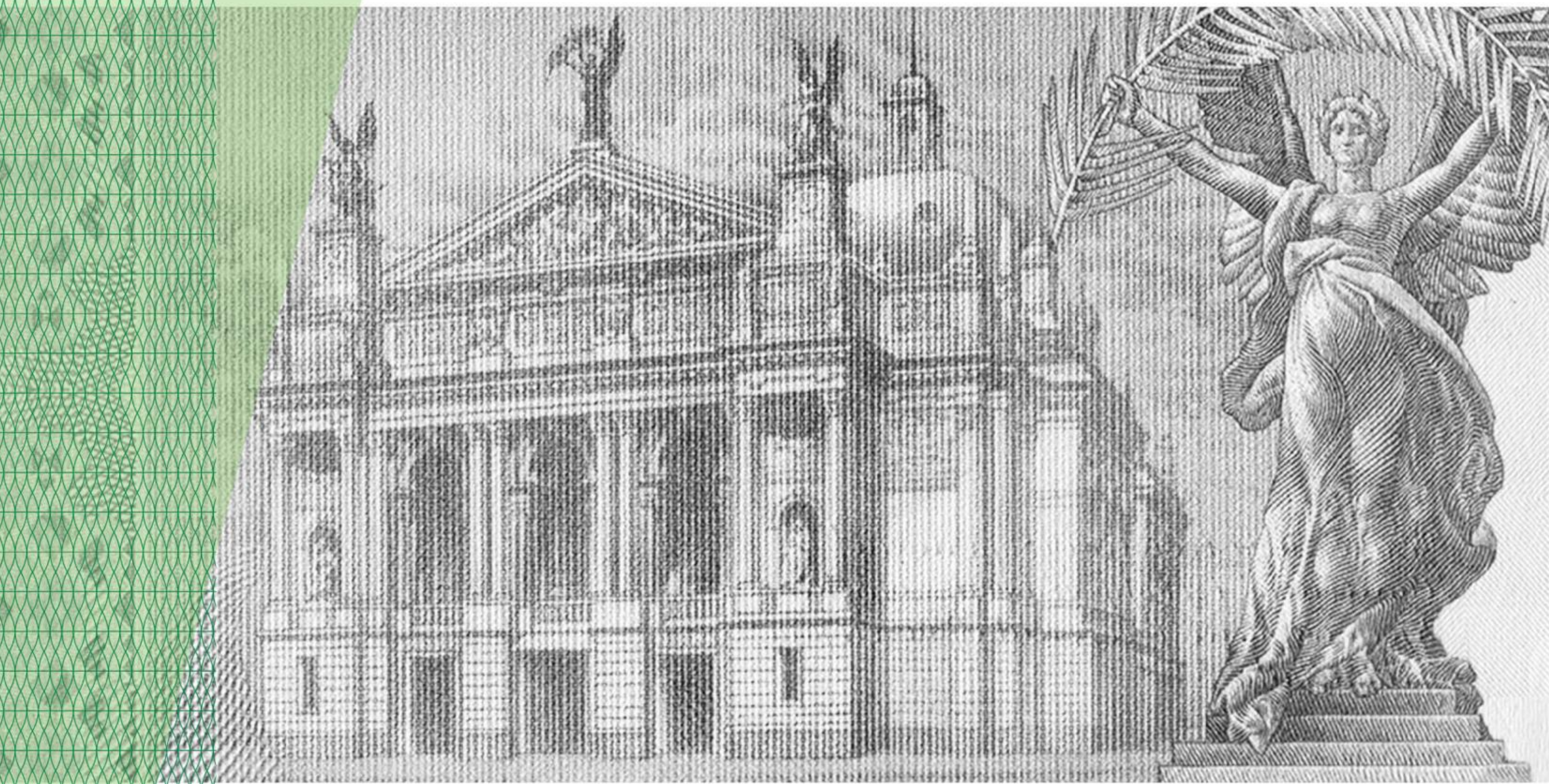
National Bank of Ukraine

Inflation Report

July 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 12 July 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 11 July 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. 442-D as of 12 July 2018 *On the Approval of the Inflation Report.*

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SUMMARY

Consumer price inflation continued to decline

June 2018 saw a slowdown in consumer price inflation to 9.9% yoy, somewhat below the NBU forecast published in the April 2018 Inflation Report. However, inflation was still higher than the target of 7.0% ± 2 pp set for the end of Q2 2018 in the Monetary Policy Guidelines for 2018 and the Medium Term.

