% GDP	0.3% GDP
Croatia	government bonds	Undeclared	4.4% GDP	4.4% GDP
Romania	government bonds	Undeclared	0.3% GDP	0.3% GDP
India	government bonds	Undeclared	0.9% GDP	0.9% GDP
Indonesia	government bonds	Undeclared	0.8% GDP	0.8% GDP
Malaysia	government bonds	Undeclared	0.6% GDP	0.6% GDP
Turkey	government bonds	5% of total assets (1.5% GDP)	1.6% GDP	1.6% GDP
South Africa	government bonds	Undeclared	0.5% GDP	0.5% GDP
Israel	government bonds	3.5% GDP	1.4% GDP	1.4% GDP
South Korea	government bonds	Undeclared	NA	NA
Chile	bank bonds	5.3% GDP	4.2% GDP	0% GDP

Source: Own compilation based on central bank websites; GDP data based on OECD and Bloomberg.

NA means no data. Scale of the purchases to date – the last available data (as of 2 July in the case of data released on an ongoing basis and the euro area, third or fourth week of June in the case of weekly data and end of May in the case of monthly data). The calculation of the scale of purchases in relation to GDP is based on the 2019 GDP data.

1.5 International financial markets

Since the publication of the previous *Report*, financial asset prices have been subject to high volatility.

In March and April 2020, in the face of the spread of the pandemic and deterioration in the global macroeconomic outlook (see Chapter 1.1 *Economic activity abroad*), sentiment in global financial markets deteriorated sharply. However, amid significant easing of monetary policy by the central banks (see Chapter 1.4 *Monetary policy abroad*) and the gradual restoration of economic activity in many economies, May and June saw an improvement of sentiment in the financial markets.

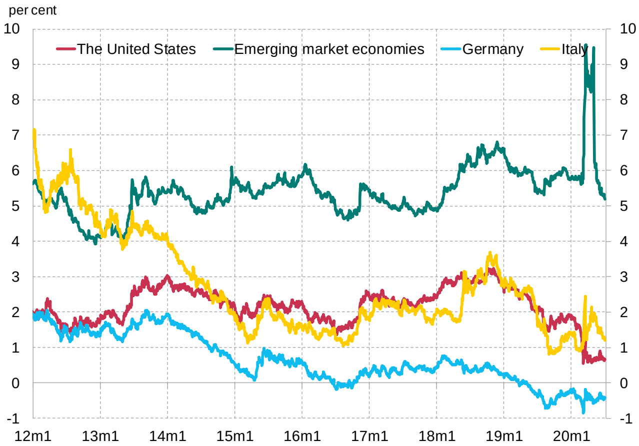
In recent months, the US Treasury bond yields have fallen to record low levels. This has taken place amid a collapse in activity and increased uncertainty in the global economy, as well as decisive easing of monetary policy by the Fed (Figure 1.16). As a result, in June 2020 average yields on the US Treasury 10-year bonds were 0.7%.

Yields on government bonds of the euro area countries were subject to increased volatility in recent months, which was due to the epidemic and macroeconomic situation in the individual countries. In particular, Italian bonds recorded relatively high price volatility, and in June 2020 their yields remained slightly higher than the average in February 2020. At the same time, in Germany – due to the more favourable epidemic and macroeconomic situation – bond yields remained significantly negative. The actions taken by the ECB, in particular the asset purchase programmes, had a stabilising effect on the prices of bonds of euro area countries. In effect, in June 2020 average yields on 10-year German bonds were -0.4%, and on 10-year Italian bonds 1.4%.

The bond yields of many emerging market economies temporarily rose sharply in March and April. However, as a result of improved investors' sentiment and the easing of monetary policy by the central banks of this group of countries, average yields decreased below the levels prior to the pandemic.

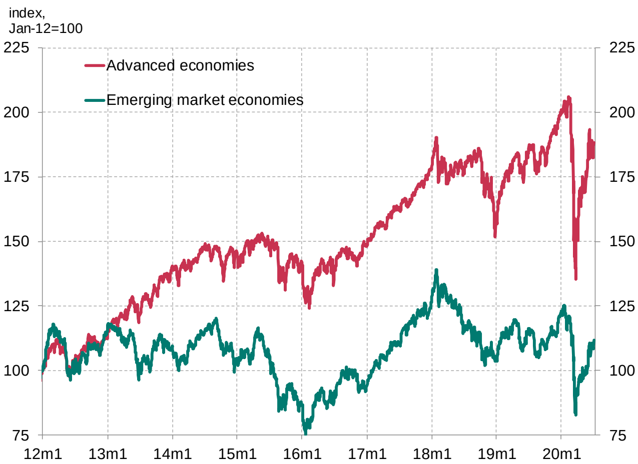
In both advanced and emerging market economies, equity prices dropped sharply in March 2020 (Figure 1.17). This was the result of the collapse of economic activity and deterioration of its outlook. Moreover, investors sold assets that they believed to be relatively risky, amid a marked deterioration in sentiment in financial markets, resulting in an increase in demand for assets perceived as the most

Figure 1.16 Government bond yields



Source: Bloomberg data.
The United States, Germany and Italy – 10 year government bond yield; emerging market economies – Bloomberg Barclays Emerging Markets Sovereigns.

Figure 1.17 Equity prices

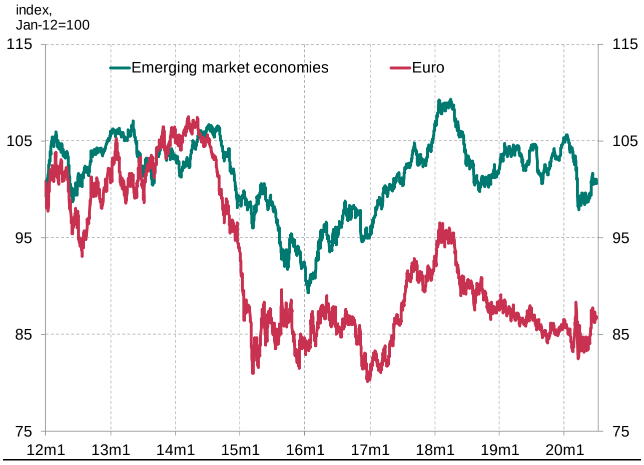


Source: Bloomberg data.
Advanced economies – MSCI World Equity Index; emerging market economies – MSCI Emerging Markets Equity Index.

liquid and safe. Amid gradual recovery of economic activity and significant easing of monetary conditions by the central banks, in the successive months equity prices rose, yet remained lower than the average in February 2020.

In recent months, the exchange rate of the euro against the US dollar has fluctuated more widely along with the changing epidemic situation and the measures taken by the ECB and the Fed (Figure 1.18). At the end of the period in question (in June 2020), the euro was slightly stronger against the US dollar than before the pandemic. After depreciating in March 2020, in the following months the currencies of the emerging market economies gradually appreciated, yet remained weaker than at the beginning of the year.

Figure 1.18 Exchange rates against the US dollar (rise indicates appreciation)



Source: Bloomberg data, NBP calculations.
Emerging market economies – MSCI Emerging Market Currency Index.

2. Domestic economy

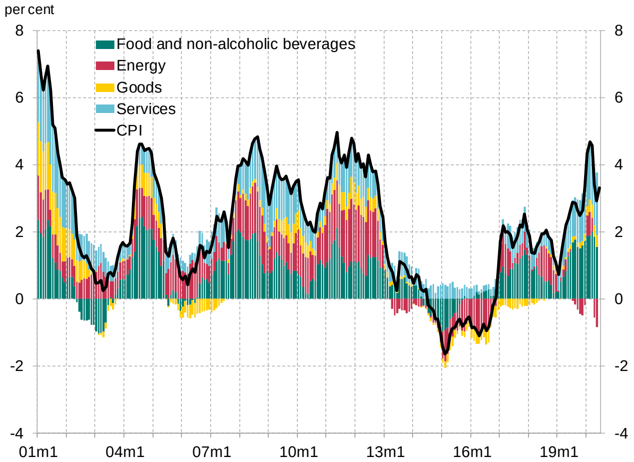
2.1 Inflation developments

After a temporary increase in 2020 Q1[17], consumer price growth in Poland decreased significantly in recent months.[18] In June 2020 – according to the Statistics Poland (GUS) flash estimate – it stood at 3.3% y/y (Figure 2.1). Since the publication of the previous *Report*, available measures of inflation expectations also decreased.

The fall in inflation compared to 2020 Q1 was mainly due to the decline in fuel prices for personal transport equipment as a result of the sharp drop in global oil prices (see Chapter 1.3 *Global commodity markets*), and – to a lesser extent – due to the decrease in food price growth. According to data as of May 2020, the fall in inflation was, in turn, limited by the increase in service price growth, including the prices of administered housing services. At the same time, in the "services" category a significant share of prices was estimated (imputed).[19]

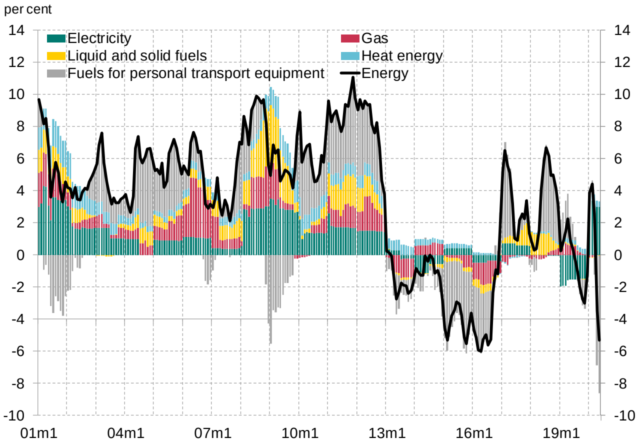
Since the publication of the previous *Report*, annual growth in energy prices fell to a negative level and in May amounted to -5.3% y/y (against 4.4% y/y in February 2020; Figure 2.2). The fall in energy prices

Figure 2.1 Composition of CPI inflation (y/y)



Source: Statistics Poland (GUS) data, NBP calculations.

Figure 2.2 Energy price growth and its components (y/y)



Source: Statistics Poland (GUS) data, NBP calculations.

[17] The rise of inflation at the beginning of 2020 was driven by an increase in regulated prices of electricity for households, fuel prices, waste disposal charges and also higher excise tax on alcoholic beverages and tobacco products as well as a further growth in unprocessed food prices.

[18] The restrictions related to the Covid-19 epidemic made the collection of data on retail prices difficult, and also led to the suspension of transactions in the markets of some consumer goods and services. For this reason, Eurostat prepared guidelines on the calculation of harmonised indices of consumer prices (HICP) in the context of the Covid-19 crisis (see https://stat.gov.pl/obszary-tematyczne/ceny-handel/wskazniki-cen/wytyczne-dotyczace-opracowania-hicp-w-kontekscie-kryzysu-zwiazanego-z-covid-19,19,1.html, available in Polish only). The Eurostat's guidelines were followed by the Statiscs Poland (GUS) when taking into account the national characteristics of the study and its requirements, both in the calculations of HICP and of national price indices of consumer goods and services (CPI). According to the Eurostat data, the share of imputed prices in the HCIP index for Poland in May 2020 was 11% (compared to approx. 19% in April 2020).

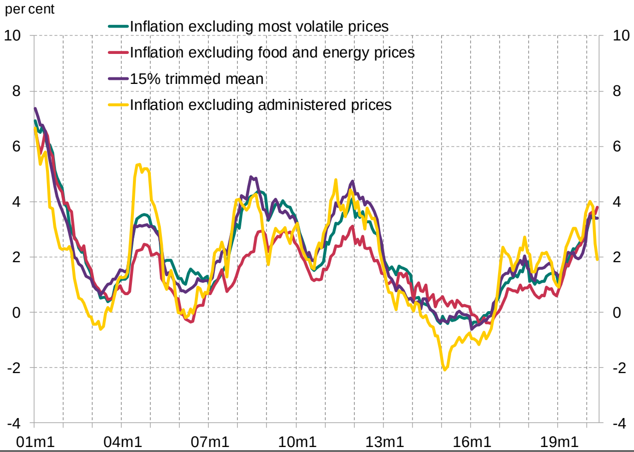
[19] In May 2020, the share of estimated data exceeded 50% in the following categories: hospital services, recreational and sporting services, and package holidays.

was the result of lower fuel prices driven by the drop in global oil prices. Alongside that, the increase in electricity prices due to the introduction of higher tariffs on its sale and distribution in January and February 2020, additionally strengthened by the statistical base effect[20], acted in the opposite direction on annual electricity price growth.

In recent months, the annual growth in prices of food and non-alcoholic beverages also declined (to 6.2% y/y in May 2020 and – according to the Statistics Poland (GUS) flash estimate – to 5.8% y/y in June 2020 from 7.5% y/y in February 2020). According to data as of May 2020, this was the result of slower growth in unprocessed food prices – primarily of poultry, pork[21] and vegetables (in particular potatoes) – observed amid weakening demand from the "accommodation and food service activities" sector in many EU countries. In turn, increase in the prices of fruit (in particular apples) due to the drought in 2019, and also prices of processed food, contained the fall in food price growth.

Inflation excluding food and energy prices was 3.8% y/y in May 2020 (compared to 3.6% y/y in February 2020; Figure 2.3). It was boosted by the high annual growth in the prices of administrated housing services, primarily waste disposal charges and also higher prices of alcoholic beverages and tobacco (resulting from the increase in the excise tax as of January 2020).[22] In May 2020, the growth in prices of some market services picked up, including medical services (primarily dental services) as well as hairdressing salons and personal grooming establishments – which may have been due to the imposed Covid-related restrictions – as well as charges by banks and post offices. The remaining core inflation indicators

Figure 2.3 Core inflation indices (y/y)



Source: Statistics Poland (GUS) data, NBP calculations.

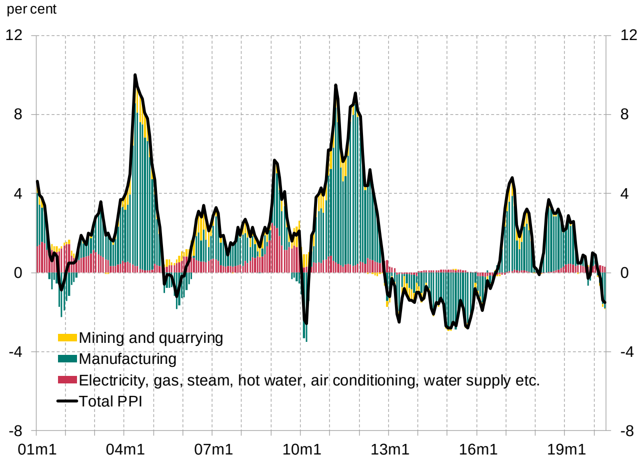
[20] This effect was the result of lower excise tax and temporary charges for electricity at the beginning of 2019.
[21] In addition, the statistical base effect, resulting from the sharp increase in prices in the corresponding period of the previous year due to the African Swine Fever (ASF) epidemic, which affected mainly China, reduced the annual growth in pork prices.
[22] In May 2020, the contribution of waste disposal charges to annual inflation excluding food and energy prices was 0.9 percentage points, while the contribution of the prices of excise goods was 0.5 percentage points.

stayed unchanged or declined significantly since the publication of the previous *Report*. In particular, inflation excluding administered prices fell in May 2020 to 1.9% y/y (compared to 4.0% y/y in February 2020).

Annual growth in producer prices has been on a gradual decline since the beginning of 2020, and in May 2020 amounted to -1.5% y/y (against 0.2% y/y in February 2020; Figure 2.4). The negative growth of the PPI index was primarily due to the drop in global oil prices.

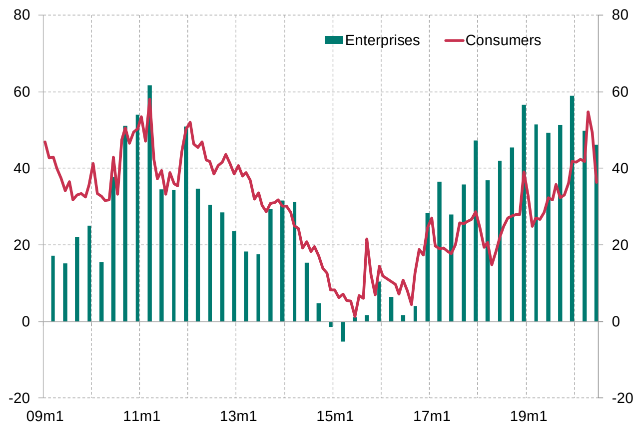
Since the publication of the previous *Report*, inflation expectations of market analysts have declined significantly, particularly over the four-quarter horizon in which they have fallen below 2.5% (Table 2.1). In turn, the median forecast of the participants to the *NBP Survey of Professional Forecasters*[23] in the horizon of 8 quarters was 2.6%. At the same time, according to the results of this survey, the uncertainty of the forecasts increased significantly during the Covid-19 pandemic. The opinions of the surveyed enterprises and consumers on price growth in the coming quarters also shifted towards lower inflation, following its earlier growth (Figure 2.5).

Figure 2.4 Composition of PPI inflation (y/y)



Source: Statistics Poland (GUS) and Eurostat data.

Figure 2.5 Balance statistics of consumer and enterprise inflation expectations



Source: Statistics Poland (GUS) and NBP data, NBP calculations.

Balance statistics is defined as a difference between a fraction of respondents expecting rise in prices and a fractions of respondents expecting no change or fall in prices (with respective weights). A rise in balance statistics should be interpreted as a shift in opinions towards higher rise in prices.

Table 2.1 Inflation expectations of financial sector analysts and participants to the NBP Survey of Professional Forecasters (per cent)

	Survey conducted in:				
	19q2	19q3	19q4	20q1	20q2
Refinitiv Survey, inflation expected in 4 quarters	2.6	2.8	2.8	1.8	1.7
NBP Survey, inflation expected in 4 quarters	2.6 (2.1-3.1)	2.8 (2.3-3.2)	3.1 (2.7-3.5)	2.2 (1.4-2.9)	2.3 (1.3-3.3)
NBP Survey, inflation expected in 8 quarters	2.6 (1.8-3.1)	2.6 (1.9-3.3)	2.8 (2.0-3.2)	2.5 (1.5-3.4)	2.6 (1.6-3.3)

Source: NBP and Refinitiv data.

Inflation expectations of the financial sector analysts are proxied by the median forecast of the analysts surveyed by Refinitiv (former Thomson Reuters) in the last month of a given quarter. Inflation expectations of the participants to the NBP Survey of Professional Forecasters reflect the median probability distribution obtained from the aggregation of probability forecasts of the experts surveyed by NBP. In the parentheses there are given 50% probability intervals (between the 2nd and 3rd quartiles) of this distribution. In principle, the survey takes place within the last two weeks of a given quarter and overlaps with the first two working days of a following quarter.

[23] *NBP Survey of Professional Forecasters Results of the NBP Macroeconomic Survey. June 2020*, NBP, No 2/2020. The forecasts in this survey were sent to NBP between 15 June and 3 July 2020, with the overwhelming majority of them sent within the last four days of the survey.

2.2 Demand and output

At the beginning of 2020 economic conditions continued to be relatively favourable. However, from the middle of March 2020 economic activity declined sharply due to the Covid-19 pandemic, its adverse impact on economic agents' sentiment and the measures taken around the world and in Poland to limit the spread of the disease.

The economic consequences of the pandemic were reflected to a limited extent in the GDP data for 2020 Q1, according to which economic growth slowed down to 2.0% y/y (from 3.2% y/y in 2019 Q4; Figure 2.6). Both consumption growth (1.2% y/y against 3.3% y/y in 2019 Q4) and investment growth (0.9% y/y against 6.1% y/y 2019 Q4) decreased.

Available data for 2020 Q2 indicate a sharp fall in economic activity. Economic conditions in the service industries that were most affected by the restrictions – accommodation and catering, entertainment, and passenger transport – deteriorated particularly sharply. At the same time, industrial production and retail sales fell markedly (Figure 2.7). Economic activity in construction declined to a lesser extent.

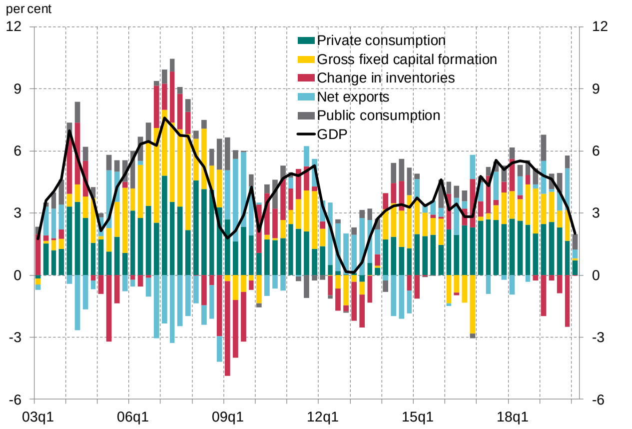
The largest fall in economic activity was recorded in April 2020. In May and June 2020, economic conditions improved along with the lifting of restrictions and some improvement in sentiment, although in annual terms a significant fall in activity persisted (Figure 2.8; Figure 2.9).

2.2.1 Output

The coronavirus pandemic caused a very sharp reduction in activity in the service sector, particularly in April 2020. In May and June 2020, economic conditions improved; however, they remained markedly weakened.

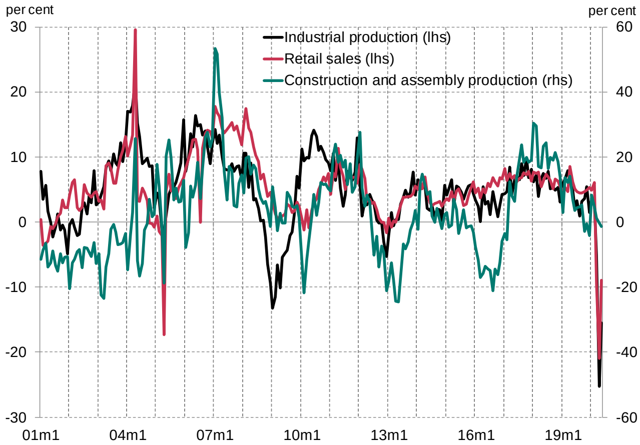
The decline in retail sales in April indicates a significant fall in activity in trade. At the same time,

Figure 2.6 GDP growth and its components (y/y)



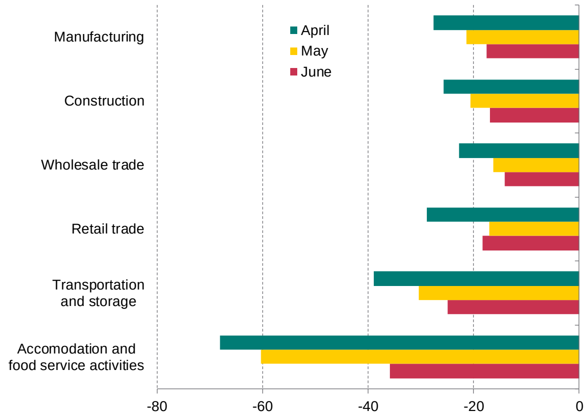
Source: Statistics Poland (GUS) data.

Figure 2.7 Economic activity indicators (seasonally adjusted data, y/y)



Source: Statistics Poland (GUS) and Eurostat data.

Figure 2.8 Estimated change in orders placed by customers on company's products, by sectors (per cent)



Source: Statistics Poland (GUS) data.

due to the restrictions on the operation of hotels, restaurants, and cultural and entertainment facilities, activity in accommodation, food services and entertainment declined sharply in April 2020, as evidenced by the Statistics Poland (GUS) business climate data, data on payment card transactions and data on community mobility. A marked fall in activity was also observed in passenger and freight transport.

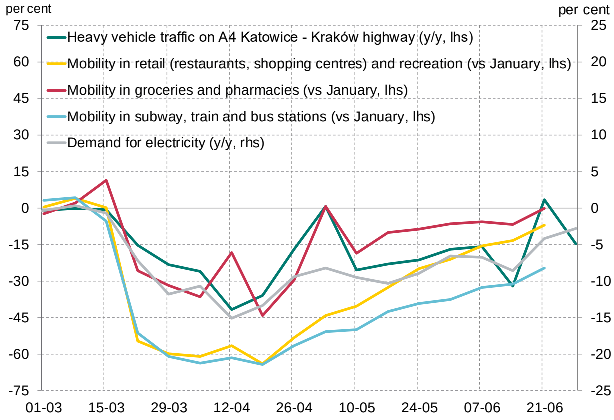
Along with the lifting of the restrictions and the gradual improvement in sentiment in May and June, business climate in services improved – the scale of the fall in retail sales declined significantly, while the Statistics Poland (GUS) business climate data and high frequency data indicate a rebound in activity in transportation, accommodation, food services and entertainment. However, in annual terms the fall in activity remained large.

Industrial production fell by 24.6% y/y in April 2020 and 17.0% y/y in May 2020 (Figure 2.10). The sharpest drop was seen in the production of capital goods (on average by 44% y/y in April and May 2020), in particular cars. In April 2020, the production of durable consumer goods also plummeted (by 47% y/y), with a particularly steep fall in furniture production. However, in May the scale of the decline in this category was already smaller (16.2% y/y). Intermediate goods output also fell significantly (on average by 15% y/y in April and May 2020). Production of non-durable consumer and energy goods declined to a somewhat lesser extent, although the fall was still significant (by an average of 11.1% y/y and 9.2% y/y, respectively).

Business climate surveys and data on electricity demand indicate that in June 2020 – like in May – business conditions in industry were gradually improving, although the fall in activity in annual terms most likely remained significant.

