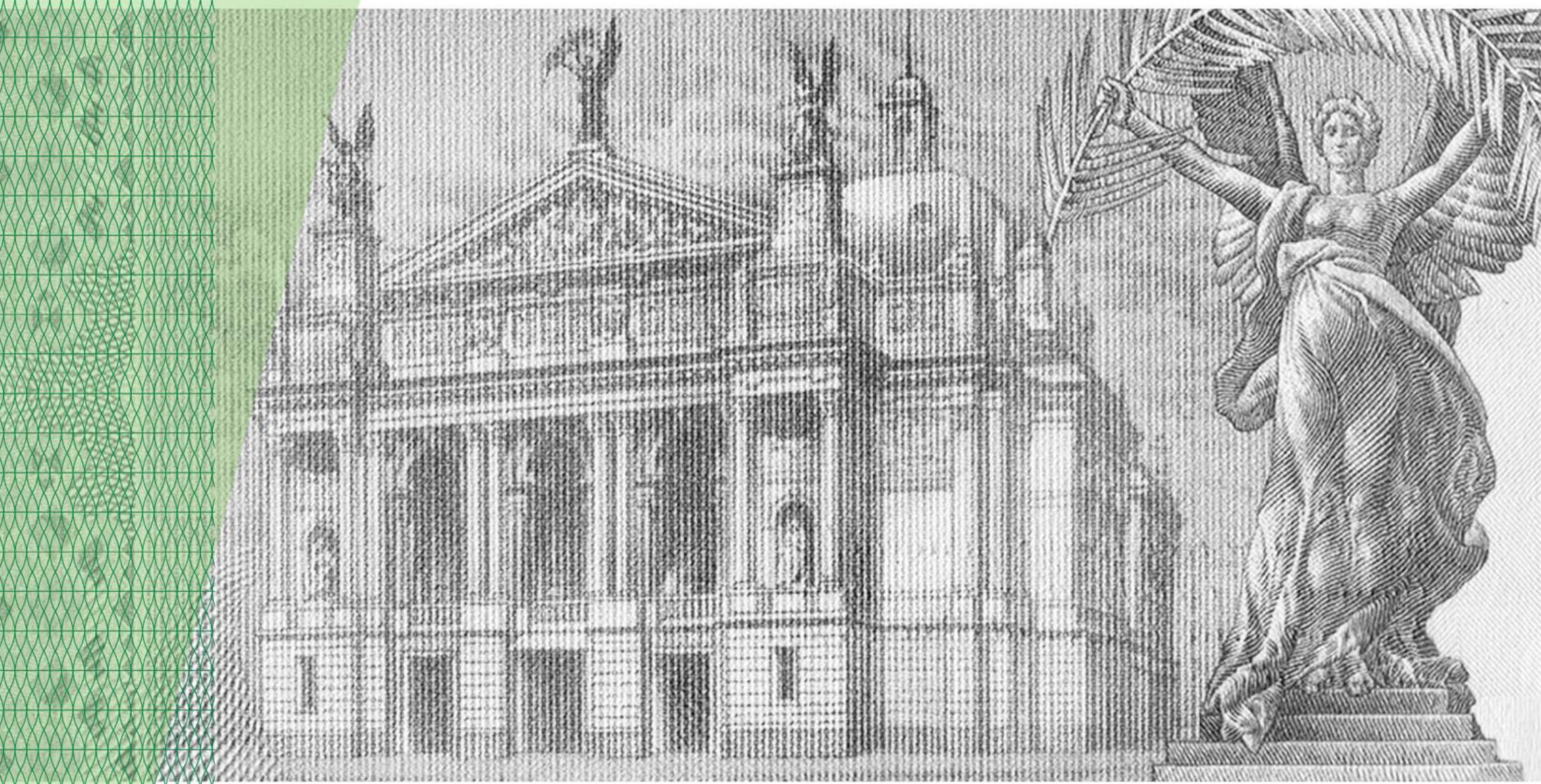
National Bank of Ukraine

Inflation Report

October 2018



PREFACE

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 25 October 2018.[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 24 October 2018 as the cut-off date for the data.

The Inflation Report is a translation of the original Report in Ukrainian. In case of any discrepancies between the original document and its translation to English, readers should consider the Ukrainian version of the Report as correct.

[1] NBU Board Decision No. 715-D as of 25 October 2018 *On the Approval of the Inflation Report.*

CONTENTS

SUMMARY 3
CURRENT ECONOMIC SITUATION 6
1. EXTERNAL ENVIRONMENT....6
2. DOMESTIC ECONOMY....12
2.1. INFLATION DEVELOPMENTS 12
Box: Measuring Inflation Using Online Price Indices 16
2.2. DEMAND AND OUTPUT 18
2.3. LABOR MARKET AND HOUSEHOLD INCOME....22
Box: Polish Labor Market and Ukrainian Workers in It 26
2.4. FISCAL SECTOR 29
2.5. BALANCE OF PAYMENTS 32
2.6. MONETARY SECTOR AND FINANCIAL MARKETS....38
3. ECONOMIC OUTLOOK FOR UKRAINE....42
3.1. FORECAST ASSUMPTIONS....42
3.2. INFLATION DEVELOPMENTS....45
3.3. DEMAND AND OUTPUT 47
3.4. BALANCE OF PAYMENTS....50
3.5. MONETARY SECTOR AND FINANCIAL MARKETS....52
3.6. RISKS TO THE FORECAST 53
TERMS AND ABBREVIATIONS.... 54

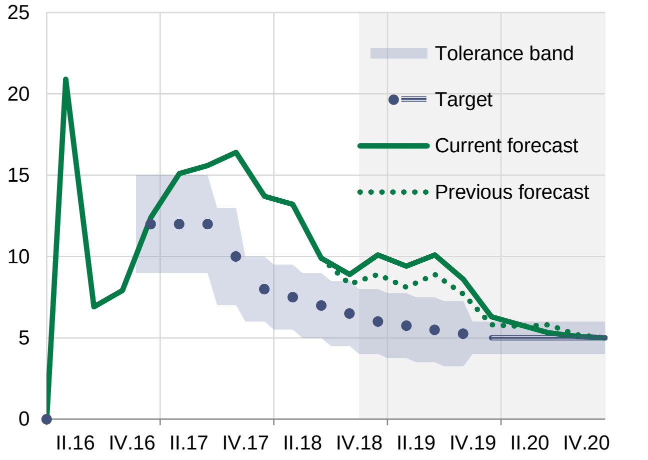
SUMMARY

Consumer price inflation continued to decline

In Q3 2018, consumer price inflation gradually decelerated (to 8.9% yoy in September), closely approaching the upper bound of the target range set by the Monetary Policy Guidelines for 2018 and the Medium Term (6.5% ± 2 pp as of the end of Q3 2018). However, the decrease in inflation was slower than the NBU had predicted in its July 2018 Inflation Report.

Headline inflation slowdown was driven by weaker growth in food prices amid more ample supply of domestic and imported foods and a decline in global food prices. However, the underlying inflationary pressure remained significant, while growth in administered and fuel prices accelerated.

CPI, %



Source: SSSU, NBU.

Core inflation slowed moderately (to 8.7% yoy), exceeding the forecast as well. As in previous months, consumer demand and a further rise in production costs – including those of labor and energy – continued to exert upward pressure on prices. Thus, household income in Ukraine grew rapidly, outpacing GDP growth by a wide margin. In August, for instance, the average monthly wages in nominal terms in Ukraine were 26% higher than last year. The growth in household income was additionally driven by an increase in social benefits (higher pensions for military pensioners, and the continued effects of modernization of pensions at the end of 2017).

The surge in global oil prices and the weakening of the hryvnia in recent months drove up domestic fuel prices, which were passed through to costs of other goods and services. Specifically, growth in administered prices accelerated, driven by higher fuel and labor costs, even as the government delayed raising household gas prices.

The hryvnia weakening against the US dollar in July - August affected the prices of certain goods, primarily imported ones. The FX market experienced heightened turbulence in Q3 2018 amid higher demand from energy importers, a typical development ahead of the fall months. In addition, market sentiments deteriorated after the IMF postponed the disbursement of financial assistance and global markets conditions worsened. Emerging market assets continued to lose their appeal to investors amid a further monetary policy tightening by the Fed. This caused emerging market currencies to depreciate against the US dollar, triggering financial instability in the most vulnerable countries (such as Turkey). Moreover, Ukraine saw a deterioration in its terms of trade amid falling prices for steel, sunflower oil, and corn and sharply rising crude oil prices.

The heightened FX market turbulence, along with the surging fuel prices, the announced increase in gas and other utility tariffs, and the run-up to presidential and parliamentary elections next year fueled inflation expectations. Inflation expectations of households and banks deteriorated, while those of professional forecasters and businesses remained high, and far above the NBU's inflation targets.

The fiscal policy impact on aggregate demand in the first nine months of 2018 is seen as rather moderate. The consolidated budget reported a surplus, formed as a result of gradually improving revenues and a marked slowdown in expenditures in Q3. The rapid growth in household income, a rise in corporate earnings, a recovery in the production of excisable goods, and a rise in imports all contributed to improved revenue performance.

The rising risks to bringing inflation back to the medium-term target necessitated monetary policy tightening in Q3 2018. The NBU raised the key policy rate by a total of 100 bp, to 18.0% per annum. The key policy rate hikes effectively transmitted into higher market interest rates on hryvnia instruments and domestic government bond yields. In real terms, yields on hryvnia-denominated bonds remained some of the highest among the emerging markets, which stemmed portfolio investment outflows as investor interest in emerging market assets waned. Along with that, banks retail interest rates have yet to adjust to fully reflect the effects of the key policy rate hikes and higher interest rates in the interbank market.

Consumer price inflation will continue to decelerate, but it will take longer to return it to the target range

The NBU revised its 2018 inflation forecast upwards to 10.1% (from previous 8.9%). This resulted from higher – than – projected global energy and wheat prices, and stronger growth in wages in Ukraine (compared to the July forecast).

The expansion in consumer demand, rapid wage growth, and the recent spike in crude oil prices will continue to impact consumer price inflation next year. This will keep inflation above the target range for longer than it was projected before. By the end of 2019, inflation will decline to 6.3%. It will enter the target range in Q1 2020, and reach the medium-term target of 5.0% at the end of 2020.

The tight monetary conditions, which resulted, inter alia, from the key policy rate hikes in the first three quarters of 2018, will be a major contributor to the slowdown in inflation. Furthermore, the drop in inflation will be driven by other factors that are restraining the growth in consumer demand, including:

- the further pass-through of the past key policy rate hikes to interest rates on hryvnia-denominated household deposits; these effects will be reinforced by the shrinking liquidity surplus in the banking system. In turn, the growth in deposit rates will provide incentives for households to increase their propensity to save;

- the deceleration in wage growth as migration processes decline in intensity, including (unlike in the past two years) through the saturation of the labor market in Poland.

In addition, prudent fiscal policy given the need to repay significant amounts of public debt and improved inflationary and exchange rate expectations will help contain price growth. The expectations will be favorably impacted by the progress in cooperating with official lenders, in particular the launch of a new arrangement with the IMF, which will carry over into the next year.

As a result, core inflation will decelerate from 7.9% at the end of this year to 5.1% in 2019, and to 3.6% in 2020.

Raw food inflation will decrease markedly this year, to 4.9%, as last year's supply shocks wear off, including those related to the strong growth in exports of some Ukrainian goods. Raw food inflation will continue to decelerate in 2019–2020, to 4% and 3.1%, respectively, dragged down by moderating global food prices.

Administered prices are expected to increase by 18.4% in 2018. The acceleration from the current level will reflect the effect of the planned hike in household gas prices and that of increased rates for heating and hot water. In 2019–2020, the growth in administered prices will decelerate to 11.7% and 10.8%, respectively. Their more rapid growth (relative to other components of the CPI) is fueled by the further gradual rise in gas prices towards the import parity price and by excise tax increases in subsequent budget periods.

As a result of the significant oil price increase since the start of the year, this year's forecast of fuel price growth has been revised to 17.5% with a further deceleration to 7.4% and 5% in the following years, primarily reflecting changes in global oil prices in hryvnia equivalent.

In 2018, GDP growth is driven by agriculture and sectors relying on domestic demand

In Q2 2018, real GDP growth accelerated to 3.8% yoy. The higher-than-expected GDP growth rates can be attributed to the early start to the harvesting campaign this year, which was reflected in the sharp rise in the gross value added (GVA) of agriculture.

As expected, domestic demand – mainly consumer demand – continued to be the main driver of real GDP growth, fueled by higher household income and improved consumer sentiment. This in turn, led to GVA growth in the transportation, trade and services sectors. An additional factor in Q2 was a noticeable acceleration in the growth in public spending, in particular on utility subsidies. Investment growth remained strong amid high business expectations.

The pickup in economic activity and strong business expectations sustained buoyant demand for labor . As a result, the unemployment rate fell sharply in Q2. In addition, following a prolonged decline, the labor supply also rose in H1 2018 as people looked for jobs more actively due to an increase in the required period of service to qualify for pensions, and strong wage growth.

Ukraine's economic growth slowed somewhat in Q3 2018, to 3.1% yoy, according to the NBU's estimates, amid weaker performance in most key economic sectors. In particular, lower yields of early grain crops adversely affected the agricultural performance. Less favorable conditions on the external markets, repairs at some metallurgical plants, as well as difficulties in transporting cargo held back the growth of industrial sector.These same factors dampened exports. Meanwhile, remittances from labor migrants increased further, which together with higher wages and social payments spurred consumer demand and imports.

As a result, the current account deficit widened significantly, to USD 2.1 billion in January – August. Rising dividend payments were another contributor to the widening.

The current account deficit was offset by financial account inflows. The net liabilities of the public sector grew, owing to foreign investors' interest in hryvnia securities at the start of the year and the issue of discount sovereign Eurobonds in August. Capital inflows to the private sector mainly resulted from foreign direct investment and long-term borrowings. Although overall BOP showed a small surplus, international reserves had shrunk because of repayments of IMF loans, standing at USD 16.6 billion as of the end of September 2018, or 2.8 months of future imports.

After speeding up in 2018, economic growth will slightly decelerate

As before, the NBU expects economic growth to accelerate in 2018, to 3.4%. The growth will continue to be bolstered mainly by private consumption, as household income will rise further, driven by strong growth in wages, pension payments, and remittances from abroad. Companies will also continue to invest actively.

In the current year, fiscal policy will have a mildly stimulative effect on economic growth, mainly through higher public spending on social payments. Q4 is expected to see a noticeable easing in fiscal policy once the government gets greater access to the external markets to finance its deficit following the resumption of cooperation with the IMF. In this light, the overall general government deficit is expected to rise to 2% of GDP.

In 2019, real GDP growth is set to decelerate to 2.5%, due to a slowdown in the global economy, worsened price conditions in global commodity markets, tighter fiscal policy given large public debt repayments, as well as tight monetary policy required to bring inflation back to its target.

In 2020, economic growth will speed up to 2.9%. The growth will be fueled by a gradual easing in monetary policy, which will become possible after inflation stabilizes at a level close to the target, as well as by the economy's greater investment attractiveness.

The budget deficit is expected to be 1.5% of GDP in 2019 – 2020. Public and publicly guaranteed debt will decrease over the forecast horizon, down to 60% of GDP in 2020. This will be due to the rapid nominal GDP growth , moderate exchange rate volatility, and a gradual decline in the share of external public debt as large debt repayments are made.

External accounts will be largely balanced in 2019 – 2020. The current account deficit will continue to hover between 2.5% and 3% of GDP, and will be offset by official financing and private capital inflows.

The key assumption underlying the macroeconomic forecast is the continued cooperation of Ukraine with the International Monetary Fund under a new Stand-By Arrangement. Loans from the IMF and other official lenders will secure access to the international capital markets over the forecast horizon, and will help rollover a portion of the debt, with the repayments peaking in 2019 – 2020. This will improve the expectations of economic agents and promote macrofinancial stability.

In Q4 2018, the overall balance of payments surplus, coupled with IMF loans, will push up international reserves to USD 19.2 billion, or 3.2 months of future imports. In 2019 -2020, international reserves will remain at virtually the same level.

A further deterioration in expectations and external conditions poses the major risk to the forecast

A worsening of depreciation and inflation expectations poses the major risk that could materialize due to the heightened uncertainty, as is usually the case when a new political cycle begins.

Another major risk to the baseline scenario is that external conditions will deteriorate. Any escalation of trade wars between the largest global economies (mainly the United States and China) could slow global trade and cause oversupply of raw commodities with the corresponding downward pressure on prices. In this case, or if access to some markets is restricted, Ukraine's foreign currency proceeds from exports will decline, which will put pressure on the hryvnia exchange rate and, hence, drive up inflation. There also remains a considerable uncertainty as to the scale of global energy price rises. A rather rapid monetary policy normalization by the major central banks increases the risk of a potential global economic downturn and capital outflows from emerging markets, including Ukraine.

Another important remaining risk is that labor migration intensifies. Labor migration to Poland is expected to decline in intensity in the medium term, given the forecast deceleration of Poland's economic growth, and the weakening interest of Polish employers in hiring Ukrainian workers. However, there remains a risk that labor migration to other European countries, such as the Czech Republic and Germany, will intensify after plans to simplify employment procedures for foreigners were announced in these countries. Outflow of the labor force from Ukraine is exacerbating the mismatches between supply and demand on the labor market with subsequent wage increases, and local shortages of qualified staff, thereby restraining the potential for economic growth and putting pressure on the economy - wide price level.

Current and projected monetary conditions are tight enough to reduce inflation in the mid-term

Guided by a revised macroeconomic forecast and risk assessments, on 25 October 2018 the NBU Board decided to leave the key policy rate unchanged, at 18% per annum.The NBU has currently decided not to tighten monetary policy further in order to balance the need to bring inflation back to its target and support economic growth.

However, should inflationary pressures continue unabated or even intensify, driven by pro-inflationary fundamental factors, such as consumer demand, inflation expectations, and a lack of progress in cooperating with international official lenders, the NBU may deem it appropriate to tighten monetary policy further by raising the key policy rate.

Current Economic situation

1. External environment

In Q2 2018, the external environment continued to be beneficial for Ukraine thanks to the steady growth in the global economy and largely favorable prices for commodities, and despite a slowdown in global trade. However, due to tighter financial conditions, growing geopolitical tensions, and trade wars caused the growth in developed and developing countries became less synchronized.

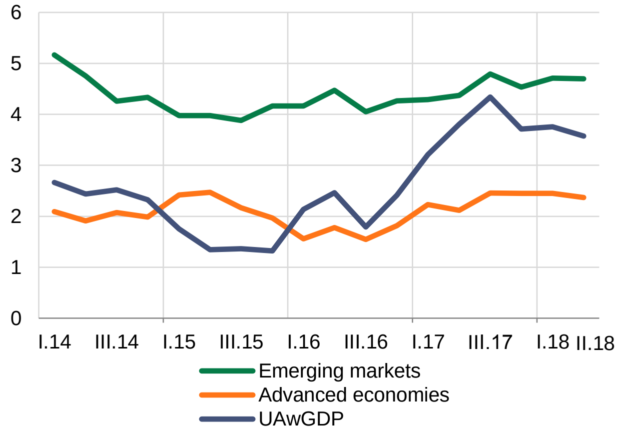
Geopolitical instability, higher trade barriers, and uncertainty over trade frictions between countries, especially the US and China, adversely affected international trade and global commodity and financial markets. Supply factors dampened demand for certain commodities and led to higher volatility and lower prices across most commodity markets, except crude oil. As a result, the global price environment (measured by the External Commodity Price Index – ECPI) deteriorated significantly for Ukrainian exporters in Q3, while prices for some products, especially sunflower oil and iron ore, decreased in annual terms.

At the same time, global inflation accelerated on the back of a surge in crude oil prices, mostly driven by a fear of supply shortages stemming from US sanctions on Iran. Moreover, investors were more averse to risk, which fed through to a depreciation of developing market currencies and a consequent acceleration of inflation. The risk aversion came as the Fed tightened its monetary policy further in response to the buildup of inflationary pressures in the US. This also led to higher yields on government securities and a stronger US dollar exchange rate. Local factors also played an important role. For example, the diplomatic conflict between Turkey and the US took place amid existing internal imbalances and caused a financial crisis in Turkey that prompted fears of contagion in other EM countries.

In Q2, the global economy continued to grow steadily thanks to stronger demand and greater investment. That said, the cyclical upswing in global growth is coming up on its two-year mark and the IMF believes growth may have peaked in certain advanced economies. Growth also became less synchronized: the gap between the pace of growth in the US and the EU is widening and growth rates are diverging among developed and developing countries. Key factors include the uneven impact from growing crude oil prices for net energy exporter and net energy importer countries, capital flight from developing countries amid higher US treasury yields and the macroeconomic vulnerability of some emerging countries, and investor pessimism in light of emerging trade wars and rising geopolitical uncertainty. Business confidence has been on a decline since April 2018, according to Moody's. And although the Purchasing Managers' Index (PMI), a global index of business activity, grew in the services sector in Q2 to offset a decline in the manufacturing sector, services PMI then also started to decrease, reflecting slower growth in domestic demand.

In Q2, the US economic growth remained above its potential and reached its highest pace since 2014. Consumer demand and corporate spending and investment contributed to the GDP growth. Lower taxes and higher government spending led to a pickup in the number of jobs, thus boosting consumption. Moreover, these factors had a positive effect on growth in the operating incomes of companies in the S&P 500 Index (up by 27% yoy, according to Standard & Poor's). However, the manufacturing

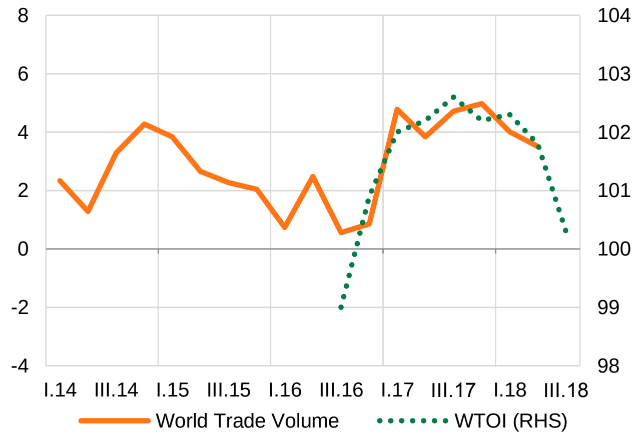
Real GDP Growth, Selected Groups of Countries, % yoy



* Weights for aggregating the growth rates of selected groups of countries are calculated and normalized on the basis of PPP GDP data, provided by the IMF; for the indicator UAwGDP – on the basis of the foreign trade turnover of Ukraine with the respective countries.

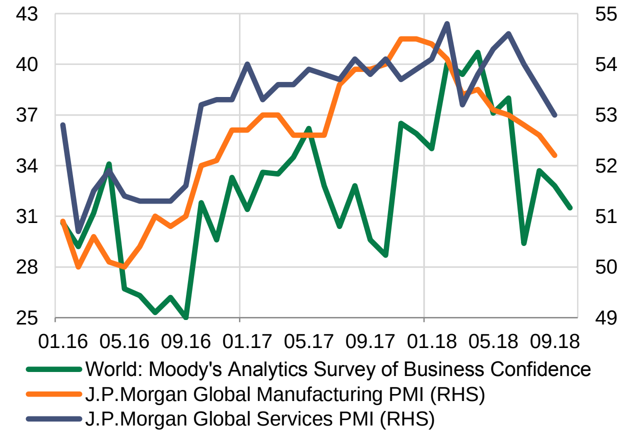
Source: IMF, NBU staff estimates.

World Trade Volume (% yoy) and World Trade Outlook Indicator (WTOI)



Source: WTO.

Global PMI and World Business Confidence, points



Source: Markit, Moody's.

industry slowed in Q3 as prices for some goods rose on the back of additional import duties and weaker new export orders.

The euro area continued to grow at a steady pace, although the pace of growth lost some momentum after its sharp rise in 2017. Domestic demand and increased investment were major growth drivers, whereas net exports contributed negatively. Economic activity slowed in Q3, although the PMI remains well above the critical 50-point mark. Industrial production declined in July for the first time in 18 months (by 0.1% yoy). This was driven largely by a significant slowdown in industrial production growth in Germany (to 0.6% yoy), caused by the trade dispute between the US and the EU.

Economic growth in CEE countries remained steady in Q2. Within that group, the CEE countries that are EU member states were among the fastest growing EU countries. Economic growth was largely supported by domestic demand fueled by stronger consumption (household income increased amid employment growth and improved expectations) and investment (particularly general government investment due to co-financing from EU funds). Meanwhile, growth in imports outpaced exports and, leaving the contribution of net exports to real GDP growth negative.

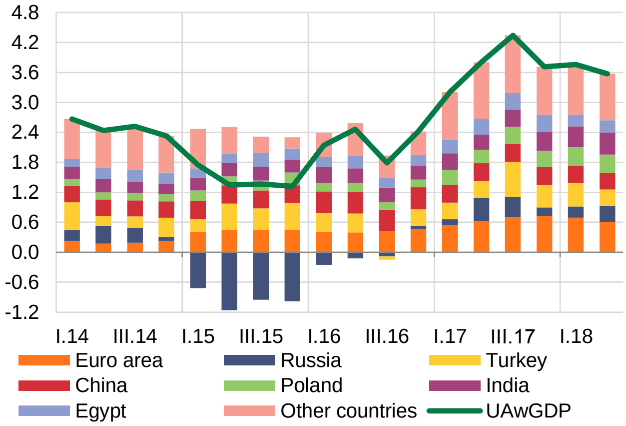
Growth was mixed in CIS countries. Russia's economic growth accelerated thanks to stronger consumption as the country hosted the FIFA World Cup. Kazakhstan generated solid economic growth on the back of weaker inflationary pressures, robust investment activity, and sustained positive growth in its main industries, primarily mining. On the other hand, the pace of growth of Belarus's economy slowed from the levels seen in Q1 2018, but remained high. The economy had been benefitting from a low comparative base in the oil refining industry (Belarus' conflict with Russia over gas supplies was resolved in April 2017), but that benefit has now faded.

Asian economies, especially China and India, remained among world's fastest growing economies. In China, higher household consumption and investment were major growth drivers. India's real GDP growth reached 8.2% yoy as foreign investment boosted industrial production and construction activity.

Rising geopolitical tensions and trade wars, especially between the US and China, caused demand to fall, pushing down prices for most commodities, except crude oil. Global trade indicators also lost growth momentum for the second quarter in a row. The World Trade Outlook Indicator (WTOI), a leading indicator, decreased almost to its base level (100.3 points) in Q3 after a moderate decline in Q2 2018 (by 0.5 pp). Within that index, the indicator of export orders fell to 97.2 points. In addition, higher tariffs deepened the regionalization of commodity markets, where supply factors started to determine price trends. As a result, Ukrainian exporters faced a less favorable global price environment in Q3, as expressed by the External Commodity Price Index (ECPI). Prices for some products, especially sunflower oil and iron ore, decreased year-on-year.

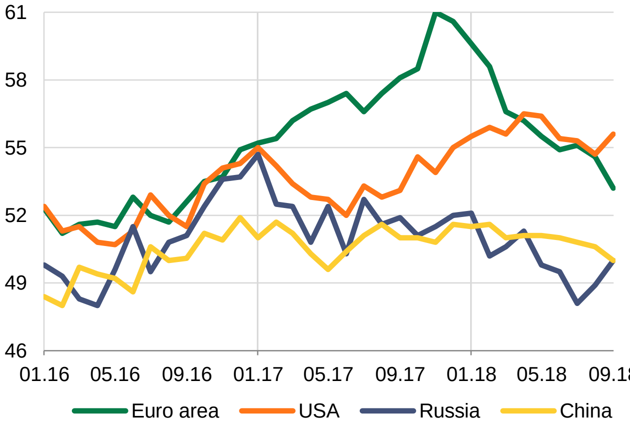
Trade conflicts escalated between the US and other countries, particularly China[2], the EU, and Turkey, and steel price trends varied across regions as a result. Steel prices rose in the US, but declined in Europe and the Middle East. In the US, steel prices grew despite an increase in production volumes (capacity utilization reached 79.5% and the growth rate of production

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



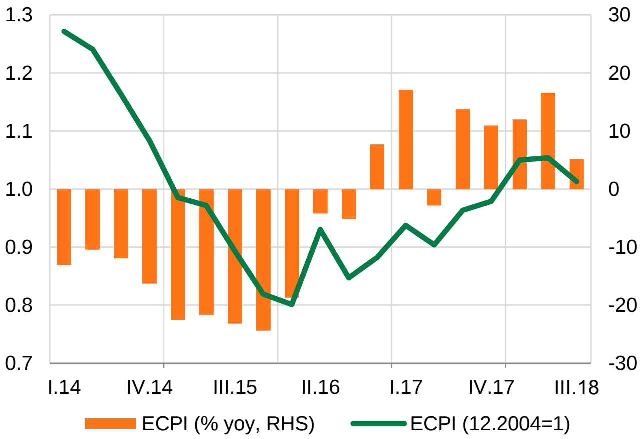
Source: National Statistical Offices, NBU staff estimates.

Manufacturing PMI, Selected Economies



Source: IHS Markit.

External Commodity Price Index (ECPI)



Source: NBU staff estimates.

[2]The US and China have now imposed additional reciprocal import duties totaling USD 253 billion and USD 113 billion, respectively.

accelerated to 5.1% yoy in August) as imports fell (according to a preliminary estimate, licensed steel imports declined at a faster pace in August (12.1% yoy)). Prices in Europe and the M iddle East dropped as production grew and demand remained relatively weak. That said, for the first time in a long period, the change in the trend was prompted not by the Chinese market, but by a decline in Turkish producers' prices. Turkish metal producers reduced their export prices in response to the rapid depreciation of the Turkish lira and lower domestic demand. As a result, Turkey reversed its net trade position in steel and became a net exporter. Additional factors included holidays in Muslim countries, demand for Iranian steel products dampened by sanctions, and the EU imposing retaliatory tariffs on some US goods (which reduced demand for steel from the automotive industry).

Meanwhile, steel prices on the Chinese market were range-bound with a small decrease only starting in mid-September. Prices remained high in China on the back of steady demand from the construction industry, which was supported by the state's infrastructure development program and greater investment in real estate. In addition, tighter environmental requirements for blast furnaces and production cuts in a number of provinces from 1 July to 31 August aimed at reducing pollution helped keep prices high. Those price trends kept Chinese producers' demand for high-quality iron ore strong, which buoyed its prices despite excess supply. As a result, iron ore prices recovered in late September after a moderate decrease through Q3.

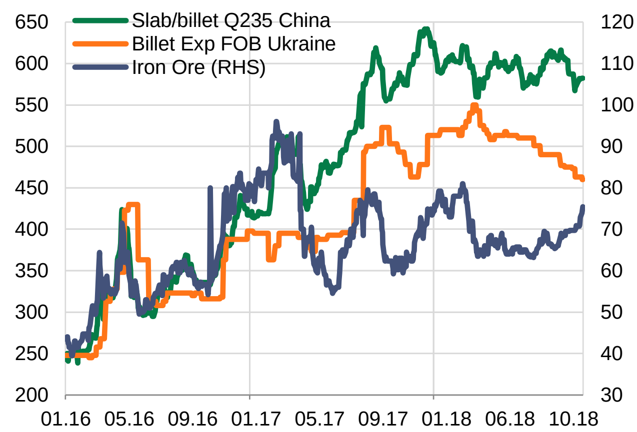
In Q3, global wheat prices spiked, while corn prices fell. In the middle of the quarter, wheat prices reached a peak since the beginning of 2015 as harvest expectations deteriorated and corrected minimally at the end of the quarter. As a result, the average quarterly price was more than 30% higher year-on-year. This year's drought broke the five-year trend of growth in global wheat yields, while wheat stocks in main exporting countries reached a low last seen in the 2007/2008 marketing year. Europe and Australia were hit hardest by the drought. Prices adjusted at the end of the quarter as newly harvested wheat, primarily from the US, came to market, and on the expectation of a bumper crop in Argentina, where harvesting will start in November.

Corn prices dropped on the back of improved harvest expectations and the adverse effects of trade wars. The corn harvest in the US – the world's largest corn producer – moved at a faster pace, exceeding the average pace over the past 5 years. However, corn exports from the US declined notably, especially to China.

Prices for sunflower oil reached a 10-year low. Expectations of a record harvest of oil crops, including sunflower and soybeans, and the trade conflict between the US and China also were important factors. According to Oil World, the global production of vegetable oils will increase 3% yoy in the 2018/2019 marketing year, far exceeding global demand. Moreover, soybean inventories rose sharply and prices fell as a result of the expected, and later realized, introduction of duties on US soybeans by China at a time when yields grew 12% yoy in the US.

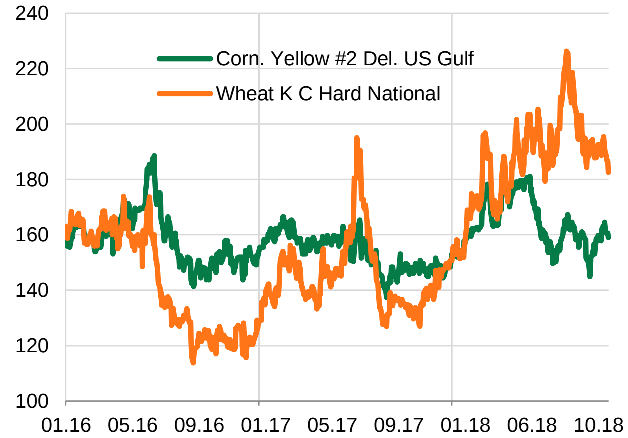
In Q3, crude oil prices reached USD 80/bbl for the second time during the year. The escalation of the trade conflict between the US and China and tense relations between the US and Iran were important factors in the growth of oil prices. Although China has excluded oil from the list of US goods subject to the additional 25% import duty, the absence of a clear decision on the issue affected markets. In addition, the first US sanctions package against Iran took effect on 7 August, which introduced a ban on the sale of US

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



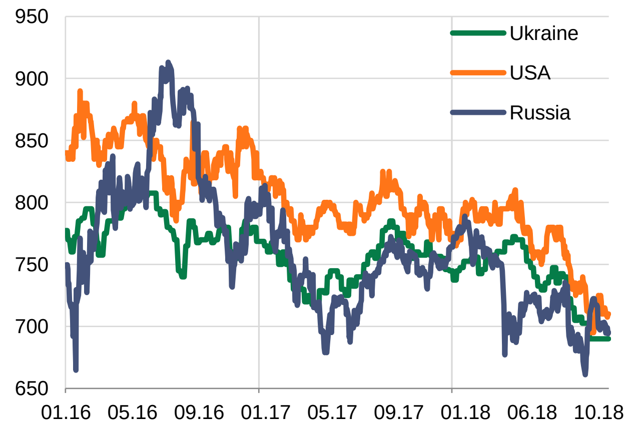
Source: Thomson Reuters Datastream.