The continued deceleration of annual inflation was mainly the result of a sharp slowdown in food price inflation. In particular, the effect of the temporary supply factors that caused the high inflation seen in H2 2017 and in early 2018 is gradually fading. This is attributed to there being a greater supply of food products, both domestically and from abroad.

Moreover, FX market conditions were benign. The economic upturn in Ukraine's main trading partners, high prices for Ukrainian exports, an increase in private remittances, and the tight monetary policy made the hryvnia strengthen against both the US dollar and the currencies of the country's trading partner countries. This, in turn, influenced the cost of imported goods and the prices of goods and services that have a substantial import content.

Growth in the core consumer price index (CPI) also slowed to 9.0% yoy. However, core inflation remained high, indicating persistently strong underlying inflationary pressure. This is mainly driven by a sustained expansion in consumer demand, which is in turn fueled by a rapid rise in household income that substantially outpaces the rate of economic growth. For instance, in May the average nominal wage in Ukraine increased by 28% yoy. The rapid wage growth was largely due to strong demand for labor, and active labor migration. Inflows of remittances also continued to grow rapidly. From January to May, they increased by 30% yoy and reached USD 4.5 billion. This is attributed to further growth in the number of labor migrants and an improvement in economic growth in Ukrainian migrants' destination countries. High growth rates of social benefits, especially on the back of larger payments to various categories of pensioners, also contributed to the increase in household income.

In Q2 2018, the NBU maintained a tight monetary policy stance: it kept its key policy rate on hold at 17% per annum. In real terms, the key policy rate grew from 5% per annum early in the year, to 8-9% per annum in June. Because of the tight monetary policy, real yields on hryvnia bonds remained some of the highest among the emerging markets. This helped maintain the attractiveness of hryvnia assets at a time when emerging markets faced heightened turbulence on the global financial markets, and when IMF financing for Ukraine was further postponed.

Consumer price inflation will continue to decelerate and will return to the target range in late 2019

The NBU has kept its inflation forecast for year-end 2018 unchanged at 8.9%, whereas the forecast for core inflation was lowered to 7.1%. The faster-than-expected inflation slowdown in May and June 2018 will be offset in the second half of the year by the stronger impact of inflation factors. These will include a greater-than-anticipated increase in administered prices, which is expected at the end of the year when domestic gas prices are brought closer to their import parity price. This factor will also influence inflation levels in the first three quarters of next year, and will prevent the NBU from bringing inflation back to the target range before Q4 2019. At the same time, in H2 2018 and 2019, a number of factors of a more fundamental nature, as distinct from the rise in administered prices, will also affect inflation. Among them will be:

- higher-than-expected domestic demand, due among other things to rising wages and remittances from labor migrants,
- the weakening of investor appetite for Ukrainian sovereign debt, due to the global trend for foreign investors to flee emerging markets and because of postponed financing for Ukraine under the IMF cooperation program,
- inflation expectations that continue to exceed the NBU's inflation targets.

The NBU's tight monetary policy will offset the effect of these factors and will be key in bringing inflation to within the target range in Q4 2019. In addition, a prudent fiscal policy in response to budget constraints caused by substantial government debt repayments, moderate imported inflation on the back of relatively low exchange rate volatility, and the lower impact of administered price inflation will contribute to the inflation slowdown.

Other factors include weaker pressure from food prices in the current year. This is especially related to prices for fruit and vegetables. However, robust external demand for some foods (particularly, butter and eggs) and the convergence of domestic food prices to the levels in neighboring countries, as well as greater export opportunities for Ukrainian businesses, will also buoy prices somewhat.

Therefore, the inflation forecast for the coming years remains unchanged: consumer price inflation is expected to stand at 5.8% at year-end 2019, and to decelerate to 5.0% in 2020, reaching the midpoint of the target range (5.0% ± 1 pp).

