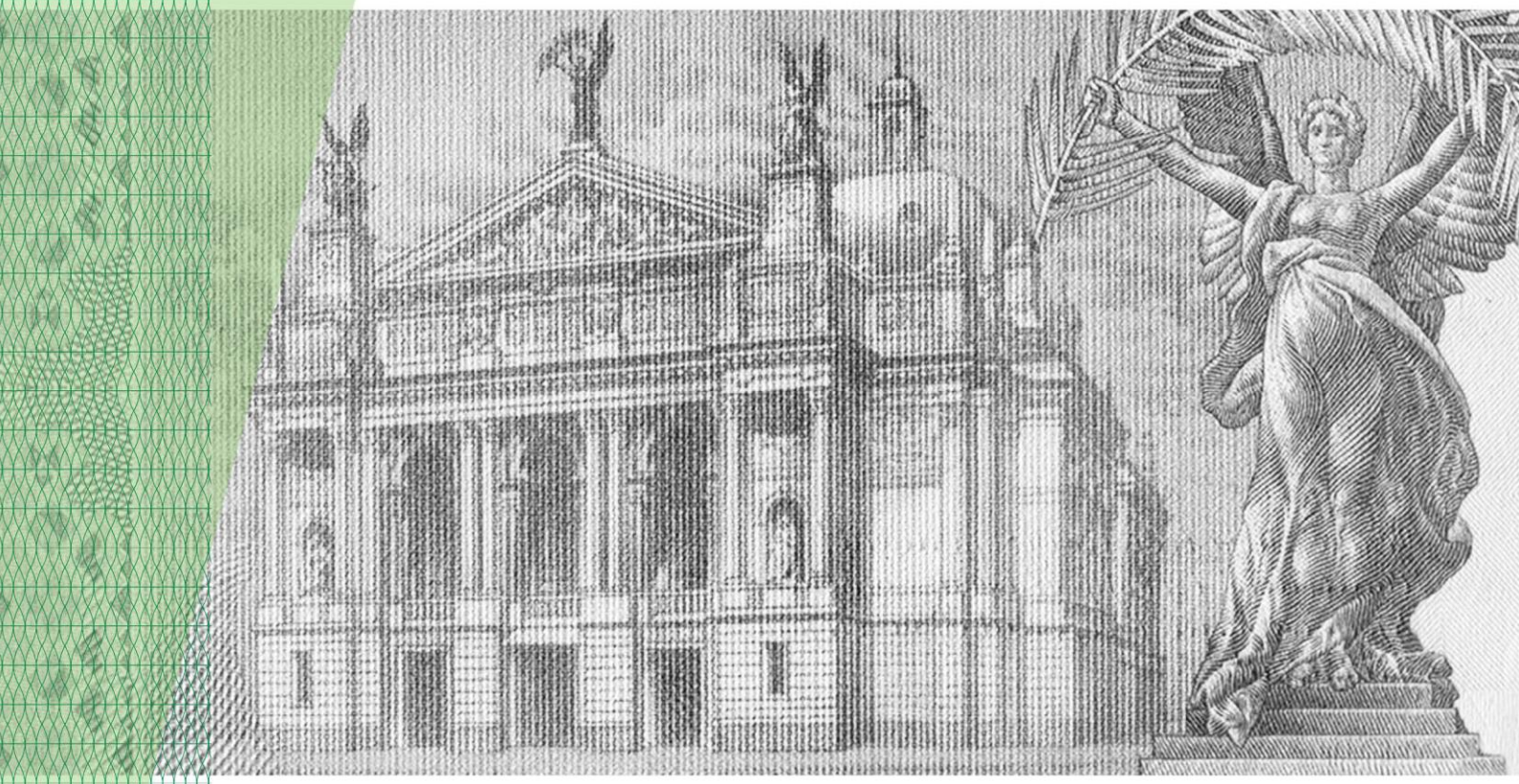
National Bank of Ukraine

Inflation Report

July 2019



The Inflation Report reflects the opinion of the National Bank of Ukraine (NBU) regarding the current and future economic state of Ukraine with a focus on inflationary developments that form the basis for monetary policy decision-making. The NBU publishes the Inflation Report quarterly in accordance with the forecast cycle.

The primary objective of monetary policy is to achieve and maintain price stability in the country. Price stability implies a moderate increase in prices rather than their unchanged level. Low and stable inflation helps preserve the real value of income and savings of Ukrainian households, and enables entrepreneurs to make long-term investments in the domestic economy, fostering job creation. The NBU also promotes financial stability and sustainable economic growth unless it compromises the price stability objective.

To ensure price stability, the NBU applies the inflation targeting regime. This framework has the following features:

- A publicly declared inflation target and commitment to achieve it. Monetary policy aims to bring inflation to the medium-term inflation target of 5%. The NBU seeks to ensure that actual inflation does not deviate from this target by more than one percentage point in either direction. The main instrument through which the NBU influences inflation is the key policy rate.
- Reliance on the inflation forecast. In Ukraine, it takes between 9 and 18 months for a change in the NBU's key policy rate to have a major effect on inflation. Therefore, the NBU pursues a forward-looking policy that takes into account not so much the current inflation rate as the most likely future inflation developments. If inflation is projected to be higher than its target, the NBU raises the key policy rate to bring inflation down to the 5% target. And vice versa, if inflation is projected to be below its target, the NBU cuts the key policy rate.
- Open communications with the public. The transparent and predictable monetary policy of the NBU, which is achieved among other things by publishing this Inflation Report, enhances public confidence. Public confidence, in turn, is an important prerequisite for the effective management of inflation expectations and ensuring price stability.

The NBU Board decides on the key policy rate eight times a year, in line with a schedule it publishes in advance. The decisions the NBU Board makes in January, April, July, and October are based on new macroeconomic forecasts. At the remaining four meetings (taking place in March, June, September, and December), the NBU Board makes its interest rate decisions based on new economic developments in Ukraine and beyond that have emerged since the latest forecast. The NBU Board announces its interest rate decision at a press briefing held on the same day at 2 p.m., after the NBU Board's monetary policy meeting. A week later, the NBU publishes the Inflation Report with a detailed macroeconomic analysis and outlook underlying its interest rate decisions.

The analysis in the Inflation Report is based on the macroeconomic data available at the date of its preparation. Thus, for some indicators, the time horizon of the analysis may vary. The cut-off date for the data in this report is 17 July 2019.

The forecasts of inflation and other macroeconomic variables were prepared by the Monetary Policy and Economic Analysis Department and approved by the NBU Board at its monetary policy meeting on 18 July 2019[1].

Previous issues of the Inflation Report, the presentation of the Inflation Report, the forecast of the main macroeconomic indicators, and time series and data for tables and charts in the Inflation Report are available on the NBU website at the following link: https://bank.gov.ua/control/uk/publish/category?cat_id=742185.

[1] NBU Board decision No. 494-D *On Approval of the Inflation Report* dated 18 July 2019.

Contents

Summary

Tight monetary policy helped reduce underlying inflation pressures

Annual consumer price inflation came in at 9.0% in June 2019, moving closer to the forecast published in the April 2019 Inflation Report. At the beginning of Q2, inflation accelerated and deviated from the forecast path due to temporary supply factors. Their effect started to wane in June. Core inflation slowed slightly in Q2, to 7.4%, and was close to the NBU forecast.

Tight monetary policy restrained underlying inflation pressures, particularly through a strengthening of the hryvnia exchange rate against the currencies of Ukraine's main trading partners. High interest rates were transmitted to the exchange rate mainly through further inflows of portfolio investment by nonresidents into hryvnia government bonds. The appreciation was also supported by better terms of trade amid lower natural gas prices and higher prices for iron ore and grains on the global markets. Under these conditions, as the hryvnia exchange rate strengthened, the NBU continued to build up its international reserves by intervening on the interbank foreign exchange market.

Tight monetary policy also contributed to an improvement of inflation expectations across all surveyed groups. Inflation expectations of households and firms were at their lowest mark for the past five years. However, headline inflation remained elevated amid robust consumer demand and production cost pressures, and further growth in administered prices.

Consumer inflation will continue to decelerate and will return to its target range in early 2020

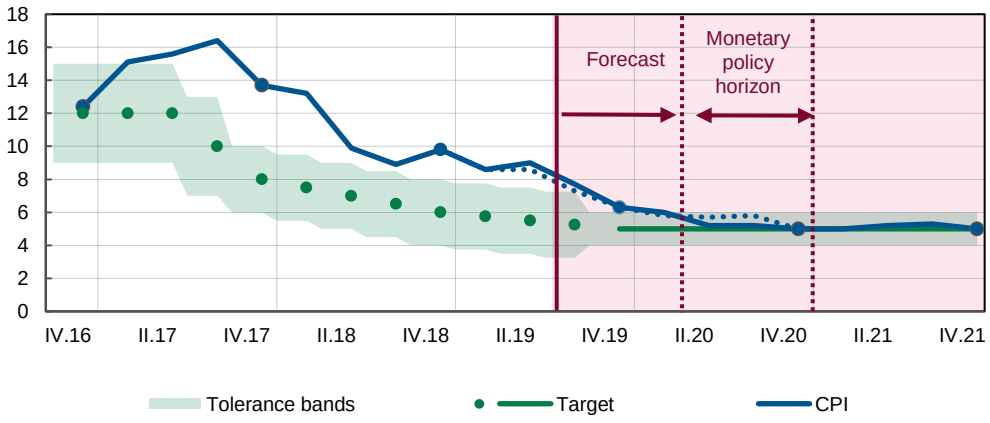
The NBU sees consumer inflation declining to 6.3% by the end of this year and reaching the target range of 5% ± 1 pp in early 2020. It is expected to hit the medium-term target of 5% at the end of 2020.

The relatively tight monetary conditions will continue to be the main driver of disinflation. Despite the gradual reduction in the key policy rate, in real terms it will remain high on the back of improved inflation expectations. High real interest rates will keep hryvnia financial instruments attractive for investors, which will support the exchange rate of the hryvnia. Moreover, such monetary policy stance will contain consumer demand pressures.

Other factors behind the gradual disinflation will include:

- restrained fiscal policy driven by the need to repay large amounts of public debt in 2019–2021
- slower wage growth amid weakening pressures from wage convergence with neighboring countries and migration
- relatively low energy prices on global markets
- ample supply of domestic and imported food products.

Figure 1. CPI (end of period, % yoy) and inflation targets



Source: SSSU, NBU staff estimates.

Inflation forecast has remained unchanged, although some components have been revised for 2019. In particular, the forecast for core inflation has been revised upwards due to faster-than-expected wage growth. Overall, however, core inflation is expected to continue slowing, to 5.5% in 2019 and 3.8% in subsequent years.

At the same time, administered prices will grow slower than expected mainly due to lower prices for imported natural gas. However, administered prices will still grow relatively quickly, at 12.8% in 2019 and a little less than 10% in the following years, as excise taxes on tobacco and alcohol products are brought closer to European levels.

As expected, economic growth slowed in H1 2019

In Q1 2019, real GDP growth decelerated, as expected, to 2.5% yoy, on the back of a lower positive contribution by agriculture as the effect of the record crop in 2018 waned. In the meantime, domestic demand grew faster than expected. Higher household income spurred growth in private consumption, while investment was boosted by high public capital expenditures, improved business expectations, and the implementation of private investment projects. Steady economic growth contributed to employment growth and helped reduce the unemployment rate, while labor supply rose too.

In Q2, according to the NBU estimates, economic growth accelerated to 3.0% yoy, also supported by domestic demand. Retail turnover grew rapidly, a sign of the sustained increase in consumer demand, itself supported by higher household income. The construction sector continued to grow fast. Industrial sector performance also improved and the harvest of early crops exceeded last year's levels.

As terms of trade improved in 2019, the merchandise trade deficit, excluding the statistical effect of used car legalization, stopped widening for the first time since 2015. This was driven by a ramp-up in exports of certain agricultural crops and subdued growth in imports. The further growth in receipts of compensation of employees, lower dividend repatriation, and larger services trade surplus formed a current account surplus in the first five months of the year. The government's borrowings on international capital markets and the nonresidents' capital inflows into hryvnia government bonds have offset the large payments on public debt. As a result, end-June reserves amounted to USD 20.6 billion, close to the level of the start of the year.

Ukraine's economy will grow at a steady 3–4% per year during 2019–2021

The slower rate of economic growth in 2019 (3.0% after 3.3% in 2018) will reflect weaker growth in the world economy and global trade, a restrained fiscal policy due to the need to repay large amounts of public debt, and the tight monetary conditions required to bring inflation back to the target. At the same time, favorable terms of trade and another record harvest of grain crops in Ukraine are expected to support economic growth.

Domestic demand will remain the main driver of economic growth. Private consumption growth will decelerate, but remain solid owing to an increase in real household incomes – wages, pensions, and remittances from abroad. The economy will get significant support from capital investment, which will continue to grow rapidly, mainly directed to energy production and export-oriented sectors.

Real GDP growth will accelerate to 3.2% in 2020 and 3.7% in 2021. The growth will be propelled by a gradual easing of monetary policy, which will bolster domestic demand, as well as by a pickup in global economic activity. At the same time, economic growth will be dragged by a decrease in natural gas transit to European countries as gas pipelines that bypass Ukraine get built.

Compared to its April projections, the NBU has revised its real GDP growth forecast upwards to 3.0% from 2.5% for 2019 and to 3.2% from 2.9% for 2020. The revision has come on more resilient domestic demand, better terms of trade, and improved assumptions for grain harvests.

The current account deficit will remain sustainable

In 2019, the current account deficit will narrow to 2.6% of GDP on the back of another record crop of grains, favorable terms of trade, and lower dividend payments. In 2020–2021, the

deficit will widen slightly because of a decrease in natural gas transit, less benign terms of trade, and stronger consumer and investment demand.

The key assumption underlying the macroeconomic forecast is further cooperation with the International Monetary Fund, under a new program

The IMF financing will allow Ukraine to attract other official financing, improve access to international capital markets, and support investor interest in Ukrainian assets. These borrowings will make it possible for the government to finance large repayments on external public debt in 2019–2021. This will also foster foreign investment inflows into the private sector. As a result, as of the end of 2021, international reserves are projected to grow to USD 23 billion (3.3 months of future imports).

The main domestic risk to the baseline forecast scenario is further strengthening of threats to macrofinancial stability

Delays in implementing key reforms and a reversal of past achievements due to court rulings, legislative initiatives, or other steps may increase the vulnerability of Ukraine's economy and pose an obstacle to further cooperation with the IMF. That could affect exchange rate and inflation expectations and make it harder for Ukraine facing a heavy debt burden in the coming years to access international capital markets. The following risks also remain valid:

- a suspension of Russian gas transit through Ukraine starting in 2020
- an escalation of the military conflict and the introduction of new trade restrictions by Russia
- an escalation of trade wars and rising geopolitical tensions.

The NBU will gradually ease its monetary policy while taking into account the need to hit the inflation target of 5%

Inflation has been steadily declining towards the 5% target, allowing the NBU to continue the cycle of key policy rate cuts. Considering the revised macroeconomic forecast and the balance of risks, the NBU Board has cut the key policy rate to 17.0% effective 19 July 2019.

The NBU has also decided to start publishing forecasts of its key policy rate as part of the quarterly revisions of the macroeconomic outlook. Publishing the interest rate forecast marks an evolutionary improvement in the transparency of monetary policy at central banks that apply inflation targeting.

The NBU expects that the publication of the key policy rate forecast will make the NBU's monetary policy more understandable and predictable for all stakeholders. This information will be useful to businesses, analysts, investors, and households. It can inform their investment decisions, business plans, savings decisions, and so on. The key policy rate forecast will shape the expectations of financial market participants, enabling the NBU to strengthen the impact of the key policy rate on the cost of financial resources and, hence, on inflation. It should be noted that the forecast imposes no obligations on the NBU, and thus the actual key policy rate may differ from the forecast if macroeconomic conditions change.

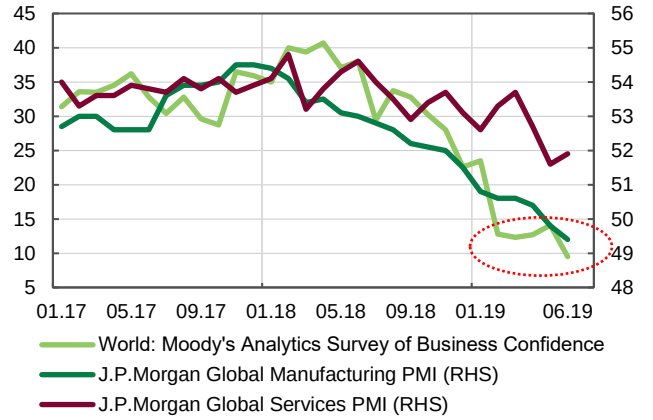
The NBU's baseline scenario sees the key policy rate decreasing further to a neutral nominal level of 8% over the coming years, provided that inflation steadily declines towards the 5% target. The fastest rate decrease is expected in 2020, with inflation returning to the target range and inflation expectations improving.

If existing inflation risks, both internal and external, materialize, the path of the key policy rate towards 8% may be longer. At the same time, stronger demand for hryvnia government bonds from nonresidents and the subsequent strengthening of the hryvnia would allow the NBU to cut the key policy rate at a faster pace than currently built into the baseline scenario.

Part 1. External Environment

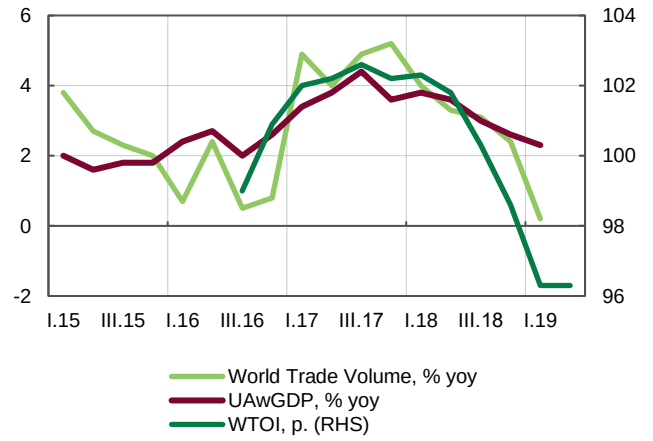
- The global economy and international trade have slowed markedly in 2019 due to geopolitical conflicts and protectionist measures. At the same time, global GDP will grow moderately in 2020–2021 as countries gradually adapt to the new geo-economic conditions.
- Weaker global demand dampened growth in global commodity prices. However, supply factors have been driving the majority of the markets over the forecast horizon, and this trend will continue. Overall, terms of trade improved for Ukraine amid lower natural gas prices and higher prices for iron ore and grains.
- A downward revision of global economic growth forecasts and monetary policy easing by leading countries were two opposing factors that shaped the global financial environment for emerging markets. Monetary policy easing is expected to play the major role.

Chart 1.1. Global PMI and World Business Confidence



Source: IHS Markit, Moody's.

Chart 1.2. World trade volume, Weighted Average of Annual GDP Growth of Ukraine's MTP Countries (UAwGDP) and World Trade Outlook Indicator (WTOI)



Source: WTO, NBU calculations.

1.1. Economic Activity

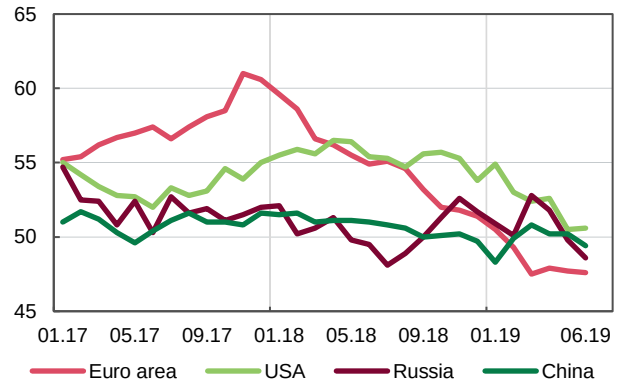
As expected, protectionist measures had a stronger negative effect on the global economy and trade in Q2 2019, as evidenced by leading indicators based on surveys. Global Manufacturing PMI dropped below 50 points due to a deterioration in business expectations. In particular, new orders have decreased the fastest in almost seven years. As shown by WTOI[2], the global economy has been growing below trend for the third consecutive quarter. That was largely driven by a considerable decline in global consumption: Global Services PMI was the lowest in almost three years. That said, the countries directly involved in the trade conflict (the United States and China) were the ones most affected by the reciprocal measures.

The slower growth in global trade and gloomier business expectations will continue to weigh on economic activity. The global economy will accelerate moderately in the coming years as countries gradually adapt to the new geo-economic conditions amid monetary policy easing by leading central banks. The cyclical recovery in advanced economies is projected to lose momentum as they approach the potential output level, while economic growth will receive less policy support due to the positive output gap and low unemployment.

The U.S. economy continued to grow at a steady pace in Q1 2019, exceeding the NBU forecast given in its April 2019 Inflation Report. At the same time, the growth in consumer demand decelerated on the back of slower wage growth and job creation. In addition, weaker consumer spending and the accumulation of large inventories reflected a notable slowdown in the growth of real imports of goods and services. The leading indicators point to a sharp deceleration in future. In the middle of Q2, the U.S. business activity index was at its lowest for almost a decade. A large pro-cyclical fiscal impulse continued to support the economy this year. However, the weakening of this effect amid protectionist measures will slow economic growth in the United States during the next few periods.

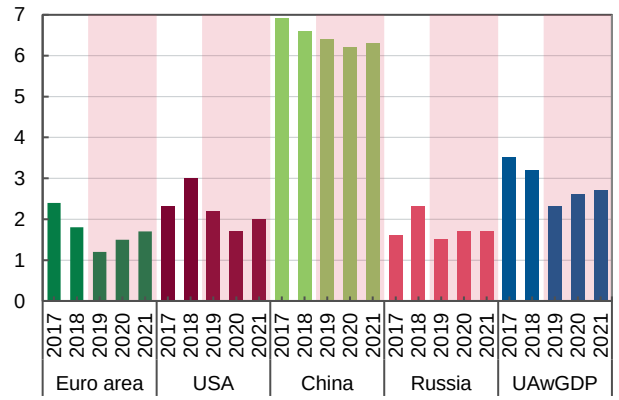
[2] World Trade Outlook Indicator (WTOI), the leading indicator for global trade, calculated by the World Trade Organization as of Q2 2019.

Chart 1.3. Manufacturing PMI, selected economies, points



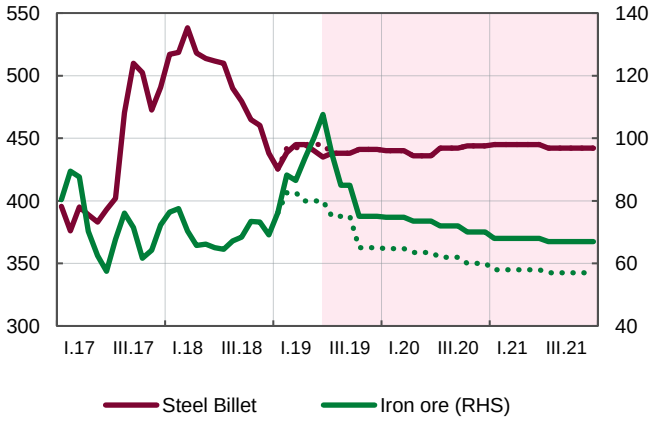
Source: IHS Markit.

Chart 1.4 Real GDP of selected countries and Weighted Average of Annual GDP Growth of Ukraine's MTP Countries (UAwGDP), % yoy



Source: National Statistical Offices, NBU staff estimates.

Chart 1.5. World price of ferrous metals and iron ore*, USD/MT, quarterly average



* Steel Billet Exp FOB Ukraine and China import Iron Ore Fines 62% FE spot (CFR Tianjin port).
Source: Refinitiv Datastream, NBU staff estimates.

The shrinking foreign trade and global uncertainty continued to weigh on the euro area economy, especially so on the manufacturing sector. Still, economic activity in the services sector grew at a steady pace, while the situation on the labor market improved further. Loose financial conditions, mildly expansionary fiscal policy, and more favorable labor market conditions owing to rising employment and higher wages should help sustain economic growth in the euro area over the forecast horizon. The growth will accelerate gradually, although its pace will remain moderate due to weak external conditions and domestic political problems.

The developing economies were less involved in trade conflicts (apart from China and Turkey) and thus proved to be more resilient than the developed markets. In CEE countries, economic growth remained relatively solid in Q1 on the back of an increase in consumption. Wage growth, albeit being slightly slower than last year, supported consumption amid low unemployment. On the other hand, labor shortages and high real estate prices are expected to send their economies into a contraction phase, resulting in a slowdown in economic activity. In turn, the Turkish economy remained stagnant. A large external debt, high inflation, depreciation of the domestic currency, and a drop in consumption were the restraining factors. Considering the geopolitical risks and threats to the independence of the central bank, the economic recovery will be weak in the coming years.

Despite a deceleration, the Asian economies continued to deliver some of the fastest rates of economic growth. The growth was propelled by financial support from the state and domestic consumer demand. Asia is expected to remain the driver of global economic growth for the next few years. Fiscal and monetary stimuli, particularly hefty spending on infrastructural projects, and high lending will contribute to the growth.

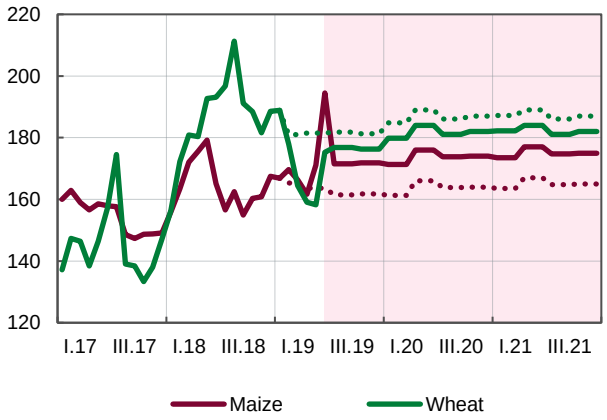
Among the emerging markets, economic growth has slowed the most since the start of 2019 in CIS countries, due to their dependence on external demand and global prices. However, in the coming years, growth in these countries will be supported by their gradual adaptation to the new geo-economic conditions and more favorable global financial conditions.

1.2. Global Commodity Markets

Weaker demand affected price trends on the global commodity markets in Q2 2019. In most markets, however, supply factors were dominant, and these will remain so over the forecast horizon.

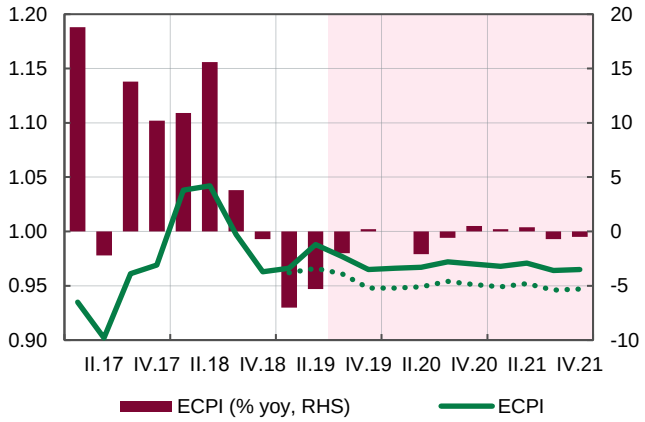
Global steel prices declined gradually on the back of sluggish demand in most regional markets due to high tension between the United States and China. World steel output continued to grow due to the pickup in U.S. and Chinese production, which more than offset lower output in the European Union. According to Global Steel Users PMI, the end-Q2 drop in the EU's steel production was the deepest since December 2012. The drop was caused by trade wars,

Chart 1.6. World cereal prices, USD/MT, quarterly average



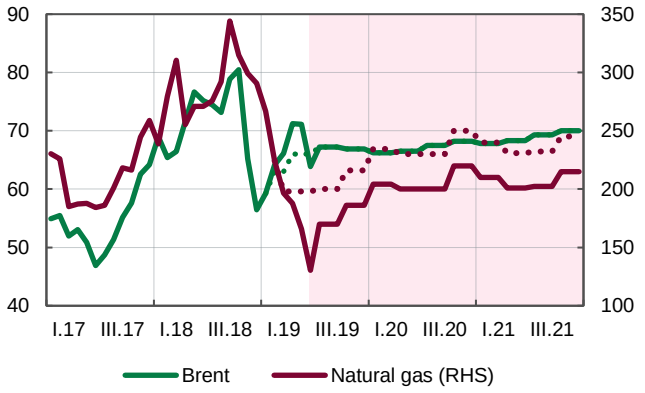
Source: Refinitiv Datastream, NBU staff estimates.

Chart 1.7. External Commodity Price Index (ECPI), Dec 2004 = 1



Source: NBU staff estimates.

Chart 1.8. World crude oil prices (USD/bbl) and German Hub natural gas prices (USD/m³)



Source: Refinitiv Datastream, NBU staff estimates.

weak demand from other economic sectors of the euro area, uncertainties over Brexit, and persisting problems in the car industry. Demand for steel is expected to remain low in Europe for the next few years. In contrast, the United States and China are projected to show a moderate rise in demand, underpinned by the state support for infrastructure projects. Still, the relatively sluggish global demand and large supply will put downward pressure on steel prices. However, high iron ore prices will prevent the prices of steel and steel products from falling sharply.