World Grain Prices, USD/MT



Source: Thomson Reuters Datastream.

World Sunflower Oil Prices, USD/MT



Source: Thomson Reuters Datastream.

dollars to Iran. On the other hand, certain countries, especially China, an important o il importer, will continue to work with Iran on oil supplies and will settle payments in Chinese yuan. The Shanghai Stock Exchange started to trade yuan-denominated oil futures in March 2018. According to Reuters, the yuan has accounted for 14% of the global oil market over the past four months.

The growth in oil prices was also driven by a substantial decrease in US inventories of oil and petroleum products (total 5.2% overall in the quarter and 20% at the Cushing Terminal) and concerns over the consequences of Tropical Storm Gordon. However, prices were curbed by the appreciation of the US dollar amid an escalation in the Turkish crisis, the revision of the OPEC+ oil production agreement, increased shale production in North America, and lower demand from China for US crude.

In late October, global oil prices fell sharply after Saudi Arabia's energy minister said that there was no need to impose an oil embargo as had occurred in 1973. The potential for rapid growth in oil production also introduced downward pressure on global prices.

The growth in oil prices has increased headline inflation in both developed and developing countries. Emerging market currencies also depreciated against the US dollar, which contributed to inflation. Those factors pushed price growth to exceed the respective targeted range in certain countries, such as Romania and Turkey. As a result, the external inflationary pressure from Ukraine's main trading partners (MTPs) grew faster (3.1% yoy in Q3), as shown by changes in the UAwCPI index[3].

Rising geopolitical tensions and escalating trade wars had a major impact on financial markets. The conflict between the US and Turkey prompted an FX crisis in Turkey and generated instability across financial markets, primarily for emerging market economies. Investor interest in emerging market assets remained modest as the US Federal Reserve continued to normalize its monetary policy and on US government treasury yields increased.

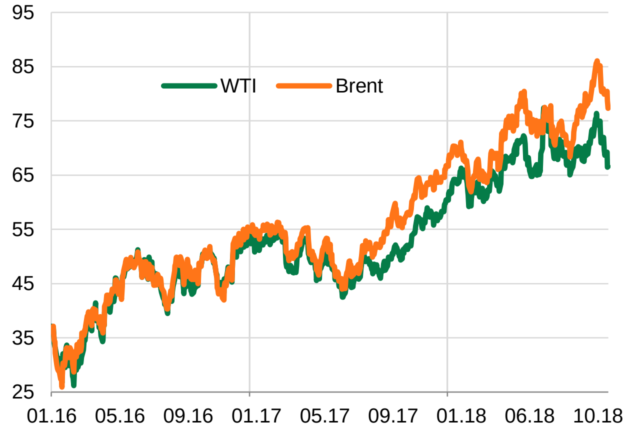
In Q3, investors continued to give preference to US financial assets. Unlike other benchmark equity indices, the S&P 500 Index continued to advance coming in to early October, trading at record high reached in mid-January 2018. This was prompted by several factors:

- The US economy is growing robustly and the average growth of corporate profits in H1 2018 was the highest in nearly eight years: 27% in Q1 and 24% in Q2, according to Thomson Reuters.
- US companies continued to buy back shares (slowing only slightly in Q2 after a record USD 189 billion in Q1, according to S&P Dow Jones Indices), boosting earnings per share.

However, a further US yield curve inversion limited the demand for bank stocks. Financial markets currently see a risk that another rate hike by the US Fed could invert the yield curve (long-term interest rates equal to or below short-term rates), which is viewed as a leading indicator of a recession. The yield differential between ten- and two-year US treasury bonds is currently at its lowest in the past 10 years: just 23 bp as of the end of Q3 2018, compared to 129 bp as of December 2015 before the Fed began the interest-rate hiking cycle.

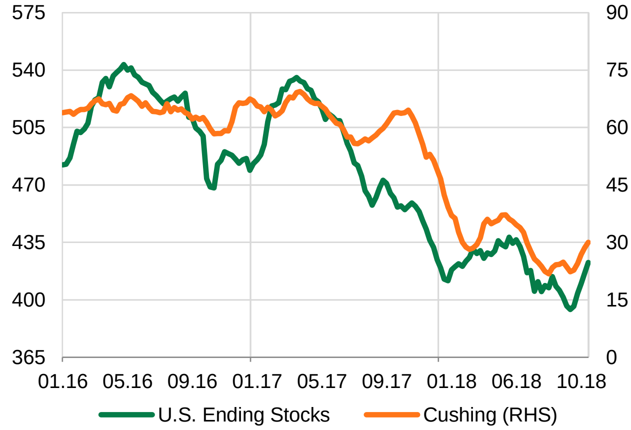
Heightened inflationary pressure (inflation was at 2.7% yoy in the US at the end of August) and an expected interest rate hike by the

World Crude Oil Prices, USD/bbl



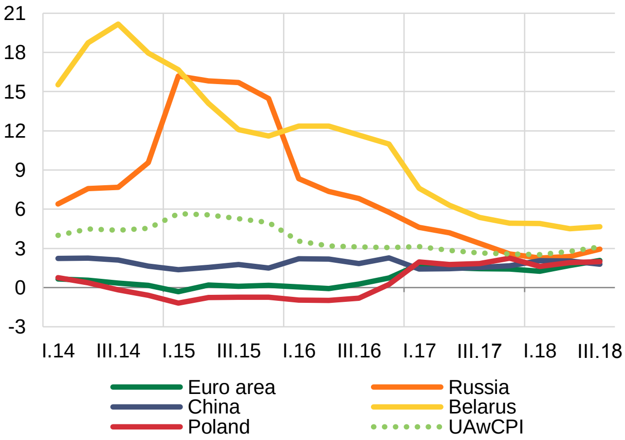
Source: Thomson Reuters Datastream.

U.S. Ending Stocks excluding SPR of Crude Oil, mln. bbl



Source: U.S. Energy Information Administration.

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



Source: *National Statistical Offices, NBU staff estimates..*

[3]Read more about the UAwCPI index in the April 2016 Inflation Report.

Fed sent yields on long-term US government securities soaring, making risky financial assets less attractive for investors. At the same time, benchm ark European equity indices retreated as new trade tariffs came into force for Europe, the financial instability in Turkey infected Europe given the close ties between their respective banking systems, and political instability increased, primarily related to Brexit.

The MSCI EM Index came under pressure as risk aversion grew among investors following the crisis in Turkey, expectations of further monetary policy tightening by the US Fed, and concerns over the consequences of US-China and US-EU trade tensions. Investor sentiment was also dented by the economic slowdown in China, primarily in retail trade and investment, lower Chinese corporate profits, and lower commodity prices, except for crude oil. As a result, the MSCI EM Index continued on the downward path that began in late January 2018.

In addition, the magnitude of declines in asset prices differed across countries, implying that investors adopted a differentiated approach. Portfolio outflows were concentrated in countries that run a significant current account deficit and are vulnerable to political risks (like Turkey, South Africa, Indonesia, and Argentina).

In particular, the rapid deterioration of diplomatic relations between the US and Turkey against the backdrop of macroeconomic imbalances led to a sizeable depreciation of the Turkish lira and increased credit risks, while interest rates on ten-year Turkish government bonds pushed past 20% in August. Until recently, Turkey was a popular destination for foreign investment into emerging markets given the country's attractive interest rate differentials, which created its dependence on external financing and high debt levels. However, investors were highly concerned about potential global contagion, as was the case during the Greek crisis, triggered a panic over the large holdings of Greek bonds among European banks. In response to the negative financial market developments, the depreciation of the domestic currency (by 31.6% in Q3), and rising inflation (24.5% yoy in September), Turkey's central bank cut minimum reserve ratios for all maturities and hiked its interest rate by 625 bp to 24% in September.

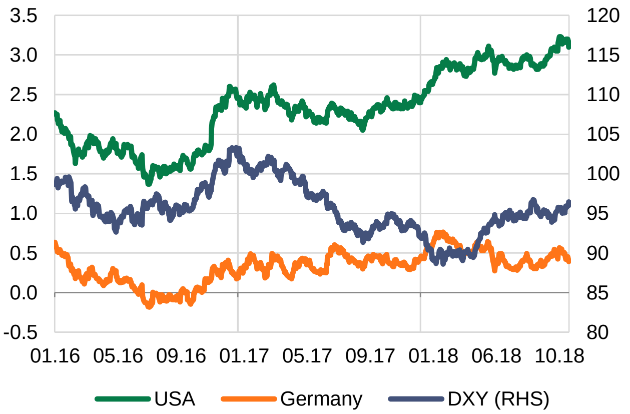
Argentina also continued to be a source of financial imbalances and turbulence on equity markets. Although the country signed an agreement with the IMF in June 2018 for USD 50 billion of credit support, capital flight from Argentinian assets increased in Q3. This caused the Argentine peso to depreciate 41.3% over the quarter and inflation to hit a record high of 34.4% yoy in August. To contain the depreciation pressure, the Central Bank of Argentina hiked interest rates twice in August by a total 20 pp and once more in late September by 500 bp, bringing its key rate to 65%. Argentina also reached arrangements to receive USD 7 billion of additional assistance from the IMF. However, an inability to hold back inflation and stem the depreciation of the domestic currency forced the Central Bank of Argentina to move away from inflation targeting and adopt a strategy of controlling the monetary base starting in October. The regulator set a target of containing the monthly growth of the monetary base to 0% from 1 October 2018 to June 2019. Daily operations to provide liquidity (LELIQ) will be the basis for the daily revision of the key rate and will be the main tool used to reach the monetary base target.

In general, emerging market currencies mostly depreciated amid the global appreciation of the US dollar. In particular, the Chinese yuan generally declined for 15 weeks of the quarter, which was a record number. The People's Bank of China responded by

Global Equity Benchmarks, 01 Jan 2016 = 100

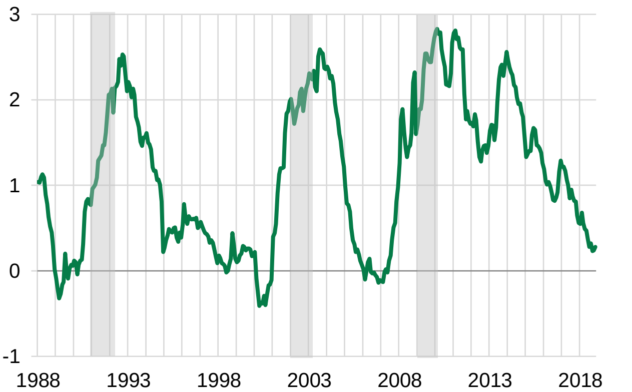
Source: Thomson Reuters Datastream.

US and Germany 10-Year Government Bonds Yields



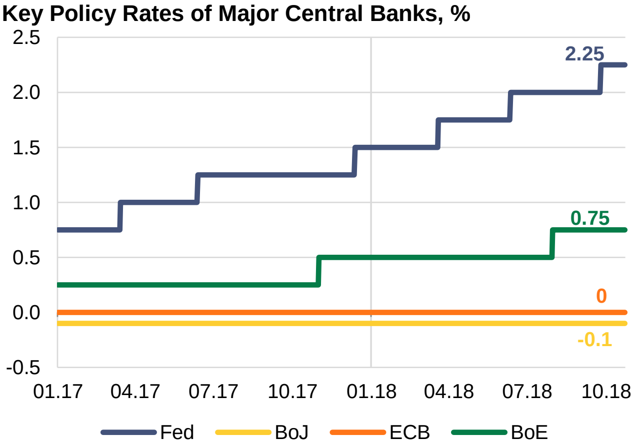
Source: Thomson Reuters Datastream.

10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity and periods of crisis



Source: FRED.

Key Policy Rates of Major Central Banks, %



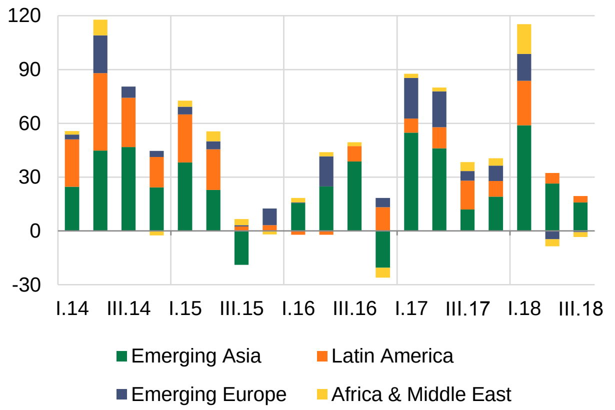
Source: official web-pages of central banks.

introducing a mandatory provisioning requirement of 20% for foreign-currency futures contracts and supplementing the formula for calculating the official yuan exchange rate with an anti-cy clical factor, which allows the regulator to set the exchange rate proactively.

Political risks caused a sharp depreciation in the Russian ruble, which pushed down the exchange rates of the Kazakhstan tenge and Belarusian ruble.

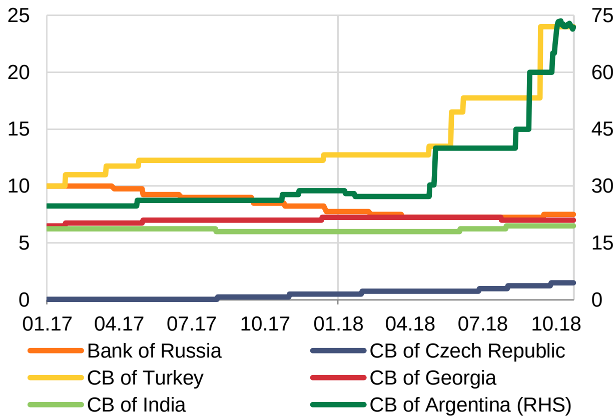
Overall, higher depreciation pressures on emerging market currencies prompted those countries to tighten monetary policies as a means to reining in inflationary pressures. For example, the Central Bank of the Russian Federation was forced to raise its key rate by 25 bp to 7.5% in September, after previously cutting the rate twice by a total 50 bp since the start of the year.

Net Non-resident Portfolio Investment in Emerging Market Countries, USD billion



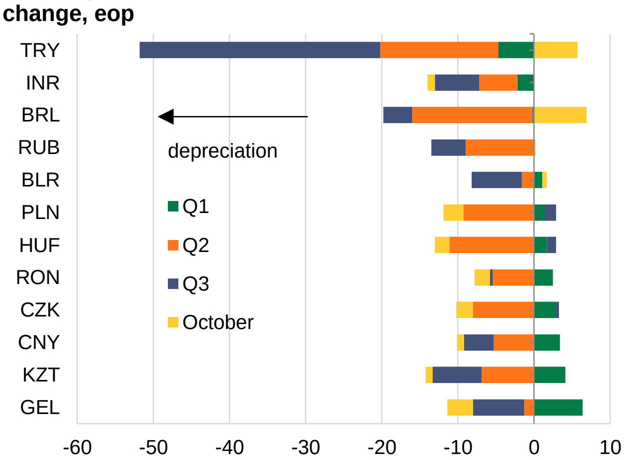
Source: Institute of International Finance.

Key Interest Rates in Emerging Market Countries, %



Source: official web-pages of central banks.

Exchange Rates of Selected EM Currencies versus USD, % change, eop



Source: Thomson Reuters Datastream.

2. Domestic Economy

2.1. Inflation Developments

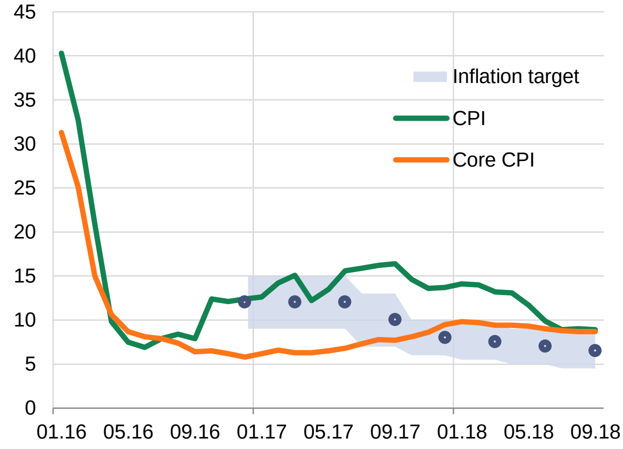
As expected, consumer price growth moderated in Q3 2018, reaching 8.9% yoy in September. However, inflationary pressures remained high, and inflation, although close to the NBU's target range, remained above the targets set in the Monetary Policy Guidelines for 2018 and the Medium Term (6.5% ± 2 pp as of the end of Q2 2018).

The continued decrease of annual inflation was driven by a slowdown in food price inflation. An increase in domestic and imported food supplies and a decline in global food prices contributed to the overall descending trend.

Moreover, the appreciation in the hryvnia NEER that occurred in H1 2018 continued to mitigate the effect of external inflation factors. However, despite a moderate slowdown in core inflation, underlying inflationary pressures remained significant. As in previous months, consumer demand and further growth in production costs – including for labor and energy – continued to push prices higher.

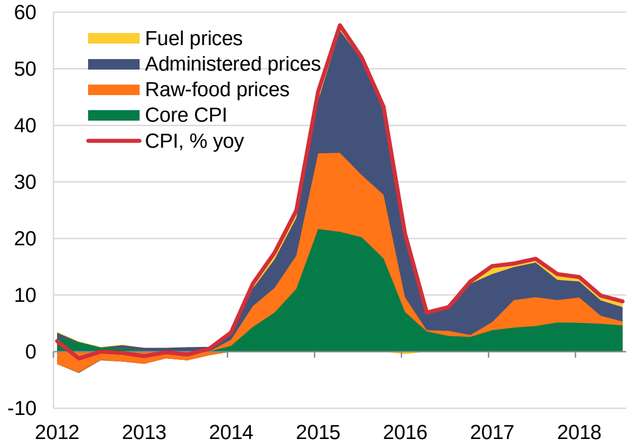
Growth in administered prices accelerated on the back of higher prices for transportation, postal services, and water supply. At the same time, prices for tobacco products grew slower.

Inflation Measures, % yoy



Source: SSSU.

Contributions to Annual Inflation, pp, eoq



Source: SSSU, NBU staff estimates.

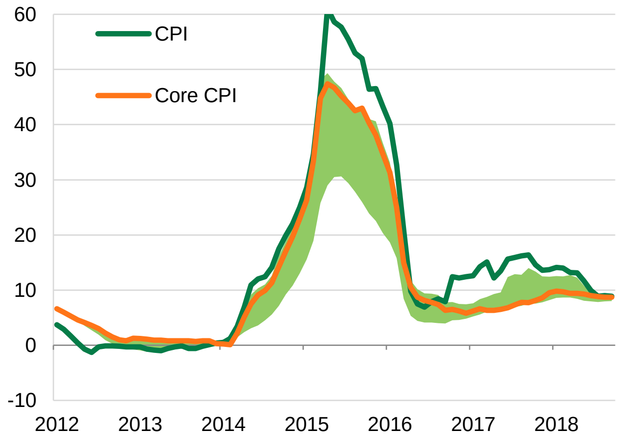
Core Inflation

Core inflation declined moderately in Q3 2018 (to 8.7% yoy in September from 9.0% in June), but was higher than the NBU had projected. Overall, underlying inflation pressures remained significant. As evident from alternative measures[4], the lower bound of the range of core inflation readings has remained almost unchanged over the last five months. A narrowing of the range is a sign of the more evenly spread price changes across various items. Among other factors, this has occurred thanks to fading temporary supply factors that cannot be controlled through monetary policy.

High inflation expectations in Q3 2018 kept underlying inflationary pressures elevated. The announced increase in tariffs for natural gas and other household utilities led to high households' inflation expectations. Banks also raised their expectations for price growth. In addition, according to business outlook survey for Q3 2018, inflation expectations of corporates retreated, but the number of companies that anticipated an increase in prices for production resources rose from the previous quarter. Corporates expected higher prices for goods or services they purchased, which would feed into an increase in prices for their own products. Survey respondents noted a growing influence of the 'exchange rate' and 'energy prices' on the back of the weaker hryvnia and higher global prices for crude oil.

Prices for processed foods grew slower in Q3 2018 (10.1% yoy). This was primarily driven by slower growth in raw material prices amid increased imports and domestic supplies and a decrease in the global prices of certain foods. Price growth slowed for meat and dairy products, including butter, and rice. At the same time, due to the hryvnia depreciation since mid-July, prices for products that are mostly imported rose in Q3 2018, especially for seafood, dried fruit, coffee, and chocolate.

Main Inflation Trends*, % yoy



* A green field reflects a range of core inflation indicators
Source: NBU staff estimates.

[4] Read more in the January 2017 Inflation Report (pages 20–21).

The worsened FX market situation also adversely affected prices for non-foods like home appliances, cars, dishware, and goods for routine household maintenance. Most of those goods are imported. The growth in prices for these products (excluding clothing and footwear) accelerated to 5.4% yoy.

At the same time, price inflation for clothing and footwear decelerated to 1.8% yoy as the hryvnia had strengthened against the currencies of Ukraine's MTPs in previous months (according to the NBU estimates, prices for those goods react to changes in the exchange rate with a significant delay). Moreover, price inflation was curbed as cheaper clothing continued to account for a large share of imports, despite larger trade volumes in clothing overall (in H1 2018, the index of physical volumes of retail turnover of clothing grew 31.5% yoy).

In Q3 2018, growth in services prices also slowed (to 13.6% yoy). Slower growth in dwelling maintenance fees (22.2% yoy) against a high comparison base was the main contributor there. Growth in catering prices also decelerated (to 13.9% yoy) owing to the slower growth in food prices.

However, growth rates increased for most other services owing to sustained pressure from consumer demand and production costs. Higher household income boosted prices for foreign travel services (16.9% yoy). These factors also pushed up airfare prices (the number of passengers increased 15.5% yoy in January–September 2018). At the same time, the affordability of foreign travel introduced some weakness to Ukrainian resort hotel prices (down by 0.4% yoy). Stronger household finances also impacted growth in housing rents, which growth accelerated to 10.0% yoy, as tenants were ready to pay more for better living conditions.

The sustained pressure from higher production costs, particularly labor costs and a large share of imports in the cost of goods sold, propelled growth in prices for mobile communication, dwelling repairs, beauty salon services, hospitals, and sports facilities.

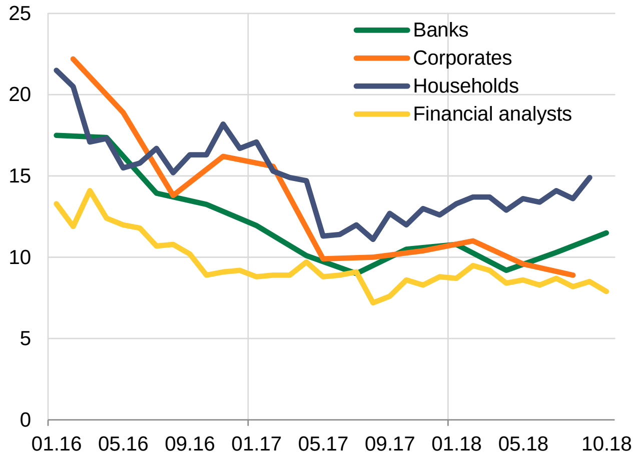
Non-Core Inflation

In Q3 2018, non-core inflation continued to decrease, down to 8.9% yoy in September from 10.3% yoy in June. However, inflationary pressures proved slightly above the NBU's expectations as the assumption of the increase in household gas prices was postponed. Other administered prices and fuel prices grew faster than expected.

Overall, the growth in administered prices accelerated to 13.5% yoy, primarily driven by rapid growth in prices for urban transportation services (32.2% yoy) owing to an increase in fares. Fees for cold water supply and sewage grew faster on the back of higher costs. Moreover, postal services prices were raised on 10 September 2018 (the growth in postal services prices in the CPI accelerated to 60.0% yoy). At the same time, the price growth of tobacco products continued to slow (22.4% yoy), driven by the waning negative effects of distribution problems last year. Prices of alcoholic drinks also decelerated (to 8.1% yoy) against a favorable comparison base[5].

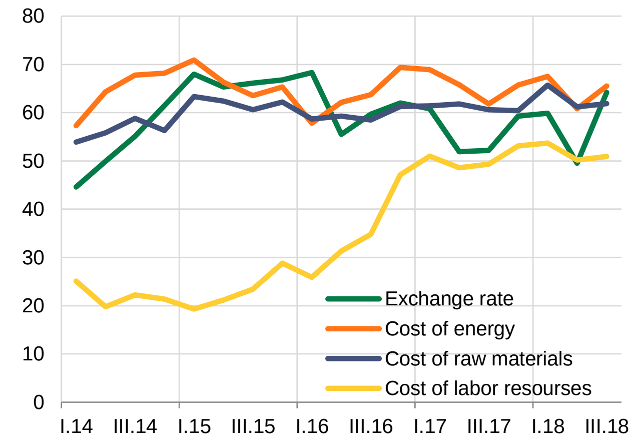
Fuel prices grew faster in Q3 (22.7% yoy) owing to an increase in global oil prices and the weaker hryvnia. According to the NBU's estimates, in the breakdown of fuel price components, the cost of petroleum accounts for 44%, taxes for 38% (including the euro-pegged excise tax), and other costs for the remaining 17%.

Inflation Expectations for the Next 12 Months, %



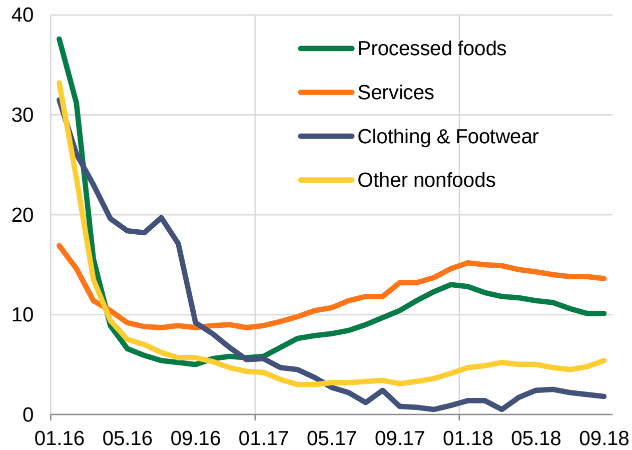
Source: NBU, GfK Ukraine.

Impact of Factors on Estimated Price Changes in Goods and Services Sold by Your Company



Source: NBU.

Main Components of Core CPI, % yoy



Source: SSSU, NBU staff estimates.

[5]The government raised minimum prices for alcoholic drinks in September last year, while this year the increase took place on 2 October.

In addition, raw food price growth decelerated in Q3 to 0.8% yoy in September compared with 5.2% in June. As expected, fruit prices fell even faster (12.8% yoy), driven by abundant harvests of apples and certain other fruits and berries. The growth in prices for meat, raw milk, and eggs slowed to 7.4 % yoy, 12.9% yoy, and 22.2% yoy, respectively, as those products tracked external market developments closely. Buckwheat and sugar prices continued to fall quickly (34.0% yoy and 18.5% yoy, respectively).

On the other hand, vegetable prices dropped by a smaller amount than at the end of the previous quarter (2.3% yoy compared with 12.9% yoy). Bell peppers and eggplants we re cheaper and prices for cucumbers, beans, and garlic also dropped further. However, growth picked up in prices for borshch vegetables as the harvest of late crops was delayed. The latter may have been caused by heavy precipitation in September, some 19%-168% above normal levels, according to the Ukrainian Hydrometeorological Center. Flour prices grew faster (16.9% yoy), which passed through to bread prices (19.2% yoy).

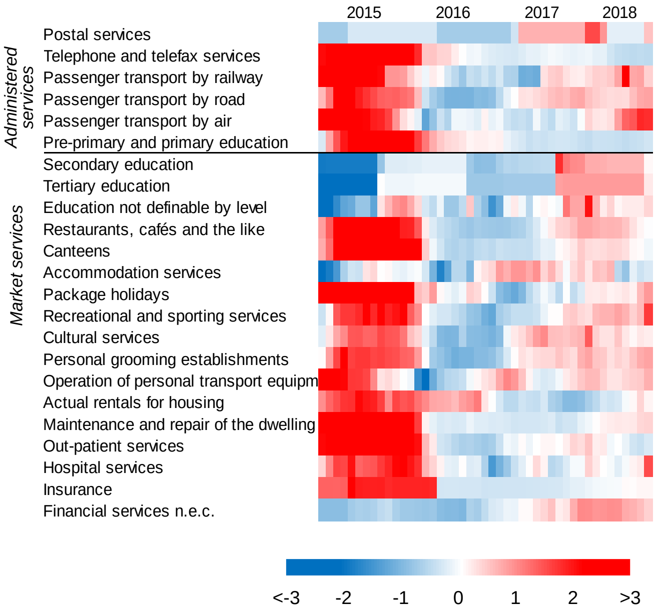
Overall, the pressure on food prices from producer prices[6] abated slightly. Price inflation of foods, beverages, and tobacco products slowed to 9.2% yoy. This was primarily due to the increased supply of imported raw materials, lower global prices, and a decrease in the price index of animal breeding products (by 0.5% yoy), which slowed the growth of prices for meat (2.8% yoy) and dairy products (12.8% yoy). In contrast, faster growth of prices in crop farming (15.0% yoy) boosted price growth in other sectors of the food industry. As a result, prices for bread and flour products grew faster (16.7% yoy) because of higher input prices (rising wheat prices), labor costs, and electricity rates. Sugar prices also declined at a slower pace (16.2% yoy).

Other Measures of Inflation

In Q3 2018, the producer price index rose more quickly. This was mostly driven by accelerated growth in prices for electricity, gas, steam, and air conditioning supply (33.9% yoy) as global energy prices increased. Naftogaz of Ukraine NJSC raised its tariffs for supplying natural gas to industrial consumers and increased the purchase price for the gas extracted in Ukraine. Prices for electricity generated at thermal power plants also grew, including due to an unresolved issue related to supplying gas to Kyiv-area power plants at preferential rates[7]. The increase in global energy prices fed through to accelerated price growth in the chemical industry (13.6% yoy).

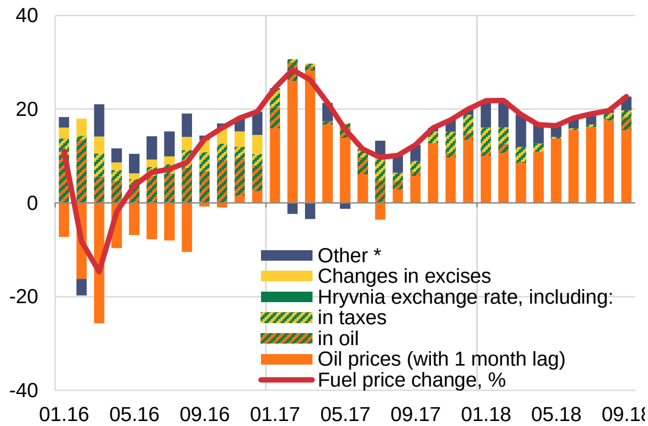
Prices also grew faster in the forestry industry on the back of increased exports of wood products (14.4% yoy in January–September 2018). On the other hand, slower growth in prices for metal ores (17.5% yoy) and metals (16.8% yoy) restrained producer price inflation. This mostly reflected the deeper fall in global iron ore prices and slower growth in steel prices. Prices in the machine-building sector increased more slowly (15.7% yoy). In particular, price growth slowed to 19.3% yoy for electrical equipment thanks to a favorable comparison base – prices rose last year on a global deficit of graphite electrodes.

Normalized* Services Inflation Heat Map in Ukraine, %**



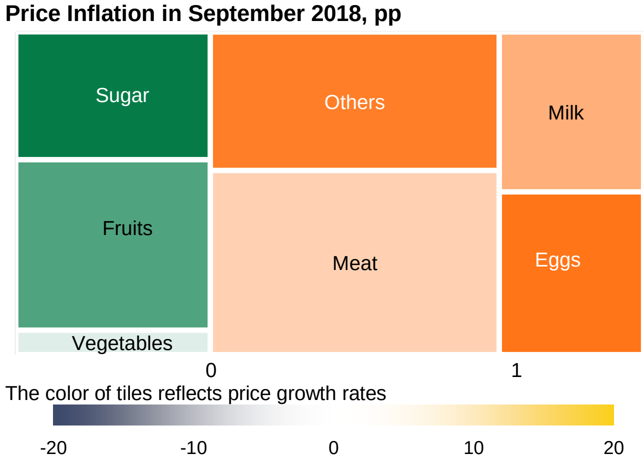
* Data are normalized by subtracting the mean change and dividing by standard deviation. Data for 2015 is excluded from mean and standard deviation calculation. See more at stlouisfed.org.
** Graphical representation of data where the individual values contained in a matrix are represented as colors. 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.

Factor Decomposition of Annual Change in Fuel Prices, pp



* Includes administrative costs, logistics services, trade margins, etc
Source: NBU, SSSU, Nefterynok.

Contributions of Food Products to the Annual Raw Food Price Inflation in September 2018, pp



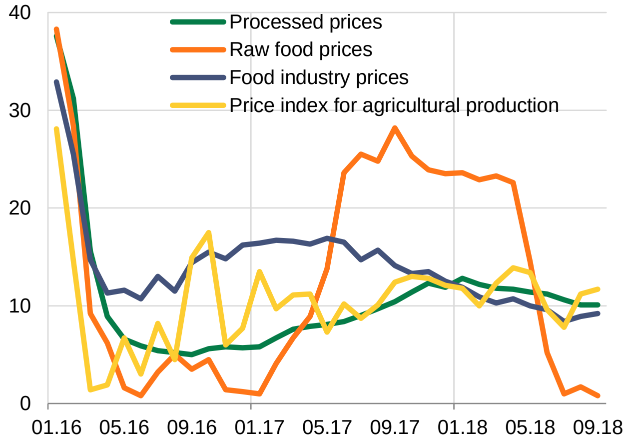
The color of tiles reflects price growth rates
Green field reflects a negative contribution
Source: SSSU, NBU staff estimates.

[6] By NBU estimates, price changes in food, beverage, and tobacco production have a significant influence on the food product and non-alcoholic drink component of the CPI. Read more in the July 2016 Inflation Report, pages 16–17.
[7] More information is available on the websites of the Kyiv City Council and Naftogaz of Ukraine NJSC.