Domestic demand drives GDP growth in 2018

In Q1 2018, real GDP growth accelerated to 3.1% yoy. As in 2017, domestic demand was the main driver of real GDP growth, with both consumption and investment rising.

The steady rise in consumer demand was propelled by rising household income (wages, pensions, and remittances). In addition, higher wages and changes to pension legislation provided incentives to official employment, as indicated by the growth in the economically active and employed population, as well as a lower unemployment rate.

Investment growth, which has been accelerating for the third consecutive quarter and which was seen in most industries, remained an important economic growth driver. In particular, capital investment in industrial production showed robust growth. The rise in investment was supported by further improvements of the business expectations and financial standings of enterprises. The sale of 4G licenses by the government contributed to higher investment in the telecommunications industry.

The acceleration in real GDP growth in Q1 2018 was primarily reflected in a pickup in trade, on the back of strong consumer demand and a revival of industrial production. Industrial production grew on increased output in the mining, metallurgy, and energy sectors, driven, among other things, by the comparison base effect, which was related to the last year's trade ban with the non-government controlled areas (NGCAs) and the seizure of companies on these territories, which affected the above industries the most.

This effect, coupled with favorable external economic conditions, boosted the performance of goods exports in H1 2018. Meanwhile, stronger domestic demand, primarily investment demand, drove faster growth in imports of goods. This caused the trade deficit to widen over the first five months of 2018. However, the continued increase in the number of labor migrants led to a substantial rise in remittances, thus leaving the current account deficit broadly unchanged at USD 0.4 billion over the first five months of 2018, which was close to the previous year's level.

Since early 2018, inflows to the financial account have remained steady, and in contrast to last year were primarily generated by the private sector. At the same time, following dramatic growth in Q1 2018, non-residents cut their holdings of domestic currency government bonds. The total inflow of foreign direct investment (FDI) remained relatively low, and was mainly directed to the real sector. Despite the surplus in the balance of payments, international reserves as of the end of June decreased to USD 18.0 billion, covering 3.1 months of future imports, which was largely due to the government and the NBU making debt repayments to the IMF.

In Q2 2018, Ukraine's economy continued to grow. The high business expectations of companies were evidence of sustained growth in investment activity. The further increase in personal income fueled consumer demand. A sharp rise in budgetary current and capital spending gave a boost to consumer and investment demand. Moreover, external market conditions remained broadly favorable. As in Q1, the disruption of ties with the NGCAs last year had an impact on the pace of economic growth. As a result, gross value added in the metallurgy, mining, and energy sectors continued to grow, despite being held back somewhat by repairs at several large enterprises in the metallurgy and mining industries. The harvesting campaign started earlier than last year, thus driving agricultural growth. Overall, real GDP growth in Q2 2018 is estimated at 3.2% yoy.

After speeding up in 2018, economic growth will slightly decelerate

As before, the NBU expects real GDP growth to accelerate to 3.4% in 2018. Economic growth will continue to be driven largely by private consumption, which is being fueled this year by the rapid growth of wages, remittances, and pensions. Investment activity is also anticipated to remain high. Favorable terms of trade, a recovery in the industrial sector, and the greater access of Ukrainian exporters to foreign markets will help decrease the negative contribution of net exports to GDP.

In 2019, however, economic growth will decelerate to 2.5% (below the previously forecast 2.9%). This will be the result of the waning effects of a rapid rise in social standards in previous years, amid a prudent fiscal policy, as necessitated by large repayments of public debt. Furthermore, the tight monetary conditions that are necessary to bring inflation back to the target will also affect growth. In 2020, the real economy is expected to grow by 2.9%.

Spurred by rising remittances thanks to an increase in the number of labor migrants, private consumption will continue to be a major driver of growth in the medium term. At the same time, labor migration will have the reverse effect on economic growth by reducing the size of the workforce and worsening companies' ability to build up investments due to rapidly rising wages.

The external trade deficit will persist, if not widen, with a significant share of domestic consumer demand and capital investment needs being met by imports. Exports will also grow, primarily driven by increasing demand from Ukraine's major trading partners. Labor migrants' remittances will continue to rise as a result of both continued migration and the higher nominal incomes in the US dollar equivalent that migrants receive abroad. As a consequence, the current account deficit will gradually widen to 2.4% of GDP in 2020.