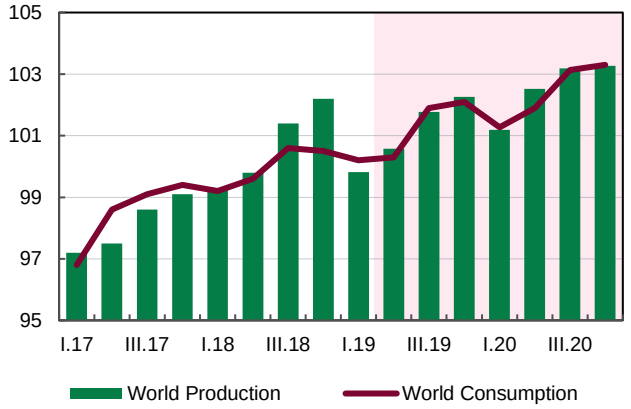
The global iron ore market was influenced by fears of possible serious shortages owing to lower production in Brazil and interruptions in supply from Australia. As a result, iron ore prices exceeded USD 100/ton in Q2. The growth in prices was also fueled by stronger demand from China, as its inventories shrank. The supply of iron ore is expected to rise in the coming years in view of resumed supplies from Australia and new suppliers entering the market. For example, in Q2, the Republic of Congo entered the global market for the first time in history. Congo plans to supply around 2 million tons of iron ore to the global market over the next two years and increase these volumes to 30 million tons by 2024 (this is equal to almost 8% of the exports of Australia, the global leader). India's iron ore corporations are also becoming more active. In addition, China is considering ways to increase its domestic production of iron ore.

Having dropped since the start of the year, grain prices jumped in late Q2. Extreme rainfall in the United States caused a delay in the corn sowing campaign. As a result, the corn harvest is expected to be 5%–10% yoy lower in the 2019/2020 marketing year. The mix of other grain crops was affected as well: the USDA estimates that domestic consumption of grain will grow in the United States. Moreover, high precipitation may cause the U.S. wheat harvest to be of lower quality. At the same time, Egypt and the EU showed stronger demand for wheat. After a seasonal correction in Q3, global grain prices will rise over the forecast horizon. Wheat prices will be supported by high demand from the Middle East and North Africa, as well as by a gradually rise in demand from South East Asia as their consumption preferences shift from rice to wheat. By contrast, global production of corn will decline by 2% yoy in the 2019/2020 marketing year because of the problems in the United States. Demand for corn will increase primarily due to higher production of ethanol. As a result, carry-over inventories will shrink by more than 10% yoy, which will drive prices up in the 2020/2021 marketing year.

Under these conditions, the external price environment for Ukrainian exporters, expressed by the External Commodity Price Index (ECPI), will generally improve compared to previous forecasts. However, prices will remain lower than in 2018.

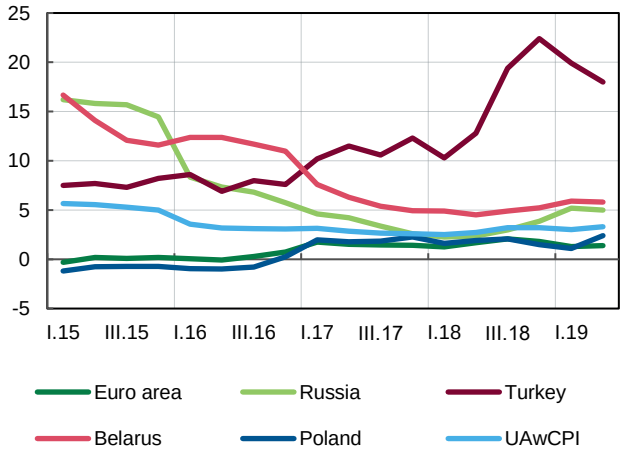
Global energy prices, particularly prices for crude oil and natural gas, were moving mostly in opposing directions in H1 2019. Global oil prices exceeded USD 75/bbl at the start of Q2, because of the oil market's high sensitivity to

Chart 1.9. Consumption and production of world crude pil and other liquids , Mbbl/d



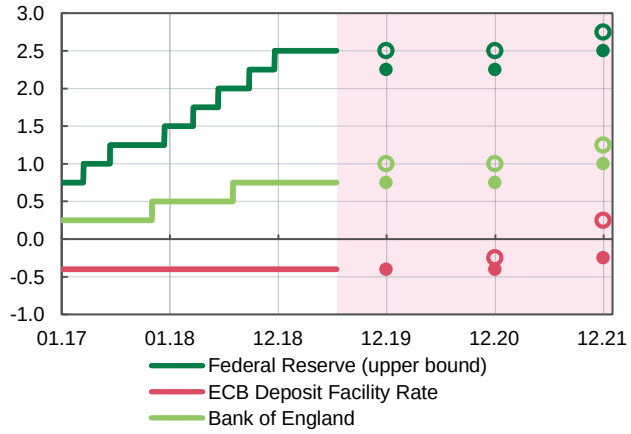
Source: U.S. Energy Information Administration, July 9, 2019.

Chart 1.10. Consumer Price Index of selected Ukraine's MTP countries and Weighted Average of Ukraine's MTP Countries' CPI (UAwCPI), % yoy



Source: National statistical agencies, NBU staff estimates.

Chart 1.11. Key policy rates of major central banks, %



*A dot without a fill indicates the previous forecast.
Source: official web-pages of central banks, NBU staff estimates based on Bloomberg.

geopolitical developments. This was driven by: the decision taken by the United States not to extend temporary permissions for some countries to import oil from Iran; interruptions in the supply of oil from the Middle East due to internal military and geopolitical conflicts; and the compliance with the OPEC+ agreement. Nevertheless, prices approached USD 60/bbl by the end of the quarter on the back of fears of slower global economic growth and hence lower oil demand. In the coming years, prices are expected to fluctuate close to the current level, while trending upwards slightly. The continued compliance with the OPEC+ agreement (extended by nine months) and U.S. sanctions against Venezuela and Iran will support prices. On the other hand, slower growth in demand for oil and greater production in the United States and Canada will offset the pressure on prices (as estimated by the U.S. Energy Information Administration).

As of the end of June, natural gas prices had decreased to their lowest since 2006 on the back of large inventories remaining after the warm winter and greater supply from the United States (especially liquefied gas) and Russia. Gas prices are expected to stabilize in Q3 2019, and then grow moderately afterwards. Demand for liquefied natural gas will grow by more than 20% by the end of 2020[3], primarily driven by demand from China. In the meantime, supply from the United States and Russia, and later from Australia and Qatar, will grow rapidly.

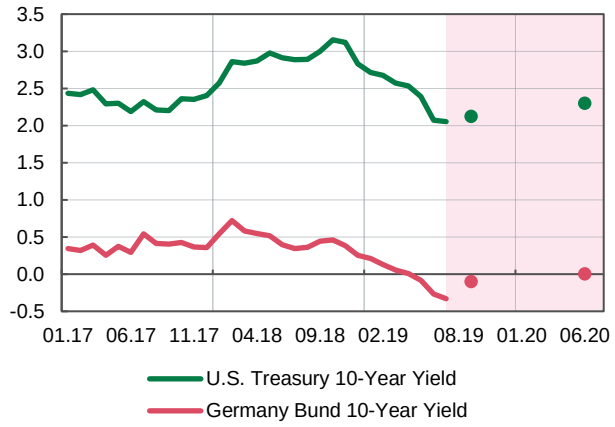
Ukrainian producers will therefore benefit from much better terms of trade over the forecast horizon than was envisaged in the April forecast, thanks to lower natural gas prices and relatively high prices for iron ore and grains.

1.3. Global Financial Markets

The anticipated economic slowdown and risks of a decline in inflation have prompted most countries, and in particular the leading central banks, to adjust their monetary policies. Unlike in previous periods, the Fed and the ECB signaled possible easing almost concertedly. Global inflationary pressure is projected to remain modest, due to slower growth in the global economy, while the leading central banks will put off tightening monetary policy. In particular, the ECB will provide support to the economy by reinvesting profits from securities, conducting long-term refinancing operations, and keeping its key interest rate low (any change might not come until mid-2020). In turn, the Fed will stop reducing its balance sheet in September 2019. The Fed also signaled that it might temporarily resort to interest rate cuts already this year. The readiness of the Fed and the ECB to ease their monetary policies made yields on government securities of developed countries fall sharply in late Q2. For example, yields on 10-year German government securities declined to -0.3%, while yields on U.S. securities dropped below 2%, the lowest level for three years.

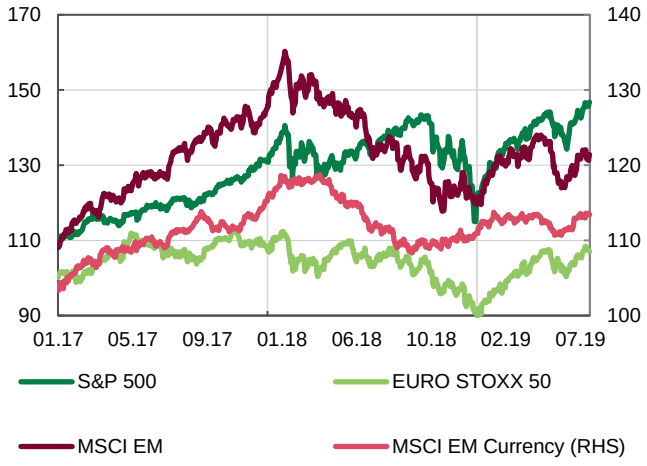
[3] As forecast by Royal Dutch Shell. LNG Outlook 2019.

Chart 1.12. U.S. Treasury 10-year yields, %



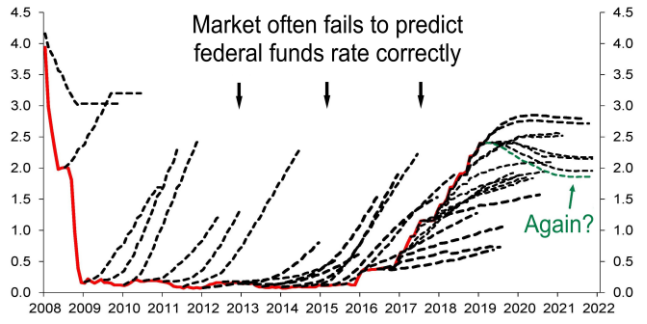
Source: Refinitiv Datastream, NBU staff estimates.

Chart 1.13. Global equity benchmarks and MSCI EM Currency Index, 01 Jan 2016 = 100



Source: Refinitiv Datastream.

Chart 1.14. History of Fed funds rate forecasts based on futures, %



Source: Federal Reserve, Bloomberg, Haver Analytics, DB Global Research.

In Q2, global financial conditions for emerging markets were shaped by two main opposing factors: greater fears of slower growth in the global economy due to an escalation of the trade war between the United States and China, and monetary policy easing by the leading central banks. The former factor caused an increase in risk aversion across the world, resulting in a massive sell-off of emerging market assets and a depreciation of the currencies of these countries against the U.S. dollar in the first half of the quarter. Additional factors included: the weak macroeconomic performance of the euro area, rising tensions in the Middle East, and the political uncertainty over Brexit in the United Kingdom. At the same time, the softening rhetoric of the leading central banks triggered a recovery in investor interest in risky assets, including the assets of emerging markets. The meeting of the leaders of the United States and China at the G20 summit in late June to discuss the trade confrontation supported optimistic moods on the market. As a result, most emerging market currencies strengthened against the U.S. dollar.

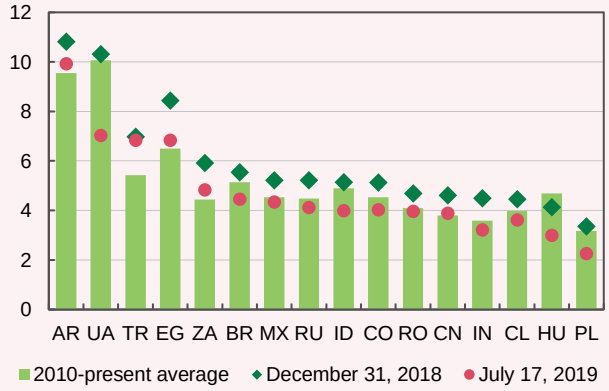
Global interest rates are expected to remain low on the back of the monetary policy easing by the Fed and the ECB. Unlike financial market participants, the NBU forecasts a more restrained policy easing by the leading central banks. However, investor demand for risky financial assets will continue, while the global financial markets will remain relatively benign for emerging markets. Investor interest in emerging markets will be additionally spurred by the brighter economic prospects in these countries while the U.S. economy cools, and by the lack of high-yield financial assets on the global financial markets. Under these conditions, the central banks of emerging markets will have to find a balance between stimulating economic activity and maintaining price stability (read more in Box 1 on page 12).

Box 1. Monetary Policy in Emerging Markets as Trade Tensions Escalate

Trade conflicts will remain among the key sources of risk and uncertainty for the coming years. If these conflicts intensify most emerging markets may simultaneously face a drop in aggregate demand and a rise in depreciation pressure, even though conditions on the global financial markets turn more favorable. Depending on country-specific characteristics, the central banks of some emerging markets will be able to respond by easing their monetary policies in order to stimulate economic activity, whereas others will have to tighten monetary policy to maintain price stability.

The escalation of the trade tensions between the United States and China led to a contraction in investment activity and trade in H1 2019, adversely affecting the prospects for global economic growth and the trends in global commodity prices. Slower economic growth and lower inflation in the United States and the euro area made the Fed and the ECB adopt a more dovish tone. This was reflected in lower yields on U.S. Treasury bonds and inversion of the yield curve. At the same time, yields on German securities turned negative again. Considering the limited supply of high-yield instruments, looser financial conditions supported investor interest in risky assets, which contributed to lower risk premiums and reduced the cost of external borrowing in the majority of emerging markets.

Figure 1. JP Morgan EMBI+ for selected EM

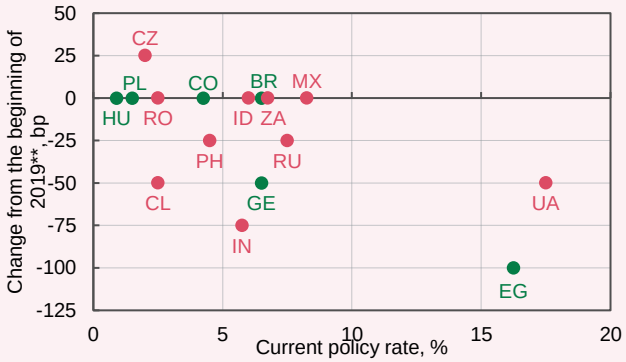


Source: Bloomberg.

The looser financial conditions for EM provided policy space for lowering key rates in some countries. According to a survey by Bloomberg, in late 2018 analysts expected monetary policy tightening in most emerging markets, but shifted their expectations towards policy easing by the April and July surveys. India, Egypt, Russia, Ukraine, and Chile had already lowered their key rates during H1 2019.

At the same time, uncertainty over a trade deal between the United States and China persists, as does the risk of rising tensions between the United States and Mexico. If trade conflicts intensify, most emerging markets may simultaneously face a drop in aggregate demand and a rise in depreciation pressure. These factors will have opposing effects on inflation, so the monetary policy response of the central banks in emerging markets will vary depending on the country-specific economic characteristics. In particular, important factors will include their degree of involvement in trade conflicts, dependence on raw commodity prices, the stability of a country's external position, the level of inflation compared to the target, the sensitivity of prices and inflation expectations to changes in the exchange rate, and so on.

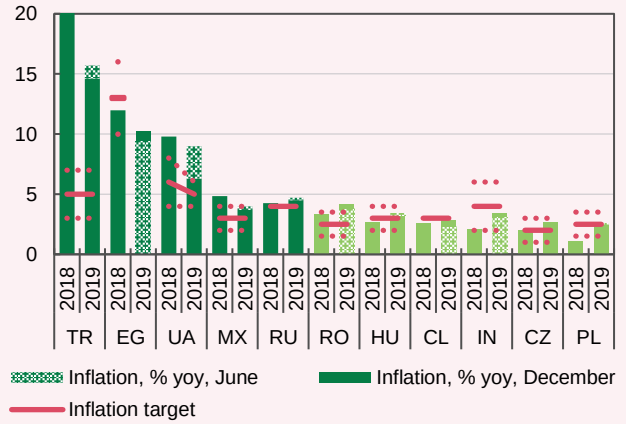
Figure 2. Key policy rates of selected EM central banks*, %



* Countries, which increased their policy rate at least once in 2018, are in pink.
** Cumulative change from the beginning of 2019 as of July 17, 2019.
Source: official web-pages of selected central banks.

In countries where a decrease in external demand and trade volumes has significant influence primarily on economic activity, central banks will be able to ease their monetary policy in order to stimulate domestic demand. This is especially true for countries with relatively high credit ratings and a low cost of external financing, including the majority of the CEE countries, and Chile. The central banks of these countries have been keeping policy rates at low levels over the past few years, and are likely to maintain this stance while inflation is within the target range.

Figure 3. Inflation in selected EMs*, %



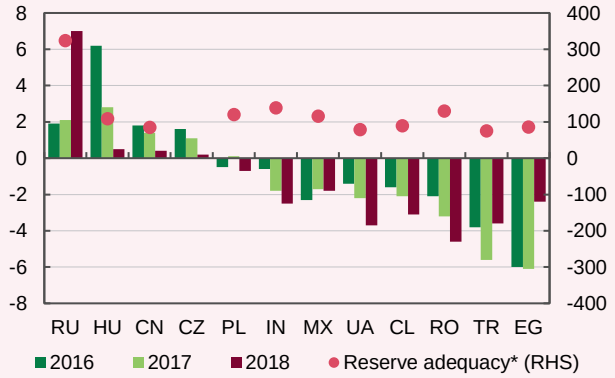
* Countries with tighter monetary conditions are marked dark green, with looser –light green (policy stance according to CBs' communications). Dotted line indicates upper and lower bounds of range around country's inflation target (where specified). In Egypt, previous target was set for Q4 2018, next – for Q4 2020; in Ukraine – for the end of 2018 and 2019.
Source: national statistical agencies, official web-pages of selected central banks.

In the Czech Republic, for example, the monetary policy normalization conducted since August 2017 will be limited by a potential increase in a positive interest rate differential vis-à-vis the euro area, where rates will remain low at least through the first half of 2020, and the corresponding

appreciation of the koruna. Hungary decided to launch a corporate bond purchasing program with a total amount of USD 1.05 billion on 1 July 2019 in order to improve the effectiveness of monetary policy transmission.

The central bank of Chile anticipates a monetary policy easing if global demand declines and copper prices fall (copper accounts for around 50% of Chilean exports). However, Chile is less susceptible to changes in investor sentiment, as its current account deficit is financed by relatively stable FDI inflows (primarily into the mining industry).

Figure 4. Current account balance in selected EMs, % of GDP



* Reserves in % to ARA metric, IMF forecast for 2019 as of July 2, 2019.
Source: IMF WEO April 2019, IMF Assessing Reserve Adequacy.

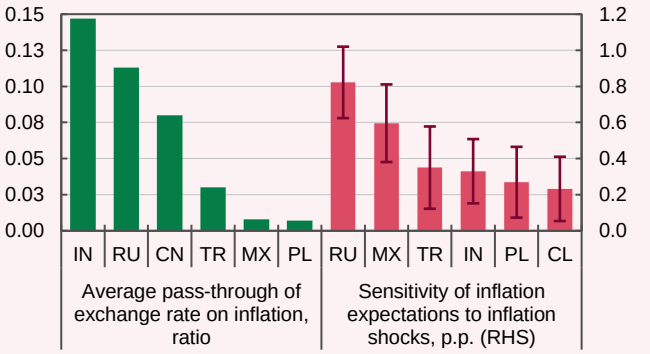
Meanwhile, the central bank of China will continue to stimulate the Chinese economy by means of targeted lending programs and reducing the required reserve ratio for selected groups of banks, while keeping the repo rate unchanged.

On the other hand, in countries that are more vulnerable to changes in the external environment and that have relatively high interest rates, pass-through effect from exchange rates to inflation is stronger. Inflation expectations in these countries are as well susceptible to external and exchange rate shocks. Accordingly, lower export proceeds and capital outflows from these countries put high pressure on their exchange rates and inflation. As a result, if trade conflicts escalate the central banks of these countries (particularly Russia, India, and Mexico) will have to pause their cutting cycle, or even switch to monetary policy tightening.

Although the Reserve Bank of India focuses on stimulating domestic demand, India is vulnerable to changes in investor sentiment. Despite enjoying large amounts of FDI, which make up the bulk of the inflows to the country's financial account, these are still not sufficient to cover the current account deficit. Threats to central bank independence pose another risk.

The central bank of Russia, which is keeping monetary policy tight, revealed that it might cut its key rate at its next monetary policy meetings and shift to a neutral policy (the rate ranging from 6% to 7% with an inflation target of 4%) by mid-2020, due to lower pro-inflationary risks and revised expectations of the Fed rate level. However, geopolitical factors that put downward pressure on oil prices may put the brakes on monetary policy normalization in Russia. On the other hand, the flexibility of the fiscal rule (despite the oil price being envisaged at USD 41.6/bbl in the budget) will dampen the effect of deteriorated terms of trade on the ruble exchange rate and inflation.

Figure 5. Exchange rate pass-through and sensitivity of inflation expectations in selected EMs



Source: World Bank.

The central bank of Mexico emphasized the need for a prudent policy, considering external and internal risks. The financial markets estimate the probability of an interest rate cut at 20% while of a hike – at 25%. The rate may be raised if the peso depreciates further on the back of an escalation in the direct trade conflict with the United States, or if the free trade agreement between the United States, Mexico, and Canada (USMCA) is not ratified.

Despite high inflation, the National Bank of Romania (NBR), which has been keeping its key rate unchanged for more than a year, plans to stick to its current monetary policy stance. The NBR took this position amid fears that a tighter monetary policy would lead to greater capital inflows and a strengthening of the leu, which would widen Romania's trade deficit. At the same time, the central bank may resume a cycle of interest rate hikes if volatility in the global financial markets increases.

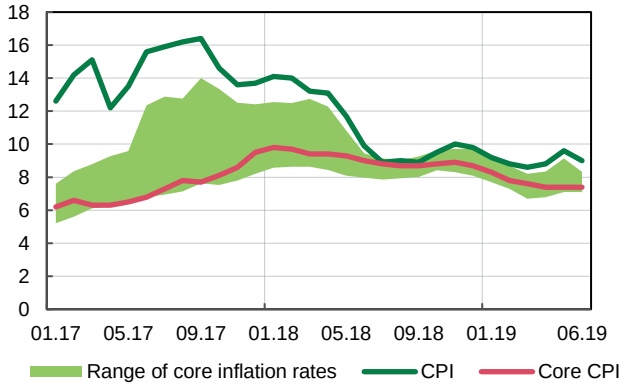
The risks associated with deepening trade wars, the global economic slowdown, and the decline in commodity prices are equally valid for Ukraine. The large external debt repayments due in 2019–2020 are an additional factor making the country vulnerable to changes in financial conditions and the strengthening of the U.S. dollar. Therefore, the materialization of the adverse scenario (an escalation of trade wars and lower commodity prices) would create the preconditions for a suspension of the cycle of easing monetary policy (read more about the risks to the forecast in Section 3.5 on page 49).

Part 2. Economy of Ukraine: Current Trends

2.1. Inflation Developments

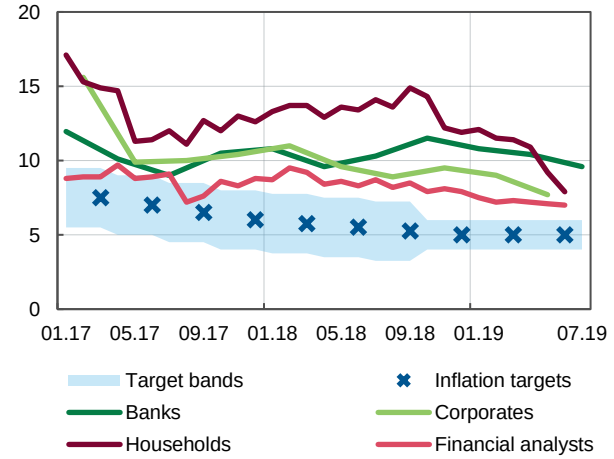
- Annual consumer price inflation came in at 9.0% in June 2019, approaching the trajectory of the April forecast after temporary factors caused a deviation from the target in previous months.
- Core inflation slowed slightly, to 7.4% in Q2, which was close to the NBU's forecast.
- Tight monetary policy remained a strong factor in holding back underlying price pressures, in particular through the exchange rate channel and lower inflation expectations across all respondent groups. At the same time, inflation remained relatively high due to the pressures of consumer demand, production costs, and rapid growth in administered prices.

Figure 2.1.1. Underlying inflation trends*, % yoy



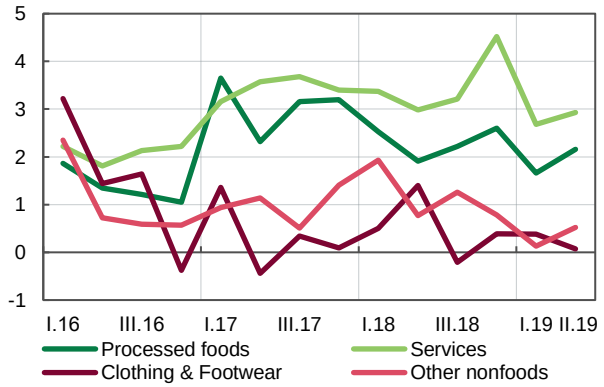
* Read more in the January 2017 Inflation Report (pages 20–21).
Source: NBU staff estimates.

Figure 2.1.2. Inflation expectations for the next 12 months, %



Source: NBU, GfK Ukraine.

Figure 2.1.3. Main components of core CPI, sa, % qoq



Source: SSSU, NBU staff estimates.

Core Inflation

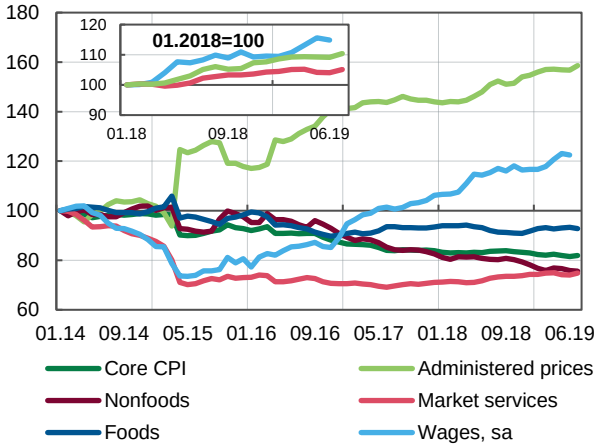
In Q2 2019, core inflation declined slightly, to 7.4% yoy in June, in line with NBU forecasts. Tight monetary policy was a strong factor containing the underlying price pressures, in particular through the exchange rate channel. The growth in nonfood prices slowed, to 2.0% yoy, thanks to favorable FX market conditions. These were mainly the prices of imported goods, or goods with a significant import share in their production costs. As a result, the prices of home appliances, furniture, clothing, and footwear grew at a slower pace.

The strengthening of the hryvnia also contributed to a decrease in inflation expectations across all respondent groups. This was seen from the results of the Business Outlook Survey, which showed that the perceived impact from the exchange rate on changes in output prices for goods and services charged by companies continued to weaken in Q2 2019. The improvement in inflation expectations was also driven by slower consumer price inflation over the past few months, a decrease in political uncertainty, information about changes in the natural gas pricing mechanism, and administrative limits on some household utility services. As a result, the inflation expectations of households and businesses were at their lowest level for the past five years.

On the other hand, underlying inflationary pressures were fueled by robust consumer demand as household income grew steadily and consumer sentiment improved. An increase in production costs, including labor costs, was another factor. The Business Outlook Survey showed that the impact of labor costs on assessments of price inflation increased slightly, reflecting rapid wage growth. Along with that, the impact of demand for respondents' products also rose due to higher wages.

Specifically, consumer demand was weak in 2014–2015, causing service prices to rise considerably more slowly than other components. However, later on, the rapid growth in wages boosted demand, leading to an increase in the cost of goods and services. These factors also continued to restrain the decline in the rate of growth of administered goods and services prices, as well as prices for market services. The growth rates of the latter have remained almost flat (14.0% yoy in June) since the beginning of the year. Specifically, the growth in prices for medical, financial, travel, and hotel services even accelerated. At the same time, the continued decline in relative prices for nonfood products can

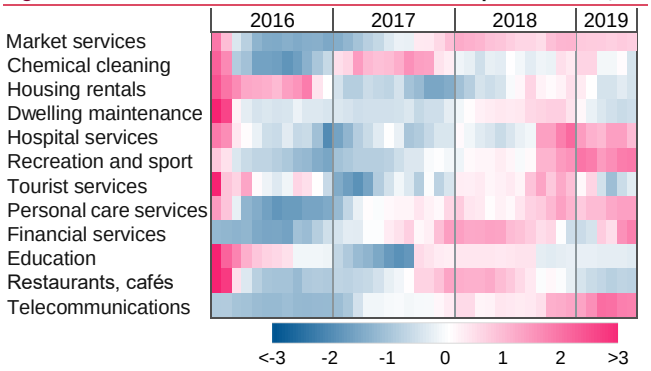
Figure 2.1.4. CPI components and wages*, 01.2014=100



* CPI deflated.

Source: SSSU, NBU staff estimates.