The cost of construction works continued to rise rapidly (23.2% yoy in August), supported by higher production costs, including labor costs. In addition, the Q3 2018 business outlook survey showed that prices in the construction sector strongly depend on raw materials prices; 82.8% of responding construction companies noted the importance of this factor.

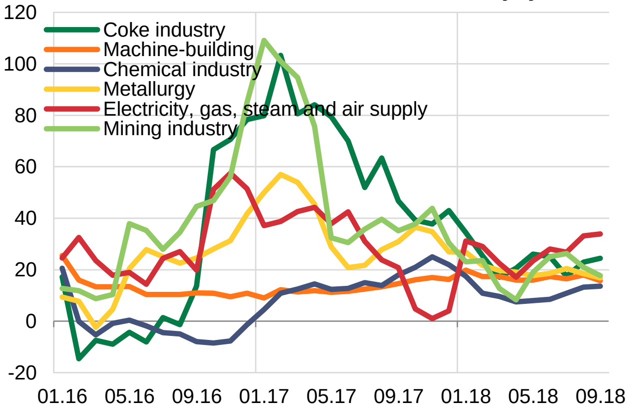
In Q2 2018, the GDP deflator increased. High growth rates in the construction industry and faster growth in prices for postal and communication services were the key contributing factors. Another reason for the increase in the GDP deflator was the faster growth in expenditures of the consolidated budget in Q2 compared with the previous year. As a result, a part of the difference was reflected in the deflator under the Taxes on Products[8] category. At the same time, the slowdown in consumer and producer price inflation restrained further growth in the GDP deflator. The NBU expects the GDP deflator to slow in Q3 2018 largely on the back of slower consumer price inflation and lower deflator in general government sector.

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



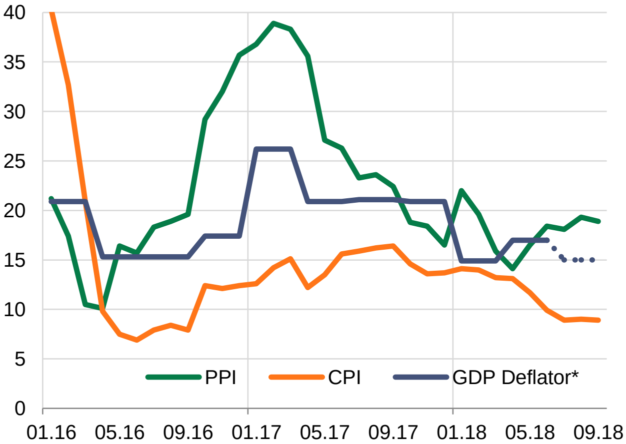
Source: SSSU, NBU staff estimates.

Producer Price Indexes in Select Industries, % yoy



Source: SSSU.

Select Inflation Indicators,% yoy



** Data for Q3 2018 – according to the NBU staff estimates.*
Source: SSSU.

[8]According to SSSU methodology, short-term calculations in the Taxes on Products category are made on the basis of extrapolation.

Box: Measuring Inflation Using Online Price Indices[9]

Central banks that pursue inflation targeting aim to keep inflation low as one of their primary goals. Over the last 20 years, the number of countries that use inflation targeting as their main monetary policy framework has increased markedly[10]. In order to target inflation, central banks therefore need a clear and observable inflation indicator that can serve as a nominal anchor for society.

Monetary policy relies on indicators that measure the cost of living and exclude the impact of occasional and administrative factors or supply factors such as a poor harvest caused by unfavorable weather[11]. This is due to the fact that the ability of monetary policy to influence those specific factors is limited.

However, most central banks, including the National Bank of Ukraine (NBU), rely on the Consumer Price Index (CPI) for the conduct of monetary policy, which is calculated and published by government statistics agencies (in Ukraine the State Statistics Service of Ukraine). Three key factors explain that choice. First, the public is more aware of the headline inflation measure, whereas other measures are more difficult to understand. Second, focusing on inflation indicators that exclude certain goods or groups of goods such as foods, utilities, or fuels reduces the households' confidence in the inflation indicator itself, and thus in the central bank's announcements and actions (Bullard, 2011). This is especially true because those are typically the goods that households buy most often and for which they can see the price changes daily. This influences households' perceptions of inflation and their inflation expectations (Coibion and Gorodnichenko, 2015). Finally, using other inflation measures like the GDP deflator reduces the effectiveness of monetary policy because the data are published with a delay. Given the rapid pace of life, receiving readily available data is important for effectiveness of monetary policy. Central banks must therefore be equipped with all possible tools and make recourse to all available sources of information.

E-commerce has been growing rapidly in Ukraine in recent years, and the pace of growth has accelerated to almost 30% annually, according to various estimates[12]. In 2017, e-commerce accounted for between 4% and 9% of retail trade turnover. The rapid penetration of e-commerce allows prices for various goods and services sold online to be monitored. This has provided an impetus to the development of web scraping, which is the collection of data from online sources using dedicated software. Many national statistics organizations and other public institutions have launched projects to introduce web scraping to augment the official statistics they currently oversee. Those bodies include the U.S. Bureau of Labor Statistics and the statistics authorities of the United Kingdom, the Netherlands, New Zealand, and Norway.

Web scraping has advantages over more traditional methods of data collection. First, the process of collecting the data is less costly. Second, online data are available in real time and on a high frequency basis, which allows continuous monitoring of inflation processes at a micro level. Third, the large volume of data with different characteristics increases the opportunity to use the data in research. The Billion Price Project, founded by Alberto Cavallo and Roberto Rigobon at the Massachusetts Institute of Technology in 2008, collects price data from hundreds of online stores around the world to be used for macroeconomic and international research (e.g., Cavallo, 2012).

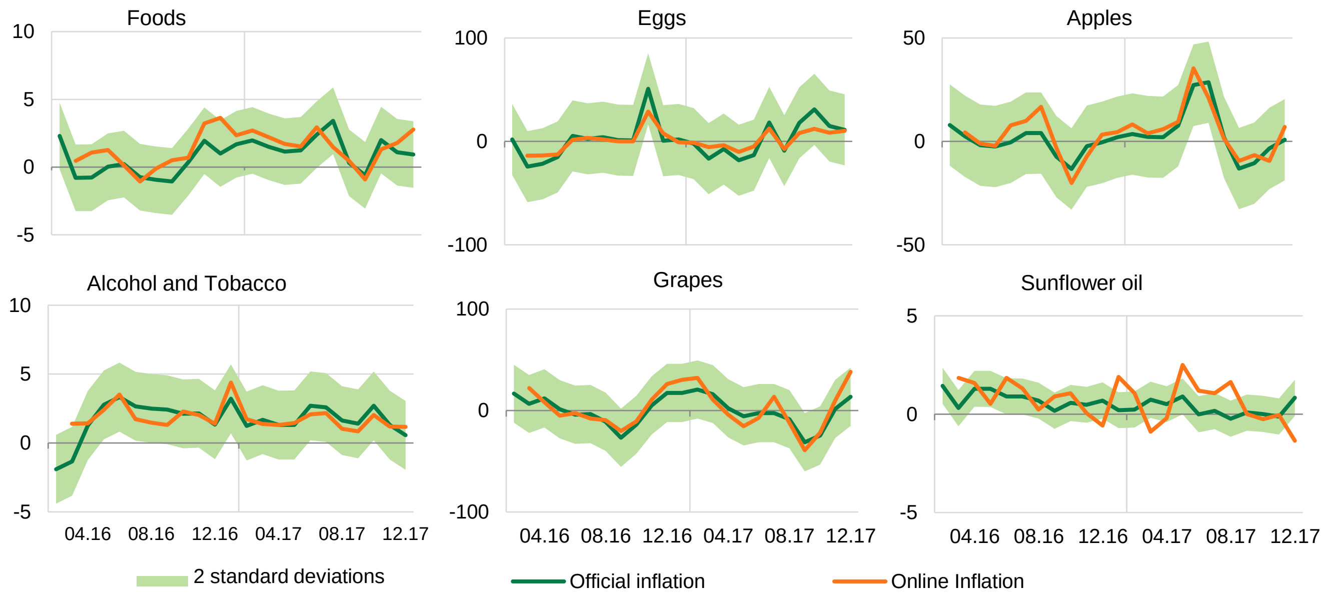
In 2015, the NBU also launched a web scraping project to collect consumer price data to nowcast inflation that can be used in monetary policy decisions. The NBU's online data comes from leading online retailers that also have large networks of offline stores in five of Ukraine's largest cities (Kyiv, Kharkiv, Dnipro, Odesa, and Lviv). The dataset covers 46% of all consumer products in Ukraine and includes more than 130 (out of 328) representative goods (hereinafter referred to as the components) used in calculating the traditional CPI. In 2016–2017, the NBU's dataset comprised 75,000 items of goods and almost 3 million weekly observations.

Then, online indices were developed and were compared with the official data to assess whether data sourced by web scraping can be a leading indicator of inflation. Using statistical transformations[13], the online price indices were found to generally be in-line with the official index, although the accuracy of the online data varied for certain CPI components. For example, the online price indices for eggs, apples, grapes, and kefir are accurate enough to reflect the general trends and short-term fluctuations in the official statistics, and their error is less than two standard deviations. However, some online indices – like prices for white bread, frozen fish, and sunflower oil – reflect the long-term monthly inflation trends, but differ materially in the short-run. The differences may be explained by the specifics of the online data – for example, the quantity of goods, the difference in the product range in large supermarkets and small stores, the geography of the data being collected, etc. However, in general, the price change trends determined using the two methods are comparable and unidirectional.

In addition, online prices can reflect new information that is not yet captured in the official statistics. This is evidenced by the fact that the ability of high-frequency online data to closely track the official monthly inflation readings increases if the data set

[9]Based on the article by O. Faryna, O. Talavera, T. Yukhymenko (2018) *What Drives the Difference between Online and Official Price Indexes?* Visnyk of the National Bank of Ukraine, No. 243, pages 23–35.
[10]Per the IMF's *AREAER reports, the number of countries in which the central banks use inflation targeting grew to 24 in 2006, 31 in 2011, and 40 in 2017, respectively.*
[11]Read more in the *Alternative Measures of Core CPI* box in the January 2017 Inflation Report (pages 20–21).
[12]According to studies by EY (*E-commerce Market in Ukraine*), Ukrainian IT company EVO, and Euromonitor.
[13]At first, the online indices for each component were calculated as a simple average of weekly changes in online prices. After that, the weekly time series for individual CPI components were transformed into monthly series.

Selected Online Indices of Individual Goods Compared to Official Data, % mom

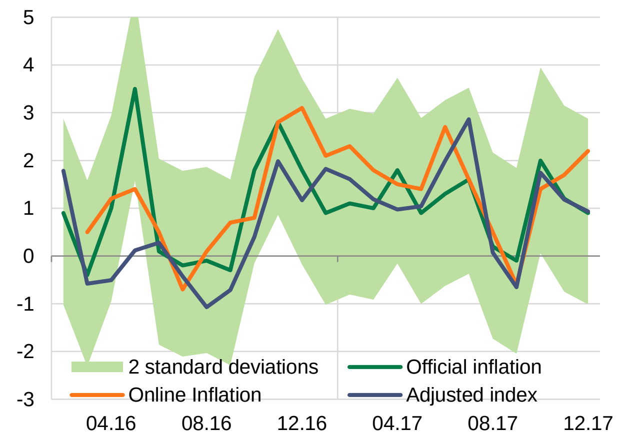


Source: SSSU, authors estimates.

captures a larger period of changes in online prices. That is, online prices can react to new economic conditions faster and thus can serve as an anchor for forecasting the official statistics.

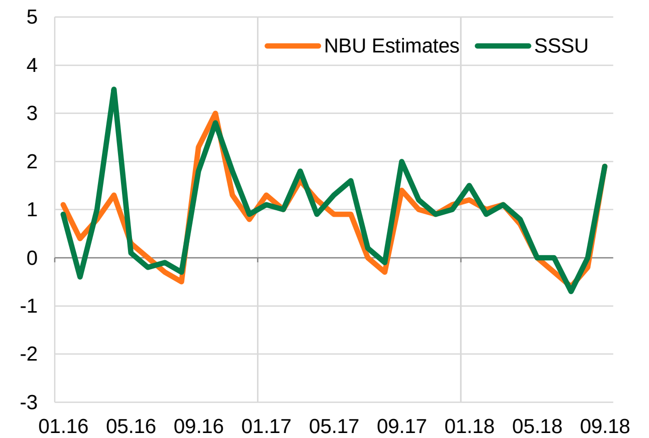
As a result, with the data collected from online sources and with the use of other modeling tools[14], the NBU can produce short-term inflation assessments nearly two weeks prior to the publication of the official data by the SSSU and use the projections for in-depth analyses and monetary policy implementation.

Official, Adjusted Official and Online Inflation, % mom



* Official index is officially published by the SSSU (based on data of 328 components); Adjusted index - calculated on the basis of individual SSSU data, but contains only components included into online index (> 130 of 328); Online index - calculated from individual online indexes (>130 components).
Source: SSSU, NBU staff estimates..

NBU Nowcast and Official CPI, % mom



* The short-term estimates, besides the online index (> 130 components), also includes NBU calculations with the use of other modeling tools[14].

Source: SSSU, NBU staff estimates.

[14] Modeling tools are used to estimate selected core CPI components, specifically price changes for services, clothing and footwear, and some non-food products.

2.2. Demand and Output

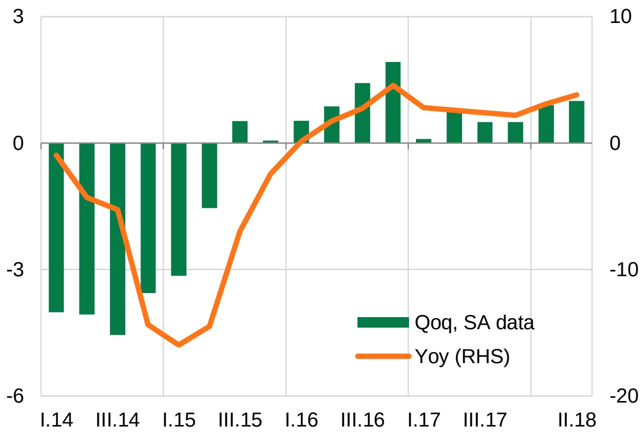
Real GDP growth accelerated to 3.8% yoy in Q2 2018 and exceeded the NBU's forecast as published in the July 2018 Inflation Report. This was driven mainly by an early start to the harvesting campaign, which resulted in a sharp increase in gross value added (GVA) in the agricultural sector.

As expected, domestic demand, mainly consumer one, continued to fuel real GDP growth. Government spending picked up noticeably, especially on utility subsidies. Rising incomes and improved consumer sentiment supported private consumption. Investment growth decelerated but remained robust on the back of strong business expectations.

The pace of growth in goods imports (buoyed by strong domestic demand) lagged behind that of exports, leaving the contribution of net exports to GDP growth negative (1.7 pp).

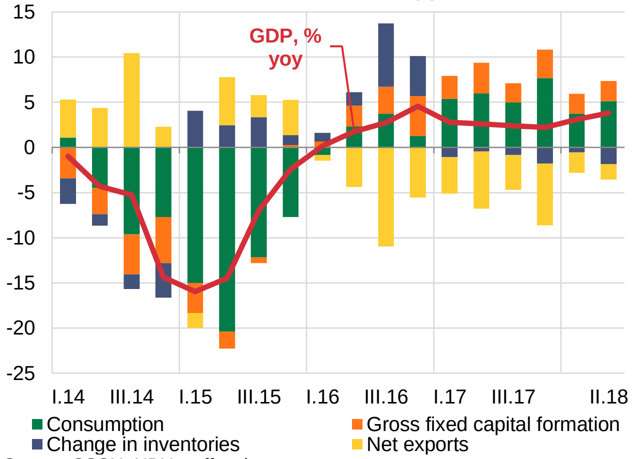
The NBU estimates real GDP growth to slow down to 3.1% yoy in Q3 2018 with weaker performance widely spread across major economic sectors and less optimistic business expectations. In particular, agriculture will make a smaller contribution due to lower yields of early grain crops. Industrial output growth was moderate because of a less favorable external environment, repairs at mining and metallurgical companies, and difficulties in transportation and logistics. On the other hand, higher wages and pensions fueled consumer demand, which remained the main driver of economic growth.

Real GDP, %



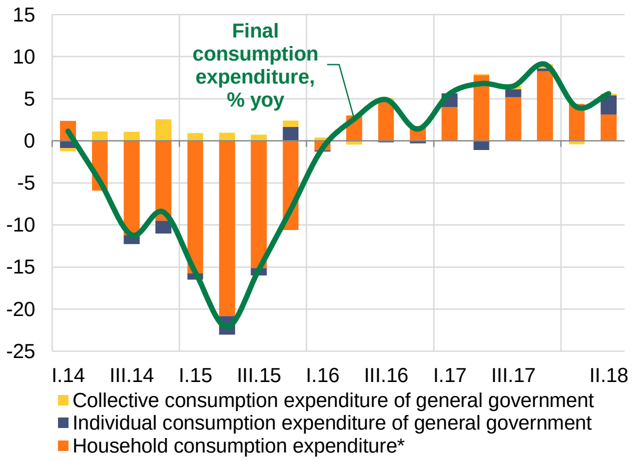
Source: SSSU.

Contributions to Annual GDP Growth, pp



Source: SSSU, NBU staff estimates.

Contributions to Annual Final Consumption Expenditures Growth, pp



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

Aggregate Demand

In Q2 2018, real GDP growth accelerated to 3.8% yoy and 1% qoq in seasonally adjusted terms.

As expected, domestic demand (consumer and investment) was the major contributor to real GDP growth in Q2 2018, similar to the previous quarter. The growth in final consumption expenditure accelerated to 5.6% yoy as government consumption surged to 11.0% yoy compared with a 1.4% decline yoy in the previous quarter. The spike came on a large increase in government spending on household utility subsidies due to the longer heating season in 2018[15]. This boosted the general government individual consumption expenditure to 17.8% yoy compared to a 0.3% yoy decrease in Q1 2018. Other government expenditures also grew, including wage payments in some branches of the public sector and transfers to businesses and households. This boosted GVA growth in most services industries that are financed mainly from the budget.

Household final consumption expenditure continued to grow, albeit at a slower pace of 4.2% yoy. Robust household income growth and improved consumer sentiment underpinned the growth in household consumption[16]. At the same time, uncertainty related to the need for some individuals to reapply for subsidies, and rising last year's comparison base, served to slow the pace of growth in

[15] Due to the harsh weather in spring 2018, the heating season lasted through March, with some household subsidies paid in April. Last year, the heating season ended in mid-March.
[16] GfK Ukraine Consumer Sentiment Index rose by 5.7 points compared to Q1 2018 as well as Q2 2017. In June 2018, the index reached a four-year high (last reached in June 2014).

household consumption. This, in turn, caused the growth of GVA in the trade sector to decelerate.

By consumption purpose, growth was strong in household spending on furnishings, health care, transport, and catering and hotel services. Growth in household consumer spending on food, alcohol, and tobacco picked up as the growth in the prices of those products dipped. On the other hand, growth in spending on clothing and footwear slumped following the strong growth of recent years, while spending on education declined.

The quarterly growth in gross fixed capital formation has been strong for three years running. However, in 2003–2004 and 2006–2007, growth in gross fixed capital formation (at around 22%) was supported by booming global commodity prices, whereas the growth in 2016–2018 has been driven mainly by high business expectations. Still, the growth of gross fixed capital formation slowed to 14.2% yoy in Q2 2018 as a result of modest pre-tax financial results of large and medium companies in H1[17]. Own funds of enterprises and organizations remained the main funding source for capital investment. The share of own funds in all funding sources accounted for 74.8%.

Meanwhile, compared with the previous quarter budget-funded capital expenditures grew as a share of total investment financing, to 8.9%. In contrast, capital investment financing through bank loans and household residential investment remained modest, with their shares down to 6.8% and 6.6%, respectively. Foreign investment remained negligible at just a 0.2% share of the total.

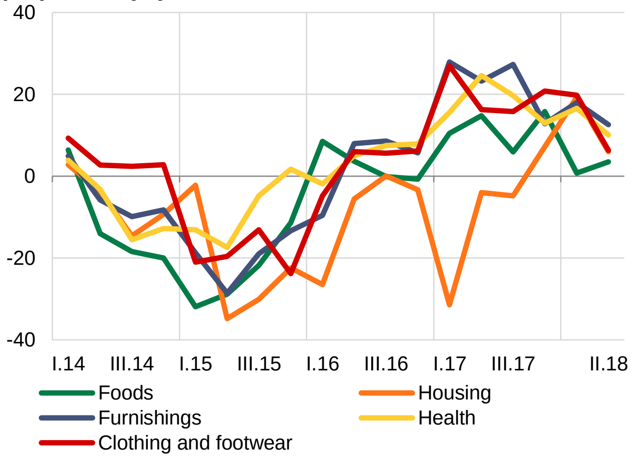
Nearly half (47.1%) of all capital investment was directed to machinery, equipment and tools, and transport vehicles. In particular, industrial companies (mining, metals, energy, and chemical industries), and trade, transport, and postal services (development projects for airports, Ukrainian railways JSC, and Ukrposhta PJSC) continued to increase investment volumes. As in the previous quarter, capital investment in intangible assets surged (by 2.4 times yoy), driven by investments in telecommunications, including for the purchase of 4G licenses.

Despite lower grain export volumes in Q2 2018 in the wake of depleted inventories and a poorer harvest last marketing year, the overall growth in exports of goods and services recovered in real terms (up 0.1% yoy compared with a 9.9% yoy dip in the previous quarter). The growth in imports of goods and services also rebounded in Q2 (up 3% yoy compared with a 5.4% yoy decrease in Q1), buoyed by robust consumption and investment demand. On balance, the negative contribution of net exports to GDP growth shrank to 1.7 pp.

Output

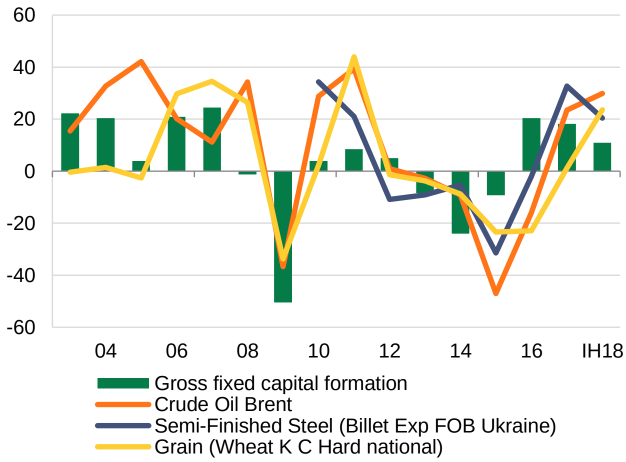
Across economic activities, real GDP growth in Q2 2018 was mainly driven by the agricultural sector. GVA growth in agriculture sped up to 19.3% yoy. Crop production grew rapidly at the end of the quarter as the grain harvest started earlier than last year. Also, the output of food products like eggs and poultry increased.

Real Final Consumption Expenditure of Households by purpose, % yoy



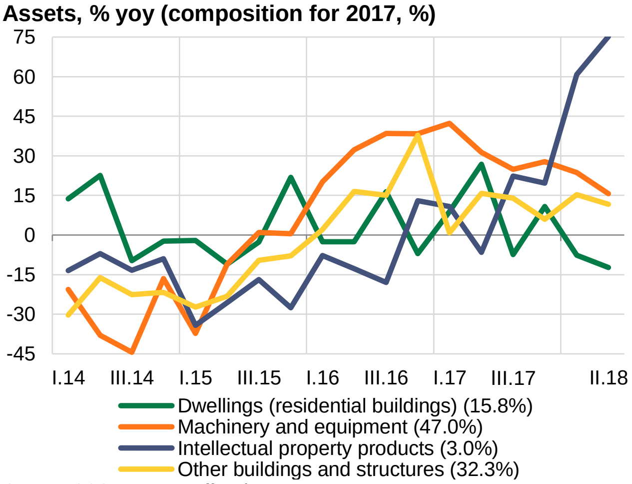
Source: SSSU, NBU staff estimates.

Gross Fixed Capital Formation and Dynamics of Annual Average Global Prices, % yoy



Source: IMF, Thomson Reuters Datastream, SSSU, NBU staff estimates.

Gross Fixed Capital Formation by Types of Non-financial Assets, % yoy (composition for 2017, %)



Source: SSSU, NBU staff estimates.

[17]In H1 2018, companies reported an increase in losses (19.4% yoy) for the first time in three years. Food producers (like producers of sunflower oil) and transportation companies (Ukrtransgaz PJSC, for example) stood out among loss-making companies.

Higher consumer demand and government expenditures boosted GVA growth in most services sectors, including those financed mainly from budget funds like health care (GVA growth increased to 2.1% yoy), public administration and defense (to 1.7% yoy), administrative and support services (to 2.4% yoy), transportation (to 2.7% yoy), and accommodation and food services (to 1.3% yoy). GVA growth in real estate activities remained high (3.7% yoy). This offset a slowdown in GVA growth in financial and insurance activities (to 1.1% yoy) and arts, entertainment, and recreation (to 1.6% yoy), and a decrease in the GVA in education (-1.9% yoy).

GVA growth in construction accelerated to 7.2% yoy, thanks to a pick-up in Q2 2018 in road and transport infrastructure development projects as capital budget expenditures have grown.

Meanwhile, other sectors' contribution to GDP growth eased. The growth of GVA in the trade sector decelerated on the back of lower retail and wholesale turnovers, with the latter affected by weaker external trade.

GVA growth in the energy sector accelerated to 6.9% as the comparison base was depressed by the halting of trade and seizure of companies in the non-government-controlled areas of Eastern Ukraine last year. The growth in the manufacturing and mining industries slowed to 2.0% yoy and 0.7% yoy, respectively, cutting into the industrial sector's contribution to GDP growth.

Estimates for Q3 2018

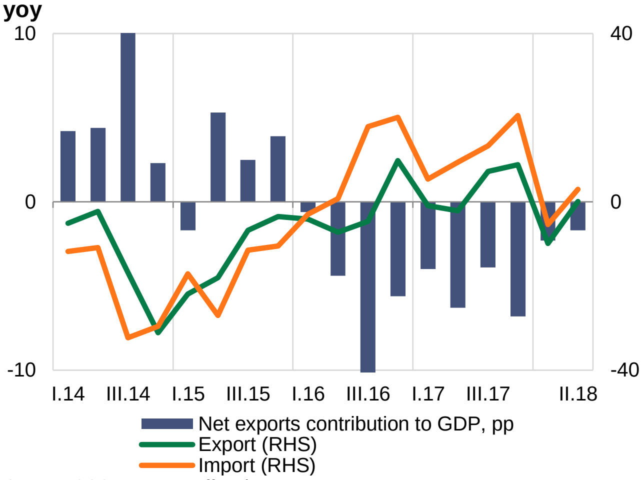
The NBU estimates that real GDP growth slowed slightly in Q3 2018 to 3.1% yoy as most key economic sectors performed weaker.

The growth in agricultural output slowed in Q3 2018 even though yields of late grain crops like corn grew versus last year. The early start of harvesting activities (in late Q2 2018) and lower yields of early grain crops, including wheat and barley, contributed to the slowdown. Continued poorer performance in selected segments of animal production also played a role.

The growth in the energy sector slowed because of the waning effects of a low comparison base resulting from the disruption of ties with non-government-controlled areas in early 2017, the protracted resolution of supplying gas at preferential rates in Kyiv, and warmer weather in September than last year. Growth in manufacturing industry was dragged down by a less favorable external environment, transportation and logistics difficulties, and repairs at some large enterprises of the mining and metallurgical complex that decreased the capacity utilization rates of metallurgical companies. Growth in chemical industry production decelerated as the effect of last-year's low comparison base faded. Overall, industrial production growth slowed in Q3 2018.

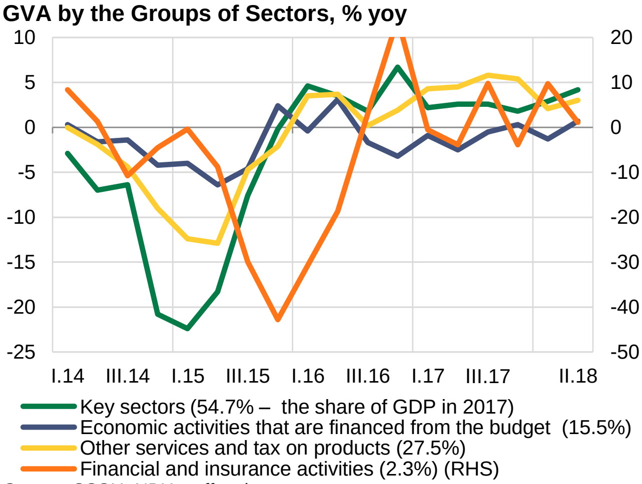
In terms of end-use categories, domestic demand bolstered Ukraine's economic growth. Consumption continued to be driven by increases in household income resulting from higher wages, pensions, and labor migrant remittances to Ukraine. At the same time, business expectations have worsened for two consecutive quarters, which has weighed on investment growth. The negative

Exports and Imports of Goods and Services, and Contribution of Net Exports to Annual Real GDP Growth, % yoy



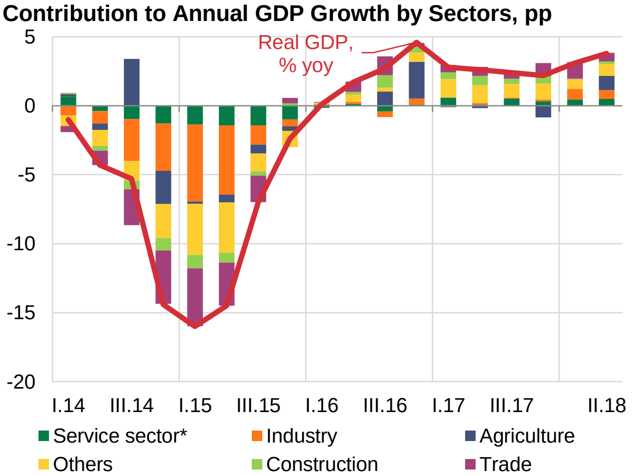
Source: SSSU, NBU staff estimates.

GVA by the Groups of Sectors, % yoy



Source: SSSU, NBU staff estimates.

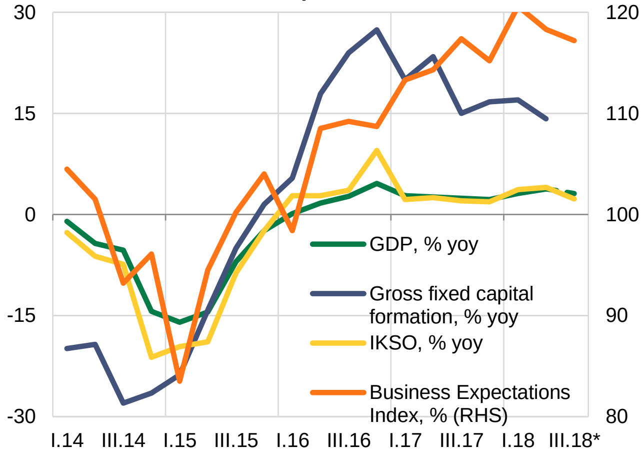
Contribution to Annual GDP Growth by Sectors, pp



* Including financial and insurance activities, real estate activities, and service activities that are mostly financed from the budget.
Source: SSSU, NBU staff estimates.

contribution of net exports to real GDP growth increased as imports grew faster than exports.

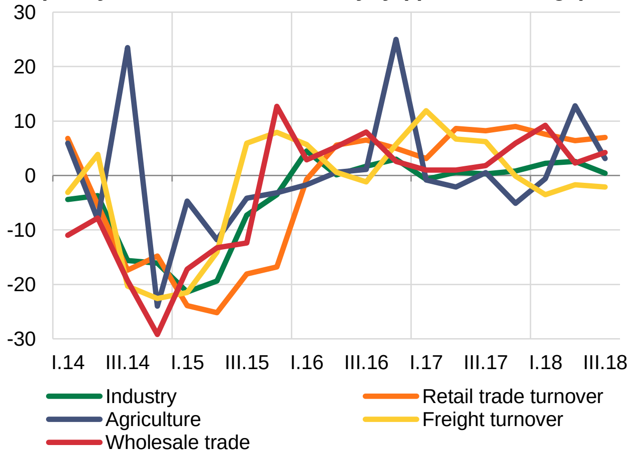
Real GDP, Index of Key Sectors Output, Gross Fixed Capital Formation and Business Expectations



** Q3 2018: GDP – NBU estimates.*

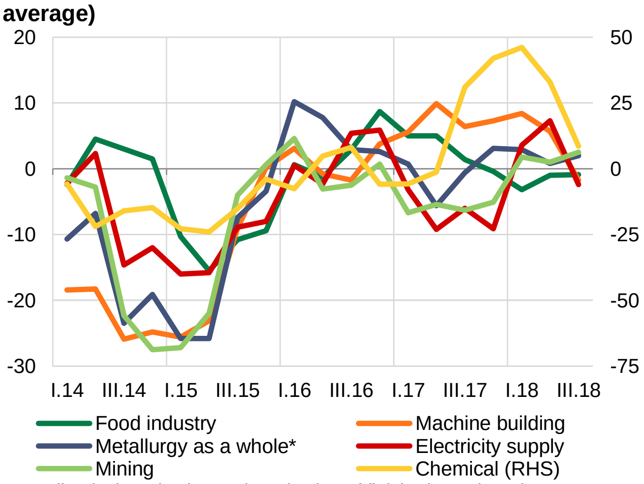
Source: SSSU, NBU staff estimates and surveys.

Output by Selected Activities, % yoy (quarter average)



Source: SSSU, NBU staff estimates.

Output by Selected Industrial Activities, % yoy (quarter average)



* Metallurgical production and production of finished metal products.

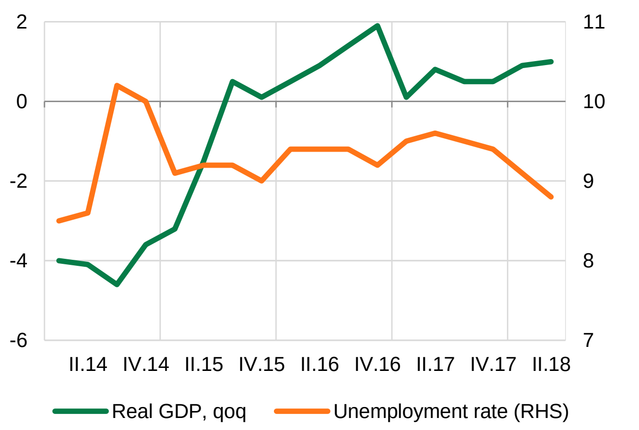
Source: SSSU, NBU staff estimates.