The Covid-related restrictions had a relatively small impact on construction works. Following growth in 2020 Q1, construction and assembly

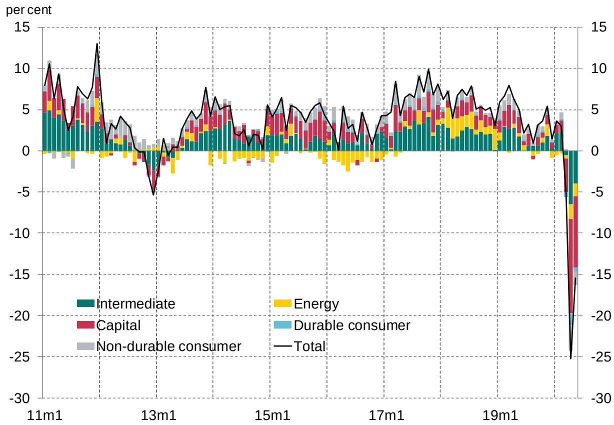
Figure 2.9 High frequency economic activity indicators



Source: Stalexport Autostrady S.A., PSE S.A., IMGW-PIB, meteomodel.pl and Google Covid-19 Community Mobility Report data, NBP calculations.

Demand for electricity from Monday to Friday, 8AM – 4PM, adjusted for holidays and temperature changes.

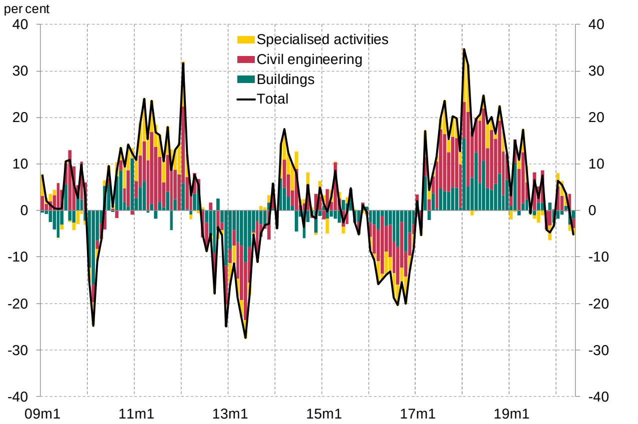
Figure 2.10 Industrial output growth by groups of goods (y/y, seasonally adjusted data)



Source: Statistics Poland (GUS) and Eurostat data, NBP calculations.

production declined in annual terms in April and May 2020, although modestly (by 0.9% y/y in April and 5.1% y/y in May 2020 compared to growth of 5.0% y/y in 2020 Q1; Figure 2.11). Infrastructure construction recorded slight growth as public investment works continued to be carried out. At the same time, residential, commercial and industrial construction saw a decline in activity (on average by 7.1% y/y in April and May 2020).

Figure 2.11 Construction and assembly output growth by construction objects (y/y)



Source: Statistics Poland (GUS) data, NBP calculations.

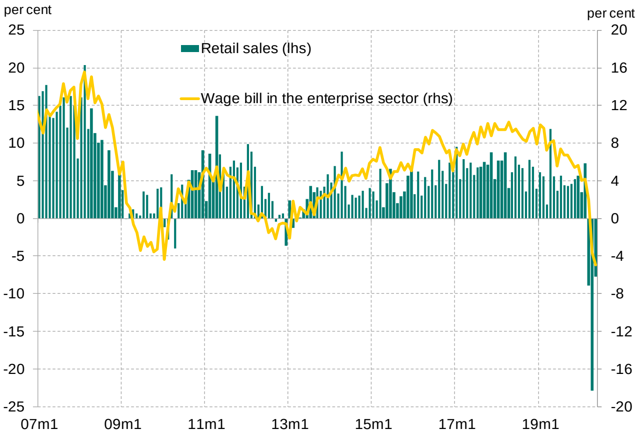
2.2.2 Consumption

Household consumption growth decreased in 2020 Q1 (to 1.2% y/y from 3.3% y/y in 2019 Q4) following a dozen or so quarters in which it remained at a relatively high level. Incoming data indicate a marked fall in consumption in 2020 Q2, which may be associated with the restrictions imposed due to the pandemic (including restrictions on the operation of transport, hotels, retail and food outlets), a deterioration in the labour market situation (see chapter 2.4 *Labour market*) and a slowdown in consumer credit growth (see chapter 2.6 *Money and credit*).

The Statistics Poland (GUS) business climate surveys for the subsequent months of 2020 Q2 suggest that sales of the services most affected by the restrictions imposed to halt the spread of the coronavirus fell sharply (including, in particular, in accommodation and food service sector).[24]

The retail sales data also indicate a marked decline in consumer demand in the first months of 2020 Q2. In April, retail sales fell by 22.9% y/y and in May by 7.3% y/y (at constant prices; Figure 2.12). The largest drops in sales in year-on-year terms were recorded in motor vehicles, motorcycles and parts (by 54.4% y/y in April and 34% y/y in May), fuels (by 32.9% y/y and 17.9% y/y respectively) and textiles, clothing and footwear (by 63.4% y/y and 8.2% y/y respectively). Sales of furniture,

Figure 2.12 Real growth in retail sales and wage bill in the enterprise sector (y/y)



Source: Statistics Poland (GUS) data, NBP calculations.

[24] *Business tendency in manufacturing, construction, trade and services – June 2020. Impact of Covid-19 pandemic on business tendency – assessment and expectations (Annex)*, Statistics Poland (GUS), 22 June 2020; *Business tendency in manufacturing, construction, trade and services 2000-2020 (June 2020). With in-depth presentation of results in accommodation and food service activities*, Statistics Poland (GUS), 24 June 2020.

electronics and household appliances instead saw positive growth in May (14.4% y/y) following a sharp fall in April (by 16.9% y/y).

In 2020 Q2, consumer sentiment plunged (Figure 2.13), with both the current and leading consumer confidence indicators declining markedly. After a sharp fall in April, consumer confidence indicators picked up somewhat in May and June, yet remained low.[25] In particular, pessimistic assessments of the future level of unemployment persisted.

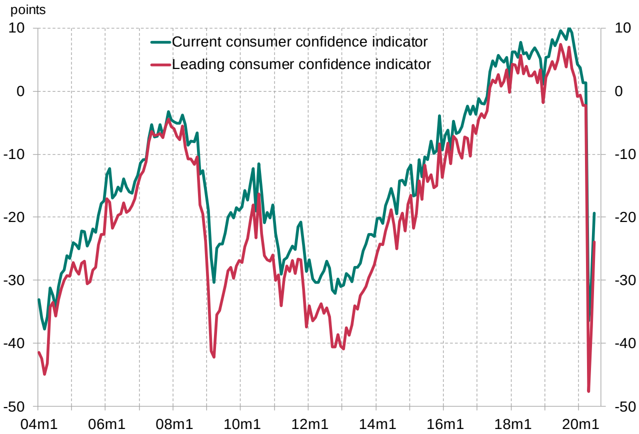
2.2.3 Investment

In 2020 Q1, the growth rate of gross fixed capital formation dropped markedly (to 0.9% y/y from 6.1% y/y in 2019 Q4; Figure 2.14). At the same time, investment growth of large and medium-sized non-financial enterprises increased somewhat compared to 2019 Q4, yet remained significantly lower than the 2019 average (Figure 2.14). According to NBP estimates, following the fall observed in the previous quarters, 2020 Q1 saw a slight rise in public investment.

The data available for 2020 Q2, including the slump in industrial output and construction and assembly production (see chapter 2.2.5 *Output*) and the sharp fall in capacity utilisation (Figure 2.15), as well as high uncertainty in the economy due to the Covid-19 pandemic, suggest a significant reduction in investment outlays in this period.

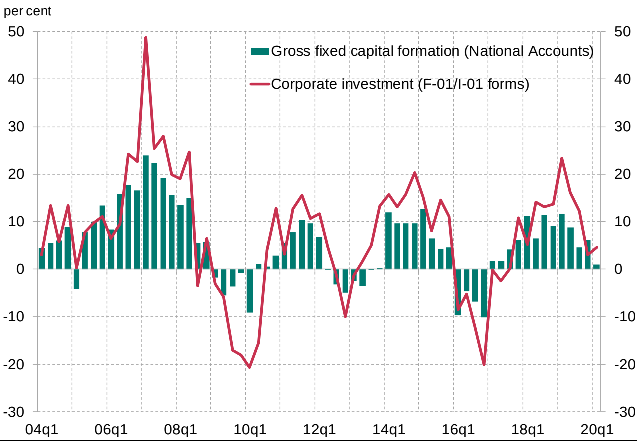
According to Statistics Poland (GUS)[26] and NBP surveys, the Covid-19 pandemic adversely affected the investment plans of enterprises. In 2020 Q2, investment optimism of enterprises decreased markedly (Figure 2.16). A deterioration in sentiment was observed in both private and public enterprises. At the same time, the propensity of enterprises to undertake new investments and

Figure 2.13 Consumer confidence indicators



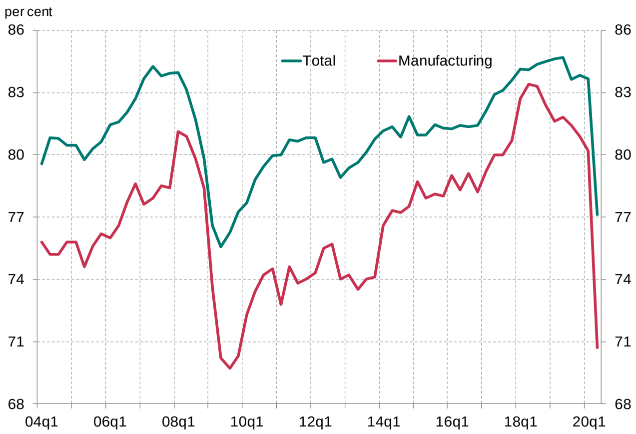
Source: Statistics Poland (GUS) data, NBP calculations.

Figure 2.14 Growth in investment (y/y)



Source: Statistics Poland (GUS) data, NBP calculations.
Data on corporate investment from the survey conducted by Statistics Poland (GUS) on revenues, costs and financial results as well as gross fixed capital formation (based on F-01/I-01 forms).

Figure 2.15 Corporate capacity utilisation (seasonally adjusted)

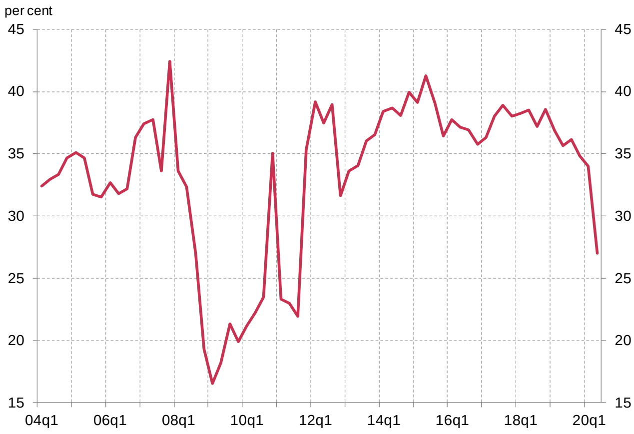


Source: NBP survey data (total) and Statistics Poland (GUS) data (manufacturing).

[25] *Consumer tendency – June 2020*, Statistics Poland (GUS), 18 June 2020.
[26] *Business tendency in manufacturing, construction, trade and services – April 2020: Impact of coronavirus SARS-CoV-2 pandemic on business tendency – assessment and expectations (Annex)*, Statistics Poland (GUS), 22 April 2020.

continue investments already started declined.[27] NBP survey data also indicate a particularly sharp deterioration in the investment climate among exporters. According to Statistics Poland (GUS) surveys, enterprises from accommodation and food service, transport and storage, and retail trade plan the largest cuts in investment for 2020.[28]

Figure 2.16 Overall assessment of investor's optimism (OPTIN)



Source: NBP survey data.

Overall assessment of investor's optimism is gauged by the share of enterprises which intend to launch new investment projects, increase investment spending or extend investment projects in progress.

2.2.4 Public finance[29]

In the first months of 2020, a marked decline in tax receipts relative to the previous year was observed. VAT revenue in the first five months was 8.6% lower y/y, and in May alone it dropped by 33.6% y/y.[30] In the period January-May 2020, state budget revenue from income taxes was also lower (PIT by 8.6% y/y and CIT by 19.2% y/y), as it was to some extent distorted by the annual tax settlement deferral and the possibility of delaying advance payments on salaries for March to May 2020.

The first fiscal policy responses to the crisis were launched by the government at the end of March. These included in particular: a three-month exemption of small firms from social security contributions,[31] the so-called standby allowance for the self-employed and persons employed under civil law contracts, co-financing of labour costs and loans for micro-entrepreneurs amounting to PLN 5000. The total cost of these measures (based on government estimates) is approx. PLN 43 billion, of which approx. PLN 38 billion has so far been disbursed (as of 2 July, 2020).

Moreover, support to businesses is implemented through the Polish Development Fund (Polski Fundusz Rozwoju, PFR), under the so-called PFR

[27] Only 76.3% of the surveyed enterprises declared they would continue already started investments, while in previous years this percentage was 94-98%. The share of enterprises planning to undertake new investments fell to 16.6% compared to the 2019 average of 21.9% (NBP survey data).

[28] *Business tendency in manufacturing, construction, trade and services – April 2020: Impact of coronavirus SARS-CoV-2 pandemic on business tendency – assessment and expectations (Annex)*, Statistics Poland (GUS), 22 April 2020.

[29] Data discussed in this chapter refer to the figures calculated in line with the ESA2010 methodology (unless otherwise stated).

[30] In May, VAT was paid on transactions concluded in April, i.e. the month when economic activity was under the strongest negative impact of the restrictions introduced to contain the spread of the epidemic.

[31] The exemption applies to 100% of the amount due (the lowest assessment base in the case of the self-employed eligible in terms of revenue and income and clergymen) in the case of social cooperatives and contribution payers, who have reported fewer than 10 persons for insurance, and 50% of the amount due if the payer has reported 10-49 persons for insurance.

Financial Shield, where out of the budgeted amount of PLN 100 billion, approx. PLN 55.5 billion has been disbursed to date (as of 2 July, 2020). Some of the above mentioned measures are repayable or are financed from the EU budget, thus not affecting the fiscal outturn. However, apart from the measures directly supporting businesses, other costs related to the epidemic will also add to the higher headline deficit, in particular, increased expenditure on health care and parental care allowances.

In effect, the general government deficit will rise significantly in 2020, as indicated by the forecasts of the government and external institutions. In line with the government forecast presented in the latest *Convergence Programme. 2020 Update* (April 2020), the headline deficit is expected to increase to 8.4% of GDP, whereas according to the European Commission (EC; May 2020) it is expected to reach 9.5% of GDP. The difference between these two figures results in particular from a different approach to support for companies provided under the PFR Financial Shield.[32]

In view of the expected decline in GDP and increased borrowing needs of the general government, the public debt-to-GDP ratio is expected to increase significantly in 2020. According to the estimates presented in the *Convergence Programme. 2020 Update*, the ratio of general government debt to GDP in ESA 2010 terms is to increase to 55.2% of GDP, while according to the EC forecast it is to reach 58.5% of GDP (compared to 46.0% in 2019). Due to the partial financing of anti-crisis measures via the issuance of PFR and BGK bonds (these entities not being part of the general government within the Public Finance Act provisions) on behalf of the Covid-19 Counteracting Fund established in April 2020, the increase in the state public debt (national

[32] The EC forecast assumes that 60% of the support provided under the PRR Financial Shield will be non-returnable, thus adding to the sector's deficit in ESA 2010 terms. The deficit estimate presented in the *Convergence Programme* did not include this instrument.

definition) can be expected to be smaller than the increase in the sector's debt in ESA 2010 terms.

2.2.5 External trade[33]

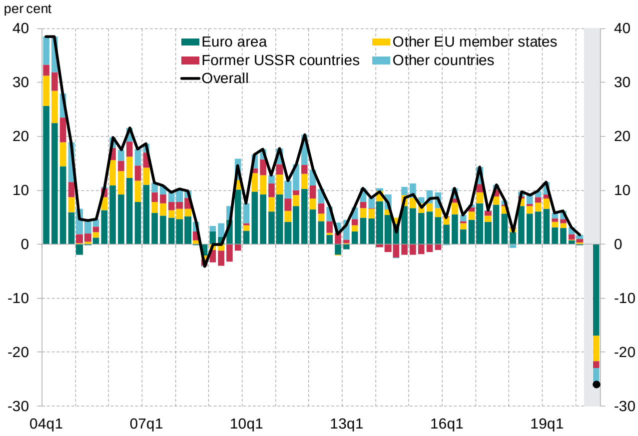
In 2020 Q1, growth in the value of goods exports continued to decline (to 1.7% y/y, from 3.1% y/y in 2019 Q4), while that of goods imports remained low (0.6% y/y compared to -1.8% y/y in 2019 Q4). The data for April 2020 point to a sharp fall in trade, related to the strong reduction in economic activity both at home and abroad.

In April, the drop in the value of exports was 26.0% y/y (Figure 2.17). It affected all groups of countries, including the largest drop in exports to the euro area (-29.3% y/y). Also in terms of goods, a decrease in exports was recorded across all groups of goods. The largest negative contribution to total export growth came from intermediate goods exports, which declined by 30.6% y/y. In connection with the collapse of activity in global car production networks, a significant drop in exports was recorded for parts and accessories for means of transport (-61.0% y/y) and passenger cars (-85.4% y/y). Exports of capital goods (-23.9% y/y) and durable consumer goods (-38.7% y/y) also plummeted significantly.

Since the publication of the previous *Report*, the zloty nominal and real effective exchange rates have depreciated. However, the scale of the weakening of the zloty was small (in April the nominal effective exchange rate weakened by 4.3% y/y and the real rate by 2.2% y/y; Figure 2.18) and as a result, the percentage of exporters reporting unprofitable exports remained relatively stable.[34]

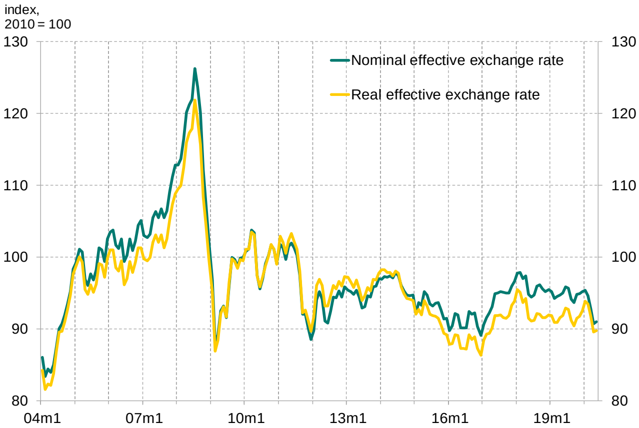
In April, a sharp drop – of 24.9% y/y – was also recorded in the value of imports, which may be related to the fall in domestic demand and exports, which are highly import intensive (Figure 2.19). The largest negative contribution to total import

Figure 2.17 Contribution to export growth by destination (y/y)



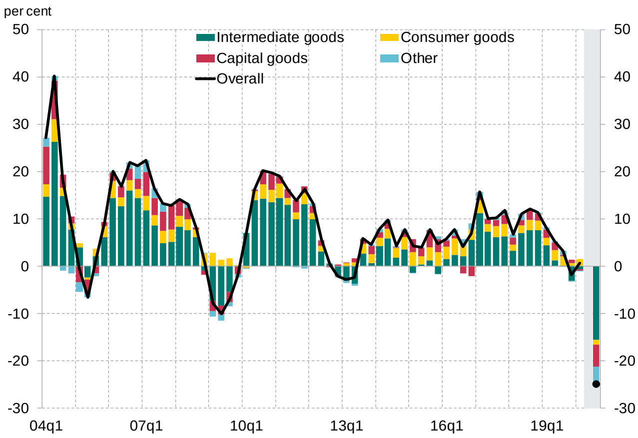
Source: Statistics Poland (GUS) data, NBP calculations.
Shaded area represents y/y export growth in April.

Figure 2.18 Nominal and real effective PLN exchange rate (rise indicates appreciation)



Source: BIS data.

Figure 2.19 Contribution to import growth by commodity (y/y)



Source: Statistics Poland (GUS) data, NBP calculations.
Data based on Statistics Poland (GUS) classification of the main product categories for the value of Polish exports and imports in zlotys. "Other" comprises passenger cars, motor gasoline and goods else not classified. Shaded area represents y/y import growth in April.

[33] In this chapter, the analysed data are Statistics Poland (GUS) data on the nominal value of exports and imports in PLN terms. Trends in trade of services are not described, as no detailed data are available on their breakdown.
[34] NBP survey data.

growth was made by imports of intermediate goods (-26.3% y/y) – mainly supply goods for industry, parts for means of transport, fuels and lubricants – as well as capital goods (-31.0% y/y) and passenger cars (-78.7% y/y). A marked weakening of imports was also observed in durable consumer goods (-30.1% y/y).

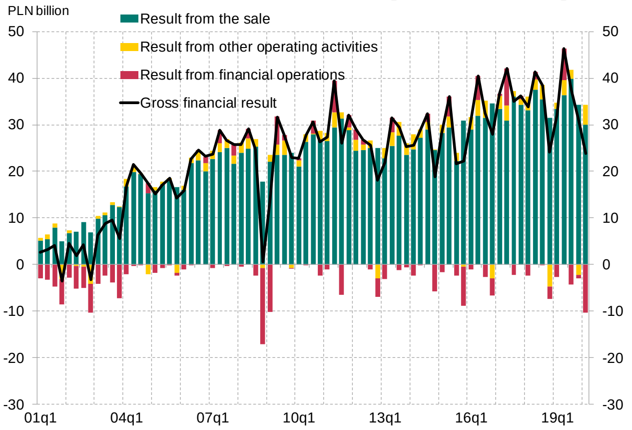
2.3 Financial situation of enterprises

In 2020 Q1, the financial performance of enterprises deteriorated. In particular, there was a fall in the result from the sale (by 9.9% y/y against a rise of 8.8% y/y in 2019 Q4), due to low growth in operating income and rising labour costs (Figure 2.20). The fall in the result from the sale was observed in most sectors. Moreover, in 2020 Q1, the losses on financial operations had a negative impact on the financial results.[35]

Another sign of the deteriorating situation of the enterprise sector in 2020 Q1 was a fall in both the sales profitability ratio and the net turnover profitability ratio (Table 2.2). The share of profitable enterprises also decreased significantly, while the liquidity situation of enterprises remained relatively sound in 2020 Q1.

The NBP survey data indicate that in 2020 Q2 the current economic situation of enterprises deteriorated sharply and is assessed as the worst since the Poland's accession to the EU, although the majority of firms (68%) still consider their situation to be good or very good. At the same time, the percentage of firms declaring they had no liquidity problems decreased. Similarly, the assessment of the ability to service debt and trade liabilities worsened and the share of approved credit applications declined.

Figure 2.20 Gross financial result of enterprises and its components



Source: Statistics Poland (GUS) data, NBP calculations.
Data from the survey conducted by Statistics Poland on revenues, costs and financial results as well as gross fixed capital formation (based on F-01/I-01 forms).

Table 2.2 Selected financial efficiency ratios in the enterprise sector (per cent)

	2019				2020
	q1	q2	q3	q4	q1
Sales profitability ratio	4.5	4.6	5.0	4.1	3.9
Net turnover profitability	3.4	4.8	3.8	2.9	2.4
Share of profitable enterprises	69.5	74.9	77.7	81.8	67.6
1st degree liquidity ratio	34.7	34.6	35.4	38.1	38.9
Return on Assets	0.99	1.45	1.12	0.87	0.66
Share of loans and borrowings in the balance sheet total	15.23	15.27	15.57	15.49	15.86

Source: Statistics Poland (GUS) data, NBP calculations.
Data from the survey conducted by Statistics Poland on revenues, costs and financial results as well as gross fixed capital formation (based on F-01/I-01 forms).
Share of profitable enterprises – seasonally-adjusted data.

[35] These losses were the result of negative exchange rate differences and losses on sales and impairment of financial assets. These were concentrated mainly in the fuel industry.

2.4 Labour market

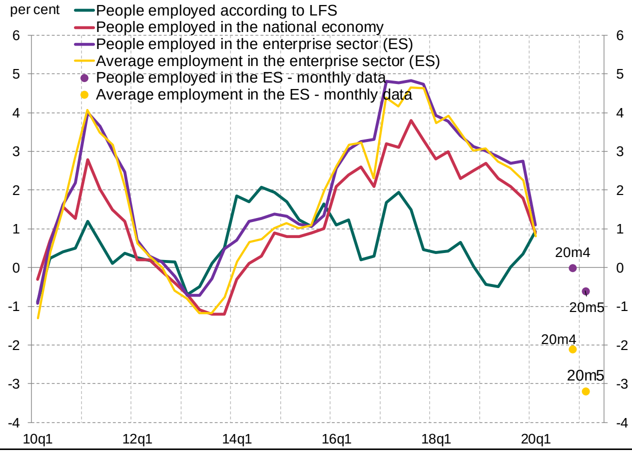
As a result of the sharp reduction in economic activity in 2020 Q2, the labour market situation deteriorated. In particular, the number of employed people fell, unemployment rose, and wage growth declined.

The number of people employed in the enterprise sector[36] in April and May 2020 decreased by 48,000 and 40,000 (m/m) respectively. Consequently, its annual growth decreased in May to -0.6% y/y (from 1.1% y/y in 2020 Q1; Figure 2.21). In accordance with the Statistics Poland (GUS) data, average employment in the enterprise sector – which is calculated as full-time jobs and often does not include employees receiving sickness or care allowance – declined in April and May 2020 by 153,000 and 85,000 people (m/m) respectively, and in effect its annual growth in May 2020 was -3.2% y/y (against 0.8% y/y in 2020 Q4).

The fall in demand for labour in the first months of 2020 Q2 is also indicated by data from the registers of labour offices, according to which in April and May 2020 over 40% fewer new job vacancies were posted than in the same period a year earlier (Figure 2.22). In line with the results of the Statistics Poland (GUS) business climate survey, in April 2020 the percentage of enterprises expecting a fall in employment during the next three months rose. In May and June, this percentage decreased, although the share of companies expecting a fall in employment still exceeded that expecting a rise.