Figure 2.1.5. Normalized* services inflation heat map in Ukraine, %**

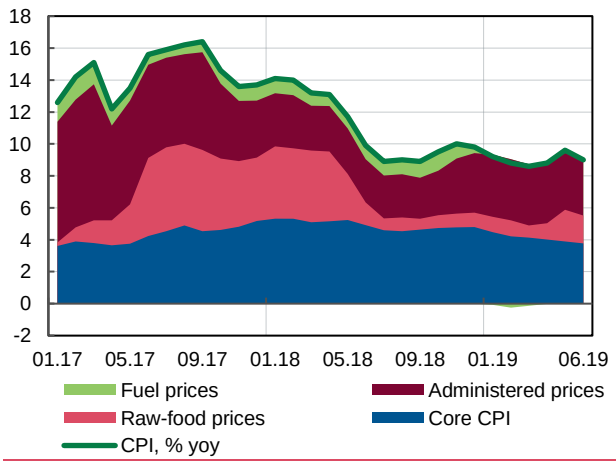


* Data are normalized by subtracting the mean change and dividing by standard deviation. Data for 2015 is excluded from the mean and STD calculation. See more at stlouisfed.org.

** Graphical representation of data where the individual values contained in a matrix are represented as colors. Red indicates higher inflation, blue lower inflation. The color of the components corresponds to the pace of normalized annual inflation.

Source: SSSU, NBU staff estimates.

Figure 2.1.6. Contributions to annual inflation, pp



Source: SSSU, NBU staff estimates.

be explained by the stronger hryvnia exchange rate and low inflation in producer countries.

Processed food prices grew faster (8.9% yoy) on the back of tight supply and robust consumer demand. In particular, the prices of meat products increased at a faster pace, driven by dwindling supply and higher global meat prices. The prices of dairy products continued to rise, due to higher global prices and a more pronounced decline in milk production.

Noncore Inflation

Noncore inflation accelerated at the end of Q2 (to 11.7% yoy in June), primarily due to temporary supply factors.

Raw food prices grew at a faster pace (7.8% yoy in June), as a result of a sharp decline in the supply of some raw products (especially borshch vegetables), which was aggravated by high demand in April–May. However, the effect of this factor had weakened by the end of the quarter: the growth rates of the prices for borshch vegetables decreased to 49.1% yoy in June as the new harvest came onto the market. Unfavorable weather spurred price growth for some open-ground vegetables. Strawberry prices remained higher than in 2018, while apple prices declined much more slowly. With higher global prices and negative expectations for Ukraine's sugar beet harvest, sugar prices also returned to growth. A deeper drop in egg prices due to a significant increase in poultry output restrained the growth in raw food prices somewhat.

Other price indices also showed similar trends[4]. Prices for animal farming products declined more slowly, at 5.1% in June. Coupled with higher global prices and strong demand, this boosted price growth in manufacture of meat and dairy products. At the same time, the lower wheat harvest of the previous year continued to drive the acceleration of the growth in producer and retail prices of bread.

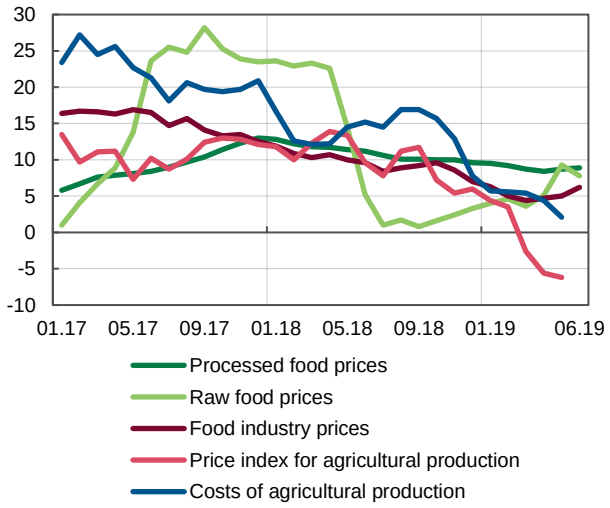
Fuel prices returned to growth (2.6% yoy) on the back of tight supply and an increase in global prices for crude oil over January–May compared to the end of 2018. The lower supply was due to interruptions in petroleum product supply from Belarus caused by contaminated oil leaking into oil pipelines, as well as to changes in the procedure for exporting petroleum products from Russia to Ukraine.

Administered prices continued to grow at a fast pace (17.0% yoy in June), due to pressure from production costs and higher excise taxes on tobacco and alcohol products, which were being gradually brought closer to European levels. However, the growth in administered prices slowed in Q2, primarily driven by changes in the procedure for setting prices for households, amid lower global prices for natural gas[5]. As a result of these changes, the growth in natural gas prices decelerated to 10.2% yoy. Price inflation in

[4] According to NBU estimates, changes in the prices of food, beverages, and tobacco products correlate most strongly with the relevant PPI component. Read more in the July 2016 Inflation Report, pages 16–17.

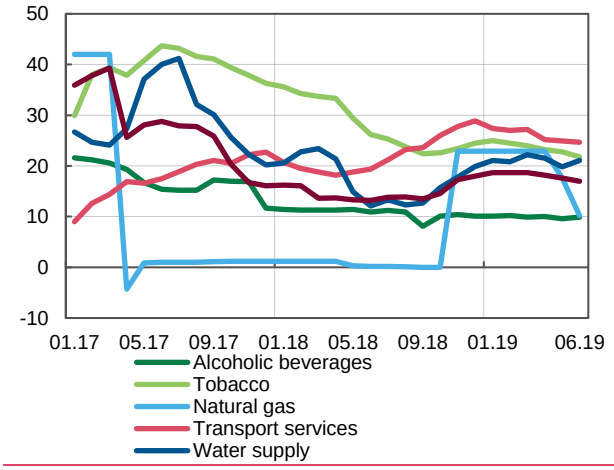
[5] In Q2, the rules for determining gas prices for households changed several times: until 1 May 2019, prices were set in line with resolution of the Cabinet of Ministers of Ukraine No. 380 dated 8 May 2019; while from 1 June 2019, the pricing has been determined by resolution of the Cabinet of Ministers of Ukraine No. 485 dated 5 June 2019.

Figure 2.1.7. Raw and processed food prices in food industry and agricultural production, % yoy



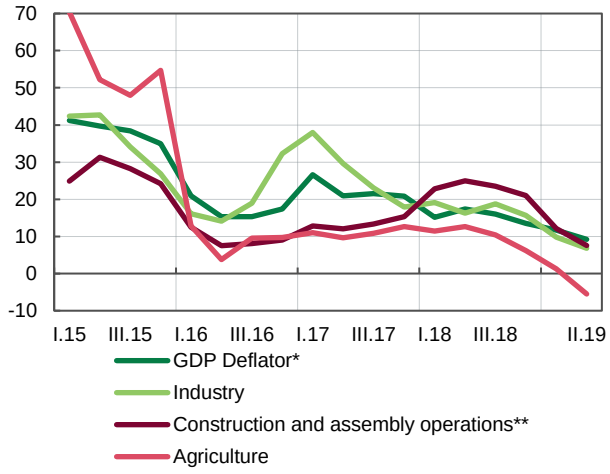
Source: SSSU, NBU staff estimates.

Figure 2.1.8. Administered prices and utility tariffs, % yoy



Source: SSSU.

Figure 2.1.9. Other inflation measures, quarterly averages, % yoy



* Data for Q2 2019 – according to the NBU staff estimates.

** Data for Q2 2019 – for two months.

Source: SSSU.

transportation services and water supply and sewage services also slowed.

Other Measures of Inflation

The pressure on prices subsided across all other price indices in Q2 2019.In particular, producer price inflation was the lowest in five years (4.5% yoy in June).

This was primarily due to a decline in global natural gas prices, which contributed to lower tariffs for gas supplies to industrial companies. This factor was also behind a drop in the price of electricity generated by thermal power plants. Moreover, prices for electricity generated from renewable sources fell more steeply, owing to the hryvnia's appreciation against the euro[6] and the rapid growth in new facilities (the green tariff being lower for them than for those put into operation before 2017). As a result, the growth in prices for the supply of energy slowed noticeably, to 3.0% yoy. The prices of crude oil and natural gas also decelerated in annual terms, due to a drop in global energy prices. This also slowed price growth in the production of coke and petroleum products and in the chemical industry.

In contrast, the prices of metal ores grew rapidly (29.3% yoy), as a result of stronger demand from domestic metallurgical plants and from continued sharp increases in global ore prices due to tight supply. However, this did not affect prices of metal products, which declined more quickly (5.6% yoy), in line with the current global trends.

Prices also grew more slowly in construction (7.3% yoy in May) and postal and communication services (21.6% in Q2). Overall, the NBU expects that the GDP deflator will slow further in Q2 2019, down from 11.7% yoy in Q1, on the back of weaker inflationary pressures in most other sectors of the economy.

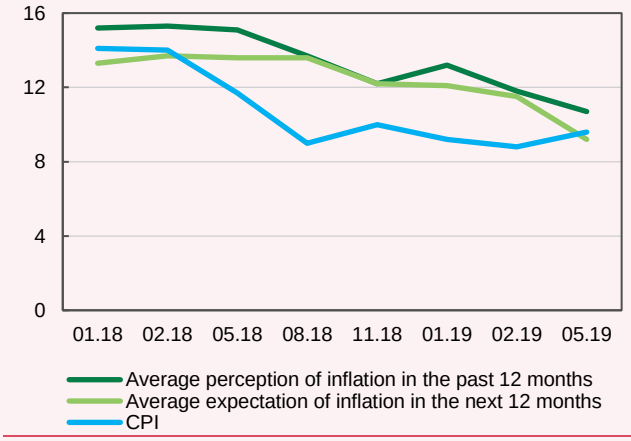
[6] The green tariff is set in euros.

Box 2. Households' Perception of Inflation

Except for recent months, households' inflation expectations have tended to deviate more significantly from the NBU's targets and projections than the inflation expectations of businesses, banks, and financial analysts. This is partially due to households' tendency to overestimate current inflation, resulting from differences in individual consumer baskets, greater focus on volatile prices of basic goods (food, fuel, etc.), and the influence of demographic and social factors.

To study the perception of inflation in Ukraine, starting in January 2018 the survey of households[7] was supplemented with a question about respondents' estimates of inflation over the previous 12 months. Over the course of the survey, households' inflation estimates decreased, which was in line with the disinflation seen in the economy. Inflation was estimated at 15.2% on average in January 2018, 13.2% a year later, and 10.7% in May 2019. Estimates provided in response to the open-ended question were also lower: half of the respondents estimated inflation at 15% and lower in 2018, compared to 18% and lower in 2017.

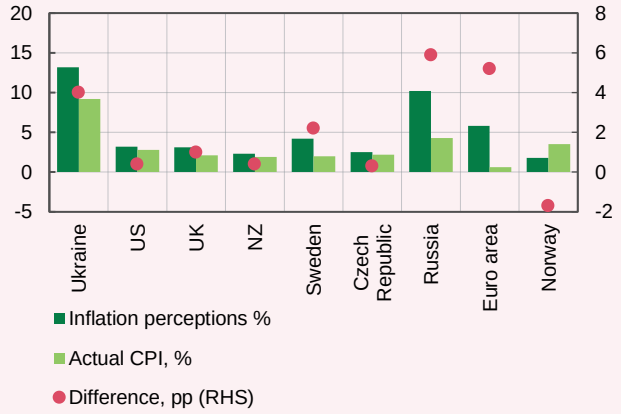
Figure 1. Inflation perceptions (interval question), inflation expectations, and CPI, % yoy (as of survey date)



Source: GfK Ukraine, NBU staff estimates.

However, despite the overall downward trend, households still perceived inflation above its actual level (by 1.1 pp in May 2019). Overstated perceptions of inflation are commonplace in many other countries, and this is associated with a number of factors. First, households tend to remember price increases better than they remember decreases (de Bruin, 2011). Second, consumers pay more attention to the prices of goods they buy more often (every day, every week) with quickly changing prices – for example food products (Fluch and Stix, 2005) – as well as prices of some representative goods, such as petrol (Coibion and Gorodnichenko, 2015). Moreover, the average consumer basket used to calculate the official inflation rate differs from the consumer basket of an individual household. A household may not buy all of the goods from the CPI basket, while consuming other goods, or goods that are weighted differently.

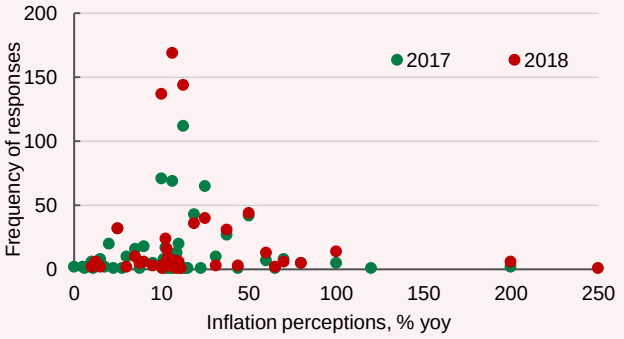
Figure 2. Inflation perceptions and actual CPI in Ukraine and other countries*



*Latest available data is December (for Sweden, Norway, New Zealand, and Russia), November (for UK), May 2018 (for U.S. and Czech Republic); January 2019 (for Ukraine); for the euro area – average for April 2013-July 2015.

Source: SSSU, GfK Ukraine, FRB, ECB, Bank of England, Reserve Bank of New Zealand, National Institute of Economic Research in Sweden, Norges Bank, Czech National Bank, Central Bank of the Russian Federation.

Figure 3. Distribution of inflation perceptions over previous 12 months (open question)



Source: GfK Ukraine, NBU staff estimates.

Inflation perceptions differ widely across respondents. In Ukraine, the estimates range from 0% to more than 200% according to the open-ended question. In 2018, despite the decline in inflation, the responses became more varied: the maximum estimate was 250% (compared to 200% in 2017). However, the greater variation of responses was caused by only a few untypical observations, which is common in other countries as well. For example, the study by Arioli et al. (2017), which is based on the European Commission data, points out that inflation estimates made by households in the euro area over 2009–2015 ranged from -

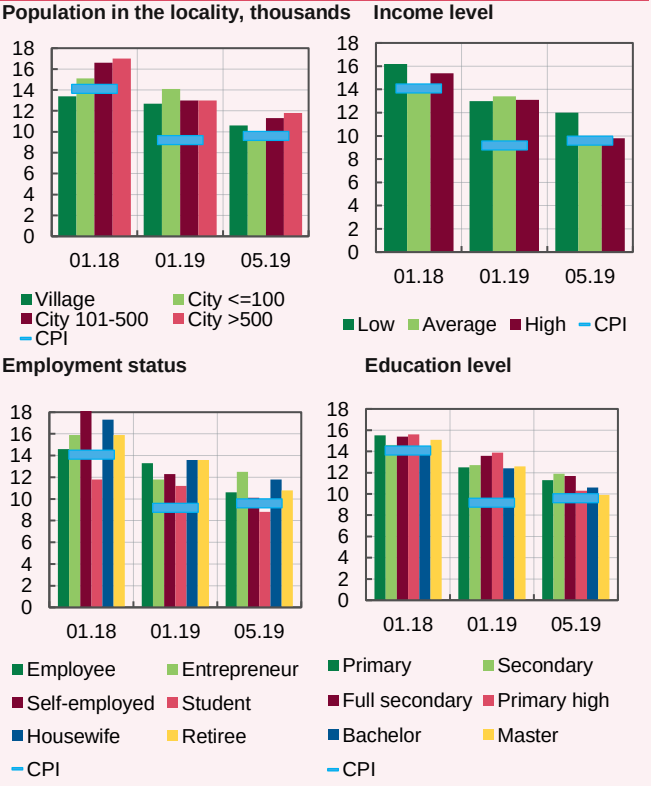
[7] GfK Ukraine conducts monthly surveys for the NBU of households' inflation and exchange rate expectations . Every quarter, respondents also provide their estimates of current inflation by choosing an answer from suggested ranges. Once a year, in January, respondents answer an open question (meaning there are no answers suggested). The survey covers nearly 1,000 household respondents who are 16 or older, quota-sampled by sex, age, place of residence (rural or urban areas), and the size of the settlement. The statistical error for responses does not exceed 3.2%).

400% to 900%, but such extreme values accounted for less than one percent of all responses.

A number of research papers dedicated to studying expectations and perception of inflation, particularly relating to households in the United States (Axelrod et al., 2018), New Zealand (Hayo and Neumeier, 2018), the euro area (Arioli et al., 2017), and Austria (Fritzer and Rumler, 2015), reveal that even in developed countries inflation perception and expectations are overstated and vary greatly depending on respondents' sex, age, place of residence, level of income, education, and financial literacy.

The NBU also assessed the influence of social, economic, and demographic factors on the perception of inflation in Ukraine[8], finding that responses were quite homogeneous by the sex and marital status of respondents. This situation has not changed over the year. On the other hand, estimates differ depending on the age of respondents. For example, for the interval question, ceteris paribus, respondents aged 50 years tend to estimate inflation 2 pp higher than respondents who are 25 years old.

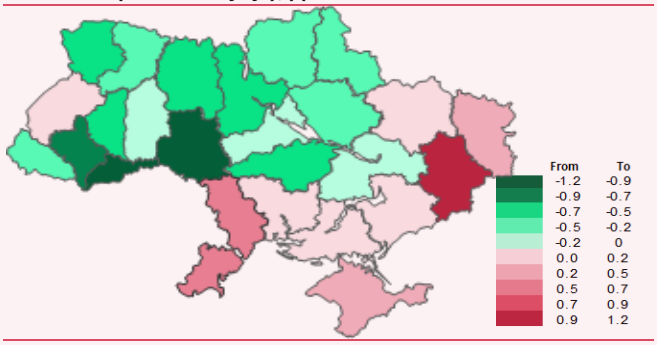
Figure 4. Average inflation perception by demographic characteristics of respondents (interval question)



Source: GfK Ukraine, NBU staff estimates.

The employment status of respondents also has a pronounced impact on inflation perceptions. Students give the lowest estimates, whereas estimates made by pensioners are the highest, which generally coincides with the distribution of estimates by age. In addition, pensioners' estimates were on average 2 pp above the estimates by employed respondents. In contrast to other countries, the level of education of Ukrainian households has little effect on perceptions of inflation – their relationship is statistically insignificant. On the other hand, the regional aspect is important. For example, estimates made by people living in western regions are on average 1.3 pp below the estimates of residents of other regions. This effect had even strengthened as of the end of 2018. However, this was expected, as inflation in western regions has been slightly lower than in the east over the past decade. Among other factors, this can be explained by the larger share of the population living in rural areas, and higher consumption of homegrown produce.

Figure 5. Normalized standard deviation of regional CPI from the overall CPI (2009–2018 yoy*), pp



* Except for 2014-2015. For Crimea – until 2013.
Source: SSSU, NBU staff estimates.

Unlike with the perceptions of inflation for 2017, inflation estimates of respondents with different income levels varied less in 2018. Moreover, estimates made by low-income respondents declined markedly, which may be due to differences in consumer baskets: consumption of low-income households is dominated by food products, which grew only 3.3% more expensive in 2018 (compared to the 9.8% growth in the CPI). Estimates by respondents who live in populated centers of different sizes also became closer in 2018.

Overall, inflation estimates in Ukraine follow the same trends as seen in other countries. Inflation perceptions positively correlate with the actual change in prices, although still exceeding it slightly. However, the deviation is narrowing gradually. At the same time, the differences in estimates by respondents with certain characteristics and the absence of a significant link to education may indicate an insufficient level of financial literacy among the public. Deeper communications with the public about the central bank's goals and activities and the introduction of financial literacy programs are among the NBU's priorities. Better understanding and trust in the central bank's actions among households will help anchor inflation expectations, and hence help the bank meet its inflation targets.

[8] In order to assess the determinants of inflation perceptions, the NBU took the approach described in the study by Fritzer and Rumler (2015). The authors built a generalized tobit model (interval regression), where interval estimates of inflation were taken as the dependent variable and a number of demographic, social, and economic characteristics of respondents were chosen as independent variables. Since the survey of Ukrainian households provides responses with not only interval, but also point estimates of inflation, the model was estimated using both types of responses for two survey periods: January 2018 and January 2019. Having several observation points allows temporal effects to be detected. The general specification of the model is as follows:

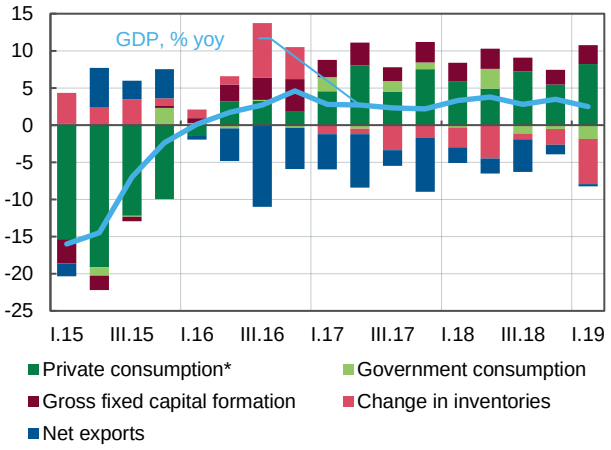
$$\text{Inflation perceived}_i = \alpha + \beta_1\,\text{age}_i + \beta_2\text{age}_i^2 + \beta_3\text{sex}^*_i + \beta_4\,\text{marital status}^*_i + \beta_5\,\text{education}^*_i + \beta_6\,\text{financial standing}^*_i + \beta_7\,\text{social status}^*_i + \beta_8\,\text{region}^*_i + \beta_9\,\text{household size}_i + \gamma\text{year}_i + \varepsilon_i,$$

where $\boldsymbol{\varepsilon_i}$ is the independent, identically distributed error term. Variables marked with "*" are interacted with the time dummy variable. Models were estimated for both every year separately and using the unified dataset.

2.2. Demand and Output

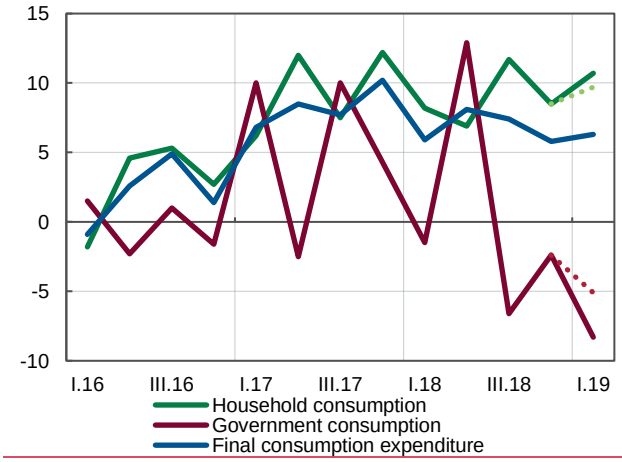
- In Q1 2019, real GDP growth decelerated, as expected, on the back of a lower positive contribution from agriculture, due to waning effect of the bumper crop in 2018.
- The growth in domestic demand accelerated, driven by both greater consumption amid higher household income and current budget expenditures and investment supported by high business expectations and capital expenditures from the budget.
- The NBU estimates that economic growth accelerated to 3% yoy in Q2 2019, supported by domestic demand, better performance of industry, and a larger harvest of early grain crops.

Figure 2.2.1. Contributions to annual GDP growth by final use, pp



* Including consumption expenditures of households and non-profit institutions serving households.
Source: SSSU, NBU staff estimates.

Figure 2.2.2. Final consumption expenditures, % yoy



* Dotted lines reflect NBU staff estimates obtained by excluding the effect of monetization.
Source: SSSU, NBU staff estimates.

Aggregate Demand

In Q1 2019, real GDP increased by 2.5% yoy and 0.3% qoq sa. Domestic demand remained an important driver of economic growth. The growth in final consumption expenditure accelerated to 6.3% yoy, primarily on the back of faster growth in household consumption (10.7% yoy). The latter partially reflected a statistical effect from the monetization of utility subsidies[9]. The same factor caused a deeper decline in the general government final consumption expenditure (to 8.3% yoy).

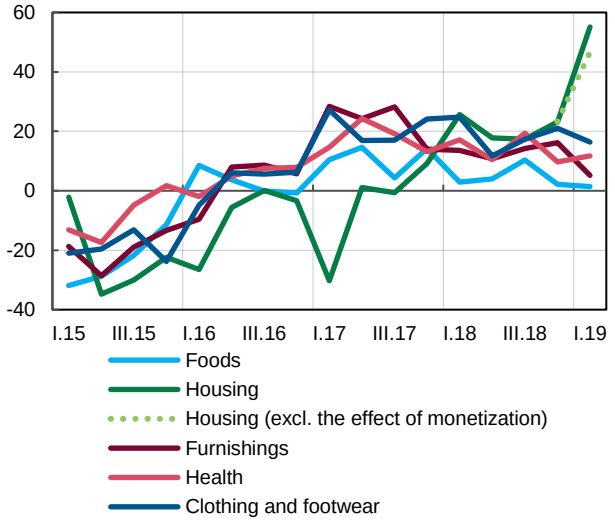
Spending on services and relatively durable goods has been growing rapidly for the second year running, despite a higher share of household spending on housing and utilities. This is evidence of steady consumer demand on the back of a large increase in household income, an improvement in consumer sentiment, and a certain change in consumer behavior. Spending grew on clothing and footwear, household goods, recreation and culture, restaurant services, and transport. That supported growth in the GVA of trade and transportation, as well as the GVA of most other services sectors.

Healthcare spending grew at a faster pace in Q1, resulting in high growth rates of this sector's GVA. Household consumption of healthcare services grew steadily, including due to changes in approaches to financing and rendering medical services under the healthcare system reform, in particular the further expansion of the *Affordable Medicines* program starting on 1 February 2019. Growth in the general government final consumption expenditures on health care accelerated as well, driven by the healthcare system reform.

Household spending on food grew at a moderate pace. Expenditure on communication services decreased on the back of a decline in the number of subscribers to both fixed phone lines (as this type of communication continues to lose popularity) and digital means of communication. The latter could be driven by users with several SIM-cards optimizing their consumption of mobile services as mobile operators revised their approaches to tariff packages in the previous periods. Moreover, growth in spending on education slowed, while the GVA of the education sector decreased in Q1. The modest growth in spending on education in the past few years may reflect a decline in the number of students caused by

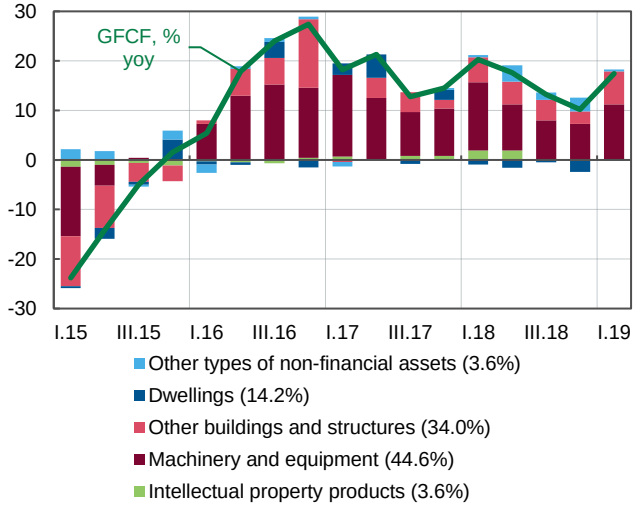
[9] According to the methodology for calculating GDP, nonmonetary transfers are accounted as general government final consumption expenditure, whereas monetary transfers are seen as household final consumption expenditure. The subsidy monetization was reflected in a redistribution of expenses between these two sectors.

Figure 2.2.3. Private consumption expenditures by purpose, % yoy



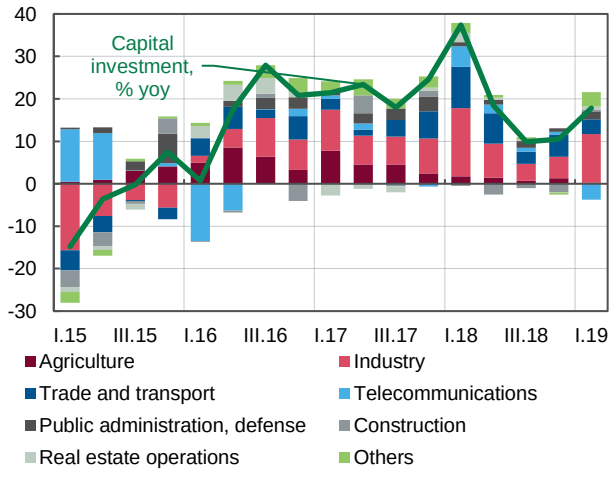
Source: SSSU, NBU staff estimates.

Figure 2.2.4. Contributions of non-financial assets to annual GFCF growth, pp (% of GFCF, 2018)



Source: SSSU, NBU staff estimates.

Figure 2.2.5. Contributions to annual growth of capital investments, pp



Source: SSSU, NBU staff estimates.

demographic processes, while the lower GVA growth of the sector may be indicative of a decrease in staff numbers and an increasing number of persons who study abroad.

Investment demand also remained an important driver of GDP growth in Q1. Growth in gross fixed capital formation accelerated to 17.4% yoy as business expectations improved[10]. Investment grew in both the public and private sectors.

The share of budget funds in investment financing increased year-on-year in Q1 2019, due to high capital expenditure from the budget[11]. These funds were mostly spent on continuing road and infrastructure repairs. Along with repairs at metallurgical and chemical plants, this boosted investment in other buildings and structures, which prompted rapid growth in the GVA of the construction industry.

Industrial companies increased investment, including in machinery and equipment. Foreign investors participated in realization of private investment projects. Thus, the capacity of operating renewable energy facilities continued to grow. Both domestic and foreign investments in the mining industry increased on the back of higher global prices for iron ore. However, due to some deterioration in financial performance[12], the share of companies' own funds decreased (to 74.1%), although they remained the main source of investment financing.

Meanwhile, inventories shrank markedly in Q1, which primarily reflected large exports of last year's record high harvest of grain and industrial crops. This also sped up exports of goods and services. The growth in imports also accelerated, particularly due to the exemption period for the customs clearance of cars registered abroad[13]. Imports grew more slowly than exports, reducing the negative contribution of net exports to real GDP growth (to 0.3 pp).