2.3. Labor Market and Household Income

In Q2 2018, demand for labor was robust, causing the unemployment rate to drop sharply. Labor demand continued to be strong into Q3 2018, driven by economic growth and strong business expectations. At the same time, labor supply also increased after prolonged contraction that started in H2 2013. In particular, the economically active and employed population increased as individuals started their job search more actively after the announcement of amendments to the pension laws (the increase in the required insurance period to qualify for a retirement pension was a particular driver) and wages increased rapidly. However, there continued to be a mismatch between supply and demand, and the percentage of companies that reported a lack of qualified workers remained high. In addition, migration processes continued to put pressure on the labor market.

Nominal household income grew 25.9% yoy in Q2, driven primarily by wage growth. The growth in household income was also driven by social transfers in-kind (mainly owing to higher utility subsidies after the longer heating season in 2017–2018) and social benefits (higher pensions for military servants and the lasting effect of the pension reform at the end of 2017). Despite high inflation, real disposable income continued to grow steadily in Q2 2018 (+9.7% yoy).

ILO Unemployment* and Real GDP, sa, %



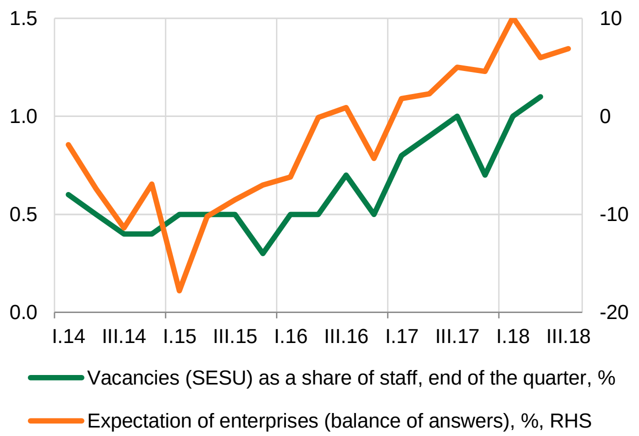
* % of economically active population aged 15 – 70 years.
Source: SSSU, NBU staff estimates.

Labor Market

Labor demand remained high in Q3 2018. [In the Q3 2018 business outlook survey](), businesses reported improved expectations for changes in the number of staff in the coming 12 months (both qoq and yoy), especially in industry, trade, and agriculture.

At the same time, corporates across all economic sectors said the shortage of skilled workers was a factor limiting their production capacity. This is a clear sign that the existing supply of labor is failing to fully satisfy the high demand of businesses.

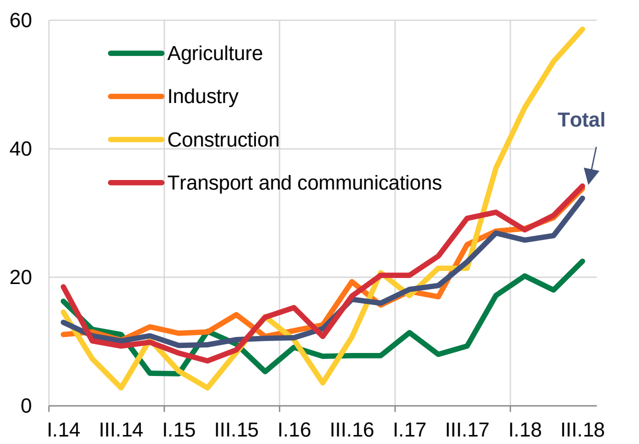
Vacancies (SESU) as a Ratio of Staff Workers* and Expectations of Enterprises as to the Change in the Number of Employees 12-Month Ahead



* Agriculture, Forestry and Fishing excluded.
Source: SSSU, SESU, NBU, NBU staff estimates.

In some economic activities, labor supply significantly exceeded demand, which is another sign of persistent labor market mismatches. According to SESU data as of early October 2018, the number of job applicants per vacancy remained the highest in finance, insurance, public administration, defense, and mandatory social security. Overall, however, the number of applicants per vacancy declined.

The Share of Enterprises that Indicated that the Lack of Skilled Workers Hampers Their Ability to Increase Production by Type of Activity, %



Source: Business outlook survey of Ukraine (NBU).

The SESU data showed a 9.3% yoy increase in the number of vacancies in January–September 2018 while the number of companies working with the Service also increased (+9% yoy). In January–September 2018, all sectors of the economy saw a yoy increase in vacancies, except for public administration, defense, mandatory social security, finance, and insurance. Vacancies in education and professional, scientific, and technical activities increased the most (+43.1% and 20.7% yoy, respectively). However, as in previous periods, skilled and unskilled workers were most in demand (representing 52% of all vacancies registered by the SESU).

Economically active population grew for the second consecutive quarter following a protracted decline that started in H2 2013 (+0.4% yoy in Q1 2018 and +0.2% yoy in Q2 2018 to 18 million individuals). This growth came amid a decrease in the economically inactive population[18]. The combination of these two trends provides evidence of an expansion of labor supply and shows that people started their job search more actively after the implementation of changes to the retirement laws (including an increase in the number of years of pensionable service required to qualify for a retirement pension) and because of rapid growth in wages. This translated into growth of the economically active population among individuals aged 30 to 59.

The high labor demand, in turn, drove an increase in the employed population for the first time since 2014 (+1% yoy in H1 2018 to 16.3 million individuals and +1.1% yoy in Q2 2018 to 16.5 million), mainly among women and in urban areas. At the same time, the number of staff[19] shrank somewhat in 2017–2018. This group accounts for almost half of all employed individuals. Thus, the increase in employment can be attributed to growth in employment at small and micro businesses and in the number of registered self-employed individuals, and the workers they hire.

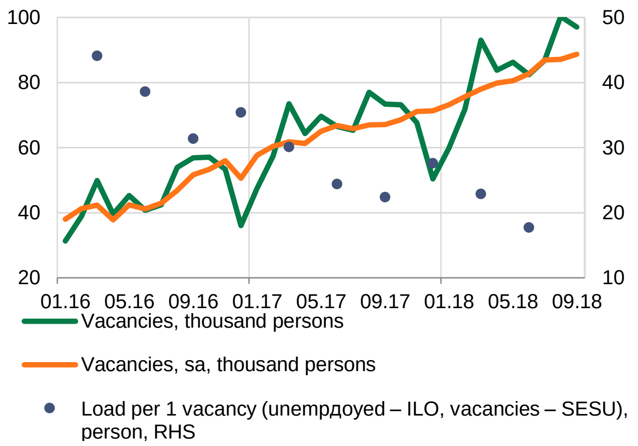
Changes to pension laws were also a major factor in reducing the number of informally employed individuals[20] (primarily in trade and agriculture). The number of individuals aged 15–70 working off the books has gradually declined since 2015 to 3.6 million in H1 2018 (21.8% of all employed individuals).

As a result, the unemployment rate (as a percentage of the economically active population aged 15–70 years) declined in Q2 2018 for the second consecutive quarter to 8.3% (8.8% sa), according to ILO methodology. The seasonal drop in unemployment in Q2 2018 (primarily in agriculture and construction) came as the harvesting campaign started earlier than last year. In H1 2018, the unemployment rate decreased by 0.7 pp yoy to 8.9%. The decrease came in all age groups in the 15–49 bracket, with those aged 40–49 accounting for most of the decrease. Young people aged 15-24 had the highest unemployment rate in H1 2018 (although it was a bit lower at 17.1%) as they struggled to find jobs after completing education[21]. By region, Luhansk and Donetsk oblasts had the highest rates of unemployment (15.4% and 14.1%, respectively).

Household Income and Savings

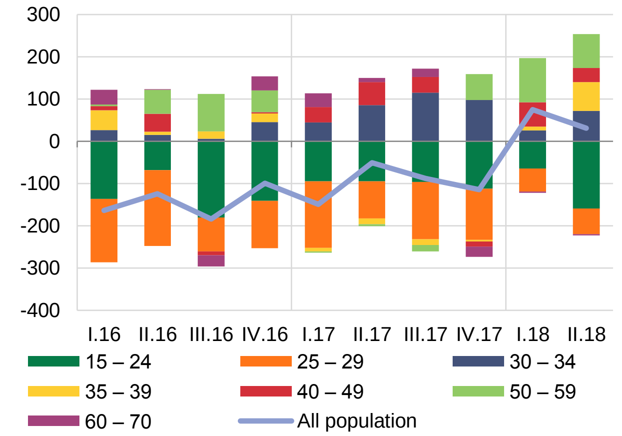
Growth in nominal household income continued to accelerate in Q2 2018 and reached 25.9% yoy. This growth was primarily driven by its largest component, wages[22], which accounted for nearly half of all household income and contributed the most (13 pp) to the overall growth in nominal household income.

Vacancies, Load per 1 Vacancy (for the quarter)



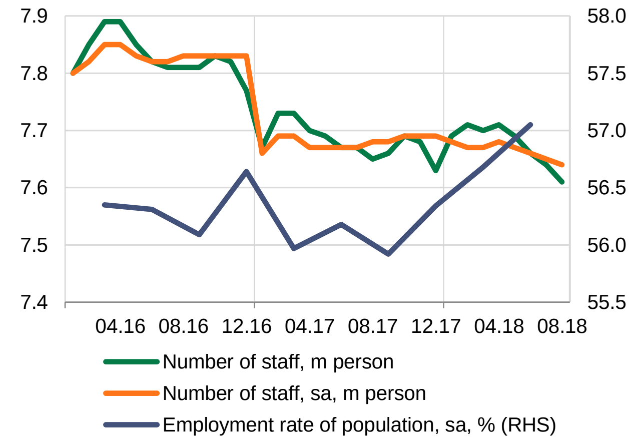
Source: SSSU, SESU, NBU staff estimates.

Economically active population, thousand persons yoy



Source: SSSU, NBU staff estimates.

Average Number of Staff, Employment Rate of Population*



* The employment rate of the population is the ratio of the number of employed aged 15 – 70 to the total population of the corresponding age. The indicator is a characteristic of the population's labor activity.
Source: SSSU, NBU staff estimates.

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[18] This category includes individuals who are not willing to work because they do not need to (pensioners, students, and housewives or -men), people discouraged from looking for work, and those who do not see a suitable job available and do not know how or where to search for a job. Read more about population categories in the *Unemployment Level by ILO Methodology* box in the September 2015 Inflation Report (only available in Ukrainian), pages 24–25.

[19] The staff are individuals working at legal entities or their subsidiaries that have at least 10 employees

[20] The informally employed include: individuals working for businesses in the informal sector (unregistered self-employed, employers and workers they hire, unpaid family members, etc.); unpaid family members working at formal sector enterprises; employees with informal jobs in the formal sector enterprises (individuals working under oral agreements or having no social guarantees; in particular, their employers did not pay social security contributions on their behalf; they did not have annual leave or paid sick leave).

[21] For more details, see the box *Youth Unemployment in Ukraine* in the July 2018 Inflation Report, pages 27–28.

[22] The growth rates of the average nominal wage (per one staff worker) and wages included in SNA's incomes differ due to the different calculation methodologies used. More specifically, wages as a part of household income are calculated from a larger sample that includes armed forces and freelancers' allowances, temporary disability payments, self-employment income, as well as other payments that are not included in the calculation of the average nominal wage per staff worker.

The growth in nominal household income in Q2 2018 was also driven by:

- Social transfers in-kind, whose growth accelerated sharply to 40.5% yoy, mainly due to utility subsidies related to the longer heating season in 2018

- Social benefits (the second largest component of nominal household income), which continued to grow rapidly but at a slower pace (+29.1% yoy). Meanwhile, higher military pensions, the continued effect of labor pension modernization in late 2017, and the recalculation of the years of pensionable service for those continuing to work after retirement age propelled rapid growth in social benefits.

The growth in wages was fueled by both the lagged effect of the minimum wage increase and continued labor migration. Labor migration has upward pressure on wages, which comes not only from the shrinking labor supply in the labor market but also from the convergence of wages in Ukraine with those in the neighboring countries. Ukraine's nominal wage has more than doubled since early 2016 but has remained a fraction of the nominal wages in neighboring countries like Poland (the main destination for Ukrainian labor migrants) and the Czech Republic.

In Q2 2018, current transfers (a part of nominal household income), which include a portion of labor migrant remittances, registered growth of 10.2% yoy, but this represented a deceleration in the pace of growth. The slowdown was the result of a decline in the intensity of labor migration to Poland (for more, read the box *Poland's Labor Market and the Role of Ukrainian Workers in It*, pages 27–29).

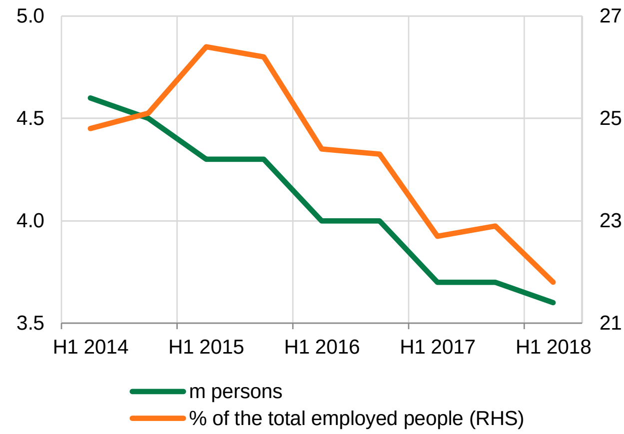
Growth in nominal income from other sources remained moderate: income from entrepreneurship and self-employment (both profit and mixed income) increased 14.9% yoy, whereas property income dropped 3.9% yoy.

Despite high inflation, real disposable income continued to grow steadily in Q2 2018 at 9.7% yoy.

Simultaneously, household savings returned to growth in Q2 2018, leaving the propensity to save higher. The highest growth was seen in deposits and securities, as well as in cash in circulation outside deposit corporations. At the same time, household foreign currency savings declined (in Q2 2018, households sold more foreign currency than they bought). This may be a sign of the increased attractiveness of hryvnia-denominated deposits amid improved conditions in the FX market, and a sign that families of labor migrants spent the foreign currency they received as remittances from abroad to sustain their level of consumption. Consumption was also supported by new loans, which were greater than repaid loans[23].

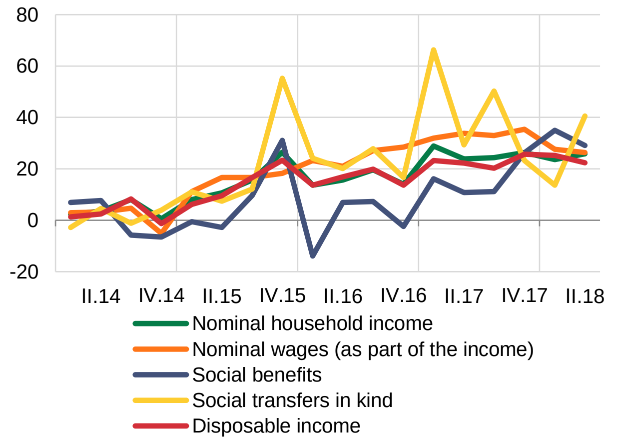
The rapid growth in nominal household income continued into Q3 2018, primarily driven by higher wages (amid solid labor demand) and pensions. Along with this, the slower growth in labor migrant

Informally Employed People



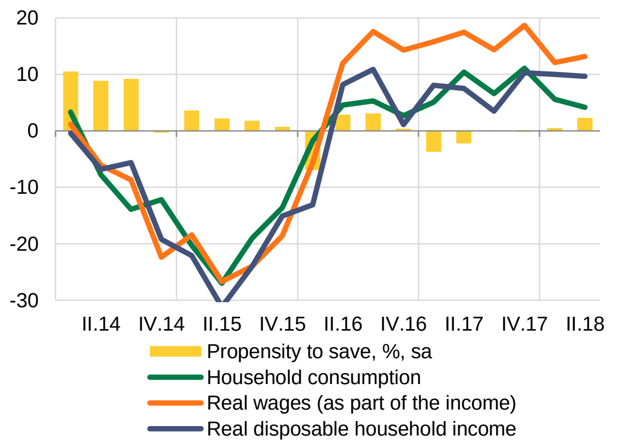
Source: SSSU.

Nominal Wages and Household Income, % yoy



Disposable income = Nominal household income – Social transfers in kind – Property income (payable) – Current payable taxes on income, wealth.
Source: SSSU.

Real Disposable Household Income, Real Wages, Household Consumption and Propensity to Save*, % yoy

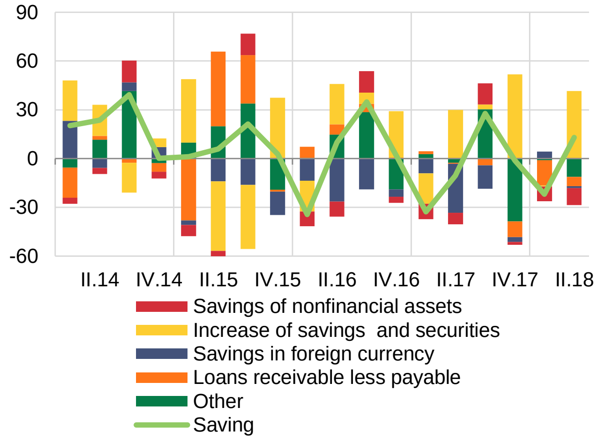


* Savings to disposable household income ratio.
Source: SSSU, NBU staff estimates.

[23] Under SSSU Guidelines on the Calculation of the Income and Expenditures of Ukrainian Households, loans are recorded as households' accumulated liabilities and, as such, diminish households' disposable financial resources.

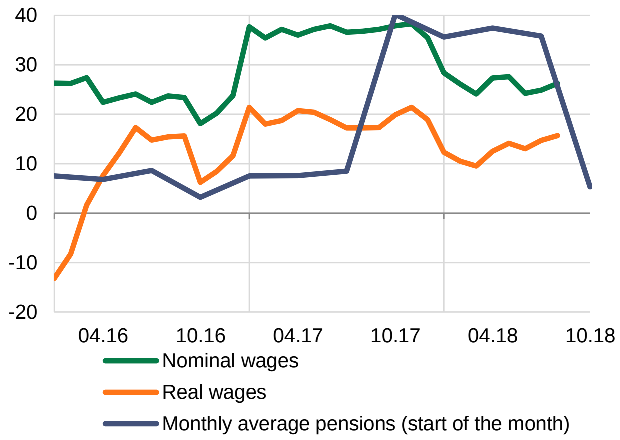
remittances and the lower utility subsidies restrained household income growth.

Household Savings, UAH bn



Source: SSSU, NBU staff estimates.

Wages and Average Monthly Pensions, % yoy



Source: SSSU, PFU.

Box: Polish Labor Market and Ukrainian Workers in It

The economic crisis of 2014–2015 in Ukraine has led to intensification of labor migration processes. With the deterioration of interstate relations between Ukraine and Russia, Poland became one of the most popular destinations among Ukrainian workers due to higher wages, strong labor demand, and geographic proximity. However, the scope for further growth in the flow of migrants to Poland have shrunk recently as conditions in the labor market have deteriorated and the interest of Polish employers in hiring Ukrainians remained contained.

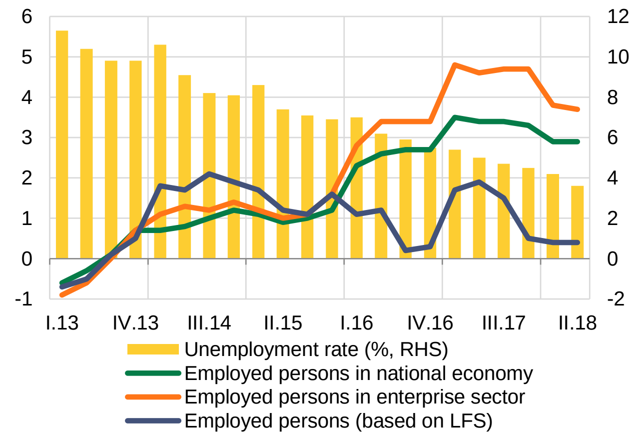
Since 2017, economic growth in Poland has accelerated materially. Real GDP increased 4.6% yoy in 2017 and 5.1% yoy in Q2 2018, mainly driven by solid consumer demand (backed by high employment, incomes, as well as strong consumer sentiment) and high investment (primarily in the public sector, owing to disbursements of EU structural funds).

The pickup in economic activity supported high labor demand and strengthened employment growth. The employment gains were particularly pronounced in the enterprise sector[24] (4.7% yoy in 2017[25] and 3.7% yoy in H1 2018), which accounts for 57% of total employment. At the same time, a labor force survey has pointed to a different employment dynamics since mid-2017, affected predominantly by the amendments to pension laws. Specifically, the number of self-employed farmers decreased (7.1% yoy in H1 2018), as did the number of contributing family workers (10.2% yoy), after a law reducing the retirement age came into effect on 1 October 2017.

Both job creation and job destruction intensified in H1 2018, but the difference between the two remained positive for the 5th consecutive year, albeit its growth slowed in Q2 to 4.8% yoy. As a result, the number of vacancies registered by state employment bureaus remained at a record high, particularly in industry, construction, trade, and for craft and related trades workers.

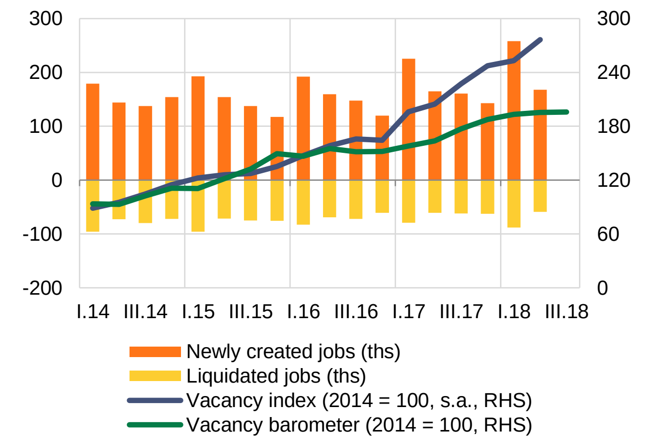
By contrast, the index of vacancies published online stabilized[26], potentially indicating the absence of necessary conditions for robust job creation in the future because of weakening labor demand and presence of structural imbalances in the labor market.

Selected Indicators of the Polish Labor Market, % yoy



Source: NBU estimates based on GUS data.

Job Creation and Destruction in Poland



Source: NBU estimated based on GUS and BIEC.

A monitoring survey of enterprise sector conducted by the National Bank of Poland (NBP) in July 2018 also suggested a possible deceleration in the growth in employment. On one hand, this tendency will have been partially determined by the limited supply of labor, which creates recruitment difficulties for employers. The economically active population aged 15 and older continued to shrink[27] amid negative demographic trends[28], high rates of external labor migration[29] (over 10% of the working age population in 2016), and – since late 2017 – changes to pension laws. On the other hand, the indicator of current economic conditions calculated by Central Statistical Office (GUS) pointed to the shift of the Polish economy to the slowdown phase.

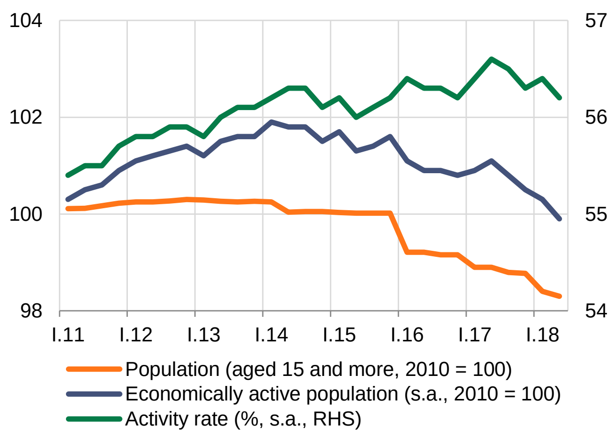
Apart from that, structural changes in the education system in the late 1990s and the rapid growth in the number of graduates since then – especially in the fields of economics, law, and social sciences – created a significant mismatch between demand and supply in the Polish labor market. With economic growth accelerating, the mismatch became more pronounced. According to a survey by Work Service, nearly half of employers at the beginning of Q3 2018 reported problems with finding suitable

[24] Indicates the units conducting economic activities in all economic sector except private agriculture, political parties, trade unions, NGOs, and institutions with a focus on national defense and public safety.
[25] The increase was partially augmented by the statistical effect. Some enterprises that previously employed fewer than nine individuals enlarged their staff and were included in the survey.
[26] The Job Offers Barometer, compiled by the Department of Macroeconomics at the University of Information Technology and Management in Rzeszow, Poland, jointly with the Bureau for Investments and Economic Cycles (BIEC).
[27] An increase in activity rate in 2011–2013 was mainly driven by individuals aged 55–59/64 in response to the adoption of pension reform in May 2012 that introduced a gradual increase in the retirement age from 2013 onward.
[28] The population count dropped sharply at the beginning of 2016 after the calculation methodology was revised and because of a lack of detailed quarterly data for 2015.
[29] According to Central Statistical Office (GUS), approximately 80% of migrants from Poland had stayed abroad for more than 12 months and may have been omitted by the labor force survey.

candidates to fill job openings, especially at low- (25.1%) and mid-level (14.9%) positions. The shortage of workers was outlined by large companies with more than 250 employees (62.4%) and industrial enterprises (74.7%).

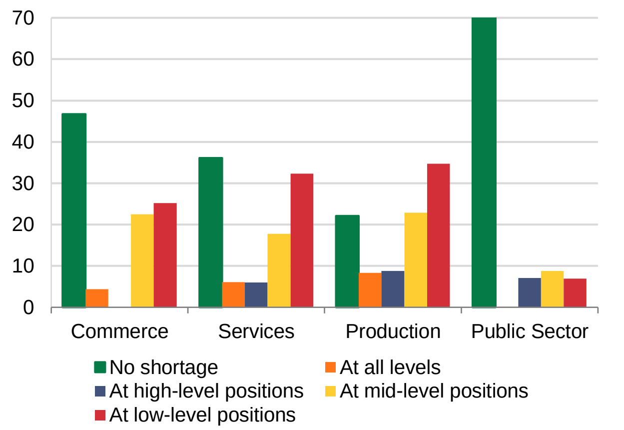
To address the issue, Polish employers most frequently offered higher salaries (37.1%, primarily in industry and trade) or overtime hours to current employees (28.1%, mainly in services)[30]. At the same time, over a quarter of them, particularly in the manufacturing sector and large companies, opted to hire workers from Ukraine. According to the survey by Personnel Service conducted in early H2 2018, more than 16.8% of Polish enterprises intended to hire Ukrainian workers. As key reasons for that, the surveyed employers most often cited job openings that could not be filled by Poles (56.7%), the equivalence between Ukrainian and Polish qualifications (53.2%), and the lack of interest from Poles in vacancies (31.3%).

Economic Activity in Poland



Source: NBU estimated based on GUS data.

Estimated Labor Shortages at Different Enterprise Levels, by Sector, as assessed by Polish Respondents, %



Source: Work Service.

Meanwhile, territorial proximity of Poland and higher level of wages were the main decisive factors for Ukrainian migrants (for 52.0% and 51.3% of respondents, respectively). As of 2015, Ukrainian workers earned on average USD 390 more net income in Poland than they did in Ukraine. The largest pay gap of USD 573 was observed in construction. In July 2018, more than half of all labor migrants earned between USD 674 and USD 944, which, however, was associated with longer working hours.

The number of Ukrainians working in Poland has grown quickly since 2013. That increase was extrapolated from data on declarations of intent to employ a foreigner – a figure that is overstated, however[31] – and from visa issuance numbers. As there is no reliable data on workers employed in Poland, either permanently or on a temporary basis, the number of visas, entitling to perform work for a period of three months or more, can be considered the lower bound of estimated labor migration from Ukraine.

Respondents in the survey by Personnel Service said that, as of July 2018, over half of Ukrainian workers had been working in Poland from one to three months and another 27.8% from three to six months. This implies those workers took advantage of the simplified employment procedure to earn short-term income. A large proportion of those surveyed came to Poland multiple times (35.3% came more than three times) and planned to return soon (57.5% of respondents) but did not plan to stay as permanent residents (74%). The majority of labor migrants from Ukraine (70.7%) were engaged as low-skilled workers in the construction, industry, and agriculture, primarily due to the demand structure in the Polish labor market. According to Poland's Ministry of Labor and Social Policy, the shortage of workers in 2017 was particularly pronounced in construction (1.5 vacancies per new unemployed individual), accommodation and catering (1.3 vacancies), healthcare (1.2 vacancies), and industry (1.1 vacancies).

Still, as of the end of 2017, only a small percentage of businesses had vacancies (5.5% in the private sector). At the same time, the survey by Personnel Service showed that 14.2% of companies in the private sector (around 5,200) intended to hire Ukrainian workers to fill job openings, with another 10.2% undecided on that question. Large companies with more than 250 employees were particularly interested in Ukrainian labor, with 29% of those employers willing to hire Ukrainians. Notable demand was also coming from industry and construction, with 29% of enterprises (around 4,200 in total) considering hiring migrants.

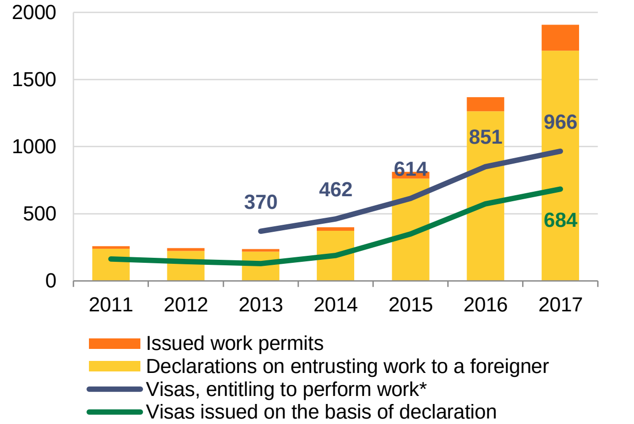
However, the number of vacancies in the private sector was much lower than the total number of individuals that were unemployed for less than 12 months (102,700 vs. 643,300), with 22.5% of them being craft and related trades workers, i.e. the would-be competitors of labor migrants from Ukraine in industry and c onstruction.

[30] http://www.workservice.com/pl/Centrum-prasowe/Raporty/Barometr-Rynku-Pracy/Barometr-Rynku-Pracy-Work-Service-IX-edycja
[31] The NBP survey showed that there were 1.22 job applications per Ukrainian worker in 2015.

Net Wages in Poland, Ukraine, and of Ukrainian Migrant Workers by Sector as of Autumn 2015, USD

* Net wage in Ukraine was estimated by subtracting social security tax (3.6%), PIT (15%) and military tax (1.5%).
Source: NBU staff estimates based on SSSU, NBP, IMF IFS.

Estimated Number of Ukrainian Migrant Workers in the Polish Labor Market, ths



* Official employment for more than 3 months is implied; includes visas issued for work / self empl., Pole's Cards, temporary and permanent residence permits.
Source: MPIPS, NBP.

Overall, the intensity of labor migration from Ukraine to Poland is expected to decrease further due to the projected deceleration of economic growth in Poland (to 3.5% in 2019 and 2.8% in the medium term, according to IMF forecasts); weaker employment gains, marked in recent surveys of Polish enterprises; and low interest of Polish employers in hiring Ukrainian workers. In H1 2018, the number of issued work permits increased by only 20% yoy, down from an increase of more than 100% yoy in the two preceding years. Furthermore, the number of job applications submitted by Ukrainians during that period fell 23.5% (by over 200,000), back to the level of H1 2016. Based on the in-year trends of past years, the number of applications may decrease in 2018 [32].

On the other hand, Ukrainians will remain interested in temporary employment abroad due to higher wages. The index of Google searches made by Ukrainians looking for work in Poland[33] has stabilized at levels last seen in 2015 (and down somewhat from 2016 levels). Moreover, the number of Google searches by those looking for work in other CEE countries (primarily in the Czech Republic) has increased since H2 2017. In addition, a simplification of foreign worker employment procedures by other CEE states and in Western Europe may pose a substantial risk of intensified labor migration to those countries[34]. At the same time, since Poland far outpaces other countries in terms of the number of labor migrants from Ukraine, a likely drop in the intensity of labor migration to Poland can potentially lead to an overall decline in labor migration in the medium term.

[32] https://www.mpips.gov.pl/analizy-i-raporty/cudzoziemcy-pracujacy-w-polsce-statystyki/
[33] Calculated as the average index of the "work in Poland" search term in Ukrainian and Russian on Google Trends (the Polish and English search terms were excluded as their numbers have remained low since 2013).
[34] Among other things, the Minister of Social Policy of the Czech Republic proposed to simplify visa and work permit procedures for Ukrainians. In addition, coalition parties in Germany agreed to adopt a law that would lower immigration barriers for professionals and university graduates with certain qualifications and a good command of German who hail from non-EU countries.

2.4. Fiscal sector

In the first nine months of 2018, Ukraine pursued a disciplined fiscal spending approach. Over that period, the consolidated budget showed a general and primary surplus. The surplus was generated by local budgets, which is typical for that period, as well as the state budget. The state budget was in deficit over the nine months, but most of that was formed in Q1, while Q2 and Q3 it was in positive territory.

A gradual acceleration in revenue growth and a notable slowdown in expenditure growth in Q3 pushed the consolidated budget into a cumulative surplus. After a moderate increase early in the year, growth in budget revenues accelerated as the year progressed. That was driven primarily by general economic environment, such us the rapid growth of nominal household income, higher earnings of profitable enterprises, renewed growth in the production of excisable goods, rising merchandise imports, and the weakening of the hryvnia against the US dollar in Q3. Temporary factors continued to play a notable role, including a change in the schedule and size of the transfers of NBU's 2017 profit and dividends paid by Naftogaz of Ukraine NJSC.

Q3 saw a sharp deceleration in expenditure growth following their increase in Q2. As a result, consolidated budget expenditures grew at a relatively slow pace in the first nine months of 2018. Both current and capital expenditures grew more slowly in Q3. Among current expenditures, social spending and debt-servicing expenditures decreased. Meanwhile, capital expenditures continued to grow rapidly despite a slowdown.

Public and publicly guaranteed debt decreased 1.4% since the start of the year to UAH 2,113 billion or 63% of GDP in late September 2018 as the consolidated budget generated a surplus and repayments exceeded the volume of new borrowings.

