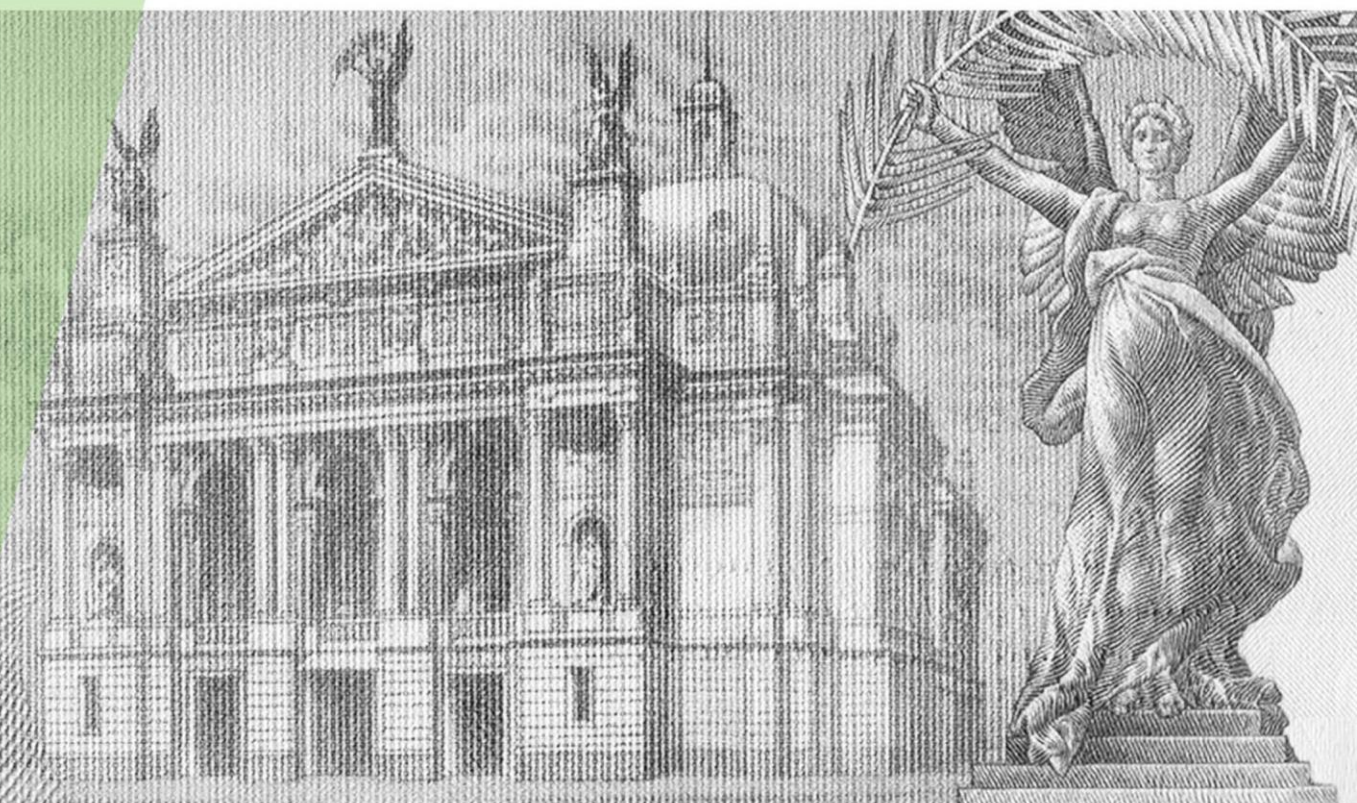




National Bank
of Ukraine

Inflation Report

January 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 forecast frequency.

The publication of the macroeconomic forecast and its underlying assumptions aims at strengthening the transparency and predictability of the NBU's monetary policy. This should enhance society's confidence, an important prerequisite for anchoring inflation expectations and achieving price stability, which is the NBU's priority.

The Monetary Policy and Economic Analysis Department developed forecasts of inflation and other macroeconomic variables. The NBU Board approved the forecasts during a meeting devoted to monetary policy issues on 31 January 2019.¹ Macroeconomic projections, including inflation, comprise the principal input, but not the only one, the NBU Board considers in its decision-making. In addition to the projections of inflation and other macroeconomic variables, the NBU Board takes into account any new information appearing after the forecast has been developed. The assessment of risks to the outlook or relations between macroeconomic parameters may vary between members of the NBU Board.

The analysis in the Inflation Report is based on the macroeconomic data available at the date of its preparation; therefore, the time horizon of the analysis for some indicators may vary. This report used 30 January 2019 as the cut-off date for the data.

Previous issues of Inflation Report, presentation of the Inflation Report, summary of macroeconomic projections, time series and data for charts and tables in the Inflation report are available at the following link:
https://bank.gov.ua/control/en/publish/category?cat_id=16036612.

¹ NBU Board Decision No. 90-D as of 31 January 2019 On the Approval of the Inflation Report.

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Summary

Consumer price inflation declines to a five-year low

Consumer price inflation declined to a five-year low of 9.8% in 2018, from 13.7% in 2017. The reversal of the inflation uptrend seen in 2017 is primarily due to the NBU's tight monetary policy stance. The NBU has raised the key policy rate six times since October 2017, by a total of 5.5 pp, to the current 18.0% per annum. The rate hikes affected market interest rates on hryvnia resources and thereby incentivized savings.

The tight monetary conditions were among the reasons for the strengthening of the hryvnia – by 6.8% for the NEER and 13.2% for the REER over the course of 2018. High global prices for exported goods over most of 2018, a record harvest of grain crops, and a substantial amount of remittances also contributed to the stronger hryvnia. Favorable FX market conditions over most of the year enabled the NBU to replenish international reserves via FX interventions.

The expansion in the domestic supply of some foods (fruit, milk, meat, etc.) and lower global food prices were additional factors that contributed to the decrease in inflation, causing the growth in raw food prices to slow sharply (to 3.3% yoy).

Despite the decrease, inflation had exceeded the NBU's target of $6\% \pm 2$ pp by the end of 2018, as specified in the [Monetary Policy Guidelines for 2018 and the Medium Term](#). The NBU deliberately chose a lengthier path to bringing inflation to its target in order to minimize costs for economic growth. Being able to strike a balance between the need to bring inflation to the target and the support of economic growth reflects the flexibility of the inflation-targeting regime.

The deviation of inflation from the target was largely due to factors over which monetary policy has only a limited effect. These factors include the growth in administered prices and tariffs (which accelerated to 18% yoy) and the increase in global oil prices, which lasted for most of the year.

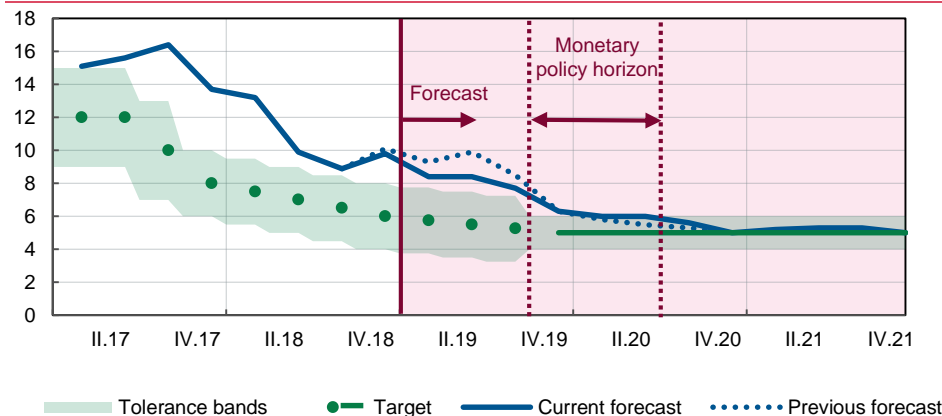
Furthermore, consumer demand and further growth in production costs – including due to higher labor and energy costs – continued to push prices higher during the year. In particular, real wages increased by 12.5% in 2018. The effects of the adjustment of pension benefits and further growth in labor migrant remittances made a substantial contribution to household income growth. Uncertainty over further cooperation with the IMF and heightened external risks weighed on economic sentiment throughout most of the year, and hence impeded the improvement of inflation expectations. As a result, core inflation slowed moderately, to 8.7% yoy, in 2018.

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

The forecast for 2019 year-end inflation remains unchanged at 6.3%, but the projected dynamics of some of inflation components have been partially revised. The disinflation effects of lower global energy prices and the stronger hryvnia will be offset by the continued pressure from wages and somewhat faster growth in administered prices. Headline inflation is expected to decline to the upper bound of the target range, $5\% \pm 1$ pp, in early 2020, and to reach the target level of 5% at the end of that year.

The main factors behind further disinflation on the forecast horizon will be the reasonably tight monetary conditions and strict fiscal policy, which will slow aggregate demand growth and bring back the negative output gap. The relatively low exchange rate volatility and a moderate rise in prices for imported goods, including energy and food, will be additional contributors. The inflationary impact of higher wages will weaken due to less intense labor migration and narrower wage gaps with neighboring countries than in previous years.

Figure 1. CPI (end of period, % yoy) and Inflation Targets



Source: SSSU, NBU staff estimates.

Thanks to these factors, core inflation will slow to 5% in 2019 and stay below 4% in 2020–2021. Raw food inflation is anticipated to remain within the 3.0%–3.5% range both this year and in the medium term, provided no major supply shocks hit the economy as a result of a poor harvest or a change in Ukrainian producers' ability to tap into certain external markets.

Administered prices will rise 13.6% in 2019. The revision of their growth rates compared to the previous forecast (up from 11.7%) is primarily due to the postponement of planned increases in central heating and hot water prices to January 2019 (from December 2018), and to somewhat higher increases in the excise tax on tobacco products. A significant contribution to administered price inflation will come from the further growth in natural gas tariffs for households in accordance with the IMF memorandum (the next increase is expected in Q2 2019). In the medium term, the growth in administered prices will decelerate to 10% in 2021.

The material correction in oil prices in Q4 2018 led to a downward forecast revision for the domestic fuel prices. Assuming no changes to existing excise tax policy, fuel prices are forecast to rise at 4%–5% per year.

Agriculture and domestic demand – oriented sectors propelled GDP growth in 2018

In 2018, economic growth accelerated to 3.3% (according to NBU estimates) – the highest growth rate in seven years.

Steady expansion in consumer demand, fueled by solid growth in real disposable income of households, supported the robust growth in domestic demand – oriented sectors, including retail trade, passenger transport, and other services. In addition, agriculture was one of the major drivers of real GDP growth, thanks to a record-high harvest of grain and oilseeds.

However, industrial production grew at a moderate pace due to transportation challenges in the Sea of Azov in H2 2018, and the carrying out of repairs at several metallurgy plants. Furthermore, the growth in the global economy and trade slowed in H2 2018 amid ramped up protectionist measures, and the global commodity price environment worsened. That weighed on the growth in exports and companies' financials and, coupled with uncertainty over further cooperation with the IMF and the upcoming elections, shifted investment activity into a lower gear. Meanwhile, robust consumer demand and high energy prices drove growth in imports value for most of the year. The current account deficit increased to 3.6% of GDP², according to the NBU, (from 2.2% in 2017), driven by larger foreign trade deficit and higher dividend payments. At the same time, remittances increased by 18.7%, containing the widening of the current account deficit.

The financial account inflows helped offset the current account deficit. Ukraine recorded USD 7.5 billion of capital inflows for the year, generated by both the private and public sectors. The

² Hereinafter, the NBU's estimate for GDP in 2018 and projections for 2019-2021 are taken for calculating ratios with respect to GDP.

role of the latter grew in importance through the end of the year, primarily due to the placement of Eurobonds and the arrival of official financing. The private sector received capital inflows in the form of net FDI and real sector borrowings. The surplus in the overall balance of payments helped increase international reserves to USD 20.8 billion by the end of last year, covering 3.4 months of future imports.

The fiscal policy stance underwent major changes – from a loose fiscal policy in H1 2018 to a tight one in H2 2018 with the expected easing late in the year. The consolidated budget recorded a wider deficit (of UAH 67.8 billion at yearend) but maintained a significant primary surplus. Along with the strengthening of the hryvnia, this pushed public and publicly guaranteed debt as a percentage of GDP further down (to 61%).

In 2019, economic growth will temporarily decelerate

Looking ahead, real GDP growth will, as projected earlier, decelerate to 2.5% in 2019. The tight monetary policy needed to bring inflation back into the target range and the strict fiscal policy due to substantial public debt redemptions will put the main drag on growth. In addition, the grain harvest is expected to be lower compared with a record last year, meaning agriculture will make a negative contribution to GDP growth. Another factor will be a gradual deceleration of growth in the global economy and trade, including due to protectionist measures.

Economic growth will continue to be primarily driven by private consumption, fueled by a further increase in real household income, which will in turn be supported by the growth in wages and pensions, although slower than last year. Investment activity is set to slow materially, but will continue to fuel the robust demand for imported means of production. As a result, imports will grow faster than exports in real terms, even amid improved performance of export-oriented industries and record grain exports. Thus, the contribution of net exports to GDP will remain negative, although it will be smaller than in previous year.

Going forward, real economic growth will start picking up, reaching 2.9% and 3.7% in 2020 and 2021, respectively. The growth will be propelled by a gradual easing of monetary policy, which will bolster domestic demand, and a pick-up in investment activity as uncertainty about the political situation diminishes.

In 2019 - 2021, fiscal policy will be tighter than in 2018. The NBU expects the consolidated budget to record a deficit of no more than 1.5% of GDP as external debt repayments reach peak levels. The continued rapid nominal GDP growth, low exchange rate volatility, and the continuing primary surpluses in the consolidated budget (over 1% of GDP a year) amid large repayments will reduce public and publicly guaranteed debt to below 60% of GDP.

After widening in 2018, the current account deficit will range between 3% and 4% of GDP throughout the forecast horizon. In 2019, the deficit will narrow to 3.1% of GDP due to the bumper corn harvest in 2018 and a drop in energy prices. In 2020–2021, the current account deficit will widen somewhat, on the back of a decrease in gas transit, the waning effects of the record high harvest in 2018, and a rise in investment imports following the elections. The widening of the trade deficit will be partially offset by greater private remittances as labor migrants' incomes increase.

Further cooperation with the IMF remains a key assumption underlying the macroeconomic forecast

Securing the financing from the IMF and other official creditors will enable Ukraine to retain access to international capital markets over the forecast horizon. At the same time, the continuation of the reasonably tight monetary policy stance will contribute to debt inflows, which, together with continued inflows of foreign direct investment, will help finance the current account deficit. Large external public debt repayments due in 2019–2020 will be partly rolled over thanks to official external borrowings and the placement of sovereign Eurobonds. This will improve the expectations of economic agents and foster macrofinancial stability. International reserves will stabilize at the current level (close to USD 21 billion) over the forecast horizon.

A deterioration in expectations and external conditions are the main risks to the forecast

The usual increase in uncertainty during the presidential and parliamentary elections poses the main risk to the macroeconomic forecast outlined above, including Ukraine's ability to meet its inflation target in 2020. This, in turn, could affect inflation expectations.

Another important risk to the baseline scenario is deterioration of external conditions as a result of a potential downswing phase in the global economy and higher volatility of world commodity prices. Risks of a sharper slowdown in the global economy have been on the rise recently, amid heightened geopolitical tensions, Brexit uncertainty, a sharp slowdown in the euro area economy, deleveraging in the Chinese economy, and increased financial market volatility.

Risks related to Russian aggression also increased late last year. Although port access conditions in the Sea of Azov have returned to normal, the risk of transportation problems via the Sea of Azov remains high. In addition, the risk of intense labor migration and the resulting pressure on wages remains valid. Another risk to the forecast is uncertainty over the volume of gas transit through Ukraine starting from 2020, as pipelines bypassing the country are being built to deliver gas to Europe.

Monetary policy will remain reasonably tight to reduce inflation to the target

Considering the updated macroeconomic forecast and the risks outlined above, the NBU Board decided on 31 January 2018 to keep its key policy rate at 18.0% per annum. Keeping the rate at this level is aimed to ensure a firm disinflation trajectory and a return of inflation to the target range in Q1 2020.

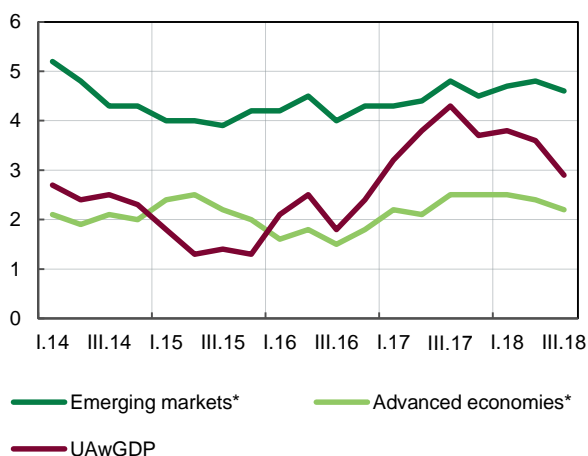
Further changes to the key policy rate during the forecast horizon will be contingent on inflation developments, as well as on whether risks to price stability materialize. The NBU Board sees potential for a monetary policy easing if inflation risks were to considerably subside and inflation were moving towards the target along the path specified in the new macroeconomic forecast. However, if underlying inflationary pressures rise, and the risks that endanger the return of inflation to the target materialize, the NBU could raise the key policy rate.

Part 1. External Environment

External conditions continued to deteriorate. Growth in the global economy and trade slowed in Q3 2018, with leading indicators pointing to a continued slackening of business activity in Q4. At the same time, growth became more uneven across both developed countries and emerging markets. More widespread protectionist measures and geopolitical uncertainty slowed the growth in world trade and caused prices to fall in most commodity markets. As a result, the average weighted ECPI Index, which tracks changes in global prices for Ukrainian exports, decreased in Q4 in both quarter-on-quarter and year-on-year terms. In addition, after reaching four-year highs in early October 2018, oil prices plunged.

Conditions in the world financial markets tightened as well. The surge in oil prices in previous periods and the depreciation of national currencies against the US dollar caused global inflation to accelerate and prompted central banks in a number of countries to tighten their monetary policies. Investors' interest in risk assets declined significantly, and stock indexes fell globally, especially in the United States. The flight to safe-haven assets drove US treasury bond rates down to eight-month lows, increasing the risk premium for emerging markets. Meanwhile, good news from US-China trade talks at the start of 2019 supported world commodity prices, especially oil prices, stock indexes, and emerging market assets.

Chart 1.1. Real GDP Growth, Selected Groups of Countries, % yoy



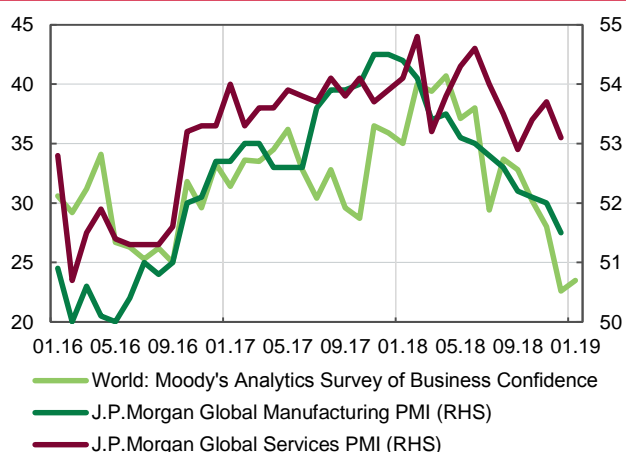
* Q3 2018 – NBU staff estimates.

Source: IMF, NBU staff estimates.

Global economic growth is decelerating as the positive momentum from favorable financial conditions and low interest rates in previous periods fades. In addition, the gaps in development between advanced countries such as the US and the euro-area states are widening, as are those between emerging markets. Turkey and Argentina, for instance, saw much slower growth in Q3 2018.

As geopolitical tensions and protectionist measures mounted in Q3 and the first half of Q4, growth in global trade slowed, and uncertainty in global commodity and financial markets increased. The higher uncertainty stems from the continued decline in business confidence revealed by a Moody's poll. Furthermore, in contrast to Q2, the global services PMI declined along with the manufacturing PMI as domestic consumption contracted. As a result, the Global Composite PMI dropped to its lowest since September 2016. Nevertheless, the certain easing of US-China trade relations in late 2018 through early 2019, and the thawing of the geopolitical standoff between the United States and Iran may contribute to global economic growth in early 2019.

Chart 1.2. Global PMI and World Business Confidence

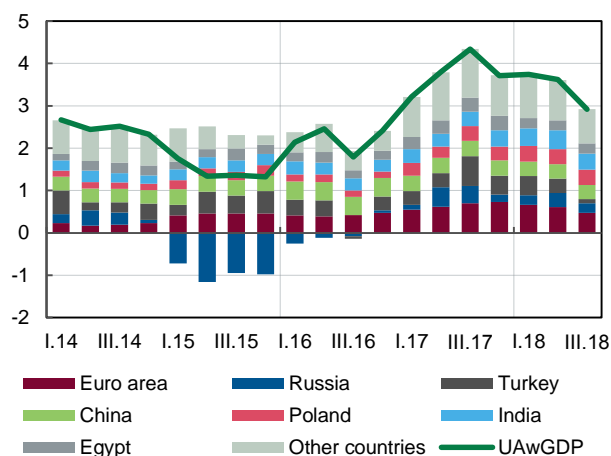


As of 25.01.2019

Source: Markit, Moody's.

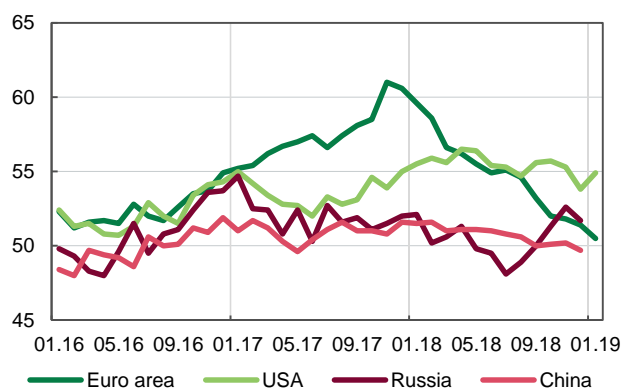
In Q3, the US economy continued to grow at the highest rate since 2014, despite the growth being slightly slower than in the previous quarter. The steady rise in consumer spending and investment, driven by tax cuts and higher government spending, reinforced the improvement in labor market conditions, contributing to the growth in the United States. More specifically, US unemployment stood at 3.7% in September, the lowest since 1969, and was no more than 3.9% at year-end. However, the [higher productivity of labor in the private sector](#) prevented a sharp increase in inflationary pressure. Simultaneously, business activity in the manufacturing sector fell to the lowest level in one-and-a-half years, as highlighted by the PMI. The drop in business activity came as business confidence deteriorated due to uncertainty about the economic outlook prompted by existing geopolitical risks and trade conflicts. Overall inflationary pressure eased

Chart 1.3. Contributions to Annual GDP Growth of Ukraine's MTP Countries (UAWGDP), % yoy, pp



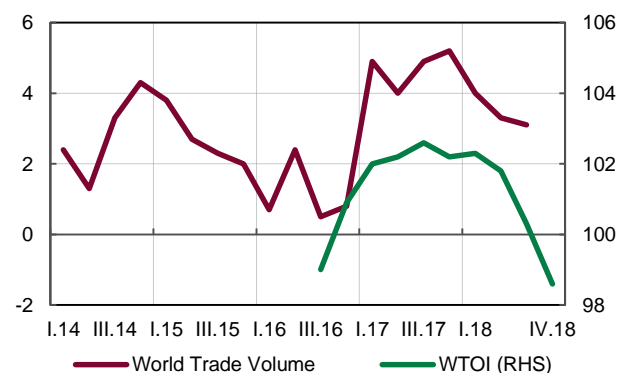
Source: National Statistical Offices, NBU staff estimates.

Chart 1.4. Manufacturing PMI, Selected Economies, points



Source: IHS Markit.

Chart 1.5. World Trade Volume (% yoy) and World Trade Outlook Indicator (WTOI), p



Source: WTO.

after oil prices declined, but higher import tariffs continue to push purchase prices higher for many companies.

Economic growth in the euro area slowed to a four-year low, primarily due to weakened external demand. Germany and Italy were hit hardest by the slump in economic activity. German GDP for the first time since Q1 2015 decreased in quarterly terms (the biggest decline in the past five years). Italian GDP contracted for the first time since Q2 2014. Apart from the important role that external factors played in the downturn (especially in Germany's case), a reduction in consumer demand made a substantial negative contribution to GDP growth, despite favorable labor market conditions. For Italy, there was a negative contribution from a contraction in investment activity due to political uncertainty in preceding periods. Between late 2018 and early 2019, growth in euro-area business activity continued to decelerate, reaching a four-year low, according to PMI data. Company creation practically came to a halt, and the number of new jobs was the lowest in two years. Riots in France, an automaker meltdown in Germany, trade conflicts, and Brexit uncertainty were the reasons for the slowdown.

Economic growth in CEE countries held steady in Q3. The economic growth was largely supported by domestic demand, fueled by greater consumption (household incomes increased amid higher employment rates and brighter expectations) and investment (particularly government investment due to co-financing from EU funds).

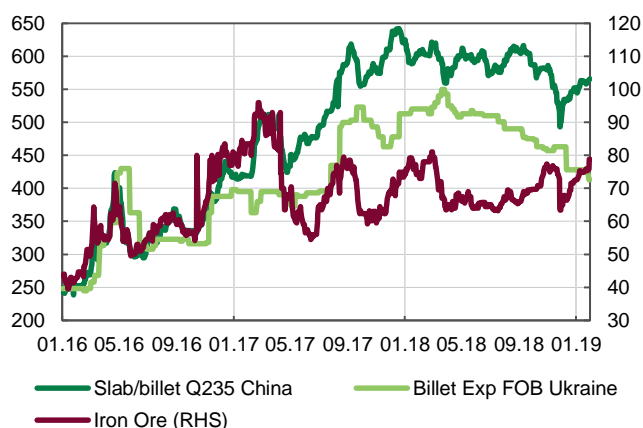
Growth was mixed in CIS countries. Russia's economic growth decelerated due to falls in construction and the engineering industry. That, in turn, had a negative effect on growth in Belarus. Another factor that dragged down growth in Belarus was a tightening of the fiscal stance, which kept the budget surplus in January–November close to 5% of GDP. Part of the surplus will go to finance [an early repayment of public debt](#). In contrast, the relatively rapid GDP growth in Kazakhstan was driven by increased oil production after the Kashagan field started operating at full capacity, and retail lending picked up. The continued expansionary fiscal policy was yet another contributor to economic growth.

Growth in some Asian countries, including China, India, and Turkey, slowed down. While growth in China and India remained rather rapid thanks to support from the government, Turkey saw its growth rate reduced to 1.6% yoy in Q3 due to high inflation and the depreciation of the lira, with domestic demand shrinking significantly as a result. Interest rate hikes by Turkey's central bank and other stabilization measures stopped the lira from depreciating, and even helped it gain some ground.

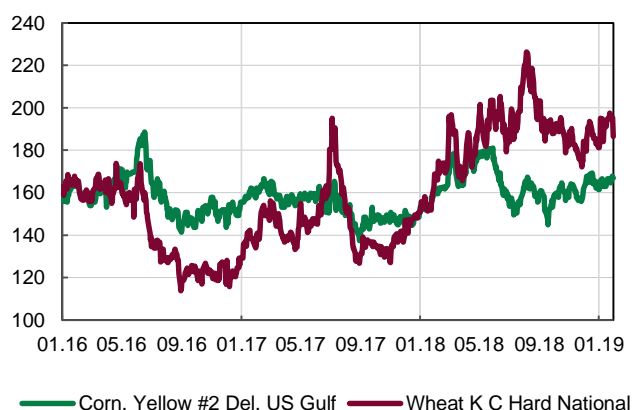
Heightened geopolitical tensions and increased protectionist measures depressed demand further, thereby slowing the growth in global trade. In particular, the World Trade Outlook Indicator (WTOI) fell to a two-year low of 98.6 in Q4 as all of

Chart 1.6. External Commodity Price Index (ECPI)

Source: NBU staff estimates.

Chart 1.7. Semi-Finished Steel Prices in China and Ukraine, USD/MT

Source: Thomson Reuters.

Chart 1.8. World Grain Prices, USD/MT

Source: Thomson Reuters.

its components deteriorated. This means that global trade growth is expected to fall short of the trend in the next few months. As a result, prices in most commodity markets decreased, while the global price environment, measured by the External Commodity Price Index (ECPI), was much less favorable for Ukrainian exporters in Q4.

With steel supply far exceeding relatively weak demand, as China, the United States and Iran ramped up production in defiance of protectionist measures, steel prices in the world markets declined in Q4. After excess supply drove down steel prices in China, producers resumed exports and thus triggered a price drop outside the country. Additional factors were the early winter weather in China's northern provinces and a contraction in domestic demand for steel and steel products due to a downturn in the automotive industry and some other industries. In turn, Europe saw its steel prices decrease as Turkish steelmakers boosted exports in an aggressive bid to realize competitive advantages made possible by the weak lira. In addition, rigid quotas and a 25% over-quota tariff on imports of flat-rolled and long-rolled steel, pipes, and stainless steel, which Turkey imposed in late September 2018 and which expired in April 2019 had a negative effect on prices. The 90-day trade truce between the United States and China that came into force on 1 January 2019 helped slow the decline in steel prices somewhat. Under the deal, the United States will not raise import tariffs on some Chinese goods to 25% (from the current 10%), and China will resume purchases of oil, agriculture products, and liquefied natural gas from the United States.

Global prices of grains and oilseeds were affected by revisions in harvest projections in Q4. Global wheat prices remained rather high, even though they were down on the previous quarter. Prices were supported by the fall in the global harvest in the 2018/2019 marketing year, the unfavorable weather for sowing winter crops, and robust demand. Prices decreased, however, after Argentina's new wheat harvest, having gained competitive advantages from a sharp depreciation of the Argentinian peso, started to come on the market. Corn prices fluctuated in a relatively narrow range. Corn prices were supported by the downgraded projections for the US corn harvest, but Brazil's increased corn output estimates kept prices from going up.

Prices for sunflower oil continued their sharp decline thanks to a sunflower harvest that hit a record high for the last decade and a drop in prices for related oilseeds. In particular, prices for soybean oil fell after the 25% tariff that China imposed on its imports from the US boosted soybean inventories.

After peaking at USD 85 per barrel in early Q4, oil prices went into free fall to test the level of USD 50 per barrel as the year ended. More specifically, global oil prices hit a four-year high in early October, driven by escalated trade conflicts and the anticipation of new sanctions against Iran, which have the potential to reduce the supply of oil in the market. In late

Chart 1.9. World Sunflower Oil Prices, USD/MT



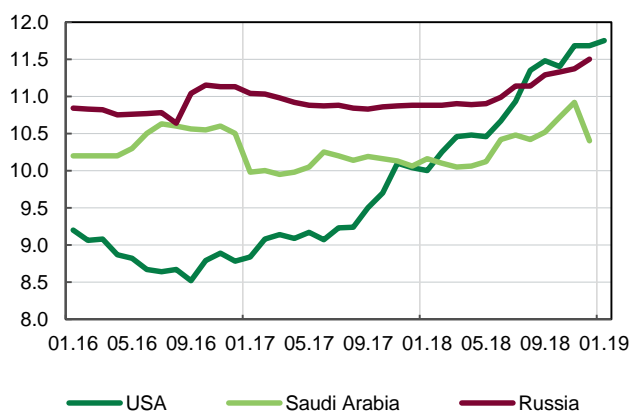
Source: Thomson Reuters.

Chart 1.10. World Crude Oil Prices, USD/bbl



Source: Thomson Reuters.

Chart 1.11. Crude Oil Production, million barrels per day



Source: U.S. Energy Information Administration, Ministry of Energy of Russian Federation.

October, however, market players went from anticipating a shortage of oil in the market to predicting a surplus, and oil prices plummeted. The following factors triggered that change in market sentiment:

- the world's leading oil producers (the United States, Russia, and Saudi Arabia), which jointly account for a third of global oil output, ramped up production
- the total production of oil by OPEC members continued to rise, reaching close to 33 million barrels per day³
- Saudi Arabia's energy minister said that there was no need to impose an oil embargo, as had occurred in 1973, and that the kingdom's oil production could continue to increase until it reaches 12 million barrels per day
- the United States eased its oil sanctions against Iran, decreasing the actual reduction in oil supplies from the country to 300,000 barrels per day from the projected 1 million barrels per day, experts estimate
- the global growth projections were revised downward.

Oil prices corrected at the start of 2019. Prices were supported by an OPEC+ deal under which oil producers were to cut production by 1.2 million barrels per day in 2019, and by market players' optimism about the US-China trade, as the countries had negotiated a truce in early January.

The surge in oil prices in previous periods and the weakening of national currencies against the US dollar caused overall inflation to accelerate further, especially in emerging markets. As a result, the external inflationary pressure from Ukraine's MTPs intensified, as shown by changes in the UAWCPI index⁴ (accelerated to 3.4% yoy in Q3).