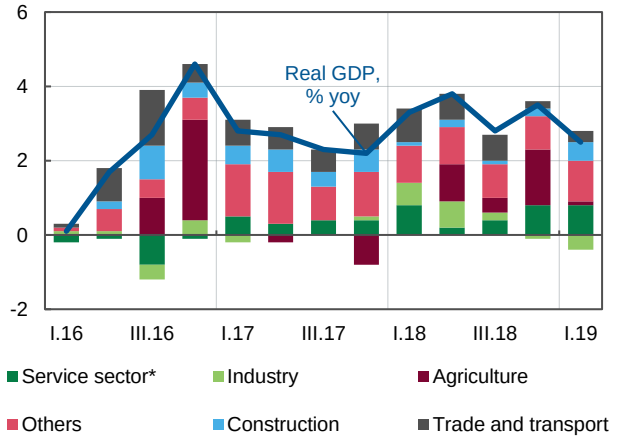
Gross Value Added

In Q1, real GDP growth slowed, primarily due to the expected decrease in the positive contribution of agriculture, due to the waning effect of last year's record harvest of late grain and industrial crops. At the same time, the contribution made by the GVA of agriculture remained positive on the back of the continued expansion of poultry farming.

The GVA of industrial production continued to drop in Q1 2019. In the energy sector, the decrease in GVA was mostly due to the weather, which was warmer than last year. The GVA of manufacturing was also below last year's level, as a result of repairs at some metallurgical and chemical plants, new restrictions introduced by Russia, and a deterioration in the external price environment. However, the decline in these industries slowed. The positive effect of a rapid growth in global iron ore prices on the output of metal ore mining in Ukraine came with a time lag. As a result, metal

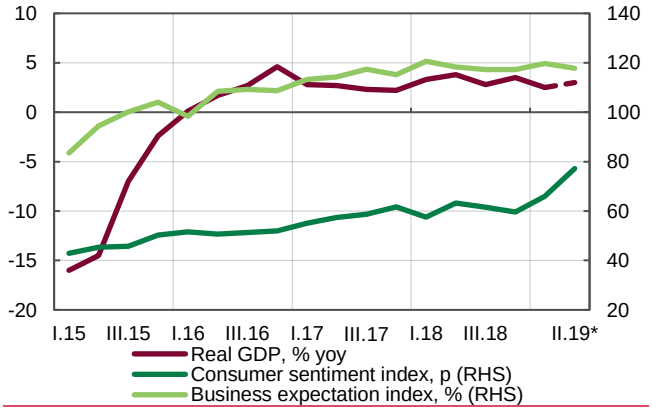
[10] The Business Expectation Index (BEI) rose to 119.7% in Q1 2019, up from 117.3% in the previous quarter.
[11] Growth in capital expenditure funded from the consolidated budget accelerated to 37.4% yoy in January–March 2019.
[12] The financial results of large- and medium-sized businesses decreased by 7.1% yoy in January–March 2019.
[13] Read more in the *Balance of Payments* section of the April 2019 Inflation Report, pages 34–38.

Figure 2.2.6. Structure of annual real GDP growth by type of activity, pp



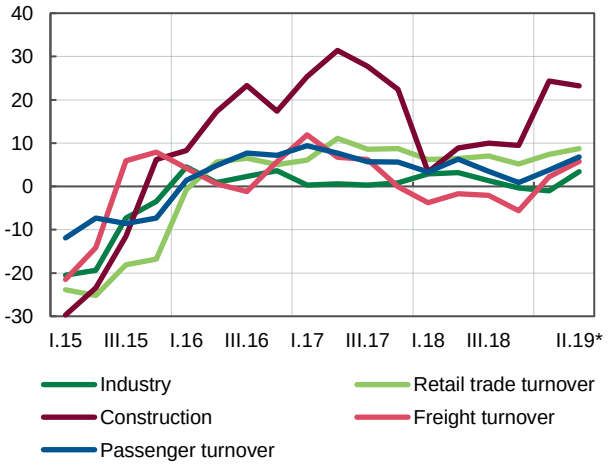
* Including education, health care, financial and insurance activities, real estate activities, public administration and defense.
Source: SSSU, NBU staff estimates.

Figure 2.2.7. Real GDP, consumer sentiment and business expectations



* Q2 2019: GDP – NBU estimates, CSI – average for April-May 2019.
Source: SSSU, NBU staff estimates.

Figure 2.2.8. Output by selected types of activity, % yoy (quarterly averages)



* Average for April-May 2019.
Source: SSSU, NBU staff estimates.

ore production continued to drop in Q1. This slowed the growth of the total GVA of the mining industry, despite the continued increase in production of natural gas, crude oil, and coal.

The growth in the cumulative GVA of the services sector was restrained by a decline in the GVA of education and slower growth in the GVA of financial and insurance activities on the back of a deterioration in the performance of insurance companies.

On the other hand, the contribution made by the GVA of the construction sector increased markedly, reflecting high investment activity.

Estimates for Q2 2019

According to the NBU's estimates, real GDP growth accelerated to 3.0% yoy in Q2, fueled largely by domestic demand. Household consumption continued to rise, as evidenced by much stronger consumer confidence[14] driven by further growth in household income. That in particular resulted in faster growth of retail turnover and passenger turnover.

Growth resumed in industrial production led by the mining and metals industries. This also contributed to a slower decline in wholesale trade and faster growth in freight turnover. An increase in natural gas transit through Ukraine was also a major factor of the growth in freight turnover.

Investment demand remained high as well, despite a slight deterioration in business expectations in Q2 2019[15], the completion of most of major repairs by industrial companies, and slower growth in capital expenditure from the consolidated budget. The strong investment demand was also evident from the sustained high growth rates of the construction sector.

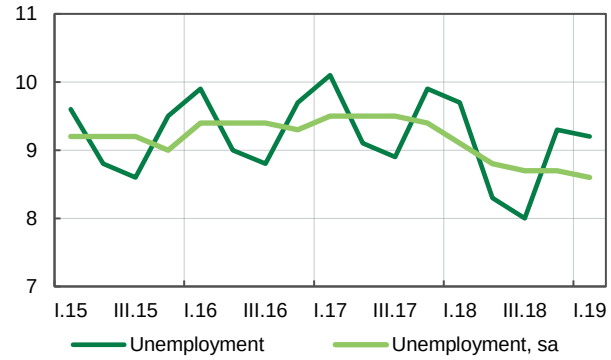
Growth in agriculture was supported by the larger harvest of early grain crops (compared to the same period of last year) due to this year's favorable weather.

[14] The Consumer Sentiment Index increased to 77.2 on average over April–May 2019 – the highest since the beginning of 2014. The increase was mostly driven by an improvement in the Q2 2019 expectations of economic development for the coming year.
[15] In Q2 2019, the Business Expectation Index declined by 1.9 pp, to 117.8%.

2.3. Labor Market and Household Income

- In Q1 2019, labor supply increased, following wage increases over the past few years and the lingering effect of tighter requirements for the minimum pensionable service period necessary to receive an old age pension.
- Economic growth helped keep labor demand high. As a result, employment increased, while unemployment declined.
- Household income grew at a significant pace due to sustained wage growth, pension increases, and additional pension benefits.

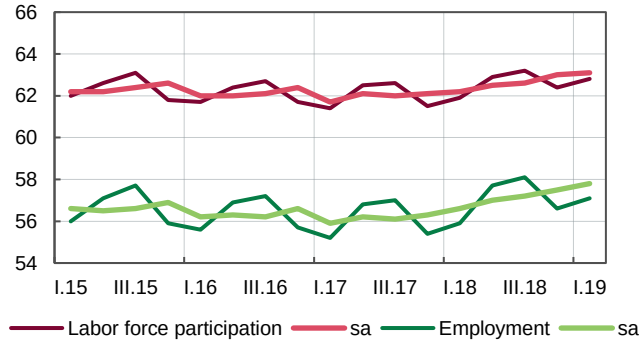
Figure 2.3.1. ILO unemployment rate*, %



* As a % of population aged 15–70 in the labor force.

Source: SSSU, NBU staff estimates.

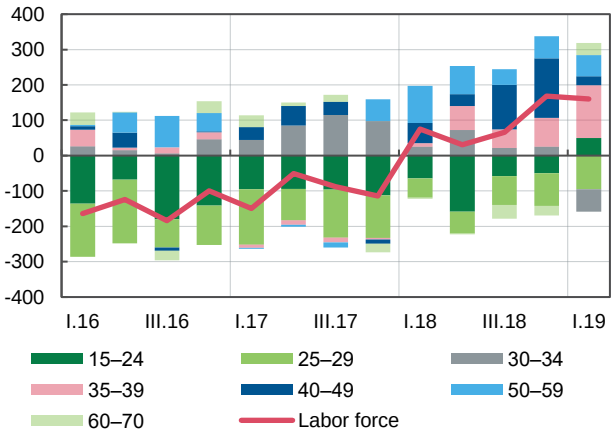
Figure 2.3.2. Labor force participation and employment rates*, %



* As a % of total population aged 15–70.

Source: SSSU, NBU staff estimates.

Figure 2.3.3. Contributions to annual change in labor force, thousand persons



Source: SSSU, NBU staff estimates.

Labor Market

In Q1 2019, labor supply[16] continued to expand: the labor force participation rate increased to 63.1% in seasonally adjusted terms. This was driven by the continued impact of changes to pension laws made in early 2018 that tightened requirements for the minimum pensionable service period necessary to receive an old age pension[17], and the steady increase in wages over the past three years. In particular, labor force participation among individuals aged 50–59 continued to increase, as did labor force participation among those aged 35–39.

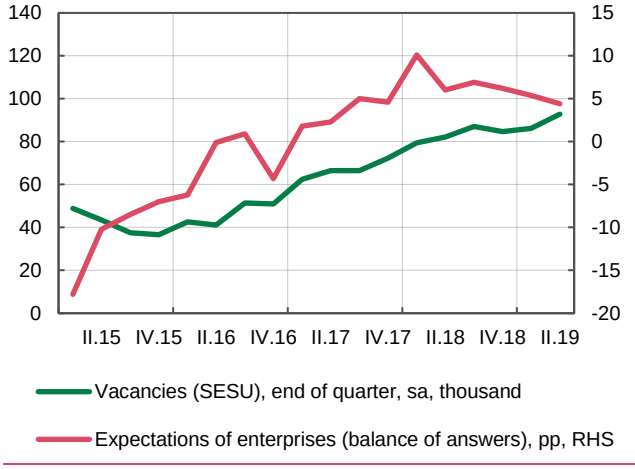
Demand for labor also continued to grow. Since 2017, businesses in all sectors have maintained high expectations with regard to changes in staff numbers, although these expectations weakened somewhat in 2019, the NBU's Business Outlook Survey shows. Businesses in retail, transportation, and construction anticipate increases in employment due to an expansion in output/work performed. Wholesale businesses are also expecting an increase in staff numbers amid the improving performance of the wholesale trade sector. At the same time, businesses in agriculture and in power and water supply expect a reduction in staff numbers for the third year running. This can be attributed to difficulties in filling existing vacancies[18].

As a result, employment rate continued to increase (to almost 58% in Q1 2019 in seasonally adjusted terms), while the unemployment rate declined (to 8.6% in seasonally adjusted terms). In addition, the growth in the number of vacancies registered by the State Employment Service of Ukraine slowed, possibly indicating that labor supply is gradually meeting labor demand.

However, the Beveridge curve shows that significant mismatches persisted in the labor market. Companies in all sectors experienced a shortage of workers, most of all in construction (more than half of surveyed businesses reported) and industry. According to Poland's Ministry of Labor and Social Policy, these sectors employed a significant share of Ukrainian labor migrants in 2018.

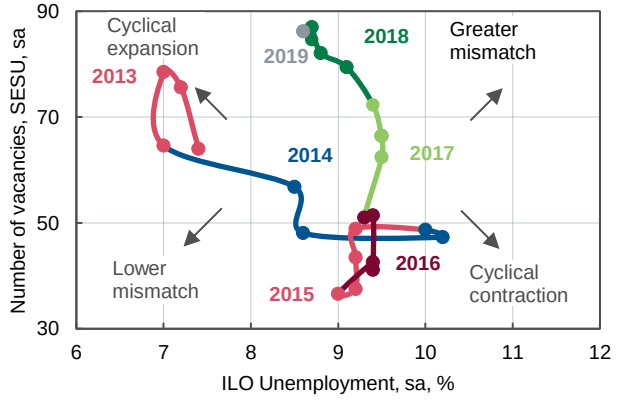
[16] In 2019, the SSSU brought its employment survey methodology in line with international standards and introduced the concept of *labor force* (formerly referred to as the *economically active population*). For details, see the message from the SSSU.
[17] For details, see Box The Key Elements of Pension Reform in the October 2017 Inflation Report (pages 27–28).
[18] For details, see Box Business Outlook Survey: Staff Shortages and Robust Demand for Labor in 2018 Resulted from Economic Growth in the April 2019 Inflation Report.

Figure 2.3.4. The number of vacancies (SESU) and expectations of enterprises as to the change in the number of employees 12-month ahead



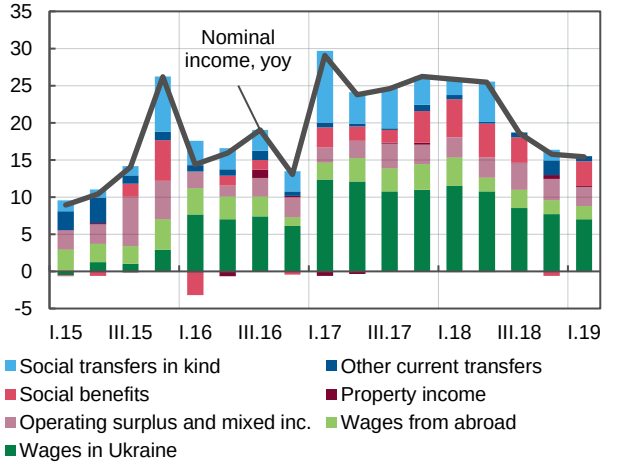
Source: SESU, Business outlook survey of Ukraine (NBU), NBU staff estimates.

Figure 2.3.5. Beveridge curve



Source: SSSU, SESU, NBU staff estimates.

Figure 2.3.6. Contributions to annual change in nominal household income, pp



Source: SSSU, NBU staff estimates.

Household Income and Savings

Revenue growth remained strong in Q1 2019, despite slowing slightly (to 16% yoy). In particular, wages increased by 18% yoy, and their share in total household income exceeded 50% for the first time ever. The sustained growth in labor demand and higher compensation of employees abroad supported the further growth in wages. The increase in compensation of employees abroad was primarily driven by wage growth in the countries that are the main recipients of Ukrainian migrants, in particular Poland, while available data showed that labor migration to this country has stabilized (see Figure 2.3.6 in the April 2019 Inflation Report). At the same time, wages remained under pressure from existing mismatches in the labor market. Specifically, in Q1, the growth of staff wages in industry and construction outpaced the average wage growth across the whole economy. Significant wage growth was also observed in the IT sector. This was the result of companies in this sector expanding the volume of outsourcing services they provided to clients abroad, as well as robust demand for IT workers in the domestic labor market, especially as international IT companies expanded their network of representation offices. Productivity growth also contributed to wage increases (see Box 3, The Relationship between Labor Productivity, Real Wages, and Inflation).

The government's social policy initiatives also had a significant effect on the changes in household income. At the beginning of 2019, the government raised the minimum wage (by 12.1%). In addition, the government raised pensions for certain categories of pensioners in January 2019, implemented old-age pension modernization in March, and introduced one-off pension supplements in March and April 2019.

The share of social transfers in kind declined, while the share of social benefits in cash increased. These changes were driven by the introduction of the monetization of utility subsidies in March. At the same time, the total volume of utility subsidies decreased as a result of growth in other income components, a restrained increase in utility tariffs, a tightening of the criteria for granting subsidies, and warmer weather during the heating season compared to the previous year. An increase in social benefits in cash and a further slowdown in inflation drove an acceleration of the growth in real disposable income (to 7.7% yoy).

Households' propensity to save remained negative in Q1. Among other factors, expenditures that exceeded income were financed by loans.

Income growth continued to decelerate in Q2, the NBU estimates. This reflected a slowdown in wage growth, in particular as a result of labor demand being gradually met, and due to the further reduction of utility subsidies. Meanwhile, the growth in pension payments accelerated, reflecting the effect of pension modernization and one-off pension supplements in April.

Box 3. The Relationship between Productivity, Real Wages, and Inflation

Labor productivity, real wages, and inflation are closely interrelated economic concepts. The relationship between them can be multifaceted and may change over time. An increase in real wages that outpaces productivity growth tends to raise inflation pressure through the aggregate supply and the aggregate demand channels. Thus, productivity analysis, among other factors, supports informed monetary policy decision-making. Over the past few years, Ukraine's real wage growth has substantially accelerated, partially due to its catch-up from the 2014–2015 crisis. However, a productivity-based analysis shows that wage pressure on inflation is mounting.

According to neoclassical economic theory, wages are equal to the marginal productivity of labor. For example, if the marginal productivity of labor rises, then under the assumption of perfect competition and profit maximization, the company increases its demand for labor. If labor supply is fixed, this causes the real wage to increase[19]. In real-world economic circumstances, interrelations are much more complex, and wages are affected by other factors, such as negotiations between workers and employers, market failure, and so on.

If, as a result of other factors, wages grow faster than productivity, this generates pressure on inflation through two main channels. On the one hand, production costs increase, which reduces aggregate supply. On the other hand, the higher incomes of consumers generate demand pressure. In the 1970s in the United Kingdom, for example, a combination of the effects of increasing wages on inflation through these two channels triggered a rapid acceleration in inflation (Pettinger, 2011).

The link between labor productivity, real wages, and inflation can be multifaceted and can change in both the short run and the long run (Yildirim, 2015). Wakeford (2004), for instance, shows that under the efficiency wage theory, real wage growth can increase employee productivity in the short run by increasing the imputed cost of job loss to workers. In addition, at the macroeconomic level, real wage growth increases unit labor costs and creates incentives for the replacement of labor with capital. In turn, the replacement of labor with capital increases marginal (and, hence, average) productivity.

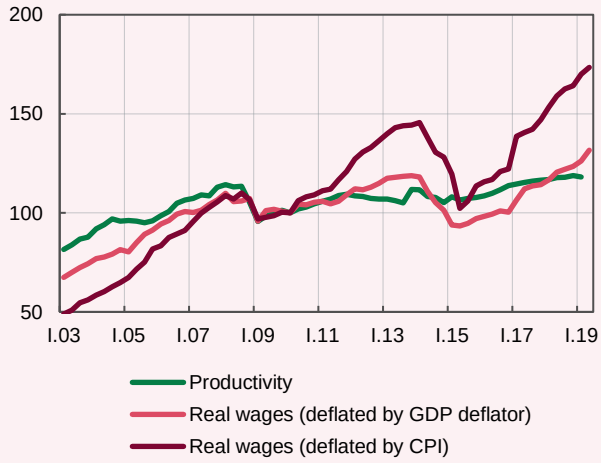
On the other hand, slower wage growth compared to productivity growth negatively affects household incomes, which discourages private consumption. Constrained consumer demand also leads to a decline in investment. In addition, low wages reduce incentives to invest in technology, which further holds back productivity growth. Consequently, the economy grows at rates below its potential. For emerging markets, low wages can be a barrier to catching up with the level of competitiveness of EU countries (Galgoczi and Drahokoupil, 2017).

On top of that, high inflation can hold back productivity growth for the following reasons:

- It reduces employees' incentives to be productive at work.
- It reduces the information content of price signals (as higher inflation tends to be associated with higher price volatility), which increases the likelihood of erroneous decisions and reduces investment efficiency.
- It shortens the planning horizon and increases contracting costs (Jarett and Selody, 1982).

Consequently, labor productivity[20] is an important indicator, which at the macro level characterizes the efficiency and competitiveness of the economy. This is a significant factor, which should be taken into account when making monetary policy decisions. A productivity-driven increase in wages stimulates economic growth without putting pressure on inflation, and therefore does not require monetary policy adjustments. Thus, it makes sense to analyze the overall and sector-wise productivity of the Ukrainian economy on an ongoing basis.

Figure 1. Productivity and staff real wage indices, sa, Q1 2010=100[21]



Source: SSSU, NBU staff estimates.

[19] In the Cobb-Douglas production function, marginal productivity of labor is proportional to average productivity. Thus, economists usually look at average labor productivity (hereinafter – labor productivity) due to a simpler calculation algorithm.

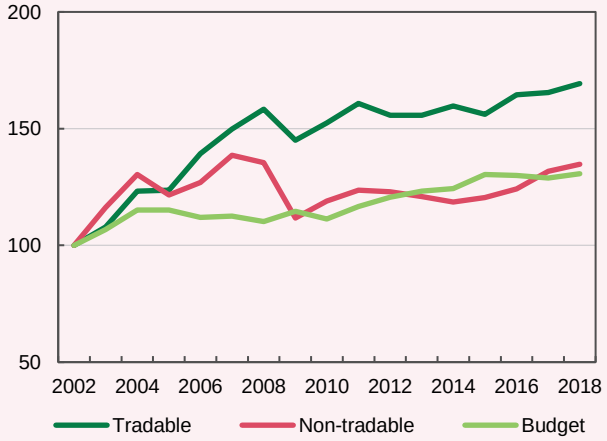
[20] The easiest way to measure labor productivity is by calculating the ratio between GDP and the number of employed individuals. More complex methods rely on calculations of productivity in real terms (Galgoczi, 2018) or based on a multi-factor model that includes capital productivity and intermediate consumption productivity (OECD, 2001).

[21] Figure 1 GDP and employment statistics (since 2010) – excluding AR Crimea. GDP statistics (since 2014), employment statistics (since 2015) – excluding also temporarily occupied territories in the Donetsk and Luhansk regions. In Q2 2019 – data are for April-May.

In Ukraine, there is significant positive correlation between real wage growth and productivity growth (the NBU's estimate stands at 0.6). At the same time, real wages tend to grow faster than productivity, except during crises.

In recent years, real wage growth has picked up significantly. On the one hand, this is due to the catch-up after a sharp fall during the 2014-2015 crisis. On the other hand, the faster growth in real wages reflects intensification of labor migration, a sizable increase in the minimum wage in 2017, and a worsening mismatch between labor supply and demand. In 2018, on average, real wages in Ukraine exceeded their pre-crisis levels of 2013 and the productivity level, various estimates suggest. At the beginning of 2019, real wages continued to grow considerably, outpacing the growth in productivity. This is a sign that wage growth pressure on inflation is increasing.

Figure 2. Labor productivity indices by sector, 2002=100

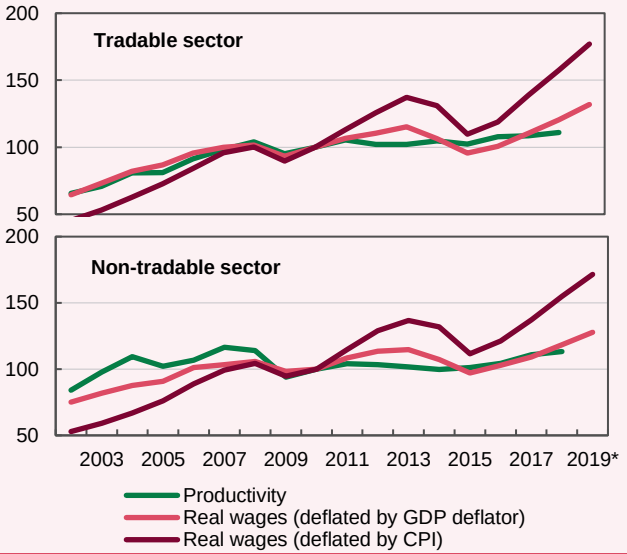


Source: SSSU, NBU staff estimates.

Overall, the growth in wages and productivity in the tradable[22] sector was higher than in the non-tradable sector. This may indicate the presence of the Balassa-Samuelson effect in Ukraine. The underlying logic of this effect can be summarized as follows:

- High productivity growth in the tradable sector contributes to fast wage growth in it.
- In the presence of labor mobility, this fuels wage growth in the non-tradable sector, which sometimes outpaces the productivity growth in this sector.
- This raises inflation in the non-tradable sector and, hence, in the whole economy (Rogoff, 1996).

Figure 3. Productivity and staff real wage indices by sector, 2010=100

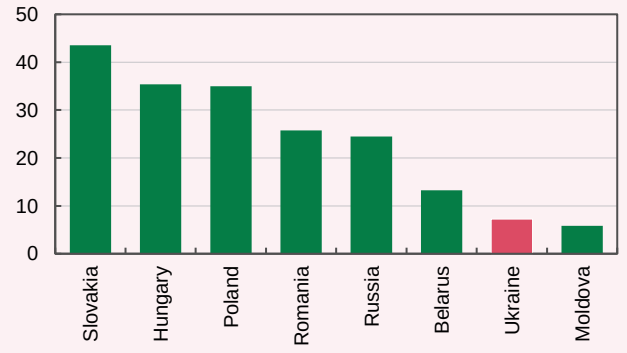


* Jan – May 2019.

Source: SSSU, NBU staff estimates.

Despite having grown over the past 15 years, labor productivity in Ukraine is significantly lower than in the neighboring countries (according to ILO estimates), which in turn affects the competitiveness of the Ukrainian economy. Ensuring macroeconomic stability is an important factor in raising productivity. Specifically, reducing and maintaining inflation at a steady low level will increase incentives to ramp up capital investment. Improving the quality of government regulation is also a prerequisite for a favorable business climate, while improving the quality of education at all levels will allow the educational system to better meet the needs of the labor market. In addition, bringing labor market legislation up to date will increase its flexibility and, hence, productivity.

Figure 4. Labor productivity* in selected countries, 2018



* In constant 2010 prices, thousand USD.

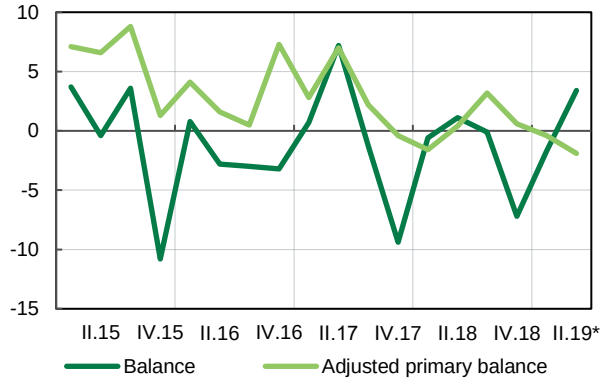
Source: ILO.

[22] The non-tradable sector includes activities that produce goods and services mainly intended for consumption in the domestic market. The tradable sector produces goods for sale also on the international market. In the non-tradable sector, we distinguish between activities that mainly produce public goods and are financed from the state budget (the budget sector), and all other activities. The non-tradable sector includes energy, water supply, construction, the retail trade, transportation, restaurants and hotels, IT, financial activities, and real estate. The tradable sector comprises agriculture, mining, and manufacturing. The budget sector is composed of public administration, education, and health care.

2.4. Fiscal Sector

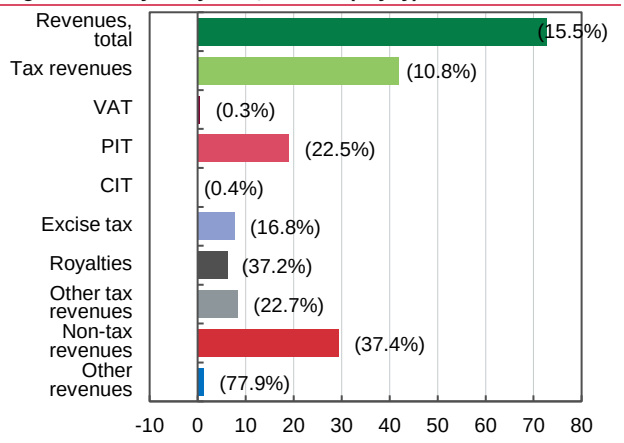
- The NBU sees current fiscal policy as loose, despite there being a significant consolidated budget surplus and relatively moderate expenditure growth.
- The early and larger-than-planned transfers of the NBU's profit to the state budget balanced out the poor performance of tax revenues, which can be attributed to both temporary and general economic factors.
- The significant financing needs to repay public debt were one of the main factors behind restrained expenditure growth.

Chart 2.4.1. Fiscal balance of the general government **



* The NBU estimates are based on preliminary data and own forecasts.
** Balance (% of GDP) – consolidated budget balance, taking into account loans to the Pension Fund from STA.
Cyclically adjusted primary fiscal balance (CAPB) of the general government (% of potential GDP). CAPB is the difference between seasonally adjusted revenues, in the structure of which tax revenues are adjusted for cyclical changes in GDP, and seasonally adjusted primary expenditures). Additionally, one-off proceeds (such as unplanned funds from special confiscation and effects from the Stockholm Arbitration) are subtracted from revenues. Positive value indicates tight fiscal policy, negative – expansionary fiscal policy.
Source: STSU, NBU staff estimates.

Chart 2.4.2. Consolidated budget revenues, absolute annual change in January - May 2019, UAH bn (% yoy)



Source: STSU, NBU staff estimates.

Balance

In January – May 2019, the consolidated budget ran a primary surplus of UAH 89 billion and a general surplus of UAH 33.9 billion. However, the NBU considers current fiscal policy as loose, as a large part of the surplus came from the transfer of the NBU's distributable profit for 2018.

Revenues

Consolidated budget revenues for the first five months of 2019 showed relatively modest growth, despite a significant acceleration in April–May. In Q1, tax revenue was the main source of revenues, while in the following months nontax receipts played a leading role.