Revenues

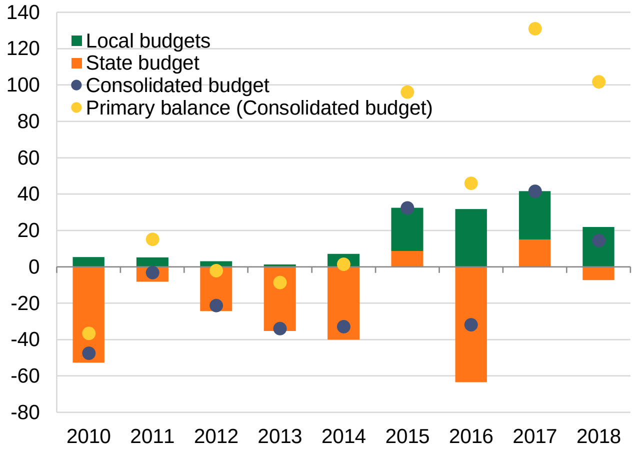
Consolidated budget revenues grew moderately in January–September 2018, but still accelerated from past periods. In contrast to Q2 when temporary factors contributed significantly to revenue growth (including additional payments associated with a decision by the Stockholm Arbitration Court and the sale of 4G licenses), conventional sources like tax revenues delivered revenue growth in Q3.

Economic factors remained the key drivers of growth in tax revenues. Proceeds from personal income tax increased steadily, driven by high wages, as did corporate income tax receipts, fueled by growth in corporate earnings.

After surging in Q2, VAT proceeds continued to increase rapidly in Q3 on the back of a pick-up in merchandise imports amid the weakening of the hryvnia. That said, the pace of growth decelerated slightly, impacted by higher VAT refunds and the fading effects of the one-off windfall gains due to the decision by the Stockholm Arbitration Court in Q2.

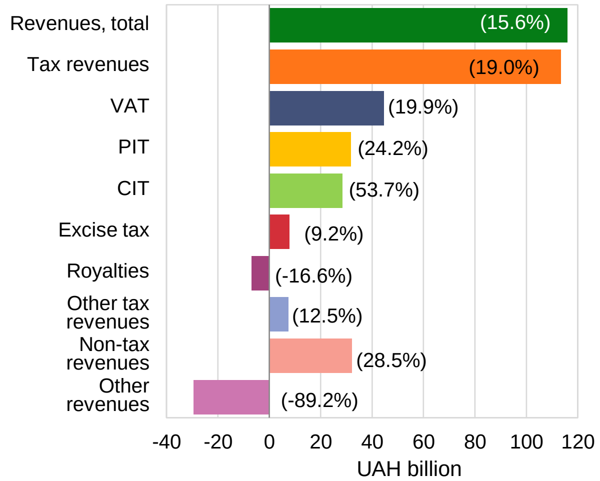
Excise tax receipts grew significantly in Q3 as the production of excisable goods increased, primarily tobacco products, which grew 7.6% yoy in June–August[35] after a 23.7% yoy decrease through the first five months of the year. Growth in goods imports and the weakening of the hryvnia were other key factors. The latter

Consolidated Budget Balance in January – September, UAH bn



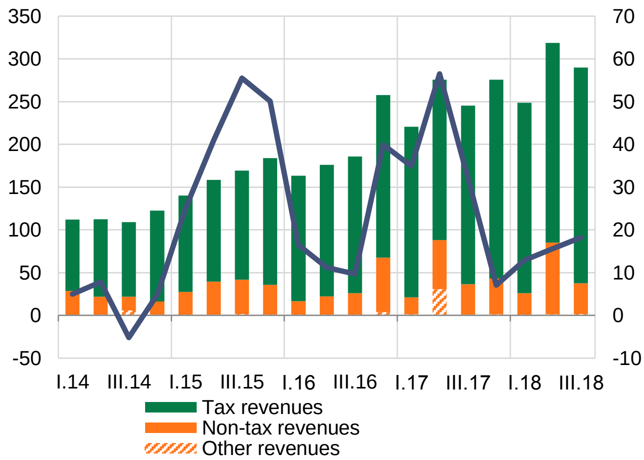
Source: STSU, NBU staff estimates.

Consolidated Budget Revenues in January – September 2018, absolute annual change, UAH bn (% yoy)



Source: STSU, NBU staff estimates.

Consolidated Budget Revenues, UAH bn and yoy change, %



Source: STSU, NBU staff estimates.

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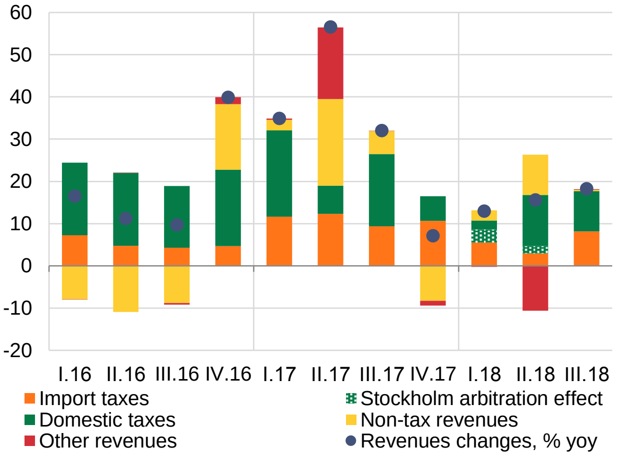
35 If paid on a monthly basis, there is a one-month lag in payments for excise taxes levied on domestic goods.

also contributed to an acceleration in the pace of growth in proceeds from international trade duties.

Meanwhile, the overall growth in revenues was restrained by royalty proceeds, which decreased in Q3 yoy against a high comparison base. Unlike last year, payments royalties in 2018 have been spread more evenly throughout the year as the new procedure for their administration has come into effect.

Non-tax revenues remained steady yoy in Q3. Naftogaz of Ukraine NJSC transferred the bulk of its portion of 2017 profit and dividends to the NBU in Q3 this year compared to Q2 last year, which affected the phasing of non-tax revenues. In contrast to last year when Naftogaz of Ukraine NJSC paid all of its dividends in June in a single payment, this year a portion of dividends was broken down into monthly installments, while the largest portion of the payment will come in late 2018[36]. That explains why the dividends were low in Q2 relative to last year and why they became an additional source of revenue in Q3.

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



* Taxes related to imports include excise taxes and VAT on imported goods, taxes on international trade (import duties). The rest are domestic taxes.

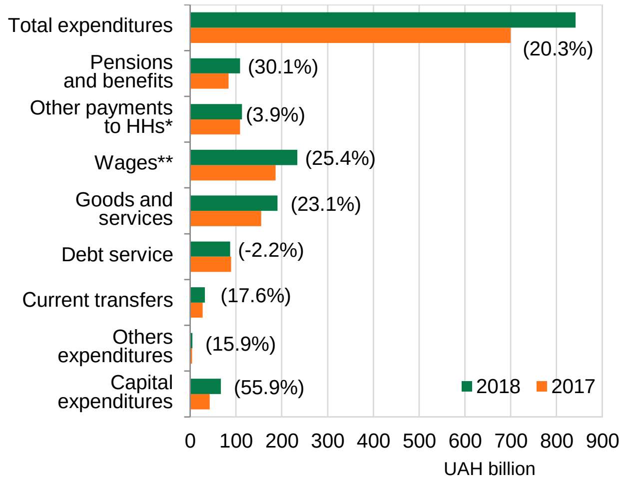
Source: STSU, NBU staff estimates.

Expenditures

After accelerating sharply in Q2, expenditures grew much more slowly in Q3. That slowdown contributed to a relatively slow pace of growth in consolidated budget expenditures in the first nine months of 2018.

Lower social spending was largely responsible for the slowdown in the growth of expenditures in Q3. Social care expenditures declined (8.1% yoy, down from an increase of 44.6% yoy in Q2) on the back of lower spending on utility benefits and subsidies for households[37] (down 75.8% yoy in Q3). The number of subsidy recipients decreased drastically, as a result of two key developments: household incomes grew rapidly while utility tariffs rose more slowly, and the subsidy allocation system changed. In addition, after the modernization of pensions for different categories in late 2017 and early 2018, including for military pensioners, growth in transfers to the Pension Fund gradually slowed, but remained one of the highest among other expenditures (24.5% yoy in Q3 and 30.4% yoy in the first nine months of 2018). In addition, the pace of growth in wages slowed qoq, but remained rapid for the nine months of the year.

Consolidated Budget Expenditures in January – September 2018, economic classification, UAH bn (% yoy)



* Other payments to the population include benefits and subsidies to households for utility payments, scholarships, etc.

** Wages include salary, allowances for the Ukrainian military personnel, and SSC.

Source: STSU, NBU staff estimates.

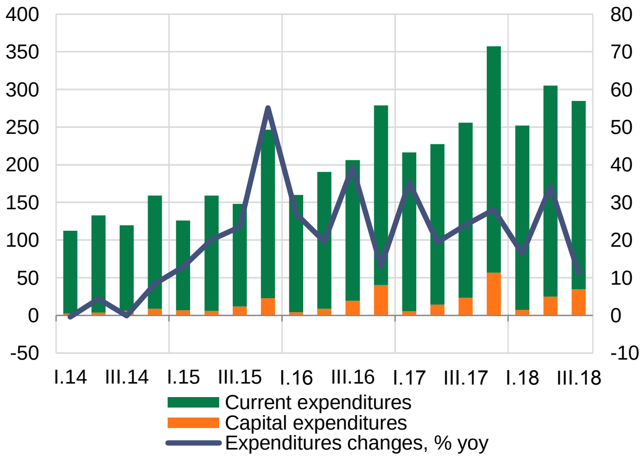
Debt-servicing spending in January–September this year was lower than last year, primarily on account of domestic debt service payments. The reprofiling of NBU-held domestic government bonds affected domestic debt-servicing spending, since the main payments related to the servicing of those bonds are due in May and November. In addition, new borrowings, primarily foreign ones, were lower than planned.

After increasing in Q2 2018, spending on the consumption of goods and services (mainly medications, surgical dressing products, and food) grew more slowly.

Growth in capital expenditures also decelerated but remained robust. As is typical, local budgets handled most of the capital expenditures, including road development expenses.

Meanwhile, the growth in expenditures on current transfers to companies and in other current expenditures picked up without materially impacting overall spending trends.

Consolidated Budget Expenditures, UAH bn and yoy change, %



Source: STSU, NBU staff estimates.

[36] Pursuant to the Cabinet of Ministers of Ukraine's directives No. 384-D dated 25 April 2018 and No. 535-D dated 26 July 2018.

[37] In August–September 2017, labor costs reached UAH 14.9 billion on the back of additional subsidy payments after the subsidies were revised and redirected to bring them in line with new regulations.

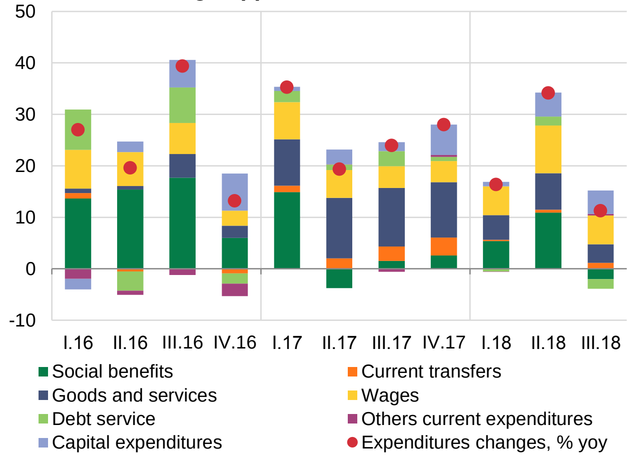
Balance

The consolidated budget ran a surplus in both Q3 and the first nine months (UAH 4.0 billion and UAH 14.5 billion, respectively). The surplus was generated by the local budgets, which is typical for that period, as well as the state budget, although the surplus of the latter narrowed significantly in Q3 relative to the previous quarter. At the same time, after recording a large deficit in Q1, the state budget ended the first nine months of 2018 with a moderate deficit of UAH 7.3 billion. As of the end of Q3, a sizeable primary surplus was maintained in the consolidated budget.

Faced with a tight debt repayment schedule and low proceeds from privatization, the government continued to borrow heavily, mainly from the domestic market. Aside from hryvnia-denominated domestic government bonds, the government also issued foreign currency bonds. In August, the government also issued discount Eurobonds. Overall, though, Ukraine repaid more foreign debt than it borrowed over the period.

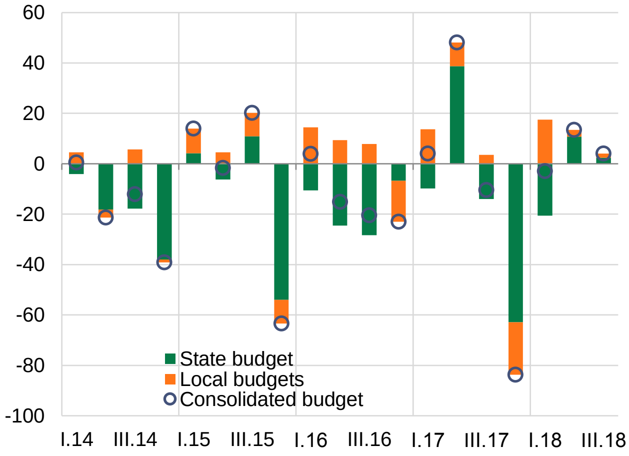
As a result, public and publicly guaranteed debt shrank by 1.3% year-to-date to UAH 2,113 billion as of end-September 2018. As nominal GDP has increased, the debt-to-GDP ratio fell to 63% from nearly 72% in late 2017.

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



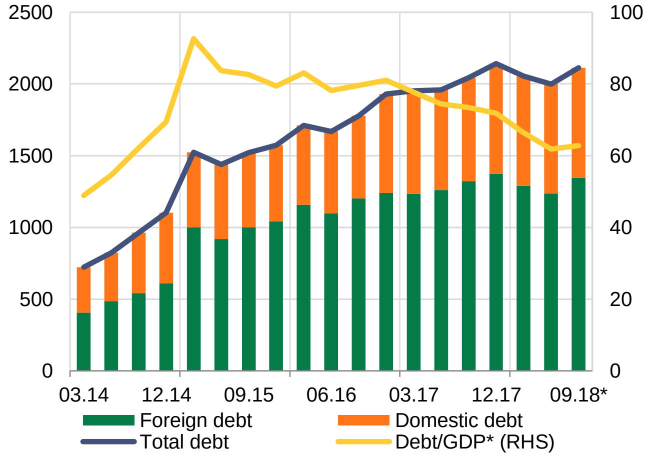
Source: STSU, NBU staff estimates.

Consolidated Budget balance, UAH bn



Source: STSU, NBU staff estimates.

Public and Publicly Guaranteed Debt, UAH bn and % of GDP



* GDP for 2018 - calculated as a quarterly moving figure based on the SSSU actual data and the NBU estimates for Q3.2018.

Source: MFU, SSSU, NBU staff estimates.

2.5. Balance of Payments

The current account deficit widened further in January–August to USD 2.1 billion as imports of goods surged. A benign external environment, together with the stronger presence of Ukrainian exporters on the EU market, supported growth in exports of goods. A low comparison base stemming from the suspension of trade with the NGCA in Eastern Ukraine also played an important role. However, the growth in exports remained moderate on the back of smaller grain stocks and lower yields of early grain crops compared to last year, repairs at some metallurgical plants, as well as difficulties in freight transportation via the Azov Sea. Import growth accelerated in 2018 fueled by robust domestic demand. As a result, the deficit of trade in goods grew to USD 7.3 billion in January–August 2018 from USD 5.5 billion in the same period in 2017. In addition, dividend payments grew rapidly thanks to stronger corporate earnings and the NBU's liberalization of dividend repatriations for past years. In the meantime, further increases in remittances (+27% yoy to USD 7.4 billion) curbed a further widening of the current account deficit.

The current account deficit was almost completely offset by financial account inflows (USD 2.2 billion in January-August and USD 1.6 billion in July–August). Both public and private sectors generated capital inflows in 2018. Net external liabilities of the general government sector (excluding IMF loans) grew as foreign investors had a strong interest in domestic government bonds in hryvnias at the begining of the year and the government placed discount Eurobonds in August. Foreign direct investment and long-term borrowings, mainly by energy companies, accounted for the bulk of capital inflows to private sector.

Despite a minor BoP surplus in January–August, international reserves have shrunk to USD 17.2 billion because of a USD 1.6 loan repayment to the IMF. In September, international reserves declined to USD 16.6 billion or 2.8 months of future imports as the government serviced and repaid public and publicly guaranteed foreign currency debt.

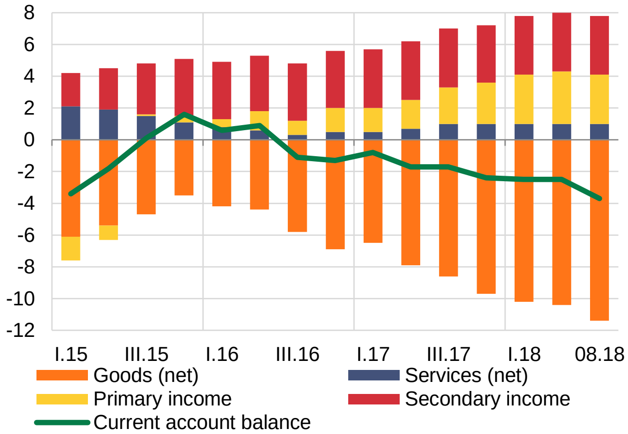
Current Account

Exports of goods grew 11.6% yoy in January–August 2018. As in 2017, the metallurgy and the crop harvest were the largest contributors to exports.

Metallurgical exports grew 28% yoy in the first eight months of 2018 on the back of favorable external conditions and a low comparison base stemming from the seizure of some plants in NGCA and the suspension of trade with those areas. At the same time, repairs at some plants hindered the growth in exports of ferrous metals. In July–August, temporary difficulties in freight transportation via the Azov Sea and weaker steel prices on some regional markets also restrained growth. Consequently, in July–August, metallurgical exports dropped by 4.7% yoy in volumes and 15.4% yoy in values.

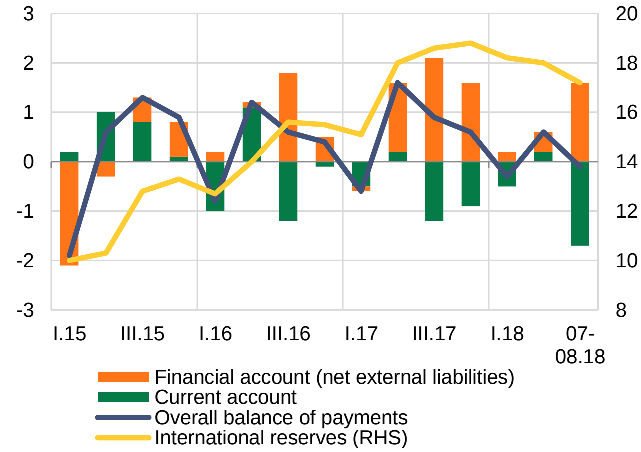
In the first eight months of the year, the value of food exports was barely changed, rising just 0.4% yoy. The modest performance was the result of smaller grain stocks and lower yields of early grain crops, as well as a decrease in global prices of some products like corn and sunflower oil. Exports of sunflower oil and sunflower oil-cake decreased 9.2% yoy and 0.5% yoy respectively, while grain exports dropped 1.3% yoy. Meanwhile, the growth in food exports was supported by the earlier start of the harvesting campaign for most crops this year and expectations of a bumper

Current Account Balance, 12-m moving average USD bn



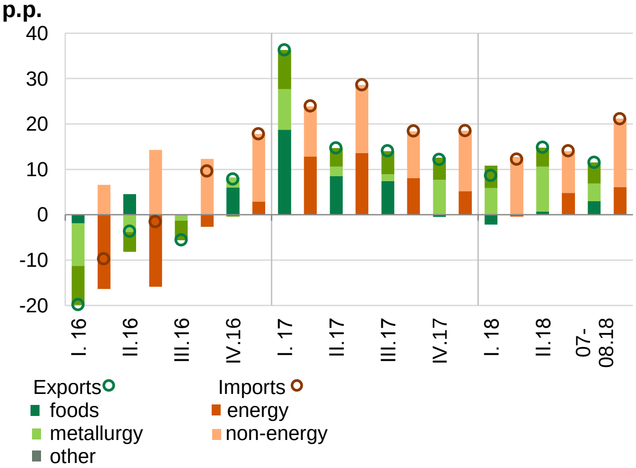
Source: NBU.

Overall Balance, USD bn



Source: NBU.

Contribution to Annual Change of Exports and Imports, p.p.



Source: NBU.

corn harvest, which contributed to strong sales of last year's corn stocks, as well as by high wheat prices. Grain exports returned to growth in July–August (+8.1% yoy). In that period, exports of rapeseeds hit record levels of about 1 million tons, which pushed up the value of oilseed exports by 1.5 times yoy.

Ukrainian exporters also secured strong positions on the EU market, which also played an important role in bolstering exports. A decision by the European Commission to ban some Brazilian poultry farms from shipping food products to the EU helped boost Ukrainian poultry exports to EU countries. As a result, meat exports grew a strong 20% yoy despite weaker growth in global food prices.

In addition, exports of chemicals, woods and wood products also expanded rapidly (+26% yoy and +28% yoy, respectively). However, growth slowed in July–August, especially in chemicals, owing to a high comparison base as Karpatnafnokhim, an export-oriented plant, restarted operations in Q2 2017.

This year, iron ore exporters have shifted away from Asian markets (especially China) to EU markets that have higher prices. Notwithstanding lower volumes than last year and a fall in global prices, this drove up the value of iron ore exports by about 8% yoy in the first eight months of 2018.

Overall, exports to European countries rose 18.2% yoy in January–August 2018, with the share of those countries in total exports up to 37.8%. Moreover, European countries were responsible for more than half of the overall export growth in July–August.

In 2018, import growth was mainly driven by robust domestic demand. In July–August, the growth accelerated to 21.2% yoy on the back of a sizeable increase in wages. Overall, imports grew 15.3% yoy in the first eight months of 2018. Non-energy imports of consumer goods grew 18.4% yoy, making the largest contribution to import growth. Meanwhile, the growth of capital goods import slowed to 7.9% yoy.

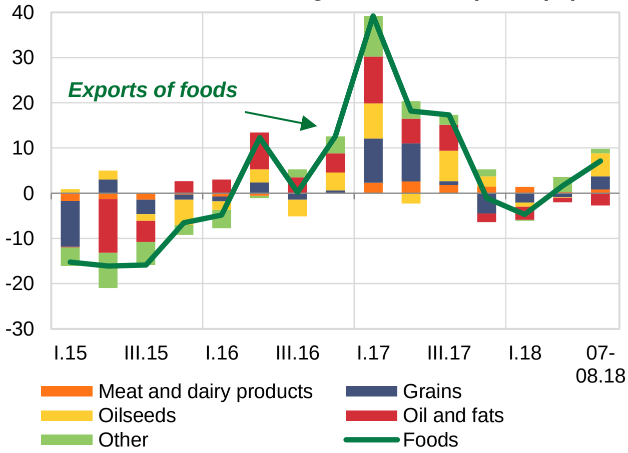
The sustained steady consumer demand in 2018 helped maintain the high annual growth rates for imports of food products (+23% yoy) and industrial goods (+17.5% yoy), while the growth in imports of industrial goods surged to 32.4% yoy in July–August. In addition, the growth in non-energy imports in July-August could have been aided by the government's actions to tackle cross-border smuggling. In general, consumer goods imports grew 18.4% yoy in the first eight months of 2018.

Machinery imports rose 15.2% yoy, remaining the largest commodity group of imports with nearly a 30% share. In July-August alone, the growth rate in machinery imports accelerated to 18.3% yoy. The pace of electrical equipment imports accelerated noticeably to 51.1% yoy, bolstered by an increase in investment in alternative energy, especially solar, and the ongoing development of electric car infrastructure. In addition, imports of cars, both new and used, rebounded to 6% yoy. However, given the record imports of used cars (and their lower prices relative to new cars), the value of machinery imports increased moderately.

Imports of ferrous metals and products surged 23.4% yoy in the first eight months of 2018, thanks to stronger investment activity and scheduled repairs at domestic plants.

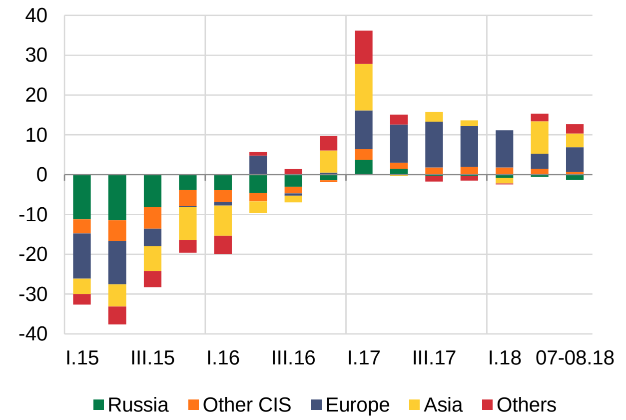
The growth in energy imports sped up in 2018, hitting 26.1% yoy in July–August. This reflected an increase in global energy prices and larger volumes of gas imports. Specifically, imports of oil

Contribution to Annual Change of Foods Exports, p. p.



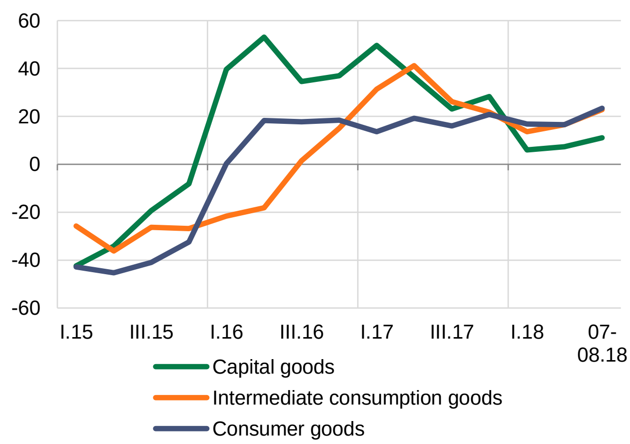
Source: NBU calculations.

Contribution to Annual Change of Exports by Regions, p.p.



Source: NBU calculations.

Imports by Broad Economic Categories, % yoy



Source: NBU.

products grew 31.3% yoy, even though volumes were practically unchanged in the first eight months of 2018. In addition, the quantity of gas pumped into storage has been on the rise since May. Although gas import volumes grew just 3.2% yoy in July–August, their value surged by 1.4 times yoy on higher prices. Nevertheless, since imported volumes through eight months of the year were substantially lower than last year, the value of the gas imports is level with last year. Unlike other energy imports, the growth in coal imports decelerated in 2018. The increased production of domestic gas coal, the adoption by some generating companies of this type of coal, and a higher comparison base (in H2 2017, coal imports grew after alternate sources were secured), contributed to the slowdown in growth.

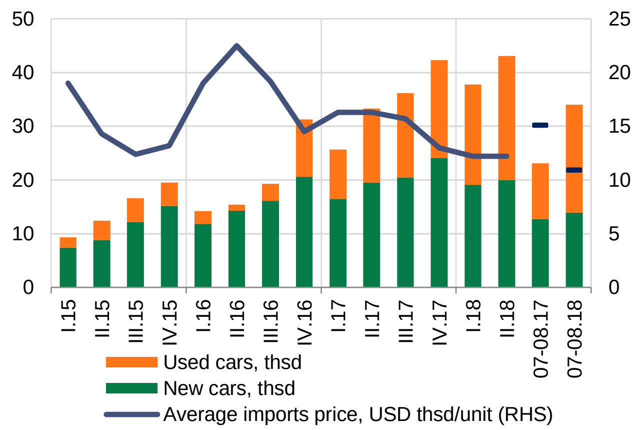
By regions, European countries continued to account for the largest share of imports, 40% of total imports in 2018. However, imports from Asian countries rose the fastest in 2018 (+23.3% yoy in the first eight months), propelled by a significant increase in demand for machinery products. As a result, Asia's share of Ukraine's total exports grew to 21.3%. A decrease in energy imports from Russia was offset by increased in chemical imports from other CIS countries, leaving the share of CIS countries relatively stable, at 25.5% over the first eight months of the year.

Exports of services also grew moderately in 2018, up 10% yoy in the first eight months. This was a result of lower proceeds from exports of pipeline transport services (-4.4% yoy) due to a decrease in gas transit to European countries. At the same time, export growth was bolstered by higher exports of air transport services (+17.3% yoy), as low cost carriers expanded their flights to Ukraine and Antonov, a Ukrainian aircraft manufacturer, completed a large cargo transportation project. In addition, the growth in exports of travel services accelerated to 16.9% yoy, driven by an increase in tourism dollar receipts after Ukraine hosted several international events.

In contrast to goods imports, the growth in services imports slowed to 11.0% yoy in January-August 2018 and 7.6% in July-August. The slowdown was driven by slower growth in imports of railway transport services (and in volumes in July–August). A decrease in coal import volumes also contributed. In addition, the growth rate of travel services imports dipped in July–August, reflecting the higher base of the previous year after the EU introduced the visa-free regime. As a result, the surplus in services trade remained steady yoy both in July–August and in the first eight months of 2018, at USD 0.1 billion and USD 0.5 billion respectively.

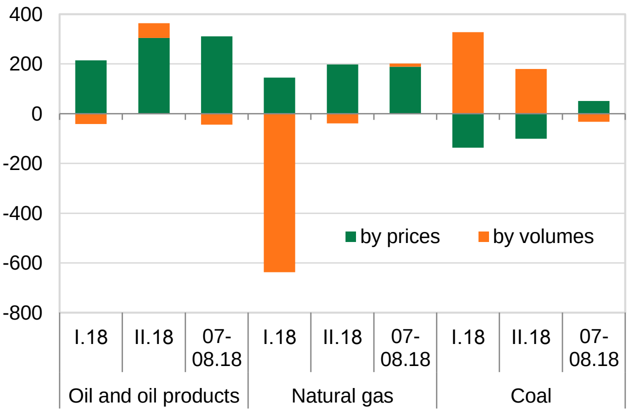
Dividend payments rose to USD 2.4 billion over the first eight months of 2018 after the NBU allowed dividends to be repatriated for past years and thanks to stronger corporate earnings. This, in turn, slowed the growth in the primary income surplus as remittances grew rapidly, and even led a year-over-year decrease in July-August. Moreover, the growth in remittances slowed to 15.9% yoy in July–August as the intensity of labor migration to Poland slowed. The Polish labor market has reached a level of saturation (see Box "Polish labor market and Ukrainian workers in it" on pages 26-28), which was only partially offset by increased labor migrant flows to other markets like the Czech Republic and the Baltic states. This also contributed to the widening of the current account deficit.

Motor Vehicle Imports



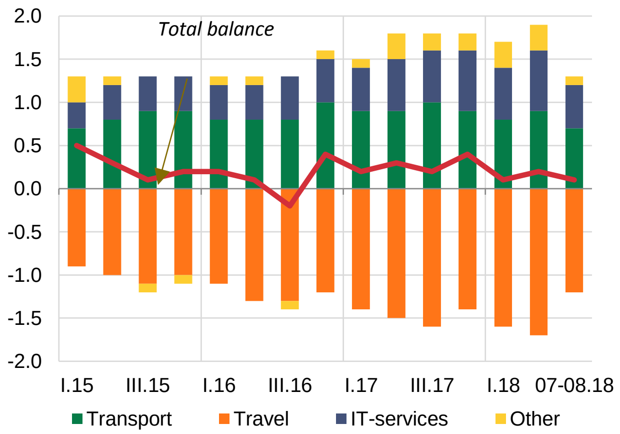
Source: Ukravtoprom, NBU.

Annual Change in Imports of Energy Goods, USD m



Source: SFS, Ukrtransgaz, NBU calculations.

Services Trade Balance, USD bn



Source: NBU.

Financial Account

In the first eight months of 2018, financial account inflows were barely changed year-over-year at USD 2.2 billion. Of that total, USD 1.6 billion came in July–August. The public and private sectors both generated inflows. In H1, the government sector's position was determined by transactions related to hryvnia domestic government bond purchases by and sales to non-residents (in Q1 non-residents purchased bonds, while in Q2 they mainly sold bonds). Overall, residents remained net buyers in H1, although the difference between the purchase and sales transactions was insignificant. The net liabilities of the public sector grew in July–August after the government placed discount Eurobonds in August. Whereas in H1 foreign direct investment accounted for the bulk of inflows to the private sector, in July–August an increase in the real sector's net trade and long-term loans (USD 0.8 billion and USD 0.4 billion, respectively) were the major contributors.

Foreign direct investment totaled USD 1.6 billion in 2018. The banking sector's debt-to-equity operations accounted for 27% of that total.[38] Excluding debt-to-equity operations, Ukraine only attracted USD 1.1 billion in foreign direct investment, about one-third less than in the same period last year.In July–August, foreign direct investment remained insignificant at USD 0.3 billion. In contrast to the previous quarter, nearly half of that FDI (47.3%) was directed to the real sector, mainly in the form of equity.

The rollover rate in the private sector rose to 162% in July–August. Although still high in 2018, the rollover rate in the banking sector had only a limited impact on the overall rollover rate in the private sector as borrowings and repayments were insignificant in absolute terms.

Reserve Assets

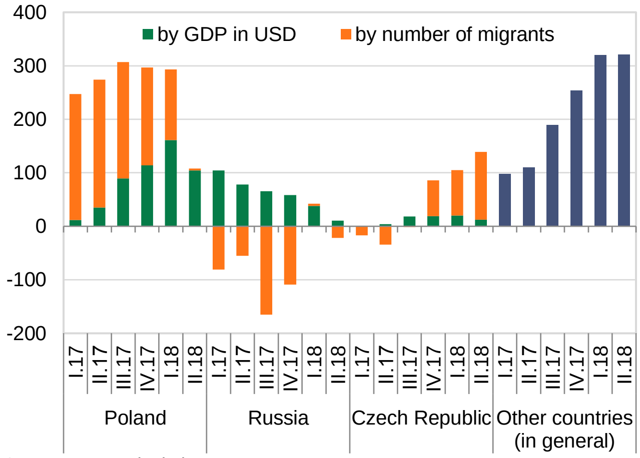
Although the balance of payments generated a small surplus in January–August, international reserves shrunk 8.4% by late August to USD 17.2 billion, or 2.9 months of future imports, as the government and the NBU repaid debt to the IMF (USD 1.6 billion since the start of the year). As of end-September, international reserves decreased to USD 16.6 billion or 2.8 months of future imports after Ukraine repaid FX public debt.