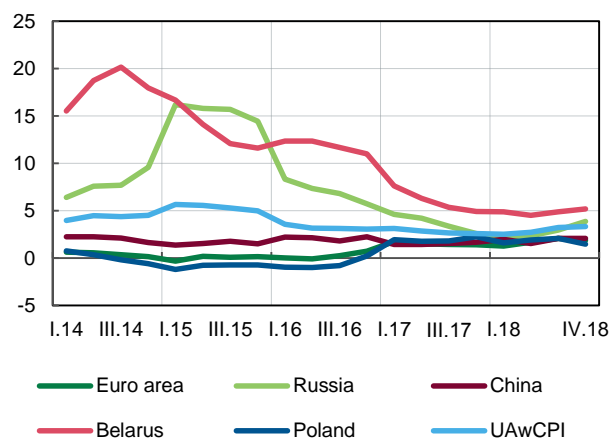
To keep inflationary and depreciation pressures in check, some central banks revised their monetary policies by raising key policy rates. The Fed hiked the federal funds rate by 25 bp in December, to 2.25%–2.5% as expected, but said it would raise the rate another two times instead of three in 2019, considering the downward revision of macroeconomic projections. Central banks in some emerging markets, including Russia, Kazakhstan, Mexico, the Czech Republic, South Africa, and Chile tightened their monetary policies as well, while the ECB confirmed it would wind down its quantitative easing program.

Global financial markets experienced a spike in volatility and diminished investor interest in risky assets in Q4. The deterioration in the global economic outlook was one of the key factors determining the overall dynamics of global indexes. The downbeat expectations were driven by worse-than-expected data on industrial production growth in China, the United States, and Germany, the deceleration of GDP

³ OPEC "Monthly Oil Market Report," 13 December 2018.

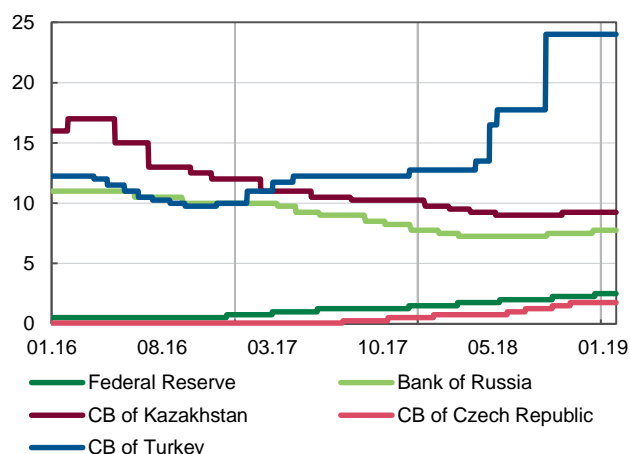
⁴ Read more about the UAWCPI index in the April 2016 Inflation Report.

Chart 1.12. Consumer Price Index of Selected Ukraine's MTP Countries and Weighted Average of Ukraine's MTP Countries' CPI (UAwCPI), % yoy



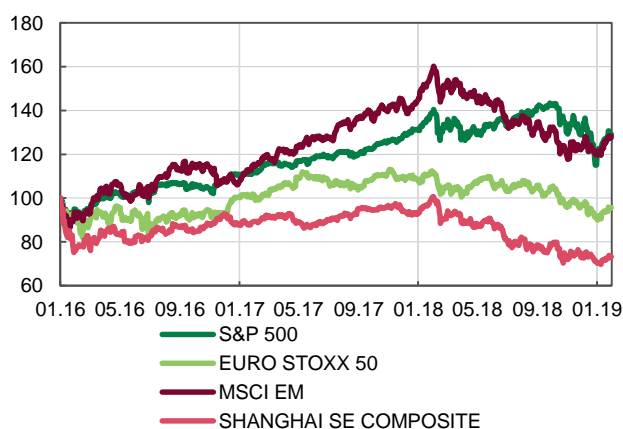
Source: National statistical agencies, NBU staff estimates.

Chart 1.13. Key Policy Rates in Selected Countries, %



Source: Official web-pages of central banks.

Chart 1.14. Global Equity Benchmarks, 01 Jan 2016 = 100



Source: Thomson Reuters.

growth in the euro area, the further widening of the US budget deficit, and the slowdown of growth in Chinese exports and imports. As a result, stock indices crashed around the globe in Q4, with the S&P 500 (-14%) falling the most, followed by the Euro Stoxx 50 (-11.7%) and the MSCI EM (-7.8%). Other factors that shaped stock market performance included:

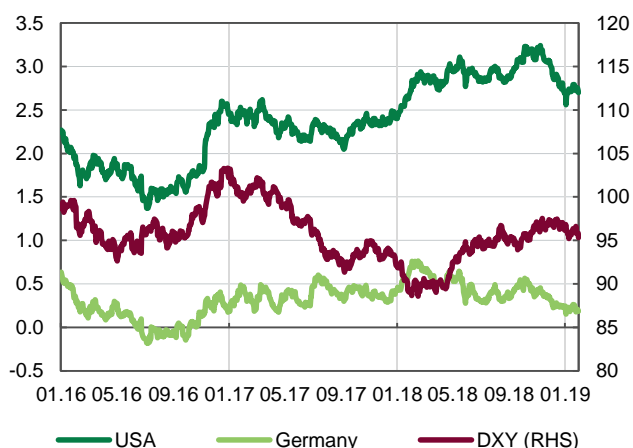
- risks of US growth decelerating. Investors interpreted the yield curve inversion as a sign of recession (the difference between yields on 10- and 2-year treasury bonds narrowing to 15 bp – the lowest since July 2007);
- US stock indices going through the final phase of a 10-year upturn;
- uncertainty over the Fed's future monetary policy stance. Recent signals from the Fed about slowing the pace of monetary policy tightening have been interpreted by market participants as ambiguous. Specifically, the Fed reduced the planned number of interest rate hikes in 2019–2020 after macroeconomic indicators worsened, but the Fed's median forecast of the federal funds rate reflected a different stance. The forecast puts the [federal funds rate at 3.1% in late 2020 through 2021, which exceeds 2.8% – the median estimate of the neutral level](#);
- declining prices of the stocks of the large companies that usually determine market dynamics. Of the latter, the so-called FAANG companies (Facebook, Apple, Amazon, Netflix, and Google) have seen their stocks fall amid investor fears of tighter regulation, pessimistic quarterly reports from some companies, and lukewarm demand in certain segments (such as semiconductors and iPhones).

The flight to safe assets drove down the long-term government bond yields. The 10-year treasury bond yields fell to 2.69% in late December, the lowest level in the past year.

At the same time, the MSCI EM index showed certain resilience in the face of the overall deterioration in global financial market conditions. The attractiveness of emerging market assets to investors was buoyed by:

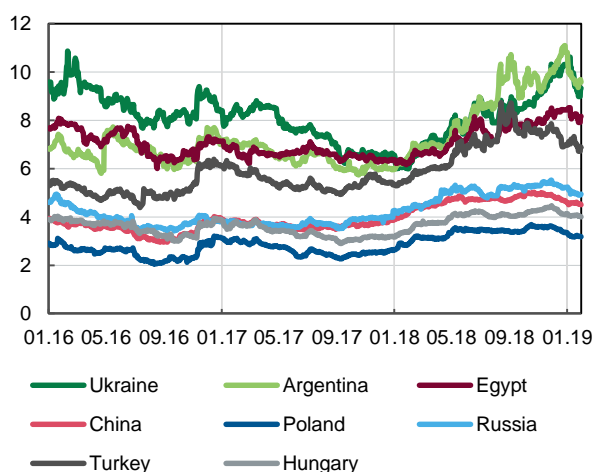
- the Fed's rhetoric regarding the slower pace of monetary policy normalization
- The stabilization of the US dollar against the basket of major currencies, and the strengthening of the euro
- measures by the Chinese government to support the stock market, and the stabilization of the yuan, the currency to which foreign investors orient their decisions (Chinese stocks account for 30% of the MSCI EM index, making it strongly correlated with movements in the Chinese currency)
- undervalued stocks (with prices being the lowest in the past four-and-a-half years). The long and large-scale selloff that began at the start of the year saw the MSCI EM lose 19% in January–October as it surrendered USD 5.5 trillion in stock value.
- the temporary trade truce the United States and China hammered out during the G20 meeting

Chart 1.15. US and Germany 10-Year Government Bonds Yields



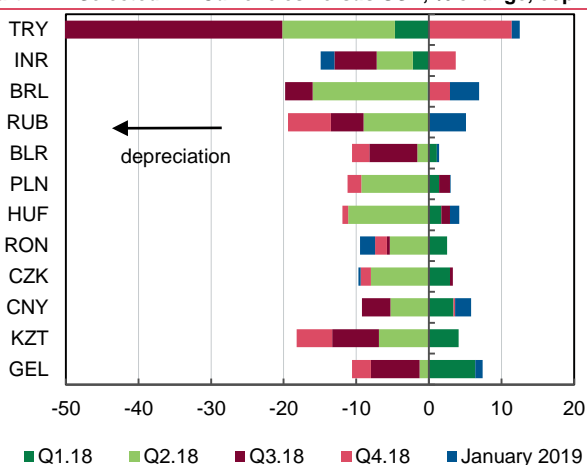
Source: Thomson Reuters.

Chart 1.16. JP Morgan EMBI+ of Selected EM



Source: Bloomberg.

Chart 1.17. Selected EM Currencies versus USD, % change, eop



Source: Thomson Reuters.

- the brighter growth outlook for 2019 for emerging markets, amid the projected slowdown of the US economy
- the lack of highly lucrative financial assets in global financial markets. In best-case scenarios, these assets make up for inflation-related losses.

Stock market conditions in developed countries worsened in early December, triggering investor risk aversion, and thus worsening the performance of emerging market assets. The risk premium increased (as 10-year treasury bond yields fell), the MSCI EM lost a lot of ground, and most of the currencies in this country group depreciated.

Meanwhile, conditions for emerging markets in the world commodity markets improved at the start of 2019 when news broke of the positive progress in US-China trade talks. Additional factors were: China publishing its plans to support economic growth by scaling up its tax-cutting effort and injecting record amounts of cash into the economy, ECB President Mario Draghi commenting on the need for continued stimulus in the euro area, and large companies like Boeing, McDonald's, and Apple reporting higher-than-expected earnings. As a result, the majority of emerging market currencies appreciated in January amid a relative stability of US dollar against the basket of major currencies.

Part 2. Domestic Economy

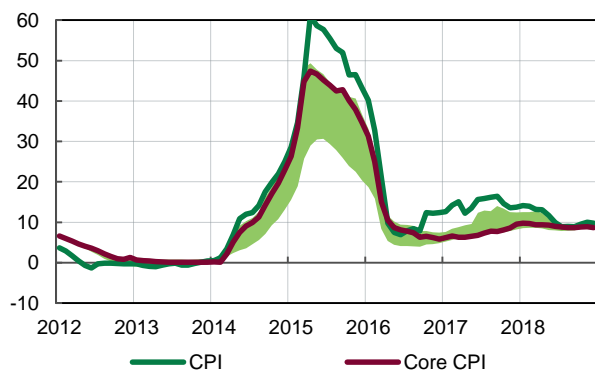
2.1. Inflation Developments

Consumer price inflation declined to a five-year low of 9.8% in 2018 (down from 13.7% in 2017). The curbing of inflation and its return to single-digits was aided by the NBU's tight monetary policy, which was also reflected in the strengthening of the hryvnia. The growth in the domestic supply of some foods and a fall in global food prices were another two factors contributing to the decrease in inflation.

As expected, inflation exceeded the year-end target of $6\% \pm 2$ pp stipulated in the NBU's [Monetary Policy Guidelines for 2018 and the Medium Term](#). The deviation from the target was largely due to factors over which monetary policy has only a limited effect. These included the growth in administered prices and tariffs and the increase in global oil prices, which lasted for most of the year.

Consumer demand and pressure from higher production costs were major inflation drivers. The robust consumer demand was generated by rapid growth in wages and energy prices throughout most of the year. Uncertainty over whether cooperation with the IMF would resume and high external risks also kept inflation expectations high during most of the year, and hence impeded the improvement of inflation expectations.

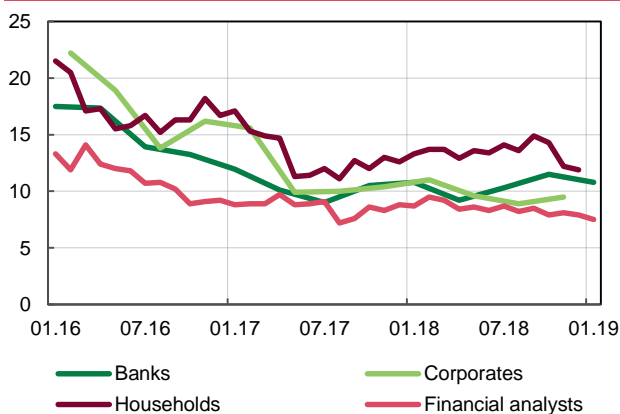
Chart 2.1.1. Main Inflation Trends*, % yoy



* Green field reflects a range of core inflation rates.

Source: NBU staff estimates.

Chart 2.1.2. Inflation Expectations for the Next 12 Months, %



Source: NBU, GfK Ukraine.

Core Inflation

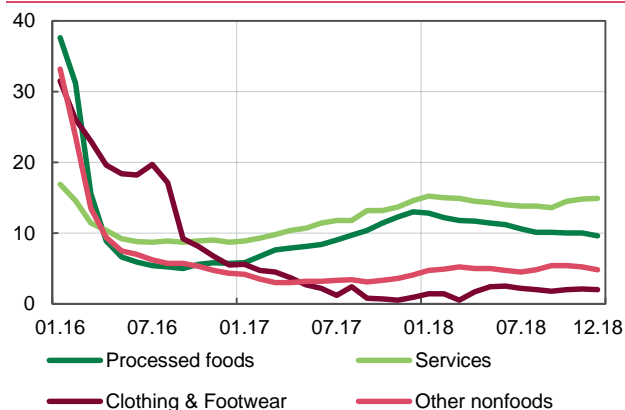
Year-end core inflation decelerated to 8.7% yoy in 2018, from 9.5% yoy in 2017. However, underlying inflationary pressure remained strong, while the decrease in core inflation was slower than the NBU projected.

As evident from alternative measures⁵, the lower bound of the range of core inflation readings has remained almost unchanged over the past three quarters. In 2018, however, this range narrowed sharply, with its asymmetry relative to the official indicator of core inflation diminishing. This provided evidence that price patterns of the representative goods (services) included in the CPI calculation became more homogenous under the influence of common factors, including those on which monetary policy has limited effect, such as wage growth and a fade-out of temporary supply factors.

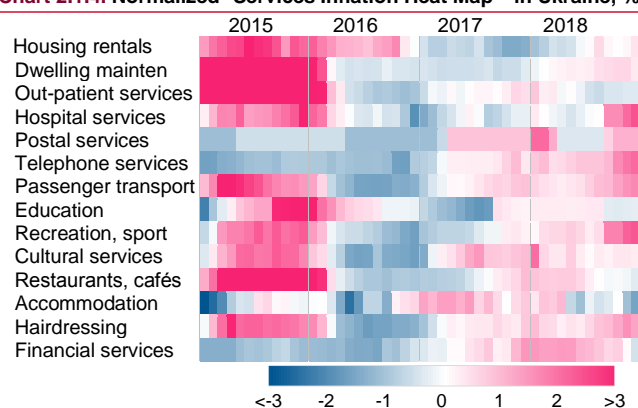
A moderate decline in inflation expectations among certain groups of respondents, including financial analysts and corporates, also impacted core inflation. Households improved their inflation expectations considerably in Q4 2018, thanks to, among other things, favorable FX market conditions. Simultaneously, during previous quarters households' inflation expectations deteriorated, in particular due to higher expected utility tariffs, including gas prices. Furthermore, the inflation expectations of all groups of respondents remained higher than either the inflation targets or the NBU's inflation forecast.

According to the [business outlook survey for Q4 2018](#), inflation expectations of corporates retreated, but the number of companies that anticipated that prices of production resources would grow increased on the previous year. Corporates expected higher prices for the goods or services

⁵ Read more in the January 2017 Inflation Report (pages 20–21).

Chart 2.1.3. Main Components of Core CPI, % yoy

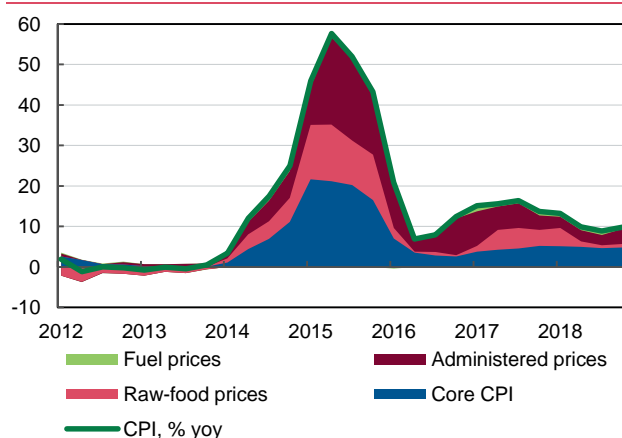
Source: SSSU, NBU staff estimates.

Chart 2.1.4. 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.

Chart 2.1.5. Contributions to Annual Inflation, eoq, pp

Source: SSSU, NBU staff estimates.

they purchased, which would feed into an increase in the prices of their own products.

The growth rates of the services prices that are included into core inflation also increased (14.9% yoy) on higher production costs, including labor costs. Among other things, substantial increases were recorded in the prices of mobile telephone services, out-patient services, repair services, dwelling maintenance, car insurance, and housing rentals.

On the contrary, the growth rates of the prices for non-food products, which are mostly imported, remained low (4.1% yoy) due to the strengthening of the hryvnia against the currencies of Ukraine's MTPs. In particular, the price of cars grew at a slower pace than last year (3.3% yoy), while prices for TV sets, mobile phones and computer equipment actually dropped compared to last year. The growth in the prices of clothing and footwear also remained slow (2.0% yoy).

The rate of growth in prices for highly processed foods declined (to 9.6% yoy), helping drive core inflation lower. In the first half of 2018, prices for this product group grew at a rather high pace, as expected, due to the effects of the pass-through of the rapid rise in prices for raw foods in 2017. The gradual fading of this factor, coupled with the decline in global prices and the expansion of the supply of raw foods, including meat, caused the growth in food prices to slow. In addition, the pass-through effects of the high harvest of 2018 will have a positive impact on inflation in the first half of 2019.

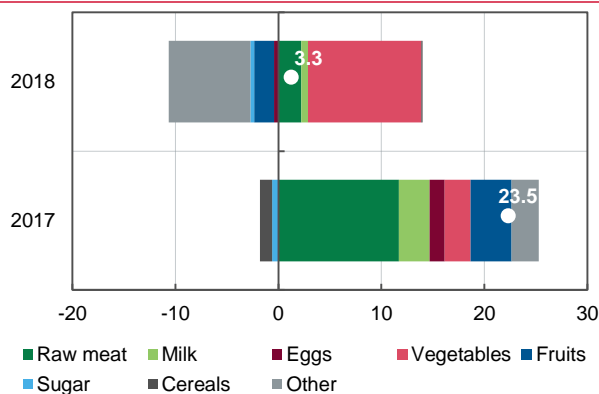
In 2018, the growth in the prices of meat and dairy products slowed (to 11.9% yoy and 10.0% yoy, respectively). The record harvest of sunflower, along with lower global prices, helped slow the growth in the prices of sunflower oil (up 2.4% yoy). At the same time, more expensive wheat flour and the rise in other production costs prevented the slowdown in the growth of prices of processed foods. As a result, bread and confectionery products posted solid price rises (21.5% yoy and 11.8% yoy, respectively), while the growth in the prices of pasta even accelerated somewhat (to 14.7% yoy).

Non-Core Inflation

In 2018, non-core inflation decelerated (to 10.7% yoy, down from 19.4% yoy in 2017). This was primarily due to a significant decrease in the growth rate of raw food prices (to 3.3% yoy, compared to 23.5% yoy a year earlier). Indeed, 2018 saw a drop in the prices of fruit (down 17.0% yoy), primarily due to the bumper apple harvest and lower prices for imported bananas and citrus fruits. In addition, compared to the previous year, egg prices fell (by 9.5% yoy) against the background of falling prices in foreign markets and an increase in poultry production in H2 2018. The growth in prices of meat and dairy products slowed in 2018 (to 8.2% yoy and 8.3% yoy, respectively).

A significant factor in the reduction of food price inflation was a certain easing of the impact of the convergence between retail prices for food in Ukraine and the prices in neighboring countries, one of the major drivers of inflationary pressures in Ukraine in previous years. This was the consequence of both

Chart 2.1.6. Contributions to the Change in Raw Food Prices, pp

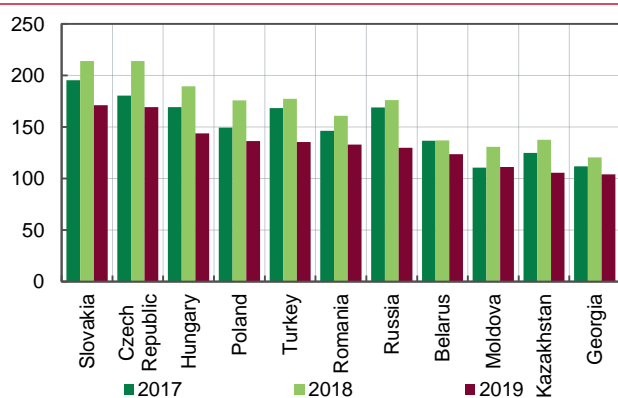


Source: SSSU, NBU staff estimates.

rather high growth rates of food prices in Ukraine in previous periods, and the easing of upward pressure on food prices in Ukraine's MTPs.

At the same time, prices for the vegetables that are used for cooking borsch grew at a fast pace in 2018 (up 73.7% yoy). This was attributed to the insufficient supply of these vegetables due to unfavorable weather conditions and the poor harvest in Europe, as well as the poor harvest of some domestic vegetables. More specifically, onion prices tripled, cabbage prices doubled, while beetroot and carrot prices were up by 74.6% and 79.1% yoy, respectively. In addition, flour and semolina grew in price (by 20.0% and 17.1% yoy, respectively) in 2018, due to the increase in wheat prices in external markets and the somewhat lower domestic supply compared to last year.

Chart 2.1.7. Grocery Index* at the beginning of the year, Ukraine = 100

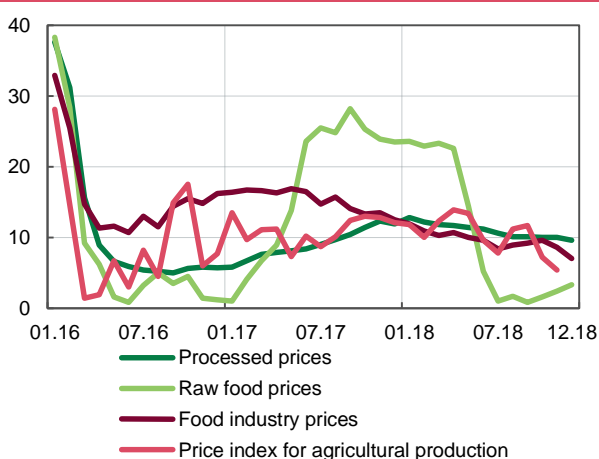


* Groceries Index is used to estimate grocery prices in the country compared to New York City for the last 12 months, calculated for the case of Ukraine.

Source: numbeo.com, NBU staff estimates.

The producer price pressure on food prices also eased slightly in 2018, as price growth in the manufacture of foods, beverages, and tobacco slowed from last year (to 7.0% yoy). In particular, the growth in producer prices for meat and dairy products decelerated (to 3.5% yoy and 9.8% yoy, respectively). This was primarily due to lower global prices and slower growth in purchasing prices. An additional factor was the expansion of the supply of imported goods. In particular, the reduction in the domestic production of pork was offset by an increase in imports. Prices for bakery and farinaceous products grew somewhat more slowly (14.7% yoy). The growth in raw material prices (primarily, due to rising wheat prices), labor costs, and electricity rates was balanced out by lower prices for rye flour and products made from it. Producer and consumer prices for sugar declined (by 7.2% yoy and 9.3% yoy, respectively) amid falling world prices and significant inventories of these products. At the same time, producer price growth in the manufacture of beverages accelerated (to 16.9% yoy).

Chart 2.1.8. Raw and Processed Food Prices in Food Industry and Agricultural Production, % yoy



Source: SSSU, NBU staff estimates.

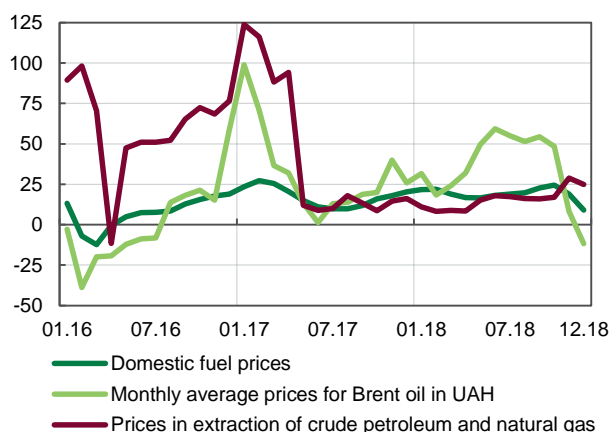
The rise in administered prices and tariffs accelerated (to 18.0% yoy from 16.1% yoy in 2017). The following tariffs were raised during the year:

- natural gas (since 1 November 2018, by 22.9%)
- postal services (in January and September, by a total of 75%)
- local telephone services (in January, June, and November, by a total of 21.7%)
- water supply and sewerage collection.

The increase in production costs made a significant contribution to price growth in this group. Labor costs account for the lion's share of the costs of these services (for some services, the share of labor costs approaches 70%). In addition, higher fuel and energy prices had a significant impact on production costs.

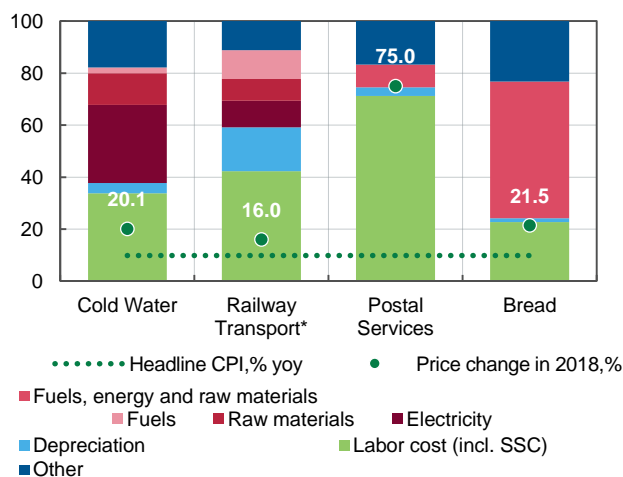
The growth in fuel prices slowed to 9.1% in December 2018 from 20.0% in 2017 thanks to a reversal in the uptrend in

Chart 2.1.9. Fuel Price Indexes, %



Source: SSSU, Thomson Reuters.

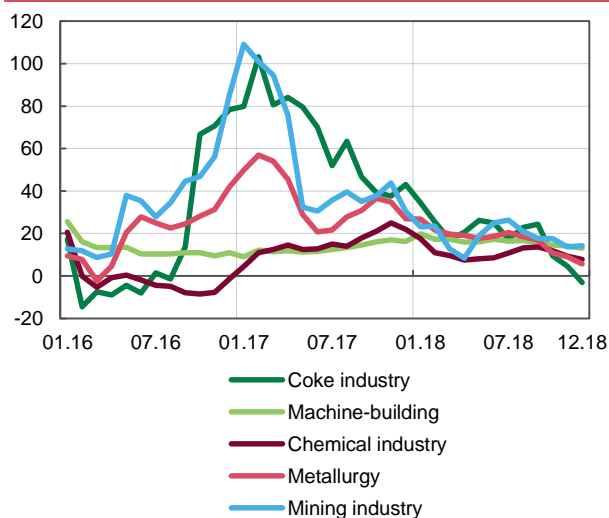
Chart 2.1.10. Cost Structure, pp, and Price Changes for Selected Administered Products and Services, % yoy



* Combined passenger and cargo transportation.

Source: financial statements of enterprises, NERC, NBU staff estimates, SSSU.

Chart 2.1.11. Producer Price Indexes in Select Industries, % yoy



Source: SSSU.

global oil prices in October 2018, and also thanks to a stronger hryvnia. But for most of the year fuel prices grew at a high pace. Accordingly, the growth in the cost of transport services accelerated during 2018. The prices of road passenger transport grew the most (by 30.3% yoy). In addition, there was an acceleration in the growth of railroad transportation prices to 15.9% yoy (JSC “Ukrainian railways” raised tariffs for passenger transportation twice in 2018) and air travel fares (to 17.8% yoy).

The growth of electricity prices for industrial consumers also accelerated significantly (to 29.8% yoy in December 2018 compared to 4.0% yoy in December 2017). Electricity is a significant cost component, particularly in the production of bread.

As a result of a significant increase in excise taxes, tobacco product prices grew at a high rate (by 24.5% yoy), albeit more slowly than in the previous year.

Other Measures of Inflation

The growth in the producer price index (PPI) decelerated substantially in 2018, to 14.2% yoy from 16.5% yoy in 2017, but remained high throughout the year.

The slowdown in producer price inflation was primarily due to lower growth rates in the mining and manufacturing industries amid similar external trends. Thus, due to the decline in world prices for iron ore and steel, the domestic mining of metal ores and metallurgy saw their prices slow (to 8.2% yoy and 5.6% yoy, respectively).

The decline in global oil prices at the end of the year led to a drop in prices for coke and refined petroleum products (by 3.1% yoy), as well as to a drop in the price growth in the chemical industry (7.7% yoy). However, this factor did not yet affect the prices in the extraction of crude oil and natural gas (prices were up 24.9% yoy in 2018). This is primarily due to the still high annual rate of growth for global prices for natural gas. In addition, along with the increase in household tariffs for natural gas, the cost of gas sold by state-owned extraction companies to NJSC “Naftogaz of Ukraine” was raised in November 2018.

In particular, the growth in prices for electrical equipment slowed significantly (to 13.5% yoy), thanks to a favorable comparison base: prices had surged a year earlier, driven by a global deficit of graphite electrodes.

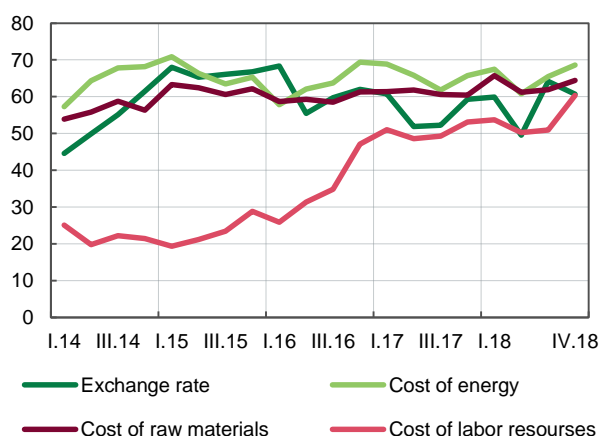
Faster price growth in electricity, gas, steam, and conditioned air supplies (up 29.8% yoy) was the main factor preventing the slowdown in producer price inflation. Increases in energy prices throughout the year were driven by the following developments:

- the NERC raised electricity tariffs for consumers other than households
- NJSC “Naftogaz of Ukraine” raised its tariffs for supplying natural gas to industrial consumers

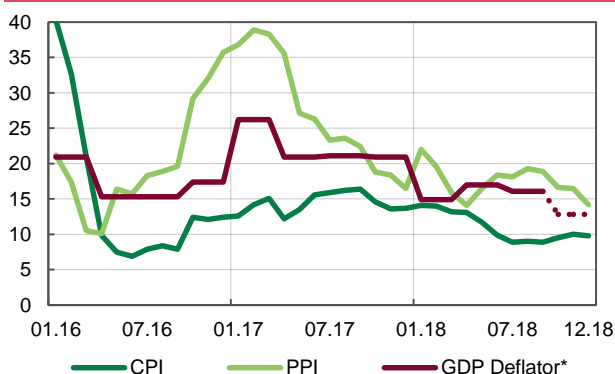
Chart 2.1.12. Producer Price Indexes by Industry, % yoy

* SSSU began publishing data on the dynamics of industrial prices for products that are sold outside Ukraine starting 2018.

Source: SSSU.

Chart 2.1.13. Impact of Factors on Estimated Price Changes in Goods and Services Sold by Companies

Source: NBU.

Chart 2.1.14. Select Inflation Indicators,% yoy

* Data for Q4 2018 – according to the NBU staff estimates.

Source: SSSU.

- the share of less costly nuclear power in the production of electricity shrank.

Meanwhile, inflation in the energy sector was restrained by the lower cost of TPP electricity production on the back of slower growth in the cost of coal.