The number of registered unemployed declined in April and May by a total of 161,000 (seasonally adjusted) compared to March 2020, and the seasonally adjusted registered unemployment rate in May amounted to 6.1% (against 5.1% in March 2020; Figure 2.23). The rise in registered unemployment was limited by a reduction in

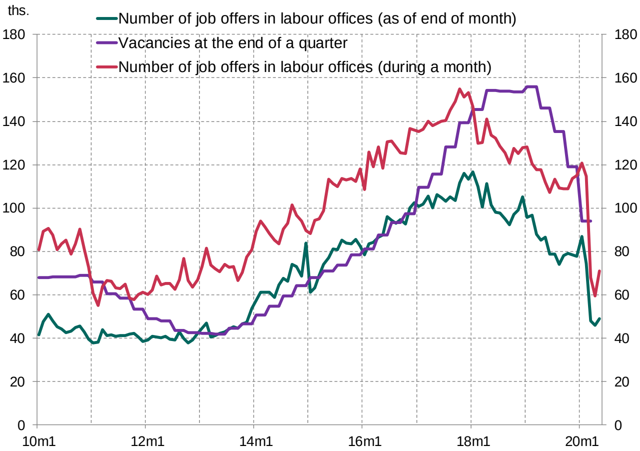
Figure 2.21 The dynamics of the number of people employed and the level of employment, seasonally adjusted data



Source: Statistics Poland (GUS) data, NBP calculations.

People employed according to LFS is a survey-based estimate of the number of employed persons, regardless of employment relationship. These data do not include temporary immigration. People employed in the national economy denotes the enterprise-reported average number of persons performing paid work at the end of each reporting period. These data do not comprise, among others, businesses employing up to 9 persons, individual farmers, persons contributing to a family business free of charge and persons working under civil law contracts. In addition, data on average employment in the enterprise sector do not cover the public sector and sole proprietors. The figure depicts quarterly data (lines) and monthly data for April and May 2020 (dots).

Figure 2.22 The number of job offers in labour offices and vacancies in the economy, seasonally adjusted data



Source: Ministry of Family, Labour and Social Policy and Statistics Poland (GUS) data.

Data on vacancies comes from a Statistics Poland (GUS) representative survey on demand for labour – quarterly values are imputed for every month of a given quarter.

[36] Data do not include enterprises employing less than 10 people, the self-employed and employed on the basis of civil law contracts, as well as farmers.

working hours and more frequent use of sickness or care allowance.[37]

Available data indicate that the epidemiological conditions also have a negative impact on labour supply. According to the LFS data collected by Statistics Poland (GUS) in the last two weeks of March 2020, a significant number of economically inactive people did not look for work due to the Covid-19 pandemic. Moreover, in March and April 2020, there was a fall in the number of foreigners staying in Poland.[38]

Relatively high wage growth in the national economy (7.7% y/y) persisted until the end of 2020 Q1, largely due to wage rises in public sector services. However, data for the first months of 2020 Q2 from the enterprise sector show a decline in nominal wage growth in this sector. In May 2020, it amounted to 1.2% y/y (against 6.3% y/y in March 2020; Figure 2.24).

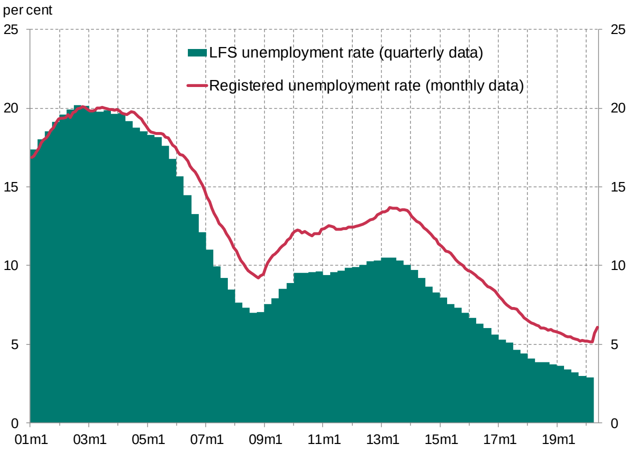
2.5 Monetary policy and asset markets

Since the publication of the previous *Report*, the Monetary Policy Council has eased monetary policy (see Figure 2: *Monetary policy of Narodowy Bank Polski in response to the Covid-19 pandemic*). The NBP reference rate has been lowered to 0.1% (from 1.5% at the beginning of March 2020) and the purchases of government securities and government-guaranteed debt securities in the secondary market have been conducted. Financial market participants now expect the NBP interest rates to be kept unchanged in the coming quarters (Figure 2.25).

2.5.1 Financial market

Amid sluggish economic activity and easing of the NBP monetary policy, the yields on Polish

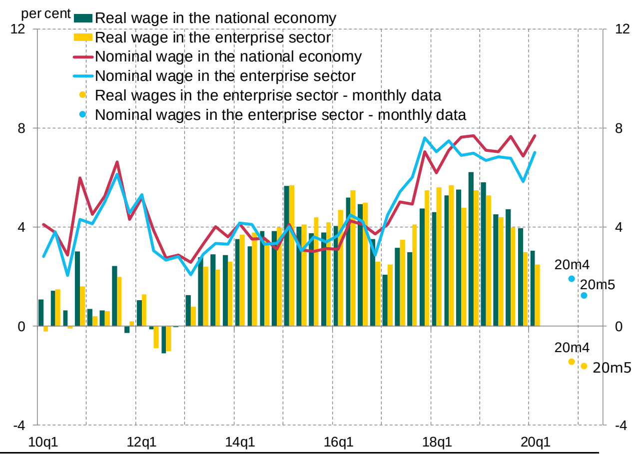
Figure 2.23 Unemployment rate, seasonally adjusted data



Source: Statistics Poland (GUS) data, NBP calculations

Data adjusted by NBP for seasonal factors and breaks related to the change in Statistics Poland (GUS) methodology in 2012. There are three reasons for the difference between the registered unemployment rate and the LFS rate: 1) the definition of an unemployed person is different, 2) the definition of the population to which the number of the unemployed is referred is different, 3) registered unemployment rate is based on the number of unemployed people registered in labour offices, while LFS unemployment rate is based on survey results.

Figure 2.24 Annual wage growth in the national economy and in the enterprise sector (y/y, nominal and real)



Source: Statistics Poland (GUS) data.

The figure depicts quarterly data (bars and lines) and monthly data for April and May 2020 (dots).

[37] According to information from the Ministry of Family, Labour and Social Policy, in the framework of the solutions offered by the anti-crisis shield alone, financed by the Guaranteed Employee Benefit Fund, working time was reduced for over 1,190,000 people, i.e. 7.2% of the total number of employed (as at 2 July 2020).

[38] Available data on border traffic indicate that in March and April the number of foreigners staying in Poland decreased by 223,000, with the largest decline among citizens of Ukraine. More information can be found in the publication *The foreign population in Poland during the 2020 Covid-19 pandemic*, Statistics Poland (GUS), June 2020.

government bonds have declined markedly (Figure 2.26). This occurred despite the persistently high risk aversion in the global financial markets conducing to temporary surges in bond yields of certain emerging market economies (see chapter 1.5 *International financial markets*). As a result, in June 2020 yields on 2-year Polish government bonds stood at an average of 0.21% and yields on 10-year bonds at an average of 1.39%.

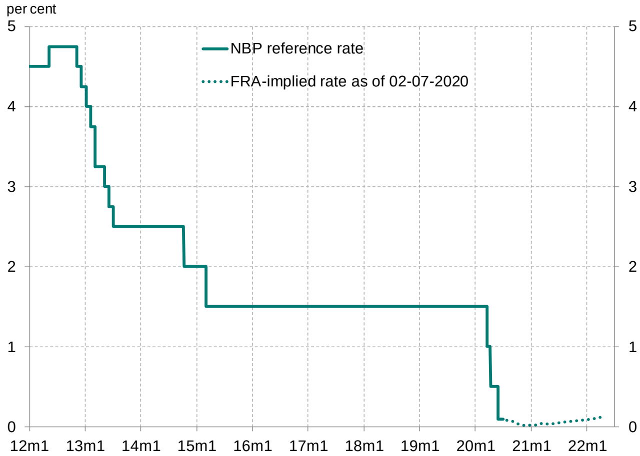
Following the plunge in sentiment in the global financial markets in the second half of February and the first half of March 2020, stock prices on the Warsaw Stock Exchange Market plummeted (Figure 2.27). In the following months – amid gradually improving sentiment in the global markets and easing of the domestic macroeconomic policy – stock prices bounced back. Yet, in June 2020 the WIG index was still on average 11% below the February 2020 level.

After the weakening to the major currencies in March 2020, the exchange rate of the zloty saw a slight appreciation in the subsequent months (Figure 2.28). In June 2020, the average exchange rate of the zloty against the euro stood at 4.45 (compared to an average of 4.28 in February 2020) and against the US dollar at 3.95 (compared to an average of 3.92 in February 2020). As a result, the scale of adjustment of the zloty exchange rate to the global shock caused by the pandemic and to the NBP monetary policy easing was limited.

2.5.2 Real estate market

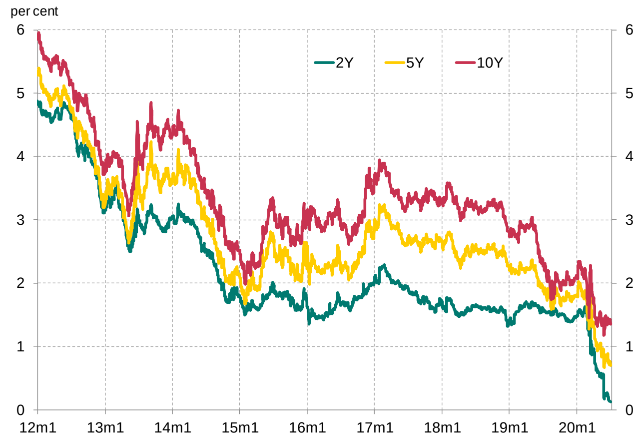
The Covid-19 pandemic has considerably limited activity in the housing market due to social distancing. Yet, this was not reflected in the available data at the time this *Report* was prepared. Consequently, this chapter presents the situation in the real estate market based on the data until 2020 Q1.[39]

Figure 2.25 NBP reference rate and 3M FRA-implied expected interest rate



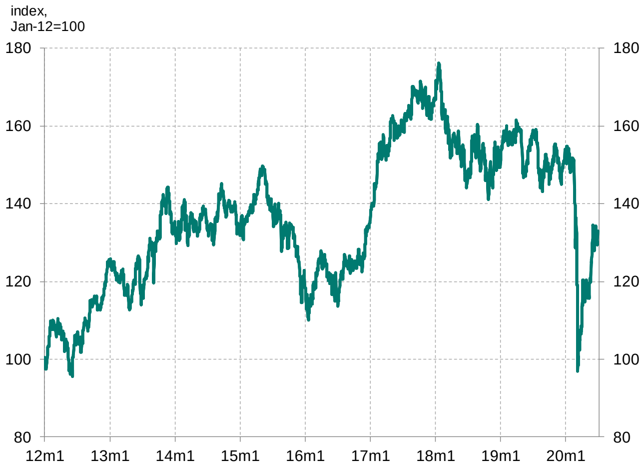
Source: NBP and Bloomberg data, NBP calculations.

Figure 2.26 Yields of Polish government bonds



Source: Bloomberg data.

Figure 2.27 The main stock market index in Poland (WIG)



Source: Bloomberg data.

[39] The data collected in the NBP database during the quotation from 1 March 2020 to 18 April 2020 include offers pending as of 1 March 2020 and transactions concluded in the period from December 2019 to February 2020. Due to the time lag in transaction data

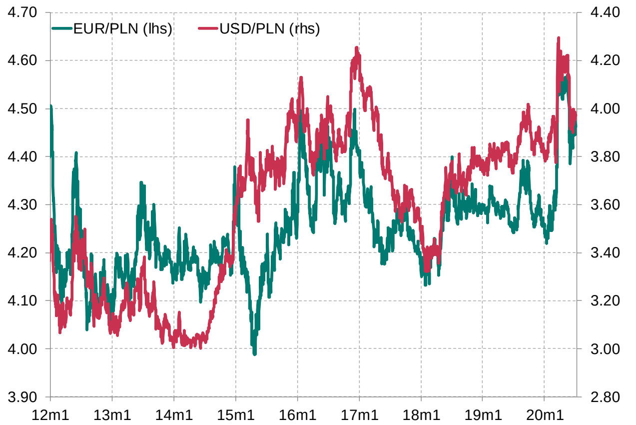
In 2020 Q1, the housing market continued to see high activity.[40] The number of sold dwellings in the largest primary markets exceeded the previous quarters' figures (Figure 2.29). The high demand for housing was accompanied by a growing number of both completed housing units made ready for occupancy and home building permits issued, while a number of housing starts was declining.

Until mid-March 2020, the demand for housing was supported by a very good situation of employees in the labour market, together with low and stable interest rates on mortgage loans. As a result, the growth in demand for housing slightly exceeded that of housing supply. According to NBP data, in 2020 Q1 offer and transaction prices of housing followed an upward trend,[41] both in the primary market (growth of 11.5% and 10.7% y/y, respectively) and in the secondary market (growth of 11.5% and 10.9% y/y; Figure 2.30). Price growth was driven by relatively high demand for housing, shortages of construction workers and the resulting increase in their wages as well as growing prices of land and construction materials.

The available commercial real estate market data are also not sufficient to assess the impact of the pandemic. It should be remembered that rental contracts for commercial real estate are concluded for several years and early termination of those contracts may entail penalties.

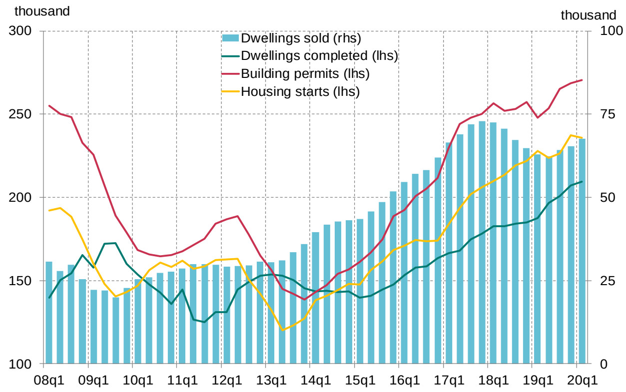
In 2020 Q1, the office real estate market saw persistently high supply, which was supported by higher rates of return on investment in this type of real estate in Poland than abroad and high availability of financing. The demand for office rental also remained high until the middle of the quarter, leading again to the slight decline in the

Figure 2.28 Nominal exchange rate of euro and US dollar in Polish zloty



Source: Bloomberg data.

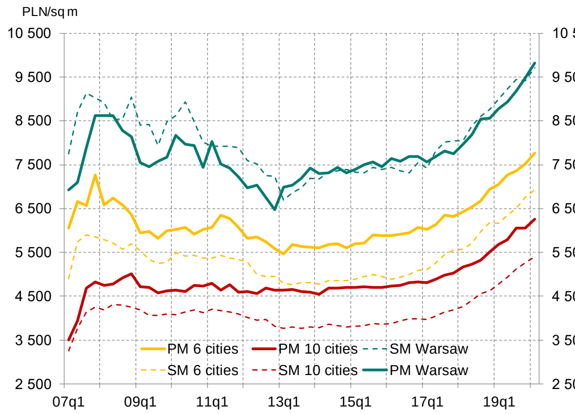
Figure 2.29 Residential construction in Poland (4-quarter rolling sum)



Source: Statistics Poland (GUS) and JLL/REAS data, NBP calculations.

Sales data are based on 6 major markets in Poland (Warszawa, Kraków, Trójmiasto, Wrocław, Poznań and Łódź).

Figure 2.30 Average prices of flats in major cities in Poland



Source: NBP data.

PM – primary market, SM – secondary market. Transaction prices – an average weighted with the share of the housing stock in a given city in the total housing stock. Aggregate of 6 cities consists of: Gdańsk, Gdynia, Kraków, Łódź, Poznań, Wrocław, whereas of 10 cities: Białystok, Bydgoszcz, Katowice, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Szczecin and Zielona Góra.

(according to the date of sale), 2020 Q1 analysed in this chapter does not coincide with the calendar year. For more information on the House Prices Database (BaRN) see: https://www.nbp.pl/homen.aspx?f=/en/publikacje/inne/real_estate_market_q.html.

[40] For more information on the situation in the Polish housing market see the NBP publication: *Information on home prices and the situation in the residential and commercial real estate market in Poland in 2019 Q4, NBP, March 2020.*

[41] The average price of housing (PLN/m2) in 16 voivodship cities and in Gdynia.

vacancy rate[42] in large cities. In 2020 Q1, the retail space segment, similarly to the previous quarters, posted only marginal growth in new retail space.

Box 2: Monetary policy of Narodowy Bank Polski in response to the Covid-19 pandemic

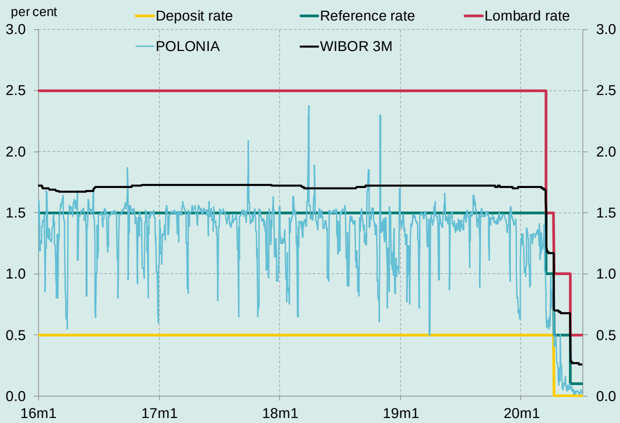
Although at the beginning of 2020 economic situation in Poland remained relatively good, in the first half of March data incoming from the economy started to indicate that due to the Covid-19 pandemic and the actions taken to limit its spread as well as a strong drop in global economic activity, the period ahead would see a marked fall in domestic economic activity.

Data released since mid-March also evidenced that weaker global growth, including in Poland, combined with lower commodity prices in international markets (see also 1.3 *Global commodity markets*) would have a downward effect on inflation in Poland. As a result, the risk of inflation falling below the NBP inflation target in the monetary policy horizon increased. Therefore, Narodowy Bank Polski – as one of the first central banks in Europe to do so – reacted preemptively to the anticipated deterioration in economic situation and started easing its monetary policy as early as in the middle of March.

At the three meetings between 17 March and 28 May, the Monetary Policy Council cut the NBP reference rate three times, in total by 1.4 percentage points down to 0.10%. At the same time, the Council also reduced the NBP deposit rate to 0.00% and lombard rate to 0.50% (Figure B.2.1).

Moreover, NBP embarked on the structural open market outright buy operations consisting of purchasing government securities and government-guaranteed debt securities in the secondary market. These operations are aimed at changing the long-term liquidity structure in the banking sector, ensuring the liquidity in secondary markets for the purchased securities, and enhancing the impact of the NBP interest rate cuts on the economy, i.e. strengthening the monetary policy transmission mechanism.

Figure B.2.1 NBP interest rates and the POLONIA and WIBOR 3M reference rates



Source: Bloomberg data.

Note: the POLONIA reference rate is determined as the average interest (weighted with the volume of the individual transactions) on unsecured interbank O/N deposits placed on the given working day until 4.30 p.m.

The target scale of the NBP operations, like in the majority of central banks nowadays conducting asset purchase programmes, has not been specified *ex ante* (see Box 1 *Monetary policy across the world in response to the Covid-19 pandemic*). Their timing and scale depend on market conditions. To date (i.e. 10 July) NBP has bought assets in the secondary market with the nominal value of PLN 101.3 bn,[43] i. e. worth 4.5% of GDP in 2019.[44]

[42] The vacancy rate is the share of unleased space in the total leasable space.
[43] The nominal value of bonds purchased by NBP may differ from the value as per the purchase price of these bonds (which amounted to PLN 106.8 bn).
[44] This means that, in relation to GDP, the amount of assets bought by NBP was close to that bought by the ECB in response to the pandemic (since the beginning of March to 3 July, the ECB – under its asset purchase programmes – bought assets worth 4.5% of GDP of the euro area (see Box 1 *Monetary policy across the world in response to the Covid-19 pandemic*).

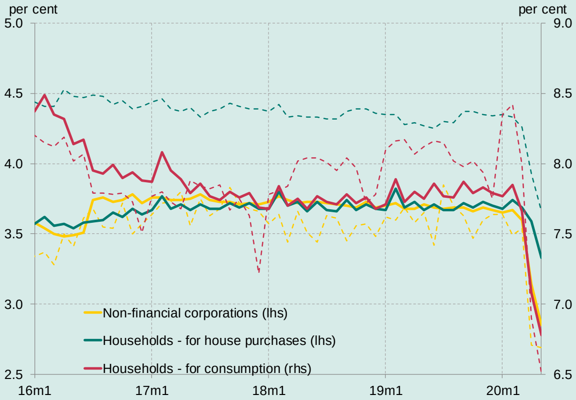
Furthermore, in March the Council decided to reduce the required reserve ratio by 3 percentage points, to 0.5%. NBP also offered banks the opportunity to gain liquidity under repo operations and refinance loans granted to enterprises in the form of bill discount credit.[45]

Owing to NBP's actions, the costs of financing and of debt service in the Polish economy have been substantially lowered. In particular, interest rates in the interbank market have fallen, as have the yields on Polish government bonds. The WIBOR 3M rate – often used as a benchmark in loan agreements – was on average by 1.44 percentage points lower in June 2020 than in February 2020, i.e. by a figure corresponding to the scale of the NBP reference rate cut. In May 2020, the average interest on new consumer loans to households was 1.9 percentage points lower than in February, on housing loans it was lower by 0.7 percentage points, and on corporate loans it was lower by 0.8 percentage points[46] (Figure B.2.2). This is conducive to lower credit instalments, supporting financial situation and sentiment of the indebted economic entities. The reductions of the NBP interest rates since March 2020 can be estimated to lower the burden on households and enterprises due to interest payments on outstanding loans by PLN 6-7 bn per year. At the same time, the average interest on bank deposits declined by less. For households deposits, it decreased by 0.6 percentage points, and for corporate deposits by 0.7 percentage points.

The NBP monetary policy easing limits the scale of the fall in economic activity, including the fall in employment and deterioration in financial situation of enterprises, while at the same time contributes to the reduction of credit instalments. As a result, it has a positive impact on debtors' ability to service their debts and on reduction of write offs in banks arising from losses of credit portfolio value.

Over recent months, there was also a substantial fall in government bond yields in Poland along the whole yield curve. Compared with February 2020, in July 2020 average yields on 2-year government bonds were lower by approx. 1.3 percentage points, on 5-year bonds by approx. 1.0 percentage point, and on 10-year bonds by approx. 0.7 percentage points (Figure B.2.3).

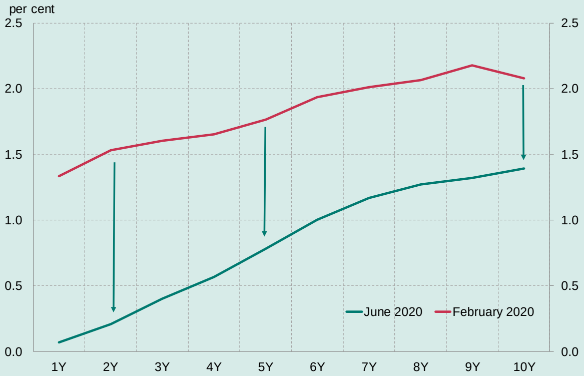
Figure B.2.2 Average interest on household and corporate loans



Source: NBP data.

Note: The average interest on złoty-denominated agreements relating to loans and other claims of banks. The solid line denotes the average interest on the outstanding balances of the given type of agreement, and the dashed line – new and renegotiated agreements.

Figure B.2.3 Polish government bonds yield curves in February and June 2020



Source: Bloomberg data.

Note: The average yields on bonds with the time to maturity from 1 to 10 years in February and June 2020.

[45] The interest on the bill discount credit is determined by the discount rate, currently at 0.12%. The loan may be granted for the period up to one year.

[46] Average interest on outstanding consumer loans decreased by 1.1 percentage points in that period, on housing loans by 0.4 percentage points, and on corporate loans by 0.8 percentage points. Changes of interest rates in the interbank market are reflected in the current interest rates on outstanding loans with a lag, thus the pass-through of the NBP interest rate cuts to average interest rates on loans in the economy will be gradual. It should be remember that the impact of changes in the NBP interest rates on credit conditions offered by banks, including their interest rates, is indirect and limited. This is because credit conditions depend on many factors, also those remaining outside the reach of central bank, like for example the level of competition in the banking sector, economic outlook, creditworthiness of the borrower, loan collateral, regulatory requirements and other factors.

In effect, despite a considerable increase in the government's borrowing needs due to the fiscal measures designed to contain the consequences of the pandemic, the financing conditions in the government bond market have been eased and liquidity in the market for government-guaranteed bonds ensured. Lower yields on government bonds will be conducive to lower costs of servicing public debt. Moreover, given that government bonds yields affect, directly or indirectly, the financing costs across all the sectors, including the margins and interest on bank loans, the easing of financing conditions in that market prevents the so-called procyclical tightening of financing conditions for all economic agents.

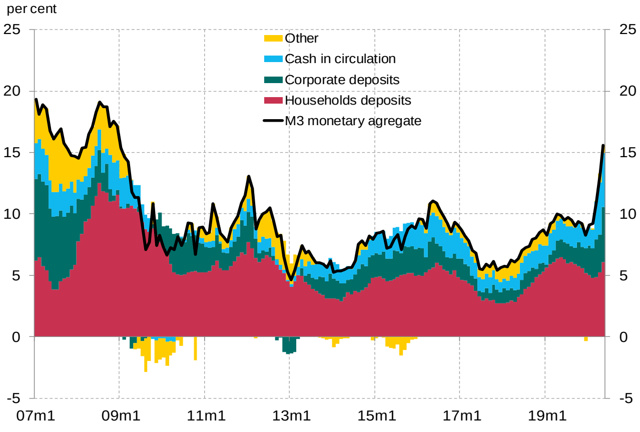
The NBP monetary policy easing in recent months mitigates the negative economic impact of the pandemic, limiting the scale of the fall in economic activity and supporting incomes of households and enterprises. Consequently, it alleviates the fall in employment and deterioration in financial situation of enterprises, thus being conducive to quicker economic recovery after the abatement of the pandemic. The measures undertaken by NBP reduce the risk of inflation falling below the NBP inflation target in the medium term and – due to their positive impact on financial situation of debtors – are conducive to enhancement of financial system stability.