External Sustainability (Q2 2018)

Since end-2017, the respective paths of external sustainability and international reserve adequacy indicators have diverged. A moderate decline in external debt, together with ongoing nominal GDP growth in US dollar terms have fed through to an improvement in external debt indicators in Q2 2018. Although it has dropped 9.4 pp YTD, the ratio of gross external debt-to-GDP has remained high at 93% as of the end of Q2 2018. At the same time, short-term external debt by remaining maturity increased further, while international reserve adequacy criteria deteriorated, making the Ukrainian economy more vulnerable to external shocks in the short-term.

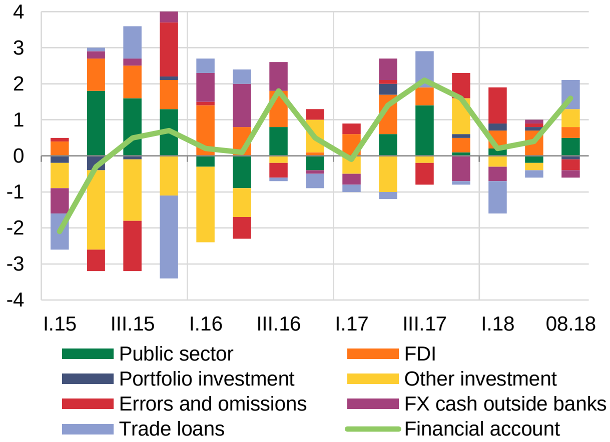
The general government sector's debt reduced by USD 1 billion in Q2 as the US dollar strengthened relative to the currencies of other debt (USD 0.5 billion), IMF loans were repaid (USD 0.3 billion), and the domestic government bond portfolio held by non-residents shrank (USD 0.2 billion).

Absolute Annual Change in Remittances by Selected Countries, USD bn



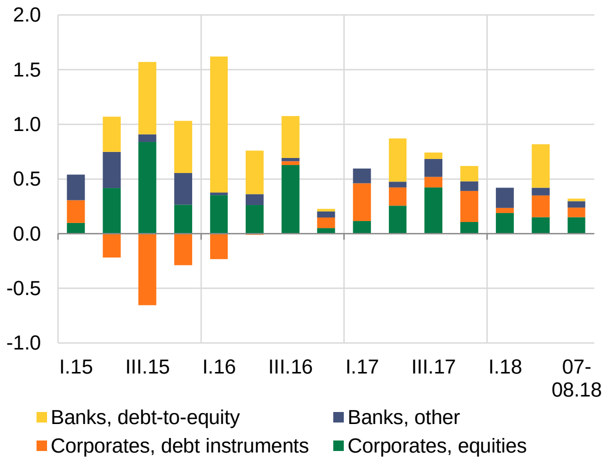
Source: NBU calculations.

Financial Account: Net External Liabilities, USD bn



Source: NBU.

Foreign Direct Investment, USD bn



Source: NBU.

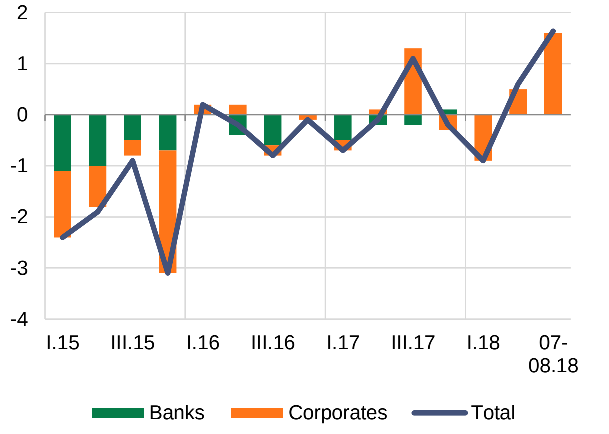
[38] In the first eight months of 2018, these operations were largely steady with the same period last year at USD 400 million.

The banking sector's external debt decreased by USD 0.4 billion over the quarter as a Russian-owned bank conducted debt-to-equity operations. The banking sector's total external debt has fallen by 2.7 times or USD 9.8 billion over the last three years to USD 5.9 billion. More than half of that reduction has come from debt-to-equity operations. Overall, however, the private sector's debt has remained practically unchanged because of an increase in the real sector's trade payables.

Short-term external debt by remaining maturity grew to USD 47.4 billion in Q2, or 84% of exports of goods and services, largely as the government started to repay Eurobonds maturing in 2019. Banks' future debt repayments decreased by USD 0.4 billion, while the debt of the central bank and the real sector was almost unchanged. As a result, the ratio of short-term debt-to-gross debt has been on the rise for two quarters in a row.

The drop in international reserves to USD 18.0 billion in Q2 2018 served to further deteriorate the reserve adequacy criteria. Reserves have decreased to 3 months of future imports, 103% of the required ratio. Following an improvement in 2017, the ratio of reserves to the IMF's composite measure (ARA metrics) stood at 62% of the minimum required level at the end of Q2 2018. The ratio of reserves to short-term debt (the Guidotti-Greenspan criterion) decreased to 38%. The 20% broad money coverage by reserves, although almost double the threshold for international reserve adequacy, has been contracting for the third consecutive quarter.

Overall Debt Flows*, USD bn



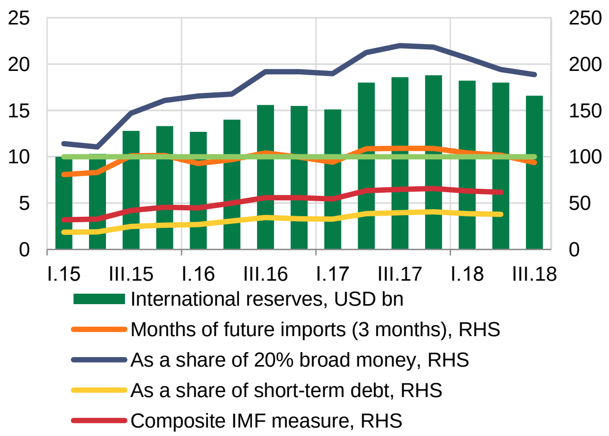
** Positive value – capital inflows*
Source: NBU.

Rollover of long-term private external debt*, %

	III.17	IV.17	2017	I.18	II.18	07-08.18
Banks	64	133	54	133	…**	107
Real Sector	96	50	68	71	105	169
Total	**89**	**59**	**66**	**80**	**123**	**162**

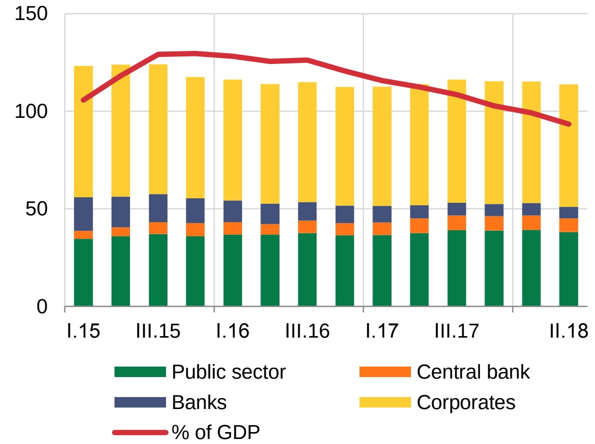
* Excluding debt-to-equity operations
** Excepted debt-to-equity operation the volume of external debt repayments of the banking sector was close to zero
Source: NBU calculations.

Adequacy Criteria of International Reserves, %



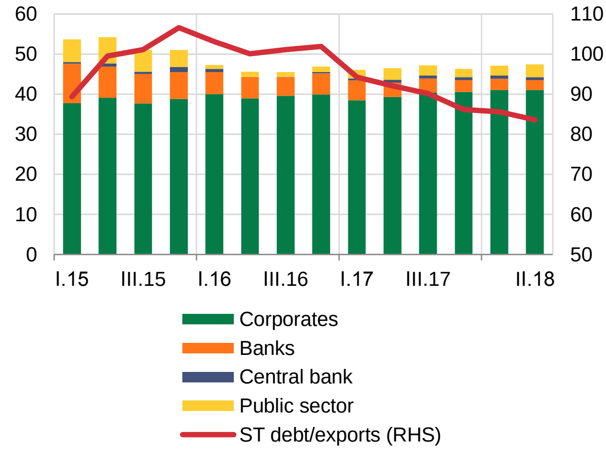
Source: NBU.

Gross External Debt, USD bn



Source: NBU.

Short-Term External Debt by Remaining Maturity, USD bn



Source: NBU.

External sustainability and international reserve adequacy indicators

%	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018*
External debt/GDP	125.5	126.2	120.6	115.7	112.4	108.6	102.8	99.2	93.4
External debt/exports of goods and services	250.4	255.4	244.6	230.8	225.5	222.4	214.7	209.5	200.7
Short-term debt/gross debt	40.0	39.6	41.7	40.8	40.9	40.6	40.2	40.8	41.7
Short-term debt/GDP	50.2	50.0	50.2	47.2	45.9	44.1	41.3	40.5	38.9
Short-term debt/exports of goods and services	100.1	101.1	101.9	94.2	92.1	90.2	86.2	85.6	83.6
Openness of the economy[39]	104.4	104.9	105.5	106.4	106.8	104.7	103.5	102.5	100.7
Reserves/short-term debt	30.7	34.2	33.2	32.9	38.6	39.5	40.6	38.7	37.9
Reserves, composite IMF measure	50.1	55.7	55.8	54.4	63.6	64.8	65.7	63.1	61.8
Reserves: Three months of future imports	96.9	104.2	99.6	94.5	109.2	110.6	110.4	105.3	102.5
Reserves: 20% of broad money	167.7	191.6	191.6	189.8	212.5	219.9	218.3	206.6	194.1
Current account/GDP, moving	1.0	-1.2	-1.4	-0.8	-1.6	-1.6	-2.2	-2.2	-2.3
Net international investment position/GDP	-33.1	-34.6	-29.1	-27.8	-25.4	-26.2	-22.9	-22.4	-19.9

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

[39]Calculated as a ratio of the 12-month rolling sum of exports and imports to GDP over the corresponding period.

2.6. Monetary Sector and Financial Markets

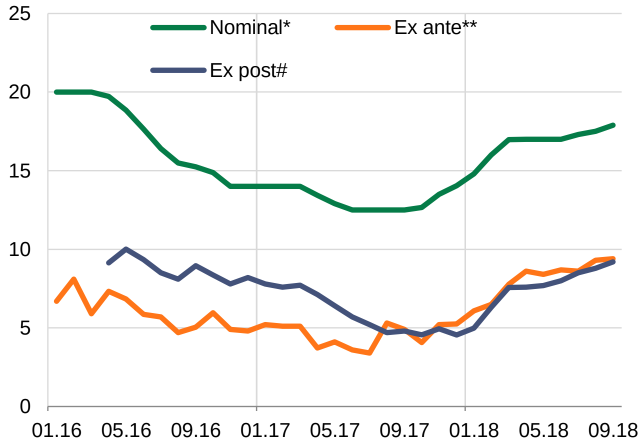
In Q3 2018 the NBU gradually tightened its monetary policy, raising the key policy rate by a total of 100 bp to 18% pa aimed at bringing headline inflation back into the target range. This was necessitated by increasing inflation risks as emerging markets have struggled to access international financial markets, growing uncertainty regarding the impact of trade wars on global commodity markets, sustained consumer demand and rapid wage growth . Thekey policy rate hikes in nominal termsleftthe real rate higher as well.

The key policy rate hikes effectively transmitted to other interest rates in the economy. As before, interest rates on hryvnia interbank loans and domestic government bond yields were most sensitive to changes in the key policy rate. This indicates the effectiveness of the first link in the monetary transmission mechanism via the interest rate channel. In real terms, yields on hryvnia-denominated bonds remained among the highest in emerging markets. This helped stem foreign portfolio capital outflows as investor interest in emerging market assets waned.

Alongside, the effect of the past key policy increases has not yet fully passed through to retail interest rates. Their impact, however, was reinforced narrowing liquidity in the banking system and sector specific factors in the money market, including increased banks' competition for corporate.

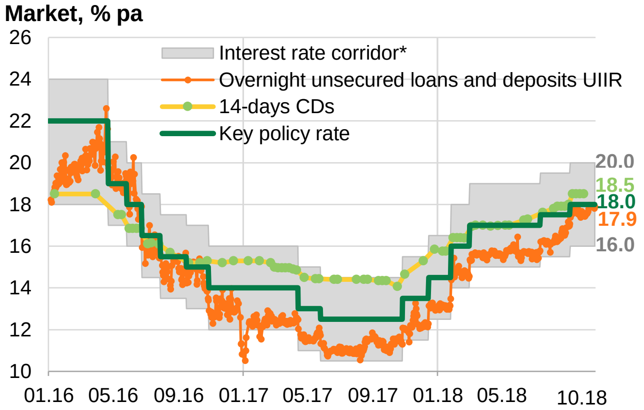
The FX market turbulence heightened in Q3 2018 amid seasonally increased demand from energy importers, typical for the fall months. Moreover, deteriorated market sentiment as the IMF postponed the disbursement of official financing, financial instability that hit Turkey, and worsened conditions in global financial markets. In those circumstances, the NBU maintained its presence in the FX market by conducting FX interventions to smooth out market fluctuations. The NBU’s actions did not counteract the effect of market fundamentals on the hryvnia exchange rate dynamics but helped ease a spike in FX demand in both the interbank and cash markets.

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.

NBU Policy Rates, UIIR and 1-year Bond Yield on Primary Market, % pa



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

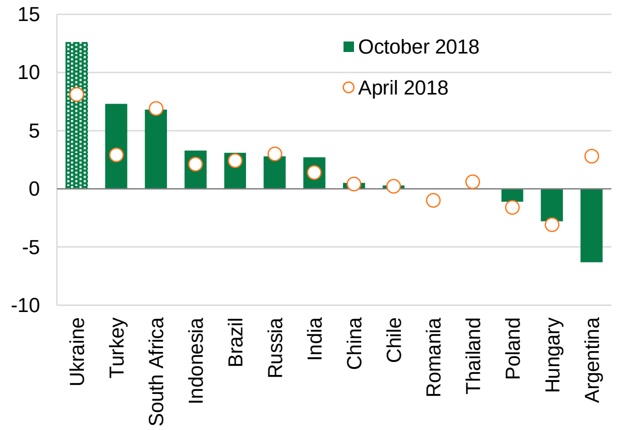
Interest Rates

In Q3 2018, the NBU continued to tighten its monetary policy. The NBU Board raised the key policy rate twice, by a total of 100 bp, to 18.0% pa. Following the nominal key policy rate hike, real rates moderately increased, to 9% pa – far above its neutral level, which the NBU estimated at 3.0% - 3.5% pa.

Prompted by narrowing banking system liquidity, the cost of hryvnia interbank loans increased after the NBU tightened monetary policy. Yields on hryvnia domestic government bonds also rose. As before, they tracked the key policy rate closely. While some other emerging market countries saw an increase in their government bond yields as well, in real terms hryvnia-denominated bonds yields remained some of the highest among them. For this reason and given relatively small amounts invested in hryvnia securities by non-residents, the Ukrainian market was less exposed to the worsened conditions in global financial markets and experienced a small outflow of foreign capital from portfolio investments in Q3 2018.

Bank retail hryvnia interest rates rose as well, even though they have yet to adjust to fully reflect the effects of the key policy rate hikes and higher interest rates in the interbank market. Apart from the transmission effects of the key policy rate hike, the growth in retail hryvnia interest rates was reinforced by the narrowing

Real Sovereign Bond Yields in Selected Emerging Markets, % pa



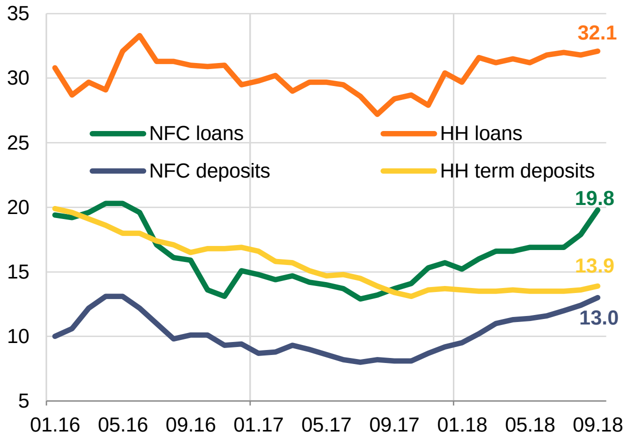
* Real interest rate is calculated as a difference of average monthly 1-year bond yield on the primary market and inflation forecasts (as of end-2019 for October, as of end-2018 for April). For Ukraine – based on NBU`s estimates.
Source: DekaBank, Consensus Economics, Thomson Reuters, NBU`s estimates.

banking system liquidity and f actors specific to selected money market segments.

The increase in interest rates on domestic currency loans w as also driven by strong demand for loans from both businesses and households. The cost of loans to NFC increased mainly due to short-term loans up to one-year, while the higher cost of loans to HH is attributable to longer-term loans with maturities above one year. The increased cost of the latter outweighed a decrease in the cost of short-term loans to HH.

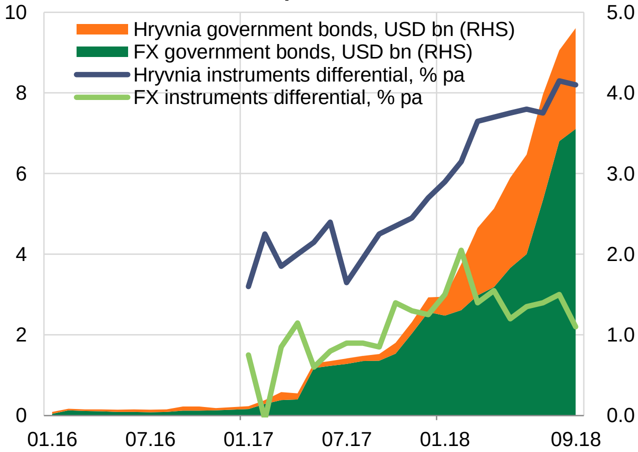
Banks raised yields on hryvnia deposits, primarily term deposits to NFCs, as competition for clients intensified. In Q3 2018 interest rates on HH term deposits responded stronger to the key policy rate hikes compared to H1 2018. Moreover, recent data suggest market interest rates continued to rise in October, which confirms that they have yet to adjust to fully reflect the the key policy rate hikes in August and September. HH have increased their holdings in alternative investment instruments, including domestic government bonds, which also contributed to the growth in deposit rates. Although the volume of those transactions are rather small, HH demand for domestic government bonds may increase as the National Securities and Stock Market Commission (NSSMC), Ministry of Finance of Ukraine (MFU) and the NBU implement a joint project to enable operations with government securities via mobile apps, greater accessibility of the market to private investors[40], and higher yields compared to deposits.

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



Source: NBU.

Government bonds in HH portfolio and yield differential between bonds and HH deposits



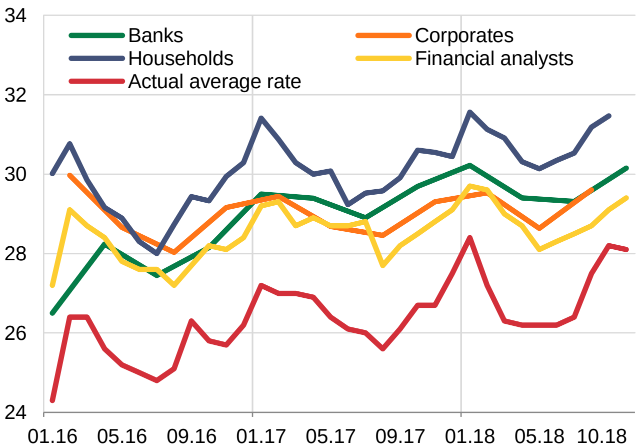
* Yield of up to 1 year maturity, adjusted on taxes and duties.
Source: NBU.

FX market

The FX market turbulence heightened in Q3 2018 amid a higher demand from energy importers, as is typical for the fall months. Moreover, market sentiment deteriorated after some emerging market countries (e.g. Turkey) were hit by financial instability and the IMF postponed the disbursement of official financing to Ukraine. Furthermore, a deterioration in expectations, which tend to worsen ahead of the fall months, boosted demand for FX cash from HH. Repatriation of dividends and the sale of hryvnia domestic government bonds by non-residents also contributed.

To smooth out exchange rate fluctuations, the NBU maintained its presence in the FX market, conducting operations to purchase and sell foreign currency. In Q3 2018, the NBU sold net USD 0.7 billion. However, since the start of the year, the NBU has purchased net USD 0.6 billion. The NBU's actions did not counteract the effect of market fundamentals on the hryvnia exchange rate developments but helped ease a spike in FX demand in both the interbank and cash markets.

Exchange rate expectations (12-month ahead), UAH/USD



Source: NBU, GfK Ukraine.

As a result, the official hryvnia exchange rate depreciated in Q3 2018 against US dollar for the quarter and year-to-date (8.1% and 0.8%, respectively), and against the euro for the quarter but remained 1.1% stronger compared to the start of the year. At the same time, most currencies of Ukraine's MTP currencies depreciated against the dollar in Q3 2018. As a result, on average for Q3, the hryvnia NEER remained unchanged compared to the previous quarter and appreciated 1% in annual terms. On average for the quarter, the hryvnia REER depreciated 1% qoq as inflation pressure in Ukraine's MTPs intensified, but remained 5.5% stronger yoy.

Base Money and Liquidity

[40] Apart from increasing the accessibility of the primary market for domestic government bonds to individuals, the NBU has streamlined the settlement procedure for transactions with domestic government bonds involving a non-resident counterparty.

In 2018, the banking system maintained liquidity surplus, although the surplus narrowed signific antly in Q3. Nevertheless, the Q3 result marked an improvement compared with Q3 2017. The narrowing liquidity in Q3 did not cause difficulties for settlements and cash services. The main contributors to the decrease in liquidity were the NBU's negative net FX purchases (UAH 18.2 billion) and the transfer of taxes and other payments (including quarterly payments) to the state budget amid the moderate growth in budget expenditures. Fiscal factors accounted for an estimated UAH 16.6 billion of the total decrease in banking system liquidity in Q3 2018. Other factors, including growth in cash and transactions by bank liquidators and DGF amounted to around UAH 2.8 billion. The liquidity shortage was reflected in a reduction in the average daily stock of NBU deposit certificates, which decreased 33% qoq, while the average daily stock of bank correspondent accounts increased.

Substantial fluctuations in banking system liquidity throughout the quarter created one-off demand from individual banks for refinancing loans with UAH 3.5 billion injected through this channel to the banking system in Q3.

Increased cash volumes and the growth inthe stock of bank correspondent accounts in Q3 2018 versus Q2 2018 (eop) led to a 1.0% increase in the base money. In annual terms, the growth of the base money picked up slightly to 13.6%. At the same time, demand for cash has been growing more rapidly than nominal HH consumption expenditures as cashless payments have grown more popular.

Money Supply and Its Components

Hryvnia deposits shrank in Q3 2018 qoq, causing their annual growth to slow to 11.8% as of the end of September.

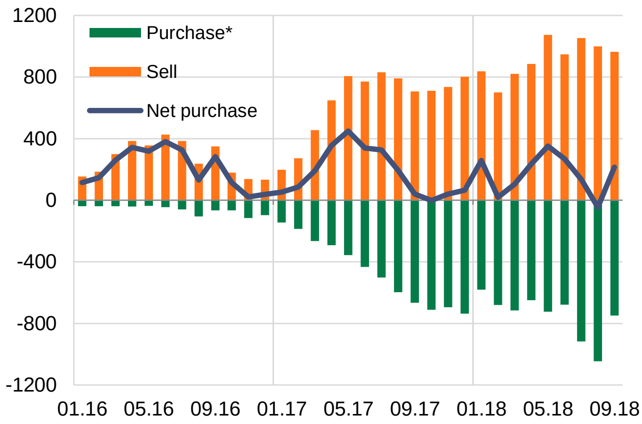
NFC hryvnia deposits decreased in August due to the above mentioned fiscal factors. In addition, depreciation expectations grew, which spurred businesses to increasingly use hryvnia resources (both own and borrowed) to make payments. Demand deposits accounted for nearly 80% of the decrease in the stock of NFC accounts. However, their annual growth picked up in Q3 to 4.4% from 3.9% a quarter earlier. In annual terms, demand deposits with maturities up to one year grew the most, while deposits with maturities between one and two years declined. This is the result of the inversion of the deposit yield curve, which enhances the attractiveness of deposits with maturity of up to one year.

The stock of HH hryvnia deposits declined as well in Q3 2018, with their year-over-year growth down to a still strong 19.8%. The accelerated growth in real wages and the improved attractiveness of hryvnia deposits amid the appreciation of the domestic currency supported the active growth in HH deposits in H1 2018. Meanwhile, HH active consumption expenditures, including at the start of the school year, and the shift into FX deposits were the key factors influencing the movements in the stock of household hryvnia deposits in Q3 2018. In addition, HH continued to increase their holdings in alternative investment instruments.

Accordingly, the stock of FX deposits increased (in USD equivalent) (2.2%), primarily on an inflow of HH funds, but continued to decline in year-on-year terms (1.2%).

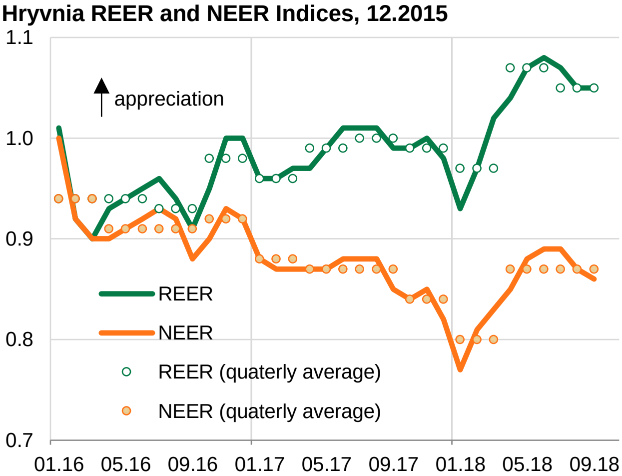
Banks continue to expect an inflow of deposits into the banking system, with expectations for an increase in HH deposits at their highest since 2015 when the Survey was first launched.

Operations of HH with FX cash, USD mn



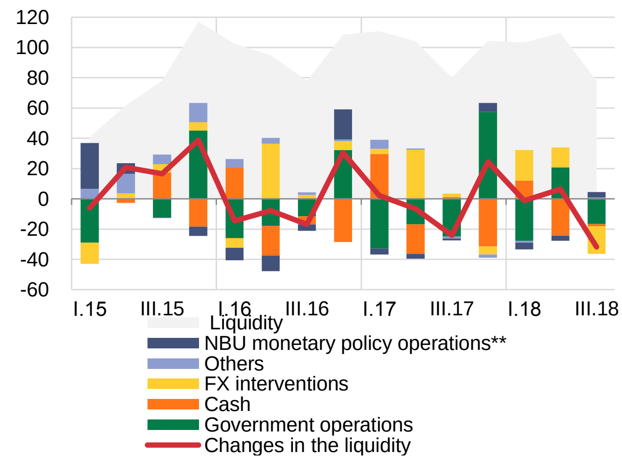
* Low purchases in 2016 and further growth are a reflection of the administrative restrictions on the FX market and their gradual liberalization.
Source: NBU.

Hryvnia REER and NEER Indices, 12.2015



Source: NBU`s estimates.

Factors Influencing Change* in the Banking System Liquidity, UAH bn



* Change of CDs and banks' correspondent accounts. Quarter to previous quarter.
** Excludes operations with CDs.
Source: NBU.

Overall, owing to the increase in the stock of FX deposits, the annual growth in money supply accelerated to 11.1% yoy in Q3 2018.

Loans

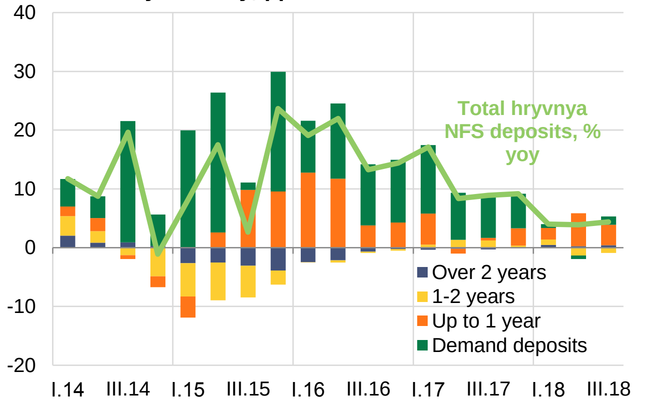
Hryvnia-denominated bank lending continued to increase gradually in Q3 2018. The growth in the stock of loans accelerated in September to 5.3% qoq and 13.2% yoy. The stock of HH loans grew the most (43.9% yoy), primarily driven by consumer loans as consumer confidence improved. Car loans and other consumer loans increased rapidly. Loans with maturities of up to five years were in high demand. Other maturities also grew, but they continue to account for a small proportion of total loans.

NFC also showed stronger demand for loans, driven by increased working capital and investment needs. Companies in wholesale and retail trade, warehousing, and support services in transportation and agriculture led the growth in demand for loans in Q3 2018. Moreover, the growth in the stock of loans in the construction sector sped up, while the decrease of real estate loans slowed down.

The growth in the stock of FX loans also accelerated, to 6% yoy (in USD equivalent).

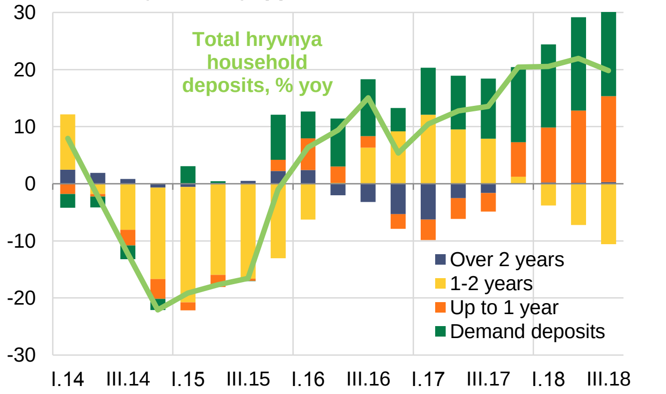
Banks continue to anticipate an increase in lending to the corporate sector and to HH, expecting that the Bankruptcy Code of Ukraine, which the Verkhovna Rada adopted on 18 October 2018, will raise the effectiveness of insolvency proceedings and procedures intended to recover the solvency of individuals in financial distress and in need of government assistance. However, any recovery in lending will continue to be restrained by structural factors like the high NPL ratio on banks' balance sheets and the substantial debt burden of large enterprises.

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



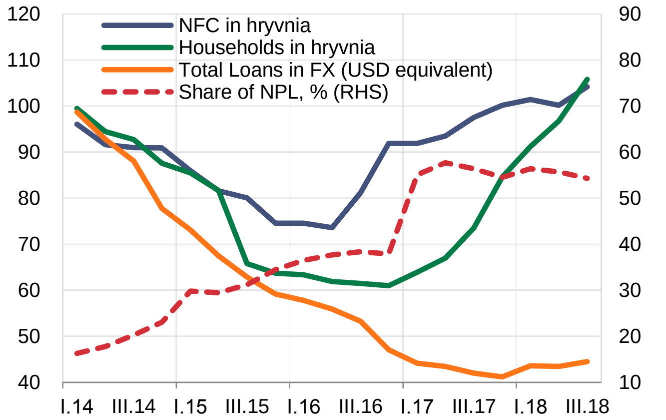
Source: NBU.

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



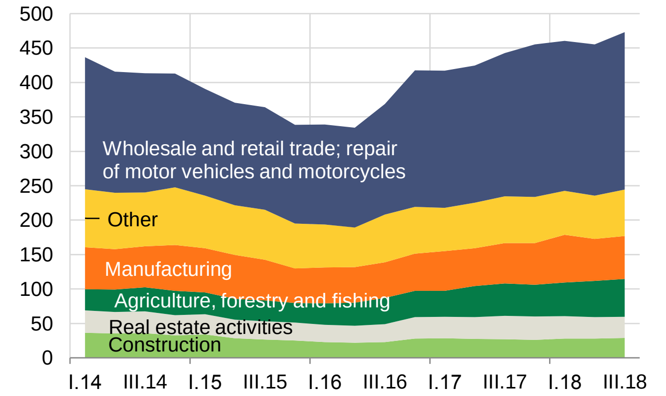
Source: NBU.

Loans, IV.2013=100



Source: NBU.

NFC Loans in Domestic Currency Breakdown by Type of Industry, UAH bn



Source: NBU.

3. Economic outlook for Ukraine

3.1. Forecast assumptions

Although remaining reasonably robust, global economic growth will gradually slow in 2018 – 2020. The growth will be underpinned by high consumption, as wages grow and unemployment falls. The global economy's potential for growth is hindered by the low capital investment and depressed productivity growth that has persisted for a long time since the global financial crisis. In addition, there will be a wider disparity between paces of economic growth in advanced and developing economies, as well as between countries within certain groups. This will be mainly due to an escalation of trade wars, geopolitical tensions in the Middle East, a tightening in financial conditions, and higher energy prices.

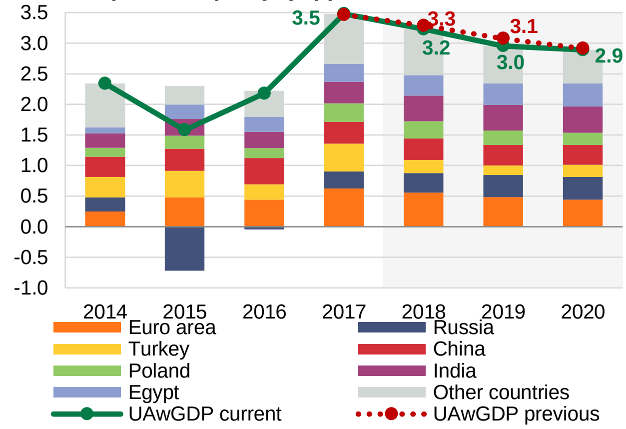
For the United States, the economic outlook is presently benign, thanks to investments in infrastructure and tax cuts. Reasonably stable consumer demand will provide additional support, fueled by higher income and the lowest unemployment rate seen over the last 50 years. At the same time, rising consumer demand will push up imports, while any existing and additional retaliatory measures that might be taken in response by the country's trading partners will hold back export growth. This will heighten inflationary pressures, which will prompt the Fed to continue interest rate hikes. The rate is expected to be increased once more by the end of the current year and three more times in 2019, approaching the neutral rate as closely as possible.