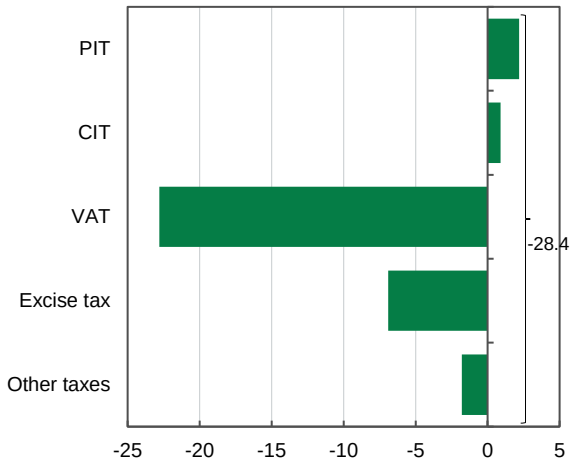
The key contribution of non-tax receipts to revenue growth in April–May was solely attributable to the transfer of the NBU's 2018 distributable profit to the state budget[23]. Specifically, in April, the NBU immediately transferred the full amount of its distributable profit to the state budget. In May, the central bank transferred another amount – in addition to the funds earmarked for transfer under the state budget law (bringing the total transfer to UAH 64.9 billion). The funds the NBU transferred were more than sufficient to close the significant gap between the planned and actual tax revenues.

Overall, in January–May, tax revenues grew by a moderate 10.8% yoy, but were nearly 9%[24] short of the planned figure after assumptions about some of the macroeconomic indicators the government factors into its budget calculations – specifically imports and the exchange rate – proved inaccurate.

Meanwhile, as before, revenues from personal income taxes increased steadily, driven by high wages. Proceeds from royalties increased as well. In April–May, the growth in revenues from the excise tax accelerated, as production of tobacco products returned to growth, up 15.8% yoy in March–May. However, due to a plunge in the production of excisable goods at the beginning of the year, the overall increase in excise tax revenues remained modest, taking into account the 20% increase in excise tax rates early in the year. Furthermore, the waning temporary effect of the customs clearance of foreign-registered motor vehicles, which played a key role in Q1, slowed the growth in not only proceeds from the excise tax on imported goods, but also revenues from VAT and taxes on international trade.

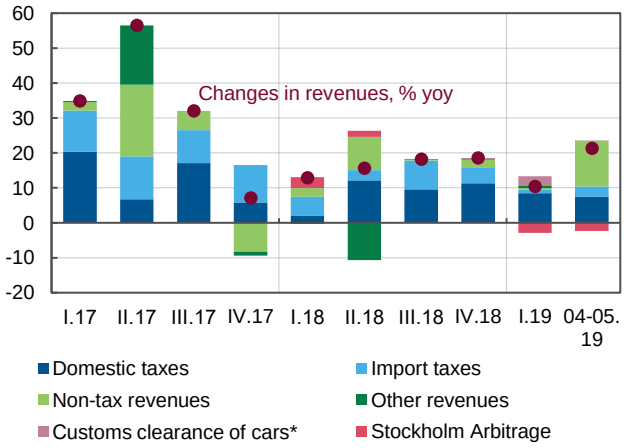
[23] Consolidated financial statements for the year ended 31 December 2018 p. 49.
[24] The data presented hereinafter on the planned general fund of the state budget are as published by the STSU.

Chart 2.4.3. Deviation of actual from projected receipts of the general fund by selected taxes in January - May 2019, UAH bn



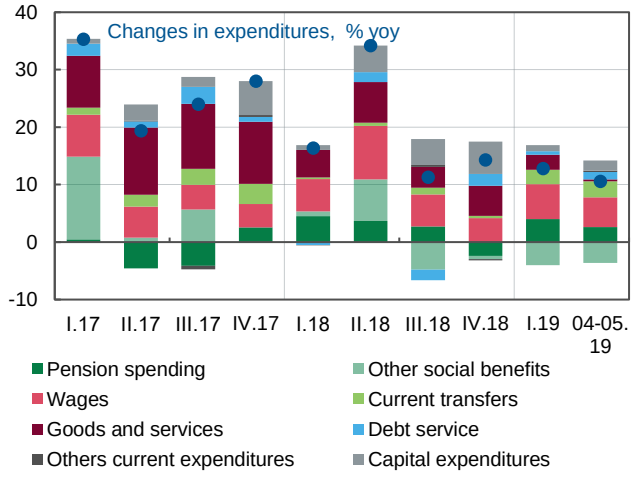
Source: STSU, NBU staff estimates.

Chart 2.4.4. Contributions to annual changes in revenues of the consolidated budget, pp



*The customs clearance of cars transported into the customs territory of Ukraine which fall under the customs regime of transit or temporary import (according to Law of Ukraine, dated 08.11.2018 "On amendments to the tax code of Ukraine concerning the excise tax on cars").
Source: STSU, NBU staff estimates.

Chart 2.4.5. Contributions to annual changes in expenditures of the consolidated budget, pp



Source: STSU, NBU staff estimates.

The growth in VAT and corporate income tax (CIT) was restrained by the comparison-base effect: in March–April last year, a significant increase in revenues from these taxes reflected the impact of the Stockholm Arbitration Court's ruling in favor of NJSC Naftogaz of Ukraine. In the meantime, the drop in CIT revenues in annual terms, as the results of the first five months of the year show, was primarily due to the deterioration in the financial performance of companies in Q1 2019, and a decrease in the amount of advance payments of this tax made in the past.

VAT proceeds in January–May were nearly flat, and in April–May, they decreased compared to the same period in 2018. Apart from the comparison-base effect noted above, this was the result of an increase in VAT refunds generated by both the steady growth in exports and the need to reduce VAT refund claims[25]. In addition, the restrained growth in imports, including as measured in the hryvnia equivalent on the back of the stronger hryvnia, and the exemption from VAT of certain types of renewable energy equipment, effective 1 January 2019, were significant contributors to the reduction in VAT proceeds.

Expenditures

After growing rapidly in January, consolidated budget expenditures slowed to a moderate pace starting in February (gaining a total of 11.8% yoy in January–May).

Social spending was a key factor in determining the changes in expenditures. This was primarily due to the lower spending on subsidies for households, reflecting a decrease in the number of subsidy recipients (for more on subsidies, see the Section Labor Market and Household Income). In contrast, the volumes of transfers to the Pension Fund increased, in particular driven by the planned indexation of pensions and by one-off pension supplements in March–April, financed out of earmarked funding from the customs clearance of motor vehicles. Expenses on compensation of employees and current transfers continued to grow quickly. Debt-servicing expenditures increased at a moderate rate, primarily due to new foreign borrowings the government took on in late 2018.

Capital expenditures went from rapid growth in January–April to a sharp decline in May, while expenditures on goods and services went from a slowdown earlier in the year to a fall in May. The changes in May and the overall moderate increase in expenditures in January–May are driven by the government's pressing need to make debt repayments.

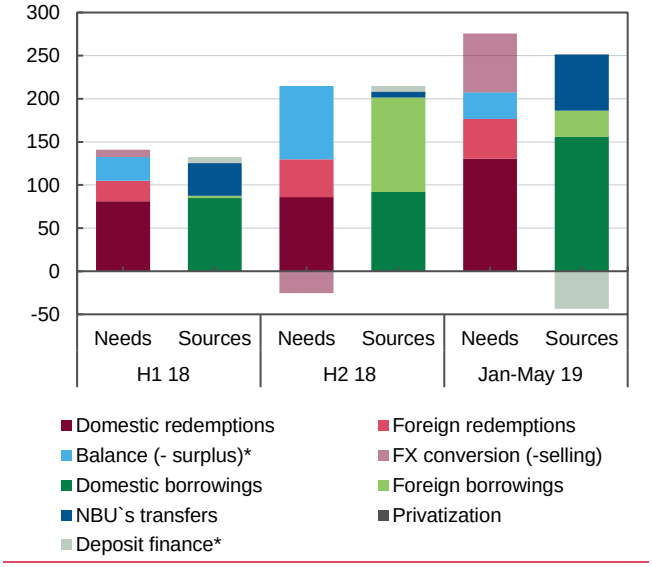
Financing and Debt

Over January–May, the government raised significant volumes of resources on the domestic and international markets to meet the tight repayment schedule and to finance the significant amount of debt-servicing expenditures.

Despite having placed Eurobonds and taken out loans under World Bank guarantees, the government has continued to borrow substantially on the domestic market over the past

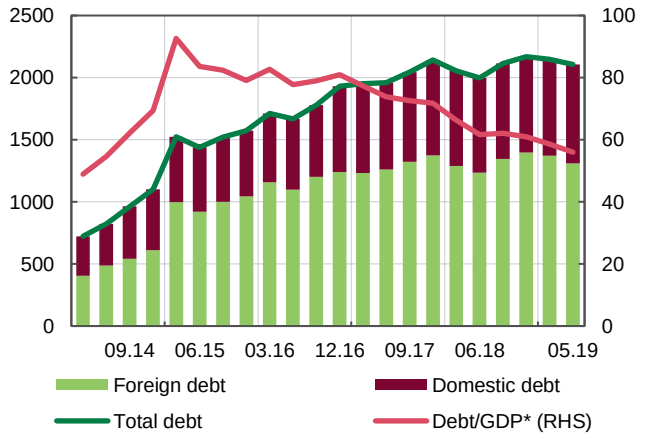
[25] In early 2019, tax refund claims totaled UAH 28.7 billion. As of 1 June 2019, their total amount stood at UAH 19.1 billion, which, however, was still a significant increase compared to the same date last year (UAH 14.0 billion).

Chart 2.4.6. Consolidated budget: funding needs and sources of financing, UAH bn



*The consolidated budget balance excludes the NBU`s transfers.
Deposit finance, among others, includes changes of balances held in the STA.
Source: STSU, NBU staff estimates.

Chart 2.4.7. Public and publicly guaranteed debt, UAH bn and % of GDP*



* Rolling GDP for 2019 – GDP Q2 2019 NBU estimates.
Source: STSU, NBU staff estimates.

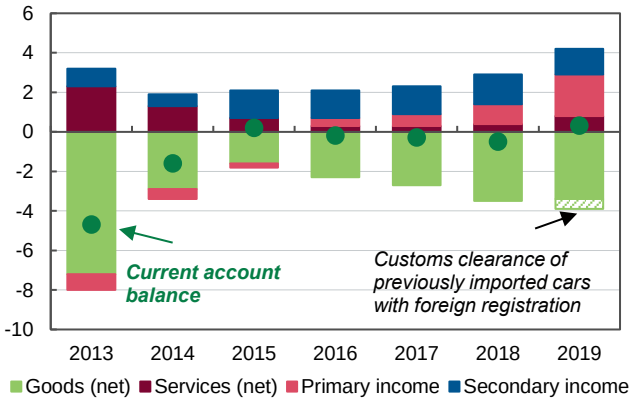
five months amid meagre privatization proceeds. At the same time, the government substantially increased the issuance of hryvnia-denominated government bonds, while significantly reducing its liabilities made up of domestic FX bonds. In effect, the government converted part of the available hryvnia resources into foreign currency to repay foreign currency-denominated debt and accumulate foreign currency to finance future repayments. As a result, the currency structure of the debt gradually improved, as the share of foreign currency in it shrank.

Given these debt transactions, public and publicly guaranteed debt declined by 2.9% from the beginning of the year, to UAH 2,106 billion in late May 2019. The reduction in debt was driven by repayments on publicly guaranteed debt, in particular to the IMF, and the redemption of U.S.-guaranteed Eurobonds issued in 2014. A slight strengthening of the hryvnia played an additional role in curtailing debt. Overall, the debt-to-GDP ratio continued to decline (to almost 56%, by NBU estimates).

2.5. Balance of Payments

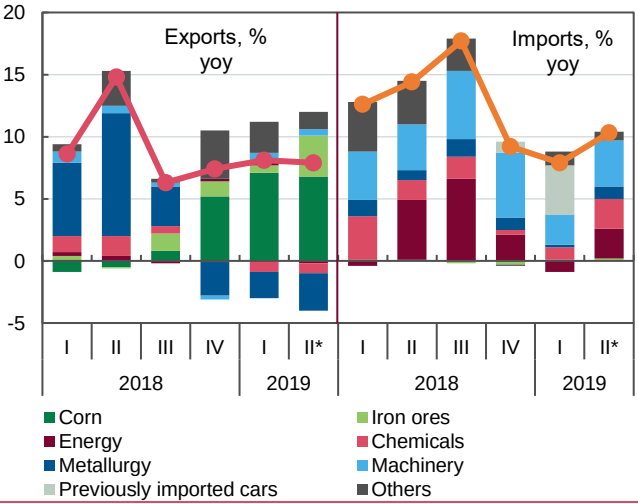
- The widening of the merchandise trade deficit seen since 2015 stalled in January–May 2019 due to a significant increase in the shipments of certain crops and a moderate increase in imports, barring the temporary effect of the customs clearance of foreign-registered motor vehicles imported earlier.
- The further growth in compensation of employees, the lower amount of dividend repatriation, and a larger surplus in the trade in services moved the current account into surplus in the first five months of the year.
- In late June 2019, gross international reserves were nearly flat compared to the beginning of the year.

Chart 2.5.1. Current account balance in January-May, USD bn



Source: NBU, Ukravtoprom.

Chart 2.5.2. Contributions to annual change in merchandise exports and imports, pp



* Data for April-May 2019.
Source: NBU staff estimates.

Current account

Exports of goods grew steadily in January–May 2019, primarily due to the record harvest of corn and sunflower in 2018. The latter drove rapid growth in volumes of exports of not only oil but also oil-cake residues, as agricultural companies ramped up exports to meet the high demand for organic fodder from Asian countries. In addition, meat exports continued to grow rapidly, fueled by the expansion of poultry exports to Saudi Arabia after that country imposed restrictions on Brazilian poultry exports at the beginning of the year. As a result, food products remained the main driver of export growth for the third quarter running.

During January–May 2019, growth in iron ore exports picked up significantly, due to a sharp increase in global prices and a slight decline in demand from metallurgical companies in early 2019. Machinery exports increased, among other things, due to large shipments of freight railcars to Belarus.

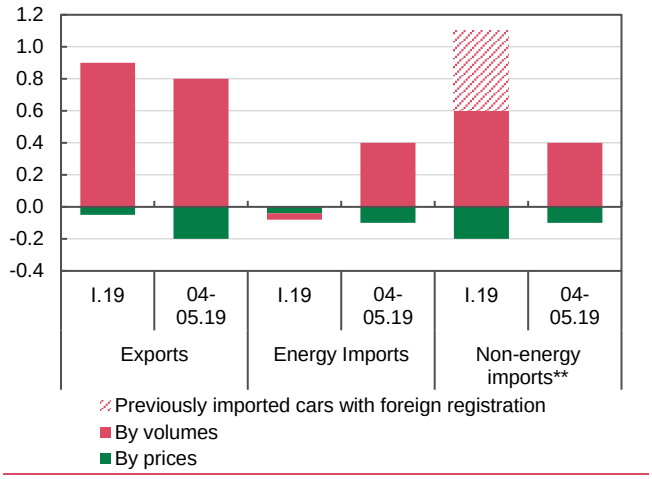
Overall, however, the growth in exports in January–May 2019 remained rather modest due to the following factors:

- the decline in global prices for Ukraine's main exports, primarily ferrous metals and chemical products
- the ongoing repairs at some Ukrainian metallurgical and chemical companies
- new trade restrictions by Russia, which depressed the export of products made of ferrous metals (pipe products in particular) and certain types of machinery.

By region, Europe and Asia remained the main destination markets for Ukrainian goods. However, a significant increase in the supply of grain crops to Egypt caused a rise in the share of African countries in Ukrainian exports. In the meantime, new Russian restrictions led to a further decline in the share of CIS countries.

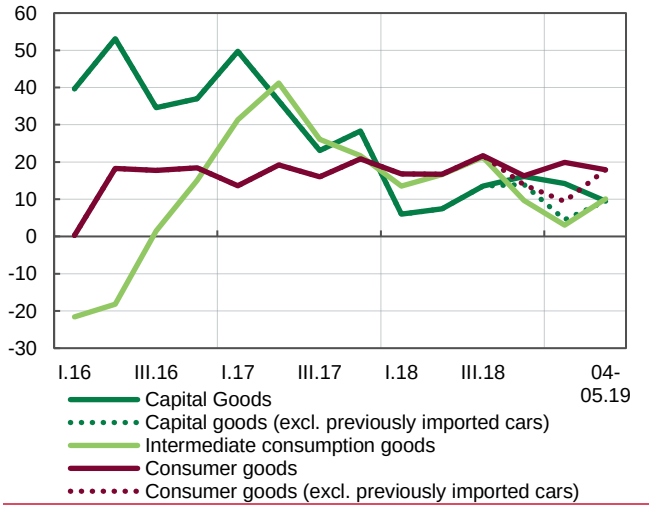
The preferential customs clearance of foreign-registered motor vehicles was one of the key contributors to changes in goods imports and a factor in shaping the balance of foreign trade in early 2019. The NBU estimates that the statistical effect of the customs clearance of previously imported foreign-registered cars that had outstayed the legal "transit" period of stay in Ukraine accounted for 4 pp of the 7.9% annual growth rate of goods imports in Q1 2019. At the same time, the preferential customs clearance regime applied to all motor vehicles imported while it was in effect (between 25 November 2018 and 22 February 2019). Furthermore, in the final days of 2018, the government extended the grace period for the customs clearance of

Figure 2.5.3. Annual change in exports and imports of selected* goods in 2019, USD bn



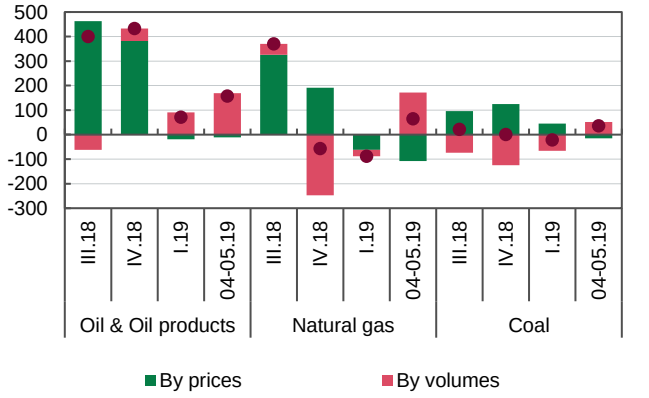
* 73% of goods exports, 56% of goods imports.
** Excluding customs clearance of previously imported cars with foreign registration.
Source: SFSU, Ukravtoprom, NBU staff estimates.

Figure 2.5.4. Imports by broad economic categories, % yoy



Source: Ukravtoprom, SFSU, NBU staff estimates.

Figure 2.5.5. Absolute annual change in selected energy imports, USD m



Source: SFSU, NBU staff estimates.

electric cars by another four years. Coupled with an increase in demand for these vehicles, this boosted imports of vehicles by both households and businesses.

The significant increase in the expenditures on passenger car imports[26] may have restrained the imports of other consumer and investment goods. Combined with the effect of other factors, such as the decline in prices for selected consumer goods and a possible slight increase in informal trade, this may explain the significant slowdown in the growth of imports of both consumer and investment goods in early 2019.

However, as consumer demand and investment activity steadily increased, the growth in imports of these goods in April–May (barring the effect of the customs clearance of cars) accelerated somewhat. Specifically, this boosted purchases of certain foods and industrial imports (fish, beverages, coffee, tea, tobacco, footwear, wood products, etc.). The acceleration in investment imports was driven largely by a further increase in imports of electrical equipment for the construction of alternative energy facilities as part of the implementation of certain large-scale renewable energy projects.

The growth in imports of intermediate goods remained moderate, despite the increased gas supplies in April–May for pumping into underground gas storages, and petroleum product supplies, among other things due to the early start of the sowing campaign. The decline in global energy prices was a key factor inhibiting the growth in the value of imports of this product group.

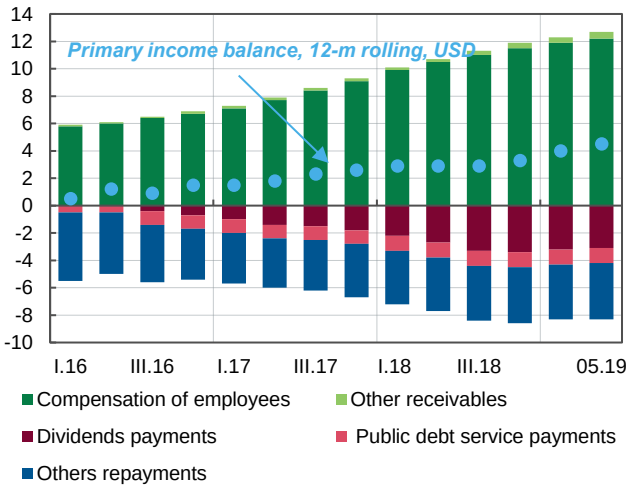
In April–May, the growth in fertilizer imports sped up considerably as a result of a decrease in purchases in the same period last year after the ban on imports of certain fertilizers from Russia was imposed and as a consequence of a slight increase in prices this year due to the switch to other markets. However, the growth in imports of chemicals remained moderate, as some chemical plants underwent repairs in early 2019, cutting back on imports of certain types of plastics.

The reduction in purchases of energy and certain chemical products from Russia at the beginning of the year reduced the share of CIS countries in total imports. Meanwhile, the robust demand for electrical equipment, including for use in the renewable energy sector, increased the share of Asian countries in total imports. European countries continued to be the main suppliers of goods. Their share in imports increased because of the customs clearance of previously imported foreign-registered cars.

The growth in exports of services in 2019 remained steady, thanks to both the increase in gas transit through Ukraine and the further growth in exports of IT services. Unlike exports, the growth in imports of services decelerated. This change was primarily driven by the slowdown in the growth of imports of travel services, which was, among other things, due to a

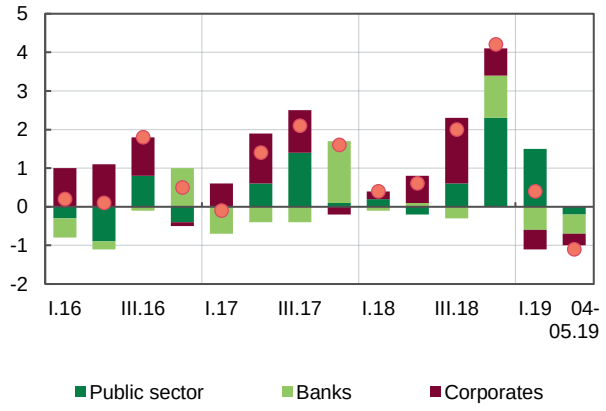
[26] Both due to the customs clearance of previously imported cars, and because of the actual purchase of imported vehicles during the grace period of customs clearance.

Figure 2.5.6. Primary income balance, 12-m rolling, USD bn



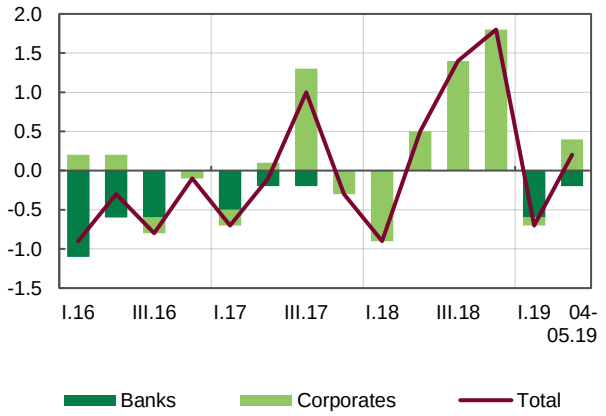
Source: NBU.

Figure 2.5.7. Financial account: net financial liabilities, USD bn



Source: NBU.

Figure 2.5.8. Overall debt flows*, USD bn



* Positive value – capital inflows.
Source: NBU staff estimates.

reduction in travel costs. As a result, the surplus of trade in services continued to grow in 2019.

In addition, the share of compensation of employees in remittances continued to grow substantially in 2019. Among other factors, this can be attributed to the expansion of outsourcing services by IT specialists. Combined with the decline in dividend payments this year, this contributed to the widening of the primary income account surplus. At the same time, the growth in remittances slowed overall, which may indicate a lower intensity of migration processes.

In January–May 2019, the current account moved into surplus (USD 0.3 billion), even after taking into account the customs clearance of previously imported foreign-registered cars.

Financial Account

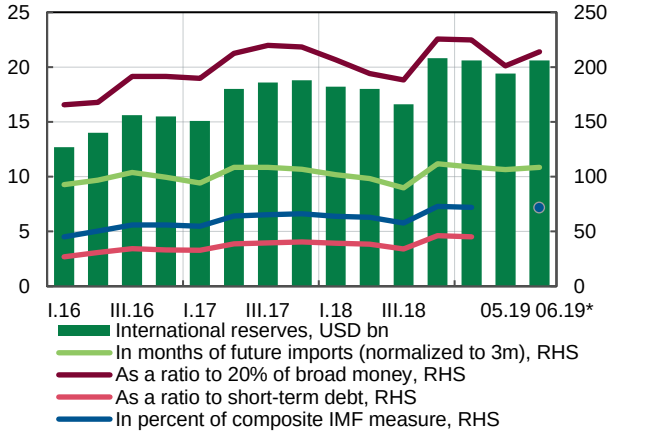
During January–April 2019, the public sector saw continued strong capital inflows, primarily driven by nonresidents' sustained interest in hryvnia-denominated government bonds. Thus, nonresidents' net portfolio investments into these securities reached USD 1.3 billion in January–May (with another USD 500 million added in June). However, due to the scheduled redemption of USD 1 billion in U.S.-guaranteed sovereign Eurobonds, the financial account recorded a significant capital outflow in May.

The private sector, as represented by both real and banking sectors, remained a net lender to the rest of the world in January–May. Thus, the banking sector made external debt repayments, primarily through the redemptions of Eurobonds by state-owned banks. Furthermore, the real sector borrowed less (mainly in Q1), resulting in the real sector's rollover declining to 70% in January–May, down from 79% in January–May last year.

The inflows of investment capital into the real sector continued to be relatively low. The bulk of FDI went to equity of mining companies and real estate firms. After moderate inflows of investment capital into the banking sector in Q1 through debt-to-equity operations and reinvested earnings, these operations declined in volume. At the same time, the amount of cash outside the banking system increased.

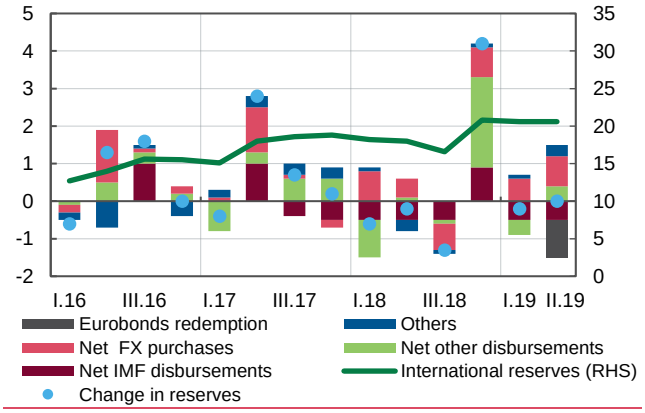
Significant external debt repayments by the public sector in May and the continued outflows of capital from the private sector led to financial account net capital outflows in January–May. As the latter surpassed the current account surplus, the balance of payments recorded a deficit (of USD 500 million in January–May). Together with repayments on IMF loans, this resulted in international reserves temporarily declining in late May (to USD 19.4 billion, or 3.1 months of future imports). By late June, however, reserves had rebounded to the level of the beginning of 2019 (USD 20.6 billion), driven by both the further inflows of portfolio investments into hryvnia-denominated securities, and the placement of government Eurobonds (EUR 1 billion).

Figure 2.5.9. Adequacy criteria of international reserves, %



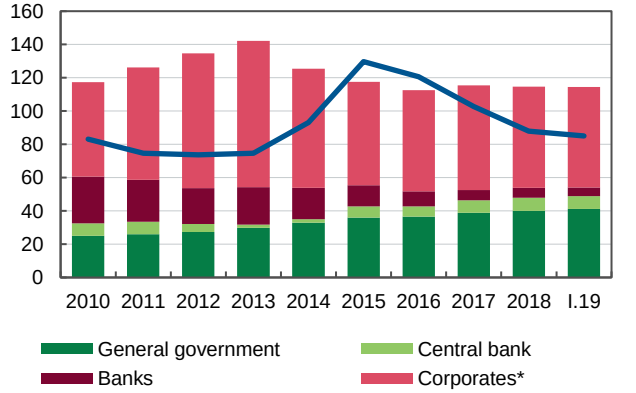
* Preliminary data and NBU staff estimates.
Source: NBU staff estimates.

Figure 2.5.10. International reserves and their change by instruments, USD bn



Source: NBU.

Figure 2.5.11. Gross external debt, USD bn



* Including intercompany lending.
Source: NBU.

External Sustainability

In Q1 2019, gross external debt remained almost unchanged for the second quarter running (USD 114.4 billion), but the debt-to-GDP ratio declined (to nearly 85%) as the economy grew. The further build-up of public sector debt was offset by a reduction in the external liabilities of the private sector. The government thus obtained a loan under World Bank guarantees and placed the securities in foreign markets. On top of that, the growth in the public sector's external debt was fueled by increased demand from nonresidents for hryvnia-denominated government securities. At the same time, some banks and real sector companies had their Eurobonds redeemed on schedule in Q1. In addition, the amount of arrears decreased after statistical adjustments were made.