2.6 Money and credit[47]

Since the publication of the previous *Report*, broad money (M3) growth in the economy accelerated (in May 2020 it amounted to 15.6% y/y compared to 9.2% y/y in February 2020; Figure 2.31). In particular, there was a temporary marked surge in cash withdrawals by customers fearing that the introduction of sanitary restrictions would limit access to their money kept at bank accounts.[48] In March and April 2020, stock of cash in circulation (excluding banks vault cash) grew by PLN 26.6 billion and PLN 20.2 billion m/m, respectively. In May 2020, the situation stabilised and monthly increase in cash in circulation was significantly smaller as it amounted to PLN 6.3 billion. Since the publication of the previous *Report*, the growth rate of corporate and households deposits increased.[49] Among the counterparts of broad money, the increase in net credit to central government had the highest share in the M3 aggregate growth (Figure 2.32).

The growth rate of household loans declined to 3.9% y/y in May 2020 (from 6.0% y/y in February

Figure 2.31 Composition of M3 growth (y/y)



Source: NBP data.
The category *Other* covers deposits of non-monetary financial institutions and local government units, repurchase agreements between banks and non-banking sector as well as debt securities with maturity up to 2 years issued by banks.

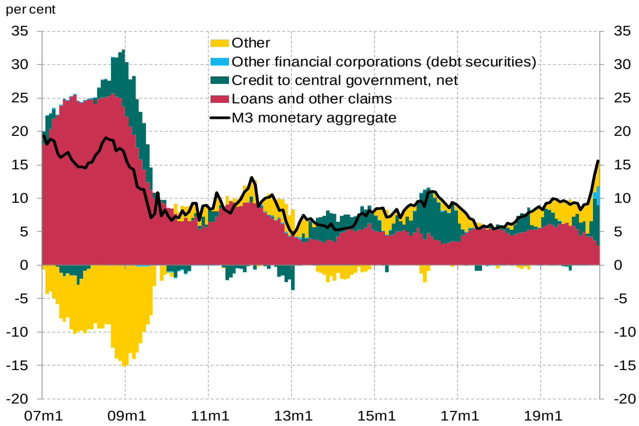
[47] In this chapter, the growth in the M3 broad money aggregate and in loans cited in the text is defined as the annual growth in the stock of a given category resulting from transaction changes. The data refer to monetary financial institutions.
[48] *Financial Stability Report. Special Issue: impacts of the Covid-19 pandemic*, NBP, June 2020.
[49] Corporate deposit growth amounted to 23.6% y/y in May 2020, compared to 12.9% y/y in February 2020. The growth in household deposits accelerated to 10.8% y/y in May from 8.4% y/y in February 2020. Transfers made under the government ani-crisis aid package contributed to an increase in corporate and household deposit growth.

2020; Figure 2.33). The decline was due to a slower pace of consumer loan growth (to 3.5% y/y in May 2020 from 8.7% y/y in February 2020) and stabilisation of housing loan growth (6.3% y/y compared to 6.4% y/y, respectively). The housing loan growth in May 2020 was driven by an increase in zloty-denominated loans (by 12.2% y/y) amid a further decrease in FX housing loan portfolio (-7.7% y/y). Data of Credit Information Bureau (Biuro Informacji Kredytowej; BIK) and survey data of NBP[50] point out to a sharp fall in demand for household loans. In March and April 2020,[51] the average weekly number of queries about instalment loans and cash loans dropped markedly as compared to the same period year ago. The total value of queries about housing loans also declined.[52]

In May 2020, the rate of growth of corporate loans slowed to 1.5% y/y from 2.4% y/y in February 2020; Figure 2.34). The slowdown was due to a faster pace of investment loan growth (5.9% y/y compared to 4.9% y/y in February 2020) and a negative rate of growth of current loans (-2.2% y/y compared to 2.1% y/y in February 2020). At the same time, according to questionnaire surveys, the percentage of enterprises applying for loans in the second quarter of 2020 remained at a lower level than in 2019.[53]

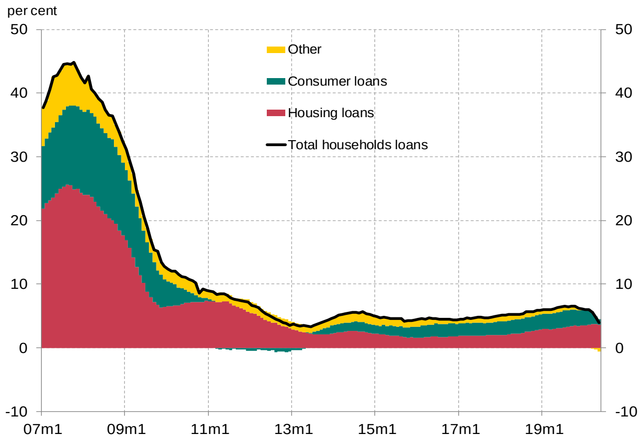
As uncertainty and credit risk grew in the first quarter of 2020, banks tightened their credit standards and terms both for enterprises and households, and declared to continue to tighten lending policy in the second quarter of 2020.[54] On the other hand, the NBP interest rate cuts from March to May 2020 led to a decrease in the interest

Figure 2.32 M3 counterparts (y/y)



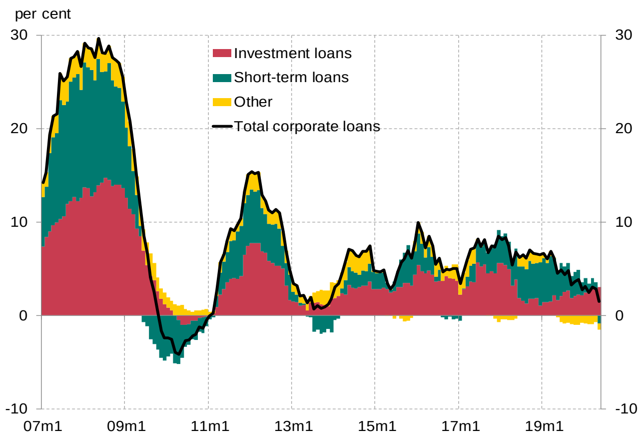
Source: NBP data.

Figure 2.33 Composition of growth in household loans (y/y)



Source: NBP data.
The category *Other* covers loans connected with credit cards, loans to individual entrepreneurs, loans to individual farmers and other receivables.

Figure 2.34 Composition of growth in corporate loans (y/y)



Source: NBP data.
The category *Investment loans* covers loans for investments and real estate purchases. The category *Other* covers car loans, loans for security purchases and other receivables.

[50] *Senior loan officer opinion survey on bank lending practices and credit conditions. 2nd quarter 2020*, NBP, April 2020.
[51] https://media.bik.pl/informacje-prasowe/511206/bik-popyt-na-kredyty-a-scenariusze-wyjscia-z-kryzysu-pandemicznego
[52] https://media.bik.pl/informacje-prasowe/520904/bik-indeks-popytu-na-kredyty-mieszkaniowe-wyniosl-w-maju-2020-r-24-2
[53] In 2020 Q2, the percentage of enterprises applying for loans amounted to 15.4%, compared to 15.5% in 2020 Q1. In 2019, it ran at the level of 16.9% on average (NBP survey data).
[54] *Senior loan officer opinion survey on bank lending practices and credit conditions. 2nd quarter 2020*, NBP, April 2020.

rates on loans (*Box 2: Monetary policy of Narodowy Bank Polski in response to the Covid-19 pandemic)*.[55]

At the same time, a majority of banks offered temporary suspension of loan repayment to current borrowers.[56]

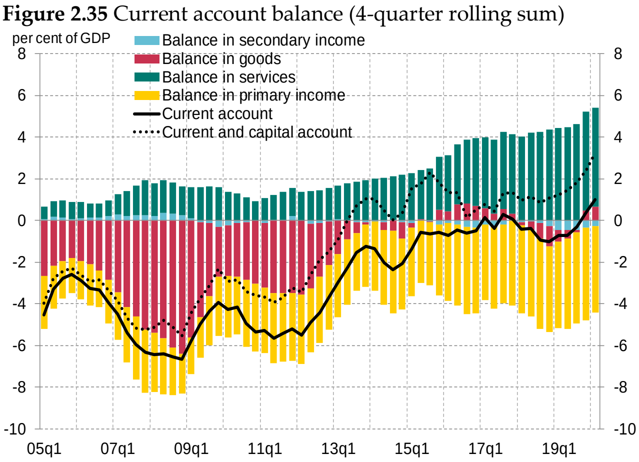
2.7 Balance of payments

In 2020 Q1, the current account balance grew to 1.3% of GDP (against 0.5% of GDP in 2019 Q4[57]; Figure 2.35). The increase in the current account balance was mainly due to the higher primary income balance, related to the fall in income of foreign direct investors in Poland. The balance was also boosted by a higher than a year ago balance in trade in goods.

Preliminary data for April 2020 show that the current account balance remained positive and higher than a year ago. In April, exports of goods decreased by 24.9% y/y, while imports fell by 23.9% y/y (see also 2.2.4 *External trade*).[58] There was also a sharp fall in exports and imports of services (37.0% y/y and 40.5% y/y respectively). Turnover in foreign travel and transport services declined particularly sharply. At the same time, the primary income balance improved and was over PLN 9 billion higher than a year ago.

The surplus on the capital account rose to 2.3% of GDP in 2020 Q1 (against 2.0% of GDP in 2019 Q4), and the total balance of the current and capital account increased to 3.5% of GDP (against 2.5% in 2019 Q4). The estimated data for April point to a further increase in the balance of both accounts.

Figure 2.35 Current account balance (4-quarter rolling sum)



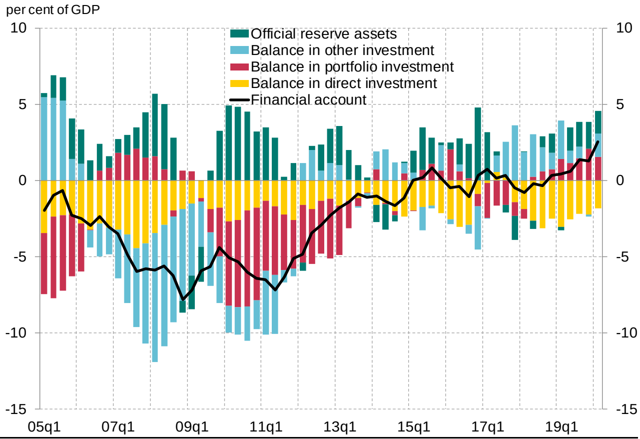
Source: NBP data.

[55] At the same time, in accordance with the recommendation of the Financial Stability Committee in its macroprudential capacity, the Minister of Finance issued a Regulation of 18 March 2020 on releasing banks from the obligation to maintain the systemic risk buffer. The decision led to the freeing of banks' capital worth approx. PLN 30 billion (see *Financial Stability Report. Special Issue: impacts of the Covid-19 pandemic*, NBP, June 2020).
[56] According to BIK data (as of 25 May 2020), the suspension applied to 8.3% of the portfolio of loans to individual clients and 26% of the value of the stock of loans to microentrepreneurs https://media.bik.pl/informacje-prasowe/518015/bik-raportuje-strukture-zawieszenia-odroczenia-splaty-rat-kredytowych.
[57] In this chapter, data on the balance of payments are presented in terms of a four-quarter rolling sum.
[58] A fall in external trade was already recorded at the end of 2020 Q1. In March 2020, growth in the export of goods was -4.6% y/y, while import growth was -1.4% y/y. In turn, growth in the export of services was -7.8% y/y, while growth in the import of services was -12.0% y/y.

In 2020 Q1 the financial account balance increased to 3.0% of GDP (against 1.7% of GDP in 2019 Q4; Figure 2.36), while the estimated data for April point to a further increase in this balance.[59]

External balance indicators in 2020 Q1 evidenced that the Polish economy is well balanced (Table 2.3). Poland's external debt to GDP ratio remained lower than in the previous years and the ratio of net international investment position to GDP improved markedly.

Figure 2.36 Financial account balance (4-quarter rolling sum)



Source: NBP data.

A positive value of the balance means an increase in Polish net assets (net outflow of capital from Poland).

Table 2.3 Selected external stability indicators (4-quarter rolling sum in per cent, unless indicated otherwise)

	2018				2019				2020
	q1	q2	q3	q4	q1	q2	q3	q4	q1
Current account balance/GDP	-0.4	-0.4	-0.9	-1.0	-0.7	-0.7	-0.3	0.4	1.0
Current and capital account balance/GDP	0.9	1.1	0.8	1.1	1.2	1.4	1.8	2.4	3.2
Trade balance/GDP	3.9	3.8	3.5	3.4	3.9	4.1	4.5	5.2	5.4
Official reserve assets (in monthly imports of goods and services)	4.8	4.7	4.6	4.8	4.6	4.6	5,0	5.1	5.2
Foreign debt/GDP	67	67	65	64	62	61	61	59	59
Net international investment position/GDP	-59	-57	-57	-56	-55	-54	-52	-50	-46
Official reserve assets/short-term foreign debt and forecast current account balance	102	98	98	115	114	123	148	165	166
Official reserve assets/short-term foreign debt	106	102	99	112	108	105	111	118	118

Source: NBP data.

The last two indicators include foreign debt and the level of official reserves at the end of the period.

[59] The increase in the financial account balance was primarily due to an increase in the balance of other investments as a result of the growth in assets of the Polish banking sector and the fall in the liabilities of NBP, mainly those due to passive repo transactions. The balance was also boosted by the decrease in the liabilities in direct investments, which was the result of lower than a year ago reinvested profits. On the other hand, the financial account balance was reduced by the lower than a year ago balance of the investment portfolio, which was due to the reduced involvement of residents in foreign securities as well as the negative balance of official reserve assets. The further increase in the balance in April was primarily due to the sharp fall in liabilities under debt securities (as a result of the purchase by the State Treasury of euro-denominated bonds from non-residents in accordance with the maturity date as well as the sale by non-residents of zloty-denominated bonds).

3. Monetary policy in March – July 2020

At the meeting held on 3-4 March 2020 the Monetary Policy Council kept the NBP interest rates unchanged at the following levels: reference rate 1.50%, lombard rate 2.50%, deposit rate 0.50%, rediscount rate 1.75%.

At the meeting held on 17 March 2020 the Council decided to cut the NBP reference rate by 0.5 percentage points, i.e. to 1.00%, and set the remaining NBP interest rates at the following levels: lombard rate 1.50%, deposit rate 0.50%, rediscount rate 1.05%, discount rate 1.10%.

At the meeting held on 8 April 2020 the Council decided to cut the NBP interest rates by 0.50 percentage points, i.e. to the following levels: reference rate 0.50%, lombard rate 1.00%, deposit rate 0.00%, rediscount rate 0.55%, discount rate 0.60%.

At the meeting held on 28 May 2020 the Council decided to cut the NBP reference rate by 0.40 percentage points, i.e. to 0.10%, and set the remaining NBP interest rates at the following levels: lombard rate 0.50%, deposit rate 0.00%, rediscount rate 0.11%, discount rate 0.12%.

At the meetings held on 16 June and 14 July the Council kept the NBP interest rates unchanged.

This chapter includes the previously published *Minutes of the Monetary Policy Council decision-making meetings* held between March and June 2020 as well as the *Information from the meeting of the Monetary Policy Council* in July 2020.

Minutes of the Monetary Policy Council decision-making meeting held on 4 March 2020

During the meeting, attention was drawn to the deteriorating economic climate in the immediate environment of the Polish economy. In the euro area, as the recession in the industrial sector unfolds, the annual GDP growth rate decreased in 2019 Q4. Economic conditions remained weak, in particular, in the major countries of this economy: in Germany quarterly GDP growth stood at zero, and in France and Italy it was negative. In the United States, GDP growth remained stable in 2019 Q4, despite weaker activity in industry. However, at the beginning of 2020 the economic climate in the United States deteriorated slightly. Attention was drawn to a marked slowdown in economic activity in China at the beginning of 2020.

The Council members assessed that due to the spread of coronavirus, uncertainty about the global economic outlook had risen substantially in the recent period. In China, production had been halted in certain companies, causing disruption in some of the global value chains, and a number of global firms had suspended production. At the same time, many countries had seen a drop in demand for tourism and transportation services. Against this background, global growth forecasts had been revised downwards, and sentiment in the global financial markets had slumped. There had been a sharp fall in equity prices, and a decline in government bond yields.

The Council members pointed out the sharp fall in the prices of oil and liquified natural gas. At the same time, it was underlined that prices of many food commodities were persisting at a high level. As a result, inflation in the global economy, including the external environment of the Polish economy, had risen in the past few months.

Due to the deteriorating economic outlook, some central banks had cut their interest rates or announced an easing of the monetary policy stance. In particular, interest rates had been cut by the US Federal Reserve (Fed). It was emphasised that the European Central Bank (ECB) was keeping the deposit rate below zero while conducting asset purchases and signalling the maintenance of loose monetary policy in the coming quarters. The Council members stressed the fact that the financial markets were expecting the ECB to loosen monetary policy further and the Fed to continue cutting interest rates.

Certain Council members were of the opinion that the potential for counteracting the economic effects of coronavirus by loosening monetary policy was limited. In their view, this resulted in part from the supply-side nature of the shock and high economic uncertainty pertaining to it. These Council members also pointed out the restricted room for further interest rate cuts in some of the economies. In contrast, other Council members argued that interest rate cuts in many countries would limit a further deterioration in sentiment and mitigate the effects of the economic losses, thus helping to support the economy in the longer run.

The Council members judged that economic conditions in Poland remained good, despite slowing economic growth. In 2019 Q4, real GDP growth stood at 3.2% y/y. GDP growth was supported by steady consumption growth, albeit slightly slower than in previous quarters, fuelled by favourable labour market conditions, strong consumer confidence and social benefit payments. It was pointed out that investment continued to grow, and the contribution of net exports to GDP growth was positive. Certain Council members highlighted the drop in demand growth below its long-term average.

Some Council members assessed that the data incoming at the beginning of 2020 suggested potentially slower growth in 2020 Q1 than in the preceding years. This was indicated by moderate industrial output growth, slower retail sales growth and somewhat weaker – although still upbeat – household sentiment. However, these Council members also stressed that construction and assembly output picked up in January, which might have been partially due to the favourable weather conditions in that month. While discussing current data, certain Council members pointed out the persistence of the PMI index below 50 points and a deterioration in some of the other confidence indicators.

It was observed that conditions in the labour market remained favourable, even though employment growth in enterprises had slowed down somewhat. On the other hand, wage growth in the corporate sector had risen slightly in January 2020 (possibly in part due to the increased minimum wage), while staying close to the level observed in the past two years. Certain Council members pointed out that the slight increase in the registered unemployment rate in recent months might signal worse prospects for the labour market.

According to preliminary Statistics Poland (GUS) data, in January 2020 inflation exceeded the upper limit of deviations from the NBP inflation target. The majority of Council members underlined that the rise in inflation above the NBP target level had been driven by regulatory and supply-side factors that remained beyond the influence of the domestic monetary policy. These factors comprised, in particular, higher electricity and fuel prices, the increase in waste disposal charges and excise tax on alcoholic beverages and tobacco products as well as a further rise in the prices of unprocessed food, related to the spread of the African Swine Fever epidemic in many countries and to last year’s drought. It was emphasised that the upward pressure on prices was also the result of demand factors related to favourable financial situation of households, yet these alone were not the reason why the inflation target had been exceeded. It was pointed out that the growth in the prices of non-food products and market services, i.e. prices which were largely determined by demand and not by regulatory factors or supply shocks, had not exceeded 2.5% y/y.

Certain Council members drew attention to the fact that some measures of business and consumer inflation expectations had risen recently. Yet the majority of the Council members shared the opinion that the increase was attributable to the adaptive nature of these expectations and the increase in current inflation. In this context, it was underlined that the medium-term inflation expectations of market analysts remained anchored at the level of the inflation target.

Some Council members pointed out that higher inflation was not the result of excessive lending growth. These Council members emphasised that the total growth in lending to the non-financial sector had decreased in the past few months and remained slower than nominal GDP growth. They also drew attention to the slower consumer credit growth and the still moderate housing credit growth. In addition, they pointed out that corporate lending growth remained slow, which – in the opinion of certain Council members – might result from companies financing operations from sources other than bank credit.

Certain Council members indicated that higher inflation contributed to lower real interest rates, which supported fast, in their assessment, lending and higher demand for riskier assets and real estate. On the other hand, some Council members underlined that lower real interest rates than in the past was a phenomenon typical for many of the world's economies these days. These Council members also pointed out that the decrease in real interest rates resulted primarily from negative supply shocks, which curtailed households' real income and their ability to service debt. Therefore, these shocks would have a hampering effect on lending in the economy. Hence, the situation was different than in a case when real interest rates decline due to price growth resulting from excessive demand in the economy.

Discussing the results of the March projection, the Council members indicated that according to its central path, GDP growth in 2020 and 2021 would remain close to 3%. Economic growth was to be further supported mainly by consumption, although consumption growth would be slower than in previous years due to the expected weakening of wage growth and the decrease in total employment forecast for 2021. Simultaneously, it was pointed out that investment growth might slow down in the projection horizon due to weaker growth in the absorption of EU funds. It was also emphasised that export growth might be slower than in the previous years. The Council members were of the opinion that in these circumstances, GDP growth would probably remain below its long-term average in the subsequent quarters.

Attention was drawn to the fact that risks to the forecast GDP growth in Poland were on the downside. The main source of risk was the further spread of the coronavirus, which might cause a sharper drop in economic activity growth in Poland's immediate environment, and, as a result, a more pronounced weakening in export growth. At the same time, further expansion of the coronavirus might lead to a slump in business and consumer sentiment at home.

The Council members pointed out that the central path of the March inflation projection indicated a possibility of inflation in 2020 running slightly above the upper limit of deviations from the inflation target due to the supply-side and regulatory factors. However, the majority of Council members stressed that as the influence of those factors faded, the anticipated GDP growth weakening materialised and the output gap narrowed, inflation would return close to the inflation target in 2021. Another factor with a dampening effect on inflation would be the recently observed decline in global oil prices. In this context it was noted that inflation returning close to the inflation target in 2021 was suggested not only by the central path of the March projection, but also by external forecasts.

In turn, certain Council members emphasised that in line with the central path of the projection, in the coming quarters inflation would continue to exceed the inflation target, temporarily even exceeding the upper limit of deviations from the inflation target. These Council members observed that unit labour cost growth – which was high in their opinion – would exert upward pressure on inflation. It was also pointed out that the further development of energy and unprocessed food prices was subject to uncertainty. The interruptions of the global supply chains as a result of the spread of the coronavirus were also noted as possibly having an inflationary impact.

The majority of Council members decided that the NBP interest rates should remain unchanged at the current meeting. In their opinion, the outlook for the domestic economy remained favourable, yet GDP growth in the coming quarters would be lower than in the previous years. At the same time, the Council assessed that recently uncertainty as to the scale and duration of the economic slowdown abroad and its impact on domestic economic activity had increased. The majority of the Council members underlined that although in the coming quarters the annual inflation rate might remain above the upper limit of deviations from the inflation target, it would be the result of the impact of supply-side and regulatory factors and would therefore remain beyond the direct influence of domestic monetary policy. In the opinion of these Council members, as the impact of those factors faded, and amid the anticipated slowdown in GDP growth, inflation would subside and return close to the inflation target over the monetary policy horizon. Such an assessment was supported by the results of the March inflation and GDP projection.

The Council members pointed out that due to the increased uncertainty about the global growth outlook and the further development of the economic situation and inflation in Poland, uncertainty about the further development of the NBP interest rates had, however, increased recently.

Certain Council members assessed that over the monetary policy horizon inflation might be higher than indicated by the current forecasts. They pointed out that such a risk was related to the possible persistence of some of the factors currently raising price growth. However, these Council members judged that the NBP interest rates should remain unchanged at the current meeting of the Council due to the increased uncertainty about the further economic situation around the world and its impact on the business climate and inflation in Poland.

In turn, other Council members emphasised that recently the risk of a sharper and longer-lasting global economic slowdown had continued to increase, and at the same time further signs had appeared indicating the transmission of the weak global business conditions into economic growth in Poland. In this context, these Council members drew attention to the additional risks related to the spread of the coronavirus. At the same time, these Council members judged that in the medium term inflation would be in line with the NBP target. As a result, a view was maintained that it was justified to lower the NBP interest rates now and that – in the longer run – it might be justified to consider further cuts in interest rates or the introduction of unconventional monetary policy instruments. Certain Council members pointed out that the assessment regarding the possible justification of monetary policy easing going forward would be possible after more information had become available regarding the situation in the global and domestic economy.

At the meeting, a motion to cut the basic NBP interest rates by 0.25 percentage points was submitted. The motion was rejected. The Council decided to keep the NBP interest rates unchanged: the reference rate at 1.50%, the lombard rate at 2.50%, the deposit rate at 0.50% and the rediscount rate at 1.75%.

Minutes of the Monetary Policy Council decision-making meeting held on 17 March 2020

While discussing the current economic situation, the Council members drew attention to the fact that the global economic situation had substantially deteriorated as a result of the Covid-19 pandemic and the measures taken by numerous countries to contain its spread. In particular, economic activity in the service sector had slowed down significantly, consumer sentiment had deteriorated, and many companies worldwide had temporarily halted production.

In these conditions, uncertainty about the outlook for global GDP growth has risen sharply and financial market sentiment has deteriorated significantly. The prices of many commodities, including oil, have plummeted, along with a depreciation of some emerging market economies' currencies.