Although slowing gradually, economic growth in the euro area will remain close to its potential level. The growth will be supported by higher wages and employment rates owing to companies raising their spending on labor, and by an increased lending to the private sector driven by relatively favorable bank lending conditions. Meanwhile, economic activity will be dampened by the uncertainty surrounding Brexit, trade disagreements with the United States, and the indirect influence of the trade dispute between the Unites States and China. Inflation developments will be mixed, driven by higher oil prices on the one hand, and drops in other commodity prices resulting from protectionist measures on the other hand. Under such conditions, the ECB will continue to phase out its quantitative easing, as announced, while keeping interest rates unchanged at their current levels at least until H2 2019.

Emerging market economies have been recently hit by adverse factors arising from both the commodity and financial markets. Taking into account the fact that the effects of geopolitical tensions and trade wars that have brought about the recent market developments will linger, economic growth in these countries is set to slow likewise. That said, the economic outlook varies substantially across regions.

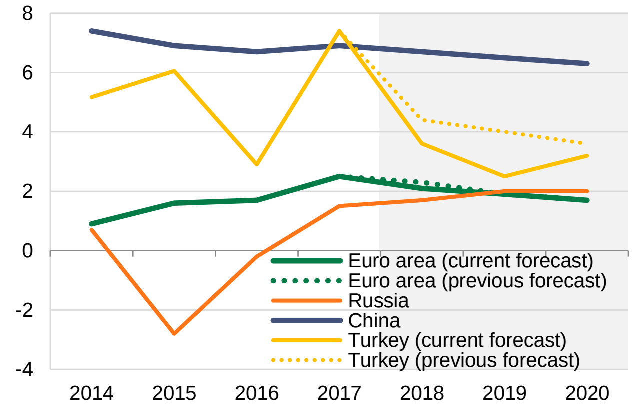
More specifically, despite some deceleration, CEE countries will grow at a steady pace, buoyed by robust consumer demand. Along with that, fiscal policy will contribute to rises in wages in the public sectors, as well as in pensions and social benefits. Government financing through EU funding will remain an additional factor. Conversely, a reduction in the positive contribution of net exports to GDP growth in the wake of less favorable external conditions, in particular high oil prices, will be a drag on economic activity. In the meantime, higher oil prices will support economic activity in some CIS countries, such as Russia (despite imposed sanctions) and Kazakhstan.

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



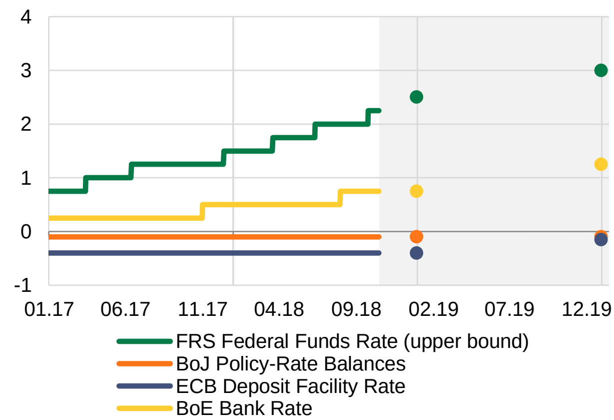
Source: NBU staff estimates based on IMF.

Real GDP* of Selected Ukraine's MTP Countries, % yoy



Source: NBU staff estimates.

Key Policy Rates of Major Central Banks, %



Source: official web-pages of central banks, NBU staff estimates based on Bloomberg.

Asian countries, such as China and India, will remain the fastest growing economies. Despite expectations of a slowdown due to a tightening in financial sector regulation and weaker external demand, government support will continue to underpin China's high economic activity. Economic growth in India will accelerate, as the temporary shock from currency and tax reforms fades. Meanwhile, Turkey's economic growth will slow noticeably on the back of the country's currency crisis and rising inflation.

Escalating trade wars will increase commodity market regionalization and will constrain price increases. Indeed, despite there being high crude steel prices on the U.S. and Chinese markets, prices on the European and Middle Eastern markets will fall gradually until they stabilize in H2 2019. The growth in steel demand will slow further, to 0.7% yoy, down from 1.8% yoy expected in 2018 and 4.7% in 2017.[41] In spite of there being a global steel glut, the steel supply will grow further. In 2019 – 2020, new foundries are scheduled to be commissioned, with total production capacity of about 52 million tons a year (excluding China), or over 3% of total global production.[42] Over half of these facilities will be launched in Middle East. Other countries planning to increase their production capacity are African and Southern and Central American countries.

Consequently, iron ore prices may drop to 57–60 USD/ton in the medium term, in view of the ongoing sizable expansion in global supply, especially from Australia, Brazil, and India, amid rather sluggish demand, and China's active shifting to the use of metal scrap in steel production.

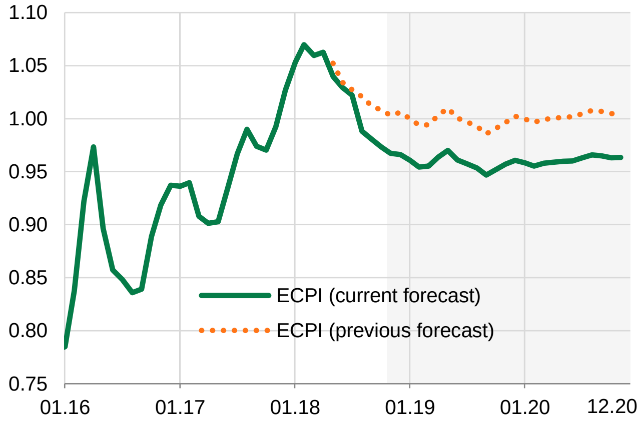
Global grain prices will increase gradually over the forecast horizon on the back of faster growth in global consumption, and because of supply factors. Global grain output in the 2018/2019 marketing year is expected to be lower by 3.3% compared to last year's record high in the wake of poorer weather conditions, and consequently, significantly lower harvests in Russia (by 16.5% yoy), the EU (by 9.3% yoy), and Turkey (by 9.5% yoy).[43] Poorer harvests are also expected in China, Ukraine, Egypt, and Uzbekistan. Meanwhile, the United States, Argentina, Canada, India, and Kazakhstan are expected to bring in larger harvests, which will partly counterbalance the lower harvests of the main wheat exporters. As a result, with consumption volumes being unchanged, wheat inventories will drop by 4.8% yoy.

In contrast, global corn output will hit about 1.1 billion tons in the 2018/2019 marketing year, 3.4% more than last year. At the same time, consumption will rise by 3.6% yoy, to a record high of almost 1.2 billion tons. However, sufficient carry-over stocks will offset the difference between output and consumption and maintain prices at their reasonably stable, if not rather low, current level.

As a result, global prices, as expressed by the external commodity price index (ECPI), will remain close to the current level over the forecast horizon. The drop in the index compared to the previous forecast is largely due to a downward revision of maize prices (the share of which is constantly rising in grain exports), and a fall in sunflower oil prices amid expectations of a good harvest of oilseeds.

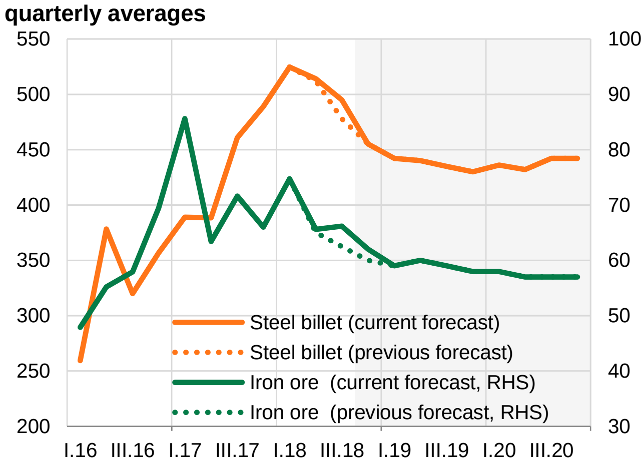
The global oil market is expected to face oil shortages until the end of the current year, resulting from the second round of sanctions imposed on Iran, and a seasonal increase in oil consumption. More specifically, in H1 2018 Iran supplied 3.8 million barrels per

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



Source: NBU staff estimates.

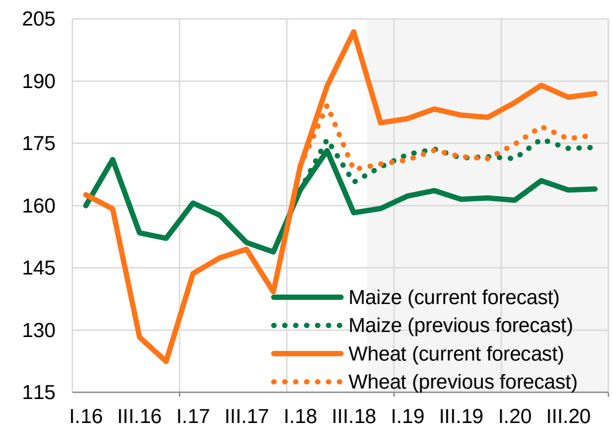
World Prices for Ferrous Metals and Iron Ore*, USD/MT, quarterly averages



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

Source: NBU staff estimates.

World Grain Prices, USD/MT, quarterly averages



Source: NBU staff estimates.

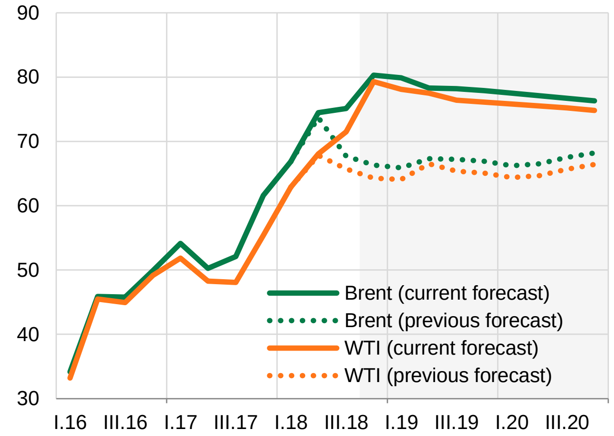
[41]World Steel Association estimates.
[42]OECD estimates.
[43]USDA projections, September 2018.

day. Saudi Arabia, Russia and Gulf countries have already started to step up production to offset the drop in oil supply seen after the sanctions were imposed. Other countries, including the United States, are also expected to ramp up oil production, and some countries may circumvent the sanctions, e.g. by paying in Chinese yuans.

Consequently, the market is expected to adapt to the drop in Iran's exports in 2019, with oil supply exceeding demand again and pushing prices down. A spike in U.S. oil production could lead to a sizeable increase in oil supply. In 2019, the United States is likely to produce 11.5 million barrels per day, a 7.5% yoy increase compared to the production volume planned for 2018.[44] Venezuela is also 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.

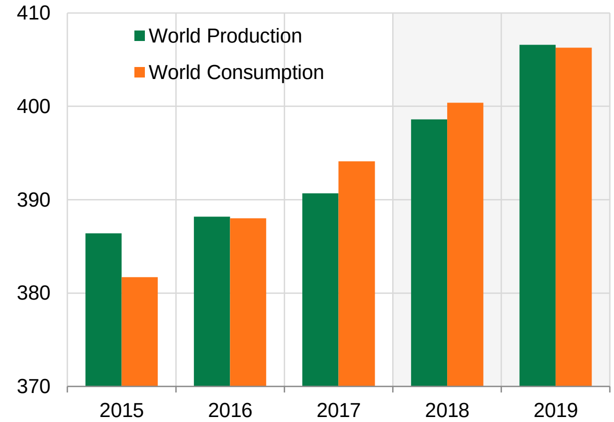
In addition to oil prices, the end of the year also saw a significant rise in gas prices. This will put additional pressure both on domestic prices and Ukraine's balance of payments. Gas and oil prices are expected to have similar trajectories over the forecast horizon: after peaking in winter, prices are expected to decrease gradually.

Brent and WTI Crude Oil Prices, USD/bbl, quarterly averages



Source: NBU staff estimates.

World Crude Oil and Other Liquids Consumption and Production, Mbbl/d



Source: U.S. Energy Information Administration, September 2018.

	CPI, change as of the end of period, %			GDP, annual change, %			Exchange rates*		Commodity Prices**, USD			
	Euro area	Russia	USA	Euro area	Russia	USA	USD/EUR	RUB/USD	Imported gas, per 1m³	Brent crude oil, per bbl	Ferrous metals export, per ton	Grain export, per ton
2014	-0.2	11.4	0.8	1.3	0.7	2.4	1.33	38.3	292.5	99.1	481.5	201.2
2015	0.2	12.9	0.7	2.1	-2.8	2.6	1.11	61.0	274.0	52.5	336.1	166.9
2016	1.1	5.4	2.1	1.8	-0.2	1.6	1.11	67.1	200.9	43.9	299.4	153.4
2017	1.4	2.5	2.1	2.4	1.5	2.3	1.13	58.3	231.5	54.5	411.0	155.3
2018	1.7	4.0	2.1	2.1	1.7	2.5	1.19	62.4	304.9	74.2	473.9	174.6
2019	1.7	4.2	2.0	1.9	2.0	2.2	1.18	65.0	344.2	78.6	428.6	172.9
2020	1.7	4.0	2.0	1.7	2.0	2.2	1.20	65.0	332.0	76.9	436.1	176.0
annual change, %												
2015							*-16.5*	*59.3*	*-6.3*	*-47.0*	*-30.2*	*-17.0*
2016							*0.0*	*10.0*	*-26.7*	*-16.4*	*-10.9*	*-8.2*
2017							*1.8*	*-13.1*	*15.2*	*24.1*	*37.3*	*2.9*
2018							*5.3*	*7.0*	*31.7*	*36.1*	*15.3*	*12.4*
2019							*-0.8*	*4.2*	*12.9*	*5.9*	*-9.6*	*-0.9*
2020							*1.7*	*0.0*	*-3.6*	*-2.2*	*1.8*	*1.8*

*Average for the year.

** Average weighted by volume, excluding oil.

[44]New estimates of the U.S. Department of Energy.

3.2. Inflation Developments

In light of new pro-inflationary factors (such as higher energy and wheat prices and stronger-than-expected wage growth), the NBU has revised its 2018 inflation projections upwards (from 8.9% to 10.1%).

These factors and resulting high inflation expectations will also drive next year's inflation (the forecast has been increased to 6.3%).

Therefore, inflation will remain above the target range longer than expected earlier, returning to the target range in Q1 2020 and reaching its medium-term target of 5.0% in late 2020.

The main factor driving inflation lower over the forecast horizon will be reasonably tight monetary conditions because of earlier key policy rate hikes. In addition, the upward pressure on wages will ease due to the expected slowdown in labor migration (in contrast to the two previous years when wages surged up). Tight fiscal policy resulting from the need to repay large amounts of public debt, and the moderate pace of imported inflation amid reasonably low exchange rate volatility will keep the inflation contained.

Core inflation will slow to 7.9% by the end of 2018. The restraining influence of tight monetary policy, together with secondary effects from slower food inflation, will outweigh major pro-inflationary factors, such as robust household income growth. The cost of market services, a core inflation component, the largest share of which is wage costs, will increase at the fastest pace, boosted by buoyant wage growth. The least pronounced increases in the current year are expected in the price of core CPI components with a high import content, amid a relatively stable nominal exchange rate (mainly against the currency basket of trading partners), as well as in processed foods. However, the pass-through effects from a rise in global wheat prices to some core inflation components will remain a pro-inflationary factor.

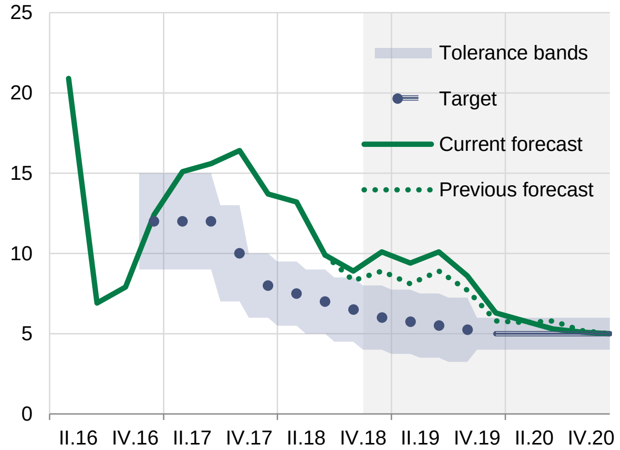
Sufficiently tight monetary and fiscal policies, together with moderate imported inflation, will push core inflation down in 2019 – 2020, to 5.1% and 3.6% respectively. Wage growth will decelerate on the back of the expected decrease in labor migration, and weak growth in the minimum wage and wages in the public sector. These factors will dampen the growth of consumer demand, bring back the negative GDP gap (which will continue to widen), and consequently, decrease inflationary pressures amid low imported inflation.

Raw food inflation will slow notably this year to 4.9% from 23.5% in 2017. This is largely attributed to the diminishing effects of last year's food supply factors, in particular active growth in exports of some Ukrainian products. However, significantly higher global wheat prices, coupled with the resulting rise in flour prices, will limit the slowdown in food inflation.

Raw food inflation is expected to fall to 4% and 3.1% in 2019 and 2020 respectively. The drop in global corn prices recorded in H2 2018 will reduce the production costs of meat and dairy products, pushing down the prices of these goods in 2019. Expectations of high crop yields as a result of agricultural investments and growing productivity in this sector are expected to rein in food inflation over the mid-term, and to counterbalance the effects from household income growth.

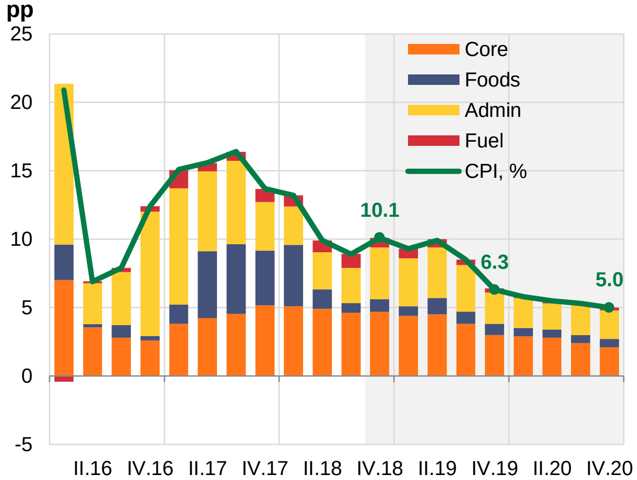
Administered prices are expected to increase by 18.4% in 2018. The announced rises in gas prices for households and thermal

CPI, %



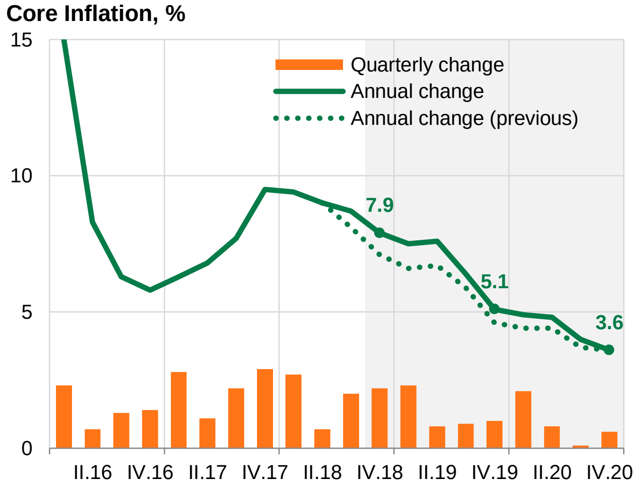
Source: SSSU, NBU staff estimates.

Contributions to Annual CPI Growth by Main Components, pp



Source: SSSU, NBU staff estimates.

Core Inflation, %



Source: SSSU, NBU staff estimates.

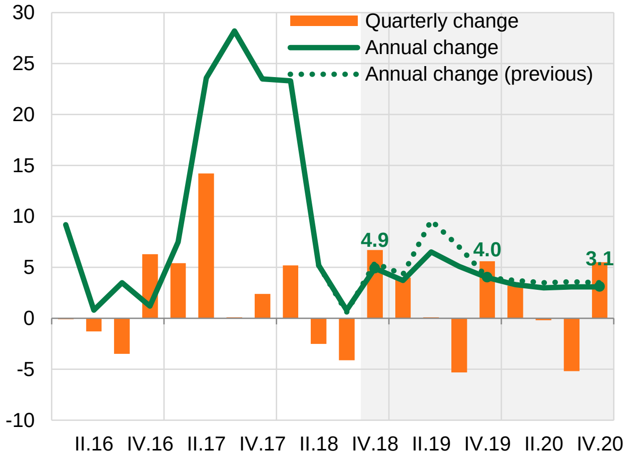
power producers (23.5%) will lead to revisions in central heating and hot water prices.

Among excisable goods, the highest increase this year will be in prices for tobacco products (by 24%), as also expected in the years to come (by 12 – 13%). This will be largely driven by growth in excise tax rates in the coming budget periods, resulting from Ukraine's commitment to harmonize tobacco excise taxes with EU rates. Alcohol prices are expected to rise by about 10% every year, including due to the ongoing increases in excise tax rates. These goods will make a considerable contribution to the administered price inflation over the entire forecast horizon.

Although slowing in 2019 – 2020 to 11.7% and 10.8% respectively, growth in administered prices will still exceed that in other consumer basket components. Gas prices (together with heating and hot water prices) will continue to rise, owing to the government's decision to gradually bring them to import parity prices. In addition, further wage increases, in particular for utility and public transport service providers, will also make a significant contribution to administered price growth over the medium-term.

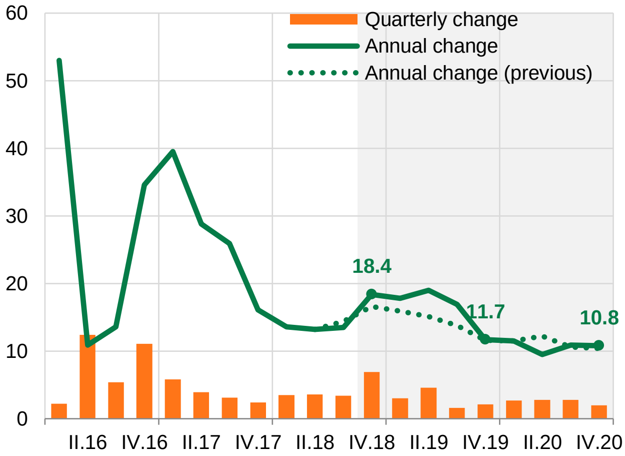
The spike in oil prices seen from the start of the year has already been reflected in the cost of fuel on the Ukrainian market, and an upward revision in 2018 projections for fuel price growth, to 17.5%. Secondary effects will mainly appear next year. However, their impact will vary and their pass-through to consumers will be offset by worsened terms of trade and the weaker external competitiveness. Consequently, fuel inflation will decelerate to 7.4% and 5% in the next two years, driven mainly by movements in global oil prices in the hryvnia equivalent.

Raw Food Inflation, %



Source: SSSU, NBU staff estimates.

Administered Prices Inflation, %



Source: SSSU, NBU staff estimates.

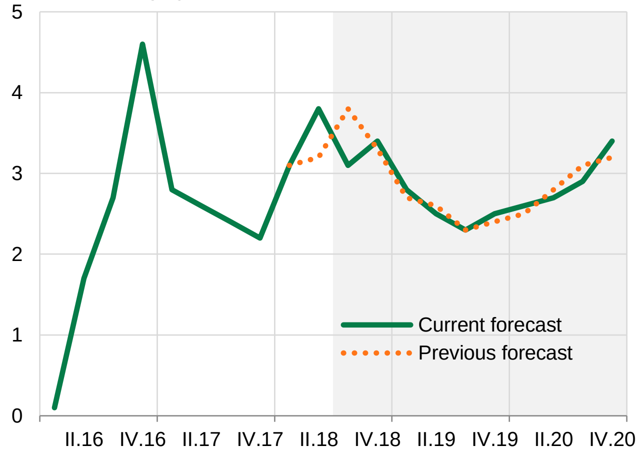
3.3. Demand and output

As before, the NBU forecasts economic growth to accelerate to 3.4% in 2018. The growth will be largely driven by private consumption, up by 5.5% in the current year, boosted by continued household income growth on the back of hikes in wages, pensions and remittances from abroad. Companies' investment activity will remain buoyant, fueling demand for investment imports. That is why the negative contribution of net exports to GDP will persist, in spite of there being a recovery in the industrial sector, and Ukrainian exporters having greater access to the external markets.

Real GDP growth is expected to slow to 2.5% in 2019, as the global economy cools, conditions on international commodity markets become less favorable, and monetary policy is kept tight enough to bring inflation back to its target range. Moreover, the restraining effects of 2019 fiscal policy are also expected to be more pronounced compared to other periods, in view of the need to repay large amounts of public debt.

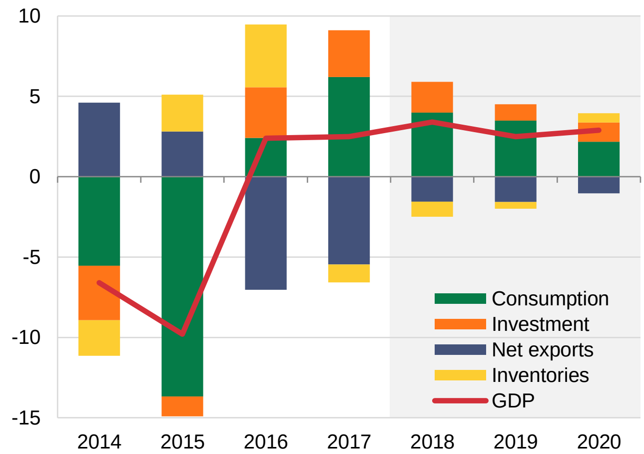
In 2020, real economic growth is expected to speed up to 2.9%. The growth will mainly result from a gradual loosening in monetary policy, which will bolster domestic demand and make the economy more attractive to investors.

Real GDP, % yoy



Source: SSSU, NBU staff estimates.

Contributions to Real GDP Growth, pp

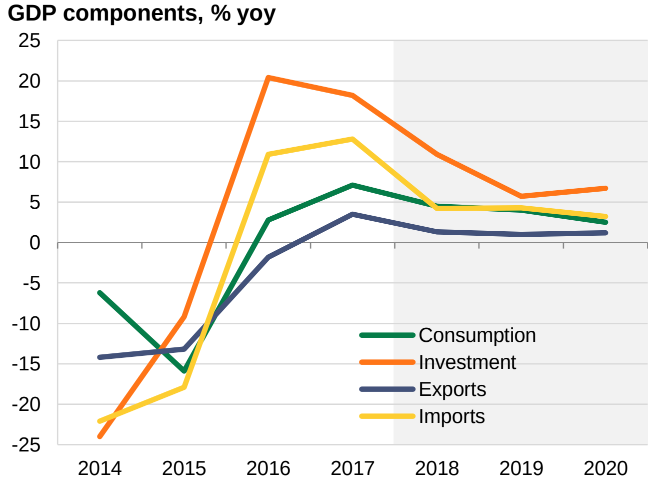


Source: NBU staff estimates.

Private consumption will remain the key driver of economic growth over the forecast period, buoyed largely by household income growth, resulting primarily from higher wages in the real economy and budgetary spending on social benefits. Increased remittances, thanks to a rise in the number of labor migrants, are also an important driver. Private consumption is expected to grow 5.5% in the current year, while slowing in later periods, to 3 – 5%, due to, among other things, fiscal policy tightening and monetary policy remaining reasonably tight. An increase in household spending on energy resulting from gas prices being raised to import parity prices, and the continued policy of gradually cutting utility norms covered by subsidies will dampen consumption.

Investment will grow the fastest among GDP components but will slow over the medium-term (from 10.9% in 2018 to 5 – 7% in the coming years), as wage costs increase and investment gradually reach the level sufficient to cover production needs. High investment activity will be concentrated primarily in export-oriented sectors (especially agriculture and the manufacturing industry), as well as sectors that rely on increased capital expenditures from the budget (such as road construction). Investment will continue to be driven by the need to upgrade production facilities, and to get products certified to gain greater access to the European market.

GDP components, % yoy



Source: SSSU, NBU staff estimates.

Capital investment growth will continue to drive investment imports up, especially investment in machinery and equipment. Households are expected to also create additional demand for imported goods as real disposable incomes grow. The share of energy imports will decline thanks to enhanced energy efficiency and the ramping up of domestic production of energy resources. As a result, the growth in total import volumes will slow to 4.2% in the current year, while retaining a similar pace over the entire forecast horizon.

Annual growth in export volumes will remain 1 – 2% in 2018 – 2020. This will be largely due to the continuing high export potential of Ukraine's agricultural sector. Export growth of metallurgical products will be dampened by the negative effects of mutual trade restrictions, market segmentation, and consequently, lower external demand. Along with that, disruption of cargo shipments on the Azov Sea, coupled with transportation difficulties, will also weigh on exports.

Potential GDP and the cyclical position of Ukraine's economy

The Potential GDP growth will speed up over the forecast period, from the current level (around 2% according to the NBU's estimates) to 3 – 3.5% in annual terms in 2020. The convergence of Ukraine's economy with advanced economies will increase total factor productivity, and this will remain the main driver of potential GDP growth.

At the same time, a high natural rate of unemployment resulting from structural labor market mismatches will remain one of the main impediments to potential GDP growth. That said, the NBU expects that labor migration will decrease, and that the negative impact of employment on potential GDP growth will thus diminish.

In H1 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. In the coming years, the positive contribution of capital to potential GDP growth will gradually increase, as fixed capital formation exceeds depreciation, resulting in capital growth in real terms.

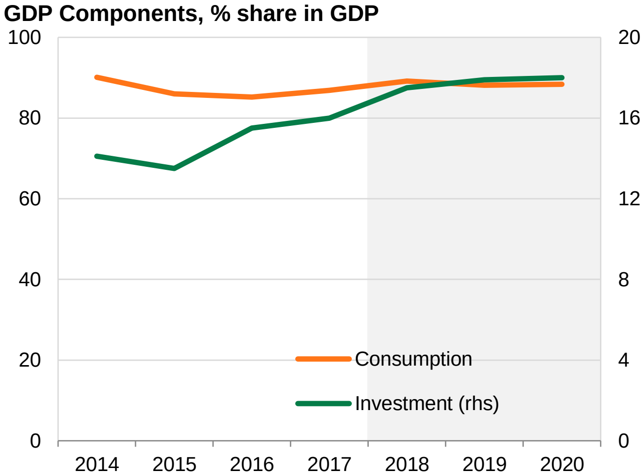
Thanks to favorable terms of trade and a revival of consumer and investment demand, the negative GDP gap closed at the end of 2017. In H1 2018, the GDP gap turned positive on the back higher social standards, a rapid decline in unemployment, and improved terms of trade. However, in light of a tight monetary policy and less favorable terms of trade, the gap will turn negative again in Q3 and stay negative over the entire forecast horizon, apart from Q4 2018. A strong fiscal impulse expected in late 2018 will cause the output gap to turn positive for a short time. However, in 2019–2020, the negative GDP gap will gradually widen, in particular, against the backdrop of a tight fiscal policy, approaching 1% of potential GDP.

In the current year, fiscal policy will make a moderate contribution to economic growth. Fiscal stimuli to aggregate demand will largely come from increased government social spending, including on pensions and the wages of public sector employees and military personnel. Q4 is expected to see a noticeable easing in fiscal policy, if cooperation with the IMF continues and Ukraine gets greater access to the external markets to finance its deficit. In this light, the structural deficit is expected to be higher than last year, with the overall public deficit rising to 2% of GDP.

The growth in tax revenues of the consolidated budget will exceed 18% in 2018. According to the NBU, the highest growth (more than 40%) will be seen in revenues from corporate income tax and individual income tax, which will be driven by the rapid growth in nominal wages.

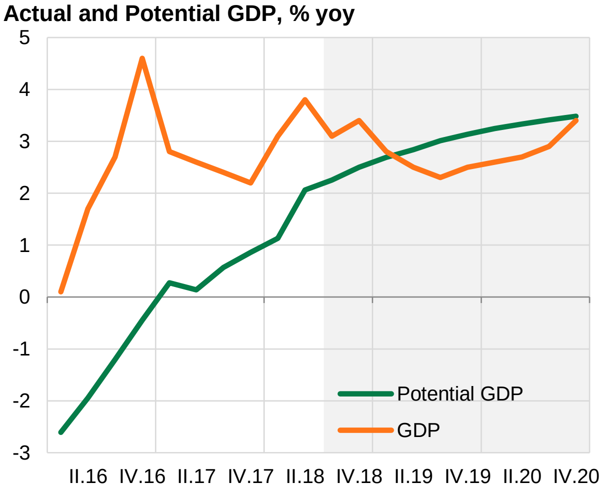
Meanwhile, budgetary spending on wages will also spike. Overall, government social spending (including pension payments) will grow by around 25%, being an important driver of domestic consumer demand. The government's policy aimed at renovating road infrastructure, together with the operational launch of the Road Fund will increase capital expenditures to about 3.5% of GDP. However, spending (as well as the budget deficit) will be mainly constrained by lower amounts of financing received over the year (particularly from external borrowing and privatization). Budget financing is expected to improve once the government gains access to the external debt markets in Q4.

GDP Components, % share in GDP



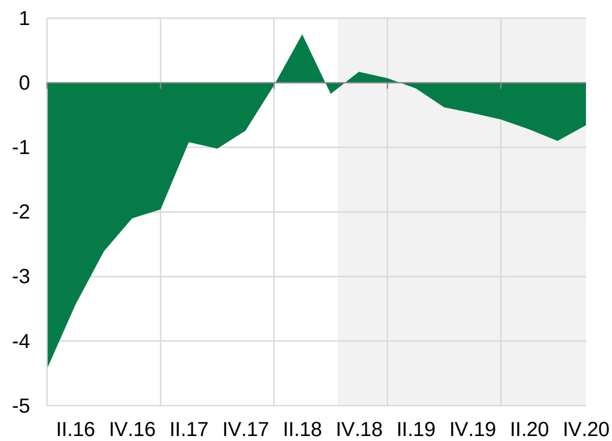
Source: SSSU, NBU staff estimates.

Actual and Potential GDP, % yoy



Source: SSSU, NBU staff estimates.

Output Gap, % of Potential GDP



Source: NBU staff estimates.