Second-round effects of higher electricity prices were also reflected in the prices of other goods and services. This applies above all to enterprises with high shares of electricity in their production costs: electric transport, utilities, especially water supply, baking, and other food industries, etc. The growth in the cost of construction activities accelerated in 2018 (to 19.1% yoy), driven by higher production costs, including labor costs.

The [business outlook survey conducted in Q4 2018](#), highlighted upward pressure on prices arising from higher production costs. In particular, respondents pointed out a significant increase in the impact of the labor costs factor on producer prices, amid a shortage of skilled employees and the growth of real wages. In addition, the impact of the cost of raw materials and the cost of energy increased due to higher spending on these components of production costs.

In Q3 2018, the GDP deflator declined somewhat, compared to both the previous year and the previous quarter. This was due to slower growth in agricultural prices and lower consumer price inflation. At the same time, the accelerated growth in the costs of construction, electricity, gas, steam, air conditioning, and financial and insurance activities kept the GDP deflator high. The NBU expects a further decline in the GDP deflator in Q4 2018, largely due to slower increases in consumer, industrial, and agricultural prices.

Box 1. Inflation Forecast Assessment

The January 2018 inflation forecast envisaged that a tight monetary policy would slow inflation, bringing it back to the upper bound of the target range. The NBU also expected that inflation would hit $6\% \pm 2$ pp as of the end of 2018, exceeding its target due to a range of pro-inflationary factors. In particular, especially in the first half of 2018, the impact from second-round effects arising from the sharp rise in raw food prices seen in 2017 remained significant, as expected. This was reflected in the high rates of growth in the prices of processed foods. In addition, the NBU anticipated that sharp increases in global oil prices, coupled with uncertainty as to whether or not cooperation with the IMF would resume, would result in considerable inflationary pressures. The central bank also made a conscious decision to lengthen the period for bringing inflation back to the target, so as to minimize costs for economic growth. Balancing the need to bring inflation back to its target against promoting economic growth reflects the flexibility of the inflation-targeting regime.

Table 1. Deviations from external assumptions made in the NBU forecast (January 2018)

Variable	Forecast	Actual
ECPI, eop, % yoy	-7.4	-3.8
ECPI (annual average), % yoy	-1.4	8
Brent, USD / bbl (annual average)	62.7	71.4
CPI in Euro area, % yoy	1.5	1.7

Table 2. Deviations from key macroeconomic variables made in the NBU forecast (January 2018)

Variable	Forecast	Actual
CPI, % yoy	8.9	9.8
Real GDP, % yoy	3.4	3.3*
Real wages, % yoy	8.8	12.5
Consolidated Budget Balance, % of GDP *	-2.4	-1.9*
Hryvnia REER (annual average), % yoy	1.8	5.9

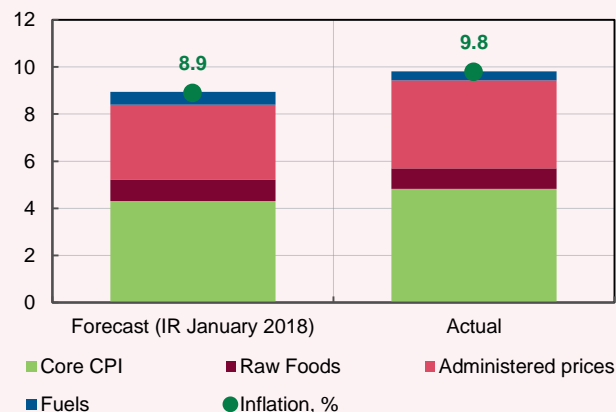
* GDP in 2018 – according to the NBU staff estimates.

Source: NBU staff estimates.

Nevertheless, although declining noticeably, the 2018 actual inflation rate of 9.8% exceeded the NBU's forecast of 8.9% published in the Inflation Report in early 2018. The main reason for this was that new pro-inflationary factors appeared in 2018, and these were not factored into the forecast.

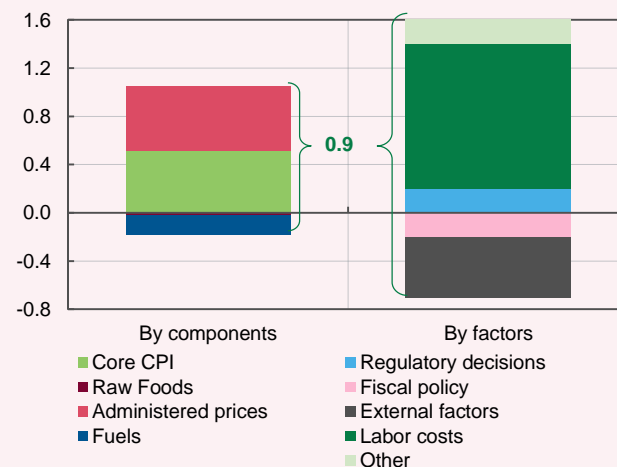
More specifically, higher-than-expected growth in administered prices and core inflation had a significant influence on the deviation from the forecast. This was mainly due to stronger pressures from production costs, in particular labor costs. Real wages increased by 12.5% yoy in 2018, exceeding the NBU's forecast. This had the strongest impact on the growth in the prices of those services, the cost of which largely depends on labor costs. Specifically, the prices of water supply and sewage collection, transportation, postal and telephone services grew faster than expected. This factor also led to faster than expected growth in the prices of market services and those processed foods that are part of core inflation.

Chart 1. Forecast and Actual Annual CPI Growth in 2018 by Main Components, pp



Source: SSSU, NBU staff estimates.

Chart 2. Annual CPI Inflation Forecast Error, pp



Source: NBU staff estimates.

Global oil prices increased throughout most of the year, which also had a bearing on the cost of goods and services. In contrast, Q4 saw a dramatic plunge in global oil prices. Although helping to reduce the direct contribution of fuel price growth to CPI change, this has not yet affected the prices of goods and services via second-round effects.

One important factor of the deviation was the implementation of previously delayed regulatory decisions to raise prices to an even greater extent than expected. Specifically, despite the uncertainly seen throughout the year, gas prices for households were marked up by 22.9% from 1 November 2018, which was more than the NBU expected in January 2018 (16.7% yoy).

Meanwhile, inflation was reined in by a range of favorable external factors. More specifically, drops in global food prices helped decrease the growth in domestic raw food prices. Higher global prices for Ukrainian exports, against the backdrop of a change in behavioral factors, lead to more benign FX market conditions than expected. On the back of

a weakening of Ukraine's MTP currencies the hryvnia's NEER strengthened, and imported inflation dropped. Fiscal policy was also slightly tighter and the budget ran a smaller deficit than the NBU had forecast in early 2018.

At the same time, other pro-inflationary factors included uncertainty related to further cooperation with the IMF, less favorable conditions on the global financial markets for emerging markets, and the heightened tensions in the Sea of Azov. These factors both increased the external vulnerability of the Ukrainian economy and weakened confidence in the country, contributing to corporates' and households' high

inflation expectations, and gradually eroding business expectations.

The NBU responded appropriately to such heightened risks by raising the key policy rate. However, the tighter monetary policy did not fully offset the impact from these factors. This was due to the fact that monetary policy influences the economy with a lag from 9 to 18 months. Furthermore, a number of these pro-inflationary factors were beyond the direct reach of monetary policy. The NBU's policy will continue to focus on containing inflation, and achieving the mid-term inflation target of $5\% \pm 1$ pp.

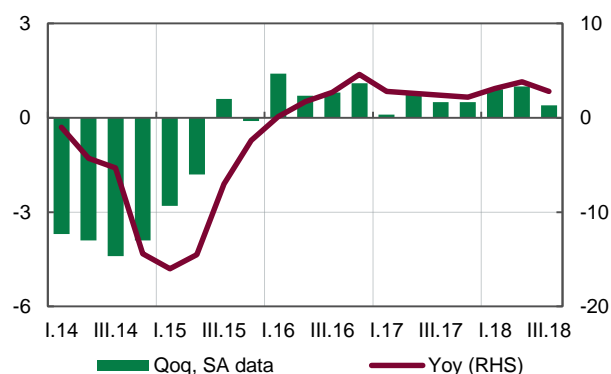
2.2. Demand and Output

In Q3 2018, the growth in real GDP decelerated to 2.8% yoy, and was practically in line with the NBU's estimate published in the October 2018 Inflation Report. The deceleration resulted from a slump in GVA growth in the agricultural sector (due to the waning effects of the early start of the grain crop harvesting campaign), and slower growth in the industrial sector.

The growth in household consumption accelerated noticeably, fueled by the steady growth in real disposable income, as well as strong consumer sentiment. This sped up the growth in final consumer expenditure, despite there being a drop in general government consumption, mainly due to a tighter fiscal policy. The negative contribution of net exports to real GDP growth increased, both on the back of more robust import growth and a decline in exports of goods and services. Among other things, the decline in exports hampered the pre-tax financial results of companies. This, in turn, weighed on investment growth, as companies continued to rely predominantly on their own funds to finance their investment activity. Other impediments to investment activity included the Azov Sea conflict, uncertainty as to further cooperation with the IMF, as well as external risks.

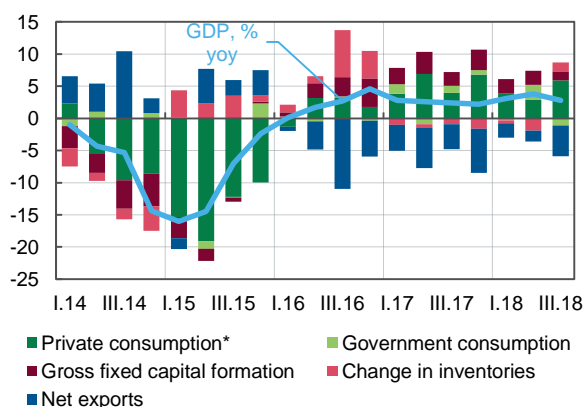
According to the NBU's estimates, real GDP growth accelerated to 3.3% yoy in Q4, largely propelled by the record harvest of late-season grain crops and leguminous crops. Retail trade turnover continued to increase at a fast pace, which was evidence of sustained consumer demand. In contrast, the performance figures of the industrial sector were modest, due to less benign external markets, ongoing repairs at some mining and metallurgical companies, and transportation and logistics difficulties. Less favorable weather compared to last year was a drag on the performance of construction and transportation. As a consequence, real GDP growth is expected to be slightly weaker both in Q4 2018 and for the whole of 2018, compared to the previous forecast.

Chart 2.2.1. Real GDP, %



Source: SSSU.

Chart 2.2.2. Contributions of Final Use Categories to Annual GDP Growth, pp



* Including consumption expenditures of households and non-profit institutions serving households.

Source: SSSU, NBU staff estimates.

Aggregate demand

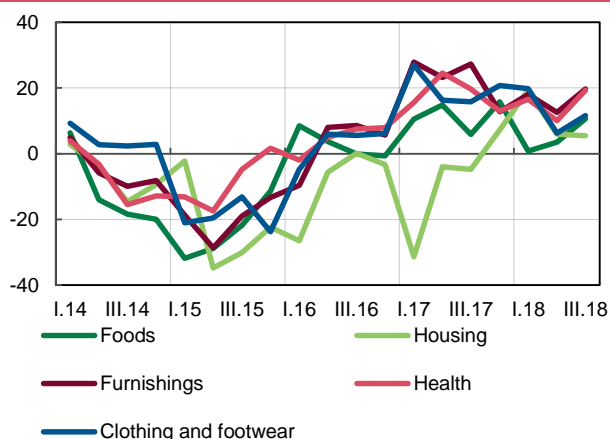
In Q3 2018, real GDP growth slowed to 2.8% yoy, while increasing by 0.4% qoq in seasonally adjusted terms.

As in previous periods, real GDP growth was largely supported by consumer demand. In particular, household consumption growth sped up markedly, to 9.7% yoy compared to 4.2% yoy in Q2. Private consumption picked up, buoyed both by increases in wages, pensions and remittances from labor migrants, and by relatively strong consumer sentiment. Meanwhile, government consumption declined by 6.7% yoy, compared to the 11% yoy surge seen in the previous quarter, on the back of a rather tight fiscal policy. Overall, the growth in final consumption expenditure accelerated only slightly (to 5.8% yoy compared to 5.6% yoy in Q2).

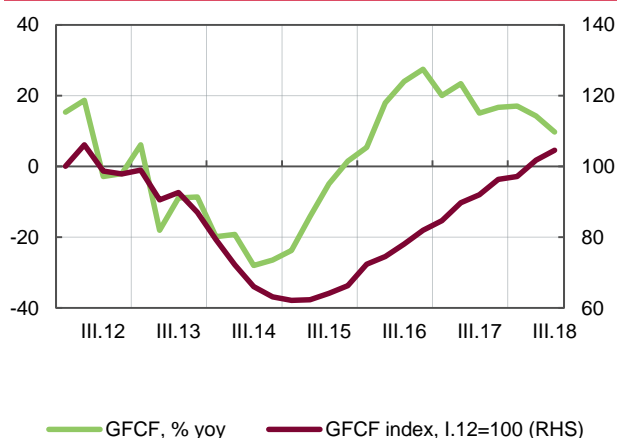
High household income spurred a rise in household consumption in all segments. In particular, expenditure on furnishing and household equipment and health care grew the fastest (by 19.7% yoy and 19.3% yoy respectively). There was a significant rise in spending on clothing and footwear, foods, alcohol, and tobacco. The growth in spending on communications and recreational and cultural services accelerated, while expenditure on education returned to growth. The growth in spending on housing and utilities slackened but remained solid.

The growth in gross fixed capital formation slowed to 9.7% yoy. The weaker investment activity was mainly attributed to weaker pre-tax financial results in the first nine months of 2018⁶, because of, among other things, modest export performance and a mild deterioration in business

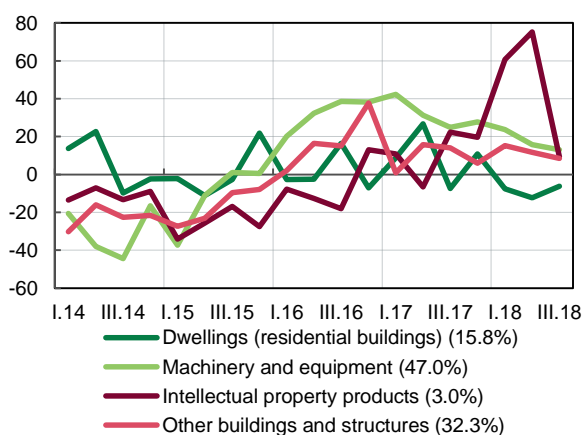
⁶Although remaining in the positive territory in January – September 2018, pre-tax financial results of large and medium companies dropped by 12.4% yoy, with profit growth decelerating for two quarters in a row (to 2.6% yoy), and the growth in losses accelerating (to 29.9% yoy).

Chart 2.2.3. Real Final Consumption Expenditure of Households by Purpose*, % yoy

* Foods include also non-alcoholic beverages; furnishings – household equipment and routine maintenance of the house; housing – water, electricity, gas and other fuels.
Source: SSSU, NBU staff estimates.

Chart 2.2.4. GFCF index and change in %

Source: SSSU, NBU staff estimates.

Chart 2.2.5. GFCF by Types of Non-financial Assets, % yoy (structure for 2017, %)

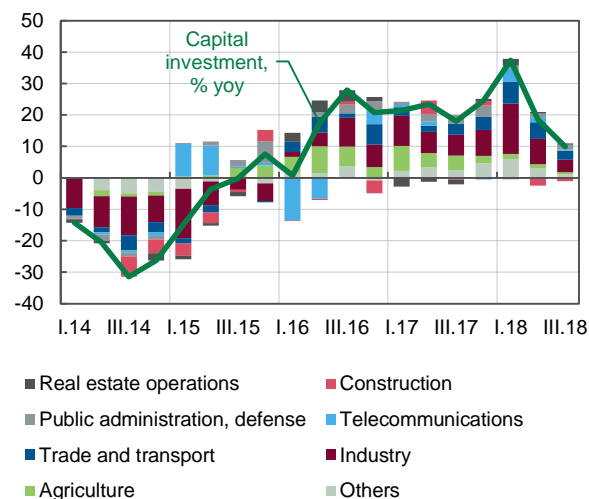
Source: SSSU, NBU staff estimates.

expectations (the BEI was 117.2%, down from 118.3% in Q2 2018 and 120.6% in Q1 2018). The latter factor mainly resulted from risks of an escalation of the Azov Sea conflict, continued international trade tensions, uncertainty related to further cooperation with the IMF, etc. Another factor behind the expected decline in investment growth was the waning effect of the pent-up investment seen during the crisis and in the post-crisis period. Indeed, in 2018, the index of gross fixed capital formation reached the level of 2012. That said, the overall growth in gross fixed capital formation sped up to 15.3% yoy, driven by a build-up in inventories, and in particular, due to corn being harvested faster in 2018 compared to last year.

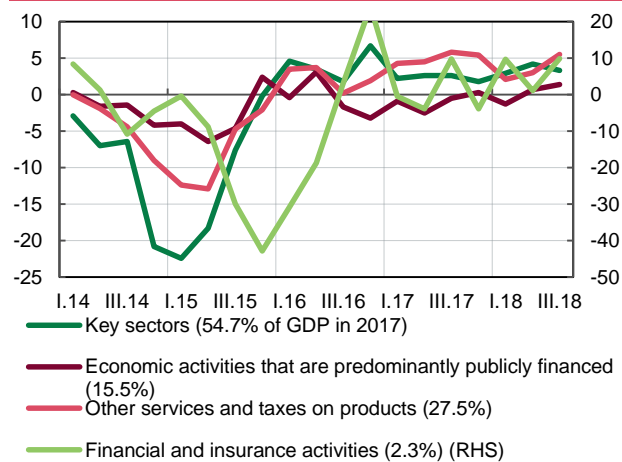
Across asset types, there was a significant slowdown in the growth of fixed investment in intellectual property (to 9.3% yoy). The main reason for this was the fading effect of investments in 4G licenses, which was also responsible for the considerably weaker growth in capital investment in the telecommunications sector. Another factor may have been the diminishing effect of the large investment in software and data protection systems that began in the latter half of 2017 (following the large-scale virus attack on computer networks seen in June 2017).

Although slowing further, the growth in gross fixed capital formation in tangible assets remained significant. Investment in machinery and equipment and in other buildings and structures kept growing at a solid pace (by 13.0% yoy and 8.4% yoy, respectively). Among other things, this was attributed to a rebound in investment activity in the mining industry and some branches of the manufacturing industry. More specifically, some metallurgical companies continued to do scheduled overhauls of old production facilities and to construct new ones (such as continuous casting machines and pulverized coal injection systems for blast furnaces, etc.). Major investment projects were undertaken by Naftogaz of Ukraine NJSC ([according to the company's data](#), in Q3 2018, it ramped up its capital investment in fixed and intangible assets by 4.1 times yoy, while increasing its net cash used in investment activities in Q3 2018 – by four times yoy). Ukrainian railways JSC also continued to step up its capital investment to reconstruct rail tracks, purchase General Electric locomotives, overhaul locomotives, and to upgrade passenger wagons.

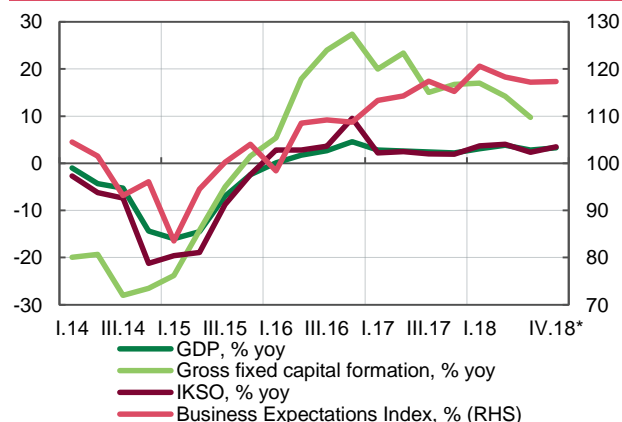
Apart from that, the growth in investment in weapon systems sped up markedly (by 2.2 times), propped up largely by a 30.5% yoy increase in budget expenditure on defense in 2018. The decline in residential housing investment slowed to 6.3% yoy, compared to 12.3% yoy in Q2 2018.

Chart 2.2.6. Contributions to Annual Growth of Capital Investment, pp

Source: SSSU, NBU staff estimates.

Chart 2.2.7. GVA by the Groups of Sectors, % yoy

Source: SSSU, NBU staff estimates.

Chart 2.2.8. Real GDP, IKSO, Gross Fixed Capital Formation and Business Expectations

* Q4 2018: GDP – NBU estimates.

Source: SSSU, NBU staff estimates and surveys.

Meanwhile, weaker investment activity was reported by the agricultural sector⁷, wholesale and retail trade, and transportation, with some sectors trimming back their capital investment (these included the food and chemical industries, manufacture of products made of wood, manufacture of motor vehicles, and research and development).

Companies predominantly relied on their own funds to finance investment activity, despite there being some reduction in the share of these funds (to 73.2% in January – September 2018), due to weaker pre-tax financial results. In H2, the share of budgetary funds in total investment edged up (to 9.7%), as is often the case in the latter half of the year. The role of other sources, such as bank lending, foreign investment, and household funds for residential construction, remained comparatively insignificant.

The negative contribution of net exports to real GDP growth increased to 4.8 pp. Sustained growth in domestic demand spurred import growth (to 5.1% yoy). In contrast, exports of goods and services dropped (by 5.2% yoy), dragged by a less benign external environment, the effects of last year's high comparison base, and the escalating tensions in the Sea of Azov.

Gross Value Added

The weaker growth in real GDP recorded in Q3 2018 resulted mainly from slower GVA growth in the agricultural sector (3.0% yoy compared to 19.3% yoy in Q2), due to the waning effects of the early start of grain harvesting.

GVA growth in the manufacturing industry also decelerated (to 1.0% yoy), driven largely by the gradual deterioration of external environment, ongoing repairs at some mining and metallurgical companies, and transportation and logistics difficulties. Meanwhile, GVA growth in electricity, gas, steam and air conditioning supply declined by 1.7% yoy. In contrast, GVA growth in the mining industry sped up to 3.1% yoy, fueled mainly by an increase in coal production.

The largest contribution to GDP growth was made by the GVA of trade (up by 6.2% yoy), thanks to rising consumer demand. The same factor boosted GVA growth in transportation (by 2.7% yoy), as it did in other services sectors. Health care was the only services sector that reported a GVA drop, of 3.3% yoy.

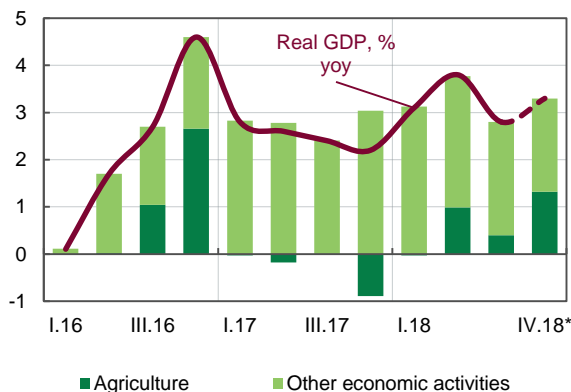
GVA growth in construction and financial and insurance activities accelerated (to 8.7% yoy and 9.9% yoy, respectively), with the growth of the latter reflecting improved performance of both the banking and non-banking financial sectors.

Estimates for Q4 2018

According to the NBU's estimates, real GDP growth accelerated to 3.3% yoy in Q4. This was mainly attributable to the buoyant growth in agricultural output, largely on

⁷Q3 2018 witnessed a further slump in imports of agricultural machinery (by almost 16%) on the back of the drop in foreign exchange earnings from grain exports seen in H1 2018.

Chart 2.2.9. Contributions to Annual GDP Change, pp



* IV.18 – NBU’s estimates.
Source: SSSU, NBU staff estimates.

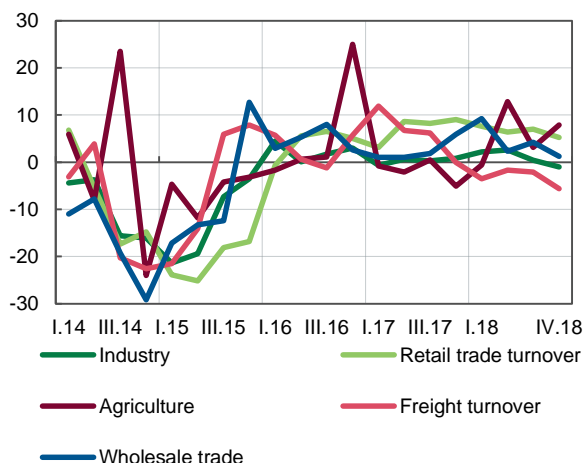
account of crop production thanks to the record harvest of corn and sunflowers. Selected output indicators in animal breeding also showed some improvement compared to the previous quarter.

Retail trade turnover and passenger turnover continued to grow at a fast pace, reflecting sustained growth in consumer demand, propelled by rapid increase in real wages.

In the meantime, the manufacturing industry demonstrated weaker performance amid the gradual deterioration of external conditions, ongoing repairs at some mining and metallurgical companies, and difficulties in transporting raw materials and finished products, due to, among other things, problems with transporting cargo via the Sea of Azov. This also weighed on wholesale trade turnover and freight turnover; however, the good harvest of late grain crops, and the large volumes of fuel sales recorded at the start of the quarter supported performance on these sectors. The output decline in the manufacturing industry was somewhat offset by the slightly better performance of the mining industry, and an increase in the output of electricity and gas supply companies, driven by lower outside temperatures and the previous year’s low comparison base. Less favorable weather conditions exerted a toll on GVA growth in construction.

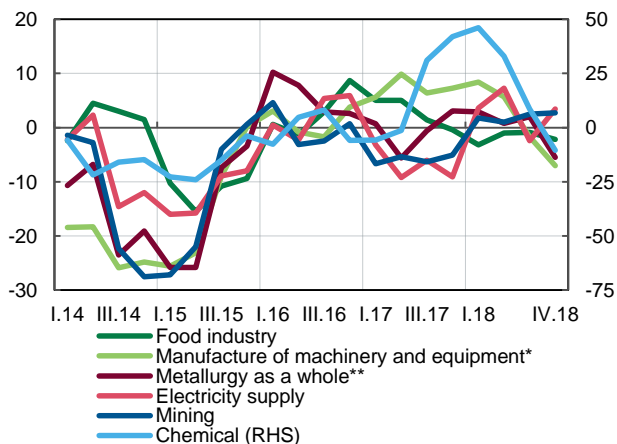
Overall, according to the NBU’s estimates, real GDP grew by 3.3% in 2018.

Chart 2.2.10. Output by Selected Types of Activity, % yoy (quarterly averages)



Source: SSSU, NBU staff estimates.

Chart 2.2.11. Output by Selected Types of Industrial Activity, % yoy (quarterly averages)



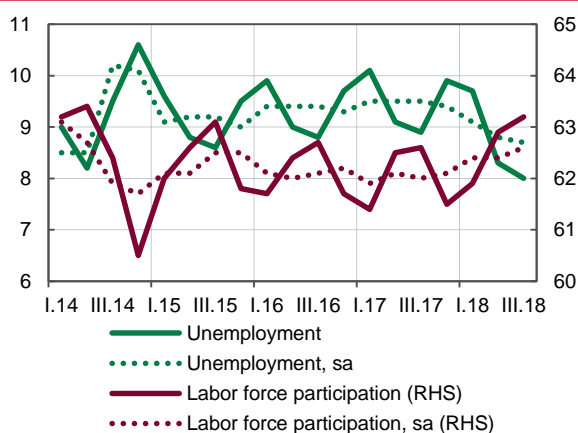
* Includes manufacture of machinery, motor vehicles and transport equipment.
** Metallurgical production and production of finished metal products.
Source: SSSU, NBU staff estimates.

2.3. Labor Market and Household Income

Labor market indicators improved markedly in Q3 2018, almost reaching pre-crisis levels. Changes to the pension legislation and higher wages contributed to the increase in labor force participation (according to ILO methodology). It reached a three-year high of 63.2%. Demand for labor also increased, fueled by economic growth. As a result, the unemployment rate dropped to 8.0% – the lowest level since 2013. Despite the growth in employment, labor migration and mismatches between supply and demand continued to put pressure on the labor market. In particular, this supported rapid wage growth.

The growth in nominal household income slowed to 18.0% yoy in Q3 2018. This was primarily due to lower social transfers in kind, as the number of subsidy recipients declined and utility subsidies grew smaller. Conversely, the growth in real disposable household income accelerated somewhat in Q3 2018 on the back of lower inflation.

Chart 2.3.1. ILO Unemployment* and Labor Force Participation, %**



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

** As a % of total population aged 15-70

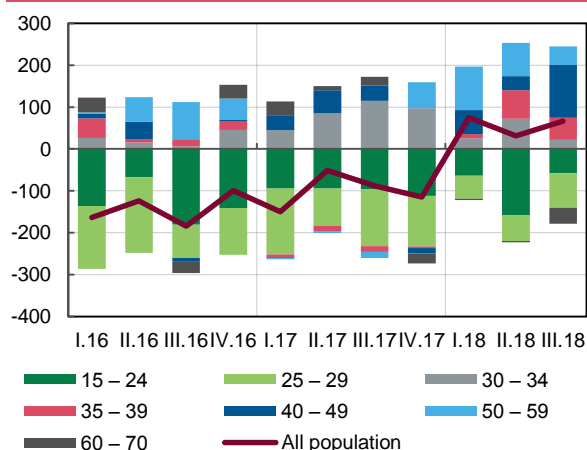
Source: SSSU, NBU staff estimates.

Labor Market

Labor market indicators improved markedly in Q3 2018 thanks to an increase in both the supply and demand for labor.

The ILO labor force participation rate reached the highest level for three years – 63.2%, which translates to 62.6% in seasonally adjusted terms. This was largely driven by the changes to pension rules introduced since the start of 2018 (particularly, the increase in the minimum pensionable service period required to receive an old age pension, from 15 to 25 years). This boosted labor force participation among the population aged 30–59 years in January–September 2018. That said, labor force participation grew the fastest among people aged 50–59 years. At the same time, in rural areas it continued to decrease. Sustained wage growth was another important factor behind the increase in labor force participation.

Chart 2.3.2. Contributions to Annual Absolute Change in Labor Force, thousand persons



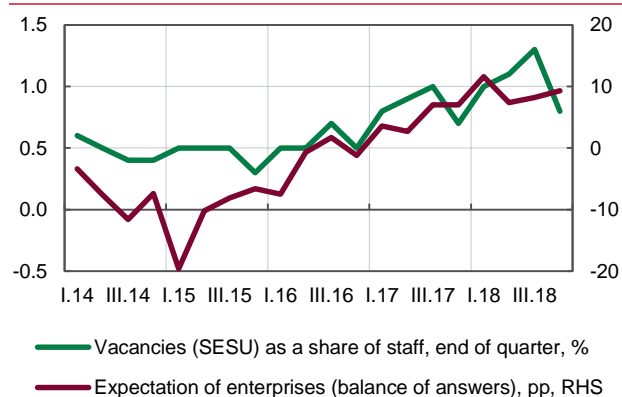
Source: SSSU, NBU staff estimates.

The number of vacancies registered by SESU in 2018 grew faster – by 10.1% yoy, while the number of employers using the SESU's recruitment services increased by 9.8% yoy. This tendency reflects both higher demand for labor, driven by economic growth, and difficulties with filling existing vacancies. The number of vacancies grew across all professional groups and the majority of business activities.

This resulted in improved employment and unemployment rates: the employment rate increased to 58.1% (57.0% sa) in Q3, reaching a four-year high. The ILO unemployment rate declined to 8.0% in Q3, or 8.7% sa, the lowest level since 2013. This was primarily due to lower unemployment among men and urban dwellers.

The number of unemployed people per vacancy decreased notably both due to stronger demand and the lower number of unemployed people. This figure reached the pre-crisis level of 15 unemployed people (according to the ILO methodology)

Chart 2.3.3. Vacancies (SESU) as a Ratio of Staff* and Expectations of Enterprises as to the Change in the Number of Employees 12-Month Ahead*



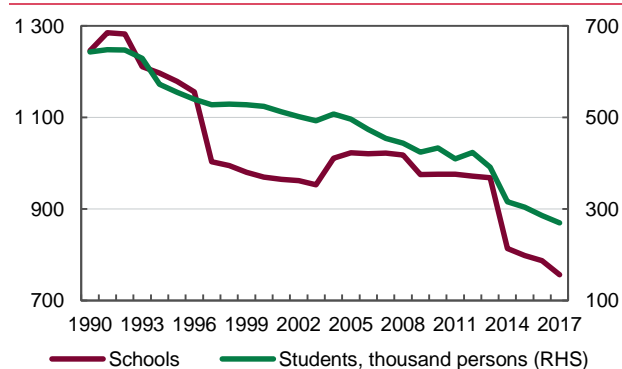
* Agriculture, Forestry and Fishing excluded.