It was pointed out that although according to the official data in China the spread of the coronavirus epidemic had slowed, and following this, activity in the Chinese economy should gradually rebound, the epidemic was spreading in many other countries. As a result, the forecasts of global economic activity had been significantly revised downwards, and a recession was likely in the euro area in 2020. It was judged that, according to current forecasts, there should be an improvement in the economic conditions further ahead; however, the pace of the recovery would depend on the effectiveness of the measures taken to contain the epidemic as well as the long-term impact of the disruptions on the income and sentiment of economic entities.

In order to mitigate the negative economic effects of the pandemic, many countries are implementing or announcing the implementation of strong fiscal stimulus measures. At the same time, many of the world's central banks, of both developed and emerging economies, are cutting interest rates, are implementing or extending financial asset purchase programmes or pumping liquidity into the banking sector.

The US Federal Reserve has cut interest rates, bringing them close to zero, restarted asset purchases and increased liquidity in the financial market. Due to the permanently negative interest rates, the European Central Bank has not cut interest rates, but it has eased monetary conditions by significantly increasing the scale of asset purchases and liquidity provision to banks. At the same time, many other central banks have eased monetary policy.

The measures of central banks around the world – through providing liquidity to the economy and also reducing the costs of debt servicing – will reduce the negative economic effects of the pandemic. The majority of the Council members judged that the easing of monetary policy around the world would contribute to improving the financial situation and business sentiment. It was also pointed out that it would contribute to lower Treasury bonds yields, which would increase the fiscal space necessary to finance both the measures taken to combat the epidemic and stimulus packages offered. Certain Council members were of the opinion that the effectiveness of some of the measures taken by the central banks to support the economic conditions would be limited in a short period due to the supply-side character of the current shocks.

In Poland, the economic conditions in the first months of 2020 had been relatively good, although data indicated a gradual slowdown in economic growth. However, the spread of the coronavirus had caused a deterioration in economic sentiment, and the restrictions on the activity of some sectors, including the service sector, will contribute to lower economic activity. The Council members pointed out that the coronavirus epidemic would constitute a drag on the demand for and supply of many services, and also – through falling incomes – it would reduce demand for a significant number of non-necessity goods. At the same time, the decline of foreign demand would also contribute to lower economic activity. The Council members also drew attention to the supply-side consequences of the spread of coronavirus, including the disruption of some of supply chains and the reduction in the number of employees due to the need for people to stay at home.

The Council members also drew attention to the high level of uncertainty about the further development of economic conditions in Poland. It was underlined that the current forecasts suggested a sharp fall in GDP growth in the short term. It was judged that in the medium term an improvement in the economic conditions could be expected; however, economic activity growth would depend above all on the scale, extent and length of the pandemic.

According to the Statistics Poland (GUS) data, in February 2020 inflation stood at 4.7% y/y. It was pointed out that in the coming months inflation would most likely decline significantly. This would be supported by the expected fall in the prices of many services, which would be most vulnerable to a fall in demand in the current economic conditions. At the same time it was judged that prices of durable goods could also be expected to decline. As a result, core inflation would also fall significantly. It was underlined that the sharp decline in global commodity prices, including oil prices, would be an additional significant factor causing a decline in price growth in the coming quarters. Taking this into account, the majority of Council members judged that in the recent period there was an increased likelihood of a faster decline in inflation in 2020 than assumed in the March projection and of inflation running below the NBP inflation target over the monetary policy horizon.

Certain Council members pointed out that the current macroeconomic shocks were also of a supply-side nature, which could curb the decline of inflation, although these shocks can also reinforce pressure on necessity goods prices increases.

The majority of the Council members judged that at the current meeting the NBP interest rates should be lowered. These Council members were of the opinion that the cut in the NBP interest rates would reduce instalments on loans with a variable interest rate taken out by enterprises and households. The reduction in debt servicing costs would therefore mitigate the losses of enterprises and households caused by production stoppages, lower incomes and lower demand for goods and services. At the same time, lower loan instalments would reduce costs for indebted households, including the self-employed or persons working on the basis of civil law contracts, who are to a large extent exposed to the risk of loss of income. As a result, the monetary policy easing would also reduce the risk of insolvency of economic entities. These Council members pointed out that although the banks had announced the possibility of temporarily suspending loan repayments, this measure – which in itself would be desirable – would only mean the postponement of loan repayments. The majority of the Council members also underlined that the interest rate cuts would contribute to lower yields on Treasury bonds and the costs of public debt servicing, which would provide additional room for the necessary fiscal stimulus.

Certain Council members judged that while at the current meeting interest rates should be cut, the scale of the NBP interest rate cuts should be small. These Council members were of the opinion that non-standard monetary policy measures could be a more effective instrument in counteracting the negative economic effects of the coronavirus epidemic at the moment. An opinion was also expressed that the possibility of using such instruments could be constrained by an excessive interest rates reduction.

Certain Council members judged that the NBP interest rates should be kept unchanged at the current meeting. They argued that in the current conditions a cut in the NBP interest rates would have a limited impact on the real economy, because the sources of the economic shock are exogenous, and the barrier to lending was the currently low demand for credit and high level of uncertainty in the economy.

The Council members judged that in order to limit the impact of liquidity shocks caused by the pandemic, it was also advisable to increase liquidity in the banking sector by NBP. This is why it was necessary to reduce the reserve requirement ratio (along with raising the remuneration rate for this reserve to the level of the reference rate) and to conduct repo operations to supply liquidity to the banking sector. It was also underlined that in the face of a significant reduction in liquidity in the Treasury securities market, it was necessary to launch purchases of Treasury securities in the secondary market as part of the structural open market operations. The aim of these operations will be to change the long-term liquidity structure in the banking sector and maintain liquidity in the secondary market of Treasury bonds. It was also underlined that the purchase of Treasury bonds in the secondary market would strengthen the impact of the NBP interest rate cuts on the economy, that is, it would strengthen the monetary transmission mechanism.

The Council members judged that in order to reduce the risk of the impact of the current economic disruptions on the credit supply, it was justified for NBP to also offer bill discount credit, which would enable banks to refinance corporate loans, including those to small and medium-sized enterprises. However, it was also pointed out that the main tool supporting lending to small and medium-sized firms in the current conditions – namely significantly heightened uncertainty and heightened credit risk – should be, above all, the extension of the government loan guarantee scheme conducted by Bank Gospodarstwa Krajowego.

The majority of the Council members judged that monetary conditions should be eased in order to mitigate the negative economic impact of the spread of the coronavirus. This will support economic recovery after the period of disruptions and will mitigate the risk of inflation running below the NBP inflation target in the medium term.

At the meeting, a motion was submitted to cut the NBP reference rate by 0.5 percentage points, narrow the symmetrical corridor of standing facility rates to overall 1.0 percentage point around the reference rate, lower the rediscount rate to 1.05% and introduce the discount rate at the level of 1.1%. The motion passed.

At the meeting a motion was submitted to lower the required reserve ratio from 3.5% to 0.5% as well as a motion to raise the remuneration of the required reserve from 0.5% to the level of the NBP reference rate. Both motions passed. At the meeting a motion was also submitted to lower the required reserve ration from 3.5% to 0.25%. The motion did not pass.

The Council set the NBP interest rates as follows: the reference rate at 1.00%, the lombard rate at 1.50%, the deposit rate at 0.50%, the rediscount rate at 1.05%, and the discount rate at 1.10%.

Minutes of the Monetary Policy Council decision-making meeting held on 8 April 2020

While discussing the current economic situation, the Council members drew attention to the fact that the Covid-19 pandemic and the measures taken to contain its spread had contributed to a significant fall of the economic activity in many countries. This was accompanied by a sharp deterioration in business sentiment, indicating a collapse in services activity and a sharp downturn in industry. In addition, the situation in the labour market had deteriorated. Therefore, incoming data indicated that the scale of the negative economic impact of the pandemic was probably greater than earlier estimates. As a result, GDP forecasts around the world – including at Poland's main economic partners – had been revised sharply downwards. At the same time, in China – after probable containment of the epidemic and easing of the restrictions – the first signs of a recovery in economic activity had appeared.

The deterioration in the global economic outlook has kept risk aversion elevated in the global financial markets. This was reflected in increased price volatility of many assets, as well as a tightening of financing conditions. At the same time, since the beginning of the year global oil prices have declined significantly. It was pointed out that this was driven by the fall in current and forecast demand for this commodity amid a sharp contraction of economic activity, in the absence of an agreement on reducing oil production between Saudi Arabia and Russia. Certain Council members judged that in the coming months oil prices might rise, while remaining lower than in the previous years. The expected weakening of global demand had also contributed to the fall in the prices of some food commodities.

The Council members judged that the scale of the negative economic effects of the pandemic in many countries might be limited by the fiscal measures adopted. It was pointed out that the launch of fiscal programmes was mainly aimed at mitigating the impact of Covid-19 on the financial situation of enterprises and – as a result – on the level of employment and household income. It was underlined that effective measures in this area were key for the ability of economies to restore activity quickly after the resolution of the current disruptions.

The fiscal measures introduced in many economies were accompanied by a significant easing of monetary conditions. Many central banks had cut interest rates, increased liquidity in the banking sector, and were conducting asset purchases. It was emphasised that monetary policy easing was being carried out quickly and on a large scale.

The Council members expressed the opinion that the measures taken by the governments and central banks would contribute to an improvement in the medium-term economic outlook. At the same time, they emphasised that it was difficult to estimate the scale of their positive impact on economic growth, which, along with the limited capacity to predict the further course of the pandemic, caused significant uncertainty about GDP growth in the coming quarters.

In Poland the economic conditions in the first months of the year were relatively good. However, the Council members judged that the measures taken to limit the spread of the epidemic – although necessary from the point of view of public health protection – were contributing to a fall in economic activity, the scale of which could be very significant in the short term. It was emphasised that the fall in economic activity would be accompanied by a deterioration in the situation in the labour market and a reduction in household disposable income. It was also underlined that the health threat associated with Covid-19 along with the negative economic effects of the epidemic had led to a slump in consumer and business sentiment. It was judged that after the resolution of the disruptions associated with the pandemic, there would probably be a gradual improvement in the economic situation in the medium term. At the same time, it was pointed out that the pace and scale of the recovery were subject to considerable uncertainty. They would depend on the long-term impact of the disruptions on the income and sentiment of businesses. It was indicated that should the weakened sentiment persist, it could lower significantly the propensity of enterprises to invest and households to consume, adversely affecting GDP growth and inflation.

It was emphasised that the negative impact of the epidemic on economic growth would be mitigated by the stimulus packages introduced in Poland and many other countries. It was judged that the strong macroeconomic fundamentals of the Polish economy, related to the low level of internal and external debt and high competitiveness, would have a positive impact on the medium-term economic outlook. It was underlined that the maintenance of price competitiveness of Polish exports, and also their geographical and sectoral diversity, would support the restoration of Polish foreign sales after the fading of the pandemic, which would take place amid intensified competition in international markets.

It was pointed out that in the coming months inflation would most likely decline significantly. Slower price growth would be supported by the expected fall in global economic activity and weakening of domestic demand. Inflation would also be lowered by lower commodity prices in the global markets. Taking this into account, the majority of the Council judged that – despite the easing of NBP's monetary policy in the recent period – the risk of inflation falling below NBP's inflation target over the monetary policy transmission horizon remained. Certain Council members expressed the opinion that the fall in economic activity might be accompanied by an increase in price growth in the medium term.

The majority of the Council members judged that, taking into account the significant deterioration in the economic outlook and the increased risk of a fall in inflation below the NBP target in the medium term, NBP interest rates should be cut once again at the current meeting. These Council members pointed out that the decision would directly lead to a further reduction in instalments on loans with a variable interest rate taken out by enterprises and households. The reduction in debt servicing costs would therefore mitigate the negative impact of the Covid-19 restrictions on the financial situation of enterprises and households and would reduce the risk of their insolvency. As a result, the interest rate cut would contribute to limiting the secondary effects of the Covid-19 epidemic – such as an increase in unemployment and a sharp fall in consumer demand – thus improving the country's medium-term outlook and strengthening the stability of the financial system. It was emphasised that this effect would be strengthened by the positive impact of the interest rate cut on business sentiment after the pandemic had ended. Mitigation of the negative impact of the pandemic on economic activity would also be supported by a decline – as a result of the decrease in interest rates – in yields on Treasury bonds and the costs of public debt servicing, which would provide more room for the necessary fiscal stimulus. The majority of the Council members pointed out that an interest rate cut, supporting the economic growth with all of the indicated channels, would reduce the risk of a fall in inflation below the NBP inflation target over the monetary policy transmission horizon.

A view was expressed that although the monetary policy should be eased at the current meeting, it should be made more expansionary through direct influence on the longer end of yield curve, rather than by reference rate cut.

The Council members underlined that in order to strengthen the easing of monetary conditions in the economy, NBP should continue to carry out the purchase of Treasury securities, while extending the range of purchased assets to include debt securities guaranteed by the State Treasury. Purchase operations will be carried out in the secondary market as part of the structural open market operations. The aim of these operations will be to change the long-term liquidity structure in the banking sector, maintain liquidity in the secondary market of the purchased securities and strengthen the impact of the NBP interest rate cuts on the economy, that is, strengthen the monetary transmission mechanism. The timing and scale of the operations will depend on the market conditions.

NBP will also offer bill discount credit intended to refinance corporate loans granted by banks.

It was pointed out that all the measures taken by NBP were aimed at reducing the negative economic consequences of the pandemic and creating the conditions for a rapid recovery in economic activity after the current disruptions had ceased. As a result, these measures support the maintenance of macroeconomic and financial stability, while also reducing the risk of inflation falling below the NBP inflation target in the medium term.

At the meeting a motion was submitted to lower the NBP interest rates by 0.5 percentage points, i.e. the reference rate to 0.50%, the lombard rate to 1.00%, the deposit rate to 0.00%, the rediscount rate to 0.55%, and the discount rate to 0.60%. The motion passed.

At the meeting a motion was submitted to extend the purchase of assets by including securities guaranteed by the State Treasury and Treasury securities with a maturity not exceeding 1 year. The motion passed.

At the meeting a motion was also submitted to introduce repo operations with over two-year maturity and interest of 0.25%. The motion did not pass.

The Council set the NBP interest rates as follows: the reference rate at 0.50%, the lombard rate at 1.00%, the deposit rate at 0.00%, the rediscount rate at 0.55%, and the discount rate at 0.60%.

Minutes of the Monetary Policy Council decision-making meeting held on 28 May 2020

While discussing the current economic situation, the Council members pointed out that incoming data confirmed a sharp decline in global economic activity in the aftermath of the Covid-19 pandemic. It was noted that many economies had seen a slowdown in economic growth already in 2019 Q4, yet the pandemic-driven shock had markedly exacerbated the economic downturn. In the economies of Poland's main trading partners this had been reflected in a decline in GDP in 2020 Q1 and a strong slump in industrial output and retail sales in April. This was accompanied by a marked deterioration in consumer and business sentiment. The situation in the labour market had also deteriorated, yet the scale of increase in unemployment varied across economies and was dependent on the introduced anti-crisis measures. It was emphasised that although business sentiment had improved in May – along with the gradual lifting of restrictions in the European economies – economic sentiment indicators remained at levels suggesting the likely persistence of weak activity also in the coming months.

Attention was drawn to the considerable uncertainty about the outlook for global economic growth. According to the current forecasts, global GDP will decline significantly in 2020. The year 2021 will see a rebound in economic activity, although the pace of the recovery will probably be slower than previously expected. It was pointed out that the renewed rise in COVID-19 cases, mounting geopolitical tensions and, primarily, the possible long-lasting impact of the pandemic on economic decisions of households and enterprises were risk factors for the fast return of global economic activity to the pre-COVID-19 levels.

Council members pointed out that the uncertainty about the outlook for global growth contributes to the heightened price volatility in the financial markets In turn, the weakening current and forecast demand was a factor driving down the prices of many commodities. Prices of energy commodities, including oil, are lower than at the beginning of the year. Certain members of the Council assessed that oil prices would remain below the previous years' levels in 2021. It was noted that the recent months had also seen declines in the prices of some food commodities. Along with declining economic activity, this contributed to a drop in inflation in many countries, including in Poland's main trading partners. The majority of Council members judged that given the current developments, there was a significant risk of deflation or permanently subdued inflation in the global economy which – given the considerable rise in public debt driven by fiscal stimulus packages – would have a negative impact on the outlook for global economic growth and macroeconomic stability. Other members of the Council pointed out that the recovery from the pandemic crisis would be accompanied by inflation.

It was pointed out that in order to limit the negative consequences of the pandemic, many economies had introduced fiscal stimulus packages on a very large scale. It was indicated that the implemented fiscal stimulus packages were aimed at mitigating the impact of COVID-19 on the financial situation of enterprises, employment and households' income.

In many economies fiscal stimulus was accompanied by strong monetary easing. Many central banks have significantly cut their interest rates. Yet it was noted that the impact of those cuts on the economy in some countries was limited by a marked decline in price growth, boosting real interest rates. It was pointed out that many central banks had introduced or extended the existing financial asset purchase programmes and had taken other measures to increase liquidity in the banking sector. It was indicated that the measures taken by the major central banks of the developed countries along with the fiscal stimulus programmes in those economies had a positive impact on the financial market sentiment, thus contributing to the appreciation of emerging economies' currencies.

In Poland the economic conditions in the first months of the year were relatively good, although annual GDP growth for 2020 Q1 had decelerated. At the same time, industrial output and retail sales data for April confirmed the slump in economic activity driven by the Covid-19 pandemic. The negative impact of the pandemic was also reflected in the deteriorating labour market situation, indicated by falling employment and declining wages in the enterprise sector. It was also pointed out that the fall in employment had been curbed by the government's measures aimed at limiting the impact of the pandemic on the labour market. At the same time, it was emphasized that household and business sentiment had further deteriorated.

It was judged that the gradual lifting of restrictions related to pandemic, which started in May, would revive economic activity. However, it was stressed that the level of activity in the coming quarters would be lower than before the pandemic due to the declining income of some households and enterprises and higher uncertainty about their future financial situation.

It was observed that the negative impact of the pandemic on economic growth was mitigated by economic policy measures, including monetary easing by NBP. It was underlined that the measures taken so far by NBP translated into lower operating costs of indebted enterprises, supporting their financial performance and, as a result, limiting the scale of the decline in employment. In this way and also by reducing the credit charges, NBP's measures contribute to the improvement of the financial situation of households. It was also pointed out that although economic policy measures were limiting the negative economic effects of the pandemic, they were not able to offset them entirely.

The majority of Council members indicated that this year's decline in GDP would be reflected in a fall in the aggregate income in the economy. It was pointed out that by lowering interest rates, NBP had limited the impact of this fall on the financial situation of indebted households and enterprises.

Certain members of the Council also indicated that interest rate cuts – given, in their opinion, the limited scope for further cuts of interest rates on deposits – would also contribute to decrease in banks' net interest margins, which might translate into their worse financial performance. They also underlined that lower interest rates would translate into lower household income on bank deposits. Those members also stressed that the NBP interest rate cuts implemented so far had been accompanied by the tightening of banks' credit policy. The majority of Council members underline, however, that the ECB's experience suggested that interest rate cuts had a neutral impact on the banking sector's performance. Moreover, through the positive impact of lower interest rates on economic activity, employment and wages, and finally on debtors' capacity to pay debts, interest rate cuts would limit the scale of credit losses, thus supporting the stability of the banking sector. At the same time, those members observed that the change in interest rates on term deposits would have an appreciable impact on income only in the case of high-value deposits, and would therefore only influence the financial situation of a small group of deposit holders.

Council members stressed that in April annual CPI growth had considerably declined, with a fall in the general price level in month-on-month terms. This was accompanied by further deflation of producer prices. The majority of Council members were of the opinion that considering the expected subdued economic activity globally and in Poland and lower commodity prices in the global market, inflation would further decline in the coming months. In view of the above, the majority of Council members expressed the opinion that despite NBP's monetary policy easing in the recent period, there was still a risk of inflation falling below the NBP inflation target in the monetary policy transmission horizon. At the same time, certain members of the Council pointed out that price growth might increase in subsequent quarters which, in their opinion, might be driven by a rebound in consumption after the pandemic, higher food prices resulting from the likely agricultural drought and growing prices of intermediate goods driven by deglobalisation.

The majority of Council members judged that considering the significant scale of the economic downturn and the prospects of lower economic activity in the coming quarters than before the pandemic and, consequently, the persisting risk of inflation falling below the NPB inflation target in the medium term, NBP interest rates should be further cut at the current meeting. Those members pointed out that such a decision would directly contribute to further reductions in instalments of variable rate loans taken out by enterprises and households. Lower loan servicing costs will mitigate the negative impact of the pandemic on the financial situation of those entities. As a result, the interest rate cut will also limit the scale of insolvency of enterprises, will contribute to a lower rise in unemployment, and will limit related secondary effects of the pandemic. Thus, the interest rate cut will improve the medium-term outlook for the domestic economy and – through the positive impact on the financial situation of debtors – will strengthen the stability of the financial system. The negative impact of the pandemic on economic activity will also be mitigated by the reduced – as a result of lower interest rates – yields on Treasury bonds and costs of public debt servicing making more room for the necessary fiscal stimulus programmes. Furthermore, the interest rate reduction will limit the risk of a further appreciation of the Polish zloty against the main currencies, which would strengthen in procyclical fashion the negative impact of the sharp fall of external demand on exporters' income and, consequently, negatively affect activity and employment in the Polish economy. As a result, and also given the expected low economic activity and price growth abroad, further appreciation of the zloty would increase the risk of deflation, which along with higher unemployment than before the pandemic would be detrimental to macroeconomic stability. The majority of Council members pointed out that the interest rate cut, while supporting economic activity through all the above mentioned channels, would limit the risk of inflation falling below the NBP inflation target in the monetary policy transmission horizon.

Certain members of the Council expressed the opinion that the NBP interest rates should be kept unchanged at the current meeting. Those members expressed the opinion that such a decision was supported by the possible rise in price growth in the coming quarters. Those members also observed that given the heightened uncertainty about the economic outlook, another interest rate cut would not stimulated lending in the economy. At the same time, such monetary easing would contribute to rising consumer and asset prices, lowering interest rates on deposits and a rise in fees charged by banks.

The Council members underlined that NBP would continue to purchase Treasury securities and debt securities guaranteed by the State Treasury in the secondary market as part of the structural open market operations. The aim of these operations will be to change the long-term liquidity structure in the banking sector, maintain liquidity in the secondary market of the purchased securities and strengthen the impact of the NBP interest rate cuts on the economy, that is, strengthen the monetary transmission mechanism. The timing and scale of the operations will depend on market conditions.

NBP will also offer bill discount credit intended to refinance corporate loans granted by banks.

The majority of Council members pointed out that all the measures taken by NBP reduced the negative economic consequences of the pandemic, by limiting the scale of slowdown in economic activity and supporting the income of households and enterprises. As a result, NBP's monetary policy contributes to mitigating the fall in employment and limiting the deterioration of the financial situation of enterprises, supporting a rapid recovery in economic activity after the pandemic ends. NBP's measures reduce the risk of inflation falling below the NBP inflation target in the medium term and, through the positive impact on the financial situation of borrowers, they contribute to the strengthening of the financial system stability.

At the meeting a motion was submitted to lower the reference rate by 0.40 percentage points, i.e. to the level of 0.10% and set the other interest rates at the following levels: the lombard rate at 0.50%, the deposit rate at 0.00%, the rediscount rate at 0.11%, and the discount rate at 0.12%. The motion passed.

The Council set the NBP interest rates as follows: the reference rate at 0.10%, the lombard rate at 0.50%, the deposit rate at 0.00%, the rediscount rate at 0.11%, and the discount rate at 0.12%

Minutes of the Monetary Policy Council decision-making meeting held on 16 June 2020

While discussing the current economic situation, Council members pointed out that the Covid-19 pandemic contributed to a fall in global economic activity, including a recession in the economies of Poland's major trading partners. In particular, the April data showed a strong slump in global activity. It was emphasised that this was accompanied by a worsening situation in the labour market and a marked deterioration in consumer and business sentiment. At the same time, Council members indicated that in the recent period, as many countries were easing the containment measures, sentiment was gradually improving.

Referring to the outlook for the global economy, it was pointed out that according to the current forecasts, in the second half of 2020 the global economy will rebound, although the level of activity will be lower than before the pandemic. In this context, attention was drawn, on the one hand, to the downward revision of the ECB's forecasts for euro area GDP growth in 2020 and the subsequent years, and, on the other hand, to the initiative to set up a Recovery Fund at the EU level to help boost activity in the EU. It was pointed out that the proposed value of the fund was significant, yet there was significant uncertainty about the timing of its launch.

It was pointed out that the main risk factors for the fast return of the global economy to the pre-pandemic level continued to include a renewed rise in Covid-19 cases, mounting geopolitical tensions, and primarily, the possible long-lasting impact of the pandemic on economic decisions regarding consumption and investment. All these factors contribute to considerable uncertainty about the timing and robustness of the recovery in the global economy in the coming quarters.

Council members pointed out that faced with the collapse in economic activity in March and April, many countries had undertaken unprecedented fiscal measures aimed at reducing the scale of the decline in incomes of households and businesses, as well as stimulating economic activity. It was also pointed out that fiscal stimulus packages in most countries were accompanied by monetary policy easing, which involved interest rate cuts and asset purchases. Some members of the Council indicated that certain central banks, including the ECB, whose main interest rate had been negative for many years, were still announcing their readiness to lower interest rates. It was emphasised that further monetary policy easing by the ECB in the recent period was the result of extending and increasing the scale of asset purchases. The Federal Reserve Bank of the United States had also extended asset purchases and announced it would use any possible tools to support the US economy. It was noted that the measures undertaken by the major central banks of the developed countries along with the fiscal stimulus programmes launched in those economies had a positive impact on the financial market sentiment, thus contributing to strengthening of emerging economies' currencies.

Members of the Council stressed that in the recent period the decline in the prices of some commodities had come to a halt, yet they were still markedly lower than at the beginning of the year. In particular, oil prices– despite having increased in the past few weeks – remained markedly lower than before the outbreak of the pandemic. Certain members of the Council judged that in the recent period oil prices had been affected by fundamental factors connected with the decline in economic activity and the fact that it was expected to recover only gradually in the subsequent quarters, as well as by the policy of the OPEC+ countries. Council members pointed out that the prices of major commodities were pushing down inflation, including in Poland's main trading partners. At the same time, some Council members indicated that the strong decline in price growth observed in many countries was driving up real interest rates despite monetary policy easing in those economies.