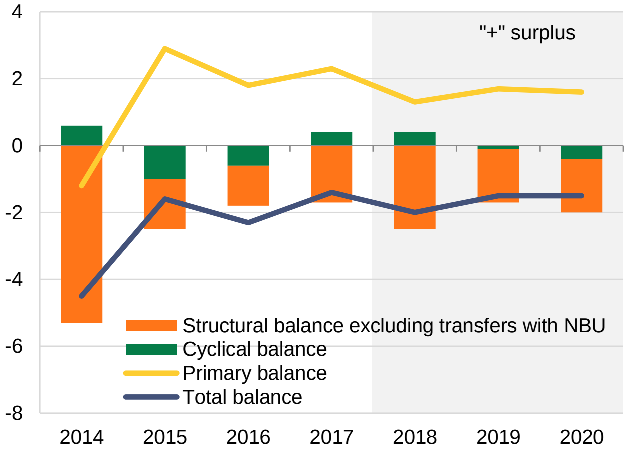
Fiscal policy is expected to be reasonably tight in 2019 – 2020, due to the need to maintain the deficit at a low level, in view of the peak of external public debt payments amid restricted access to the external markets for developing economies, including Ukraine. In this light, the budget deficit is projected at 1.5% of GDP over that period, with fiscal policy expected to have a moderating effect on economic growth and inflation. Loans from the IMF and other official lenders will secure continued access to the international capital markets over the forecast horizon, and will help refinance a portion of the debt, repayments of which will peak in 2019 – 2020.

Public and publicly guaranteed debt will decrease over the forecast horizon, falling to 60% of GDP in 2020. This will be due to the rapid nominal GDP growth, moderate exchange rate volatility, and a gradual decline in external public debt as large debt repayments are made.

The unemployment rate is projected to be below 9% (according to ILO methodology) over the entire forecast period, as mismatches on the labor market gradually disappear. However, the unemployment rate will remain rather high, due to slower economic growth resulting from tight monetary and fiscal policies, slowdown of labor migration, leading to lower upward pressure on wages.

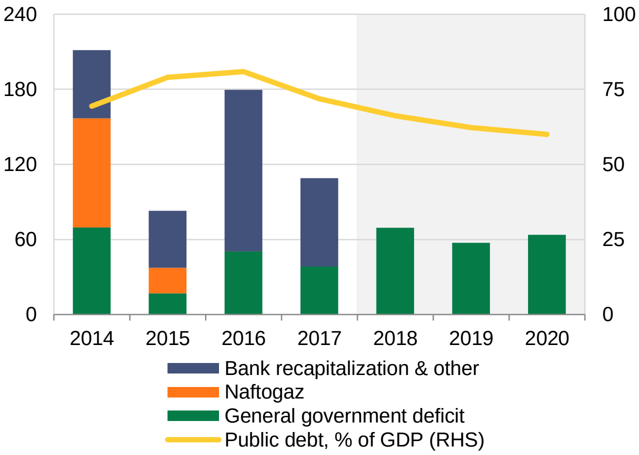
Wage growth will decelerate on the back of the expected deceleration of labor migration, and weak growth in the minimum wage and wages in the public sector. In spite of the wage hike (by 37%) seen in the previous year mainly in response to labor force outflows, wages continued to grow in the current year, albeit at a slower pace. In 2018, wages will increase on average by 25% in nominal terms, or by 13% in real terms. Wage growth is expected to decelerate over the forecast horizon by 16% and 10% in 2019 – 2020 respectively (by 7% and 5% in real terms). The slower growth over the forecast horizon will be largely attributed to the fading of labor migration and budget consolidation. The gradual saturation of the Polish labor market is expected to reduce labor migration. Wages in the public sector will grow rather slowly in 2019 – 2020 because of the tight fiscal policy. In addition, the mid-term budget plan envisages moderate growth in the minimum wage (in particular by 12% to UAH 4,170 in 2019 according to the draft budget for the year).

Consolidated Budget, % of GDP



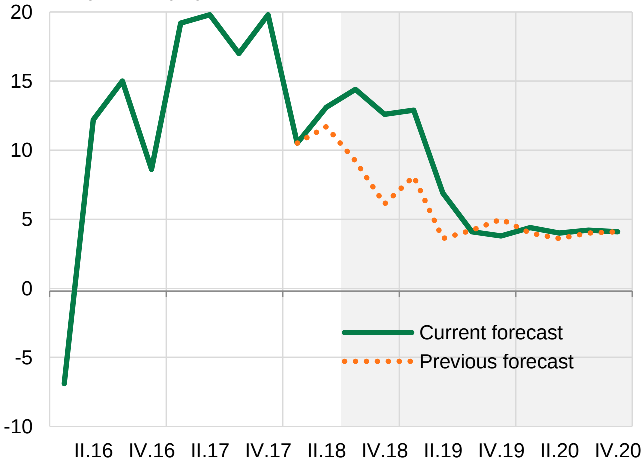
Source: NBU staff estimates.

Public Sector Deficit, UAH bn and Public debt, % of GDP



Source: MFU, SSSU, NBU staff estimates.

Real wages, % yoy



Source: SSSU, NBU staff estimates.

3.4. Balance of Payments

In 2018, the NBU expects the current account deficit to widen to 2.7% of GDP. This will be driven by an almost twofold increase in dividend repatriation and deterioration in the merchandise trade balance on the back of growing consumer demand and less favorable terms of trade in H2 2018. The current account deficit will remain close to the current level of 2.5%–3.0% of GDP in 2019–2020. The trade deficit will widen over the forecast horizon amid the worsened terms of trade and the gradual appreciation of the hryvnia REER. At the same time, the deficit will be offset by greater private remittances, supported by the higher incomes of labor migrants and lower dividend repatriation.

As before, macroeconomic forecast is based on the assumption that Ukraine will continue to cooperate with the IMF and enjoy relatively favorable access to international capital markets. At the same time, inflows of investment and debt capital will be limited by high systemic and political risks in Ukraine in the run-up to the presidential and parliamentary elections that are scheduled for 2019. The placement of sovereign Eurobonds slated for 2018–2020 and an inflow of foreign official financing will help rollover a portion of Ukraine's debt, repayments of which will peak in 2019–2020. The amount of foreign currency cash outside banks will barely change in 2019–2020 as migration processes slow and the exchange rate becomes less volatile.

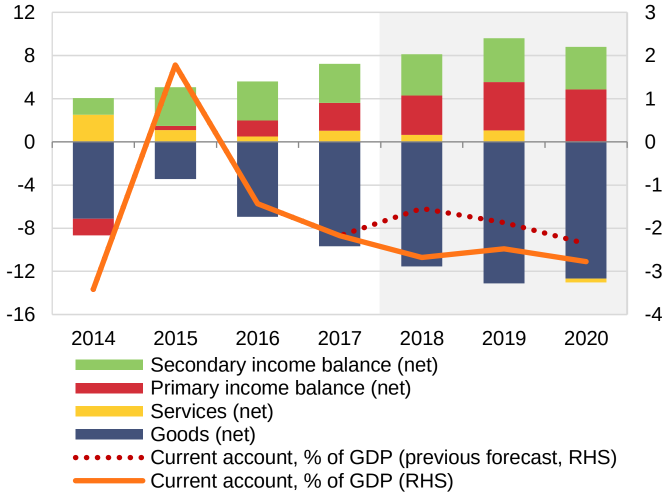
In 2018, a surplus of the overall balance of payments, coupled with IMF loans, will enlarge Ukraine's international reserves to USD 19.2 billion, or 3.2 months of future imports. A minor projected deficit in the overall balance of payments in 2019–2020 will be financed by IMF loans. As a result, international reserves will remain at approximately USD 19 billion over the forecast period.

The current account deficit is expected to come in at 2.7% of GDP in 2018, larger than the 2.2% of GDP in 2017. The main factor behind the larger deficit is an increase in dividend repatriation to USD 3.5 billion from USD 1.8 billion in 2017, driven by the easing of administrative restrictions and strong corporate earnings. Robust consumer demand (fueled by higher real household income) and investment demand (primarily from agriculture and metallurgy) pushed imports of goods and services to grow faster than exports. The current account deficit is expected to remain at 2.5%–3.0% of GDP in 2019–2020. Growth in imports of goods and services will continue to outstrip that of exports owing to higher energy prices, strong household consumer demand, and large investment imports. Exports will grow on higher crop yields and greater exports to Ukraine's main trading partners (MTPs). The larger trade deficit will be offset by growing private remittances due to rising labor migrant income in US dollar terms.

In 2018, growth in exports of goods will slow but remain high at around 10% on the back of higher metals prices (driven by stronger global demand) and grain prices (due to poorer crop yields, especially wheat, caused by dry weather in exporting countries). Metallurgical exports are projected to grow 26% yoy, mainly driven by rising demand from India and China.

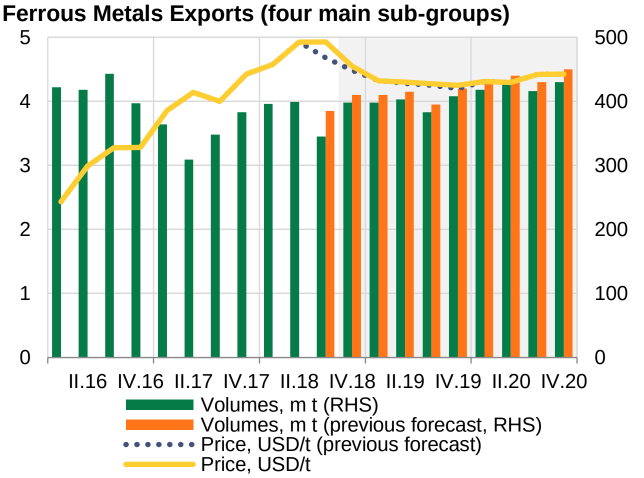
In 2019, exports of goods will remain almost level with 2018 as terms of trade deteriorate. However, in 2020 exports are expected to return to growth (by 4%). Nevertheless, in 2019–2020 export volumes will increase owing to improved productivity in agriculture, particularly higher yields of grain and oilseeds, and sustained demand from Asia for metals products. In addition, growth is expected in machinery exports, specifically aircraft products to

Current Account, USD bn



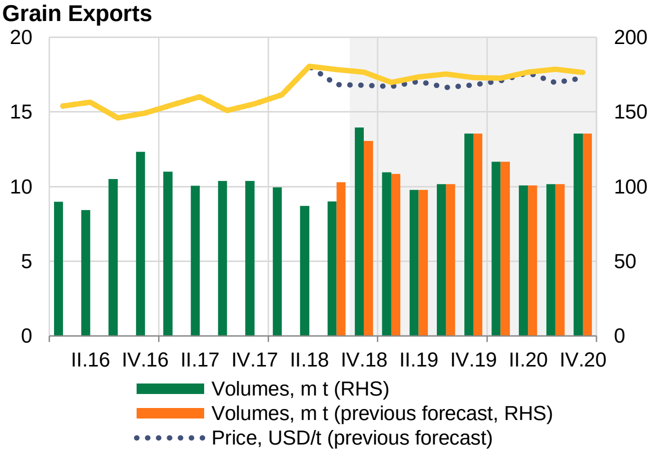
Source: NBU.

Ferrous Metals Exports (four main sub-groups)



Source: NBU.

Grain Exports



Source: NBU.

Asian markets, as well as in chemicals exports thanks to high global demand and renewed domestic production.

In 2018–2020, the growth in imports of goods is expected to slow from 12% to 3%. Energy imports will decrease due to both a gradual drop in energy prices and smaller volumes of gas imports (thanks to larger volumes of local production and the implementation of energy saving measures). Growth in investment and consumer imports will also decelerate, with the latter largely a function of the expected slower wage growth.

The surplus in the trade in services is expected to continue into 2018–2019. The ongoing increase in the number of travelers and, consequently, imports of services, will be counterbalanced by growth in transportation and IT services exports. In 2020, a drop in gas transit volumes will lead to a deficit in the trade in services.

Remittances from labor migrants are expected to increase gradually in 2018–2020, which will offset the widening of the trade deficit. In 2018, remittances will primarily grow on the larger number of labor migrants thanks to streamlined employment procedures in Eastern Europe. In 2019–2020, migration will slow and growth in remittances will largely be generated by increases in the incomes of labor migrants.

Dividend repatriation will nearly double year-on-year in 2018 to USD 3.5 billion driven by the gradual liberalization of capital movements and improved earnings by companies with foreign ownership. Over the forecast horizon, the amount of dividend repatriation is expected to remain large, albeit somewhat below the level of 2018.

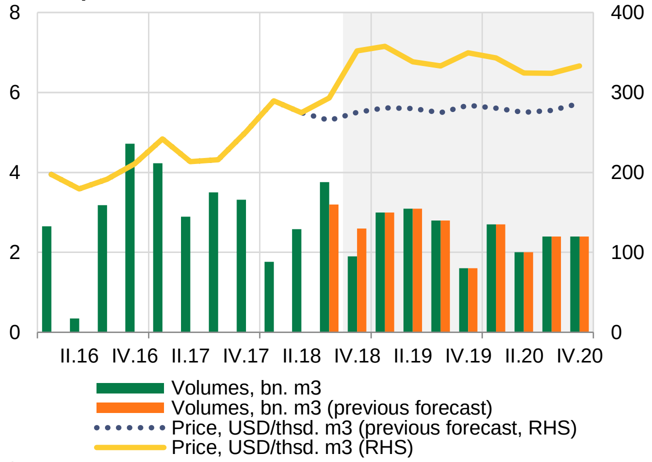
In 2018, net financial account inflows will mostly come from public sector borrowing. Signing a new cooperation program with the IMF will allow Ukraine to secure loans from the EU and the World Bank. These borrowings coupled with sovereign Eurobond issuance will enable Ukraine to rollover a portion of its external public debt that falls due in 2018–2020. The continued cooperation with the IMF will also be a positive signal for private investors to resume investing in Ukraine.

As a result, net financial account inflows to the private sector will increase in 2019–2020. However, in 2019 these inflows will be curbed by higher political risks related to the presidential and parliamentary elections.

With private remittances from labor migrants having increased considerably in 2018, the amount of foreign currency cash outside banks has grown for two consecutive years. However, already in 2019, FX cash outside banks will level off owing to weaker migration and lower exchange rate volatility.

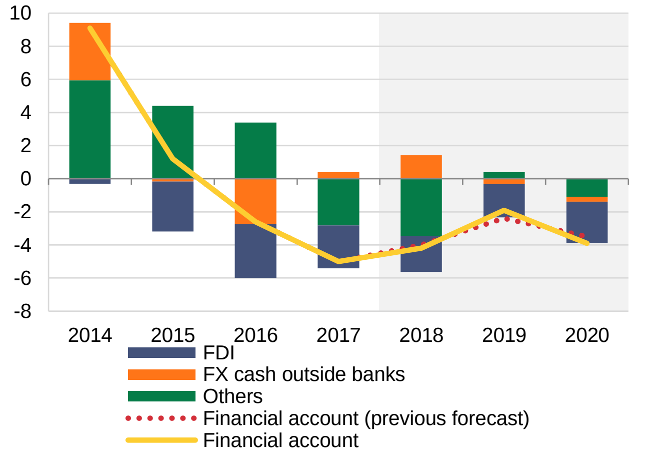
In 2018, a surplus in the overall balance of payments, together with the net inflows under the new Stand-By Arrangement (SBA) with the IMF, will push international reserves to an estimated USD 19.2 billion, or 3.2 months of future imports. That amount corresponds to 66% of the IMF's composite measure for reserve adequacy. In 2019–2020, net borrowing from the IMF will help cover the deficit in the overall balance of payments and maintain international reserves at around USD 19 billion.

Gas Imports



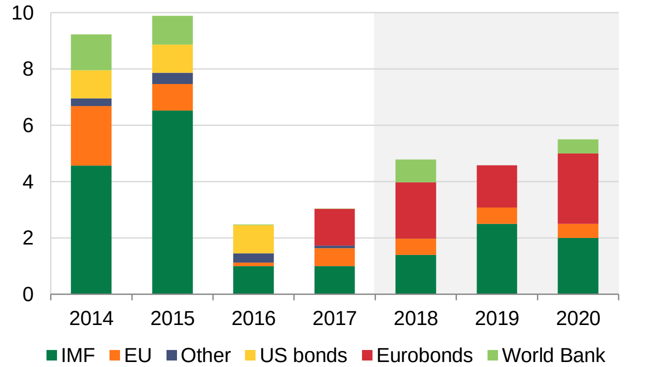
Source: NBU.

Financial Account, USD bn

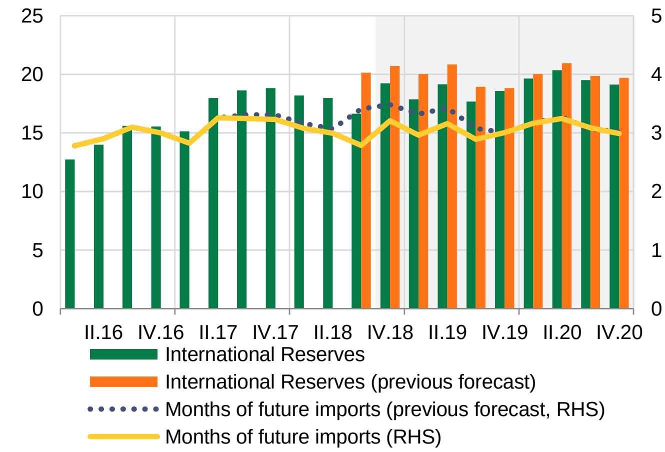


Source: NBU.

Official Financing and Eurobond Placement, USD bn



International Reserves



Source: NBU.

3.5. Monetary Sector and Financial Markets

The NBU expects to pursue a relatively tight monetary policy over the forecast horizon. The key policy rate will remain well above its neutral level owing to a number of inflation risks and the need to bring inflation down to the target level.

Stronger demand for cash and public debt repayments by the government in the next two years will reduce liquidity in the banking system. This will be reflected in higher demand for refinancing loans among banks and smaller issues of NBU certificates of deposit.

Despite the expansion of cashless settlements, demand for cash will be supported by rising real income and price levels. The NBU has raised its projections for cash growth to reflect current money market conditions. Coupled with growth in banks' correspondent accounts, this will lead to an increase in the monetary base by around 12% in 2018, 7% in 2019, and 6% in 2020.

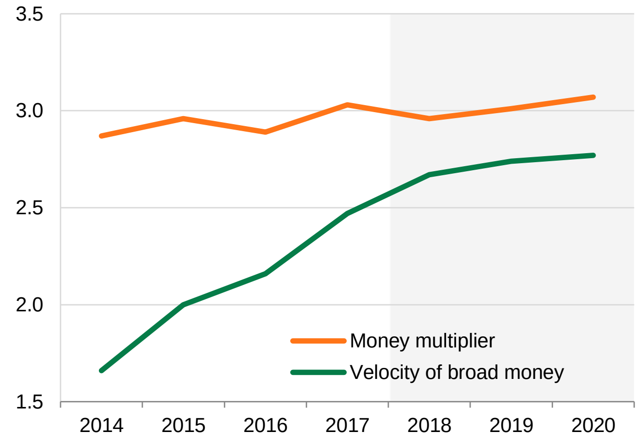
Relatively high real interest rates will boost the propensity of households to save. As a result, the money supply is expected to grow 8%–10% over the forecast horizon. A resumption of lending by banks will support the growth in the money supply. However, the growth in lending will be moderate owing to still high institutional risks and a large share of nonperforming loans.

In Q4 2018, individual banks are expected to show more one-off demand for refinancing loans on the back of significant fluctuations in banking system liquidity, mostly caused by government operations.

In 2019, banking system liquidity will be mainly absorbed by the government's operations to service public debt and by the growth in cash in circulation, which will be partially offset by the NBU's purchases of foreign currency to replenish international reserves. If the government uses a large share of the domestic market liquidity to repay public debt in 2019, the banking system could face a structural deficit of liquidity. If that materializes, the NBU would focus on liquidity provision operations.

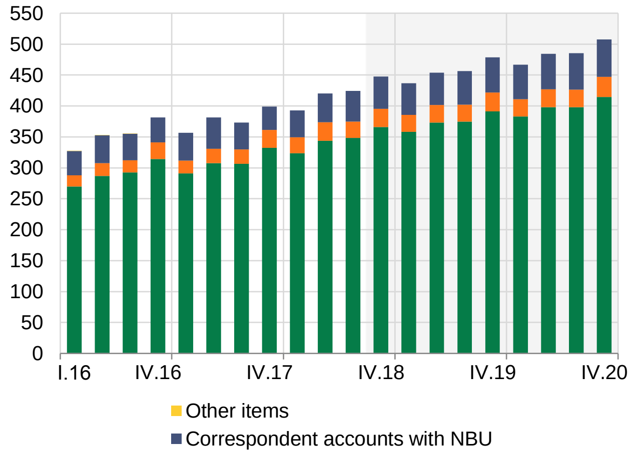
Maintaining the key policy rate high will keep monetary conditions tight and drive disinflation, bringing price growth back to its target range in early 2020. This will allow inflation to reach the mid-point of the target range – the medium-term inflation target of 5% – in 2020.

Money Multiplier and Money Velocity



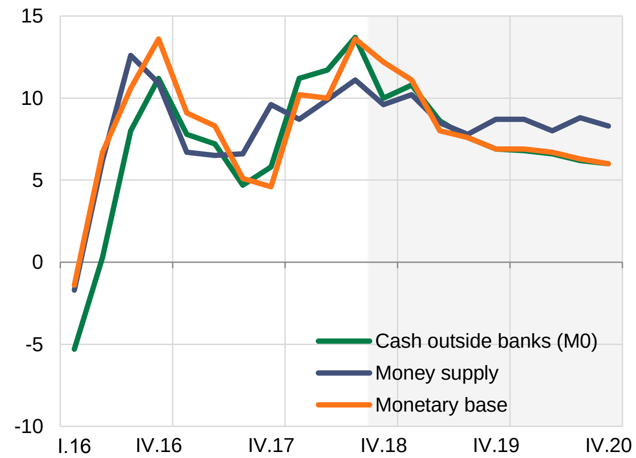
Source: NBU.

Monetary Base (Components), UAH bn



Source: NBU.

Monetary Indicators, % yoy



Source: NBU.

3.6. Risks to the Forecast

The NBU considers a further deterioration in inflation expectations (due to the start of a new political cycle) and in the external environment to be the main risks for the realization of the present macroeconomic forecast, including Ukraine's ability to meet its inflation target in 2020.

Ukraine's external risks may arise from both global raw commodity prices and a possible downturn in the global economy. Any escalation of trade conflicts between the largest global economies (mainly the United States and China) could slow global trade growth and weigh on the global economy. That type of global tensions could cause an excess supply of raw commodities in some regions and depress prices. In this case, or if access to certain markets were to be restricted, Ukraine's export proceeds would decline, which would put pressure on the hryvnia exchange rate and drive up inflation. The NBU would then have to tighten monetary conditions beyond the level built into the baseline scenario in order to neutralize the negative effect these external conditions have on inflation.

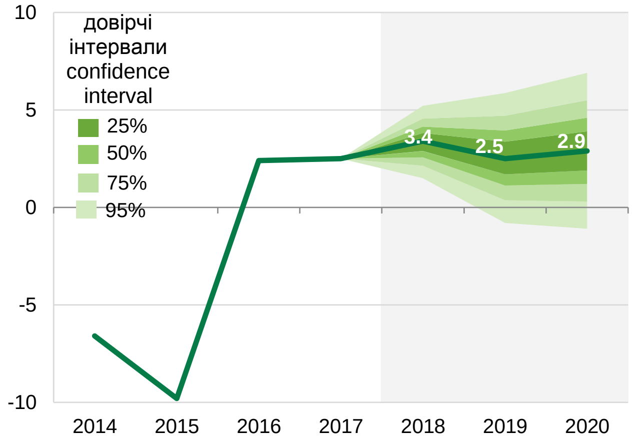
Considerable uncertainty remains over the magnitude of the increase in global energy prices and the corresponding impact on prices of other goods due to higher production costs.

In addition, developing countries are exposed to increased risks of capital flight. A rapid tightening of monetary policy by leading central banks leads to capital flight from emerging market economies, including Ukraine. This factor makes experts wary of the potential for a global downturn. If this scenario materializes, it would be important to implement a prudent approach to monetary and fiscal policy to mitigate any adverse effects of the external shocks on the economy.

Continued labor migration poses a significant risk to economic growth. Outflows of workers from Ukraine are exacerbating the disparity between supply and demand on the labor market, leading to higher wages and local shortages of qualified staff, and also decreasing the economy's potential growth. This also exerts pressure on prices in the economy. The announced easing of employment rules for foreign citizens in the Czech Republic and Germany heightens this risk for Ukraine.

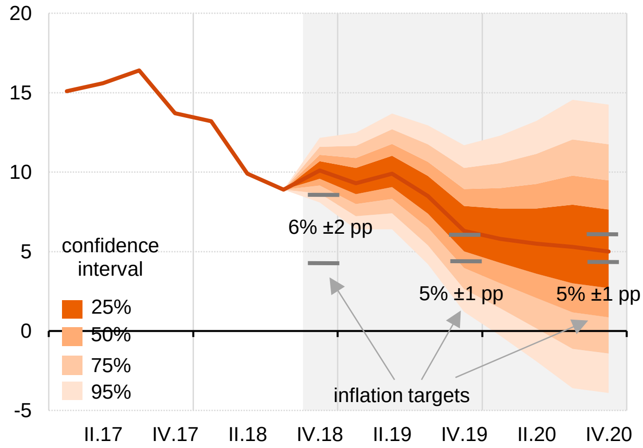
Risks to the forecast also include uncertainty over the volume of gas transit through Ukraine starting in 2020, as pipelines bypassing the country are being built to deliver gas to Europe and Western Asia.

Real GDP Growth, % yoy



Source: NBU.

CPI Growth Forecast and Targets, % yoy



Source: NBU.

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 25%. The same applies to other chart areas, implying the 95% probability that the inflation rate will be in the range of the lightest shaded area.

TERMS AND ABBREVIATIONS

ATO	Anti-Terrorist Operation
BPM5, BPM6	IMF Balance of Payments Manual (5th edition), IMF Balance of Payments and International Investment Position Manual (6th edition)
CEE	Central and Eastern Europe
CIS	Commonwealth of Independent States
CIT	Corporate income tax
Core CPI	Core consumer price index
CPI	Consumer price index
DGF	Deposit Guarantee Fund
ECB	European Central Bank
EFF	Extended Fund Facility
EMs	Emerging Markets
EU	European Union
FAO	Food and Agriculture Organization
FDI	Foreign direct investment
Fed	Federal Reserve System
FTA	Free trade agreement
FX	Foreign exchang
GDP	Gross domestic product
GVA	Gross value added
IKSO	Index of Key Sectors Output
ILO	International Labour Organization
IMF	International Monetary Fund
MFU	Ministry of Finance of Ukraine
MTP	Main trading partner
MY	Marketing year
NBFI	Non-bank financial institutions
NBU	National Bank of Ukraine
NEER	Nominal effective exchange rate
NGCA	Non-government-controlled areas (parts of Donetsk and Luhansk oblasts temporarily not under the authority of the Ukrainian government)
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
SSC	Single Social Security Contribution
PMI	Purchasing Managers' Index
PPI	Producer price index
REER	Real effective exchange rate
Russia	Russian Federation
SESU	State Employment Service of Ukraine
SFSU	State Fiscal Service of Ukraine
SSSU	State Statistics Service of Ukraine
STA	Single Treasury Account
Treasury	State Treasury Service of Ukraine
US	United States of America
USDA	United States Department of Agriculture
VAT	Value-added tax
WITS	World Integrated Trade Solution

bcm	billion cubic metres
bn	billion
bp	basis point
E&O	errors and omissions
EUR	euro
m	million
M0	cash
M3	money supply
mom	in monthly terms; month-on-month change
pp	percentage point
qoq	in quarterly terms; quarter-on-quarter change
RUB	Russian ruble
sa	seasonally adjusted
thcm	thousand cubic metres
UAH	Ukrainian hryvnia
USD	US dollar
USD/bbl	US dollars per barrel
yoy	in annual terms; year-on-year change

Macroeconomic forecast (October 2018)

Indicators	2015	2016	2017	2018						2019						2020					
				I	II	III	IV	current forecast	forecast 07.2018	I	II	III	IV	current forecast	forecast 07.2018	I	II	III	IV	current forecast	forecast 07.2018
REAL ECONOMY, % yoy, unless otherwise stated																					
Nominal GDP, UAH bn	**1989**	**2385**	**2983**	700	807	994	1038	**3540**	3460	795	902	1104	1149	**3950**	3845	873	987	1207	1253	**4320**	4188
Real GDP	**-9.8**	**2.4**	**2.5**	3.1	3.8	3.1	3.4	**3.4**	3.4	2.8	2.5	2.3	2.5	**2.5**	2.5	2.6	2.7	2.9	3.4	**2.9**	2.9
GDP Deflator	**38.9**	**17.1**	**22.0**	14.9	17.0	15.0	12.2	**14.8**	12.2	10.5	9.0	8.0	8.0	**8.9**	8.4	7.0	6.5	6.0	5.5	**6.3**	5.9
Consumer prices (period average)	48.7	13.9	14.5	-	-	-	-	10.9	10.7	-	-	-	-	8.8	7.7	-	-	-	-	5.6	5.5
Producer prices (period average)	36.0	20.5	26.3	-	-	-	-	18.1	15.7	-	-	-	-	12.5	8.1	-	-	-	-	7.8	8.1
Consumer prices (end of period)	**43.3**	**12.4**	**13.7**	13.2	9.9	8.9	10.1	**10.1**	8.9	9.3	9.9	8.5	6.3	**6.3**	5.8	5.8	5.5	5.3	5.0	**5.0**	5.0
Core inflation (end of period)	34.7	5.8	9.5	9.4	9.0	8.7	7.9	7.9	7.1	7.5	7.6	6.4	5.1	5.1	4.6	4.9	4.8	4.0	3.6	3.6	3.6
Non-core inflation (end of period)	49.7	17.5	19.4	17.9	10.3	8.9	13.0	13.0	11.3	11.8	13.1	11.3	7.9	7.9	7.5	7.2	6.4	7.1	6.9	6.9	6.8
raw foods (end of period)	40.7	1.2	23.5	23.3	5.2	0.8	4.9	4.9	5.4	3.7	6.5	5.1	4.0	4.0	4.0	3.3	3.0	3.1	3.1	3.1	3.5
administrative prices (end of period)	64.4	34.6	16.1	13.6	13.2	13.5	18.4	18.4	16.6	17.8	19.0	16.9	11.7	11.7	11.6	11.5	9.5	10.9	10.8	10.8	10.4
Producer prices (end of period)	**25.4**	**35.7**	**16.5**	15.9	18.4	18.9	17.2	**17.2**	10.4	15.7	13.7	11.0	8.7	**8.7**	8.6	6.8	8.0	7.8	8.2	**8.2**	8.1
FISCAL SECTOR																					
Consolidated budget balance, UAH bn	**-30.9**	**-54.8**	**-42.1**	-	-	-	-	**-69.1**	-71.4	-	-	-	-	**-58.3**	-56.4	-	-	-	-	**-64.5**	-61.7
% of GDP	-1.6	-2.3	-1.4	-	-	-	-	-2.0	-2.1	-	-	-	-	-1.5	-1.5	-	-	-	-	-1.5	-1.5
Public sector fiscal balance (IMF methodology), UAH bn	**-17.0**	**-50.3**	**-38.4**	-	-	-	-	**-69.3**	-72.7	-	-	-	-	**-57.3**	-57.4	-	-	-	-	**-63.8**	-61.0
% of GDP	-0.9	-2.1	-1.3	-	-	-	-	-2.0	-2.1	-	-	-	-	-1.5	-1.5	-	-	-	-	-1.5	-1.5
General government and Naftogaz financing, UAH bn	-37.5	-50.3	-38.4	-	-	-	-	-69.3	-72.7	-	-	-	-	-57.3	-57.4	-	-	-	-	-63.8	-61.0
General government and Naftogaz financing, % of GDP	-1.9	-2.1	-1.3	-	-	-	-	-2.0	-2.1	-	-	-	-	-1.5	-1.5	-	-	-	-	-1.5	-1.5
BALANCE OF PAYMENTS (NBU methodology)																					
Current account balance, USD bn	1.6	-1.3	-2.4	-0.5	0.2	-3.1	0.0	-3.4	-2.0	-1.2	-0.6	-1.4	-0.3	-3.5	-2.6	-1.5	-0.7	-1.3	-0.7	-4.2	-3.6
Financial account, USD bn	1.2	-2.6	-5.0	-0.2	-0.4	-2.1	-1.6	-4.2	-4.0	-0.4	-1.2	-0.5	0.0	-1.9	-2.4	-2.1	-1.4	0.0	-0.3	-3.9	-3.5
BOP overall balance, USD bn	**0.8**	**1.3**	**2.6**	**-0.3**	**0.6**	**-0.9**	**1.7**	**0.8**	2.0	**-0.8**	**0.5**	**-0.9**	**-0.4**	**-1.6**	-0.3	**0.6**	**0.7**	**-1.3**	**-0.4**	**-0.4**	-0.1
Gross reserves, USD bn	**13.3**	**15.5**	**18.8**	**18.2**	**18.0**	**16.6**	**19.2**	**19.2**	20.7	**17.9**	**19.2**	**17.7**	**18.6**	**18.6**	18.8	**19.6**	**20.3**	**19.5**	**19.1**	**19.1**	19.7
Months of future imports	3.1	3.0	3.2	3.1	3.0	2.8	3.2	3.2	3.5	3.0	3.2	2.9	3.0	3.0	3.0	3.2	3.2	3.1	3.0	3.0	3.0
Export of goods, % yoy	-29.9	-5.3	18.3	8.6	14.8	6.6	11.4	10.3	9.7	-0.9	-2.9	3.6	-3.5	-1.0	0.1	4.1	3.8	5.0	4.5	4.4	5.3
Import of goods, % yoy	-32.6	4.2	21.9	12.2	14.0	19.0	4.5	12.1	9.6	7.6	4.6	-3.6	0.8	2.0	4.0	2.5	1.2	2.2	4.2	2.6	5.6
MONETARY ACCOUNTS (Qumulative since the beginning of the year)																					
Monetary base, %	0.8	13.6	4.6	-1.5	5.2	6.3	12.2	**12.2**	11.0	-2.5	1.3	1.9	6.9	**6.9**	6.2	-2.5	1.1	1.3	6.0	**6.0**	4.6
Broad money, %	3.9	10.9	9.6	-3.3	0.3	3.3	9.6	**9.6**	10.4	-2.8	-0.6	1.5	8.7	**8.7**	8.7	-2.8	-1.3	1.6	8.3	**8.3**	8.2
Velocity of broad money (end of year)	2.0	2.2	2.5	-	-	-	-	**2.7**	2.6	-	-	-	-	**2.7**	2.6	-	-	-	-	**2.8**	2.7