Source: SSSU, SESU, NBU, NBU staff estimates.

per SESU vacancy as of Q3 2018. This tendency applied to all business activities and professional groups. Employers were most in need of skilled tool operators: there was one registered unemployed person per vacancy (in particular, there was a shortage of dressmakers, electricians, metalworkers, and cooks). This was driven by the pressure from labor migration as well as by a decrease in the number of vocational schools and students attending them in Ukraine.

In addition, the labor market continued to be exposed to supply and demand mismatches in terms of candidates' skills and employers' needs. According to the study [Skills for a Modern Ukraine](#) published by the World Bank in 2017, 60% of employers reported that the current educational system did not meet their needs for skills, and that students were most lacking in practical skills. The Beveridge curve also indicated the persistence of labor market mismatches amid the transition to a cyclical expansion phase.

Chart 2.3.4. Number of Technical and Vocational Schools and Their Students*



* Before 2014 – includes temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and a part of the Donetsk and Luhansk regions.

Source: SSSU.

According to the [Q4 2018 business outlook survey](#), businesses maintained high expectations with regard to changes in staff over the following 12 months. While agriculture and energy companies expected a decline in staff numbers over the following 12 months, expectations improved in transportation, construction, trade, and mining.

Household Income and Savings

The growth in nominal household income slowed to 18.0% yoy in Q3 2018.

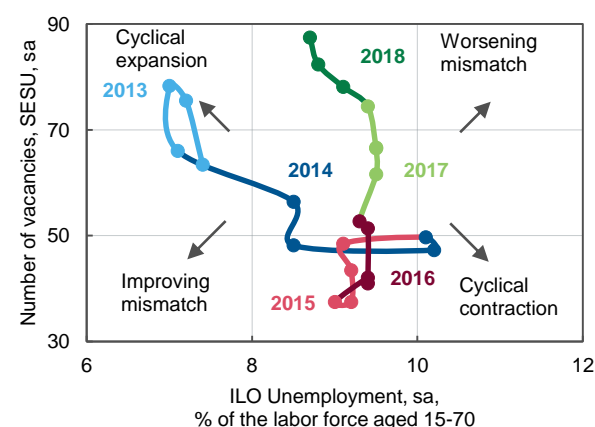
A decrease in social transfers in kind (by 0.1% yoy versus growth of 40.5% yoy in Q2) was the main reason behind the slower income growth. This was due to a decrease in the number of households which received utility subsidies (by 58% yoy as of end-September 2018), which was driven by several factors:

- higher household incomes amid contained growth in utility rates, as the hike in the natural gas price was put off to the end of the year, and increases in heating and hot water rates being rescheduled for 2019
- changes in the criteria for setting subsidies and utility consumption norms⁸
- verification of previously granted subsidies, which envisages [checking the property and incomes of citizens using data from a range of governmental databases](#).

The growth in nominal wages (as part of total household income) slowed to 22.9% yoy. This was the result of weaker growth in wages earned both within Ukraine (as increases in labor demand were gradually met) and abroad.

Although nominal disposable income grew less rapidly compared to the previous quarter, the decline in inflation in Q3 2018 caused real disposable income growth to accelerate slightly, to 10.0% yoy. Coupled with the continued pickup in

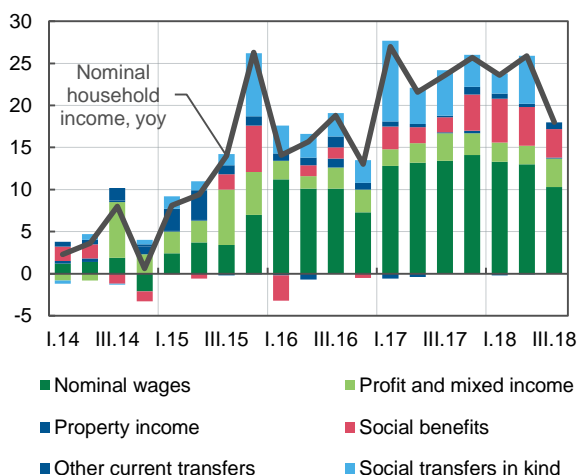
Chart 2.3.5. Beveridge Curve



Source: SSSU, SESU, NBU staff estimates.

⁸Resolution of the Cabinet of Ministers of Ukraine No. 329 dated 27 April 2018

Chart 2.3.6. Contributions to Annual Change in Nominal Household Income, pp

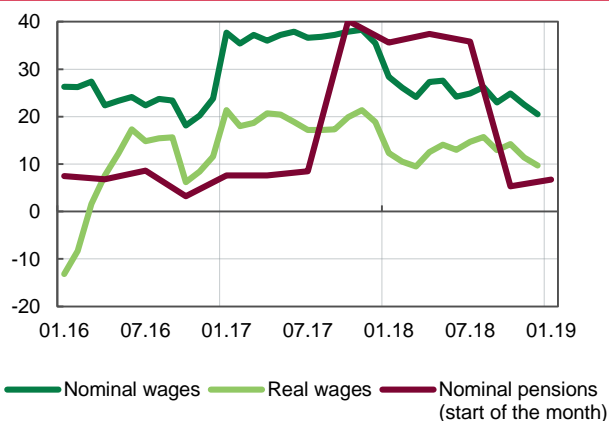


Source: SSSU, NBU staff estimates.

retail bank lending, especially consumer lending, this supported high levels of household consumption. As a result, households' propensity to save remained low (at 0.1% sa in Q3), despite returning to a positive value in 2018.

In Q4 2018, nominal incomes continued to grow at a fast pace, fueled by the rapid growth in wages, the largest income component. On the other hand, pensions grew considerably slower against a high comparison base on the back of last year's modernization of pensions. This dampened growth in social benefits – the second largest component of nominal income. Growth in social transfers in kind remained modest due to decreased amounts of utility subsidies.

Chart 2.3.7. Wages and Average Monthly Pensions, % yoy



Source: SSSU, PFU, NBU staff estimates.

2.4. Fiscal Sector

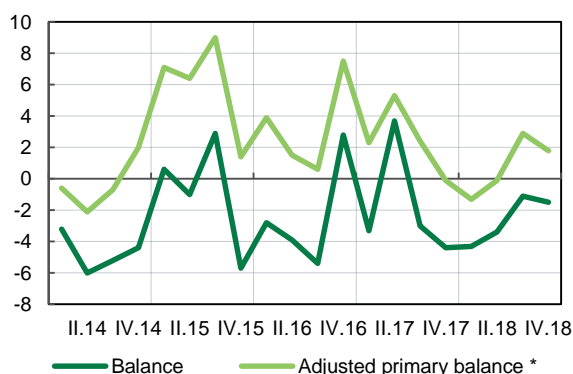
In 2018, fiscal policy switched from an expansionary stance in H1 to a tight one in H2, followed by an expected loosening at the end of the year. The consolidated budget recorded a significant deficit in 2018 as a whole (UAH 67.8 billion or 1.9% of GDP), while a primary surplus was maintained. The state budget deficit remained almost unchanged as a percentage of GDP compared to 2017 (1.6% of GDP) and was significantly lower than the level set by [the budget law](#). In contrast, local budgets posted a deficit for the first time since 2010 (UAH 8.5 billion or 0.2% of GDP).

The tightening of fiscal policy in the second half year reflected the modest revenue growth in 2018. General economic factors influenced revenues the most – namely, slower-than-expected import growth in the hryvnia equivalent and a decrease in the production of excisable goods. At the same time, revenue growth was supported by steadily rising nominal wages and higher earnings of profitable companies, as well as larger amounts of dividends transferred to the budget, particularly from NJSC Naftogaz of Ukraine following a ruling by the Stockholm Arbitration Court.

In the second half of the year, the growth in expenditures slowed markedly compared to the first half, despite the traditional rise in spending at the end of the year. The slowdown was due to lower expenditures on household utility subsidies and transfers to the Pension Fund, as well as slower growth in expenditures on debt service.

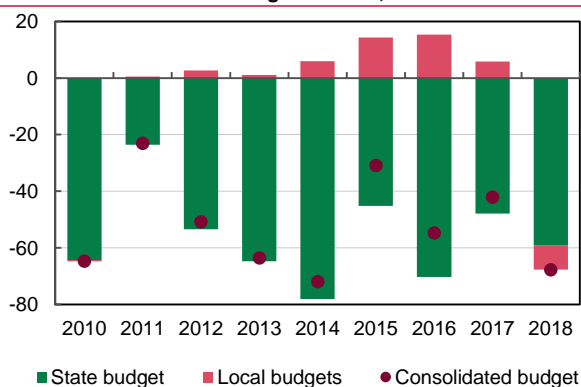
Thanks to the primary surplus of the budget and the stronger hryvnia exchange rate, public and publicly guaranteed debt increased by 1.3% in 2018, reaching UAH 2,169 billion by the year-end. As a result, the ratio of public and publicly guaranteed debt to GDP continued to decrease (to 61%).

Chart 2.4.1. The General Government Fiscal Balance, % 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. Source: STSU, NBU staff estimates.

Chart 2.4.2. Consolidated Budget Balance, UAH bn



Source: STSU, NBU staff estimates.

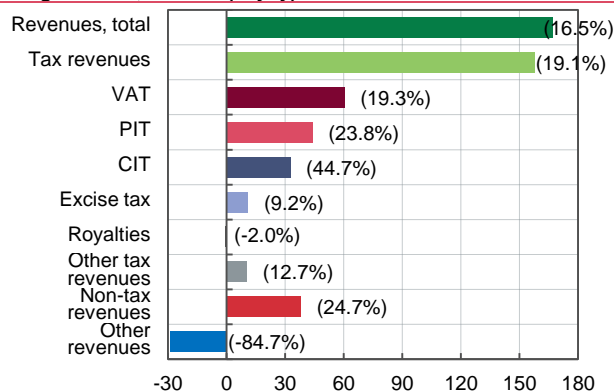
Balance

During 2018 fiscal policy switched from an expansionary stance in H1 to a tight one in H2. Thus, the consolidated budget deficit registered in Q1 was succeeded by a surplus that lasted until November inclusively. However, a substantial deficit in December pushed the consolidated budget into a sizeable deficit in Q4, and for the full year (UAH 67.8 billion). Overall, in 2018 fiscal policy remained tight, although it was considerably less strict compared to the previous year.

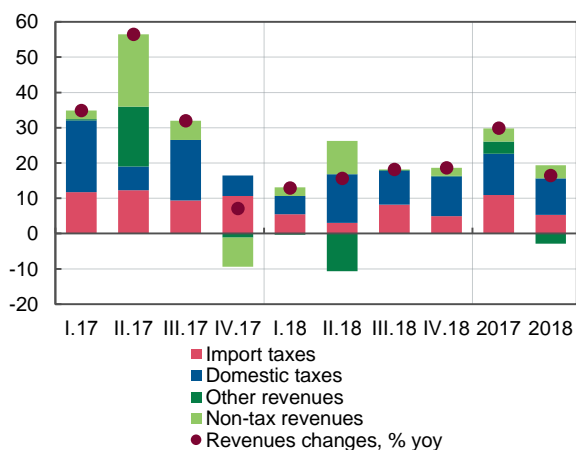
Revenues

Consolidated budget revenues grew moderately over the course of 2018, although their pace of growth was increasing gradually. Both in Q4 and in 2018 as a whole, the major contribution to revenue growth came from taxes. At the same time, nontax receipts were also an important factor thanks to nonrecurring sources. For example, these included funds received by Naftogaz of Ukraine NJSC following [the ruling of the Stockholm Arbitration Court](#).

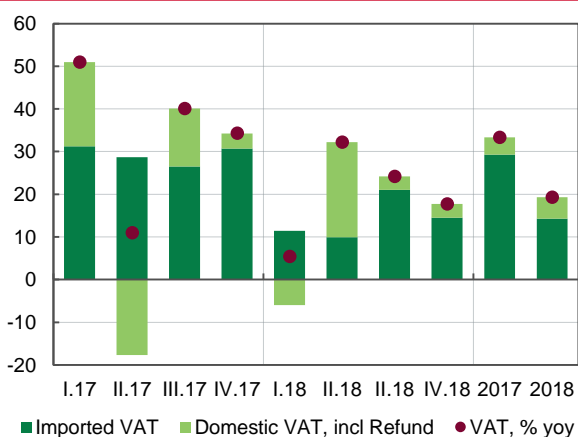
In 2018, domestic taxes were the main driver of tax revenue growth, whereas it was import taxes in 2017. Thus, personal income tax and corporate income tax revenues grew at steadily high rates throughout the year. Personal income tax increased on the back of rapidly rising wages, while the growth in corporate income taxes was fueled by higher corporate earnings. In addition, proceeds from royalties also rose in Q4. In particular, this was due to the hike of natural gas prices for households and heat-and-energy producers in November. Simultaneously, proceeds from royalties were volatile during the year, including due to changes in the administration procedure and advance payments being made in [December 2017 \(UAH 4.8 billion\)](#). The latter was responsible for the lower amount of royalties received in 2018 compared to 2017.

Chart 2.4.3. Consolidated Budget Revenues, absolute annual change in 2018, UAH bn (% yoy)

Source: STSU, NBU staff estimates.

Chart 2.4.4. Contributions to Annual Changes in Revenues of the Consolidated Budget, pp

Source: STSU, NBU staff estimates.

Chart 2.4.5. Contributions to Annual Changes in VAT proceeds, pp

Source: STSU, NBU staff estimates.

In Q4, growth in VAT revenues continued to slow. Proceeds from VAT on imported goods grew at a modest pace owing to slower growth in imports, especially of natural gas, and the stronger hryvnia. Proceeds from VAT on domestically produced goods held nearly flat at the previous quarter's level, including due to the moderate growth in refunds (up by 4.8% in Q4). Overall in 2018, the growth in VAT revenues was modest, even despite such one-off factor as the positive ruling of the Stockholm Arbitration Court, which led to an additional amount of [VAT paid](#) in Q2.

Excise tax revenues declined in Q4. This was attributed to a decrease in the output of some excisable goods, particularly tobacco products (by 8.5% yoy) in August–October⁹ after a rise in their production (by 12.6% yoy) in June–July. Slower growth in goods imports and the appreciation of the hryvnia were other factors. These also restrained growth in proceeds from international trade duties. Although taxes on imported goods grew more slowly than domestic taxes, they still made a substantial contribution to the growth of revenues in Q4 and for the full year.

As expected, nontax receipts increased in Q4. This was a result of Naftogaz of Ukraine NJSC shifting the schedule of its dividend payments for 2017. Unlike in 2017, when the company paid the entire amount of dividends as a one-off lump sum payment in June, in 2018, Naftogaz shifted the larger part of its dividend payments to the second half year, with the biggest payments slated for Q4 (UAH 16.2 billion)¹⁰. However, in 2018 nontax receipts increased rather moderately, while other revenues declined against the background of the large amounts received from confiscation in 2017.

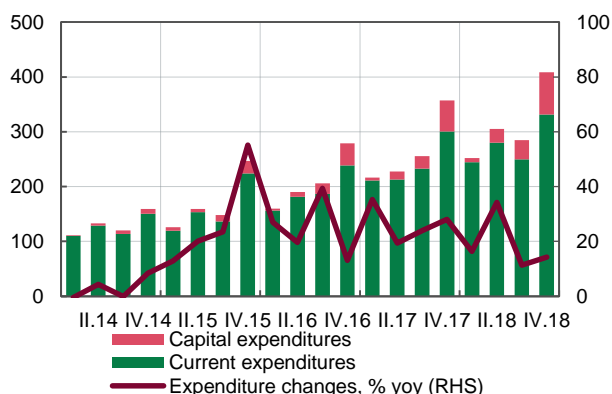
Expenditures

In Q4, consolidated budget expenditures continued to grow at a moderate pace (14.3% yoy), albeit accelerating slightly on the previous quarter. Across current expenditures, expenses on goods and services grew faster in Q4, primarily due to the expected increase in spending on medicines and bandaging products, services costs, apart from public utility services, and other expenditures. In general, expenses on goods and services showed the fastest growth, while their share of total expenditures has been rising in recent years.

In addition, debt servicing expenditures, as expected, increased in Q4, primarily driven by domestic debt. This reflected the reprofiling of NBU-held domestic government bonds in late 2017, since the main payments related to the servicing of these bonds fall in May and November. However, debt servicing expenditures continued to grow at a slow pace in 2018. That said, their volume was much below the planned levels thanks to the stronger hryvnia and slower inflation, as well as to a later-than-planned placement of securities on the

⁹ The excise taxes on domestic goods are paid on a monthly basis, in the month following the reporting period.

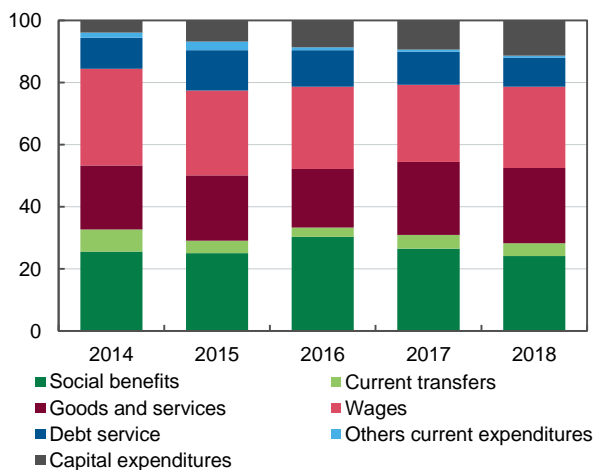
¹⁰ Pursuant to the ordinances of the Cabinet of Ministers of Ukraine No. [384-p](#) dated 25 April 2018 and No. [535-p](#) dated 26 July 2018.

Chart 2.4.6. Consolidated Budget Expenditures, UAH bn

Source: STSU, NBU staff estimates.

external market and funds received from international financial institutions.

Expenses on compensation of employees continued to rise rapidly. In contrast, expenditures on utility benefits and subsidies for households were smaller than last year. This was mainly due to a substantial drop in the number of subsidy recipients (read more in section 2.3). Moreover, despite the additional UAH 10.8 billion allocated to support the Pension Fund, transfers to the fund in Q4 were smaller than in the previous year due to the comparison base effect – in Q4 2017, the amount of transfers to the Pension Fund increased noticeably on the back of increases in pension payments following the pension modernization. Overall in 2018, budget support for the Pension Fund rose by 12.5%.

Chart 2.4.7. Structure of Consolidated Budget Expenditures, economic classification, %

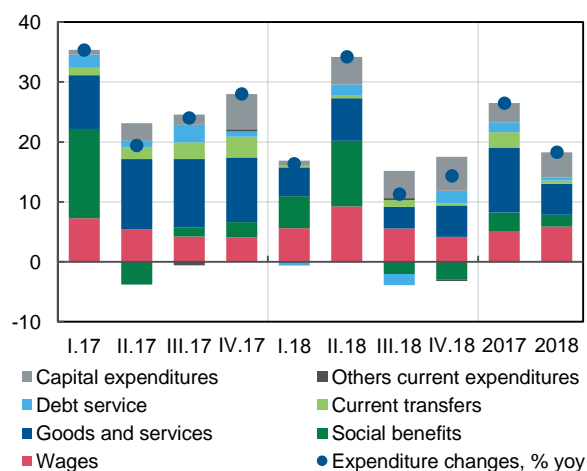
Source: STSU, NBU staff estimates.

Having accelerated markedly in Q3, growth in expenditures on current transfers to companies moderated in Q4. For the year as a whole, growth in these expenditures remained modest, which can be explained by delays in tenders and other procedures. In addition, other current expenditures decreased in Q4 and for the full year.

Capital expenditures continued to grow in Q4. As is typically the case, these expenditures were made primarily from local budgets, in particular for the purpose of developing infrastructure. As a result, notwithstanding the high comparison base, capex growth actually accelerated in the full year 2018, with their share in consolidated budget expenditures rising steadily.

Financing and Debt

The consolidated budget deficit was mostly financed with borrowed funds in Q4 and in 2018 as a whole. This is explained by the extremely low proceeds from privatization and the tight debt repayment schedule.

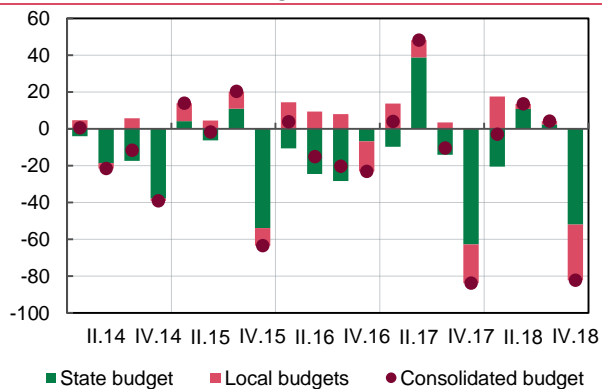
Chart 2.4.8. Contributions to Annual Changes in Expenditures of the Consolidated Budget, pp

Source: STSU, NBU staff estimates.

Unlike in previous quarters, in Q4 the placement of sovereign Eurobonds and cooperation with international partners generated significant funds. However, domestic borrowing remained the primary source of deficit financing – securities were offered in both domestic and foreign currencies. At the same time, short-term instruments accounted for the bulk of domestic borrowing. As in Q3, borrowings exceeded repayments in Q4 (despite the large amounts of repayments).

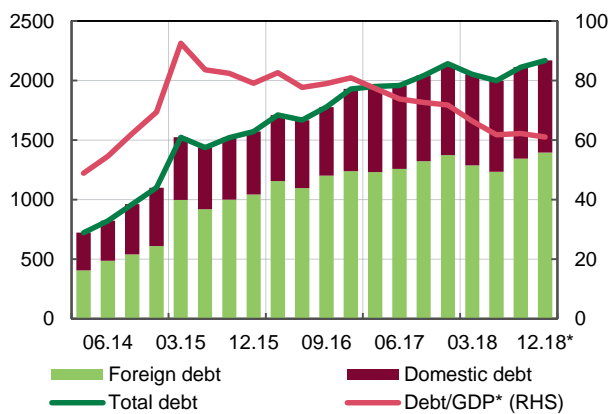
Taking into account all debt transactions conducted during the year and the stronger hryvnia exchange rate towards the end of the year, public and publicly guaranteed debt increased by 1.3% from the beginning of 2018, reaching UAH 2,169 billion as of the end of December 2018. As a result, the debt-to-GDP ratio declined throughout the year (to 61%, from nearly 72% at the end of 2017).

Chart 2.4.9. Consolidated Budget Balance, UAH bn



Source: STSU, NBU staff estimates.

Chart 2.4.10. Public and Publicly Guaranteed Debt, UAH bn and % of GDP*



* GDP for 2018 - NBU estimates.

Source: MFU, SSSU, NBU staff estimates.

Box 2. Key Parameters of the State Budget of Ukraine for 2019¹¹

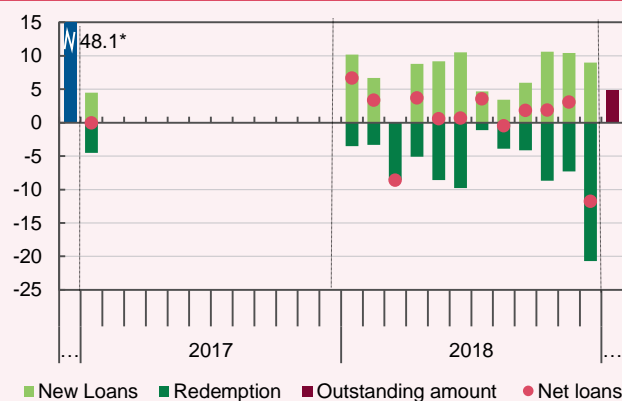
The state budget of Ukraine for 2019 is based on a rather conservative macroeconomic forecast. This was reflected in the modest increase in revenues and expenditures projected in the document compared to the actual figures of 2018 (10.6% and 12.8%, respectively). However, as expenditures will grow faster than revenues, the deficit will widen to 2.3% of GDP compared to 2018, although the primary balance will remain positive. That said, the main risks lie in financing. This concerns not only proceeds from privatization, but also planned domestic and foreign borrowing.

The budget law provides for minor tax changes. The rates of some excise taxes, royalties, and the environmental tax were revised and indexed. The sizeable increase in proceeds from royalties is also a reflection of higher natural gas prices for households¹², which will impact VAT revenues as well. Overall, tax revenues will rise by 14.2% compared to the actual level seen in 2018. However, these growth rates exceed the growth in nominal GDP according to the NBU's forecast, which might mean that expectations regarding these revenues are rather optimistic. This primarily concerns VAT revenues, which were also lower than planned in 2018. Nontax revenues will decline, mainly against the high comparison base of actual figures for 2018.

The rather restrained growth in expenditures is due to a decrease in utility benefits and subsidies for households (by UAH 15.9 billion, to UAH 55.1 billion). Following the expansion of the utility subsidy program in 2015–2016, it was expected that it would be scaled down gradually. This is the result of the rise in household income, moderate growth in utility tariffs, better targeting, and more thrifty use of resources by households. In view of the launch of subsidy monetization, the budget law allocates UAH 20 billion for paying subsidies in cash.

For 2019, support for the Pension Fund was increased by UAH 17.4 billion, to UAH 167.5 billion. This is due to the planned indexation of pensions and challenges in fulfilling the budget of the Pension Fund in 2018. The Fund borrowed from the single treasury account in order to cover liquidity gaps throughout the year, the outstanding amount being UAH 4.8 billion as of the end of 2018.

Chart 1. Pension Fund Loans from STA, UAH bn



* Outstanding amounts for previous periods.

Source: MFU, SSSU, NBU staff estimates.

Expenditures were also increased moderately across other items compared to their actual performance in 2018. However, overall expenditures will grow faster than revenues. As a result, the planned deficit was raised to almost UAH 90 billion. On the one hand, this size of deficit is moderate and complies IMF requirements (2.3% of GDP), but on the other hand, it is significantly above the actual level of 2018. Moreover, payments on the foreign public and publicly guaranteed debt peak in 2019–2020. Taking into account the large placements of domestic government securities in 2018, mostly short-term bonds, the total financial needs of the state

Table 1. State Budget Parameters

	2018			2019	2018	2019	2017	2018	2019
	Law	Fact	% of plan	Law	% yoy	% of GDP			
Revenues, total	918.0	928.1	1.1	1026.1	17.0	10.6	26.6	26.1	25.9
Tax revenues	760.0	753.8	-0.8	860.7	20.2	14.2	21.0	21.2	21.7
PIT	91.1	91.7	0.7	106.2	22.3	15.7	2.5	2.6	2.7
CIT	82.3	96.9	17.7	95.5	44.8	-1.4	2.2	2.7	2.4
Royalties	46.5	45.3	-2.7	58.3	-7.0	28.8	1.6	1.3	1.5
Excise tax	124.1	118.9	-4.2	130.2	9.8	9.6	3.6	3.3	3.3
VAT	384.4	374.5	-2.6	434.8	19.3	16.1	10.5	10.5	11.0
Domestic VAT, incl refunds	84.3	79.1	-6.1	94.6	24.7	19.5	2.1	2.2	2.4
Imported VAT	300.1	295.4	-1.6	340.2	17.9	15.2	8.4	8.3	8.6
Non-tax revenues	145.0	164.7	13.6	155.4	28.1	-5.6	4.3	4.6	3.9
Other revenues	13.0	9.6	-26.0	10.1	-74.5	4.9	1.3	0.3	0.3
Expenditures	991.9	985.8	-0.6	1112.1	17.4	12.8	28.1	27.7	28.0
Net lending	6.7	1.5	-	4.0	-	-	0.1	0.0	0.1
Balance (- deficit)	-80.6	-59.2	-	-90.0	-	-	-1.6	-1.7	-2.3

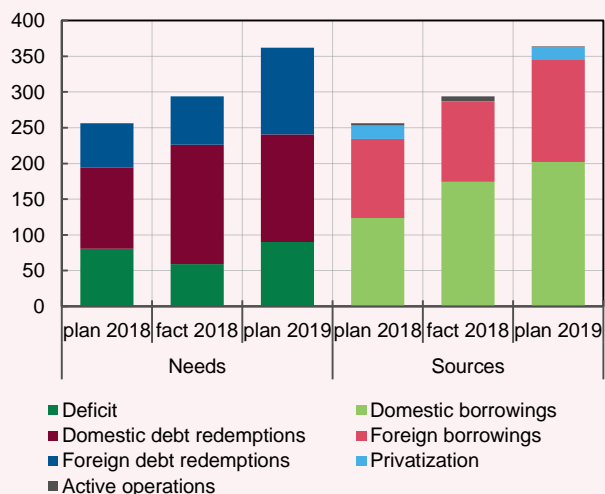
Source: STSU, VRU, NBU staff estimates.

¹¹Hereinafter the Law of Ukraine *On the State Budget of Ukraine for the Year 2019*.

¹²Simultaneously with natural gas prices for households being raised, the price of locally produced gas is also increasing, which has a direct impact on the amounts of royalties and VAT paid.

budget will be 9.1% of GDP in 2019, versus 8.3% of GDP in 2018.

Chart 2. Fiscal Needs of the State Budget and Sources of Financing, UAH bn



Source: STSU, VRU, NBU staff estimates.

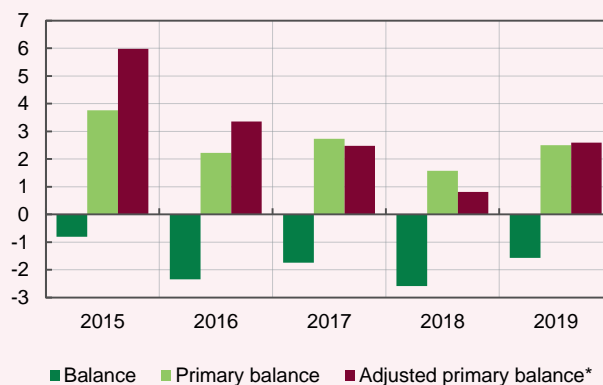
According to the budget law, it is planned to finance the budget deficit and debt obligations mainly with new domestic and foreign borrowings in 2019. The planned amount of foreign borrowings is worth the equivalent of USD 5 billion (using the average UAH/USD exchange rate assumed in the budget), of which over USD 4 billion is to finance the general fund expenses. However, global FX market conditions have deteriorated for emerging market economies over the year. This has translated into a higher cost of foreign borrowing. In addition, demand for Ukrainian sovereign Eurobonds may be lower in a year of presidential and parliamentary elections.

The planned amount of domestic borrowings is UAH 202 billion, which is 15.9% above the actual amount borrowed in 2018, and 34% higher than the principal

payments on domestic debt. As usual, the budget also envisages proceeds from privatization (UAH 17.1 billion). As privatization has generated little revenue in past years, the risk of a revenue shortfall from this source remains high. In the event of a shortfall of privatization proceeds and lower-than-expected foreign borrowings, it might be difficult to raise the required funds on the domestic market due to the already ambitious plan for domestic borrowings envisaged in the budget law. Considering high financing risks, the budget is likely to be executed with a lower-than-planned deficit in 2019.

Therefore, the NBU forecasts that fiscal policy will be somewhat tighter in 2019 compared to both the planned parameters and to the previous year. Among other factors, this will weigh on in aggregate demand in 2019, and help reduce inflationary pressures.

Chart 3. Fiscal Balance of the General Government and Fiscal Stance*, % of potential GDP



* The fiscal stance is calculated as the cyclically adjusted primary balance (CAPB). CAPB is the difference between revenues, in the structure of which tax revenues are adjusted for cyclical changes in GDP, and 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 means tight fiscal policy, negative – expansionary fiscal policy.

Source: STSU, VRU, NBU staff estimates and forecast.

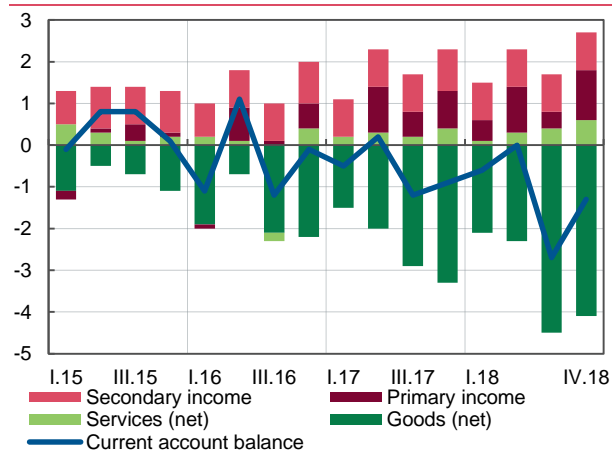
2.5. Balance of Payments

The current account deficit narrowed compared to the previous quarter, to USD 1.3 billion in Q4 2018. Apart from the expected widening in the primary income account surplus, a decline in the external trade deficit driven by weaker growth in both energy and consumer imports contributed significantly to the improvement in the current account.

Overall, in 2018, the current account ran a deficit of USD 4.7 billion (compared to USD 2.4 billion in 2017). This widening was mainly attributed to an increase in the merchandise trade deficit, to USD 13 billion compared to USD 9.7 billion in 2017. Exports of goods grew, driven primarily by a benign external environment, and further penetration of Ukrainian exporters into the EU market. That said, the considerable difficulties in freight transportation via the Sea of Azov seen at the end of the year, coupled with ongoing repairs at some metallurgical plants, weakened the positive impact from the bumper harvest of corn and oilseeds. As a result, exports of goods rose only moderately, by 9.2% in 2018. The growth in imports of goods outperformed that of exports, spurred by robust domestic demand and high energy prices throughout most of the year. Furthermore, 2018 also witnessed a sizeable increase in dividend payments. At the same time, remittances rose by 18.7%, preventing a sharper worsening of the current account deficit.