In Poland, data on economic conditions in April showed a strong slump in economic activity, a decline in wages and employment in the enterprise sector and weak consumer and business sentiment. It was also pointed out that the negative impact of the pandemic on employment was relatively small as strong protective measures had been taken, aimed at protecting jobs and subsidizing the income of employees and the companies employing them. It was observed that the main adjustments in the labour market still involved the reduction of working hours, the retirement of employees and more frequent use of sickness or care allowance. The Council emphasised at the same time that the gradual lifting of pandemic-related restrictions started in May and continuing in the recent weeks had translated into a certain improvement in sentiment and would revive economic activity in the subsequent weeks.

Council members expected that the rebound in economic activity – besides the likely further lifting of pandemic-related restrictions – would also be supported by economic policy measures, including NBP's monetary policy easing, which limits the scale of decline in employment, supporting household income and the financial situation of enterprises. In the context of the expected economic recovery, some members of the Council also drew attention to the important role played by Poland's investment in infrastructure. Certain members of the Council also observed that Poland had a chance to recover relatively quickly from the recession. At the same time it was noted that the expected economic recovery might be dragged down by the uncertainty about the consequences of the pandemic, lower incomes and weaker business sentiment than in the previous years. The majority of Council members emphasised that the pace of economic recovery might also be curbed by the lack of significant adjustment of the zloty exchange rate to the global shock caused by the pandemic and NBP's monetary policy easing. In this context it was observed that NBP's monetary policy should limit the risk of zloty appreciation against the main currencies, which would pro-cyclically enhance the negative impact of the sharp decline in external demand on exporters' income, thus adversely affecting activity and employment in the Polish economy. As a result, and taking into account the expected weak activity and low price growth abroad, the appreciation of the zloty would increase the risk of deflation, which combined with a higher unemployment rate than before the pandemic would be detrimental to macroeconomic stability.

Council members emphasised that annual CPI inflation had declined in May to 2.9%, falling over three months by 1.8 percentage points. Some members of the Council observed that despite the strong decline in the total expenditure on services, their annual price growth remained relatively high. This pointed to a certain bounce-back of demand after some of the restrictions imposed on the service sector had been eased and might result from the growing operating expenses of this sector under the new sanitary regime. At the same time – in the opinion of those members of the Council – amid recession, sales in the service sector would probably remain subdued in the coming quarters. It was pointed out that the decline in inflation was accompanied by further deflation of producer prices. In turn, certain members of the Council observed that the majority of core inflation measures remained at an elevated level, and inflation expectations, despite having declined in the recent period – still suggested that consumers perceived inflation as heightened.

The majority of Council members were of the opinion that considering the expected subdued economic activity globally and in Poland, low forecast inflation abroad and relatively low commodity prices in the global market, inflation would be low in the subsequent years. At the same time, certain members of the Council upheld the opinion that price growth might be boosted by a rebound in consumption after the pandemic, higher food prices resulting from the likely agricultural drought and growing prices of intermediate goods driven by deglobalisation.

Council members pointed out that NBP's measures taken so far had contributed to ease financing conditions in Poland. In particular it was emphasised that interest rate cuts had translated into lower expenses of indebted enterprises and households, supporting their budgets. It was pointed out that lower loan instalments provide more room for other kinds of spending, boosting demand and helping debtors to timely meet their payment obligations, thus being conducive to higher employment in the economy. Interest rate cuts translate also into lower yields on government bonds, which reduces the costs of public debt servicing. It was also emphasised that this effect was significantly reinforced by the asset purchase programmes in place. Thanks to ensuring liquidity in the market of the purchased assets – which is a direct result of NBP's intervention in this market – it is possible to finance anti-crisis measures without excessively increasing their costs. Moreover, NBP also launched the bill discount credit which allows the refinancing of corporate loans on very favourable conditions.

The Council members argued that NBP's measures would lead to lower unemployment, fewer bankruptcies among Polish enterprises and finally lower risk not only of inflation running below the target, but also of deflation, which would be detrimental to the entire economy, including to the financial system. Some members of the Council emphasised that the reduced credit risk and the ensuing lower credit losses for commercial banks as a result of NBP's measures were very important factors which should be considered when assessing the effects of monetary policy on the economy. At the same time, certain members of the Council pointed out that interest rate cuts exerted a downward pressure on bank interest margins, which might prompt banks to increase their charges. They also emphasised that as households' income on bank deposits was reduced as a result of lower interest rates, households would seek other, riskier forms of investment. Other members of the Council judged that a certain reallocation of savings – in line with households' preferences as regards the accepted risk-to-profit ratio – might be favourable for the economy. Referring to the lending policy of commercial banks, these members emphasised that it was affected by many factors, yet NBP's monetary policy was clearly acting against the procyclical tightening of banks' lending policy.

The Council members were of the opinion that following significant interest rate cuts in the previous months and the launch of asset purchases, the present meeting should keep the NBP interest rates unchanged and continue to pursue NBP's remaining measures. It was pointed out that NBP's monetary policy easing mitigated the negative effects of the pandemic, limiting the scale of the decline in economic activity and supporting the income of households and enterprises. As a result, NBP's monetary policy contributes to mitigating the fall in employment and limiting the deterioration of the financial situation of enterprises, supporting a quicker recovery in economic activity after the pandemic ends. NBP's measures reduce the risk of inflation falling below the NBP inflation target in the medium term and, through the positive impact on the financial situation of borrowers, they contribute to the strengthening the stability of the financial system.

The Council decided to keep NBP interest rates unchanged: the reference rate at 0.10%, the lombard rate at 0.50%, the deposit rate at 0.00%, the rediscount rate at 0.11%, and the discount rate at 0.12%.

Information from the meeting of the Monetary Policy Council held on 14 July 2020

The Council decided to keep the NBP reference rate unchanged at the level of 0.10%. At the same time, the Council set the remaining NBP interest rates at the following levels: lombard rate at 0.50%, the deposit rate at 0.00%, rediscount rate at 0.11%, discount rate at 0.12%.

NBP will continue to purchase government securities and government-guaranteed debt securities on the secondary market as part of the structural open market operations. The timing and scale of the operations will depend on the market conditions.

Furthermore, NBP will offer bill discount credit aimed at refinancing loans granted to enterprises by banks.

Incoming data confirm that the Covid-19 pandemic contributed to a fall in global economic activity, including recession in the economies of Poland's main trading partners. At the same time, along with a gradual easing of the containment measures, sentiment has improved in many economies, accompanied by a recovery in economic activity. Current forecasts indicate that the second half of 2020 will see a further improvement in the global economic conditions, although the level of activity will be lower than before the pandemic. Uncertainty remains regarding the pace and robustness of the recovery in the global economic conditions in the coming quarters.

A further improvement in the global economic conditions will be supported by the fiscal measures introduced as well as the accompanying easing of monetary policy, including the interest rate cuts and asset purchases.

Recent weeks have seen a certain improvement in sentiment in global financial markets. This was accompanied by an increase in the prices of some commodities, which, however, remain significantly lower than at the beginning of the year. Along with weaker economic activity, this contributed to the inflation staying at low levels in many countries, including Poland's main trading partners.

In Poland, incoming information suggests a gradual improvement in sentiment and a recovery in economic activity, which, however, remains lower than before the pandemic. This is accompanied by a further, although limited, fall in employment and a marked decline in wage growth in enterprises. According to the Statistics Poland (GUS) flash estimate, inflation stood at 3.3% y/y in June.

A further recovery in economic activity may be expected over the coming months. This will be supported by an improvement in the economic situation in the environment of the Polish economy and the economic policy measures, including the easing of NBP's monetary policy. At the same time, the scale of the expected recovery in activity may be limited by uncertainty about the effects of the pandemic, lower incomes and weaker sentiment of economic agents than in previous years. The pace of the economic recovery could also be limited by the lack of visible zloty exchange rate adjustment to the global pandemic-driven shock and to the monetary policy easing introduced by NBP.

The Council became acquainted with the results of the July projection of inflation and GDP, prepared under the assumption of unchanged NBP interest rates. The July projection takes into account data and information published up to 30 June 2020. In line with the July projection based on the NECMOD model, there is a 50-percent probability that the annual price growth will be in the range of 2.9–3.6% in 2020 (against 3.1–4.2% in the March 2020 projection), 0.3–2.2% in 2021 (compared to 1.7–3.6%) and 0.6–2.9% in 2022 (compared to 1.3–3.4%). At the same time, the annual GDP growth – according to this projection – will be with a 50-percent probability in the range of -7.2 – -4.2% in 2020 (against 2.5–3.9% in the March 2020 projection), 2.1–6.6% in 2021 (compared to 2.1–3.9%) and 1.9–6.0% in 2022 (compared to 1.8–3.7%).

NBP will continue to purchase government securities and government-guaranteed debt securities on the secondary market as part of the structural open market operations. These operations are aimed at changing the long-term liquidity structure in the banking sector, ensuring the liquidity in secondary markets for the purchased securities and enhancing the impact of the NBP interest rate cuts on the economy, i.e. strengthening the monetary policy transmission mechanism. The timing and scale of the operations will depend on the market conditions.

Furthermore, NBP will also continue to offer bill discount credit aimed at refinancing loans granted to enterprises by banks.

The NBP monetary policy easing mitigates the negative economic impact of the pandemic, limiting the scale of the fall in economic activity and supporting incomes of households and enterprises. Consequently, it alleviates the fall in employment and deterioration in financial situation of enterprises, thus being conducive to quicker economic recovery after the abatement of the pandemic. The measures undertaken by NBP reduce the risk of inflation falling below the NBP inflation target in the medium term and – due to their positive impact on financial situation of debtors – are conducive to enhancement of financial system stability.

The Council adopted the *Inflation Report – July 2020*.

4. Projection of inflation and GDP

This inflation and GDP projection was prepared by the Economic Analysis Department of Narodowy Bank Polski and presents a forecast of economic developments under the assumption of the unchanged NBP interest rates. In terms of the contents, works on this projection were supervised by Piotr Szpunar, Director of the Economic Analysis Department. The process was coordinated by the Macroeconomic Forecasts Division of the Economic Analysis Department. Using the macroeconomic model NECMOD, the projection was prepared as the outcome of an iterative process, in the course of which the paths of some variables were adjusted if they diverged from NBP experts' economic intuition based on their knowledge of economic processes. The Management Board of NBP approved the projection to be submitted to the Monetary Policy Council. The projection constitutes one of the inputs to the Monetary Policy Council's decision-making process concerning the NBP interest rates.

The July projection based on the NECMOD model covers the period from 2020 Q2 to 2022 Q4. The starting point for the projection is 2020 Q1.

The cut-off date for the data used in this projection is 30 June 2020.

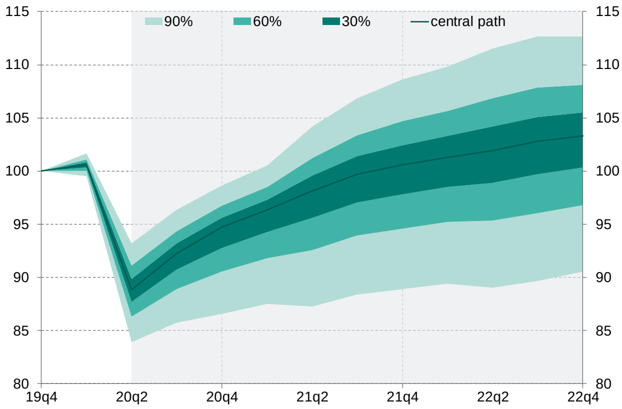
4.1 Summary

The rapid spread of the COVID-19 pandemic and administrative restrictions imposed on economic and social life in the first half of 2020 led to a deep recession in the global economy, including Poland. The fall in domestic GDP results from three interrelated negative shocks: reduced household and corporate expenditure in response to falling income and rising uncertainty, limited activity in industries and sectors directly affected by the lockdown and weaker external demand.

Along with the lifting of restrictions and the recovery abroad, domestic economic activity will pick up, supported by the government's anti-crisis measures and monetary easing. Yet, it will take some time for GDP to return to the pre-COVID-19 level. The scale of increase in consumer spending over the projection horizon will be curbed by lower household disposable income growth than before the crisis, change in people behaviour and growing importance of the precautionary motive in choosing between consumption and saving. Households and enterprises will also refrain from undertaking long-term investment projects due to only a slight improvement in their personal financial situation compared with the pre-crisis period and the persistently heightened uncertainty.

The negative consequences of the pandemic in the form of sluggish economic activity will contribute to a fall in inflation and then keep it at a low level. Yet, the scale of the decline in inflation in the coming quarters will be curbed by higher operating costs of some enterprises and lower labour productivity resulting from sanitary restrictions and the partial supply chain disruption. Moreover, inflation in 2020 will be boosted by the increase in excise duty in January and higher food prices. On the other hand, energy prices will be lower than in 2019.

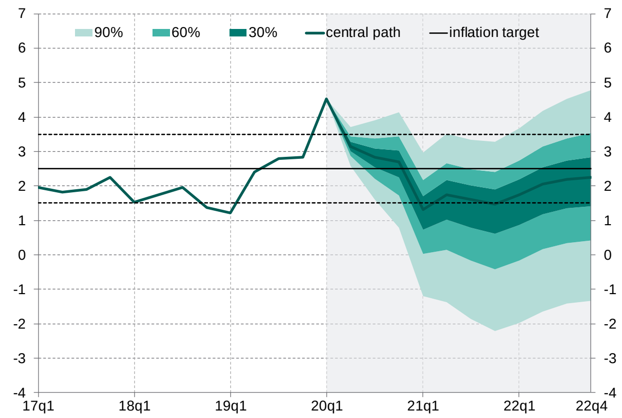
Figure 4.1 Level of real GDP (Q4 2019 = 100)



Source: Statistics Poland (GUS) data, NBP calculations.

Fan charts depict the probability distribution of possible outcomes of the level of GDP (Figure 4.1) and inflation rate (Figure 4.2). The part of the chart in the grey background illustrates forecast uncertainty of these variables over the projection horizon. It was assumed that the probability distribution of the possible outcomes of a variable at each forecast horizon belongs to the family of two-piece normal (TPN) distributions. This distribution is determined by three parameters: mode, variance and a measure of skewness. The mode of the distribution is the central path of the projection, while the variance is determined based on historical forecast errors for each of the horizons adjusted for the impact of the current uncertainty of exogenous variables. The skewness of the distribution is obtained on the basis of an analysis of several alternative scenarios together with the assigned probabilities of their realisation. On the chart, the distribution of the realisation of a given variable is illustrated by 30%, 60% and 90% probability intervals around the central projection path, which were constructed in such a way as to minimize the width of the bands (for more information see: Pońsko P., Rybaczyk B., 2016, Fan Chart – A Tool for NBP's Monetary Policy Making, Narodowy Bank Polski Working Paper, No 241.).

Figure 4.2 CPI inflation (y/y, %)



Source: Statistics Poland (GUS) data, NBP calculations.

The methodology of construction of fan charts is discussed in the note under Figure 4.1.

Inflation will hit the lowest level in 2021 due to the still relatively weak demand pressure, low prices in Poland's external environment and falling unit labour costs. At the same time, as the epidemic situation is anticipated to get back to normal, the growth in costs associated with restrictions imposed on economic activity will come to a halt and some enterprises may see a decline in costs. In 2022, along with the rebound in economic activity, consumer price growth will pick up again. However, the rise in inflation will be limited as restrictions on the supply side will ease more quickly than factors that now constrain demand.

Poland's future economic situation is strongly dependent on the progress of the COVID-19 pandemic and changing behaviour of economic agents under the gradual lifting of administrative lockdowns and restoring the freedom of doing business. The balance of uncertainty factors in the case of GDP growth and – to a lesser extent – CPI inflation shows that these categories are more likely to remain below the central projection scenario (Figure 4.1; Figure 4.2)

Table 4.1 July projection versus March projection

	2020	2021	2022
GDP (y/y, %)			
July 2020	-5.4	4.9	3.7
March 2020	3.2	3.1	3.0
CPI inflation (y/y, %)			
July 2020	3.3	1.5	2.1
March 2020	3.7	2.7	2.4

Source: NBP calculations.

4.2 External environment

Economic growth

The developments observed since the publication of the previous projection, in particular, the rapid spread of the COVID-19 pandemic and the introduction of administrative restrictions in economic and social life aimed at halting the spread of the virus, led to a slump in the global economy. The incoming data point to a marked fall in global GDP in 2020 Q2, driven both by restrictions on many sectors of the economy as well as growing uncertainty affecting both consumption and investment decisions (Table 4.2). It may be expected that from the second half of 2020, along with the gradual lifting of restrictions, activity in the major developed economies will slowly rebound. This will be supported by anti-crisis fiscal programmes aimed at mitigating the negative

Table 4.2 GDP abroad - July projection versus March projection

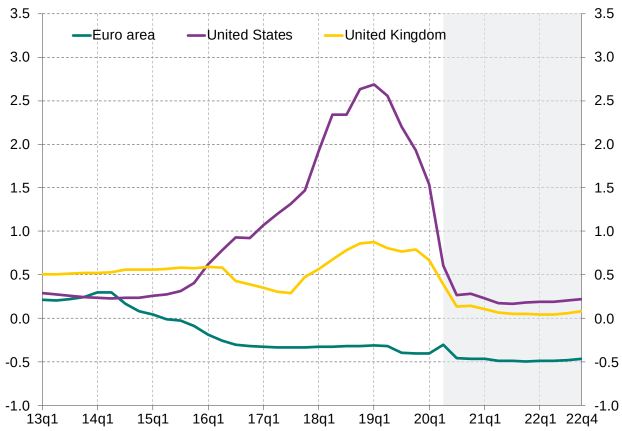
	2020	2021	2022
GDP in Euro Area (y/y, %)			
July 2020	-9.1	5.2	3.2
March 2020	0.9	1.3	1.3
GDP in United States (y/y, %)			
July 2020	-5.7	3.4	2.7
March 2020	1.9	1.8	1.9
GDP in United Kingdom (y/y, %)			
July 2020	-9.6	5.1	3.3
March 2020	1.1	1.0	1.3

Source: NBP calculations.

effects of the COVID-19 pandemic and strongly expansionary monetary policy (Figure 4.3).

However, it will take many quarters for GDP to return to the levels observed before the outbreak of the pandemic. In the initial recovery phase, global economic growth will mainly rely on the rebound in consumer demand, while the pick-up in investment will be spread over time. The need to maintain certain restrictions and a strengthened sanitary regime as well as heightened uncertainty regarding the progress of the pandemic and its consequences will curb the global economic recovery. The deteriorating financial situation of enterprises, rising unemployment and very slow recovery of international trade will also hamper global GDP growth.

Figure 4.3 Interest rates abroad (%)



Source: Bloomberg data, NBP calculations.

The pace of recovery in Poland's main trading partners will vary and will depend on the effectiveness of measures aimed at containing the spread of the coronavirus, the possibility to use fiscal and monetary measures to mitigate business cycle and the relative importance of sectors most affected by the pandemic. Structural features of Poland's main trading partners' economies affecting the speed of resource reallocation will also play an important role in the recovery. The baseline scenario assumes that the Germany will be the first to recover, which is connected with the relatively large size of anti-crisis measures taken by its government and the limited scale of structural problems faced by its economy compared with other euro area countries.

The baseline scenario envisages that in 2020 the major developed countries will see their potential output decline, which will be largely driven by the administrative restrictions imposed on economic activity. Compared with the previous forecasting round, there is a downward revision in expectations about medium term potential GDP growth due to the adverse impact of the slowdown in capital accumulation and the rise in equilibrium unemployment rate. However, it is expected that the scale of decline in potential output will be smaller and its rebound will be faster than that of aggregate demand.

Inflation and commodity markets

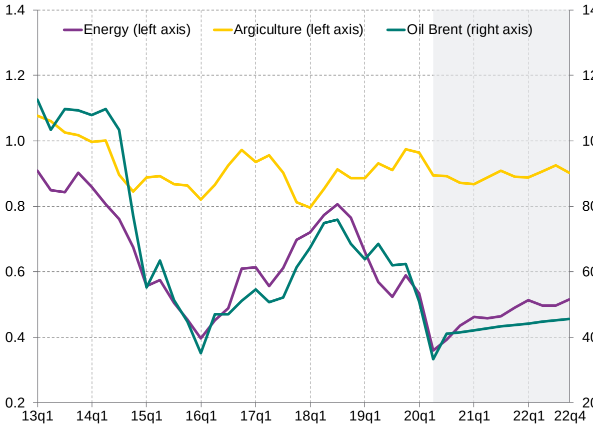
March and April 2020 saw a slump in oil prices in response to a sharp reduction in demand for this commodity driven by the COVID-19 pandemic (Figure 4.4). In early April OPEC countries, Russia and other producers (e.g. companies in the Unites States) decided to cut production, which resulted in a new rise in oil prices as of May this year. Natural gas and hard coal prices in the global markets also started to increase at the turn of April and May following the falls observed since the beginning of 2020.

The baseline scenario assumes that along with the improving epidemic and economic situation worldwide, prices of oil, natural gas and hard coal will gradually pick up in the years 2021-2022. Whether this scenario materialises will largely depend on how the pandemic develops and whether demand for energy commodities continues at a low level. It will also rely on new decisions, if any, of OPEC countries and other producers concerning production volumes.

The fall in demand in the global economy also affected the prices of the majority of agricultural commodities in the world markets. It is expected that prices of oil, freight and artificial fertilizers, which continue at low levels, will put downward pressure on agricultural commodities prices. The main risk to the forecast of these prices are future agrometeorological conditions, the availability of workers and the scale of fall in demand driven by the COVID-19 pandemic.

Inflation in Poland’s external environment (measured by changes in the gross value added deflator; Figure 4.5) will remain on a low level over the projection horizon. The impact of the pandemic on price growth in the global economy will still be limited in the first half of this year. This results from higher operating costs of enterprises

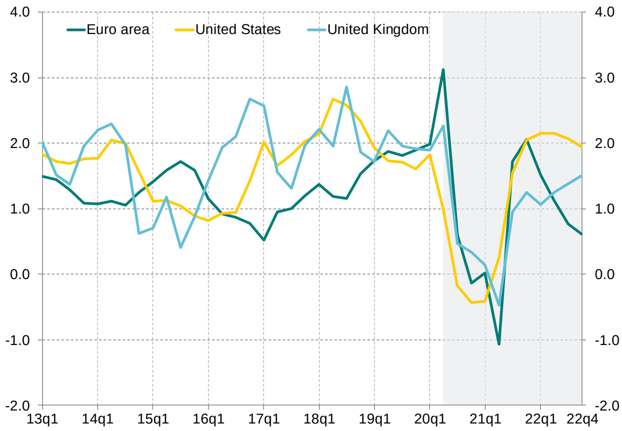
Figure 4.4 Energy commodities price index (USD, 2011=1) and index of agricultural prices (EUR, 2011=1) in global markets and Brent oil prices (USD/b)



Source: Bloomberg data, NBP calculations.

The index of the prices of energy commodities includes prices of crude oil, coal and natural gas, taking into account of the consumption structure of these commodities in Poland. The agricultural commodity price index includes prices of wheat, pork, skimmed milk powder, butter, sugar, cocoa, coffee, frozen concentrated orange juice, potatoes, oilseed, allowing for weights reflecting the consumption structure of Polish households.

Figure 4.5 Inflation abroad (y/y, %)



Source: Bloomberg, Eurostat data, NBP calculations.

Inflation as measured by the value added deflator.

connected with the imposed restrictions and the anti-crisis measures taken in many countries to stabilise employment and limit the rate of decline in wages amid severe production cutbacks. However, it is expected that from the second half of 2020 falls in prices in the global economy will accelerate as a result of growing competitive pressure amid a strongly negative output gap and slower rebound in the wage bill than in production.

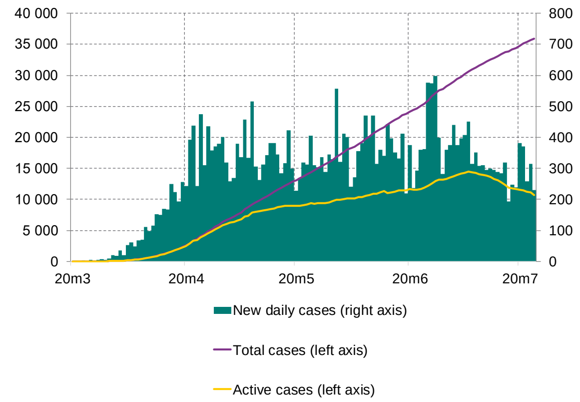
4.3 Polish economy in 2020-2022

Assumptions regarding the development of the epidemic and scope of government restrictions

The first cases of SARS-CoV-2 infection in Poland were recorded at the beginning of March 2020 (Figure 4.6). In response to the growing epidemic threat, the government introduced a series of measures aimed at halting the spread of the virus. These measures covered compulsory isolation of the population, the closure of educational institutions, restrictions on the operation of non-food shops and the provision of some services, and the closure of the borders. In the subsequent weeks, the growth in the number of officially reported infections slowed down and in the second half of April the government launched a plan to gradually ease the imposed restrictions.

The future economic situation in Poland is heavily conditioned to the future course of the COVID-19 pandemic. The current projection was prepared amid the stabilisation of the number of daily COVID-19 infections; however, the development of the epidemiological situation in the country – and consequently also the economic situation – continues to be subject to high uncertainty. In particular, it is dependent on the behaviour of the population, including on whether the citizens comply strictly with the recommendations still in force while the administrative restrictions are being gradually lifted and the freedom to conduct business activities is being restored.