A key assumption underlying the macroeconomic forecast is that there is further progress in carrying out structural reforms, as envisaged by the current IMF-supported program and the new program with the IMF that is expected to be signed in 2020. These reforms are critical for ensuring macrofinancial stability and sustainable economic growth in the long term. Access to the official financing provided by the IMF and other international lenders will enable the government to obtain further financing from the international capital markets on reasonable terms.

In 2018, the NBU foresees disbursements of approximately USD 2 billion from the IMF, in addition to the loans pledged by the EU and the World Bank Group and a Eurobond placement by the government. These funds will have boosted international reserves to USD 20.7 billion (covering 3.5 months of future imports) by the end of 2018. Going forward, a rather moderate inflow of investment capital and debt capital into the private sector and further market borrowings by the government are anticipated. As a result, in 2019–2020, the balance of payments is expected to run a deficit amid peak repayments on external public debt, and international reserves will amount to around USD 20 billion.

The impact of fiscal policy on the economy in 2018 is considered to be pro-inflationary, mainly due to rising social spending, including an increase in pensions as a result of the reform of the pension system, coupled with a rise in public-sector wages and military salaries. Robust social spending will fuel an expansion in domestic demand but constrain the government's ability to finance development projects, as it will be necessary to keep the general government deficit in line with Ukraine's obligations to the IMF.

The general government deficit is thus projected to reach 2.1% of GDP this year, exceeding last year's level by an insignificant amount.

The approaching period of peak repayments on external public debt, amid growing interest rates on the international markets and the closure of the IMF-supported program in 2019, set the scene for a tighter fiscal policy in 2019 and 2020, which will have a dampening effect on both economic growth and inflation. In that period, the budget deficit is projected to be less than 1.5% of GDP under the baseline scenario, while the primary balance will continue to be positive.

Public and publicly guaranteed debt is expected to decrease as a percentage of GDP over the entire forecast horizon. This will be due to rapid growth in nominal GDP, relatively low exchange rate volatility, and a gradual decline in the external debt as the government makes large debt repayments.

Stalling reform is a major risk to the economy

The failure to carry out structural reforms, which are essential in maintaining macrofinancial stability and continuing cooperation with the IMF, poses a major risk to the implementation of the abovementioned scenario. A further delay in the implementation of Ukraine's commitments under the ongoing IMF-supported program reduces the likelihood that the country will receive the financing envisaged under the program. This increasingly narrows the country's window of opportunity to secure financing from the international capital markets, which is needed to make the peak public debt repayments. Therefore, receiving less than the planned amount of disbursements will complicate the financing of budgetary spending and harm devaluation and inflation expectations. The latter will also reflect the increase in uncertainty that is usually seen in the run-up to elections, which will be held next year.

Bringing the prices of natural gas for households to the market level creates a significant uncertainty for the inflation outlook. Delays in taking this action and changes in the calculation of the import parity price may cause the inflation trajectory to substantially deviate from the baseline scenario as a result of changes to administered tariffs.

Labor migration is a major risk for the baseline scenario. A further rapid outflow of workers from Ukraine will continue to exacerbate the mismatch between supply and demand in the labor market, which will be accompanied by wage growth and inflation, while also reducing economic potential.

Outside Ukraine, considering the above-trend growth in many countries in 2018 and 2019, the global economy is highly likely to overheat and slide into a downturn. The other likely drivers of recession include the looming threat of large-scale trade wars, which, if they materialize, will cause a slowdown in world trade and problems in China's financial system. The abovementioned factors have the potential to trigger a drop in global commodity prices, a shrinking of Ukraine's exports, and a decline in FX proceeds with an ensuing correction in the hryvnia exchange rate.

The risk of capital flight from emerging markets is also heightening. One of the potential triggers of this would be an overly rapid shift by advanced countries to tighter monetary policies. As a result, Ukraine and other emerging markets could be hit by capital flight.