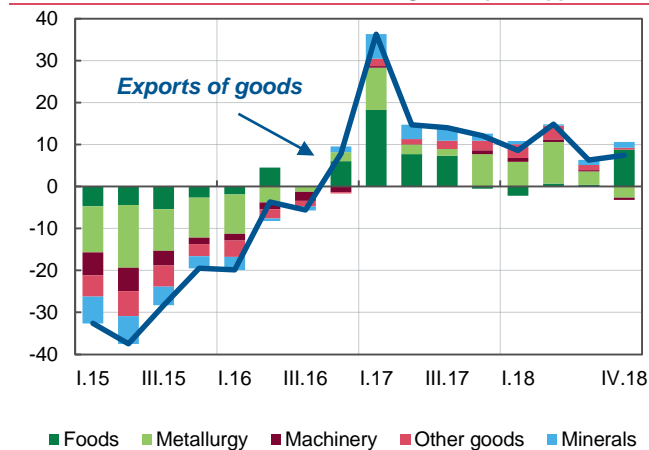
Financial account inflows grew noticeably compared to previous quarters, both in Q4 and for the year as a whole. Overall, 2018 inflows came in at USD 7.5 billion, and were generated by both the private and the government sectors. The government became increasingly responsible for attracting the bulk capital flows towards the end of the year, by placing sovereign Eurobonds and receiving official financing. The private sector received capital inflows through net FDI and real sector borrowing. International reserves had increased by the end of 2018, to USD 20.8 billion or 3.4 months of future imports, driven by a surplus in the overall balance of payments and the disbursement of official financing, despite large repayments of IMF loans.

Chart 2.5.1. Current Account Balance, USD bn



Source: NBU.

Chart 2.5.2. Contributions to Annual Change of Exports, pp



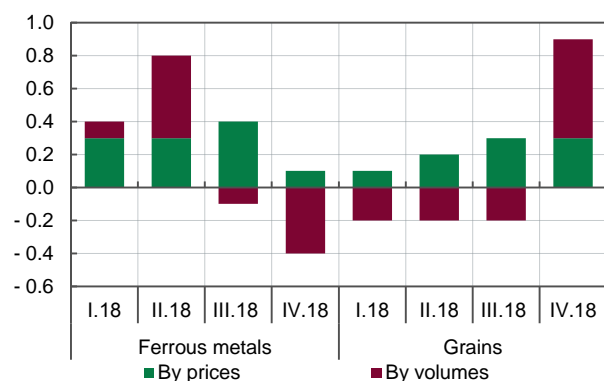
Source: NBU staff estimates.

Current account

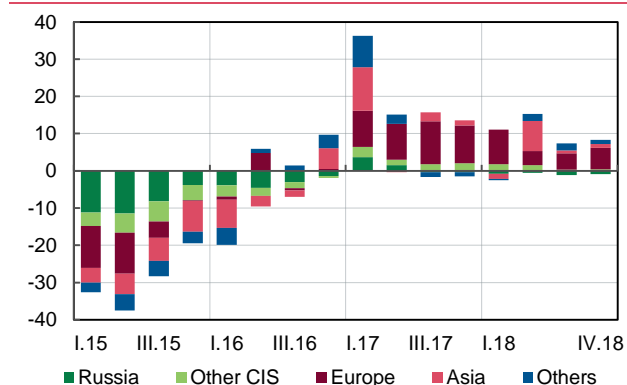
In 2018, exports of goods were up by 9.2% yoy. In H1, the metallurgy was a major contributor the export growth by ramping up export volumes and benefiting from rising global prices. In contrast, in H2, the agricultural sector took the lead, thanks to bumper harvests of some crops.

As expected, in Q4, export growth was mainly fueled by food exports, as the growth in these exports accelerated to 20.1% yoy, reaching a historic high of USD 5.8 billion and accounting for half of all exports of goods. More specifically, the record corn harvest in 2018 pushed up the volumes of grain exports to 14 million tons – the highest figure for the available record. With global prices higher than last year, this drove up the value of grain exports by 1.5 times yoy. In addition, exports of vegetable oil and fats returned to growth (13.5% yoy), propped up by the record harvest of sunflowers. Furthermore, the active processing of oilseeds helped [consolidate Ukraine's position](#) as the largest exporter of oil-cake residues. Exports of oil-cake residues spiked by 1.6 times yoy, propelled by sustained growth in the global demand for organic fodder. Although slowing somewhat due to falling export prices, the growth in meat exports, especially poultry exports, at 24.6% yoy, remained buoyant.

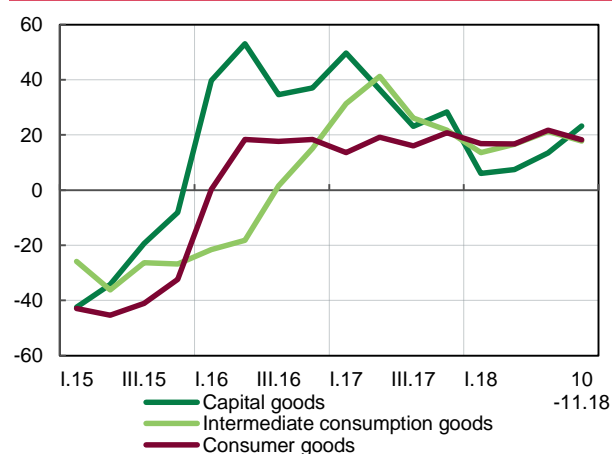
That said, the annual growth in exports of goods in Q4 (7.4 yoy) was little changed on the previous quarter, because of the difficulties experienced by some mining and metallurgical companies. In particular, the decline in the volumes of ferrous metals exports accelerated, in the wake of a drop in metal production and the considerable difficulties in freight transportation via the Sea of Azov seen in October – November. Together with falling global prices, this caused the metals exports to fall by 10.5% yoy.

Chart 2.5.3. Exports of Selected Goods, yoy change, USD bn

Source: NBU, SFSU.

Chart 2.5.4. Contributions to Annual Change in Exports by Regions, pp

Source: NBU staff estimates.

Chart 2.5.5. Imports by Broad Economic Categories, yoy change

Source: NBU.

Meanwhile, iron ore exports rose at a fast pace (by 20.5% yoy). This rise was attributed to the stocks of ore that accumulated after the demand from the domestic metallurgy industry weakened, and to iron ore exporters pivoting away from Asian markets (especially China) to EU markets where prices were higher.

Across regions, 2018 export growth resulted from trade with European countries. Overall, exports to European countries rose by 16.1% yoy in 2018, with the share of these countries in total merchandise exports rising to 38.6%. Furthermore, Europe was the only region in which exports of goods exceeded the level seen in 2011, coming close to the historic high recorded in 2008. Growth in exports to Asian countries (6.3% yoy) was somewhat restrained by the refocusing of iron ore exports to other markets. The growth in exports to African countries (0.1% yoy) was dragged down by a contraction in exports of Ukrainian wheat to Egypt, while the growth in exports to CIS countries (0.7%) was dampened by a fall in machinery exports to Russia.

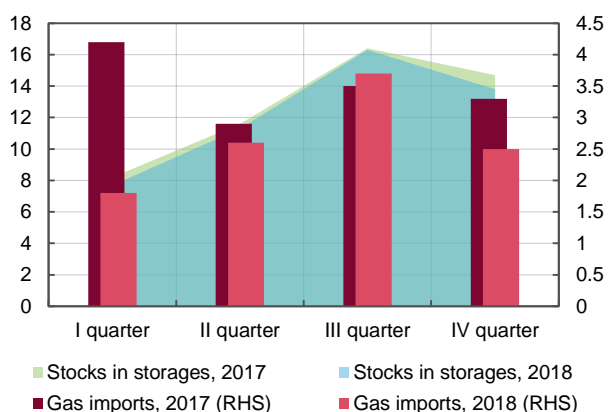
The growth in imports of goods (by 14% in 2018) outpaced that of exports. That said, the growth in imports slowed to 11.5% yoy in Q4. All import components declined, apart from investment imports.

Steady consumer demand was the main driver of non-energy import growth in 2018 (13.7% yoy). Meanwhile, the favorable FX market conditions seen in late 2018 somewhat slowed the demand for imports, with import growth decelerating to 11.2% yoy in Q4. This caused growth in food and industrial imports to slow, to 10.7% yoy and 24.1% yoy respectively.

The strong performance of energy imports recorded in 2018 was attributed to surging global energy prices throughout most of the year, with gas imports largely shaping the quarterly import dynamics. More specifically, in late 2018, gas imports shrank, while the decline in the volumes of coal imports deepened, due to some [energy-generating companies shifting](#) to Ukrainian gas coal. As a result, the growth in energy imports decelerated to 12.3% yoy in Q4. At the same time, the growth in oil product imports, at 32.5% yoy, remained robust, supported by both high volumes (on the back of active harvesting), and prices.

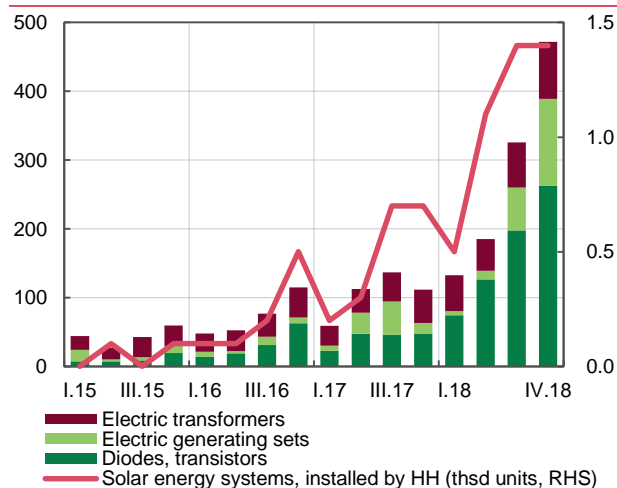
In addition, Q4 witnessed a notable slump in the growth of chemicals imports, to 2.2% yoy, resulting, among other things, from falling imports of some raw materials because of repairs at some chemical plants, and [delays in the customs clearance](#) of fertilizers from Belarus.

Chart 2.5.6. Gas Imports, bcm



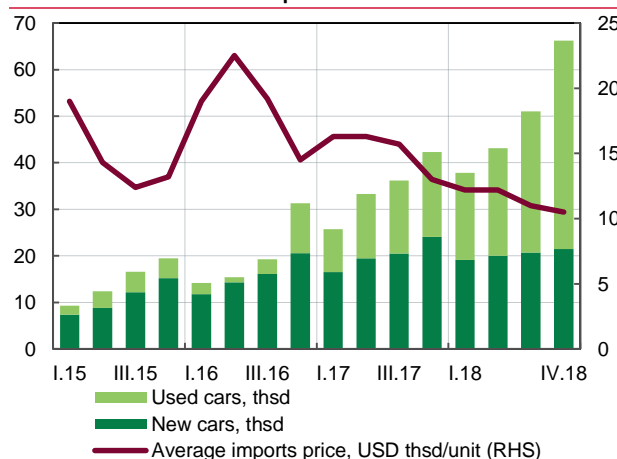
Source: NBU, Ukrtransgaz.

Chart 2.5.7. Imports of Selected Equipment for Alternative Energy, USD m



Source: SFSU, SAEI.

Chart 2.5.8. Motor Vehicle Imports



Source: NBU, Ukravtoprom.

In contrast, investment import growth continued to speed up in 2018, hitting 23.2% yoy in Q4. In particular, the growth in imports of cars, mainly used ones, accelerated noticeably, to 26.8% yoy. Among other things, this was due to the [legalization of imported cars](#), a substantial portion of which was reflected in investment imports. Imports of [General Electric locomotives](#) also contributed to the growth. Furthermore, in 2018, investment imports were also driven by an increase in activities related to the construction of alternative energy facilities (for more details, see the [Box Investment Imports as a Contributor to the Widening of the Current Account Deficit](#)).

Robust demand for some machinery imports pushed up the share of Asian countries in imports of goods (to 22.4%). Despite there being a slight reduction in their share (to 40.3%), European countries have remained the main suppliers of imported goods for four years running. An upturn in imports of oil products from Russia and Belarus counterbalanced drops in chemicals imports from these countries, maintaining the share of CIS countries relatively stable at 25.1%.

The annual growth in exports of services moderated to 10.6% yoy in 2018. This was mainly attributable to a fall in exports of pipeline transport services, due to a decrease in gas transit to European countries. Meanwhile, export growth was propped up by a rise in exports of air transport services, thanks to enlarging the list of flights offered by foreign low-cost companies (in particular, in Q4), and a further increase in exports of IT services.

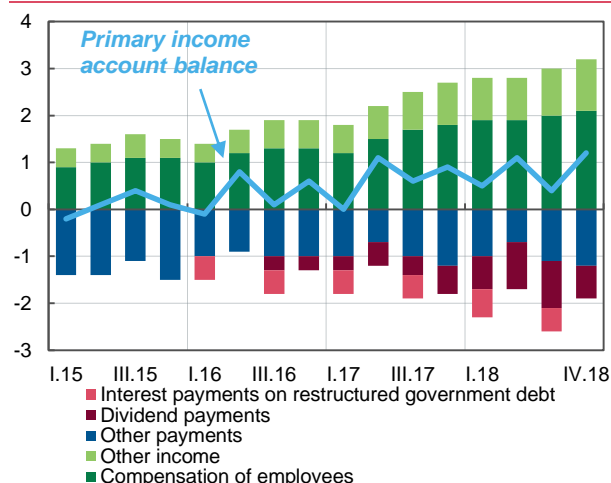
In contrast to exports of services, the growth in imports of services slowed to 8% for the year as a whole (to 1.5% yoy in Q4). This was largely attributable to the weaker growth in imports of travel services seen in H2, on the back of increases in the number of travelers recorded in the same period last year after visa-free regime with EU.

Remittances grew further in 2018, by 18.7% yoy to USD 11 billion, widening the surplus in the primary and secondary income account. However, the widening slowed somewhat in annual terms in H2 (in particular, to 8.5% yoy in Q4), which may have been due to a somewhat less intense labor migration to some EU countries (such as Poland), and to Russia. In the meantime, growth in the primary income account surplus was somewhat dampened by a hike in dividend payments – by 1.9 times yoy to USD 3.4 billion in 2018.

Financial account

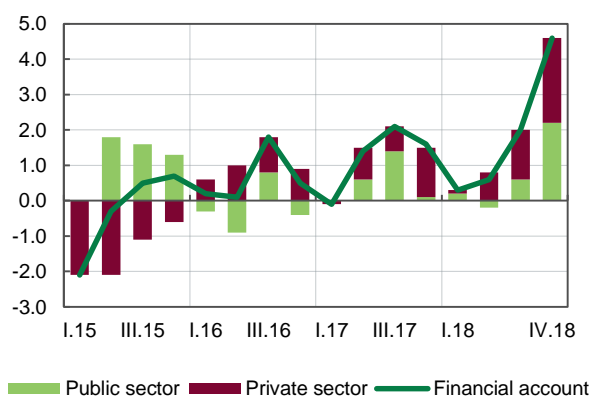
In Q4, financial account inflows, at USD 4.6 billion significantly exceeded the current account deficit, and were generated by both the private and public sectors. Although

Chart 2.5.9. Primary Income Account, USD bn



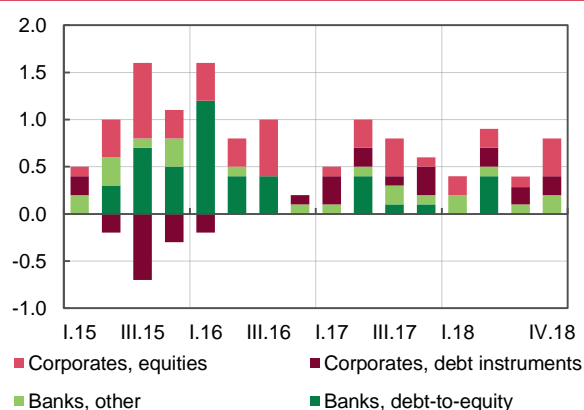
Source: NBU.

Chart 2.5.10. Financial Account: Net External Liabilities, USD bn



Source: NBU.

Chart 2.5.11. Foreign Direct Investment, USD bn



Source: NBU.

the role of the public sector increased markedly towards the end of the year, for the whole 2018, the private sector saw larger inflows. More specifically, inflows to the public sector seen in Q4 2018 were largely driven by the government's successful placement of five- and ten-year Eurobonds worth a total of USD 2 billion, and the disbursement of USD 1 billion in EU loans, which were guaranteed by the World Bank.

Inflows to the private sector also surged compared to previous periods, and resulted from an increase in the net foreign borrowings of the real sector and inflows of foreign direct investment.

Indeed, in Q4, foreign direct investment grew to USD 0.8 billion, almost entirely channeled into real sector equity. For the year as a whole, foreign direct investment totaled USD 2.5 billion in 2018, of which the real sector receiving 60%. Agricultural, wholesale and retail trade companies were the recipients of a substantial portion of the equity investment. Foreign direct investment in the banking sector was almost flat at last year's level.

Meanwhile, in Q4, the substantial trade in goods deficit was financed by trade loans of USD 1 billion. As a result, debt inflows to the private sector were almost solely channeled into the real sector both in Q4 and for the whole of 2018. Rollover in the real sector was 105% in 2018, up from 68% in 2017. The banking sector's borrowings were insignificant and had little influence on overall private sector rollover (106%).

Reserve Assets and External Sustainability

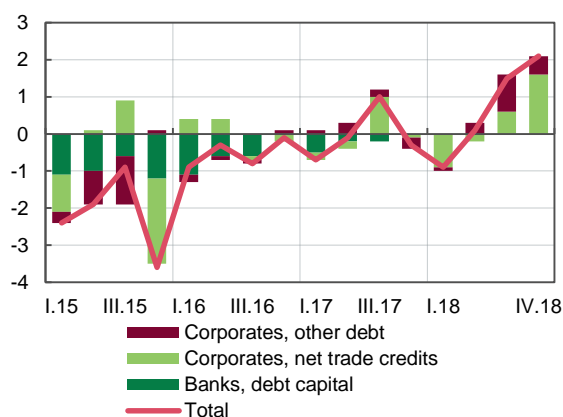
International reserves had increased by the end of 2018, to USD 20.8 billion or 3.4 months of future imports, thanks to a surplus in the overall balance of payments and the disbursement of official financing.

Gross international reserves rose by USD 2 billion or 11% in 2018, improving some external sustainability indicators in Q4. More specifically, the ratio of reserves to the IMF's composite measure was, according to preliminary estimates, about 70%, reserves in months of future imports increased to 3.4 months (114% of the required minimum), with reserves as a ratio to 20% of broad money being more than double the threshold for international reserve adequacy.

However, external debt still remains large, which is evidence of the Ukrainian economy's vulnerability to external shocks.

Although dropping somewhat compared to the previous quarter, the ratio of gross external debt to GDP still remained high in Q3, at 91.1%. In addition, in Q4, the public sector received a total of USD 3.7 billion in international loans, USD 1.4 billion of which was an IMF tranche disbursed under a

Chart 2.5.12. Overall Debt Flows*, USD bn

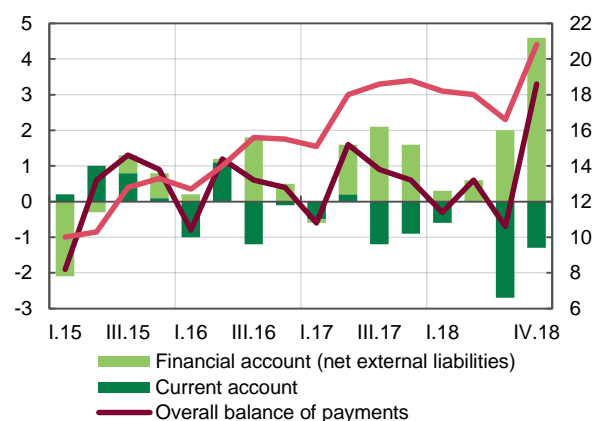


* Positive value – capital inflows.
Source: NBU.

new cooperation program. As a result, borrowing by this sector significantly exceeded repayments over that period. According to preliminary estimates, the ratio of gross external debt to GDP had risen by the end of 2018.

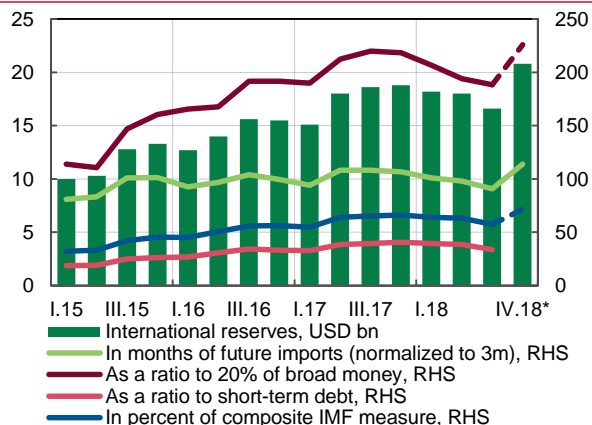
Short-term debt by remaining maturity also remained high. In absolute terms, this debt grew to USD 49.3 billion (85% of exports of goods and services) in Q3, with the government sector being mainly responsible for this. Indeed, the government debt maturing within the next 12 months spiked by USD 1.8 billion, to USD 4.9 billion, mainly because Eurobonds have to be repaid over that period. The debt of other sectors was either unchanged or little changed. As a result, in Q3, the ratio of short-term debt to gross debt rose to 43%, while increasing to 39.1 as a percentage to GDP.

Chart 2.5.13. Balance of payments, USD bn



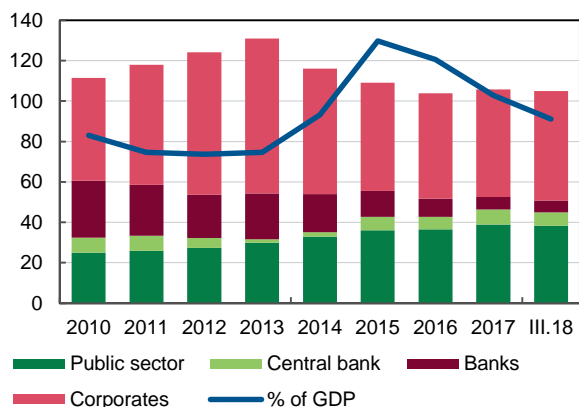
Source: NBU.

Chart 2.5.14. Adequacy Criteria of International Reserves, %



* Preliminary estimates.
Source: NBU staff estimates.

Chart 2.5.15. Gross External Debt, USD bn



Source: NBU.

Table 2.5.1. External Sustainability and International Reserve Adequacy Indicators*

%	IV.16	I.17	II.17	III.17	IV.17	I.18	II.18	III.18	IV.18**
External debt/GDP	120.6	115.7	112.4	108.6	102.8	99.2	93.4	91.1	--
External debt/exports of goods and services	244.6	230.7	225.3	222.2	214.3	209.2	200.3	198.1	--
Short-term debt/gross debt	41.7	40.8	40.9	40.6	40.2	40.1	41.1	43.0	--
Short-term debt/GDP	50.2	47.2	45.9	44.1	41.3	39.8	38.4	39.1	--
Short-term debt/exports of goods and services	101.9	94.2	92.1	90.2	86.1	83.9	82.3	85.1	--
Openness of the economy	105.5	106.5	106.8	104.9	103.6	102.8	101.1	100.6	100.9
Reserves/short-term debt	33.2	32.9	38.6	39.5	40.6	39.4	38.5	33.7	--
Reserves/IMF composite measure	56.1	54.7	64.0	65.2	66.1	63.9	63.0	57.4	≥70.0
Reserves in months of future imports (normalized to 3 months)	99.4	94.1	108.3	108.3	106.5	101.4	98.9	91.7	113.8
Reserves/20% of broad money	191.6	189.8	212.5	219.9	218.3	206.6	194.1	188.4	225.9
Current account/GDP, 12-month rolling	-1.4	-0.8	-1.7	-1.6	-2.2	-2.2	-2.2	-3.4	-3.6

* Green represents an improvement compared to the previous quarter while red indicates a deterioration.

** - preliminary estimates.

Source: NBU staff estimates.

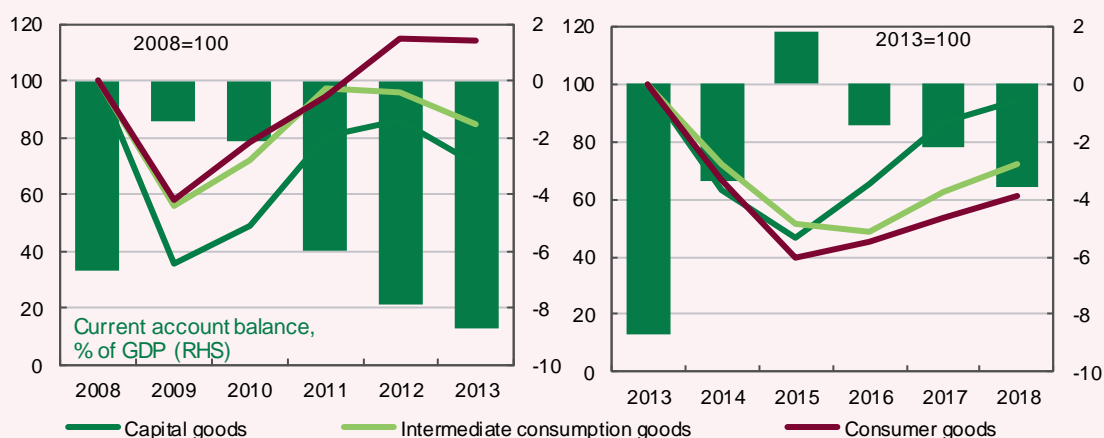
Box 3. Investment Imports as a Contributor to the Widening of the Current Account Deficit

In recent years, the current account deficit has been gradually widening. There was a similar period of widening after the crisis of 2008–2009, to a record 8.7% of GDP. However, the nature of the deficit widening changed significantly after the crisis of 2014–2015.

In 2008 – 2013, the widening was mainly driven by robust consumer demand, fueled by a socially-oriented fiscal policy amid a cyclical upswing in the global economy and a fixed exchange rate. As a consequence, consumer imports surged, significantly overshooting the pre-crisis levels seen in 2012 – 2013.

In contrast, after 2014, investment demand became the main contributor to the widening of the current account deficit. The fall in investment imports seen during the 2014 – 2015 crisis was less pronounced for all commodity groups than during the previous crisis. In part, the drop in imports recorded in 2014 reflected a less scope of data coverage, resulting from the annexation of Crimea, and the temporary occupation of some areas in eastern Ukraine. Since 2016, the growth of investment imports has been outperforming that of consumer imports. In recent years, there has been an increase in the share of imports of industrial and computer equipment in the composition of investment imports. The share of imports of

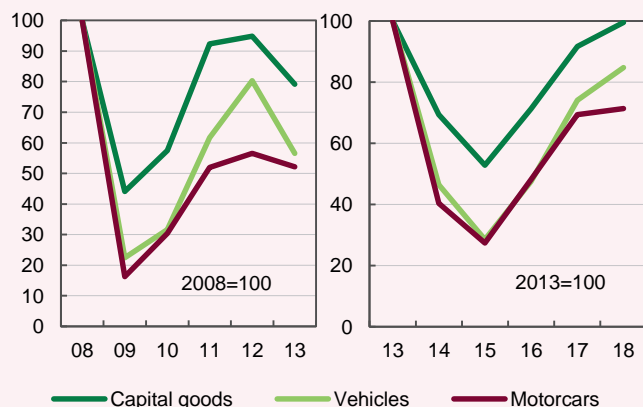
Chart 1. Imports by BEC and Current Account Balance



At the same time, low labor productivity, together with the economy's high energy intensity, lead to there being a large share of imports in intermediate consumption. During the 2008 – 2009 crisis, investment imports experienced the largest contraction. Furthermore the rebound in investment imports seen in 2011 – 2012 was caused, to a significant extent, by preparations for the 2012 UEFA European Championship.

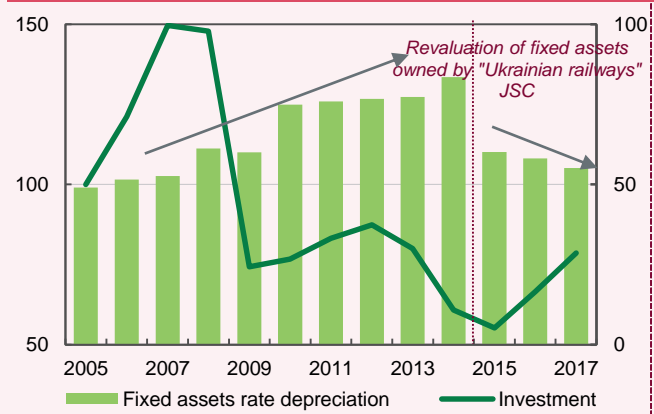
agricultural machinery has remained relatively stable. In contrast to other investment import components, imports of capital equipment reached the 2013 pre-crisis level in 2018, spurred by high investment activity carried out, among other things, with the aim to upgrade fixed assets.

Chart 2. Investment Imports, USD bn



Source: NBU.

Chart 3. Fixed Investment and the Depreciation Rates of Fixed Assets

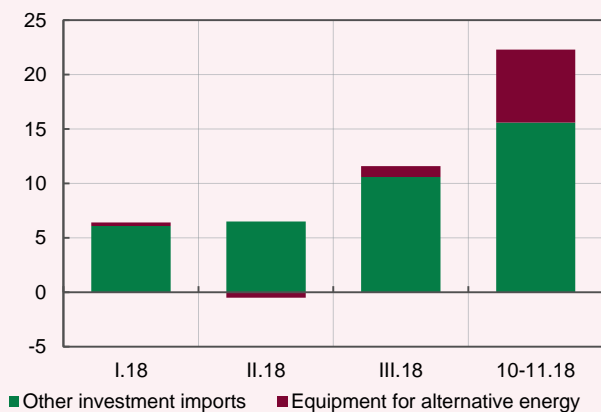


Source: NBU, SSSU.

In 2018, imports of green energy equipment were among the important drivers of investment import growth. In recent years, investors have expressed a great deal more interest in building green energy facilities in Ukraine (for more details,

see [Box "Development of green energy sector in Ukraine"](#) on pages 21-22). [Ukraine's State Agency on Energy Efficiency and Energy Saving estimated](#) that investment in renewable energy hit EUR 1.1 billion in 2016 – 2018. The bulk of this investment (about EUR 0.7 billion) was made in 2018. As a result, electricity production from renewable energy sources (813 MW) almost tripled compared to last year.

Chart 4. Contributions to Annual Change in Investment Imports, pp



Source: NBU, SFSU.

A pick-up in lending supported the implementation of a range of large-scale renewable energy projects¹³, as well as households' more active installation of solar panels. This, in turn, boosted demand for the required imported equipment. More specifically, imports of electric generating sets surged more than five-fold, while those of electricity generators and electric transformers rose by two times and 1.6 times yoy respectively. In addition, demand for mounting structures for such equipment appeared to contribute to the growth in imports of metallurgical products (by 19.2% yoy).

H2 2018 saw a noticeable increase in imports of the equipment required for the construction of renewable energy facilities. This was attributed to both the commercial attractiveness of green energy facilities, due to high tariffs and uncertainty about overhaul of the existing system of government support for green energy projects – in 2018 parliament drew up a draft law that envisaged a change in the pricing of renewable energy from 1 July 2019¹⁴. However, the draft law that parliament adopted at first reading in late 2018 postponed the introduction of a new system until 1 January 2020. Furthermore, on 1 January 2019, imports of renewable energy equipment were exempted from VAT. As a result, there is good reason to believe that investment in renewable energy will remain very attractive in 2019, generating robust growth in imports of renewable energy equipment.

¹³ [Nikopol Solar Power Plant](#), [Prymorsk Wind Power Plant](#), [Rubaniv Power Plant](#), [Yavoriv-1 Solar Power Plant](#), [Solar Chernobyl](#)

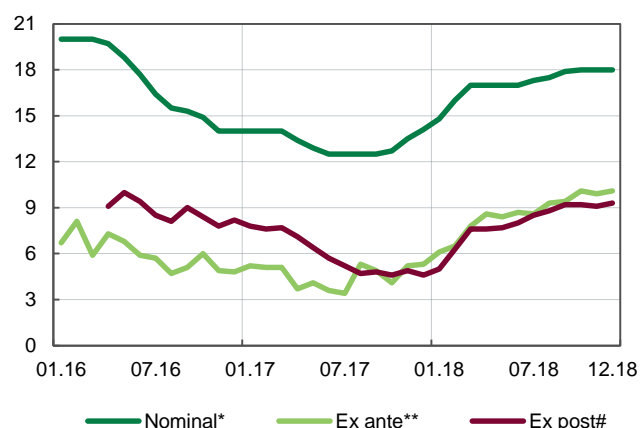
¹⁴ Ukraine' Draft Law On Amending Some Ukrainian Laws with a View to Delivering Market Conditions for Renewable Energy Generation [No. 8449](#), dated 7 June 2018

2.6. Monetary Sector and Financial Markets

The NBU Board twice in Q4 2018 decided to keep its key policy rate unchanged, at 18.0% pa. First, these decisions took into account expectations of further pass through of previous rate hikes to the value of market resources. Second, some positive developments emerged, helping diminish inflationary risks. In particular, risks to macrofinancial stability have subsided considerably, among other things due to the continued cooperation between Ukraine and the IMF under a new [SBA](#) program.