Figure 4.6 Number of new and active cases of COVID-19 in Poland



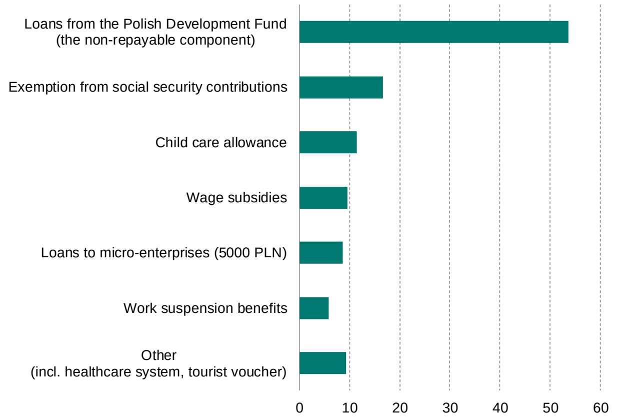
Source: Ministry of Health data.

In the scenario of the development of the economic situation in Poland presented below, it was assumed that the countermeasures currently applied will keep the number of COVID-19 cases under control, and in particular, that in the autumn there will not be a massive second wave of the epidemic, although temporary increases in COVID-19 cases is possible. Consequently, the government will not increase the scale of the restrictions imposed on economic life, and the current restrictions will be gradually lifted. The negative impact of the pandemic on economic activity will therefore fade away; however, it will not fully disappear before the end of the projection horizon. The assumptions concerning a further development of the pandemic constitutes thereby the main source of risk for the future economic growth.

Anti-crisis measures

In order to mitigate the negative impact of the pandemic and restrictions imposed on economic activity, the government introduced a series of anti-crisis solutions of unprecedented scale (see chapter 2.2.3 *Public finance*; Figure 4.7). Protecting jobs and preventing the growth of unemployment were among the top priorities. This is done, among others, by subsidizing wages during the economic lockdown or in the case of reduced working time. An important aspect of the government's action is focused on supporting enterprises by reducing their operating costs and improving their financial liquidity, both in the form of direct subsidies, exemption from the payment of ZUS social insurance contributions granted to small businesses, simplified procedures of corporate income tax payment, as well as provision of loans, including from the Polish Development Fund, and sureties and guarantees. Solutions in the form of social transfers to the population, such as additional child care leave or a furlough scheme for the self-employed and people employed on the basis of civil law contracts will support household income in the event of inability to work or

Figure 4.7 Anti-crisis measures - non-repayable support financed from national sources (PLN billion)



Source: NBP estimates based on regulatory impact assessments and ZUS, MRPiPS, MR, PFR data.

restricted work ability. Another element of the government's Anti-crisis Shield is an increase in health care expenditure.

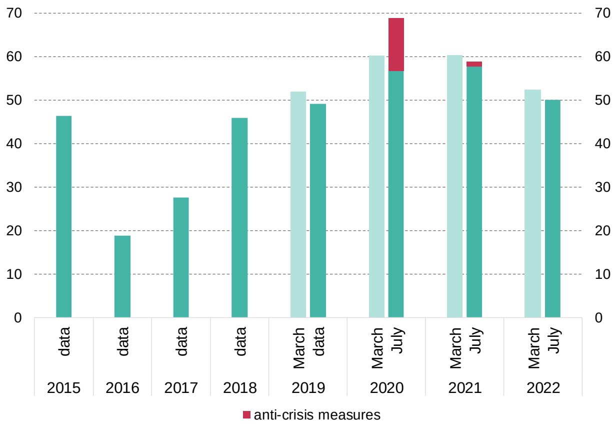
Since companies are still applying for assistance under some of the above-mentioned instruments, the final scale of the anti-crisis measures is subject to uncertainty. For projection purposes, on the basis of the government assumptions and the available data on the implementation of individual instruments, it was assumed that the total value of non-refundable financial assistance from national funds will reach PLN 115 billion in 2020.

The majority of government assistance was provided in 2020 Q2, when economic activity was restricted to the greatest extent. The positive impact of the anti-crisis measures will, however, also be visible in the coming quarters, above all due to the reduced number of people facing long-term unemployment and the reduced number of enterprises which would not have survived a period of a sharp fall in their income.

With the approval of the European Commission, part of the EU funds under individual operational programmes for 2014-2020 were redirected by the government to finance the anti-crisis measures. The overwhelming majority of these funds will be used in 2020 and will be allocated to finance labour costs, working capital subsidies, support for the health service, training, and loans for micro, small and medium-sized enterprises (see Figure 4.8).

The fiscal stimulus is accompanied by easing of monetary policy (see Box *Monetary policy of Narodowy Bank Polski in response to the COVID-19 pandemic*). The Monetary Policy Council cut the reference rate from 1.5% to 0.1%, thus reducing the operating costs of enterprises and supporting investment, as well as stimulating consumption by lowering loan instalments. NBP also launched a purchase programme covering Treasury securities and debt securities guaranteed by the State Treasury. By changing the long-term structure of liquidity of the banking sector and strengthening

Figure 4.8 EU funds absorption under cohesion policy, highliting amounts allocated for anti-crisis measures (PLN billion)



Source: MFiPR, Statistics Poland (GUS) data, NBP calculations.

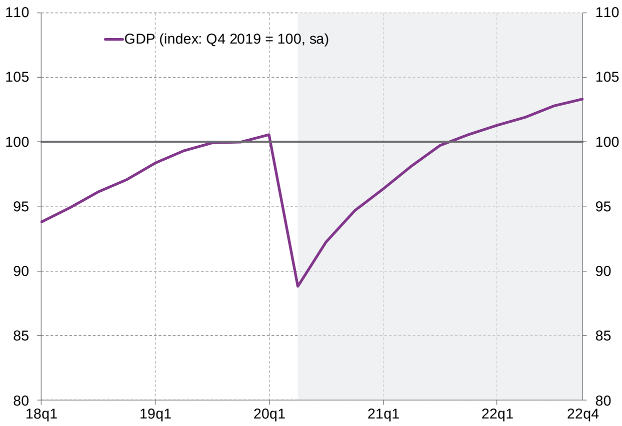
the transmission of the interest rate cuts to the economy, these measures will also cushion the slump in economic activity in 2020.

Economic activity

As a consequence of the development of the COVID-19 epidemic, in Poland, as in other countries, there was a slump in economic activity in 2020 Q2 (see chapter 2.2 *Demand and output*; Figure 4.9; Figure 4.10). The fall in GDP is the result of the occurrence of three interrelated negative shocks. Firstly, households and enterprises are limiting their expenditure in response to falling incomes and heightened uncertainty. Secondly, the restrictions imposed on the economy curb supply in sectors that are directly affected by the restrictions. Thirdly, there is a reduction in foreign demand as a result of similar restrictions imposed in other countries. Consequently, in 2020 Q2 there was a slump in private consumption, investment expenditure, and foreign trade turnover. The scale of the fall in GDP was partly limited by the anti-crisis measures of the government and Narodowy Bank Polski (see *Anti-crisis measures*).

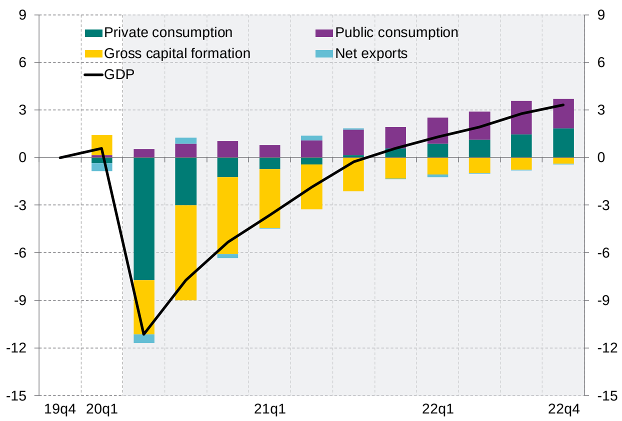
Along with the easing of the restrictions and improvement of the economic situation abroad, in 2020 Q2 domestic economic activity will partially recover while GDP growth in year-on-year terms will remain negative. In the first place, this recovery will be seen in consumer spending (Figure 4.11). Households will gradually start to purchase goods and services that were not purchased in 2020 Q2; however, consumer demand will be limited by the significant deterioration of households' income. Changes in the behaviour of the population (fearing coronavirus infection, part of society may voluntarily avoid certain social activities, such as the use of certain services) has also lowered consumer spending growth. In addition, with persistently high uncertainty and fears of losing their source of income, households are more likely to increase savings at the expense of current consumption.

Figure 4.9 Level of real GDP



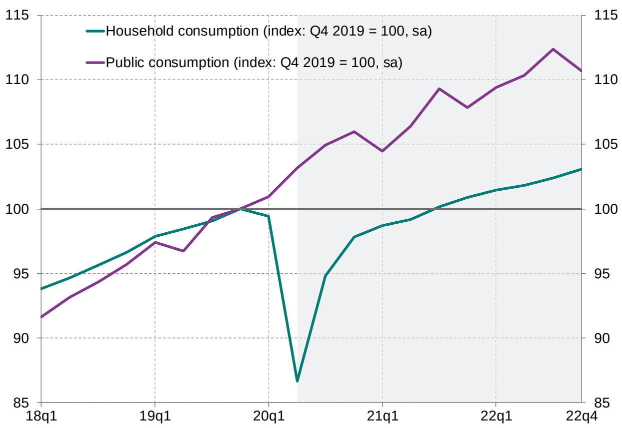
Source: Statistics Poland (GUS) data, NBP calculations.

Figure 4.10 GDP and its components (changes in %, reference period Q4 2019)



Source: Statistics Poland (GUS) data, NBP calculations.

Figure 4.11 Household and public consumption



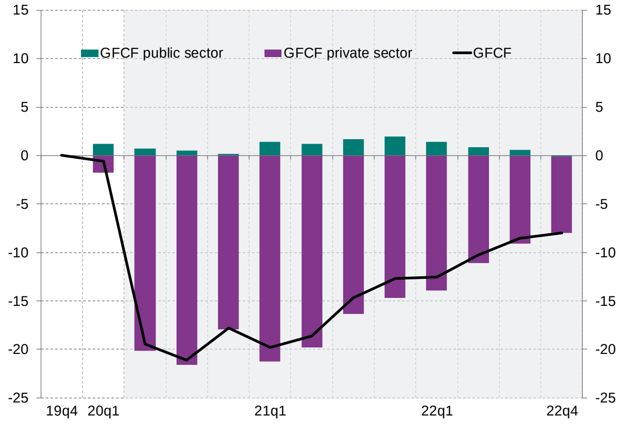
Source: Statistics Poland (GUS) data, NBP calculations.

A partial recovery in consumer demand, an improvement in the export outlook, and support from monetary and fiscal policy will slowly increase corporate investment expenditure compared to 2020 Q2 (Figure 4.12). However, this expenditure – as well as purchases of housing – will run significantly below the previous year's level, since economic agents will not be willing to make long-term financial commitments amid heightened uncertainty. The scale of the drop in gross fixed capital formation in 2020 will be partly mitigated by public investment due to the increase in EU funds allocated to finance this expenditure (Figure 4.13).

Alongside the recovery in the global economy, starting from 2020 Q3, exports and imports will also grow (Figure 4.14). The contribution of net exports to GDP growth in 2020 will run at a positive level, in line with the countercyclical response of this category that has been observed historically in Poland. However, the scale of the improvement in the trade balance in 2020 will be curbed by the sharp fall in income from the export of services, which in the previous business cycles showed high resilience to falls in external demand.

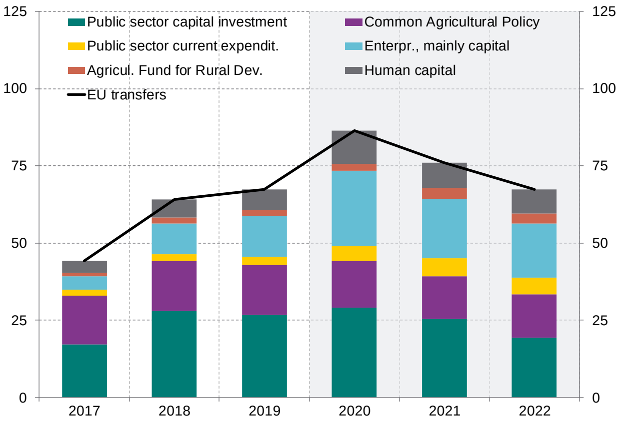
In 2021, GDP growth will exceed the long-term average due to the further rebound in economic activity against the low reference point of 2020. In 2022 the economic growth rate will once again decline, as a result of the impact of the continued unfavourable conditions for the development of private demand. The scale of consumer spending growth will be limited by the absence of a significant improvement in household disposable income, changes in the behaviour of the population, and the increased importance of the precautionary motive, leading to a higher savings rate. Households and enterprises will also refrain from undertaking long-term investment projects, which will be due to only a small improvement in their financial situation compared to the period before the crisis and continued heightened uncertainty.

Figure 4.12 Gross fixed capital formation and its components (changes in %, reference period Q4 2019)



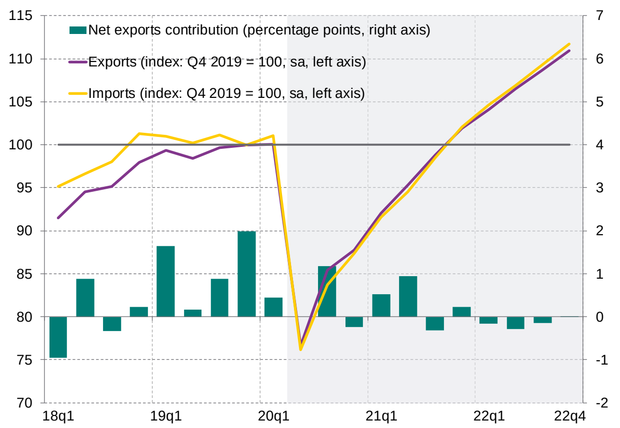
Source: Statistics Poland (GUS) data, NBP calculations.
Private sector investment is defined as gross fixed capital formation according to the national accounts except for the general government sector. It covers gross fixed capital formation of non-financial enterprises, financial and insurance companies, households (both housing and non-housing investment) and non-profit institutions serving households.

Figure 4.13 Expenditure financed by EU funds (in PLN billion) – breakdown



Source: NBP calculations.

Figure 4.14 Foreign trade



Source: Statistics Poland (GUS) data, NBP calculations.

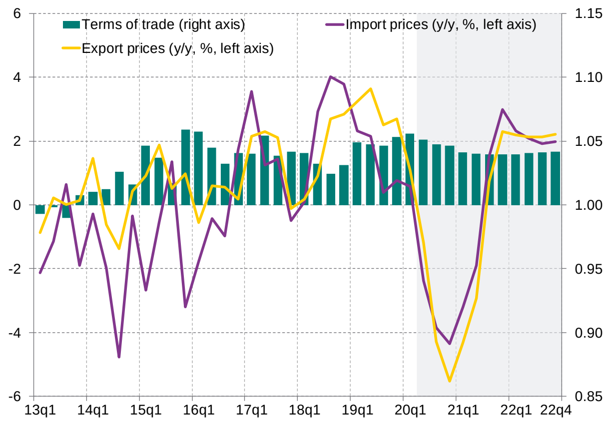
Potential output and the output gap

In response to the economic crisis caused by the COVID-19 pandemic, 2020 will also see a drop in the growth rate of the potential output of the Polish economy, although on a smaller scale than the fall in demand (Figure 4.16). There will be a marked drop in total factor productivity (TFP) growth, and the contribution of the labour factor and – to a lesser extent – the capital factor to growth of potential output will also decline.

The fall in TFP growth in 2020 is due – primarily – to the changes in the labour market in response to the outbreak of the COVID-19 pandemic. A large part of enterprises decided to reduce working time and furlough employees, while at the same time many parents have taken advantage of care allowance. The outbreak of the pandemic also prompted a large scale move to new forms of work. For people previously not accustomed to teleworking, the shift to remote working may require adapting to new tools and assuming new responsibilities. The growth in operating costs of enterprises due to, among others, the need to equip the workplace with the necessary personal protection equipment, as well as the reduction in the use of fixed assets (e.g. as a result of the temporary closure of workplaces) also lowered total factor productivity growth.

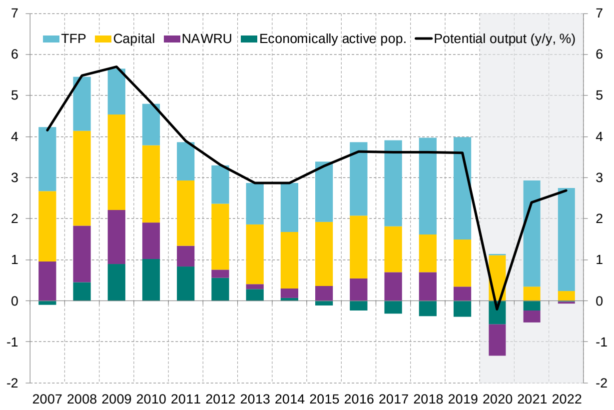
The outbreak of the COVID-19 pandemic also caused the potential workforce to shrink. This is primarily due to the increasing skills mismatch in the labour market. Some of the dismissed employees in sectors affected by the crisis will not find other work due to the lack of qualifications and skills as well as the time needed to acquire them. At the same time, certain sectors of the economy, which as a result of the pandemic and its consequences are permanently gaining in importance, are reporting problems with the availability of qualified staff (e.g. internet sales employees, couriers). An increase in skills mismatch in the labour market is reflected in an increase in the equilibrium unemployment rate

Figure 4.15 Export and import prices



Source: Statistics Poland (GUS) data, NBP calculations.

Figure 4.16 Potential product (y/y, %) – breakdown



Source: NBP calculations.

Potential output growth is defined as the economic growth rate that does not cause the accumulation of inflationary pressure. It may originate from the growth of labour supply, productive capital or total factor productivity. In the NECMOD model it is estimated on the following Cobb-Douglas production function:

$$PKB_t^{pot} = TFP_t^{trend} \cdot \left[LF_t^{trend} \cdot (1 - NAWRU_t)\right]^{0.67} \cdot K_t^{1-0.67},$$

where PKB_t^{pot} is the level of potential output, TFP_t^{trend} – total factor productivity, smoothed by the Hodrick-Prescott (HP) filter extended with an index of capacity utilisation, LF_t^{trend} – the number of economically active people smoothed by a HP filter, $NAWRU_t$ – non-accelerating wage rate of unemployment in the equilibrium, K_t – productive capital. The output elasticity with respect to labour was set at the level of 0.67.

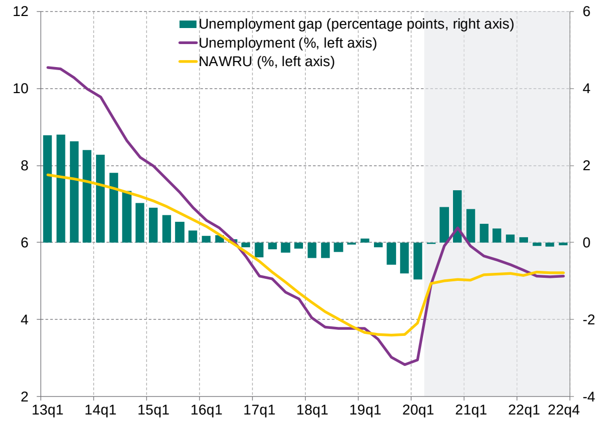
(NAWRU; Figure 4.17). The outflow of migrants due to the crisis, especially employees from Ukraine[60], also adversely affects the potential output of the Polish economy, although its scale is moderate so far.

In total, in 2020 potential output growth will be running close to zero compared to the past 10- year average of 3.6% y/y.

In 2021-2022 growth of potential GDP will pick up significantly. This forecast is based on the assumption that along with the lifting of the lockdown and restrictions imposed on the Polish economy, limitations in the supply of certain goods and services may relatively quickly be overcome. However, the scale of the restoration of potential GDP will be limited by the failure of investment outlays to quickly return to the pre-crisis levels and the resulting permanent reduction in productive capital assumed in the projection.

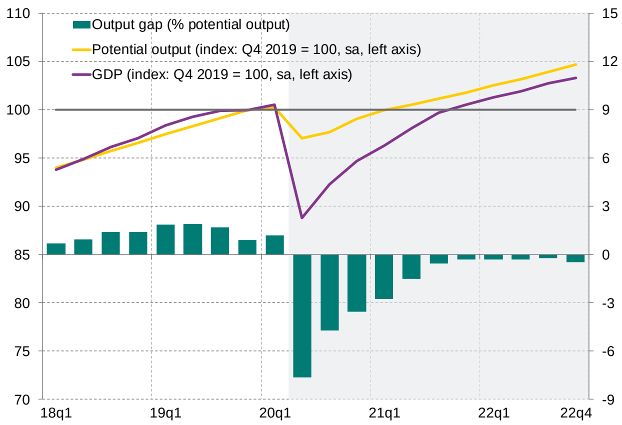
The much sharper fall in demand than in potential output in 2020 will cause the output gap to run in clearly negative territory in 2020 (Figure 4.18). In the coming years the output gap will narrow, but it will not close before the end of the projection horizon. Such a development of the output gap results from the high persistence of the impact of factors currently reducing demand, alongside faster disappearance of limitations on the supply side.

Figure 4.17 Unemployment



Source: Statistics Poland (GUS) data, NBP calculations.
$NAWRU_t$ – non-accelerating wage rate of unemployment in the equilibrium

Figure 4.18 Output gap



Source: Statistics Poland (GUS) data, NBP calculations.
The output gap is a synthetic measure of demand pressure in the economy. It is expressed as a percentage of the deviation of the actual real level of GDP from the level of potential output.

Labour market

In 2020 Q2, along with a slump in economic activity driven by the pandemic, the number of the employed decreased amid a relatively lower decline in the labour force participation rate (see chapter 2.4 *Labour market*; Figure 4.19). The scale of

[60] Immigrants have a positive impact on the potential of Poland's economy, but due to the definition of Polish residents used in the LFS survey, they are included in the cohorts of the economically active and employed persons only to a limited extent according to this methodology. In the NECMOD model, immigrants not included in the LFS population do not, therefore, increase the labour supply, but affect the potential output through their positive impact on total factor productivity (TFP). At the same time, the presence of immigrants on the domestic labour market reduces the equilibrium unemployment rate (NAWRU), as they have lower wage expectations. This, in turn, puts downward pressure on wages among Polish employees. This means that due to the inflow of immigrants, the level of the unemployment rate that fails to boost wage expectations (NAWRU) is lower.

the increase in the unemployment rate was mitigated by the government's anti-crisis measures involving subsidies to enterprises, including wage subsidies during the period of reduced working time and economic downturn.

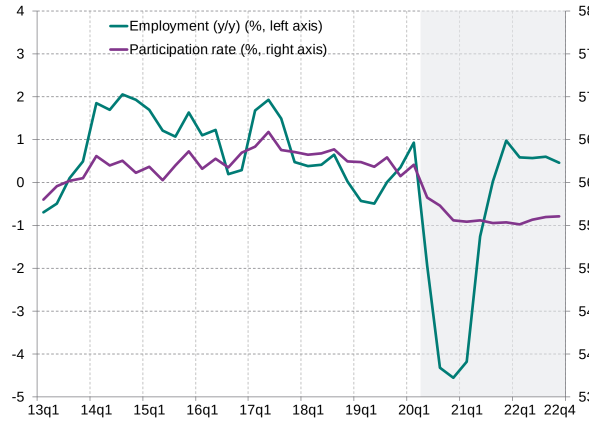
The subsequent quarters, along with the expiry of notice periods and the persistently weak demand for labour, will see a further reduction in the number of the employed and a rise in the unemployment rate despite a smaller scale of GDP decline in year-on-year terms. The rise in unemployment rate will also be driven by the decreasing scale of the government's anti-crisis measures assumed in the projection. In the longer projection horizon, alongside a gradual resumption of economic activity, the unemployment rate will decline again, yet will remain at an elevated level compared to the period preceding the outbreak of the pandemic.

The fall in employment in 2020 Q2 was accompanied by a sharp decline in wages compared with 2020 Q1, resulting from the reduction of flexible wage components, including wage components depending on work intensity, and from holding down some of the previously planned wage increases. The average working time was also reduced. As a result of the phased lifting of the restrictions, the gradual resumption of economic activity and the rise in labour productivity, wages will start to grow again from the second half of 2020, however, their annual growth rate will be close to zero until the beginning of 2021 (Figure 4.20). This trend will continue in the subsequent years, yet average wage growth will not reach the 2018-2019 level due to the elevated unemployment rate.

CPI inflation

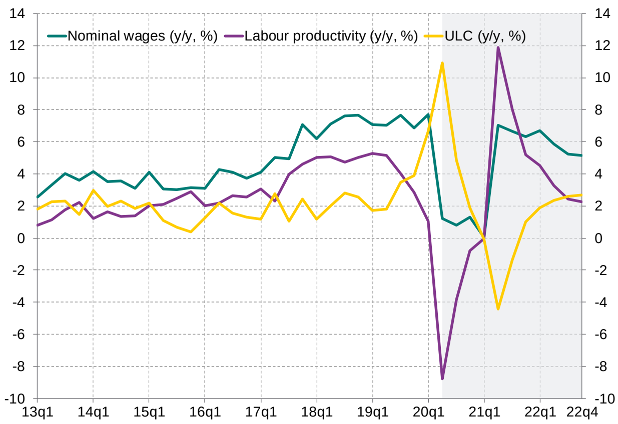
The negative impact of the pandemic in the form of subdued economic activity will lead to a decline in inflation and then will keep inflation at a low level (Figure 4.21; Figure 4.22; Figure 4.23). The limited scale of the rebound in demand, the persistently

Figure 4.19 Employment and labour force participation



Source: Statistics Poland (GUS) data, NBP calculations.