Monetary policy will be sufficiently tight over the forecast horizon to bring inflation back to the target

Under the baseline scenario of the macroeconomic forecast, monetary policy conditions need to remain sufficiently tight to return inflation to the target range by the end of next year, and lower it to 5% in 2020. A tight monetary stance will help mitigate the described pro-inflation factors, given the increasing likelihood of the abovementioned inflation risks. Furthermore, tighter financial conditions for emerging markets were an additional argument in favor of raising interest rates as leading central banks normalized their monetary policy. As a result, on 12 July 2018 the Board of the National Bank of Ukraine decided to raise its key policy rate to 17.5% per annum, effective from 13 July 2018. If the probability that the abovementioned risks materialize continues to increase, or new significant threats to inflation and to macrofinancial stability arise, the NBU could continue to raise the key policy rate to the level necessary to bring inflation back to its target over a reasonable time horizon.

Current Economic Situation

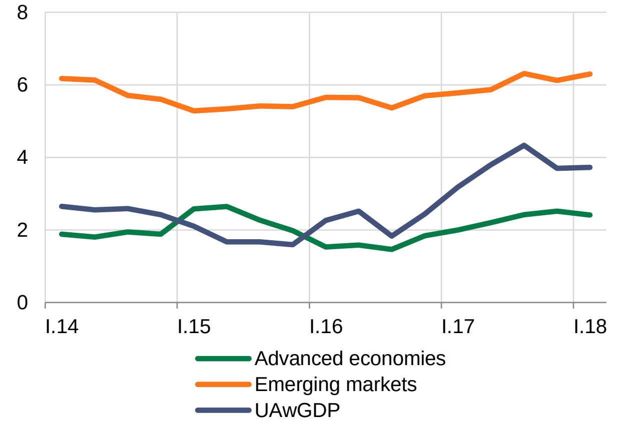
1. External environment

The external environment affecting the domestic economy continued to be benign, thanks to steady global economic growth and largely favorable prices on the international commodity markets. Most notably, the weighted average annual rate of economic growth in Ukraine's main trading partners in Q1 2018 remained at the previous quarter's level, owing to the sustained demand and investment in both developed and developing countries. At the same time, according to the data available, economic growth slowed somewhat in Q2, because of a contraction in global trade due to a higher risk of trade wars.

Buoyant global demand has kept commodity prices high. Meanwhile, there was a significant influence from market specific factors typical only of certain markets. These included unfavorable weather conditions for grain harvests seen in early 2018 in some regions, restrictions imposed on steel production by China, the high level of compliance with the OPEC+ agreement, and geopolitical conflicts. In Q2 2018, the ECPI Index[2], which is an aggregated index that tracks changes in global prices for Ukrainian exports, continued to grow at a rapid pace.

On the other hand, in Q2 there was a deterioration in the conditions on the global FX market for emerging market countries. This was primarily due to further monetary policy tightening by the Fed in response to the buildup of inflationary pressure in the United States. As a result, yields on government securities went up and the US dollar strengthened. This led to a lower investor interest in risky assets, and a depreciation in the domestic currencies of most emerging market countries.

Real GDP Growth Rates for Selected Groups of Ukraine's MTP Countries and Weighted Average of Real GDP Growth for Ukraine's MTP (UAwGDP), % yoy

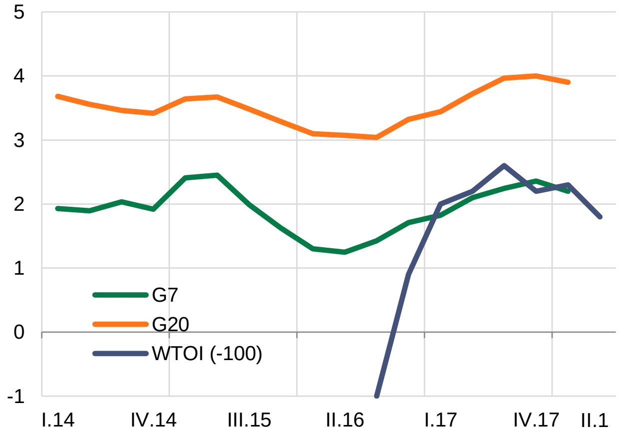


* Weights for aggregating the growth rates of selected groups of countries are calculated and normalized on the basis of PPP GDP data, provided by the IMF; for the indicator UAwGDP – on the basis of the foreign trade turnover of Ukraine with the respective countries.