The ratio of short-term debt by remaining maturity to gross debt increased marginally in Q1 (to 40%), primarily due to significant volumes of external debt repayments by the public sector in 2019–2020. The level of private sector external debt maturing within the next 12 months remained virtually unchanged in late Q1 2019 compared to the end of 2018. As a result, international reserve adequacy ratios were little changed as well.

Box 4. Ukraine's Gross External Debt: Recent Trends

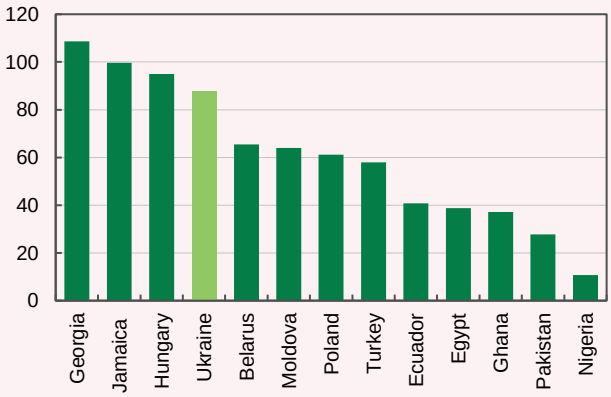
In recent years the ratio of external debt to GDP has gradually declined. Furthermore, the total amount of external debt includes real sector arrears and debt that arose from round tripping transactions. If these components were to be deducted from the external debt, its 'true' size would be substantially lower. Ukraine's external position nevertheless remains vulnerable, warranting further prudent fiscal and monetary policies, cooperation with the IMF and other international financial institutions, and development of domestic financial market.

Under various economic theories, moderate foreign borrowings have the potential to stimulate economic growth. Thus, for countries with scarce financial resources, foreign borrowings can finance long-term investment projects without limiting current consumption, which would otherwise not be possible without borrowing (Eaton, 1993). At the same time, the same economic theories, confirmed by econometric studies ((Pattillio et al., 2002) and real-world examples, show that after reaching a certain threshold external debt not only restricts economic growth, but also becomes a potential source of crises – both for the indebted country and for other countries or groups of countries (De Santis, 2012).

In recent years, Ukraine's gross external debt has been rather stable in nominal terms at around USD 115 billion, but because of GDP growth, the country's external debt-to-GDP ratio has been steadily improving (as Figure 2.5.11 shows). On the one hand, this reflects a significant reduction in the current account deficit compared to pre-crisis years. On the other hand, it results from the repayment of past borrowings – primarily those of the private sector. With a number of geopolitical risks materializing, the price environment in the global commodity markets deteriorating, and crisis-related processes rattling the economy in 2014–2015, Ukraine has found itself facing limited access to international capital markets and a restricted capacity to roll over debt (i.e. to repay debt by taking on new debt). Considering the significant external financing needs, the general government sector (GGS) has been relying on official financing. As a result, the share of private sector debt in total external debt has declined in recent years, to 57% in late Q1 2019, down from 78% in 2013, while the share of the GGS debt has expanded.

Despite the gradual decrease, the debt-to-GDP ratio remains rather high, especially compared to peer countries27. Also, the metrics of debt risk assessment show that Ukraine is highly vulnerable to abrupt changes in both the internal and external environments. This is because of the significant financing needed to service the debt, which is a direct consequence of the high level of debt, even under favorable financial conditions. This, in turn, limits the current level of aggregate consumption and, consequently, economic growth. Also, the ratio of gross external debt to GDP is one of the indicators that significantly influences perception and assessment of risk by investors and/or creditors28. As such, it is reflected in risk premiums and the cost of borrowing, which affect debt rollover. Apart from that, a significant portion of Ukraine's public debt is denominated in foreign currency, which will significantly increase the debt burden on the economy if the domestic currency depreciates.

Figure 1. External debt-to-GDP ratio in selected countries*, %



* Data on Ecuador, Ghana, Jamaica and Pakistan refers to 2017, others - 2018.
Source: NBU staff estimates.

Table 1. Risk assessment for EMs: debt profile

As of 31.03.2019	Low risk	Moderate risk	High risk	Ukraine
EMBI spread	< 200	200-600	> 600	~600
External financing requirements* (percent of GDP)	< 5	5-15	> 15	>30
Public debt in foreign currency (share of total)	< 20	20-60	> 60	>65
Public debt held by nonresidents (share of total)	< 15	15-45	> 45	>60

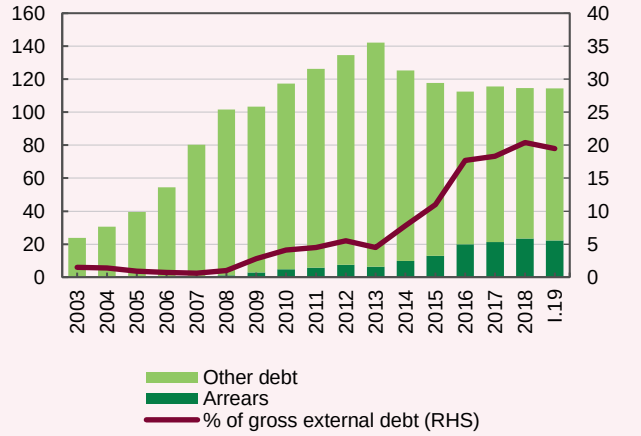
* Current account balance plus amortization of total short-term external debt at remaining maturity.
Source: Ministry of finance, Bloomberg, NBU staff estimates.

At the same time, there are several factors that could mitigate investors' perception of Ukraine's external debt. Thus, a typical feature of real sector debt during the crisis was a significant increase in the share of overdue debt, i.e.

[27] This group includes some of the countries to which leading international rating agencies assigned the same long-term sovereign rating as Ukraine's at the end of 2018, and a number of neighboring countries with which Ukraine has close socioeconomic relations.
[28] Thus, according to Cantor and Packer (1996), the debt-to-GDP ratio plays an important role when the world's leading rating agencies are determining a country's sovereign rating. Afonso (2003) concludes that while GDP per capita is a major factor in explaining the ratings of developed countries, external debt plays a decisive role for those of emerging markets. Moreover, Afonso et al. (2010) write that GDP changes, public debt, and the state budget are important in the short term, while government performance, external debt, international reserves, and default history all have a long-term impact on a country's credit rating.

nonguaranteed loans that had not been repaid within the specified term, and interest on that debt. To a large extent, the increase in that debt reflected the loss of government control over a number of companies located in the temporarily occupied territories. Close to USD 10 billion in real sector arrears has a low probability of repayment, the NBU estimates[29]. However, according to international standards, it cannot be removed from external debt indicators[30] and continues to be included in total gross and short-term external debt.

Figure 2. Ukraine's gross external debt and share of other sectors' nonguaranteed loan arrears, USD bn

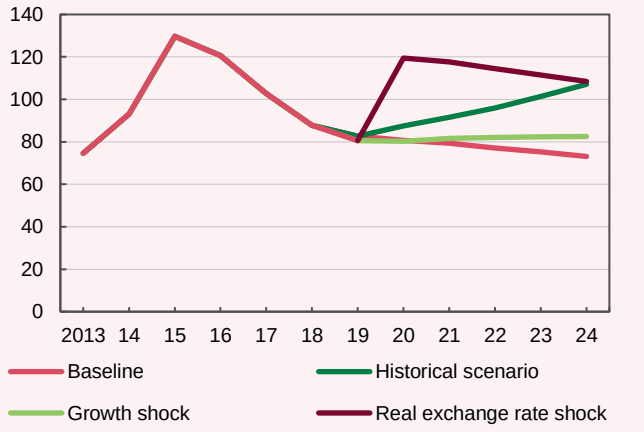


Source: NBU staff estimates.

In addition, a significant portion of the real sector's external debt comprises intercompany lending and trade credits (USD 22.6 billion, or more than a third of liabilities as at the end of Q1 2019). Some of these liabilities may reflect so-called "round-tripping" transactions, in which residents direct funds overseas to have them returned in the form of financial liabilities. As such, these operations should also be excluded from the total amount of external debt.

Under the baseline scenario, external debt levels will continue to decline, reaching 73% of GDP by late 2024. At the same time, alternative scenarios indicate the importance of maintaining macrofinancial stability in Ukraine. In case of a sharp depreciation of the hryvnia and/or a slowdown in GDP growth (including to the average level of the past 10 years, when the country went through two deep macroeconomic crises), external debt will return to over 100% of GDP.

Figure 3. Gross external debt under different scenarios,* % GDP



* Baseline scenario uses current inflation report projections, from 2022 - is based on the assumption of real GDP growth at 4%, GDP deflator at 5% and 1% change of nominal exchange rate. The historical averages are calculated over the ten-year period; growth shock (minus one-half standard deviations in 2009-2018); real exchange rate shock (one time 30 percent real depreciation in 2020).
Source: NBU staff estimates.

Considering the above, the NBU should continue to pursue sound fiscal and monetary policies, which in recent years have helped strengthen Ukraine's external position. The peak external debt repayments scheduled for 2019–2021 warrant further cooperation with the IMF and other official lenders. First, this will help attract long-term financing, the cost of which is significantly lower than that of market-based borrowing. Second, it will ease the access to international capital markets and reduce the cost of credit financing, as many investors perceive cooperation with IFIs as a sign that a country has made progress in structural reform and that it has a safety cushion to ward off adverse external and internal risks. The development of the hryvnia-denominated domestic financial market is another important step towards improving the effectiveness of public debt management and reducing dependence on external financing.

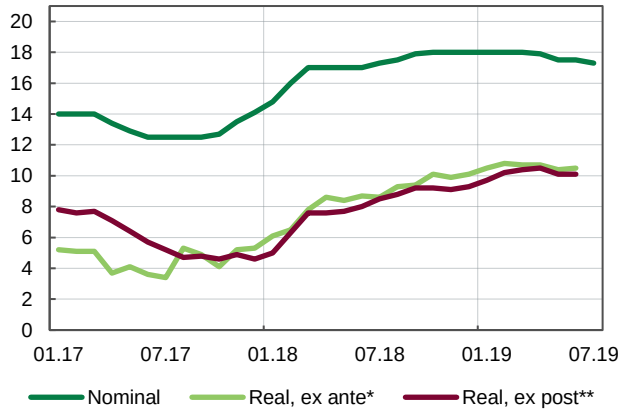
[29] This category includes the overdue debt of the entities that: have poor financial performance (i.e. meeting two or more of the following criteria: zero revenue, debt-to-revenue ratio > 3, negative EBITDA, debt-to-EBITDA ratio > 10); and/or entities that are located in occupied territories; and/or are undergoing bankruptcy/suspension of operations; or are in default (according to Form 613 of the NBU resolution). In addition, this category includes approximately half of the overdue debt of companies that are operational but that meet one of these criteria: zero revenue, debt-to-income ratio > 3, negative EBITDA, debt to EBITDA > 10.

[30] BPM6 stipulates providing additional information on the fair value of loans or the nominal value of nonperforming loans only for assets and not for liabilities. Only creditors may disseminate this information regarding their assets on a supplementary basis(paragraph 7.46 of the BPM6).

2.6. Monetary Conditions and Financial Markets

- Monetary conditions remained tight, despite the launch of the monetary easing cycle. This manifested itself in persistently high real interest rates, creating prerequisites for a disinflationary trend.
- The significant FX supply, including through an inflow of foreign portfolio investments, helped strengthen the hryvnia and allowed the NBU to continue to replenish its international reserves.
- The growth in consumer lending in hryvnias remained high, while lending to nonfinancial corporations was constrained by a number of temporary factors and issues that can only be resolved through legislation.

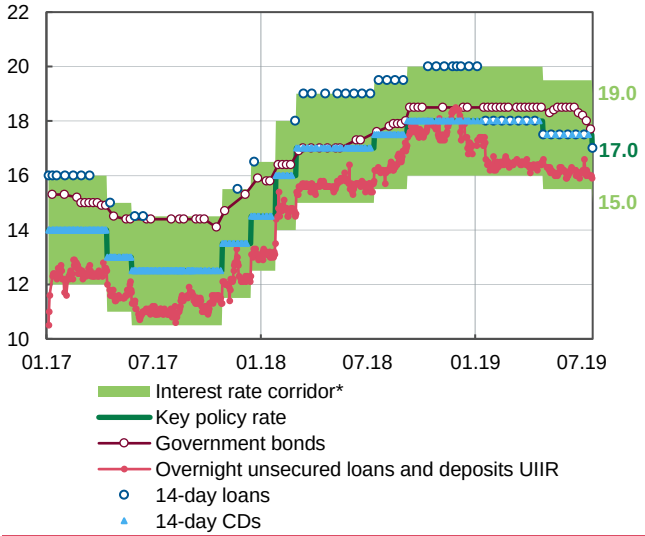
Figure 2.6.1. Nominal and real key policy rates, average, %



* Deflated by 12-month ahead inflation expectations of financial analysts.
** Deflated by actual annual rate of core inflation.

Source: NBU staff estimates.

Figure 2.6.2. NBU policy rates, UIIR and 1-year Bond Yield on primary market, %



* Upper bound – interest rate on overnight loans of the NBU, lower bound – overnight CDs of the NBU.

Source: NBU.

Interest Rates

In April 2019, the NBU Board announced the beginning of a monetary easing cycle and decided to cut the key policy rate by 50 bp, to 17.5%. The decision was prompted by the continued decline in inflation and an improvement in inflation expectations. In its June meeting, however, the NBU Board took a wait-and-see approach after inflation risks intensified due to both internal and external factors. At the same time, the NBU Board indicated that it may press forward with the monetary policy easing cycle if these risks were to subside. In line with this expectation, the NBU Board lowered the key policy rate to 17% at its July monetary policy meeting.

Although the NBU Board reduced the nominal key policy rate, the real key policy rate remained virtually unchanged (at around 10%) in Q2, reflecting improved inflation expectations, and continued to significantly exceed its neutral level, which the NBU estimates at approximately 3%.

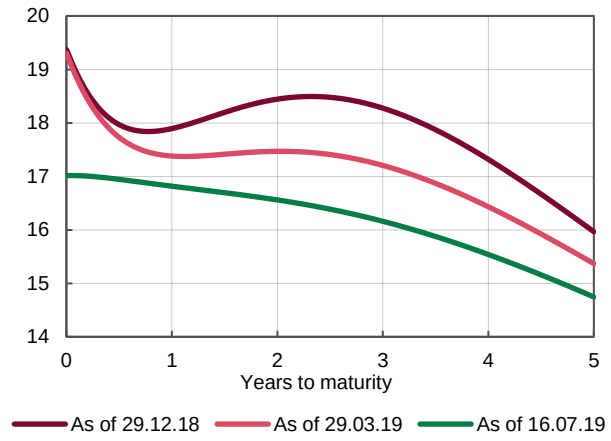
The UIIR[31] declined in Q2 2019, fluctuating slightly above the lower bound of the NBU's rate corridor for standing facilities. The downward trend in the cost of interbank resources continued, driven by the key policy rate cut the NBU made in April and by the still significant liquidity surplus in the banking system.

This, in turn, contributed to the decrease in the average interest rates on hryvnia loans and deposits of nonfinancial corporations in Q2 2019. On the other hand, the weighted average interest rate on hryvnia household loans marginally increased due to continued robust demand for consumer loans. Weighted average interest rates on hryvnia household deposits remained virtually unchanged during the quarter, although they rose slightly in June. The latter was mainly due to a number of situational and structural factors, in particular a decline in liquidity at certain banks amid dividend payments, and risks amplified by judicial and legislative decisions. In addition, interest rates on deposits came under upward pressure from higher yields on domestic government bonds, despite the decrease in yields across all maturities.

As in previous periods, yields on hryvnia government bonds primarily responded to changes in the key policy rate. Despite the decline in yields in nominal terms, in real terms they remained some of the highest among EMs, which stimulated a further inflow of nonresident portfolio investments into hryvnia government bonds and enhanced this market's liquidity. Another factor was the simplification of the

[31] The indicator of hryvnia interbank interest rates for the purposes of the interest rate policy.

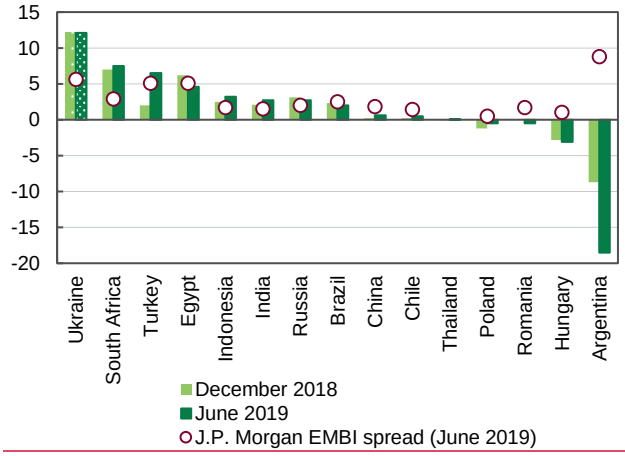
Figure 2.6.3. Zero coupon yield curves for hryvnia bonds on the secondary market*, %



* Spot rates with continuously compounded interest plotted using Svensson parametric model.

Source: NBU.

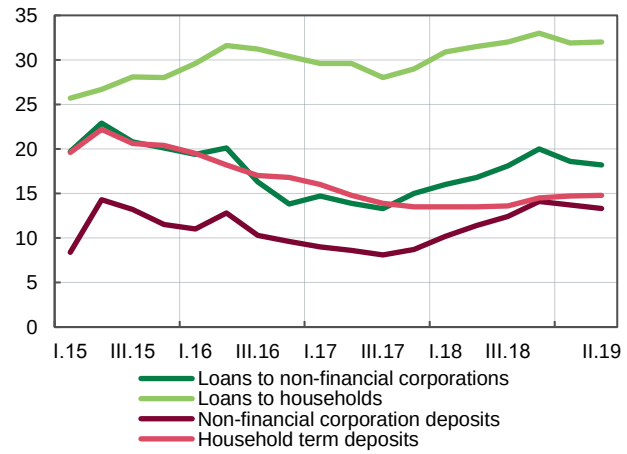
Figure 2.6.4. Real sovereign bond yields* and risk premium in selected EMs, %



* Difference between monthly averages of 1-year bond yield on the primary market and inflation forecasts as of end-2019.

Source: DekaBank, Consensus Economics, Refinitiv, Bloomberg, NBU staff forecast and estimates.

Figure 2.6.5. Weighted average interest rates on new hryvnia loans (excl. overdrafts) and deposits, %



Source: NBU.

procedure for buying domestic government bonds after the Ukrainian market joined the network of the Clearstream international securities depository.

In Q2 2019, demand for medium- and long-term domestic government bonds, including from nonresidents, increased significantly. This prompted the MFU to launch a debut issue of six-year domestic government bonds in early June. As a result, the range of hryvnia securities in the nonresident portfolio with maturities of at least one year expanded significantly in late June, and the yield curve shifted downwards for all maturities, taking on the classic inverted shape. Yield curve inversion typically occurs in countries where current inflation exceeds the target and the central bank responds by raising rates. This indicates an improvement in inflation expectations (Figure 2.1.2) and thus expectations of future decreases in nominal rates. At the same time, considering the NBU's key policy rate forecast (see Box 5, Publication of Key Policy Rate Projections on p. 47), there remains a significant potential for the government to cut the cost of medium-term loans.

FX Market

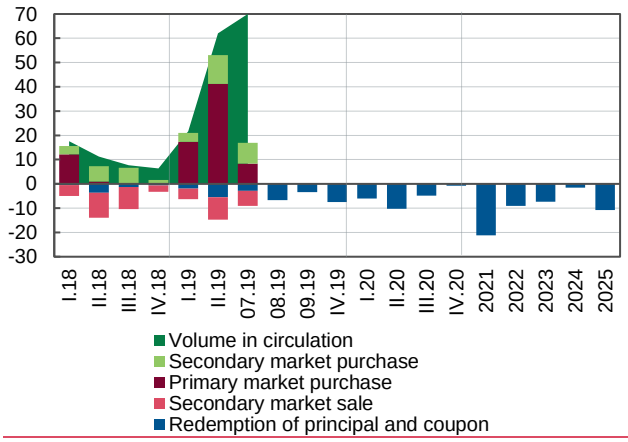
In Q2 2019, conditions in the FX market remained mostly favorable: the significant FX supply supported a moderate strengthening of the hryvnia. The short-term increase of turbulence in late May was driven by a temporary deterioration in external financial conditions for emerging markets and a heightened uncertainty in Ukraine, among other things due to speculative information being spread in the media about external public debt, discussions being postponed regarding the continuation of the IMF's financial support until a new government is formed, and threats to financial stability continuing to grow due to current court proceedings.

The following were major factors in ensuring the FX supply:

- continued inflows of foreign portfolio investment
- a pick-up in exports, and relatively modest imports
- smaller amounts of dividends being repatriated abroad than last year
- net FX sales by households.

Under those circumstances, the NBU maintained its presence in the FX market in Q2 2019. In late April, the NBU again increased the daily planned volume of FX purchases this year (from USD 15 million to USD 20 million) to replenish international reserves. Thus, the positive balance of the NBU's interbank FX market transactions amounted to USD 0.8 billion in Q2 alone, and to USD 1.4 billion since the beginning of the year. A greater part of this amount was used to replenish international reserves. Accordingly, the NBU reduced its interventions to prevent excessive volatility of the hryvnia exchange rate. The official exchange rate of the hryvnia appreciated against both the U.S. dollar and the euro in Q2 2019 compared to the previous quarter, and from the start of the year. On the other hand, most of the currencies of Ukraine's MTPs depreciated against the U.S. dollar. As a result, the NEER and REER of the hryvnia continued to strengthen in Q2 2019 (by 3.3% yoy and 8.8% yoy,

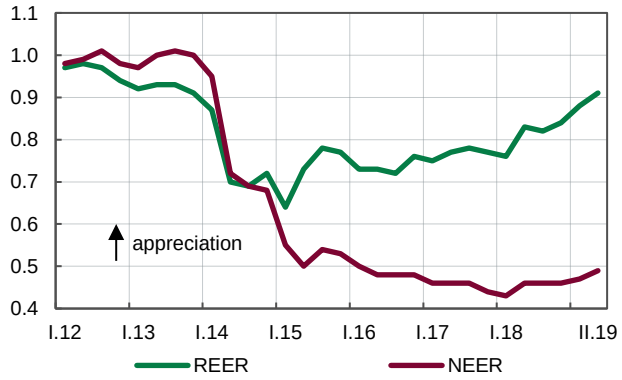
Figure 2.6.6. Transactions in hryvnia domestic government bonds by non-residents and their scheduled redemptions*, UAH bn



* As of 12.07.2019.

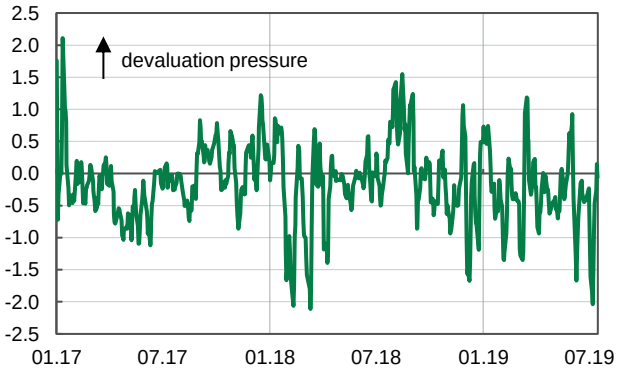
Source: NBU staff estimates.

Figure 2.6.7. Hryvnia REER and NEER indices, average, 12.2011=1



Source: NBU staff estimates.

Figure 2.6.8. Exchange Market Pressure Index*



* 5-day weighted rolling sum of UAH/USD exchange rate changes and ratio of net NBU`s FX interventions to foreign reserves. Weight of exchange rate - 1/4, weight of FX interventions - 3/4.

Source: NBU staff estimates.

respectively), slightly exceeding the forecast in the April 2019 Inflation Report.

As conditions improved, the NBU continued to take steps to liberalize the FX market in Q2 2019. In particular, the NBU:

- increased the dividend repatriation limit (to EUR 12 million per month, up from EUR 7 million per month) and canceled this limit on 10 July 2019
- canceled deadlines for a number of export and import settlements
- simplified the procedure for obtaining FX licenses for certain market participants
- authorized the banks to provide short-term funding in hryvnias to nonresident legal entities for the acquisition of domestic government bonds
- canceled the surrender requirements for FX proceeds.

Banking System Liquidity

The banking system has maintained an ample liquidity surplus this year, which nevertheless narrowed in Q2. First, average daily balances of certificates of deposit declined, while average daily balances in the banks' correspondent accounts remained almost flat compared to the previous quarter.

The decline in liquidity was mainly driven by the increase in cash in circulation that is typical for Q2. In annual terms, however, the increase was marginal (5.4%) compared to nominal GDP growth, reflecting the on-going expansion of cashless payments. In addition, liquidity declined due to government transactions[32], even though their impact weakened significantly. Liquidity withdrawals through government transactions in the course of the year reflected its large funding needs, including for repayment of FX debt, external debt in particular.

The NBU's FX purchases continued to be the main source of liquidity. To a lesser extent, the liquidity was injected into the banking system through the lending channel to meet the sporadic demand from certain banks for refinancing loans, amid narrower liquidity and its uneven distribution across the banks.

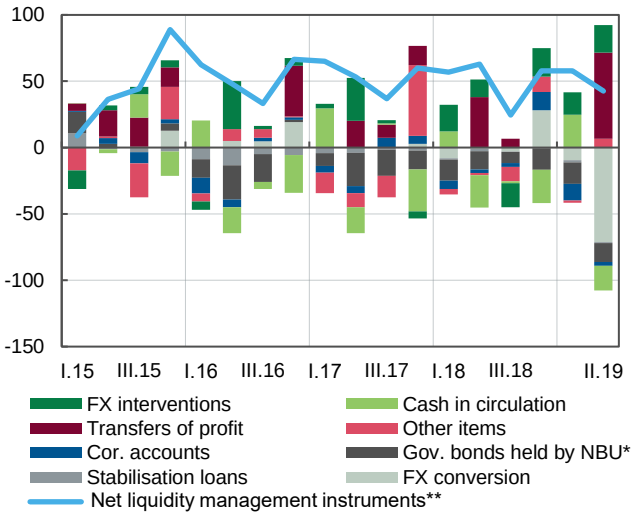
Deposits

In April–May 2019, hryvnia deposits in the banking system continued to grow, but at slower paces.

The relatively rapid growth in hryvnia household deposits (11.4% yoy in May) was driven by a further increase in household incomes. At the same time, domestic government bonds are becoming increasingly more attractive to households – large depositors in particular – due to higher yields.

[32] The NBU calculated the impact of fiscal factors on the liquidity of the banking system based on the following key factors: government`s net FX purchases from the NBU, the transfer of part of the NBU's profit to the state budget, the increase in single treasury account balances, and government payments to the NBU on its liabilities.

Figure 2.6.9. Determinants of the banking system liquidity, UAH bn

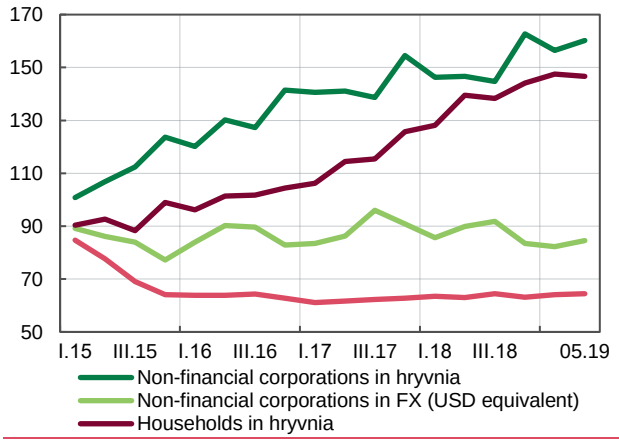


* Difference between government bond purchases to the NBU portfolio and government debt repayments, including interest payments.

** Difference between the stock of CDs and short-term refinancing loans.

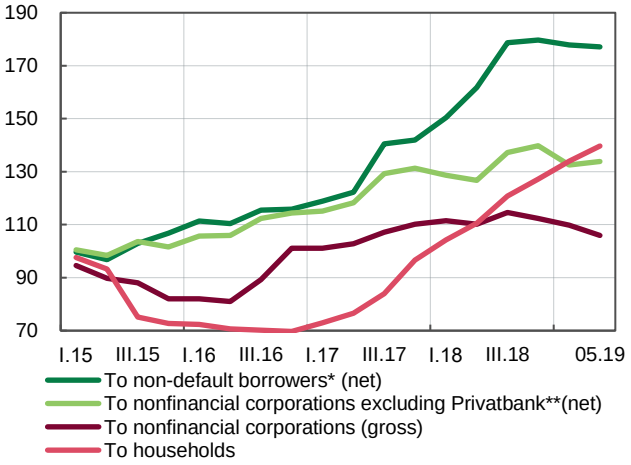
Source: NBU.

Figure 2.6.10. Deposits, IV.2014=100



Source: NBU.

Figure 2.6.11. Loans in domestic currency, IV.2014=100



* Loans over UAH 2 m to businesses that have not defaulted since 2014.

** PrivatBank was excluded from the calculation of net loans due to the significant formation of reserves after nationalization.

Source: NBU.

Nonfinancial corporations' deposits grew as well, albeit much more slowly, which, among other things, can be attributed to heightened investment activity.

The banks continue to expect significant deposit inflows over the next 12 months. The banks' expectations of an increase in household deposits have been at their highest since 2015.

FX deposits (in USD equivalent) continued to decline, due to the higher attractiveness of banking products in hryvnias amid favorable FX market conditions.

Loans

In April–May 2019, the banks continued to actively lend to households, while being reluctant to lend to nonfinancial corporations due to a number of factors.