Figure 4.20 Unit labour costs



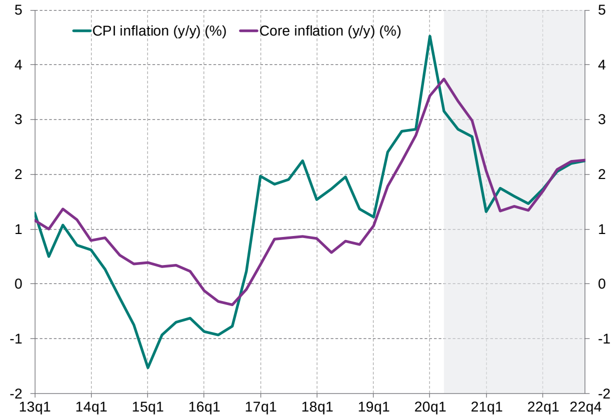
Source: Statistics Poland (GUS) data, NBP calculations.
Unit labour costs are defined as the average cost of labour per unit of output produced. They are calculated by dividing the product of average wages and the number of employed persons in the economy by the total GDP. Alternatively, they can be expressed as the quotient of the average wage and labour productivity, in other words, the relation of GDP to the number of the employed persons. Unit labor costs (ULC) presented in the chart include employers' social security contributions.

elevated unemployment rate and the moderate wage growth will put downward pressure on inflation. The global scale of the pandemic and the slow recovery of GDP growth in Poland's trading partners will result in low inflation in the environment of the Polish economy and depressed energy commodity prices in the global markets.

The scale of the decline in inflation in the coming quarters will be limited by rising operating expenses of some enterprises driven by the imposed sanitary restrictions as well as the partial disruption of supply chains. Despite the fact that the majority of restrictions have been lifted, some restrictive measures such as obligatory quarantines for persons who have had contact with COVID-19 positive persons, recommended social distancing, and the need to ensure working conditions meet sanitary requirements increase corporate costs and reduce productivity. The effects of the global disruption of supply chains caused by the outbreak of the pandemic may also prove relatively long-lasting. Supply-side constraints will contribute towards narrowing the negative output gap, thus reducing the downward pressure on price growth. Moreover, inflation in 2020 will be boosted by the high growth rate of prices of excise goods following an increase in excise tax in January 2020. Food prices continue to run at a relatively high level, reflecting last year's poorer agricultural crops and the exchange rate depreciation after the outbreak of the pandemic.

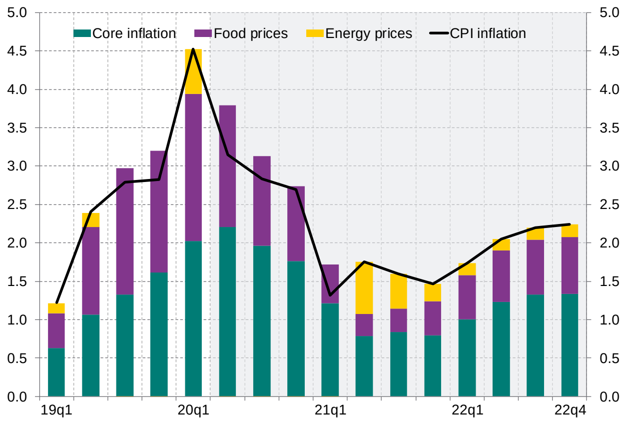
The factors which are now putting upward pressure on inflation will gradually fade out and in the medium term inflation will decrease, running below 2.5% until the end of the projection horizon. Inflation will hit its lowest level in 2021 due to the still relatively weak demand pressure in that period and a decline in unit labour costs. Moreover, as the epidemiological situation gets back to normal, a further rise in costs related to the restrictions imposed on the economy will be limited. Some enterprises may even record a decline in those costs. A higher food supply

Figure 4.21 CPI and core inflation



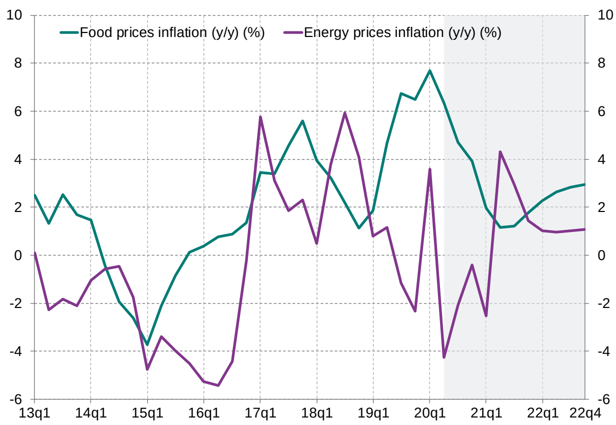
Source: Statistics Poland (GUS) data, NBP calculations.

Figure 4.22 CPI inflation (y/y, %) – breakdown



Source: Statistics Poland (GUS) data, NBP calculations.

Figure 4.23 Food and energy price inflation



Source: Statistics Poland (GUS) data, NBP calculations.

compared to 2020, resulting from the assumption that agrometeorological conditions in Poland will get back to normal, will also be a factor putting downward pressure on inflation over this horizon.

The year 2022 will see a rise in inflation, although moderate, as a result of a further increase in domestic and external demand and, consequently, of the narrowing of the negative output gap. At the same time, at the end of the projection horizon the growth rate of unit labour costs will pick up again, driven by the improving situation in the labour market, which will contribute to higher consumer price growth. The expected rise in inflation in the environment of the Polish economy, boosting import prices, will work in the same direction.

Table 4.3 Probability of inflation running:

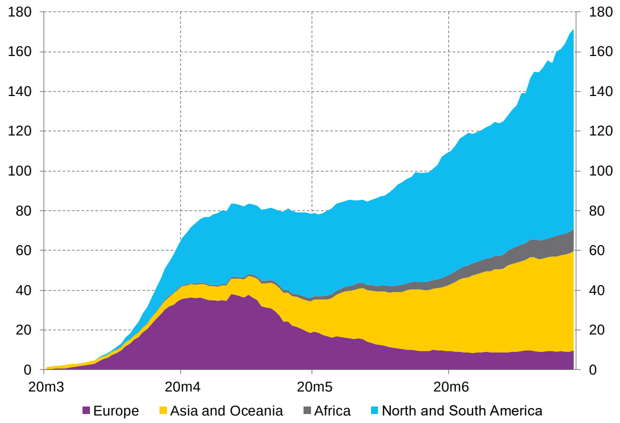
	Below 1.50%	Below 2.50%	Below 3.50%	Below the central projection	In the range (1.5-3.5%)
20q2	0.00	0.03	0.85	0.50	0.85
20q3	0.04	0.35	0.86	0.53	0.82
20q4	0.17	0.49	0.84	0.57	0.67
21q1	0.66	0.91	0.99	0.60	0.33
21q2	0.57	0.83	0.96	0.64	0.39
21q3	0.64	0.87	0.98	0.67	0.34
21q4	0.68	0.88	0.98	0.67	0.30
22q1	0.60	0.82	0.95	0.66	0.35
22q2	0.51	0.73	0.90	0.64	0.39
22q3	0.46	0.68	0.86	0.61	0.40
22q4	0.43	0.64	0.83	0.59	0.40

Source: NBP calculations.

4.4 Forecast uncertainty sources

The central scenario of the projection, presenting the most likely macroeconomic developments in Poland, is subject to uncertainty reflected in the fan charts (Figure 4.1; Figure 4.2). A further development of the pandemic continues to be the major source of risk for economic activity and, to a lesser extent, inflation in Poland as the impact of the pandemic on changes in inflation is the result, on the one hand, of changes in demand, and, on the other hand, of changes in the operating costs of enterprises. The balance of uncertainty factors in the case of GDP growth and CPI inflation indicates a higher probability of outcomes below the central projection scenario (Table 4.3). Under the assumption of an unchanged NBP reference rate, the probability of CPI inflation running within the symmetrical band of deviations from the NBP inflation target (defined as 2.5% +/- 1 p.p. in the medium term) declines in the first quarters and then rises to approx. 40% at the end of the projection horizon (Table 4.3).

Figure 4.24 Daily new cases of COVID-19 (thous. of people, 7-day average)



Source: Johns Hopkins University data, NBP calculations.

More severe course of the pandemic connected with a permanent loss of productive potential of the Polish economy

The main risk for the realisation of the central projection path in the current forecasting round is a different course of coronavirus pandemic than assumed in the baseline scenario. The gradual easing of the restrictions previously imposed by the governments of individual countries runs the risk of an increase in the number of new infections (a so-called second wave), which could lead to a significant deterioration in the epidemic situation and the return of some of the administrative restrictions. In those regions of the world in which the number of new confirmed cases is still rising (among others in India and South America; Figure 4.24) there is the risk of further strong growth in the number of new infections. In such a scenario, the appearance of outbreaks of the epidemic in workplaces in Poland and abroad may require the suspension of their activity and lead to disruptions in the supply chains. The pessimistic scenario of the coronavirus pandemic development assumes that until the appearance of a vaccine and/or an effective cure, an extension of the current restrictions on economic activity in Poland and abroad may be expected, along the return of some of the restrictions already lifted.

An increase in the number of infections and the tightening and prolonging of the restrictions would lead to permanent changes in economic behaviour of the population in accordance with the principle of increased social distancing, which would translate into a reduction in demand for many types of services. In turn, the continued high uncertainty and pessimistic business sentiment could result in increased financial market tensions and investment reduction.

These negative trends could additionally be strengthened by the slowdown or reversal of the globalisation process, including the intensification of trade disputes between the United States, the European Union and China. These actions may lead to the break-up of the existing global value chains, thus permanently increasing the scale of the disruptions in global trade. Difficulties in controlling the epidemic in certain emerging economies may in turn translate into limited access to foreign financing of their growing borrowing needs, capital outflow and increased political instability.

Another factor which could delay the rebound in economic activity may be the intensification of fiscal problems in the euro area countries most affected by the crisis resulting in rising uncertainty and a deterioration in business and consumer sentiment.

A longer and more severe course of the coronavirus pandemic than assumed in the baseline scenario and the materialisation of one of the above risks would lead to a stronger fall in economic activity and a slower rebound in the global economy and in Poland. A significant reduction in corporate investment, including in the renewal of the machinery stock, an increase in the equilibrium unemployment rate as a result of the negative hysteresis effect, a reduction in labour force participation and slower total factor productivity growth would result in a permanent loss of productive potential of the domestic economy. Consequently, the long-term economic growth path would shift downwards and a return to the pre-pandemic level of production would be delayed.

A milder course of the pandemic combined with a faster return to the long-term path of economic growth

On the other hand, although much less likely, a milder development of the pandemic abroad and in Poland than assumed in the baseline scenario is possible. Progress in testing and tracing contacts of infected people, a strengthened sanitary regime and the discovery of effective therapy could lead to faster suppression of the pandemic. As a result, the imposed restrictions would be lifted sooner and the rules regarding conducting economic activity and the movement of people would return to a state similar to that before the pandemic. Following a rapid improvement in the epidemic situation, there would also be an increase in optimism of households and enterprises.

A faster normalisation of the epidemic situation would improve global sentiment, which in turn would translate into a gradual easing of tensions in world trade and an increase in international trade volume. In this scenario the fiscal and monetary measures taken would turn out to be sufficient support for economic entities, allowing relatively rapid growth in economic activity and a recovery of productive potential. The likelihood of the realisation of this scenario would be increased by the introduction of the EU's new stimulus package, the so-called Next Generation EU. The EUR 750 billion package, which could become effective even in 2021, would provide significant support for economic growth in Poland and its immediate environment.

In the scenario assuming a milder development of the pandemic, with a significant reduction in uncertainty, Polish economy would not experience a permanent fall in potential output, and the level of economic activity would recover close to the level projected before the pandemic outbreak by the end of 2022.

Prices of energy and agricultural commodities

Besides uncertainty related to the future course of the pandemic and its impact on the domestic economy, changes in the prices of energy and agricultural commodities, both in the global and local markets, continue to be a significant source of uncertainty for the inflation path in the baseline scenario. The prices of oil and other energy commodities in the global markets could be subject to significant volatility, not only due to changes in demand, but also due to actions taken by the major producers in response to their budget situation or the condition of domestic production sectors. In turn, the risk of a significant deviation of meteorological conditions compared to the long-term average in countries that are important food producers, as well as in Poland, is an additional source of uncertainty for food prices developments over the projection horizon.

Table 4.4 Central path of inflation and GDP projection

	2019				2020				2021				2022				2019	2020	2021	2022
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Consumer Price Index CPI (%, y/y)	1.2	2.4	2.8	2.8	4.5	3.2	2.8	2.7	1.3	1.8	1.6	1.5	1.7	2.1	2.2	2.2	2.3	3.3	1.5	2.1
Core inflation net of food and energy prices (%, y/y)	1.1	1.8	2.2	2.7	3.4	3.7	3.3	3.0	2.1	1.3	1.4	1.3	1.7	2.1	2.2	2.3	2.0	3.4	1.5	2.1
Food prices (%, y/y)	1.8	4.7	6.7	6.5	7.7	6.4	4.7	3.9	2.0	1.2	1.2	1.8	2.3	2.6	2.8	2.9	4.9	5.7	1.5	2.7
Energy prices (%, y/y)	0.8	1.2	-1.2	-2.3	3.6	-4.3	-2.1	-0.4	-2.5	4.3	2.9	1.4	1.0	1.0	1.0	1.1	-0.4	-0.9	1.5	1.0
GDP (%, y/y)	4.8	4.6	4.0	3.2	2.0	-10.6	-7.7	-5.3	-4.2	10.5	8.1	6.2	5.1	3.9	3.1	2.7	4.1	-5.4	4.9	3.7
Domestic demand (%, y/y)	3.3	4.7	3.3	1.3	1.7	-11.1	-9.1	-5.3	-4.9	9.8	8.8	6.2	5.5	4.3	3.3	2.8	3.0	-6.0	4.7	4.0
Household consumption (%, y/y)	3.9	4.4	3.9	3.3	1.2	-12.0	-4.3	-2.2	-0.7	14.5	5.6	3.1	2.8	2.7	2.2	2.1	3.9	-4.2	5.3	2.4
Public consumption (%, y/y)	7.4	4.3	5.4	3.2	4.3	7.0	5.7	6.0	3.5	3.1	4.1	1.8	4.7	3.7	2.8	2.6	4.9	5.5	3.1	3.4
Gross fixed capital formation (%, y/y)	11.6	8.8	4.6	6.1	0.9	-18.5	-20.0	-17.8	-19.3	1.0	8.2	6.2	9.0	10.3	7.2	5.4	7.2	-13.5	-2.0	7.9
Contribution of net exports (percentage points, y/y)	1.6	0.2	0.9	2.0	0.4	0.0	1.2	-0.2	0.5	0.9	-0.3	0.2	-0.2	-0.3	-0.1	0.0	1.2	0.4	0.3	-0.1
Exports (%, y/y)	8.5	3.6	4.9	2.0	0.6	-22.3	-14.3	-12.3	-8.0	24.4	15.7	16.2	13.1	11.7	10.0	8.9	4.7	-12.0	11.0	10.8
Imports (%, y/y)	5.9	3.6	3.5	-2.0	-0.2	-24.5	-17.3	-12.6	-9.4	24.0	17.7	16.8	14.3	13.1	11.0	9.4	2.7	-13.4	11.0	11.9
Gross wages (%, y/y)	7.1	7.0	7.7	6.9	7.7	1.2	0.8	1.3	0.1	7.0	6.7	6.3	6.7	5.9	5.3	5.1	7.2	2.6	5.0	5.7
Total employment (%, y/y)	-0.4	-0.5	0.0	0.4	0.9	-1.9	-4.3	-4.6	-4.2	-1.3	0.0	1.0	0.6	0.6	0.6	0.5	-0.1	-2.5	-1.1	0.6
Unemployment rate (%)	3.8	3.5	3.0	2.8	3.0	4.9	5.9	6.4	5.9	5.6	5.5	5.4	5.3	5.1	5.1	5.1	3.3	5.0	5.6	5.2
NAWRU (%)	3.7	3.6	3.6	3.6	3.9	4.9	5.0	5.0	5.0	5.2	5.2	5.2	5.1	5.2	5.2	5.2	3.6	4.7	5.1	5.2
Labour force participation rate (%, y/y)	56.2	56.2	56.3	56.1	56.2	55.8	55.7	55.6	55.5	55.6	55.5	55.5	55.5	55.6	55.6	55.6	56.2	55.8	55.5	55.6
Labour productivity (%, y/y)	5.3	5.1	4.0	2.9	1.1	-8.8	-3.8	-0.8	0.0	11.9	8.1	5.2	4.5	3.3	2.4	2.3	4.3	-2.9	6.1	3.1
Unit labour cost (%, y/y)	1.7	1.8	3.5	3.9	6.6	10.9	4.9	1.9	-0.1	-4.4	-1.4	1.0	1.9	2.3	2.6	2.7	2.8	5.7	-1.3	2.4
Potential output (%, y/y)	3.7	3.6	3.6	3.5	2.9	-1.3	-1.5	-0.9	-0.3	3.6	3.5	2.8	2.5	2.6	2.7	2.9	3.6	-0.2	2.4	2.7
Output gap (% potential GDP)	1.9	1.9	1.7	0.9	1.2	-7.6	-4.7	-3.6	-2.8	-1.5	-0.5	-0.3	-0.3	-0.3	-0.2	-0.5	1.6	-3.6	-1.3	-0.3
Index of agricultural commodity prices (EUR; 2011=1.0)	0.89	0.93	0.91	0.97	0.96	0.89	0.89	0.87	0.87	0.89	0.91	0.89	0.89	0.91	0.93	0.90	0.93	0.91	0.89	0.91
Index of energy commodity prices (USD; 2011=1.0)	0.66	0.57	0.52	0.59	0.53	0.36	0.39	0.43	0.46	0.46	0.46	0.49	0.51	0.50	0.50	0.52	0.59	0.43	0.47	0.50
Inflation abroad (%, y/y)	1.8	1.9	1.8	1.9	1.9	2.6	0.6	0.0	0.1	-0.6	1.6	1.9	1.6	1.3	1.1	1.0	1.8	1.3	0.8	1.2
GDP abroad (%, y/y)	1.6	1.2	1.3	1.0	-2.5	-14.9	-9.3	-6.9	-2.9	12.7	6.6	4.8	4.1	3.4	2.8	2.3	1.3	-8.4	5.0	3.1
Current and capital account balance (% GDP)	1.2	1.4	1.8	2.4	3.2	4.4	6.3	6.3	6.2	5.2	3.3	2.7	2.5	2.5	2.6	2.6	2.4	6.3	2.7	2.6
WIBOR 3M (%)	1.72	1.72	1.72	1.71	1.62	0.58	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	1.72	0.66	0.22	0.22

Source: Bloomberg, Eurostat, Statistics Poland (GUS), NBP calculations.

For the majority of variables, the values up to Q1 2020 are determined on the basis of raw quantities, while in the projection horizon are presented seasonally adjusted data. In the case of the unemployment rate, the NAWRU rate, the labour force participation rate, potential output growth, the output gap, the agricultural commodity price index, the energy commodity price index, inflation abroad and GDP growth abroad only seasonally adjusted data are presented, while the WIBOR 3M rate and import price growth are not seasonally adjusted series.

LFS data on total employment, labour force participation rate and unemployment rate. The agricultural commodity price index includes prices of wheat, pork, skimmed milk powder, butter, sugar, cocoa, coffee, frozen concentrated orange juice, potatoes, oilseed, allowing for weights reflecting the consumption structure of Polish households. The energy commodity price index covers prices of crude oil, coal and natural gas, taking into account the structures of consumption of these commodities in Poland.

5. The voting of the Monetary Policy Council members in February – April 2020

■ Date: 5 February 2020

Subject matter of motion or resolution:
Motion to lower the NBP interest rates by 0.25 percentage points.

MPC decision:
Motion did not pass.

Voting of the MPC members:

For:	E. M. Łon	**Against:**	A. Glapiński G. M. Ancyparowicz E. Gatnar Ł. J. Hardt C. Kochalski J. J. Kropiwnicki K. Zubelewicz J. Żyżyński

R.Sura was absent.

■ Date: 4 March 2020

Subject matter of motion or resolution:
Motion to lower the NBP interest rates by 0.25 percentage points.

MPC decision:
Motion did not pass.

Voting of the MPC members:

For:	E. M. Łon	**Against:**	A. Glapiński G. M. Ancyparowicz E. Gatnar Ł. J. Hardt C. Kochalski J. J. Kropiwnicki R. Sura K. Zubelewicz J. Żyżyński

■ Date: 17 March 2020

Subject matter of motion or resolution:
Motion to lower the NBP reference rate by 0.50 percentage points to 1.00% and to set the remaining NBP interest rates as follows:
- lombard rate 1.50%
- deposit rate 0.50%
- rediscount rate 1.05%
- discount rate 1.10%.

MPC decision:
Motion passed.

Voting of the MPC members:

For:	A. Glapiński	**Against:**	Ł. J. Hardt
	G. M. Ancyparowicz		J. J. Kropiwnicki
	C. Kochalski		K. Zubelewicz
	E. M. Łon		
	R. Sura		
	J. Żyżyński		

E. Gatnar was absent.

■ Date: 17 March 2020

Subject matter of motion or resolution:
Resolution No. 1/2020 on reference rate, refinancing credit rate, deposit rate as well as the rediscount and discount rates at the NBP.

MPC decision:
MPC lowered the reference rate by 0.50 percentage points to 1.00% and set the remaining NBP interest rates as follows:
- lombard rate 1.50%
- deposit rate 0.50%
- rediscount rate 1.05%
- discount rate 1.10%.

Voting of the MPC members:

For:	A. Glapiński	**Against:**	Ł. J. Hardt
	G. M. Ancyparowicz		J. J. Kropiwnicki
	C. Kochalski		K. Zubelewicz
	E. M. Łon		
	R. Sura		
	J. Żyżyński		

E. Gatnar was absent.

Date: 17 March 2020

Subject matter of motion or resolution:
Motion to lower the required reserve ratio from 3.5% to 0.25%.

MPC decision:
Motion did not pass.

Voting of the MPC members:

For: Ł. J. Hardt
J. J. Kropiwnicki
K. Zubelewicz

Against: A. Glapiński
G. M. Ancyparowicz
C. Kochalski
E. M. Łon
R. Sura
J. Żyżyński

E. Gatnar was absent.

Date: 17 March 2020

Subject matter of motion or resolution:
Motion to lower the required reserve ratio from 3.5% to 0.50%.

MPC decision:
Motion passed.

Voting of the MPC members:

For: A. Glapiński
G. M. Ancyparowicz
C. Kochalski
J. J. Kropiwnicki
E. M. Łon
R. Sura
K. Zubelewicz
J. Żyżyński

Against: Ł. J. Hardt

E. Gatnar was absent.

■ Date: 17 March 2020

Subject matter of motion or resolution:
Resolution No. 2/2020 amending the resolution on the required reserve ratios for banks, cooperative savings and credit unions and the National Association of Cooperative Savings and Credit Unions and the remuneration of required reserves.

MPC decision:
MPC lowered the required reserve ratio from 3.5% to 0.50%.

Voting of the MPC members:

For:	A. Glapiński	**Against:**	Ł. J. Hardt
	G. M. Ancyparowicz		
	C. Kochalski		
	J. J. Kropiwnicki		
	E. M. Łon		
	R. Sura		
	K. Zubelewicz		
	J. Żyżyński		

E. Gatnar was absent.

■ Date: 17 March 2020

Subject matter of motion or resolution:
Motion to raise the remuneration of the required reserve funds from 0.50% to 1.0 of the NBP reference rate.

MPC decision:
Motion passed.

Voting of the MPC members:

For:	A. Glapiński	**Against:**	No-one
	G. M. Ancyparowicz		
	Ł. J. Hardt		
	C. Kochalski		
	J. J. Kropiwnicki		
	E. M. Łon		
	R. Sura		
	K. Zubelewicz		
	J. Żyżyński		

E. Gatnar was absent.

Date: 17 March 2020

Subject matter of motion or resolution:
Resolution No. 3/2020 amending the resolution on the required reserve ratios for banks, cooperative savings and credit unions and the National Association of Cooperative Savings and Credit Unions and the remuneration of required reserves.

MPC decision:
MPC raised the remuneration of the required reserve funds from 0.50% to 1.0 of the NBP reference rate.

Voting of the MPC members:

For: A. Glapiński
G. M. Ancyparowicz
Ł. J. Hardt
C. Kochalski
J. J. Kropiwnicki
E. M. Łon
R. Sura
K. Zubelewicz
J. Żyżyński

Against: No-one

E. Gatnar was absent.

Date: 8 April 2020

Subject matter of motion or resolution:
Motion to lower the NBP interest rates by 0.50 percentage points.

MPC decision:
Motion passed.

Voting of the MPC members:

For: A. Glapiński
G. M. Ancyparowicz
C. Kochalski
J. J. Kropiwnicki
E. M. Łon
R. Sura
J. Żyżyński

Against: Ł. J. Hardt

E. Gatnar and K.Zubelewicz were absent.

Date: 8 April 2020

Subject matter of motion or resolution:
Resolution No. 4/2020 on reference rate, refinancing credit rate, deposit rate as well as the rediscount and discount rates at the NBP.

MPC decision:
MPC lowered the NBP interest rates by 0.50 percentage points.

Voting of the MPC members:

For: A. Glapiński
G. M. Ancyparowicz
C. Kochalski
J. J. Kropiwnicki
E. M. Łon
R. Sura
J. Żyżyński

Against: Ł. J. Hardt

E. Gatnar and K.Zubelewicz were absent.

Date: 8 April 2020

Subject matter of motion or resolution:
Resolution No. 5/2020 amending the resolution on monetary policy guidelines for 2020.

Voting of the MPC members:

For: A. Glapiński
G. M. Ancyparowicz
Ł. J. Hardt
C. Kochalski
J. J. Kropiwnicki
E. M. Łon
R. Sura
J. Żyżyński

Against: No-one

E. Gatnar and K.Zubelewicz were absent.

Date: 8 April 2020

Subject matter of motion or resolution:
Resolution No. 6/2020 on approving the Annual Financial Report of the National Bank of Poland prepared as of 31 December 2019.

Voting of the MPC members:

For:	A. Glapiński G. M. Ancyparowicz Ł. J. Hardt C. Kochalski J. J. Kropiwnicki E. M. Łon R. Sura J. Żyżyński	**Against:**	No-one

E. Gatnar and K.Zubelewicz were absent.

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