Source: NBU staff estimates.

The global economy continued to grow steadily. As before, growth was supported by an expansion in demand, increasing investment, and a pickup in trade. Evidence for this came from the World Trade Outlook Indicator (WTOI), a leading indicator, which remained 1.8 pp above the trend in Q2 2018. The slight decline in the indicator on the previous quarter (by 0.5 pp), driven by fewer export orders, largely reflects a rise in economic instability due to a higher risk of trade wars. This is also reflected in lower business confidence, as estimated by Moody's. The growth in the service sector outpaced that seen in the industrial sector, reflecting the significant influence of stronger demand on the global economy.

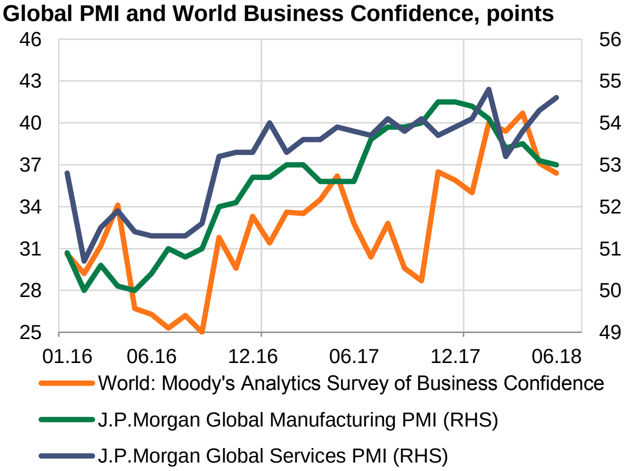
Real GDP Growth, by Selected Groups of Countries, % yoy, and World Trade Outlook Indicator (WTOI)



Source: OECD, WTO.

In the United State, economic activity picked up, on the back of improved productivity and better labor market conditions, which boosted household spending, and a rise in corporate investment due to improved business sentiment. On the other hand, the Purchasing Managers' Index (PMI) pointed to rapid growth in the private sector's operating expenses, with the average rate of growth in producer prices being the fastest since July 2013 (primarily as a result of higher prices for metals, especially steel, and for crude oil). The average growth in employment was quite significant over the last few months, while the unemployment rate was 4.0% in June. The easing of fiscal policy gave a strong impetus to economic growth. In view of inflation being close to the target, the Fed continued to increase interest rates, which led to US dollar appreciating on the global markets.

Global PMI and World Business Confidence, points



Source: Markit, Moody's.

After a sharp rise in late 2017, the Euro area's economic activity slowed. This was driven by insufficient investment into the expansion of production amid high rates of labor utilization. The

[2] Read more about the ECPI Index in the February 2016 Macroeconomic and Monetary Review.

employment rate is currently the highest since the onset of the economic crisis. At the same time, the capacity utilization rate exceeded the long-term average in the Euro area and in each of the largest economies.[3] The PMI in manufacturing also remained above its long-term average level, despite a slight deceleration due to higher costs. Domestic demand was steady, while external demand was influenced by improved economic conditions in MTP countries.

Economic growth in Central and Eastern Europe (CEE), the CIS, and Asia stabilized at almost the previous quarter's level, thanks to an improved business climate and sustained domestic demand, fueled by wage growth. On the other hand, in Q2 the leading indicators signaled a certain deceleration in these economies due to the contraction in foreign trade. The PMI of Russia's industrial sector dropped below 50 points in May for the first time in almost two years, due to a decline in procurement activity, coupled with slower growth in output and in the number of new orders. However, notwithstanding a deceleration in consumer demand, business expectations remained generally high.