As in previous periods, hryvnia household loans continued to grow strongly (by 27.5% yoy in May) on account of rapidly increasing car loans and other consumer loans. Improved consumer sentiment and higher spending on durable goods contributed to the growth.

Meanwhile, the stock of hryvnia loans to nonfinancial corporations declined in May (by 5.9% yoy). On the one hand, this was due to the statistical effect of excluding data reported by banks that were undergoing liquidation. In addition, the effect of repayments and write-offs by banks of the earlier provisioned financial asset losses continued to play a role. On the other hand, lending to nonfinancial corporations is being held back by a number of unresolved issues (including large amounts of nonperforming loans) the solution to which lies primarily outside the banking system. Loans granted to borrowers with no defaults over the crisis period have been growing rapidly (by 13.3% yoy in May 2019), showing the banks' willingness to actively lend to the corporate sector.

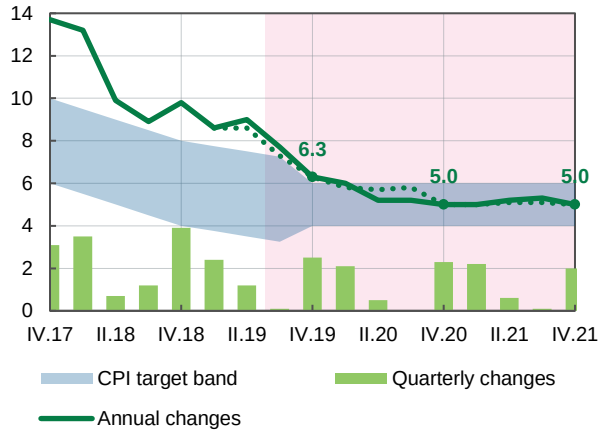
At the same time, the banks are optimistic about the prospects for lending to businesses and households, expecting that their credit portfolios will grow in size and quality over the next 12 months.

Part 3. Ukrainian Economy: Forecast

3.1. Inflation Developments

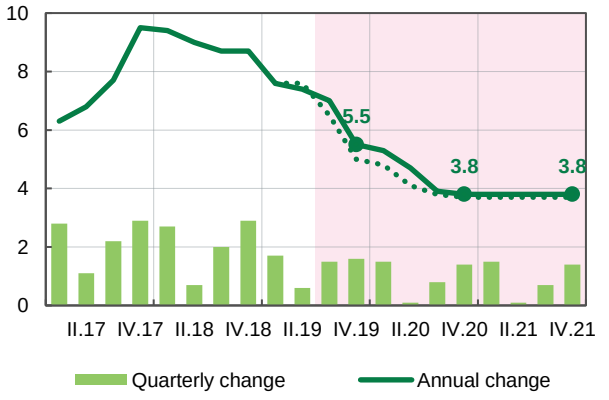
- Consumer inflation will decline to 6.3% by the end of this year, will reach the target range of 5 ± 1% by early 2020, and will meet the medium-term target of 5% in late 2020.
- Core inflation will continue to slow (to 5.5% in 2019, and to 3.8% in subsequent years), on the back of a tight monetary policy, a widening of the food supply, a gradual deceleration in wage growth, and low imported inflation.
- Administered prices will continue to grow at the highest pace, due to tobacco and alcohol prices being brought to European levels.

Figure 3.1.1. CPI, %



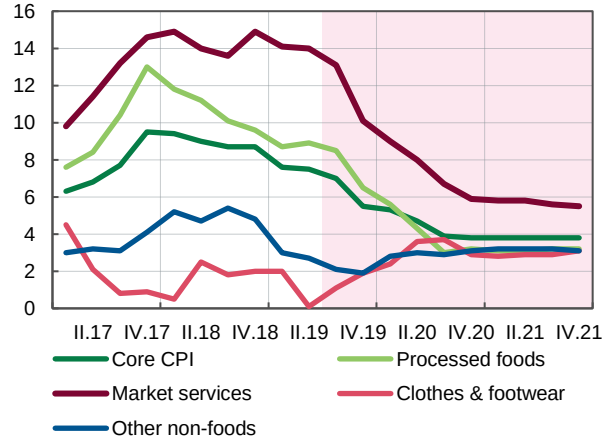
Source: SSSU, NBU staff estimates.

Figure 3.1.2. Core inflation, %



Source: SSSU, NBU staff estimates.

Figure 3.1.3. Main components of core CPI, %



Source: SSSU, NBU staff estimates.

The impact of several temporary shocks that deflected inflation from its target in 2017–2018 will gradually soften. As a result, consumer inflation will continue to decelerate and will return to its target range in early 2020. Deceleration is projected across all of the main components of consumer inflation.

Tight monetary and fiscal policies, coupled with weaker pressures from domestic demand, will also help slow inflation, which has already been reflected in improved inflation expectations. The anchoring of such expectations will be also facilitated by the publication of key policy rate projections, outlining the NBU's intention to maintain tight monetary conditions for as long as it takes to bring inflation back to its target.

Moderate exchange rate volatility, together with low inflation in Ukraine's main trading partners, will restrain the growth in imported inflation (namely, prices for clothes and footwear), and, accordingly, the growth in core inflation (which will decrease to 5.5% in 2019). Due to weaker wage growth in the economy because of a narrowing gap with wages in neighboring countries the growth in market services prices will decelerate over the forecast horizon. Nevertheless, the prices of market services will still grow more quickly than other core inflation components, reflecting the impact of the Balassa-Samuelson effect (for more details see Box 3 "The Link Between Labor Productivity, Real Wages and Inflation").

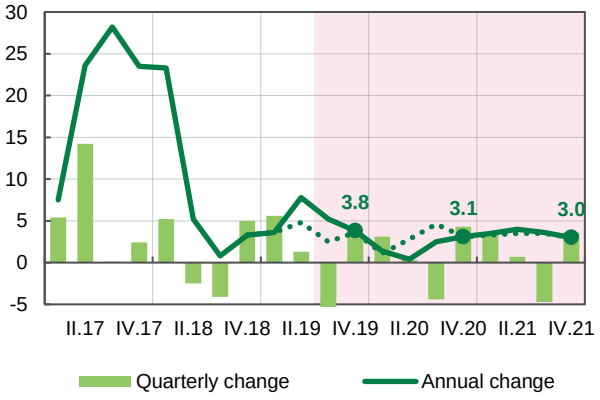
Despite the easing of monetary policy, core inflation will decelerate to about 4% over the mid-term, reflecting largely weaker pressures from domestic demand.

Low producer price inflation amid sluggish external demand and low imported gas prices will also support the current disinflation trend.

Favorable weather conditions, together with higher yields, will keep food price inflation low (including through second-round effects on core inflation components). However, the prices of some goods (such as meat and dairy products) are still expected to rise rather noticeably, reflecting relevant trends on the global markets.

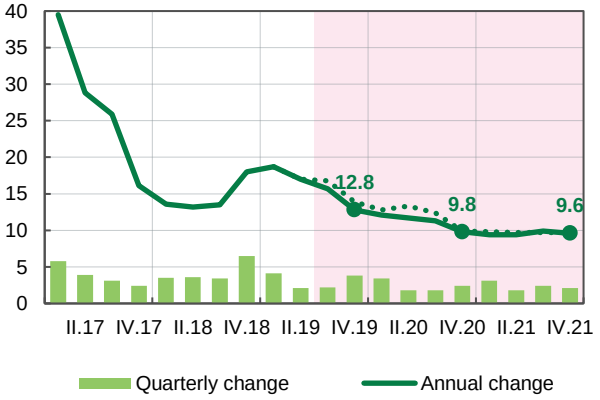
Raw food prices will rise rather moderately (by 3%–4%) over the forecast period. In the current year, some supply shocks are cancelling each other out. More specifically, an increase

Figure 3.1.4. Raw food inflation, %



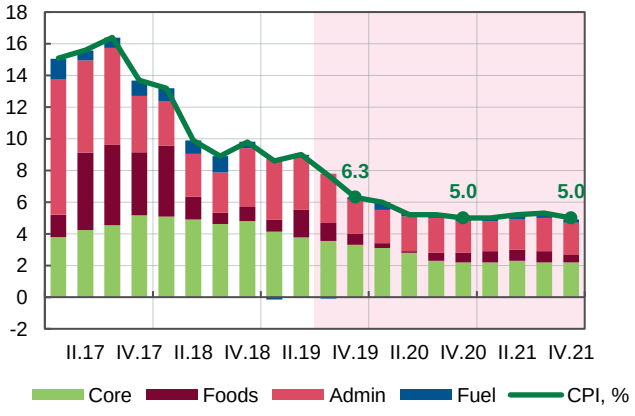
Source: SSSU, NBU staff estimates.

Figure 3.1.5. Administered price inflation, %



Source: SSSU, NBU staff estimates.

Figure 3.1.6. Contributions to annual CPI growth by main components, pp



Source: SSSU, NBU staff estimates.

in fruit prices (because of less benign conditions for fruit cultivation) is offsetting a decrease in prices for vegetables from the new harvest, which are expected on the back of the pronounced rise in vegetable prices seen last year.

Despite a slowdown in the growth of administered prices, these prices will still remain the fastest-growing inflation component, primarily due to tobacco and alcohol prices being brought to European levels. Household gas prices will be practically unchanged in 2019, thanks to favorable conditions on the European spot gas market, and a strengthening of the hryvnia exchange rate. Gas prices are expected to rise by 7%–11% in 2020–2021 as import parity pricing is expected to be maintained.

With global oil prices reasonably stable and hryvnia exchange rate volatility low, fuel prices will help bring down inflation in 2019, in part by influencing the production costs of other goods and services. After 2019, fuel prices are expected to rise by about 5% every year.

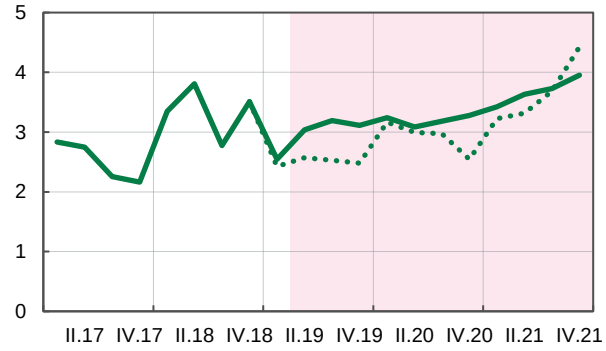
Although the inflation forecast has remained unchanged compared to that published in the previous Inflation Report, some of its components have been revised. In particular, core inflation projections for 2019 have been revised upward (by 0.5 pp) in the wake of higher-than-expected wage growth. At the same time, administered prices will grow more slowly than expected (by 1.1 pp), due to lower prices for imported gas, and electricity prices for households being capped by the government through the imposition of special duties on some electricity market players.[33]

[33] Resolution of the Cabinet of Ministers of Ukraine No. 483, dated 5 June 2019.

3.2. Demand and Output

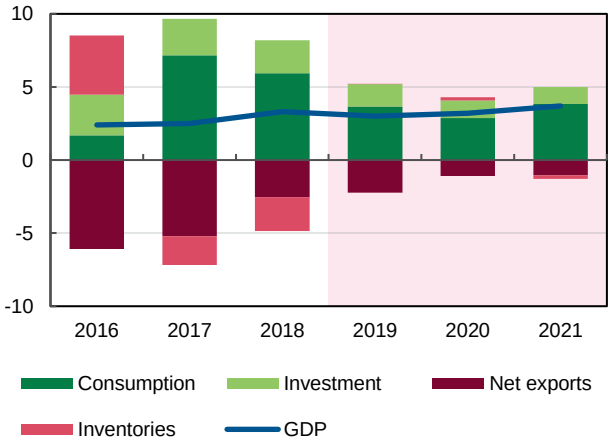
- Economic growth will slow to 3% in 2019 (due to a cooling in the global economy), only to speed up again to 3.2% in 2020 and 3.7% in 2021, driven by a monetary policy easing and recovery in external demand.
- Although decelerating, capital investment will continue to rise at a fast pace, and will mainly go to export-oriented sectors and the energy sector.
- Private consumption growth will decline on the back of weaker growth in real wages in Ukraine, resulting from the narrowing of the gap between wages in Ukraine and those of labor migrants.

Figure 3.2.1. Real GDP, % yoy



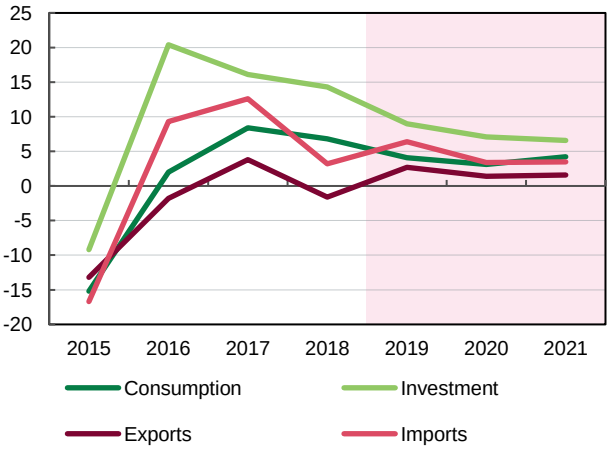
Source: SSSU, NBU staff estimates.

Figure 3.2.2. Contributions to real GDP growth, pp



Source: NBU staff estimates.

Figure 3.2.3. GDP components by final use, % yoy



Source: SSSU, NBU staff estimates.

Despite there being tight monetary and fiscal policies, domestic demand will remain high and stable in the current year. After hitting 3.3% in 2018, economic growth will slow to 3% in 2019 on the back of weak GDP growth in Ukraine's main trading partners. At the same time, favorable terms of trade and another record harvest of grain crops in Ukraine are expected to support economic growth.

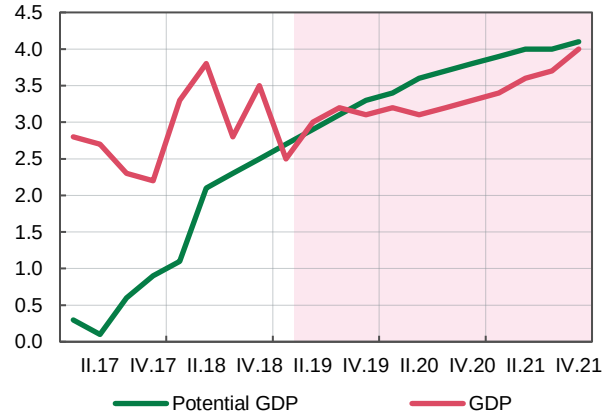
Although decelerating to 5.2% in 2019, private consumption growth will continue to be the major contributor to economic growth, thanks to robust growth in wages and pensions. A pick-up in lending in 2020–2021, amid a significant easing in monetary conditions will boost both private consumption and investment.

Capital investment growth will also decelerate, to 9% in 2019 and to about 7% in subsequent years. Nevertheless, the ratio of investment to GDP will remain practically unchanged, at about 17%, matching its pre-crisis level. Investment will be propelled by the need to upgrade production facilities and to step up production in export-oriented industries (mainly in the agricultural sector and in the mining and metallurgical industries), and in the energy sector (in its renewable energy sector in particular).

The negative contribution of net exports to GDP will continue to decline in 2019–2021. The decline in 2019 will be modest, however, due to an increase in gas imports to build up stocks for use if the transit of gas via Ukraine is stopped. Export growth is expected to recover starting in 2019, fueled largely by an increase in exports of grains, metallurgical products and iron ore. Export growth will slow somewhat in 2020 on the back of diminished gas transit through Ukraine. While bolstered by buoyant consumer and investment demand, import growth will be dampened by a gradual drop in gas imports.

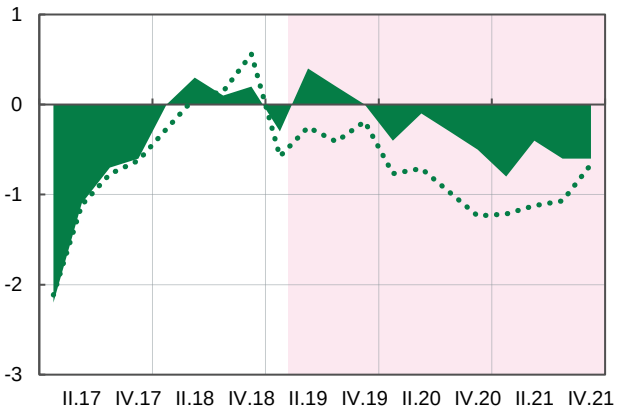
The NBU has revised upward its economic growth forecast compared to the April macroeconomic forecast to 3% in 2019 (from 2.5%) and 3.2% in 2020 (from 2.9%) due to favorable terms of trade, and expectations of a record harvest of grain crops. More stable domestic demand will be an additional factor. More specifically, stronger growth in private consumption will result from wage pressure diminishing more slowly, and rising pensions. The investment forecast has been revised upward on the back of a weaker restraining impact from the presidential and parliamentary elections than expected in the previous inflation report.

Figure 3.2.4. Actual and potential GDP, % yoy



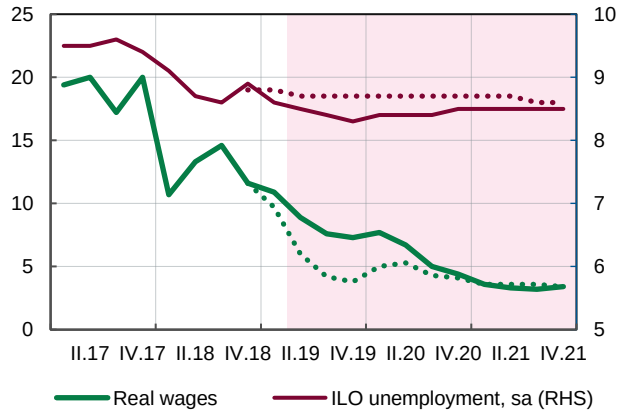
Source: SSSU, NBU staff estimates.

Figure 3.2.5. Output gap, % of potential GDP



Source: NBU staff estimates.

Figure 3.2.6. Real wages, % yoy and ILO unemployment sa, %



Source: SSSU, NBU staff estimates.

Potential GDP and the Cyclical Position of the Ukrainian Economy

Potential GDP growth will continue to accelerate, to hit 4% in 2021 and to stay at that level from that year onwards. The growth will continue to be mainly driven by total factor productivity, which will gradually converge to that seen in Ukraine's more developed neighboring economies. Stronger growth in potential GDP requires a speed-up in reforms to improve the business environment.

Although investment growth is expected to slow over the forecast horizon, the contribution of capital to potential GDP growth will remain positive, as fixed assets will be replaced more quickly than they are depreciated.

As in previous years, the negative labor contribution will remain the main impediment to potential GDP growth over the entire forecast horizon. This will result mainly from shortages in blue-collar workers and the natural decline in the population. Although the negative labor contribution of the workforce will be smaller than in previous years due to less intense labor migration. Pension reform, which helped increase employment, will also decrease the negative labor contribution.

A positive GDP gap is expected in Q2 and Q3 2019 on the back of better terms of trade and a record corn harvest. In 2020 Ukraine is expected to return to a small negative output gap (about 0.5% of potential GDP) due to a deterioration in terms of trade, continuing weak foreign demand, and the lagged effects of tight monetary and fiscal policies.

Household Income and Unemployment

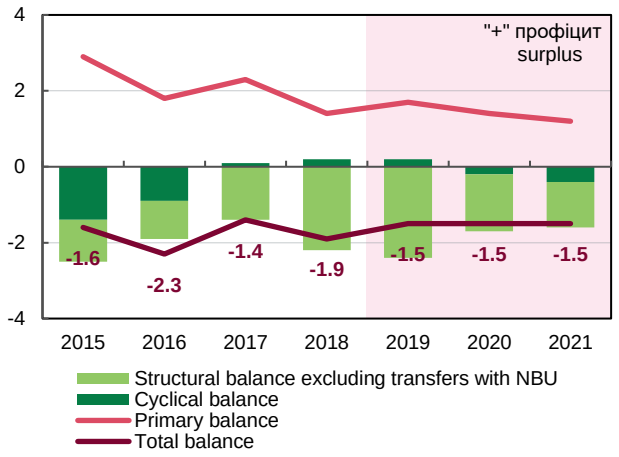
Although slowing over the forecast horizon, household income growth will remain high. In 2019, income growth will be propelled by economic growth and intense competition among employers for workers, amid a decrease in labor supply caused by labor migration. That said, the gap between wages on the domestic labor market and the labor markets of neighboring countries will gradually narrow, reducing the stimuli for labor migration and smoothing out labor market imbalances.

Starting in 2019, the unemployment rate (according to ILO methodology) will decrease slightly and stabilize at about 8.5%, which is close to the natural rate of unemployment. Among other things, the decline will result from people's increased motivation to seek employment generated by higher wages and the need to obtain the pensionable service period required by the new pension law.

Fiscal Policy

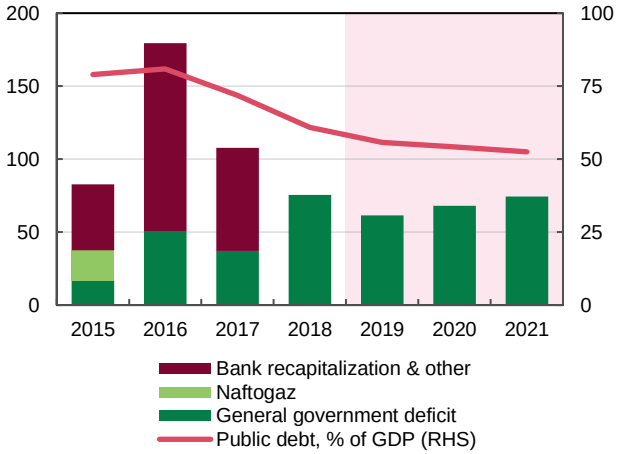
Fiscal policy will be reasonably tight in 2019–2021, due to the need to make large public debt repayments. The consolidated budget deficit will stand at about 1.5% of GDP, while the structural deficit (excluding the transfers of the NBU's profit to the budget) will narrow every year, as the negative GDP gap widens. As a result, fiscal impulse is expected to be negative, curbing aggregate demand and inflation.

Figure 3.2.7. Consolidated budget, % of GDP



Source: STSU, NBU staff estimates.

Figure 3.2.8. Broad public sector deficit, UAH bn, and public debt, % of GDP



Source: IMF, STSU, MFU, NBU staff estimates.

In 2019, government revenue growth will be close to nominal GDP growth (about 13%). The largest increases will be seen in revenues from personal income taxes (by about 17%) and single social contributions (which are payable to the budget of the PFU), driven by the still high growth in nominal wages. Revenues from some taxes (in particular, VAT revenues from goods imported into Ukraine) are expected to fall short of their planned amounts. This will be partly offset by transfers of a portion of the NBU's profit, which rose by 45.5%, to 1.6% of GDP in 2019.

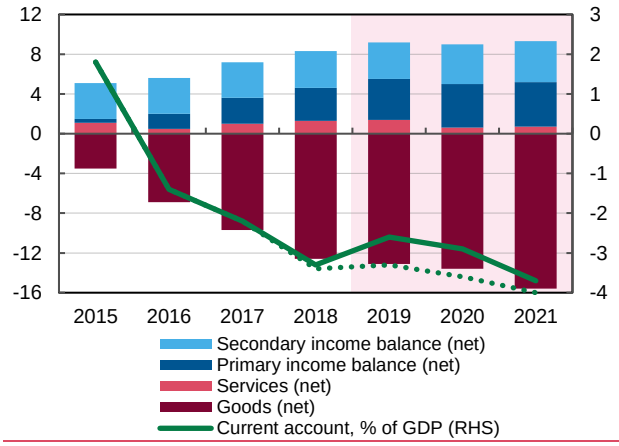
Despite there being presidential and parliamentary elections in 2019, an increase in government expenditures will be moderate, at about 12%. Stronger growth in social spending will limit capital expenditures, which will not exceed 4% of GDP.

The ratio of public and publicly guaranteed debt to GDP will continue to decline on the back of continuing primary budget surpluses (over 1% of GDP every year), robust growth in nominal GDP, and low exchange rate volatility.

3.3. Balance of Payments

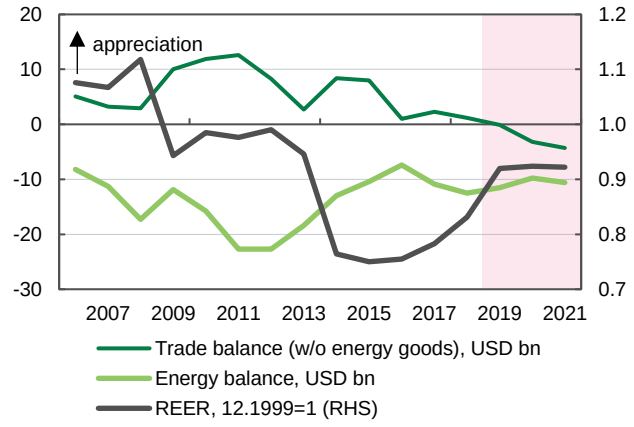
- In 2019, the current account deficit will narrow to 2.6% of GDP on the back of a bumper grain crop, favorable terms of trade, and lower dividend payments.
- In 2020–2021, the current account deficit will widen, driven by a decrease in natural gas transit, less favorable terms of trade, and larger consumer and investment imports. Nevertheless, the deficit will remain at acceptable levels.
- Capital inflows to the government and private sectors will continue, fueled by high interest rates, international investors' growing appetite for risk assets, and the signing of a new program with the IMF.

Figure 3.3.1. Current account, USD bn



Source: NBU staff estimates.

Figure 3.3.2. REER and trade balance



Source: NBU staff estimates.

The current account deficit will remain at the level of 2018 (3.3% of GDP) over the forecast horizon, although fluctuating in some years due to a range of idiosyncratic factors. Such fluctuations will not exceed ±1% of the sustainable deficit level (about 3% of GDP, according to the NBU's estimates), which is evidence of the absence of significant mismatches in the external position.

The growth in exports of goods will slow gradually in 2019–2021 (from 9% in 2018 to 2% in 2021), on the back of weak external demand and a deterioration in the terms of trade in 2020–2021. Meanwhile, export growth will be underpinned by bumper grain crops and an uptick in exports of foods (as Ukrainian exporters increase their presence on the EU markets), metallurgical products, electrical and mechanical equipment, and wagons.

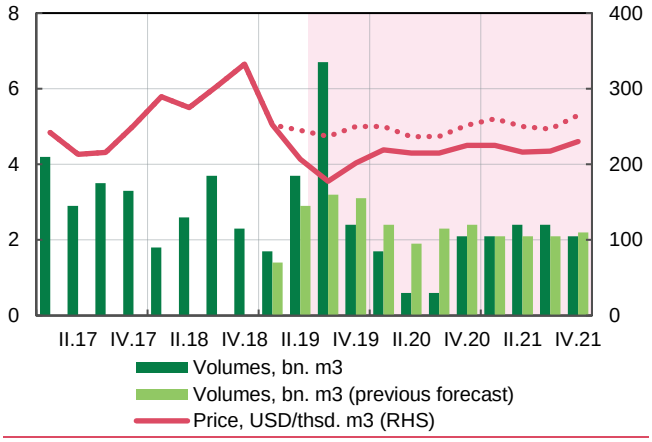
Imports of goods will also grow at a slower pace in 2019–2021 (from 13% in 2018 to 4%–5%), mainly due to the weaker performance of energy imports, resulting from the decreased consumption of natural gas and growth in gas production. In 2019, import growth will be also restrained by falling gas prices, caused by both demand factors (warm winter temperatures in Europe) and supply factors (mainly on the back of rapid growth in gas production by the United States and Russia). This forecast assumes that Ukraine will purchase additional quantities of gas before the start of the 2019/2020 heating season, because of the looming threat that Russia will cease to transit gas through Ukraine from Q1 2020 onwards.

The growth in non-energy imports will decelerate, albeit less quickly, propped up by sustained domestic demand. This will mainly be reflected in an uptick in imports of machinery, chemical and food products. Meanwhile, demand for imports will decline, due to real household income growing at a slower pace, the bulk of fixed assets having been renewed, and REER appreciation coming to an end.

The surplus in the trade in services will persist over the entire forecast horizon, supported by buoyant growth in exports of IT services. However, this surplus will narrow in 2020–2021 as the volume of gas transit declines dramatically.

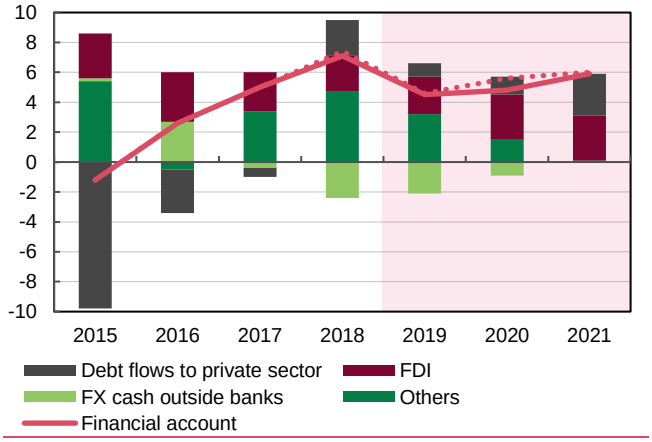
Remittances will grow in 2019–2021 as the foreign income of labor migrants rises. Meanwhile, the number of labor migrants will remain practically unchanged, due to the convergence of wages and the saturation of the labor market. Dividend payments will decrease in 2019–2021 compared to 2018 on the back of attractive financial conditions in Ukraine.