In addition, the FX market conditions remained mostly favorable in Q4 2018 as the FX supply from bank customers exceeded the demand. The unusual behavior of FX market players in Q4 2018 was explained by the large proceeds from agricultural exports amid the bumper corn crop, the positive news about the new IMF program, the restrained fiscal policy, and the maintenance of tight monetary policy. This enabled the NBU to continue increasing its international reserves by conducting interventions on the interbank FX market.

Chart 2.6.1. Real Key Policy Rates, % pa



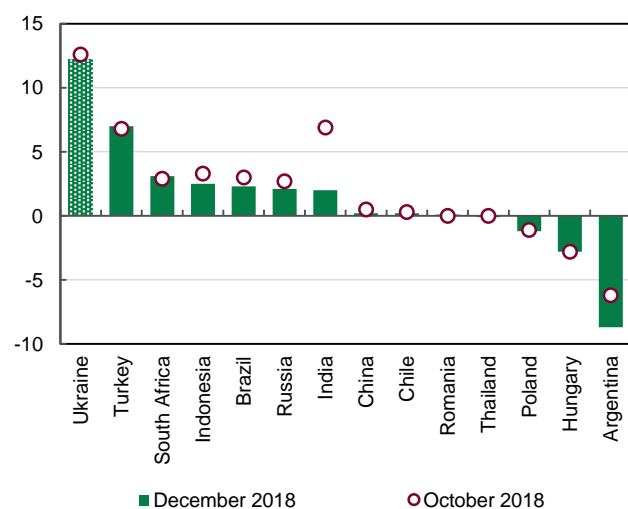
* Average monthly interest rate on 14-day CDs.

** Deflated by 12-month ahead inflation expectations of financial analysts.

Deflated by annual rate of core inflation.

Source: NBU's estimates.

Chart 2.6.2. Real Sovereign Bond Yields in Selected Emerging Markets, % pa



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

Source: DekaBank, Consensus Economics, Thomson Reuters, NBU's forecast and estimates.

Interest Rates

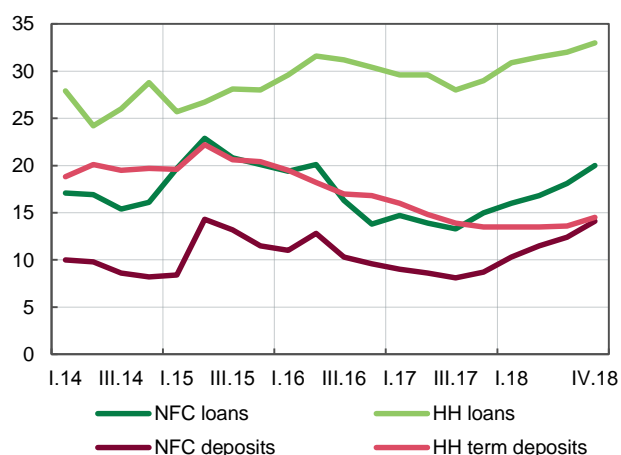
In Q4 2018, the NBU Board maintained the key policy rate at 18.0% pa. As expected, despite unchanged key policy rate, market rates continued to reflect previous rate hikes, although market-specific factors also played a role. Moreover, the key policy rate increased slightly in real terms, reaching 9%–10% pa. This was driven by a gradual decline in inflation expectations, a deceleration of inflation at the end of the quarter, and other factors. Accordingly, the real rate significantly exceeded the neutral level, which is around 3% pa according to the NBU's estimates.

In Q4 2018, [UIIR](#), the indicator of hryvnia interbank interest rates for the purpose of interest rate policy, closely approached the key policy rate. Apart from the transmission of previous hikes, another factor was the rising demand for interbank loans, especially in the period of quarterly tax payments and other payments to the state budget. However, in late December 2018, the UIIR decreased somewhat on the back of an increase in the banking system's liquidity.

Yields on one-year hryvnia domestic government bonds held steady over the course of Q4. Meanwhile, transactions with short-term hryvnia instruments prevailed on the market. Their yields increased to 19%–20% given high fiscal needs. Overall, real yields on hryvnia-denominated instruments remained some of the highest across emerging markets. Along with other factors, this supported the favorable conditions on the FX market, unlike in Ukraine's MTPs.

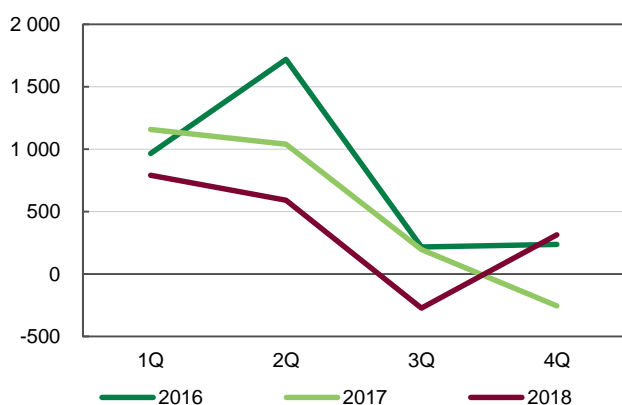
The banks also raised their hryvnia interest rate rates for their customers. Along with the transmission of previous hikes of the key policy rate, market-specific factors also contributed. Most notably, the increase in interest rates on hryvnia-denominated loans reflected the strong demand for loans from both businesses and households. Interest rates on loans to NFCs mainly grew for maturities of up to one month, while the interest rates on HH loans rose the most from one to three months. Increased competition for customers and other factors prompted the banks to raise interest rates on hryvnia deposits, especially on NFC term deposits. The response from HH term deposits was also stronger in Q4 2018.

Chart 2.6.3. Average Weighted Interest Rates on New Hryvnia Loans (excl. overdrafts) and Deposits, % pa



Source: NBU.

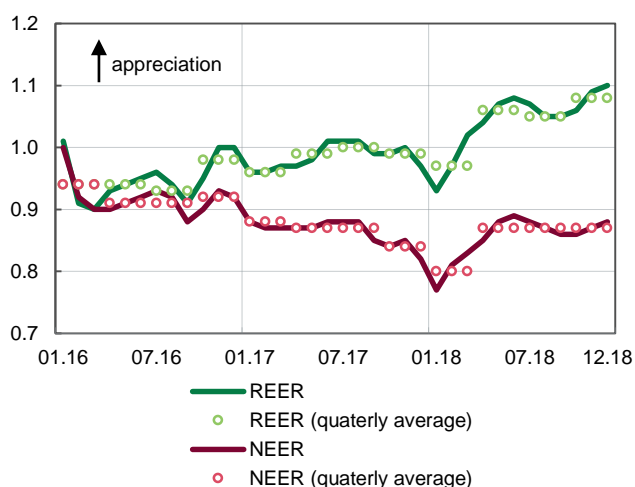
Chart 2.6.4. Net Export Proceeds*, USD mn



* Excess of proceeds from exports of goods and services over transfers from imports of goods and services.

Source: NBU.

Chart 2.6.5. Hryvnia REER and NEER Indices, 12.2015=1



Source: NBU's estimates.

FX Market

The FX market conditions remained mostly benign in Q4 2018 as the FX supply from bank customers exceeded demand. In general, the impact of seasonal factors weakened in 2018, which implies that the behavior of FX market participants is becoming more mature, including on the cash market.

The unusual behavior of FX market players and the atypical exchange rate developments seen in Q4 2018 were explained by large export proceeds amid the bumper corn crop, the positive news about the new IMF program, and the restrained fiscal policy. At the same time, the FX market was more turbulent in the periods during which market sentiment factors gained force. The escalation of the conflict with Russia in the Sea of Azov and the introduction of martial law in some oblasts triggered a temporary spike in the speculative demand in late November.

The NBU's actions did not counteract the hryvnia exchange rate movements beyond what was dictated by market fundamentals. The NBU maintained its presence on the FX market, conducting both FX sale and purchase operations. As conditions on the FX market were mostly favorable, the NBU's net FX purchases amounted to USD 770 million in Q4, and almost USD 1.4 billion for the whole 2018.

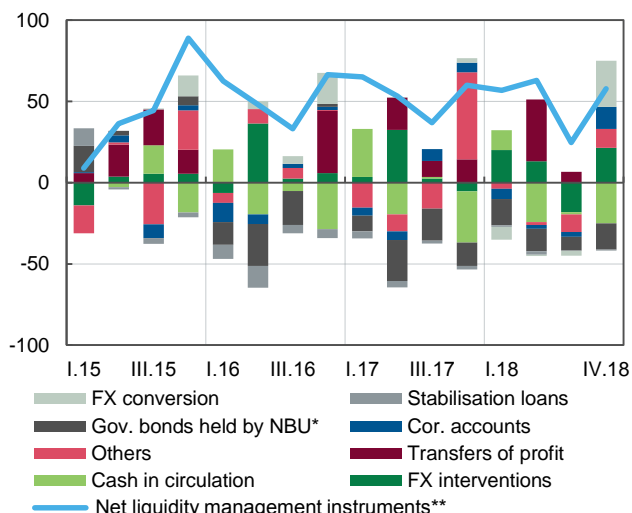
As a result, the official UAH/USD exchange rate appreciated in Q4 2018 by 2.2% qoq and 1.4% ytd. The UAH/EUR exchange rate also strengthened, by 4.3% qoq and 5.3% ytd. Given the depreciation of the currencies of the majority of Ukraine's MTPs, the hryvnia strengthened against the basket of these currencies in December compared to September 2018, in both nominal and real terms (by 1.9% and 5.4%). The NEER and the REER of the hryvnia appreciated as of the year-end (December 2018 to December 2017) by 6.8% and 13.2% yoy, respectively.

Base Money and Liquidity

In 2018, the banking system maintained liquidity surplus, although it narrowed significantly in H2. This was largely due to substantial tax and other payments to the state budget, as well as to rising demand for cash. Despite the liquidity expansion, commonly seen in December, the average daily stock of NBU certificates of deposit declined by 30.5% qoq in Q4 2018. In addition, H2 2018 witnessed an occasional increase in demand for refinancing loans from some banks, which was also a reflection of the narrowing liquidity in the banking system. However, the volumes of these transactions were insignificant. Refinancing loans granted by central banks are a standard liquidity support measure aimed at covering temporary liquidity gaps. Taking into account the frequency of refinancing tenders (usually every two weeks), it has a short-term effect on the banking system's liquidity.

In Q4 2018, liquidity was mainly absorbed by an increase in cash outside banks (by UAH 25.1 billion or 6.7% qoq), the

Chart 2.6.6. Determinants of the Banking System Liquidity, UAH bn



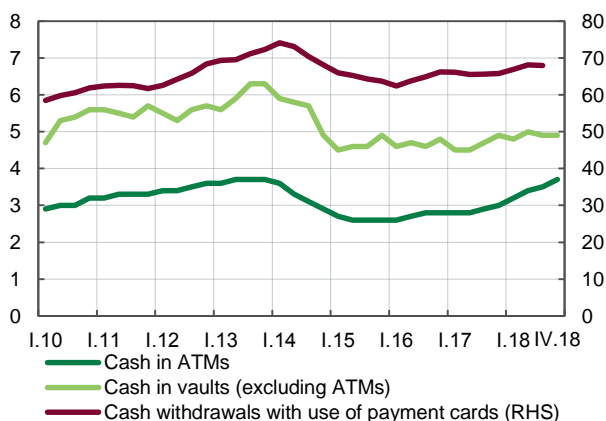
* Difference between government bond purchases to the NBU portfolio and government debt repayments, including interest payments.
 ** Difference between the stock of CDs and short-term refinancing loans.
 Source: NBU.

peak of which, as is usual, was recorded in December. Moreover, liquidity also declined on the back of bank liquidation transactions (UAH 900 million).

During this period, the liquidity was mainly supplied via government transactions, the net impact of which was estimated at UAH 22.9 billion¹⁵. With increased budget expenditures, which usually pick up at the end of every year, the influence of this factor became much stronger in December. At the same time, the strength of this factor was considerably weaker than in the previous year, due to limited hryvnia funding sources. Liquidity was also injected through the FX channel. Thanks to the favorable FX market conditions, in Q4 2018, the NBU mostly purchased FX to replenish international reserves. The NBU's net FX purchases amounted to UAH 21.4 billion. Other factors did not significantly affect the liquidity of the banking system.

The increase in cash exceeded the decrease in the stock of bank correspondent accounts at the end of Q4 2018 versus Q3 2018, leading to a 2.7% increase in the monetary base. In annual terms, it grew by 9.2%.

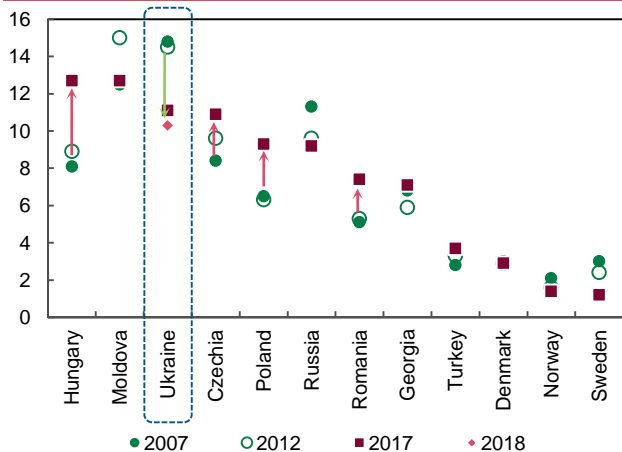
Chart 2.6.7. Cash in Vaults to M0 Ratio, Cash Withdrawals with Use of Payment Cards to Final HH Expenses Ratio, %



Source: NBU.

At the same time, in 2018 as a whole, demand for cash increased more slowly than the nominal consumption expenditures of households, as cashless payments became more popular. However, the growing popularity of payment cards resulted in increased amounts of cash loaded in bank ATMs and conducted transactions with payment cards. Inflows of cash to the banks via transactions to top up card accounts grew markedly, as more people chose this method to pay for goods and services, and banks charged relatively high commissions for cashless transfer/crediting of funds. The spread of payment cards also impacted the structure of cash issue and withdrawal channels. In particular, such traditional channels as paying wages or withdrawing bank deposits at maturity in cash, as well as proceeds from trade, are being replaced with cash transactions using payment cards.

Chart 2.6.8. M0 to GDP Ratio in Selected Countries, %



Source: IMF, SSSU, NBU's estimates and calculations.

Along with the rising popularity of cashless payments, the growth in demand for cash moderated as post-crisis demand weakened. As a result, the share of cash outside the banks in Ukraine approached the levels of neighboring countries.

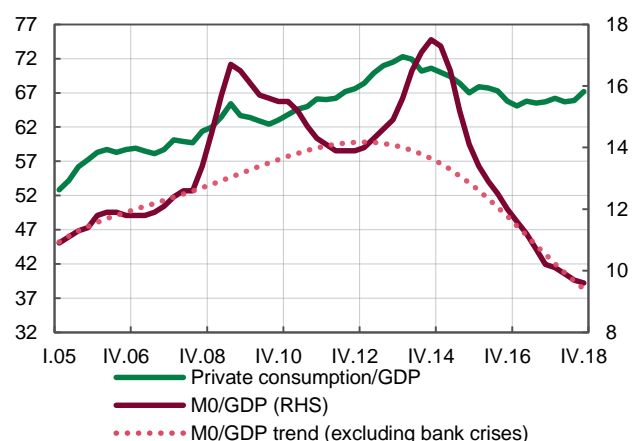
Money Supply and Its Components¹⁶

In 2018, hryvnia bank deposits continued to grow, decelerating slightly as of the end of November (to 8.8% yoy). This was mostly driven by fiscal factors in light of quarterly taxes and other payments to the budget, and was primarily reflected in the moderate growth of NFC deposits.

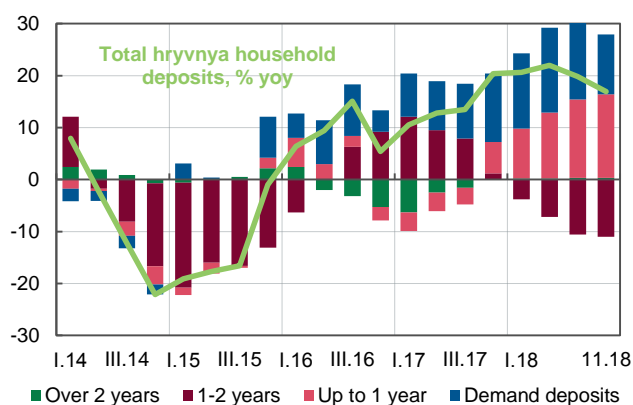
The moderate growth in hryvnia deposits of NFCs in 2018 was largely due to the weaker financial results of companies, a sizeable increase in dividend payments for previous periods, and the tighter fiscal policy. At the same time, the term structure of NFC deposits was determined by the banks'

¹⁵The impact of fiscal factors on the growth in banking system liquidity is estimated based on the following key factors: the government's net FX sales to the NBU, principal and interest payments on government securities held by the NBU, and the decline in single treasury account balances.

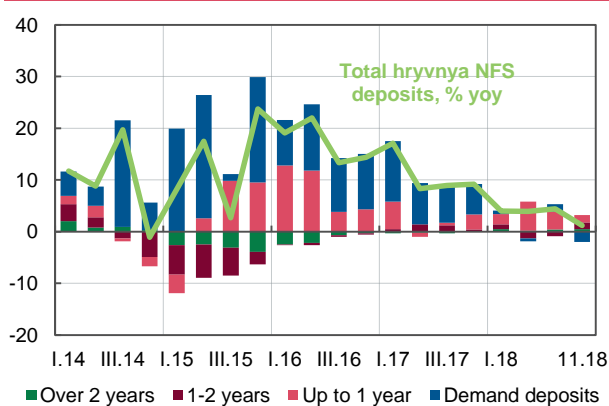
¹⁶ The information provided hereinafter covers 11 months of 2018.

Chart 2.6.9. Cash-to-GDP and Private-Consumption-to-GDP Ratios (4-quarter moving average), %

Source: SSSU, NBU's forecast and estimates.

Chart 2.6.10 Annual Change in HH Deposits in Domestic Currency Breakdown by Maturity, pp

Source: NBU.

Chart 2.6.11. Annual Change in NFC Deposits in Domestic Currency Breakdown by Maturity, pp

Source: NBU.

interest rate policies. In particular, demand deposits decreased, as their interest rates remained almost unchanged throughout most of the year, whereas the stock of term deposits grew on the back of higher interest rates. FX deposits (in US dollar equivalent) dropped, primarily amid higher dividend payments abroad and purchases of foreign-currency denominated domestic government bonds.

Hryvnia HH deposits continued to increase rapidly (16.9% yoy in November), fueled, among other factors, by high growth rates of both real and nominal wages. Deposits with a maturity of up to one year and demand deposits were in most demand. On the other hand, the stock of FX deposits remained almost unchanged, having grown by 1.1% yoy in November. This is attributed to the higher attractiveness of hryvnia deposits and rising interest in alternative investments, particularly in domestic government bonds, as they carry higher yields than deposits. Overall, owing to the deposit growth, the money supply increased by 8.8% yoy in November 2018.

In the next 12 months, the banks expect an inflow of deposits into the banking system, with expectations of an increase in HH deposits at their highest since 2015, when the survey was first launched.

Loans

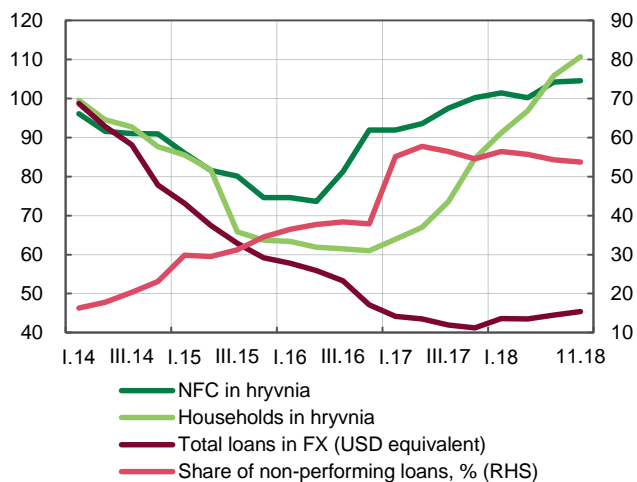
In 2018, the banks remained active in lending to NFCs and HHs – as of the end of November 2018, the banks' loan portfolio increased by 12.7% yoy in domestic currency, and by 8.3% yoy in FX (in US dollar equivalent). Growth in hryvnia lending decelerated somewhat in H2, which might have been driven by some banks raising their lending standards for certain types of loans and borrower groups, by the high base of comparison, and by other factors.

The stock of HH loans continued to grow the fastest (by 42.6% yoy in November). As usual, this was driven by consumer loans. Car loans and other consumer loans increased rapidly. Loans with maturities of up to five years were the most popular.

Demand for loans from NFCs was prompted by their need for working capital and investment. The largest growth in hryvnia loans was generated by companies engaged in the wholesale and retail trade, agriculture, transportation, warehousing, and postal and courier services. In addition, FX lending (in US dollar equivalent) rose gradually in 2018, accelerating to 10.3% yoy in November. Companies in the sector of electricity, gas, steam, and air conditioning supply, the food and chemicals industries, and wholesale trade were the major drivers of the FX loans. Among other factors, this might have been due to investment demand, which was largely satisfied by imported goods, and the price advantage of FX loans. Despite the persistence of depreciation expectations, the cost of such loans remained lower compared to hryvnia loans.

A number of factors from outside the banking system limited the growth in NFC loans: the protection of creditor rights, large

Chart 2.6.12. Loans, IV.2013=100

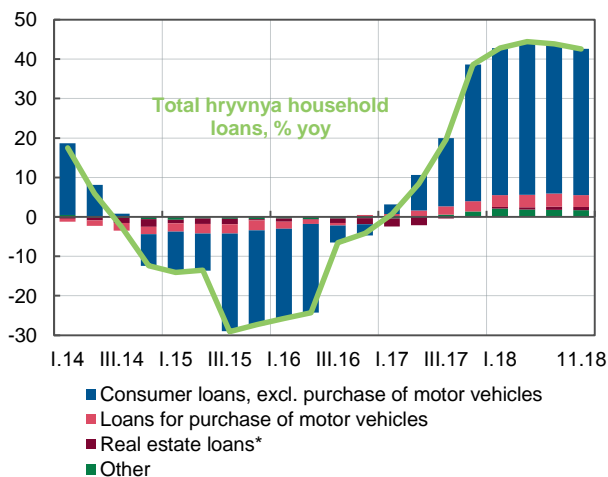


Source: NBU.

amounts of non-performing loans accumulated over past periods, and other factors.

However, the banks remain [optimistic about the prospects for corporate and retail lending](#), forecasting that their portfolios will grow over the next 12 months, and that the quality of corporate loans will improve.

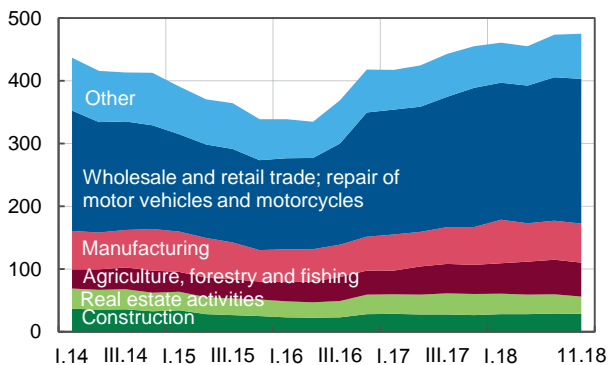
Chart 2.6.13. Annual Change in HH Loans in Domestic Currency by Type of Industry, pp



* Includes loans for purchase, development or reconstruction of real estate.

Source: NBU.

Chart 2.6.14. NFC Loans in Domestic Currency by Type of Industry, UAH bn

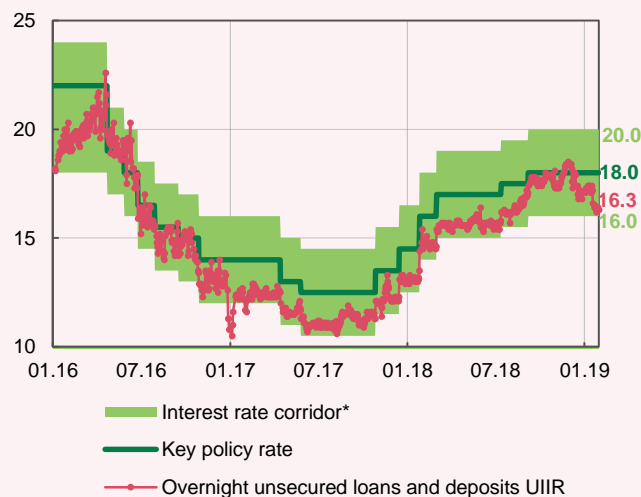


Source: NBU.

Box 4. Implementation of the NBU's Monetary Policy in an Unstable Structural Liquidity Position of the Banking System

Under the inflation-targeting regime, central banks meet monetary policy targets by influencing the value of money in the economy. By changing the key policy rate – the rate at which the NBU carries out its main operations to inject or absorb liquidity, which in Ukraine is the discount rate – the NBU influences short-term interest rates on the interbank lending market. In turn, the short-term interbank rates pass-through to interest rates on other financial assets (government securities) and bank interest rates on loans and deposits. Consequently, irrespective of the banking system's structural liquidity position, the NBU's operational target is to maintain hryvnia interbank rates ([the Ukrainian Index of Interbank Rates, UIIR](#)) at a level close to the key policy rate (currently 18% pa), within the interest rate corridor for rates on standing facilities (16% pa for overnight certificates of deposit and 20% pa for overnight loans).

Chart 1. NBU Policy Rates and UIIR, % pa



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

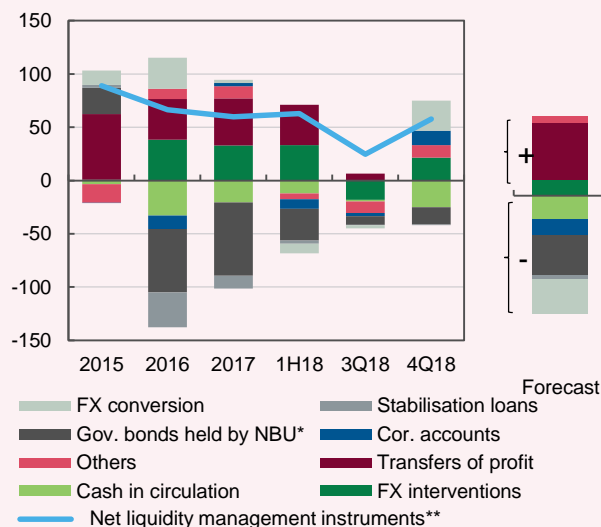
Source: NBU.

For a long time, the banking system of Ukraine has been functioning under the large structural liquidity surplus. This is rather typical of emerging markets (read more in the box [The NBU's Monetary Policy in Conditions of a Structural Surplus of Bank Liquidity](#) in the July 2017 Inflation Report). The structural liquidity position of the banking system can also change due to shifts in macroeconomic conditions and the economic and financial development of a country. For example, after the global financial crisis of 2008 and measures taken by central banks in advanced economies to overcome its consequences (particularly the quantitative easing programs), the banking systems of these countries moved from a structural liquidity deficit to a structural liquidity surplus.

In 2014–2015, the liquidity surplus increased substantially in Ukraine on the back of NBU transactions to purchase government securities, including to support payments by the

Deposit Guarantee Fund (DGF) to bank depositors. In contrast, in 2016–2018, liquidity in the banking system was mostly injected through the NBU's FX purchases to replenish international reserves. In addition, liquidity in late 2018 grew as the government tapped foreign currency to finance budget spending.

Chart 2. Determinants of the Banking System Liquidity in 2015-2018, UAH bn, and Forecast for 2019



* 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.

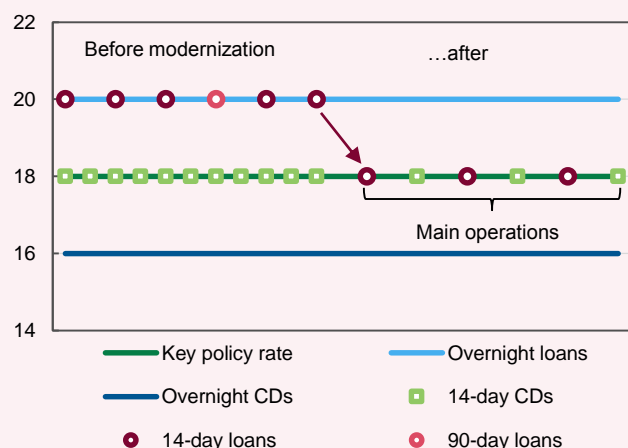
Source: NBU.

At the same time, the structural surplus narrowed significantly during H2 2018, influenced by an increase in demand for cash from households and businesses, on the back of an acceleration in economic growth and favorable conditions on the FX market. Liquidity narrows as banks exchange funds deposited in their correspondent accounts with the central bank for cash in order to meet their clients' needs. Transactions to redeem government securities held by the NBU also absorbed liquidity. A structural liquidity deficit is likely to emerge, taking into account the large payments on external debt slated for 2019 and the continued rise in demand for cash.

When transitioning from one state to another, the liquidity position may be unstable: swinging between surplus and deficit. Under such conditions, the NBU can redirect its main operations from absorbing liquidity (the sale of 14-day certificates of deposit) to providing liquidity (via refinancing loans). As refinancing loan rates are higher than those of 14-day certificates of deposit (which had been the NBU's main operation before 11 January 2019), changing main operation while keeping the same operational design would have caused excessive volatility of the key policy rate and short-term interbank interest rates. In order to be more flexible in responding to changes in the liquidity of the banking system of Ukraine, the NBU introduced [changes](#) to the operational

design of its monetary policy effective from 11 January 2019. The new design relies on both tenders to offer certificates of deposit with maturity of 14 days, and tenders to provide refinancing for the same term. Conducting both operation types at the key policy rate will help maintain market rates at a level close to the key policy rate, and thus meet the NBU's operational target. Main operations are not limited in amount, which will quell concerns banks might have over market operations under a structural liquidity deficit.

Chart 3. Operational Design of Monetary Policy of the NBU



Source: NBU.

Table 1. Operational Design of the NBU's Monetary Policy Given Unstable Banking System's Liquidity Position

Parameter	Features
Main operation	Refinancing tenders and tenders to offer 14-day certificates of deposit are conducted at the key policy rate
Frequency	Once a week, every Friday. Main operations are made in turn: certificates of deposit are sold one week, and refinancing transactions take place the following week. There will be no more regular refinancing tenders for a term of up to 90 days
Amount	Unlimited
Standing facilities	Standing facilities form a corridor of overnight interest rates: +/- 2 pp of the key policy rate – unchanged
Fine-tuning operations	Unscheduled tenders to place certificates of deposit and provide refinancing

Source NBU.

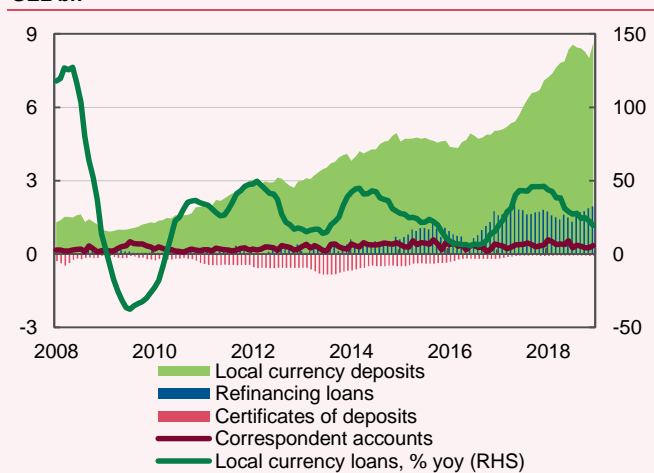
As before, banks will be able to use overnight standing facilities. Parameters of standing facilities remain unchanged: +/- 2 pp of the key policy rate. At the same time, the NBU has stopped conducting tenders to provide liquidity for a term of up to 90 days, as banks showed little interest due to the possibility of rollover under other operations.

The NBU has also changed the schedule for holding its liquidity management operations. The NBU no longer holds weekly refinancing tenders and semiweekly tenders to place certificates of deposit. Main operations are alternated and are conducted once a week, on Fridays (see Table 1). A reduction in the frequency of scheduled tenders will deepen the interbank lending market by encouraging banks to transact with each other and to manage their own liquidity in a more efficient way. If there is a large deviation of the UIIR from the key policy rate, the NBU can perform fine-tuning transactions to inject and absorb liquidity (unscheduled tenders) in order to meet its operational target.