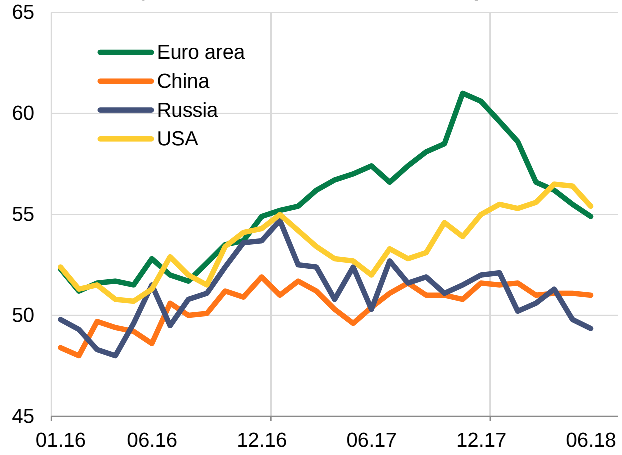
Inflation rates in the majority of Ukraine's MTPs are converging to their targets, thanks to their monetary policies and the global price environment. This raises the external inflationary pressure coming from Ukraine's MTPs, as expressed by the UAwCPI index[4], which rose by 0.2 pp to 2.7% yoy in Q2.

Global prices for Ukraine's key exports remained quite high. Steel prices were supported by strong demand from the US after its imposition of tariffs on steel and aluminum imports, which drove prices up markedly on the country's domestic market, and by demand from China as additional more stringent restrictive measures were applied to metals plants and petrochemical factories.[5]

In contrast, the steel import tariffs imposed by the US, in spite of there being certain exceptional provisions, added to the surplus of steel outside the US, which pushed prices down. Other factors lowering prices were: Ramadan being celebrated in Muslim countries (from 16 May to 14 June), the start of the rainy season in Eastern Asia (especially in Indonesia and the Philippines), and higher capacity utilization at metals plants in China (utilized capacity at 110 companies reached 88.9% in May). The latter drove an increase in volumes of iron ore imports (up by 2.9% yoy in May), which prevented iron ore prices from declining. Moreover, the rising tensions in trade between the US and China raised levels of uncertainty, making market participants less active.

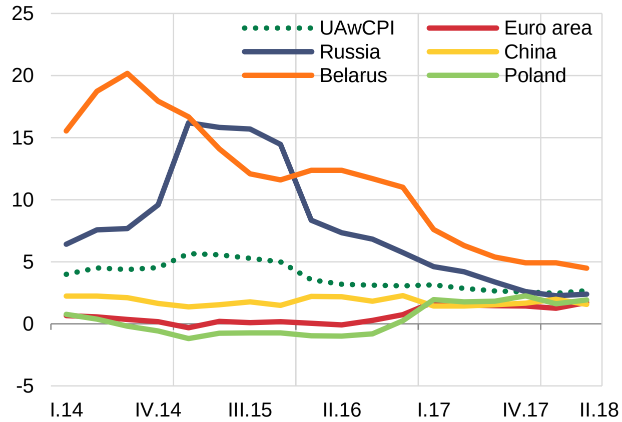
In early Q2 2018, there was a sharp rise in global wheat and corn prices. Wheat prices grew on sustained high global demand, particularly from Algeria, Egypt, South Korea, and North Africa, as well as on the adverse effect drought has had on the harvest of the 2018/2019 marketing year, primarily in Argentina, the US, and the EU. Additional factors included a long-term strike by railway employees in France, a shortage of grain transportation vehicles and the closure of some river routes, which limited supplies of wheat from Europe, and lower yields of winter crops in Australia in the 2018/2019 marketing year (down by 10% compared to the average volume over the past ten years) as a result of a decrease in crop areas. Corn prices have also increased since the start of

Manufacturing PMI for Selected Economies, points



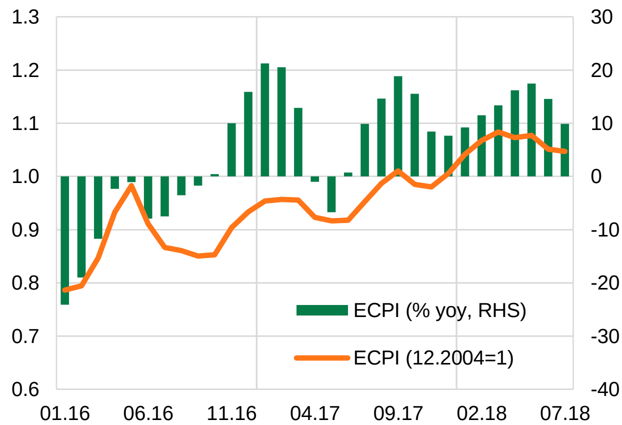
Source: IHS Markit.