Figure 3.3.3. Gas imports



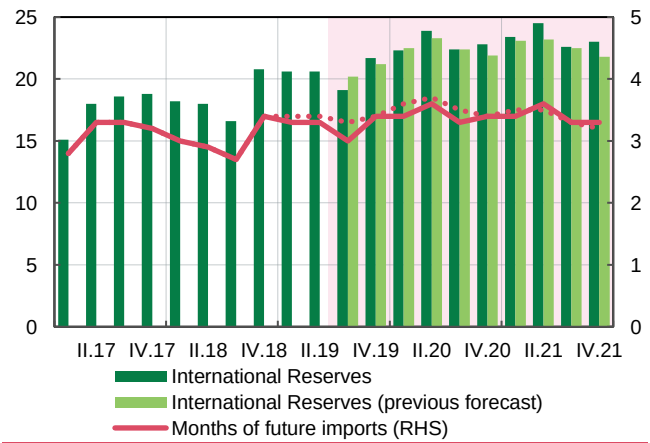
Source:NBU staff estimates.

Figure 3.3.4. Financial account: net inflows, USD bn



Source: NBU staff estimates.

Figure 3.3.5. International reserves, USD bn



Source: NBU staff estimates.

Capital inflows to both the government and private sectors will persist in 2019–2021, which will fully finance the current account deficit. Among other things, this will be due to attractive interest rates in Ukraine, resulting from the looser monetary policies conducted by leading central banks, and due to the signing of a new program with the IMF.

Low exchange rate volatility and improved inflation expectations, coupled with the persisting attractiveness of hryvnia-denominated financial instruments, are expected to halt the growth in FX cash outside the banking system by 2021.

The launch of a new cooperation program with the IMF in late 2019 will help secure more financing from other official lenders, and place Eurobonds on favorable terms and conditions. In contrast to previous years, the volume of nonresident-held hryvnia-denominated domestic government bonds is expected to rise due to a decrease in risk premium in Ukraine and an increase in investors' risk appetite amid expectations that leading central banks will ease their monetary policies.

Net inflows of financing under the new program with the IMF are expected to push up international reserves to USD 23 billion, or 3.3 months of future imports, by late 2021.

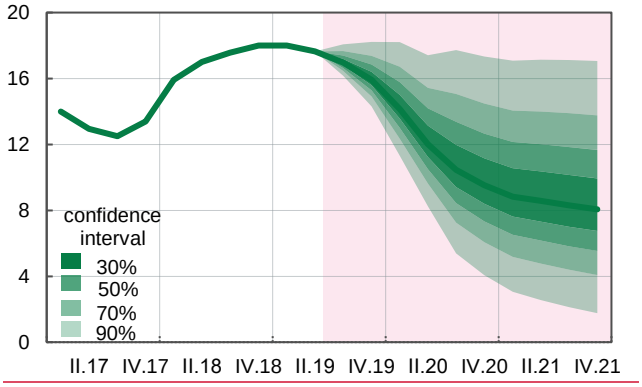
Compared to the forecast published in April, the current account deficit will narrow over the entire forecast horizon. The main reasons behind the forecast revision were larger grain exports and better terms of trade (higher ore prices and lower gas prices). Other reasons were an increase in labor migrants' remittances caused by an upward revision in the forecast for Poland's nominal GDP, and a reduction in dividend payments. Meanwhile, some current account components have been revised in the opposite direction, widening the current account deficit. Exports of ferrous metals were revised downward on the back of ongoing trade tensions between the United States and China. Imports of machinery, food and chemical products were revised up because of more robust growth in domestic demand than expected.

In 2019–2020, net capital inflows to the private sector were revised downward due to households selling less FX cash than expected. At the same time, 2019 capital inflows to the government sector are expected to slightly overshoot the forecast. This will result mainly from the government's adopting a strategy for replacing FX debt with hryvnia debt amid rising risk appetite among foreign investors. As a result, the overall balance of payments will be close to zero over the entire forecast horizon, with the increase in international reserves to USD 23 billion by the end of 2021 owing to net inflows of IMF loans.

3.4. Monetary Conditions and Financial Markets

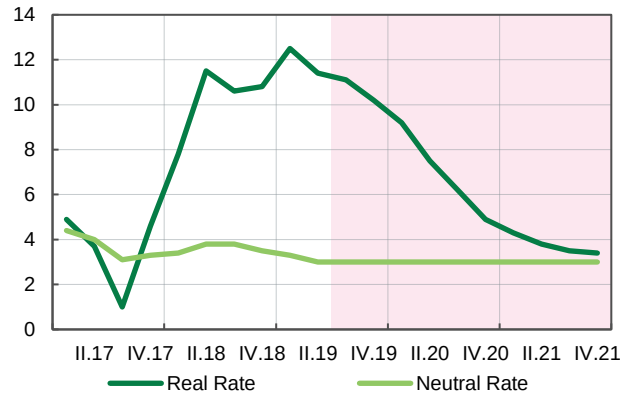
- Lower inflation pressures and improved inflation expectations are forecast to deliver the conditions suitable for a gradual easing in monetary policy.
- After strengthening considerably in 2016–2019, the real effective exchange rate of the hryvnia is expected to stabilize in 2020–2021. The current level of the exchange rate is consistent with fundamentals.
- A liquidity surplus in the banking system is expected to be maintained.

Figure 3.4.1. Key policy rate, average, %



Source: NBU staff estimates.

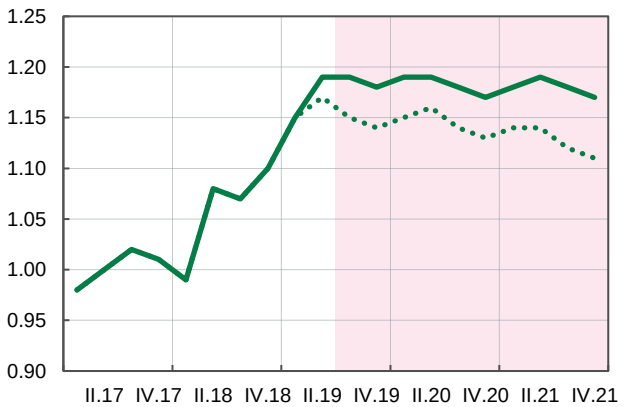
Figure 3.4.2. Real interest rate*, %



* Deflated by inflation expectations that are based on the quarterly projection model.

Source: NBU staff estimates.

Figure 3.4.3. Hryvnia REER Index, IV.2016=1



Source: NBU staff estimates.

Monetary policy will ease gradually provided that inflation pressures decrease, and inflation expectations improve steadily. As the disinflation proceeds, the key policy rate will decrease in real terms from the current level of 10% to the neutral level of about 3%[34] in 2021.

Accordingly, the key policy rate will drop to 8% in 2021.The largest decrease in the key policy rate is expected to take place in 2020, along with inflation returning to its target range and inflation expectations improving.

The key policy rate could decline to 8% more slowly if existing inflation risks materialize. At the same time, with higher demand for hryvnia domestic government bonds from nonresidents and increased appreciation pressures, the central bank could cut the key policy rate more quickly than is anticipated in the baseline scenario. More details about possible responses of the key policy rate to the materialization of some risks are given in Section 3.5 “Risks to the Forecast.”

Monetary policy easing will help stabilize the hryvnia REER in 2020-2021 following its strengthening in 2016–2019. According to NBU estimates, the exchange rate is in line with fundamentals, while the acceptable current account deficit will not pose any serious risks over the forecast horizon. The floating exchange rate regime, together with a liberalized FX market, reduces the likelihood of the accumulation of FX imbalances.

An increase in cash in circulation and significant repayments of public external debt will cause a gradual narrowing of the liquidity surplus of the banking system and a shift to liquidity deficit in 2021. The government’s external debt payments may be financed through government domestic borrowing and the subsequent FX purchases. This will be partly offset by the central bank purchasing FX to replenish international reserves.

The growth in transaction demand for cash will be to some extent counterbalanced by the rising number of cashless payments. More specifically, cash will rise at a lower pace than nominal consumer spending, while the ratio of M0 to GDP will decline further, to 9.5% by the end of 2019 (in line with the target the NBU set for the amount of cash in the economy[35]) and to 8.9% in 2021.

[34] Hrui A., Lepushynskyi V., Nikolaychuk S. Neutral Real Interest Rate in a Small Open Economy: Application to Ukraine // Visnyk of the National Bank of Ukraine, No. 243, 1/2018.
[35] According to the Comprehensive Program of Ukrainian Financial Sector Development until 2020.

Box 5. Publication of Key Policy Rate Forecasts

In this Inflation Report, the NBU commences the regular publication of forecasts of its key policy rate. This is the next step (following the start of the publishing of Summaries of the Discussion on the Key Policy Rate at the NBU Monetary Policy Committee) in making monetary policy more transparent and predictable. In the past, the NBU provided only descriptive information about possible changes to its key policy rate, by publishing forward guidance in its press releases and Inflation Reports.

The NBU has started publishing regular forecasts of its key policy rate as part of its macroeconomic outlook. This will help market participants to better understand monetary policy and make it more predictable, strengthen the transmission of monetary policy, and reduce risk premiums. The positive effects of publishing key policy rate forecasts are evidenced by the experience of seven other inflation targeters: the central banks of the Czech Republic, Georgia, New Zealand, Iceland, Israel, Norway, and Sweden.

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From now onwards, the expected trajectory of the key policy rate, which is in line with forecasts of other macroeconomic variables, above all, inflation, which is heading towards its target, will be made explicit in Inflation Reports and other NBU documents.

This will help:

- improve economic agents' understanding of the NBU's future monetary policy and its macroeconomic projections. Correspondingly, having this better understanding, economic agents will be able to take more informed investment decisions
- enhance the impact of the key policy rate on market interest rates, the cost of financial resources, and inflation. More information about the rationale behind the central bank's monetary decisions will enable financial market participants to adjust their expectations regarding the future cost of financial resources. This will enable the NBU to affect the entire yield curve to a certain degreereduce risk premium, as monetary policy becomes more understandable and predictable
- improve the quality of decision-making processes at the NBU concerning analytical support and discussions by MPC members that focus on medium-term monetary policy goals.

The positive effects of publishing key policy rate forecasts are evidenced by the experience of seven other inflation targeters: the central banks of the Czech Republic, Georgia, New Zealand, Iceland, Israel, Norway, and Sweden.

In particular, Sweden's Riksbank, ten years into the publication of key policy rate forecasts, noted that disclosing such information had helped improve market participants' understanding of the monetary regulator's intentions, and improve forecasting and decision-making processes at the central bank. Importantly, none of the fears expressed with regard to publishing key policy rate forecasts materialized, but were dispelled (Riksbank Studies, June 2017).

Holmsen, Qvigstad, Røisland and Solberg-Johansen (2008) estimate that the Norges Bank publications of key policy rate forecasts have helped increase confidence in the monetary regulator, and improved market participants' expectations regarding the cost of financial resources. Movements in forward rates of up to one year are almost fully aligned with the forecast of the key policy rate. However, deviations from the forecast increase over longer periods, due to a natural rise in uncertainty. As a result, the assumptions of market participants deviate from those of the central bank, deflecting the trajectory of forward rates. However, this does not signify an absence of confidence in the monetary regulator, and shows only that analysts continue to make their own forecasts rather than basing their decision-making exclusively on the central bank's estimates.

The Central Bank of Iceland comes to a similar conclusion (Monetary Bulletin, 2007-3). Within six months of the first publication of a key policy rate forecast, the short-term expectations of market participants had become anchored.

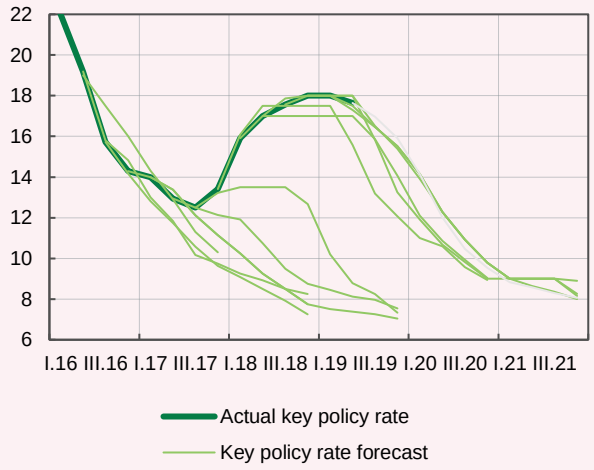
The National Bank of Georgia also offers an example of a developing economy having a successful experience in publishing key policy rate forecasts. After the publication of a key policy rate forecast, it became clear that the market had previously overestimated the future tightness of monetary policy, expecting higher interest rates on domestic currency-denominated securities. Consequently, the information published by the central bank about its intentions led financial market participants to revise their expectations and to decrease long-term interest rates. The yield curve on domestic securities moved downward (Monetary Policy Report, November 2016).

At the same time, many monetary regulators still refrain from publishing such information for fear that the market might misinterpret key policy rate forecasts as the central bank's strict commitment to maintain the key policy rate at that level. Accordingly, deviations from the forecast would undermine confidence in monetary policy.

However, such misinterpretations of forecasts can be avoided by establishing effective communications with the financial market. It is important that market participants correctly interpret key policy rate forecasts, and understand that such forecasts do not mean that the NBU is committing itself to following the trajectory it has forecast. In making decisions on the key policy rate, the NBU Board may deviate from the forecast trajectory the NBU published earlier in order to account for changes in the assessment of risks to the NBU's ability to achieve its targets – primarily inflation targets – and to take into account the emergence of internal and external factors that were not factored into the previous macroeconomic forecast, as well as any deviations from the forecast that these new factors cause to other indicators.

If there are any changes to forecast assumptions (such changes occur in every forecast cycle), the NBU may revise its key policy rate forecast (Figure 1) in order to bring inflation back to its target. For instance, since Q3 2017 the NBU has revised the projected trajectory of the key policy rate upwards every quarter due to the intensification of inflationary pressures. The NBU's decision to conduct a tighter monetary policy met the need to reduce inflation and bring it back to its target. In order to stress uncertainty around its forecasts, and their contingent nature, the NBU will publish its forecasts in the form of a fan chart. Market participants are familiar with such charts, as the NBU has been using them to plot its inflation and GDP projections. The central line on the graph shows the forecast trajectory of the key policy rate under a baseline scenario, with the bands around the central line being confidence intervals. The intensity of the color of the confidence interval bands varies from the darkest (the area around the central line) to the lightest, reflecting the probability that the actual level of the key policy rate will lie within a certain range of values.

Figure 1. NBU's key policy rate: actual level and forecast, quarterly average, %

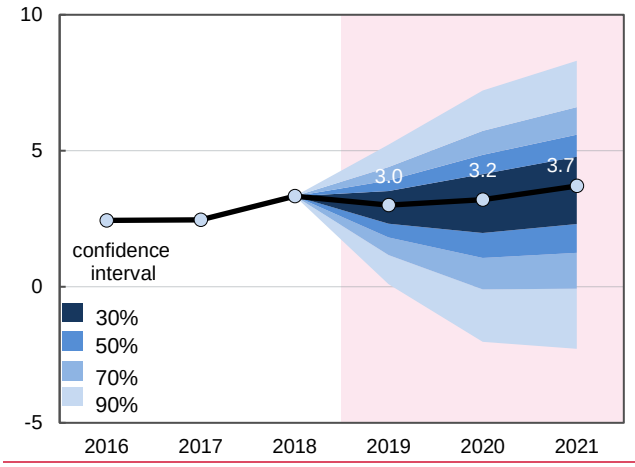


Source: NBU.

A forecast of the key policy rate (its quarterly average), together with other macroeconomic indicators, will be announced on a quarterly basis in a press release about the NBU Board's monetary policy decisions, and in the forecast section of the Inflation Report. In addition, the stance of the members of the Monetary Policy Committee on current and projected key policy rates will be disclosed in the Summary of the Discussion on the Key Policy Rate at the NBU Monetary Policy Committee .

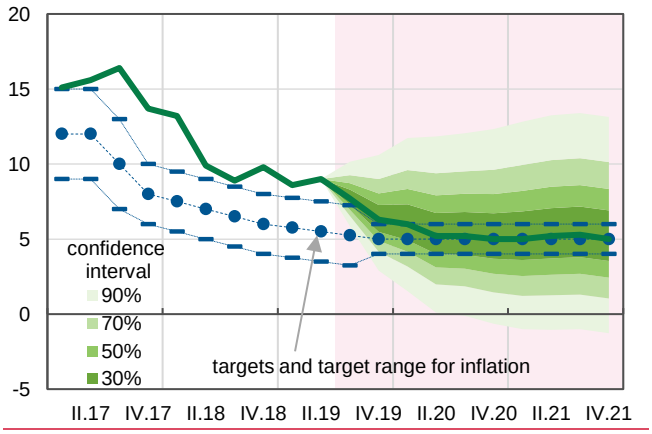
3.5. Risks to the Forecast

Figure 3.5.1. Real GDP forecast, % yoy



Source: NBU staff estimates.

Figure 3.5.2. CPI forecast and inflation targets, % yoy



Source: NBU staff estimates.

The forecast is given in a fan chart. This chart type is used to illustrate uncertainty with regard to predicted future values. For instance, the probability that the inflation rate will be in the range of the darkest shaded area in the chart (around the central line) is 30%. The same applies to other chart areas, implying the 90% probability that the inflation rate will be in the range of the lightest shaded area.

The main risk to the baseline scenario is that threats to macrofinancial stability continue to intensify. This is directly tied to possible delays in the signing of a new memorandum with the IMF once a new government is formed. A delay in implementing key reforms or steps reversing previous achievements (e.g., through court rulings or legislative decisions) would decrease the probability of Ukraine's obtaining official financing in good time. That would cause expectations about the exchange rate and inflation to worsen, and make it more difficult for Ukraine to access the international capital markets amid large repayments of external debt over the next few years. *Under such conditions, the NBU would have to conduct a tighter monetary policy (by cutting its key policy rate more slowly) than is envisaged in the baseline scenario in order to significantly offset pressures on the FX market, and to prevent inflation from greatly deviating from its target.*

A significant risk is that the transit of Russian gas through Ukraine will stop completely from 2020, in light of the lack of any progress in signing a new agreement, and the construction of gas pipelines to Europe bypassing Ukraine. A more noticeable decline in FX proceeds than is envisaged in the baseline scenario would put higher depreciation pressures on the hryvnia. A rise in spot gas prices on European trading platforms and possible technical difficulties with imports could complicate matters. In addition, such developments could worsen prospects for economic growth and bring capital inflows to a temporary halt. *As such developments could put upward pressures on inflation, the NBU would conduct a tighter monetary policy compared to the baseline scenario by suspending its monetary easing cycle.*

There continues to be a significant risk of an escalation of the military conflict and the introduction of new trade restrictions by Russia. The materialization of these risks would worsen the investment climate, as well as inflation and exchange rate expectations. *The degree to which these negative developments affect economic growth and inflation will determine the extent of monetary policy tightening.*

There continues to be a risk that global economic growth slows to a greater extent (due to intensifying trade tensions), and that there are resulting drops in global commodity prices. A decline in export proceeds would put stronger pressures on the FX market, which would be intensified by investors' weakening appetite for risky assets. Meanwhile, a decline in economic activity would fail to fully counterbalance resulting inflation pressures. *Under such conditions, the NBU would conduct a tighter monetary policy.* See more details about possible repercussions for Ukraine's peers among EM countries in Box 1 on page 12.

The continued rise in non-residents' interest in hryvnia-denominated domestic government bonds is increasing the risk of exchange rate fluctuations in the event of massive capital inflows or outflows. The NBU acknowledges the

possibility that non-residents might continue purchasing hryvnia-denominated domestic government bonds in large amounts, strengthening the exchange rate further. *Under this scenario, the NBU will be able to cut the key policy rate and build up international reserves more quickly than is envisaged in the baseline scenario.*

There is uncertainty around new government initiatives for administering energy prices for households and keeping these prices below market levels. This would deflect the trajectory of administered prices from the baseline scenario and could be a barrier to successful cooperation with the IMF. *This risk is more likely to be neutral for monetary policy, as lower administrated prices would be offset by increased depreciation pressures due to complications in cooperation with the IMF. The response of monetary policy will depend on how such developments affect inflation expectations.*

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Macroeconomic forecast (July 2019)

Indicators	2016	2017	2018	2019						2020						2021					
				I	II	III	IV	current forecast	forecast 4.2019	I	II	III	IV	current forecast	forecast 4.2019	I	II	III	IV	current forecast	forecast 4.2019
REAL ECONOMY, % yoy, unless otherwise stated																					
Nominal GDP, UAH bn	**2385**	**2984**	**3559**	808	912	1119	1164	**4003**	3970	892	1002	1228	1268	**4390**	4342	974	1095	1343	1391	**4803**	4750
Real GDP	**2.4**	**2.5**	**3.3**	2.5	3.0	3.2	3.1	**3.0**	2.5	3.2	3.1	3.2	3.3	**3.2**	2.9	3.4	3.6	3.7	4.0	**3.7**	3.7
GDP Deflator	17.1	22.1	15.4	11.7	9.2	8.2	7.7	9.2	8.9	7.0	6.5	6.1	5.5	6.3	6.3	5.5	5.5	5.5	5.5	5.5	5.5
Consumer prices (period average)	13.9	14.4	10.9	-	-	-	-	8.3	8.0	-	-	-	-	5.5	5.7	-	-	-	-	5.1	5.1
Producer prices (period average)	20.5	26.4	17.4	-	-	-	-	7.0	9.5	-	-	-	-	8.9	7.4	-	-	-	-	7.9	7.8
Consumer prices (end of period)	**12.4**	**13.7**	**9.8**	8.6	9.0	7.7	6.3	**6.3**	6.3	6.0	5.2	5.2	5.0	**5.0**	5.0	5.0	5.2	5.3	5.0	**5.0**	5.0
Core inflation (end of period)	5.8	9.5	8.7	7.6	7.4	7.0	5.5	5.5	5.0	5.3	4.7	3.9	3.8	3.8	3.7	3.8	3.8	3.8	3.8	3.8	3.7
Non-core inflation (end of period)	17.5	19.4	10.7	10.0	10.8	8.6	7.6	7.6	8.1	6.9	6.4	7.0	6.4	6.4	6.6	6.4	6.6	7.1	6.5	6.5	6.6
raw foods (end of period)	1.2	23.5	3.3	3.6	7.8	5.2	3.8	3.8	3.6	1.4	0.4	2.5	3.1	3.1	3.1	3.5	4.0	3.6	3.0	3.0	3.0
administrative prices (end of period)	34.6	16.1	18.0	18.7	17.0	15.7	12.8	12.8	13.9	12.1	11.7	11.3	9.8	9.8	9.9	9.4	9.4	9.9	9.6	9.6	9.7
Producer prices (end of period)	**35.7**	**16.5**	**14.2**	8.9	4.5	4.7	7.6	**7.6**	8.2	7.7	12.0	9.3	7.6	**7.6**	7.6	9.1	8.4	7.3	7.3	**7.3**	7.3
Nominal wages (period average)	23.6	37.1	24.8	20.8	18.9	16.6	14.4	17.5	14.2	14.4	12.3	10.8	9.7	11.7	10.6	8.8	8.6	8.8	8.6	8.7	8.7
Real wages (period average)	9.0	19.1	12.5	10.9	8.9	7.6	7.3	8.6	5.8	7.7	6.7	5.0	4.4	5.9	4.6	3.6	3.3	3.2	3.4	3.4	3.5
Unemployment (ILO)	9.4	9.5	8.8	-	-	-	-	8.5	8.7	-	-	-	-	8.4	8.7	-	-	-	-	8.5	8.7
FISCAL SECTOR																					
Consolidated budget balance, UAH bn	**-54.8**	**-42.1**	**-67.8**	**-**	**-**	**-**	**-**	**-61.9**	-61.5	**-**	**-**	**-**	**-**	**-68.0**	-67.2	**-**	**-**	**-**	**-**	**-73.6**	-73.6
% of GDP	-2.3	-1.4	-1.9	-	-	-	-	-1.5	-1.5	-	-	-	-	-1.5	-1.5	-	-	-	-	-1.5	-1.5
Public sector fiscal balance (IMF methodology), UAH bn	**-50.3**	**-37.0**	**-75.4**	**-**	**-**	**-**	**-**	**-61.5**	-61.2	**-**	**-**	**-**	**-**	**-68.0**	-66.9	**-**	**-**	**-**	**-**	**-74.4**	-72.6
% of GDP	-2.1	-1.2	-2.1	-	-	-	-	-1.5	-1.5	-	-	-	-	-1.5	-1.5	-	-	-	-	-1.5	-1.5
BALANCE OF PAYMENTS (NBU methodology)																					
Current account balance, USD bn	-1.3	-2.4	-4.3	0.0	-0.4	-2.5	-0.9	-3.8	-4.9	-0.7	-0.8	-1.7	-1.4	-4.6	-5.8	-1.1	-1.4	-2.2	-1.7	-6.3	-6.7
Exports of goods and services, USD bn	46.0	53.9	59.1	15.1	15.2	15.6	16.6	62.5	60.8	15.4	15.6	16.1	17.0	64.2	61.7	15.8	16.0	16.8	17.4	66.1	63.6
Imports of goods and services, USD bn	52.5	62.5	70.4	16.9	18.0	19.8	19.5	74.2	72.7	18.2	18.6	19.7	20.6	77.2	75.1	19.1	19.7	20.8	21.4	80.9	78.2
Financial account, USD bn	-2.6	-5.0	-7.1	-0.4	-1.0	-1.6	-1.6	-4.5	-4.6	-1.8	-1.5	-0.7	-0.8	-4.8	-5.6	-2.3	-1.5	-0.9	-1.2	-5.9	-6.0
BOP overall balance, USD bn	**1.3**	**2.6**	**2.9**	**0.3**	**0.6**	**-0.9**	**0.6**	**0.6**	-0.3	**1.1**	**0.7**	**-1.0**	**-0.6**	**0.2**	-0.1	**1.3**	**0.1**	**-1.3**	**-0.5**	**-0.4**	-0.7
Gross reserves, USD bn	**15.5**	**18.8**	**20.8**	**20.6**	**20.6**	**19.1**	**21.7**	**21.7**	21.2	**22.3**	**23.9**	**22.4**	**22.8**	**22.8**	21.9	**23.4**	**24.5**	**22.6**	**23.0**	**23.0**	21.8
Months of future imports	3.0	3.2	3.4	3.3	3.3	3.0	3.4	3.4	3.4	3.4	3.6	3.3	3.4	3.4	3.4	3.4	3.6	3.3	3.3	3.3	3.2
MONETARY ACCOUNTS (Qumulative since the beginning of the year)																					
Monetary base, %	13.6	4.6	**9.2**	-2.8	2.1	1.6	8.2	**8.2**	9.4	-3.4	0.9	0.7	6.5	**6.5**	6.5	-3.2	0.9	0.6	6.3	**6.3**	6.3
Broad money, %	10.9	9.6	**5.7**	-1.9	0.8	3.0	8.0	**8.0**	8.5	-1.6	1.4	3.6	8.6	**8.6**	8.4	-1.7	1.1	3.5	8.8	**8.8**	8.8
Velocity of broad money (end of year)	2.2	2.5	**2.8**	-	-	-	-	**2.9**	2.9	-	-	-	-	**2.9**	2.9	-	-	-	-	**2.9**	2.9

Terms and abbreviations

BPM6	IMF Balance of Payments and International Investment Position Manual (6th edition)
BOI	Business outlook index
CD	Certificate of deposit
CEE	Central and Eastern Europe
CIS	Commonwealth of Independent States
CMU	Cabinet of Ministers of Ukraine
CIT	Corporate income tax
Core CPI	Core consumer price index
CPI	Consumer price index
CSI	Consumer sentiment index
EBITDA	Earnings before interest, taxes, depreciation, and amortization
ECB	European Central Bank
ECPI	External Commodity Price Index
EM	Emerging Markets
EMBI	Emerging Markets Bond Index
EU	European Union
FAO	Food and Agriculture Organization
FDI	Foreign direct investment
Fed	Federal Reserve System
FSSS	Federal State Statistics Service of Russia
FX	Foreign exchange
GDP	Gross domestic product
GFCF	Gross fixed capital formation
GVA	Gross value added
HH	Households
ILO	International Labour Organization
IT	Information technologies
IMF	International Monetary Fund
JSC	Joint Stock Company
MFU	Ministry of Finance of Ukraine
MPC	Monetary Policy Committee
MTP	Main trading partner
MY	Marketing year
NBU	National Bank of Ukraine
NEER	Nominal effective exchange rate
NFC	Nonfinancial corporation
NJSC	National Joint Stock Company
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PFU	Pension Fund of Ukraine
PIT	Personal income tax
PMI	Purchasing Managers' Index
PPI	Producer price index
REER	Real effective exchange rate
Russia	Russian Federation
SESU	State Employment Service of Ukraine
SFSU	State Fiscal Service of Ukraine
SSSU	State Statistics Service of Ukraine
STA	Single Treasury Account
STSU	State Treasury Service of Ukraine
TPP	Thermal Power Plant
UAwCPI	Weighted Average of Ukraine's MTP Countries' CPI
UAwGDP	Weighted average of annual GDP growth of Ukraine's MTP countries
UIIR	Ukrainian Index of Interbank Rates
US	United States of America
USDA	United States Department of Agriculture
VAT	Value-added tax
WTOI	World Trade Outlook Indicator

bbl	barrel
bcm	billion cubic metres
bn	billion
bp	basis point
EUR	euro
m	million
M0	cash
M3	money supply
mom	in monthly terms; month-on-month change
pp	percentage point
qoq	in quarterly terms; quarter-on-quarter change
RHS	right-hand scale
RUB	Russian ruble
sa	seasonally adjusted
thsd	thousand
UAH	Ukrainian hryvnia
USD	US dollar
yoy	in annual terms; year-on-year change