The banking system's structural liquidity position has no influence on bank lending, as commercial banks do not use funds in their correspondent accounts or refinancing loans to issue loans to their customers. The banks' individual decisions to grant loans rely on the expected yield on these transactions, which, in turn, depend on the cost of resources in the economy and on risk assessment. In general, lending volumes are influenced by the private sector's demand for credit resources and a number of institutional factors: the current state of and changes in legislation, the depth of the financial markets, the accessibility of financial resources, etc.

The experience of some emerging markets also proves that changes in the structural liquidity position have no impact on the volumes of bank lending and economic growth. For example, in Georgia, net claims on the central bank increased throughout the period from 2010 to 2013, as did lending activity. In 2017, net claims on banks grew markedly, while bank lending also picked up.

Chart 4. Selected Indicators of Georgian Banking System Liquidity, GEL bn



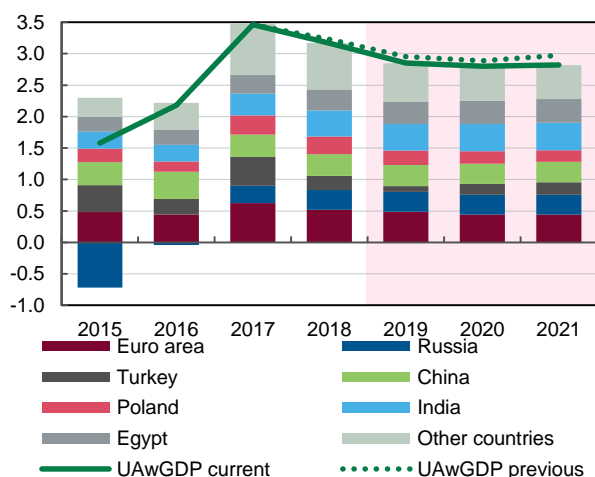
Source: National Bank of Georgia.

Part 3. Macroeconomic Forecast

3.1. Forecast Assumptions

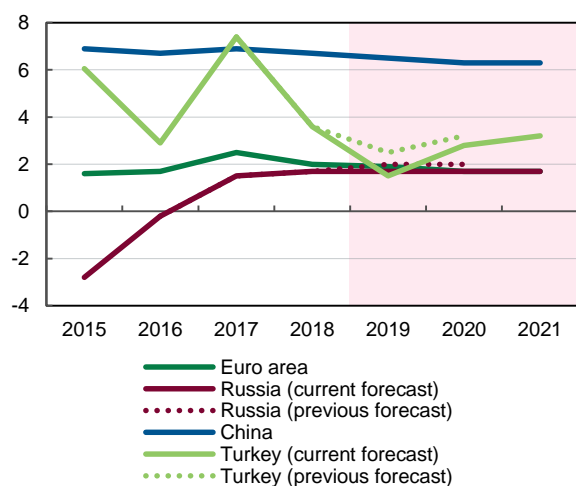
Global economic growth will gradually slow in 2019 – 2021, dampened by the adverse impact of protectionist measures on global trade, and a weakening in capital inflows to emerging markets due to a range of measures taken by leading central banks in 2018 with a view to normalize monetary policy. More specifically, global trade growth is expected to decelerate to 3.6% in 2019 and to 3.5% in 2020 (down from 3.8% in 2018).¹⁷ This will result in rather weak global commodity prices.

Chart 3.1.1. Contributions of Ukraine's MTP Countries to Annual GDP Growth (UAwGDP), % yoy, pp



Source: NBU staff estimates based on IMF.

Chart 3.1.2. Real GDP of Selected Ukraine's MTP Countries, % yoy



Source: NBU staff estimates.

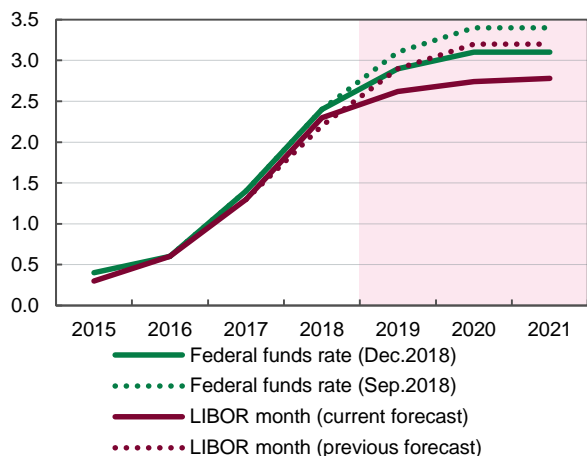
US economic growth will gradually slow, dragged down by the fading of the positive effects of tax stimuli and protectionist measures. In contrast, growth in investment, employment and wages (which sped up in December 2018) will ensure above-potential growth of the economy. Expectations of weaker global economic growth could prompt the Fed to conduct a tighter monetary policy. The financial markets currently expect the federal funds rate to be unchanged in 2019.

Although slowing gradually, economic growth in the euro area will remain close to its potential level. The growth will be strongly underpinned by the ECB's expansionary monetary policy (despite the central bank's winding down its quantitative easing program), as well by rising employment. Meanwhile, a slowdown in some of the largest euro area economies, such as Italy and Germany will drag growth down. Italy's problems are caused by its debt, which, at about 130% of GDP, is one of the largest in the euro area, and which is mainly owed to French banks. Germany's problems are primarily attributed to the trade disputes between the United States and China, which hit the car industry the most. Uncertainty as to what form Brexit will take remains another impediment to economic growth in the euro area. Under such conditions, although winding down its quantitative easing program, the ECB will continue to provide support to the economy by reinvesting profits from securities, and by keeping its key policy rate low. Any changes in the key policy rate are not expected to come before the beginning of 2020.

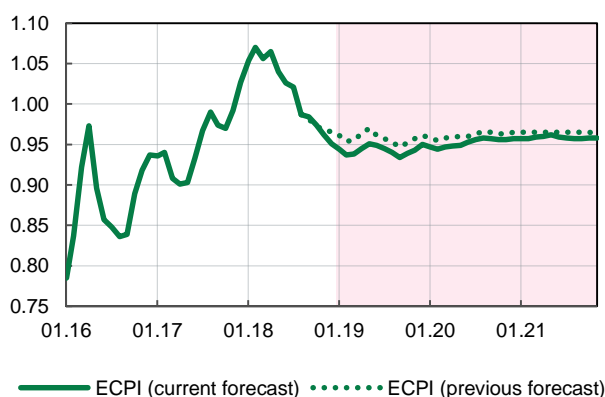
The slowdown of the global leading economies, coupled with trade restrictions, will adversely affect the financial markets, denting risk appetite, including for emerging market assets. This, in turn, will affect capital inflows to these countries, slowing their economic activity.

In addition, the economies of central and eastern European countries will be hit by the slowdown in global trade growth, as their trade with the euro area, which is the main trading partner of these countries, slows. Meanwhile, their economic growth will be boosted by relatively steady consumer demand, underpinned by rising employment and wages, and public financing from EU funds. The global trade slowdown

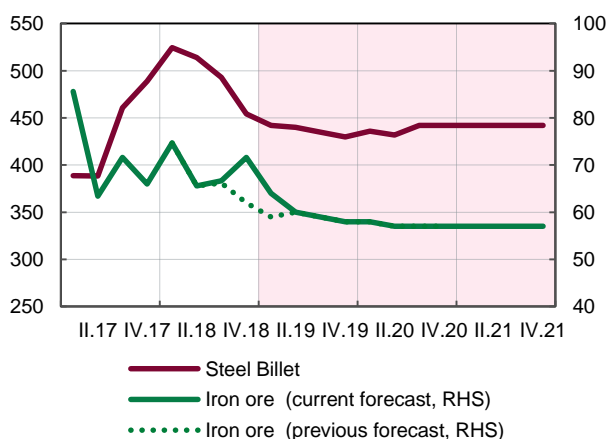
¹⁷ World Bank estimates. These forecasts are in line with the WTO's downward revisions of global trade projections, amid rising trade tensions and tighter lending standards.

Chart 3.1.3. Federal Funds Rate (EOP) and LIBOR, %

Source: Federal Reserve, NBU staff estimates.

Chart 3.1.4. External Commodity Price Index (ECPI), Dec 2004 = 1

Source: NBU staff estimates.

Chart 3.1.5. World Price of Ferrous Metals and Iron Ore*, USD/MT, quarterly average

*Steel Billet Exp FOB Ukraine ra China import Iron Ore Fines 62% FE spot (CFR Tianjin port).

Source: NBU staff estimates.

will also be a drag on economic growth in the CIS countries, such as Russia, Belarus, and Kazakhstan.

Meanwhile, Turkey's economic growth will slow noticeably, on the back of the country's currency crisis, rising inflation, and weaker demand from its main trading partners.

Asian countries, such as China and India, will remain the world's fastest growing economies. Although China is expected to have the slowest pace of economic activity in the last 30 years, the country will remain one of the main drivers of the global economy. The Chinese economy will be supported by tax stimuli arising from tax and charge cuts, by permission being granted to local authorities to issue special bonds to finance key projects, by reductions in reserve requirement ratios by the People's Bank of China to encourage lending to small and medium businesses, and by an increase in medium-term lending (medium-term lending facility or MLF).

Price rises will be curbed by weaker external demand and a slowdown in global trade. As a result, global prices, as measured by the external commodity price index (ECPI), will remain close to the current level over the forecast horizon. The decline in the ECPI compared to the previous forecast is largely due to a downward revision of corn prices amid expectations of a good harvest of oilseeds.

Global steel prices are expected to be little changed from their current level, as a slight rise in demand for steel will be offset by an increase in its supply. More specifically, the growth in demand for steel will hit 0.7% yoy.¹⁸ New steel mills are scheduled to be commissioned in 2019 – 2020, with total production capacity of about 52 million tons a year (excluding China), or over 3% of total global production.¹⁹ Over half of the mills will be launched by Middle Eastern countries. Other countries planning to increase their production capacity are African and Southern and Central American countries.

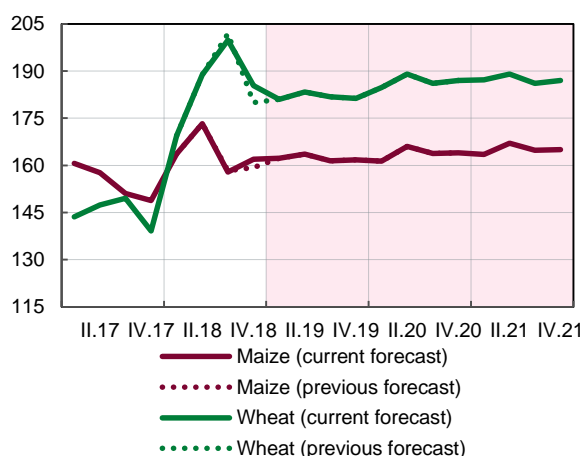
Iron ore prices will drop, dragged down largely by ongoing increases in the supply of this commodity (especially by Australia and Brazil). In particular, Vale, a Brazilian mining company, plans to expand S11D, its largest iron ore mine, boosting its projected capacity four-fold by 2020. At the same time, Rio Tinto, an Australian mining company, will in 2019 launch the field development of its Koodaideri mine, producing high-quality lump ore, which is in the highest demand. Declining demand for ore, especially from China after the Chinese government trims back its financial support for construction and infrastructure projects starting from 2020, will also drive prices down.

Global grain prices will increase gradually over the forecast horizon on the back of faster growth in global consumption. Global grain output in the 2018/2019 marketing year is expected to decline by 3.9% yoy,²⁰ due to significantly lower harvests in Russia (down by 17.6% yoy), the EU (by 9% yoy),

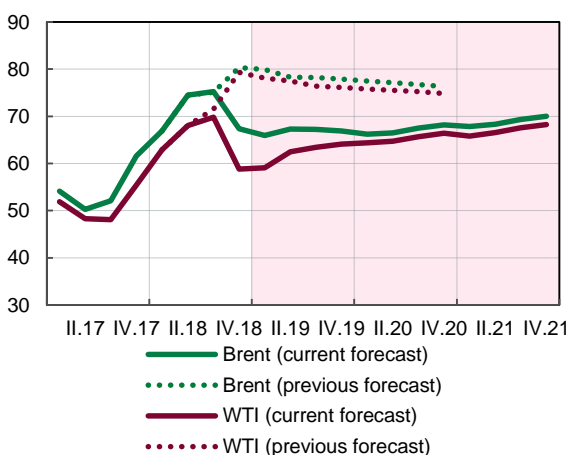
¹⁸ World Steel Association estimates.

¹⁹ OECD estimates.

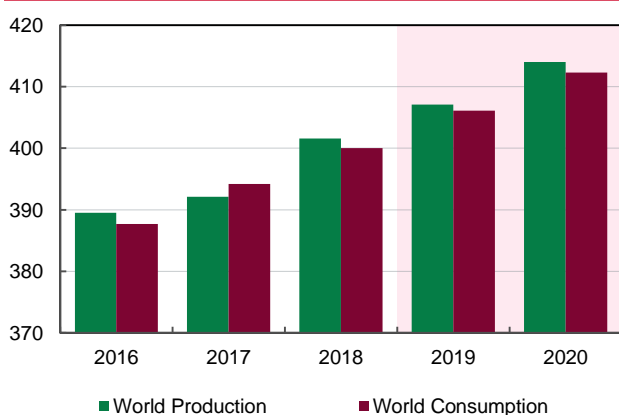
²⁰ USDA projections, December 2018.

Chart 3.1.6. World Cereal Prices, USD/MT, quarterly average

Source: NBU staff estimates.

Chart 3.1.7. Brent and WTI Crude Oil Prices, USD/bbl, quarterly average

Source: NBU staff estimates.

Chart 3.1.8. Consumption and Production of World Crude Oil and Other Liquids, Mbbl/d

Source: U.S. Energy Information Administration, January 2019.

Australia (by 17.8% yoy), and Turkey (by 9.5% yoy). The decline will be in part counterbalanced by higher harvests in the United States (up by 8.3%), Canada (by 5.1%), Argentina (by 5.4%), as well as in India, Iran and Kazakhstan. The larger wheat harvests in some countries are mainly attributable to increases in wheat planting areas, which offsets lower yields. As a result, with consumption volumes being barely changed, wheat inventories will drop by 4.4% yoy in the 2018/2019 marketing year. In the meantime, the global corn harvest will grow by 2.1% yoy in the 2018/2019 marketing year, with consumption rising by 4.3% yoy, to a record high that will exceed output. However, sufficient carry-over stocks will offset the difference between output and consumption.

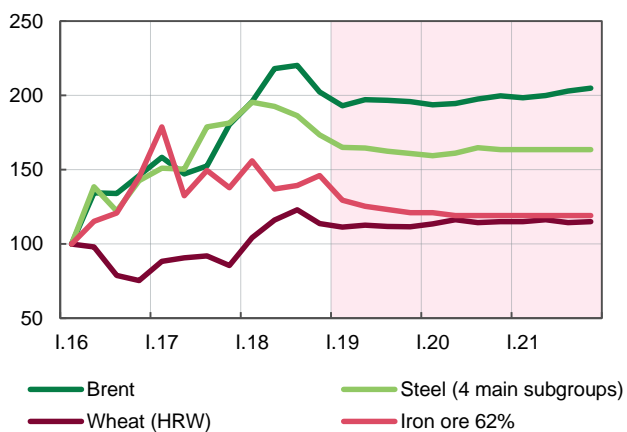
Global oil prices are expected to hover between USD 60 and USD 70 per barrel in the coming years. In 2019 – 2020, global demand for oil is expected to rise by 1.5 million barrels/day every year²¹. At the same time, the change in the global oil supply will have similar dynamics. More specifically, a surge in US oil output will be counterbalanced by cuts in production resulting from the compliance to the OPEC+ agreement. The oils sanctions imposed on Iran by the United States will be offset by the new cooperation mechanisms launched by the EU and China, which together import around 50% of Iranian oil. In particular, the EU has announced its intention to put in place special payment infrastructure to enable it to pay for Iranian oil, while China is resorting to trade in oil futures in Chinese yuans.

In addition, new rules introduced by the IMO (International Maritime Organization)²² are expected to drive up demand for high quality oil refinery products on the one hand, and to cause a partial shift to liquefied gas on the other. Under such conditions, Venezuela and Qatar will contribute to the supply of oil. More specifically, Venezuela is expected to markedly step up its oil exports (up to 1 million barrels per day by 20 August 2019), which will become possible thanks to an agreement signed by China and Venezuela. Following its withdrawal from OPEC on 1 January 2019, Qatar plans to step up its oil production by 43%, to 1.1 million barrels/day.

Under such conditions, global prices on the main commodity markets will gradually synchronize. The asymmetry seen in recent years was mainly caused by idiosyncratic factors that emerged on individual markets. In particular, such factors included record grain harvests to be followed by yield declines, and surges in the production of iron ore on the back of falling production costs. In contrast, the forecast assumes that from 2019 onwards the response of demand to changes in the pace of economic growth, amid relatively stable supply, will be the underlying force affecting commodity markets.

²¹ Source: U.S. Energy Information Administration, Short-Term Energy Outlook, January 2019.²² The IMO is a specialized United Nations agency responsible for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships.

Chart 3.1.9. World Price Indexes for Selected Commodities, Q1, 2016 = 100



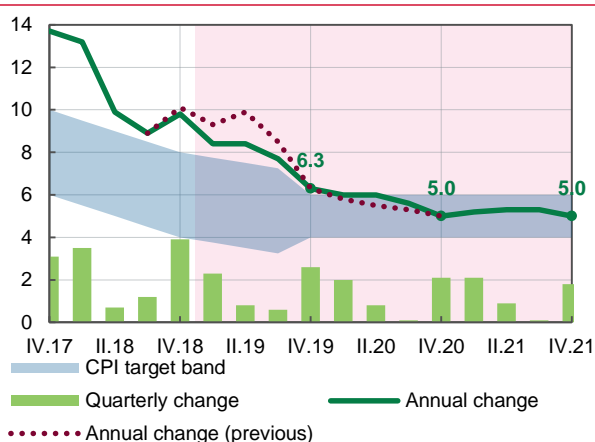
Source: NBU staff estimates.

3.2 Inflationary developments

As before, consumer price inflation is expected to return to the upper bound of the target range at the start of 2020, and to the medium-term target level of 5% at the end of that year.

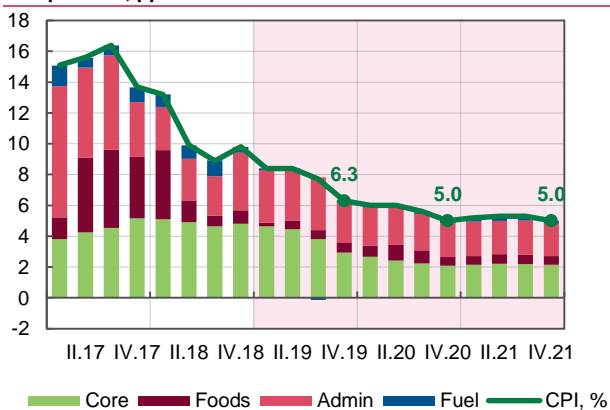
The year-end inflation forecast remains unchanged at 6.3% in 2019, but the projected dynamics of some of inflation components have been partially revised. The disinflation effects of lower energy prices and a stronger hryvnia will be offset by continued pressures from rising wages and faster growth in administered prices. The main factors behind the drop in inflation on the forecast horizon will be fairly tight monetary conditions and restrained fiscal policy, which will slow the growth in consumer demand and bring back the negative GDP gap. Relatively low exchange rate volatility and moderate growth in the prices of imported goods, including energy and food, will also help rein in the prices of most of the components of the consumer basket. The pro-inflationary effect of wage hikes will weaken.

Chart 3.2.1. CPI, %



Source: SSSU, NBU staff estimates.

Chart 3.2.2. Contributions to Annual CPI Growth by Main Components, pp



Source: SSSU, NBU staff estimates.

Core inflation will decelerate to 5% in 2019, curbed by the tight monetary policy and restrained fiscal policy, and the weakening of the pro-inflationary effects of wage hikes. Second-round effects from slowing food and fuel inflation will also help bring core inflation down. Although decelerating thanks to decreased pressures from wages, the growth in the prices of market services will remain the largest contributor to core inflation.

In the meantime, given the hryvnia's relatively stable NEER, increases in the prices of those core CPI components that are predominantly imported (such as clothes and footwear, and computer and household equipment) are expected to be rather small.

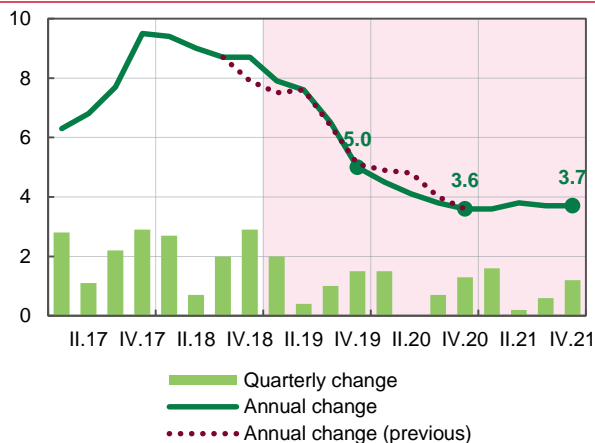
Core inflation will decline further in 2020 – 2021, hovering below 4%, dragged down by moderate pressures from the exchange rate, wages, and aggregate demand (pressures from aggregate demand will be evidenced by a negative GDP gap over the forecast period).

Raw food inflation is forecast to remain within the 3.0%–3.5% range both this year and in the medium term, provided no dramatic supply shocks hit the economy as a result of a poor harvest or a change in Ukrainian producers' ability to tap into certain external markets. The higher output of the agricultural sector, driven by past investments and improved productivity, will curb food price inflation in the medium term.

The growth in administered prices in 2019 has been revised upward, to 13.6% (up from 11.7% in the previous forecast). This was due to a shift in an increase in central heating and hot water prices to January 2019 (the previous forecast envisaged their increases coming in December 2018). Further rise in household gas prices (according to commitments under the IMF memorandum) is scheduled for Q2 2019.

Nevertheless, the main contribution to administered price inflation in the current year will come from upticks in tobacco prices (which are expected to hit 19%), resulting from revisions in the schedule for raising excise tax foreseen in the law on Ukraine's state budget for 2019. Although slowing to

Chart 3.2.3. Core Inflation, %



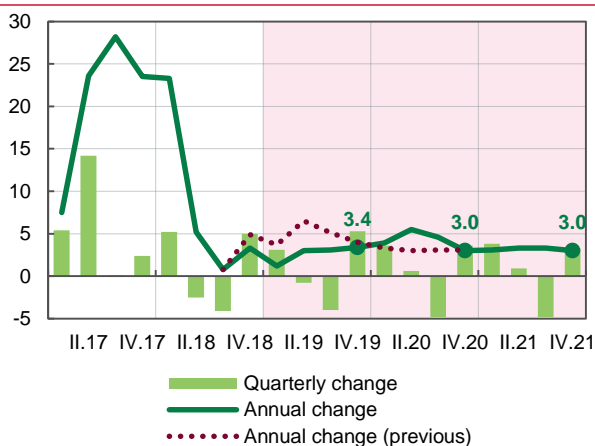
Source: SSSU, NBU staff estimates.

12%, the growth in tobacco prices will remain high in the years to come, fueled mainly by further excise tax rises. Alcohol prices are expected to rise by 6%–9% every year over the forecast period.

Although decelerating to 10.3% in 2021, the growth of administered prices will still exceed that of prices for other consumer basket components. From 2020, gas prices, on which heating and hot water prices depend, will be set on the basis of import parity prices. Further wage increases for utility and public transportation service providers, will also make a significant contribution to administered price growth over the medium-term.

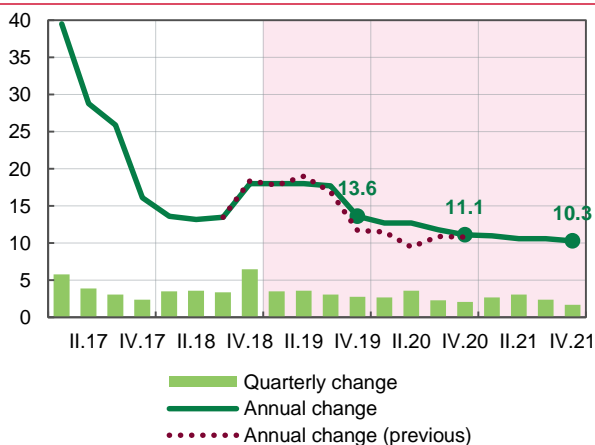
The material correction in oil prices in Q4 2018 prompted the Ukrainian market to revise fuel prices. As early as Q1 2019, the annual change in fuel prices is expected to approach zero, which will be largely responsible the more rapid fall in headline inflation relative to the previous forecast. Further annual increases in fuel prices are expected to be in the range of 4%–5%, provided there are no changes to the excise tax policy.

Chart 3.2.4. Raw Food Inflation, %



Source: SSSU, NBU staff estimates.

Chart 3.2.5. Administered Price Inflation, %



Source: SSSU, NBU staff estimates.

3.3. Demand and Output

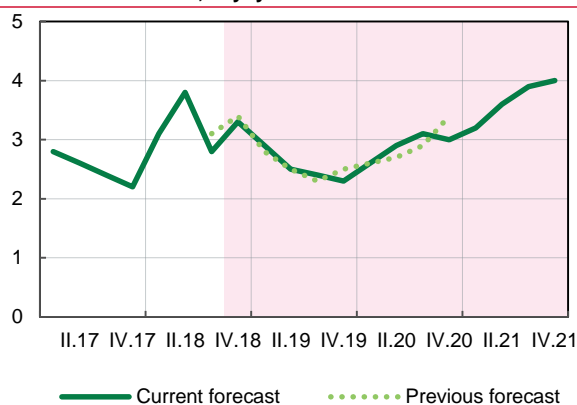
Following an increase of 3.3% in 2018, GDP growth will slow to 2.5% in 2019, as projected earlier. The main constraints will be the tight monetary policy needed to bring inflation back into the target range and the restrained fiscal policy required to repay substantial amounts of public debt. In addition, the grain harvest is expected to decline in the wake of last year's record figures, which enabled agriculture to make a significant contribution to GDP growth. Another factor will be a gradual deceleration of growth in the global economy and trade, among other things due to protectionist measures.

Private consumption will remain the main driver of economic activity, but the growth in private consumption will slow to 4.9% this year, reflecting a corresponding slowdown in real incomes, in particular salaries, pension payments, and remittances from abroad.

Investment activity will go into slowdown mode, but will continue to fuel the robust demand for investment imports. As a result, imports will grow faster than exports in real terms, even amid a revival in export-oriented industrial production and record grain exports. Consequently, the contribution of net exports will remain negative, albeit to a lesser extent than in previous years.

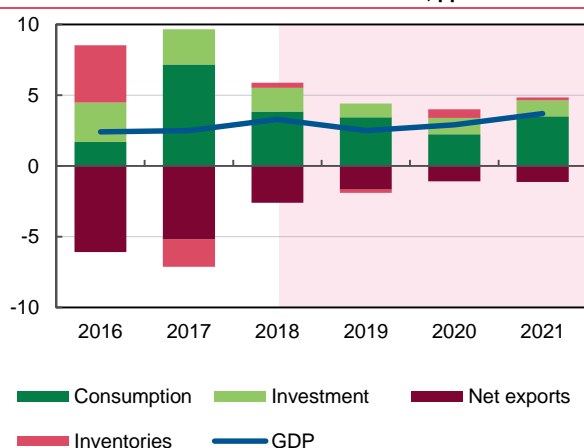
From next year onward, real economic growth will start picking up, reaching 2.9% and 3.7% in 2020 and 2021, respectively. The growth will be propelled by a gradual easing of monetary policy, which will bolster domestic demand, and a pick-up in investment activity as uncertainty over the political situation diminishes.

Chart 3.3.1. Real GDP, % yoy



Source: SSSU, NBU staff estimates.

Chart 3.3.2. Contributions to Real GDP Growth, pp



Source: NBU staff estimates.

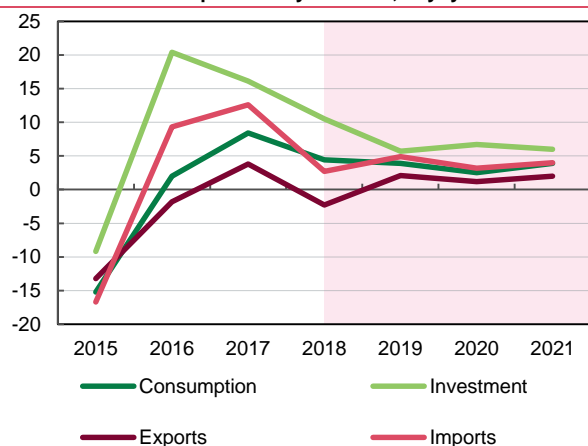
Economic growth will continue to be mainly driven by private consumption, but its growth will decelerate somewhat in the current year, to 4.9%. This will be driven by a decrease in the growth rates of real wages and other personal income (particularly social expenditures from the budget and labor migrant remittances). In 2021, private consumption will increase by nearly 5% as monetary policy eases and lending activity resumes.

Investment activity will significantly slow in 2019 (growing by about 6%) amid tight monetary conditions and an increase in political uncertainty during the electoral cycle. Considering the monetary policy easing and the more stable political situation, investment growth will accelerate slightly in 2020–2021. An important driver of growth in investment will be the need to upgrade production capacity in export-oriented industries to increase access to foreign markets. Investment growth will also be driven by increased capital expenditures from the budget, particularly on road renovations. Amid these changes in the investment landscape, the share of gross fixed capital formation will increase to 19% of GDP in 2021 (from 17% in 2018).

In 2019, the negative contribution of net exports to GDP will shrink, primarily due to gradual increases in export volumes. Exports are expected to increase by about 2% in 2019, mainly driven by big shipments of grain from last year's harvest, and the growth in supplies of metallurgy products. In 2020–2021, the volume of exports will continue to grow at a low rate due to smaller volumes of gas transit and grain exports than in 2019.

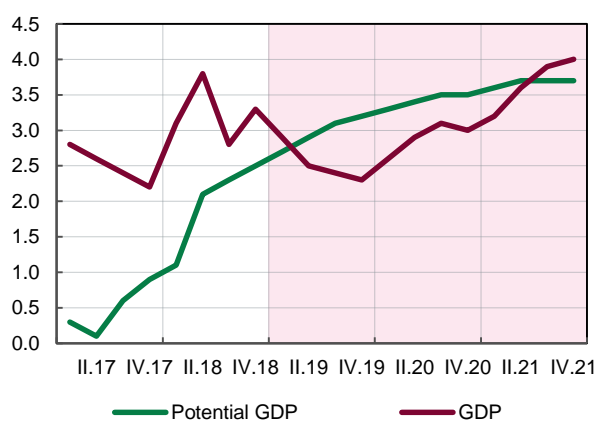
Import volumes will increase by nearly 5% this year, primarily driven by the dynamics of investment imports, including machinery and equipment (a significant contribution is

Chart 3.3.3. GDP Components by End Use, % yoy



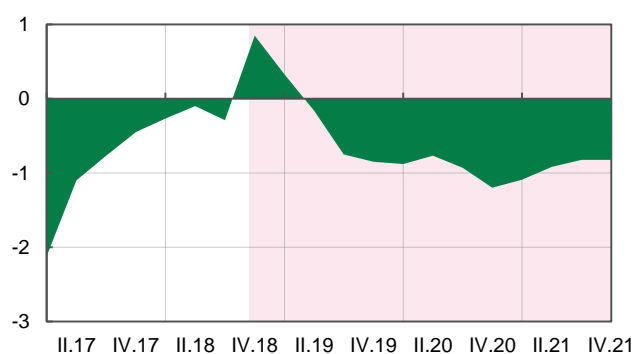
Source: SSSU, NBU staff estimates.

Chart 3.3.4. Actual and Potential GDP, % yoy



Source: SSSU, NBU staff estimates.

Chart 3.3.5. Output Gap, % of Potential GDP



Source: NBU staff estimates.

expected from the green energy sector). Household demand for imported products will remain high, but its growth will decelerate, as will the growth in real wages under conditions of a tight fiscal policy. In the medium term, the growth in import volumes will slow to 3%–4% per annum as the real exchange rate gradually weakens.

Potential GDP and the Cyclical Position of Ukraine's Economy

The growth of potential GDP will continue to accelerate, from 2.5% yoy (the NBU's Q4 2018 estimate) to 3.7% yoy by the end of 2021.

This will mainly be due to an improvement in total factor productivity as Ukraine's economy converges to those of developed countries.

Demographic changes will remain among the main impediments to the growth in potential GDP. At the same time, the NBU expects that labor migration will slow, reducing its negative impact on the growth of potential GDP.

In Q3 2018, the negative contribution of capital to potential GDP dropped to zero, owing to growth in the share of capital investment in GDP in previous years. It is expected that, going forward, the contribution of capital to the growth of potential GDP will be positive, and will gradually increase over the forecast horizon as accumulated fixed capital will exceed depreciation.

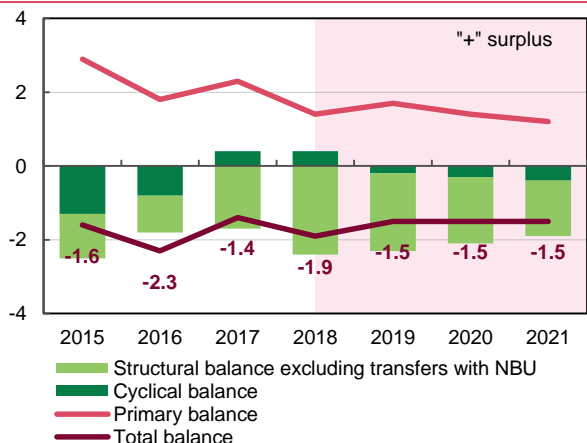
Thanks to favorable terms of trade and a revival of consumer and investment demand, the negative GDP gap closed in Q3 2018. Simultaneously, in Q4, a positive GDP gap (of almost 1%) emerged because of the high grain yields and lower prices for energy. However, the tight monetary policy, a deceleration in the growth of external demand, and less favorable terms of trade (compared to 2018) will push the GDP gap back into negative territory in Q2 2019. Over the entire forecast horizon, the negative output gap will fluctuate around 1% of potential GDP.

Fiscal policy

This year and in the medium term, fiscal policy will be tighter than in 2018, curbing both aggregate demand and inflation. The NBU expects that the government will find it difficult to expand the budget deficit to 1.5% of GDP this year as external debt repayments reach peak levels. Securing financing from the IMF and other official creditors will enable Ukraine to retain access to international capital markets over the forecast horizon, and to refinance part of the debt.

Tax revenues to the consolidated budget will increase by 11% in 2019. The highest growth rates are expected from the individual income tax due to high rates of nominal wage growth in the economy. At the same time, budget spending on compensation of employees will continue growing fast. Overall, growth in government social expenditures (including pension payments) will be about 12% and will be an important driver of domestic consumer demand. Capital expenditures

Chart 3.3.6. Consolidated Budget, % of GDP



Source: STSU, NBU staff estimates.

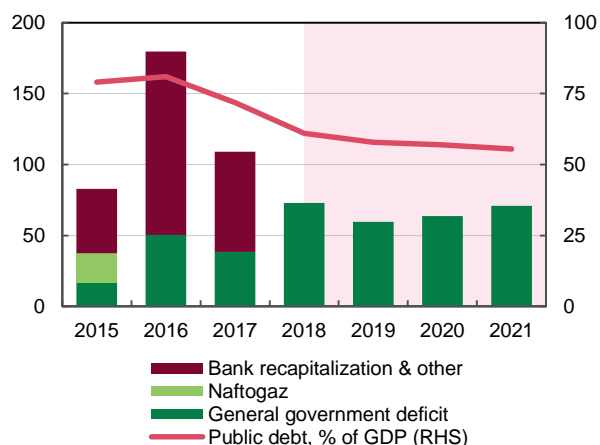
of the consolidated budget are expected to be close to 3.5% of GDP throughout the forecast horizon, supported by government policies to overhaul road infrastructure.

The continued rapid growth in nominal GDP, low exchange rate volatility, and a constant primary surplus in the consolidated budget (over 1% of GDP a year) will reduce public and publicly guaranteed debt to below 60% of GDP.

Household Income and Unemployment

The still high unemployment rate (8.5%–8.7% by ILO methodology) will be driven by the slow pace of economic growth, amid tight monetary and fiscal policies over the forecast horizon. The slowing of migration processes and the smoothing out of labor market imbalances will reduce the pressure on wage growth.

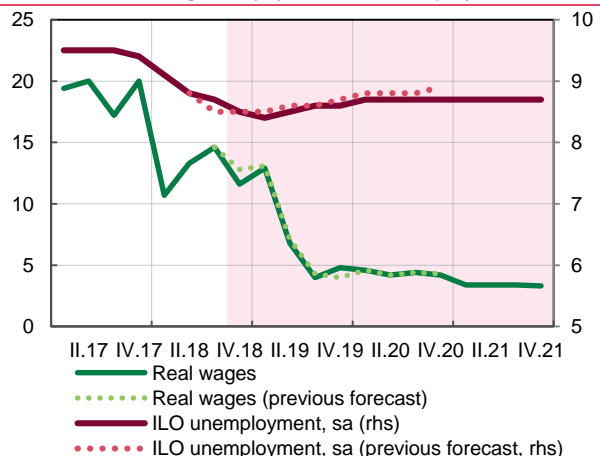
Chart 3.3.7. Broad Public Sector Deficit, UAH bn, and Public Debt, % of GDP



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

The growth rate of the average nominal wage will decline (from about 16% this year to 9% in 2021), both due to the lower outflow of labor to EU countries, and because of a slower rate of wage convergence. Real wages will increase by 7% in 2019, while thereafter their growth will decelerate to about 4% per annum.

Chart 3.3.8. Real Wages, % yoy, and ILO Unemployment sa, %



Source: SSSU, NBU staff estimates.

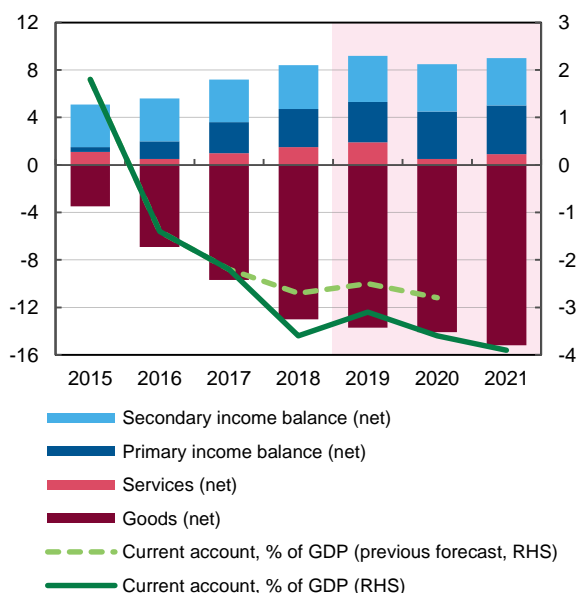
3.4. Balance of Payments

After widening to 3.6% of GDP in 2018, the current account deficit will fluctuate between 3% and 4% of GDP throughout the forecast horizon. In 2019, the deficit will narrow to 3.1% of GDP due to the bumper corn harvest in 2018 and a drop in energy prices. In 2020–2021, the current account deficit will widen slightly, on the back of a decrease in gas transit, the waning effect of the record harvest than in 2018, and a rise in investment imports, fueled by a reduction in political uncertainty. The widening of the trade deficit will be partially offset by greater remittances as a result of higher incomes of labor migrants.

As before, the NBU's macroeconomic forecast is based on the assumption that Ukraine will continue to cooperate with the International Monetary Fund (IMF) and enjoy relatively favorable access to the international capital markets. At the same time, the maintenance of a reasonably tight monetary policy stance will contribute to the inflow of debt capital, which, together with continued inflows of foreign direct investment, will finance the current account deficit. Official external borrowing and the placement of sovereign Eurobonds by the government will allow for a partial rollover of the significant external public debt repayments that are scheduled for 2019–2021.

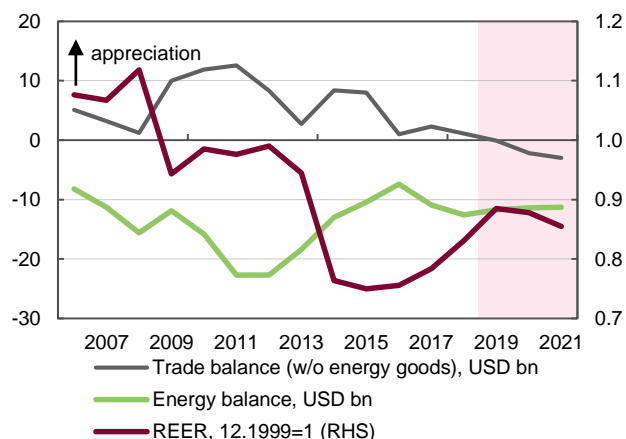
As a result, international reserves will stabilize at the current level (close to USD 21 billion) over the forecast horizon.

Chart 3.4.1. Current Account, USD bn



Source: NBU staff estimates.

Chart 3.4.2. REER and Trade Balance



Source: NBU staff estimates.

The current account deficit will narrow to 3.1% of GDP (compared to 3.6% of GDP in 2018), driven largely by lower energy prices and the record corn harvest in 2018. In 2020–2021, the current account deficit will widen slightly to less than 4%, on the back of a decrease in gas transit, the waning effects of the record harvest in 2018, and a rise in investment imports.

Export growth in 2019–2021 will be primarily driven by an increase in the volumes of shipments of metallurgy products, primarily to the Asian markets. In 2019, the growth in goods exports will slow to 2% as annual average global prices of commodities decline. At the same time, the growth in export volumes will accelerate due to the record harvest of corn and the increase in the demand for metallurgical products. The growth in machinery exports will be curtailed by the introduction by Russia (on 29 December 2018) of an additional restriction on imports that mainly applies to Ukrainian machinery products.

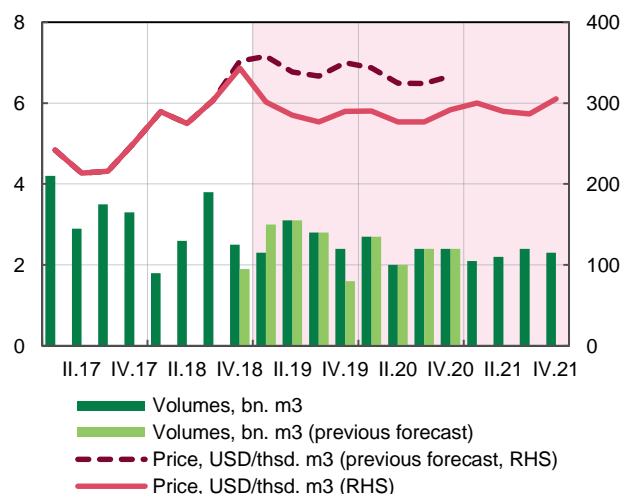
In 2020–2021, the growth in exports will accelerate to 3%, primarily due to an increase in supplies of metallurgical and machinery products as a result of global demand growth.

In 2019–2021, the growth in merchandise imports is expected to slow to 3%–4% (from 14% in 2018). In 2019, energy imports will decrease, primarily due to lower energy prices. Energy imports will continue to decline in 2020–2021 due to smaller volumes of natural gas imports because of increased domestic production and the further implementation of energy-saving measures. A deceleration in the growth in non-energy imports to 5%–6% (from 14% in 2018) will result from the slower growth in consumer demand amid a tight fiscal policy. Starting from 2020, investments in alternative energy are expected to decrease. However, investment activity is expected to pick up as political risks ease.

As a result, the trade balance, excluding energy, will run a deficit in 2019–2021. A gradual depreciation of the hryvnia will restrain the widening of the deficit.

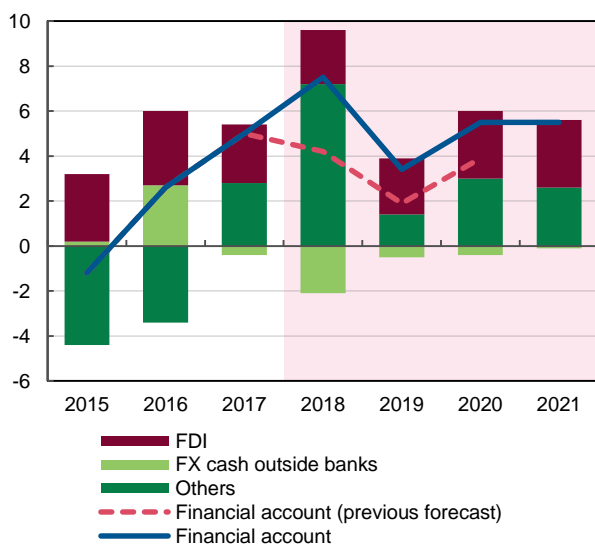
In 2019, the surplus in the trade of services will continue to grow due to the further growth in exports of transportation and IT services. However, the surplus in the trade of services is

Chart 3.4.3. Gas Imports



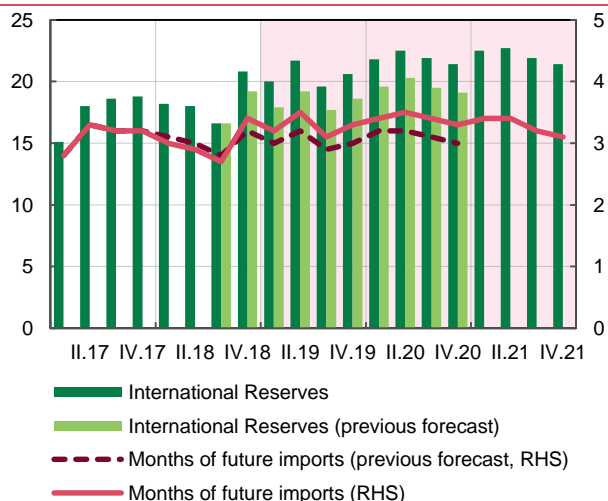
Source: NBU staff estimates.

Chart 3.4.4. Financial Account: Net Inflows, USD bn



Source: NBU staff estimates.

Chart 3.4.5. International Reserves, USD bn



Source: NBU staff estimates.

expected to narrow in 2020-2021 due to a nearly twofold reduction in gas transit volumes.

Remittances from labor migrants are expected to grow at a slower rate in 2019–2021 as migration processes decline in intensity. The growth in remittances will be almost fully determined by the dynamics of labor migrant incomes abroad.

Over the forecast horizon, dividend payments will remain at the previous year's level – between USD 3 billion and USD 3.5 billion – as capital flows are liberalized further.

Net financial account inflows in 2019–2021 will be directed to the private sector. A tight monetary policy and continued cooperation with the IMF (a positive signal to investors) will facilitate an inflow of debt capital, mainly into the real sector.

Following an increase in FX cash outside banks by USD 2.1 billion in 2018, such a growth is expected to decelerate significantly over the forecast horizon, amid high interest rates on hryvnia deposits and low exchange rate volatility.

Official borrowings from external donors in 2019–2021 (USD 6.5 billion from the IMF and USD 1.6 billion each from the EU and World Bank), along with USD 8.5 billion from the placement of sovereign Eurobonds, will allow rollover maturing external debt.

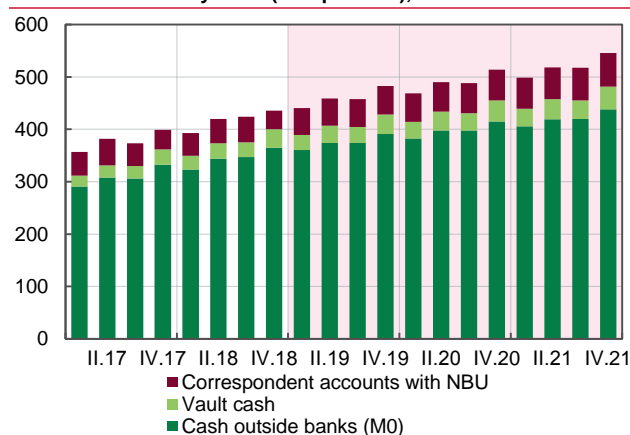
A minor deficit in the overall balance of payments over the forecast horizon will be financed with net inflows from the IMF. As a result, international reserves will remain at the level of year-end 2018 (close to USD 21 billion) over the forecast horizon. By the end of 2021, they will cover 3.1 months of future imports, or about 70% of the IMF's composite measure.

3.5. Monetary Stance and Financial Markets

A further tightening of monetary policy is expected to continue over the forecast horizon in order to ensure that inflation is reduced to its target level in 2020. At the same time, under the baseline scenario, monetary policy will gradually ease as inflationary pressures weaken.

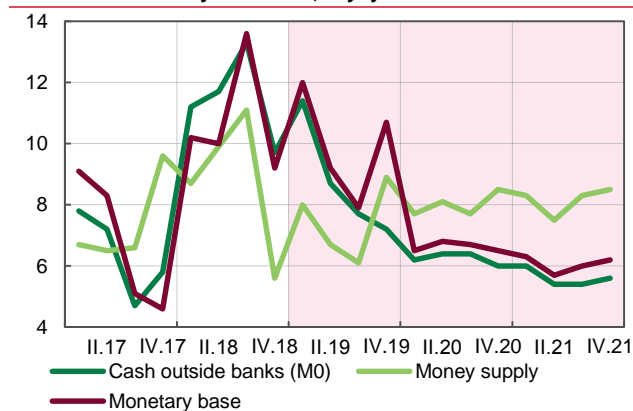
The liquidity of the banking system is expected to decrease, which will be reflected in the NBU's main liquidity management operations. The main factors behind the reduction of liquidity will be the significant government's payments of external public debt over the next two years, and an increase in currency in circulation amid growing transaction demand. This will result in an increase in the banks' demand for refinancing loans and a decrease in the volume of issuance of NBU's certificates of deposit. When transitioning from one state of liquidity to another, the liquidity position may be unstable (read more in the box Implementation of the NBU's Monetary Policy in an Unstable Structural Liquidity Position of the Banking System).

Chart 3.5.1. Monetary Base (Components), UAH bn



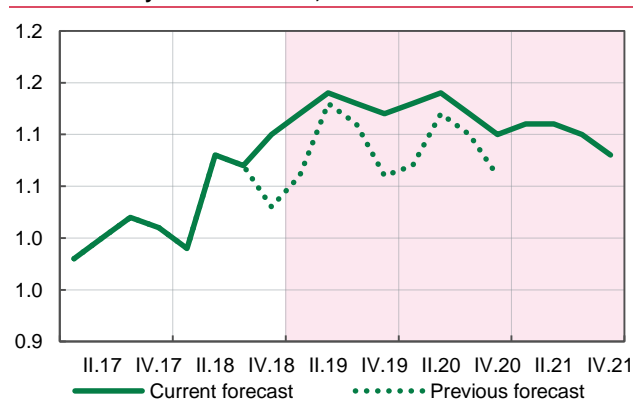
Source: NBU.

Chart 3.5.2. Monetary Indicators, % yoy



Source: NBU.

Chart 3.5.3. Hryvnia REER Index, IV.16=1



Source: NBU.

Despite the expansion of cashless payments, cash demand is being supported by increases in real household income and price levels. The amount of vault cash is expected to increase to accommodate the more widespread use of payment cards, which require sufficient reserves of cash in ATMs. Coupled with growth in the banks' correspondent accounts, this will expand the monetary base by around 11% in 2019, and by 6% in 2020 and 2021.

Domestic currency deposits are expected to continue to increase in 2019, owing to rather high real interest rates. Deposits are expected to grow at a higher pace (9%–10%) than cash (6%–7%). As a result, the money supply is expected to grow by about 9% over the forecast horizon. A resumption of lending by banks will also support the growth in the money supply. However, the growth in lending will be modest, owing to persistently high institutional risks and a large share of nonperforming loans.

The banking system's liquidity is expected to narrow over the next few years as the government makes large payments on external public debt and the volume of currency in circulation increases. The change in liquidity will also largely depend on the sources of government funds to repay debt. When transitioning from one state of liquidity to another, the liquidity position may be unstable. Under such conditions, the direction of the NBU's main liquidity managing operations (whether to inject or withdraw liquidity) will be determined by the structural liquidity position of the banking system. In the future, the structural liquidity position will be determined by demand for cash, the impact of fiscal factors, and the NBU's FX market operations.

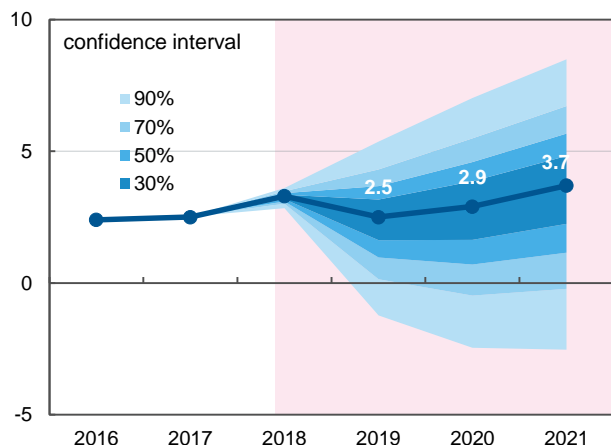
Lower inflationary pressures will be accompanied by a gradual easing of monetary conditions, which in turn will contribute to a weakening of the real effective exchange rate of the hryvnia in 2020–2021. The key policy rate will decrease in real terms from the current (9%–10%) to the neutral (about 3%)²³ level in the medium term.

²³Hrui A., Lepushynskiy 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. <https://bank.gov.ua/doccatalog/document?id=69524810>

3.6. Risks to the Forecast

The main risks to the baseline scenario of the macroeconomic forecast arise from the deterioration of inflationary expectations amid the start of a new political cycle and a turbulent external environment.

Chart 3.6.1. Real GDP Forecast, % yoy

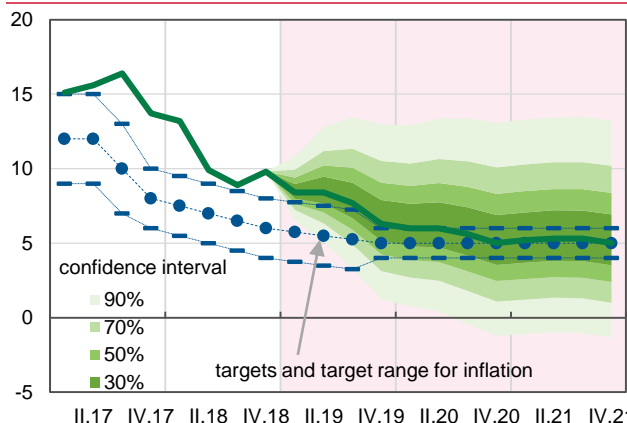


Source: NBU staff estimates.

The risks that inflationary and depreciation expectations will worsen stem from election-year uncertainty. Thus, depending on the course of events in the political arena, economic agents may worsen their inflationary expectations, potentially warranting the appropriate monetary policy response.

The likelihood that the risk of a sharper slowdown in the global economy will materialize is on the rise. Heightened geopolitical conflicts and increased protectionist measures amid the anticipated deleveraging of the Chinese economy constitute an impediment to the growth of foreign trade and decreases in prices in global commodity markets. In addition, risks of a significant slowdown in economic activity in the EU, especially in its largest economies – Germany, Italy, and France – have intensified recently. Important risk factors were: difficulties with the introduction of new environmental standards in the automotive industry as Germany's terms of trade deteriorated, political turbulence in Italy, made worse by its high debt burden, and yellow-jacket riots in France. An additional factor is uncertainty over how to implement Brexit. As a result, there are increasing risks that Ukraine will face worsened external conditions. This means, on the one hand, that Ukraine's foreign exchange proceeds will decline and, on the other hand, that its economic growth will decelerate. The monetary policy response will depend on the balance between the effects of currency depreciation and those of the cooling-off of the economy.

Chart 3.6.2. CPI Forecast and Inflation Targets, % yoy



Source: NBU staff estimates.

The risks of Russian aggression against Ukraine have heightened again. Although access to Sea of Azov ports has been restored, risks of new transportation challenges emerging in the region are still high.

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.

In addition, substantial uncertainty remains regarding the volume of gas transit through Ukraine from 2020 onward, as pipelines bypassing the country are being built to deliver gas to Europe.

Terms and abbreviations

ATM	Automated teller machine	NEER	Nominal effective exchange rate
BEI	Business Expectation Index	NERC	The National Commission for State Regulation in the Energy and Utilities
BEC	Classification by Broad Economic Categories	NFC	Non-financial corporation
CAPB	Cyclically adjusted primary balance	OECD	Organisation for Economic Co-operation and Development
CD	Certificate of deposit	OPEC	Organization of the Petroleum Exporting Countries
CEE	Central and Eastern Europe	PFU	Pension Fund of Ukraine
CIS	Commonwealth of Independent States	PIT	Personal income tax
CIT	Corporate income tax	PMI	Purchasing Managers' Index
Core CPI	Core consumer price index	PPI	Producer price index
CPI	Consumer price index	REER	Real effective exchange rate
DGF	Deposit Guarantee Fund	Russia	Russian Federation
ECB	European Central Bank	SAEE	State Agency of Energy Efficiency and Energy Saving of Ukraine
EMs	Emerging Markets	SBA	Stand-by Arrangement
EU	European Union	SESU	State Employment Service of Ukraine
FAO	Food and Agriculture Organization	SFSU	State Fiscal Service of Ukraine
FDI	Foreign direct investment	SSSU	State Statistics Service of Ukraine
Fed	Federal Reserve System	STA	Single Treasury Account
FX	Foreign exchange	STSU	State Treasury Service of Ukraine
GDP	Gross domestic product	TPP	Thermal Power Plant
GFCF	Gross fixed capital formation	UEFA	the Union of European Football Associations
GVA	Gross value added	UIIR	Ukrainian Index of Interbank Rates
HH	Households	US	United States of America
IKSO	Index of Key Sectors Output	USDA	United States Department of Agriculture
ILO	International Labour Organization	VAT	Value-added tax
IMF	International Monetary Fund	VRU	Parliament of Ukraine
MFU	Ministry of Finance of Ukraine		
MTP	Main trading partner		
MY	Marketing year		
NBU	National Bank of Ukraine		
bcm	billion cubic metres	pa	per annum
bn	billion	pp	percentage point
bp	basis point	qoq	in quarterly terms; quarter-on-quarter change
E&O	errors and omissions	RHS	right-hand scale
EUR	euro	RUB	Russian ruble
m	million	sa	seasonally adjusted
M0	cash	thsd	thousand
M3	money supply	UAH	Ukrainian hryvnia
mom	in monthly terms; month-on-month change	USD	US dollar
MW	Megawatt	yoy	in annual terms; year-on-year change

Macroeconomic forecast (January 2019)

Indicators	2015				2016				2017				2018				2019				2020				2021							
Real economy, % yoy, unless otherwise stated																																
Nominal GDP, UAH bn	1 989	2 385	2 984	700	807	994	1 051	3 553	3 540	797	902	1 105	1 160	3 965	3 950	875	989	1 211	1 261	4 336	4 320	953	1 081	1 327	1 383	4 744						
Real GDP	-9.8	2.4	2.5	3.1	3.8	2.8	3.3	3.3	3.4	2.9	2.5	2.4	2.3	2.5	2.5	2.6	2.9	3.1	3.0	2.9	2.9	3.2	3.6	3.9	4.0	3.7						
GDP deflator	38.9	17.1	22.1	14.9	17.0	16.1	13.3	15.3	14.8	10.5	9.0	8.0	8.0	8.9	8.9	7.0	6.5	6.0	5.5	6.3	6.3	5.5	5.5	5.5	5.5	5.5						
Consumer prices (period average)	48.7	13.9	14.4	-	-	-	-	10.9	10.9	-	-	-	-	8.8	8.8	-	-	-	-	5.7	5.6	-	-	-	-	5.2						
Producer prices (period average)	36.0	20.5	26.4	-	-	-	-	17.4	18.1	-	-	-	-	9.6	12.5	-	-	-	-	7.3	7.8	-	-	-	-	7.8						
Consumer prices (end of period)	43.3	12.4	13.7	13.2	9.9	8.9	9.8	9.8	10.1	8.4	8.4	7.7	6.3	6.3	6.3	6.0	6.0	5.6	5.0	5.0	5.0	5.2	5.3	5.3	5.0	5.0						
Core inflation (end of period)	34.7	5.8	9.5	9.4	9.0	8.7	8.7	8.7	7.9	7.9	7.6	6.5	5.0	5.0	5.1	4.5	4.1	3.8	3.6	3.6	3.6	3.6	3.8	3.7	3.7	3.7						
Non-core inflation (end of period)	49.7	17.5	19.4	17.9	10.3	8.8	10.7	10.7	13.0	9.1	9.8	9.3	8.1	8.1	7.9	8.1	8.7	8.0	7.0	7.0	6.9	7.2	7.3	7.3	6.9	6.9						
Raw foods (end of period)	40.7	1.2	23.5	23.3	5.2	0.8	3.3	3.3	4.9	1.2	3.0	3.1	3.4	3.4	4.0	3.9	5.5	4.6	3.0	3.0	3.1	3.1	3.3	3.3	3.0	3.0						
Administrative prices (end of period)	64.4	34.6	16.1	13.6	13.2	13.5	18.0	18.0	18.4	18.0	18.0	17.7	13.6	13.6	11.7	12.7	12.7	11.8	11.1	11.1	10.8	11.0	10.6	10.6	10.3	10.3						
Producer prices (end of period)	25.4	35.7	16.5	15.9	18.4	18.9	14.2	14.2	17.2	11.9	10.5	7.6	8.2	8.2	8.7	6.6	7.3	7.2	7.6	7.6	8.2	7.6	8.0	8.0	7.3	7.3						
Fiscal Sector																																
Consolidated budget balance, UAH bn	-30.9	-54.8	-42.1	-	-	-	-	-67.8	-69.1	-	-	-	-	-61.4	-59.3	-	-	-	-	-67.2	-64.5	-	-	-	-	-73.5						
% of GDP	-1.6	-2.3	-1.4	-	-	-	-	-1.9	-2.0	-	-	-	-	-1.5	-1.5	-	-	-	-	-1.5	-1.5	-	-	-	-	-1.5						
Public sector fiscal balance (IMF methodology), I	-17.0	-50.3	-38.4	-	-	-	-	-72.8	-69.3	-	-	-	-	-59.6	-57.3	-	-	-	-	-63.7	-63.8	-	-	-	-	-70.9						
% of GDP	-0.9	-2.1	-1.3	-	-	-	-	-2.0	-2.0	-	-	-	-	-1.5	-1.5	-	-	-	-	-1.5	-1.5	-	-	-	-	-1.5						
Balance of payments (NBU methodology)																																
Current account balance, USD bn	1.6	-1.3	-2.4	-0.6	0.0	-2.7	-1.3	-4.7	-3.4	-1.0	-1.0	-1.8	-0.7	-4.5	-3.5	-1.7	-1.3	-1.7	-1.0	-5.6	-4.2	-1.4	-1.3	-1.9	-1.5	-6.2						
Financial account balance, USD bn	1.2	-2.6	-5.0	-0.3	-0.6	-2.0	-4.6	-7.5	-4.2	-0.7	-1.9	-0.3	-0.5	-3.4	-1.9	-2.5	-2.0	-0.6	-0.5	-5.5	-3.9	-2.1	-1.6	-0.7	-1.1	-5.5						
BoP overall balance, USD bn	0.8	1.3	2.6	-0.3	0.6	-0.7	3.3	2.9	0.8	-0.4	1.0	-1.5	-0.2	-1.1	-1.6	0.7	0.7	-1.0	-0.5	-0.1	-0.4	0.7	0.2	-1.2	-0.5	-0.7						
Gross reserves, USD bn	13.3	15.5	18.8	18.2	18.0	16.6	20.8	20.8	19.2	20.0	21.7	19.6	20.6	20.6	18.6	21.8	22.5	21.9	21.4	21.4	19.1	22.5	22.7	21.9	21.4	21.4						
Months of future imports	3.0	3.0	3.2	3.0	2.9	2.7	3.4	3.4	3.2	3.2	3.5	3.1	3.3	3.3	3.0	3.4	3.5	3.4	3.3	3.3	3.0	3.4	3.4	3.2	3.1	3.1						
Exports of goods, % yoy	-29.9	-5.3	18.3	8.6	14.8	6.3	7.4	9.2	10.3	4.0	-0.4	2.6	0.5	1.6	-1.0	-0.7	0.6	5.9	6.3	3.1	4.4	3.9	3.8	4.0	2.0	3.4						
Imports of goods, % yoy	-32.6	4.2	21.9	12.8	14.7	17.4	11.5	14.0	12.1	10.2	7.5	-2.0	-3.4	2.5	2.0	2.9	0.7	3.6	5.2	3.1	2.6	2.7	4.3	4.9	5.5	4.4						
Monetary accounts (Cumulative since the beginning of the year)																																
Monetary base, %	0.8	13.6	4.6	-1.5	5.2	6.3	9.2	9.2	12.2	1.1	5.3	5.1	10.7	10.7	6.9	-2.8	1.5	1.2	6.5	6.5	6.0	-3.0	0.8	0.7	6.2	6.2						
Broad money, %	3.9	10.9	9.6	-3.3	0.3	3.4	5.6	5.6	9.6	-1.1	1.4	3.8	8.9	8.9	8.7	-2.1	0.7	2.7	8.5	8.5	8.3	-2.4	-0.2	2.5	8.5	8.5						
Velocity of broad money, ratio (end of year)	2.0	2.2	2.5	-	-	-	-	2.8	2.7	-	-	-	-	2.9	2.7	-	-	-	-	2.9	2.8	-	-	-	-	2.9						