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



Source: NBU staff estimates.

External Commodity Price Index (ECPI)



Source: NBU staff estimates.

[3] https://www.ecb.europa.eu/press/key/date/2018/html/ecb.sp180619.en.html.

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

[5]In particular, in Jiangsu province, China's second largest producer of steel, another three metals companies with total capacity of 4.25 million tons per year are to be closed, and steel output at other plants will be cut by approximately 15%. At the same time, metals companies in Tangshan prefecture-level city continue to limit their output of steel products.

Q2 on the back of limited supply and unfavorable weather. Poor weather forced US farmers to postpone sowing corn several times, causing a slowdown in sowing, which was 45% lower than last year. Brazil, the world's second largest corn exporter, expected lower corn yields from its second harvest. Meanwhile, robust demand was maintained by China, Iran, Jordan, and South Korea.

However, grain prices started to decline in the latter half of the quarter, with corn prices falling especially quickly. This price trend was due to a gradual improvement in estimates of the new grain harvest and the expected negative effect of retaliatory tariffs imposed by China on imports of soy and corn from the US, as well as ones by Mexico on imports of US corn.

In Q2, crude oil prices rose temporarily above their four-year high of 80 USD/bbl, being highly sensitive to geopolitical events and trade wars. During the quarter, price growth was mainly driven by:

– increased tensions between the US and Russia over the situation in Syria, and new US sanctions against some large Russian companies and businesspeople in the oil industry
– persisting tensions between Iran and the US, as the US abandoned the Iranian nuclear program agreement and imposed sanctions against Tehran
– high level of compliance with the agreements between the OPEC+ countries, and oil output cuts in Venezuela, Nigeria, Qatar, Kuwait, the UAE, and Libya.

Additional factors included an increase in China's strategic reserves and a decrease in the total and strategic reserves of oil and oil products in the US.

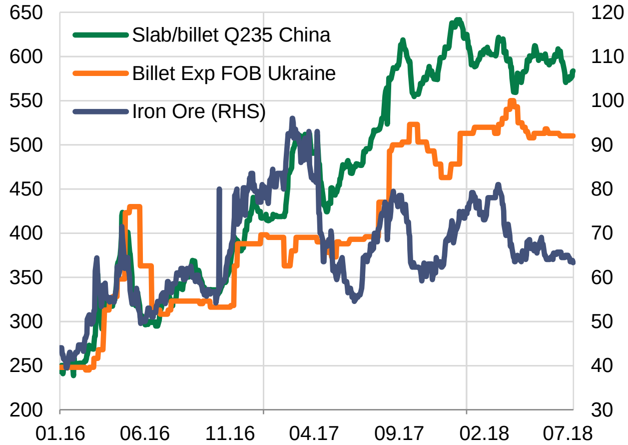
On the other hand, greater oil production at shale deposits in North America and an expected OPEC+ decision to increase oil production (production was increased by 1 million barrels per day according to a decision taken on 22 June) led to a certain price correction in late June, which was, however, offset by the escalation of the trade confrontation between the US and China. On 15 June the US announced it would impose 25% penalty tariffs on imports from China worth a total of USD 50 billion, effective from 6 July. In turn, China announced its intention to introduce additional tariffs of 25% on US energy imports, including oil, natural gas, and coal, in September. This caused panic buying of US oil, thus pushing up prices for WTI oil, which also affected prices of other types of oil.

An increase in inflationary pressure and an expected interest rate hike by the Fed sent yields on US government securities soaring, which reduced equity market volatility and made risky financial assets less attractive for investors.

Even despite the slowdown in the Euro area's economy and protectionism rising across the world, strong global economic growth continued to support global equity indices. However, US indices were pressured by geopolitical threats, inflation risks (primarily in the US), and investors' expectations of faster monetary policy tightening by the Fed. As a result, the number of expected interest rate increases envisaged in Fed funds futures grew from three to four this year, while yields on 10-year US Treasury bonds exceeded the psychological threshold of 3% per annum.

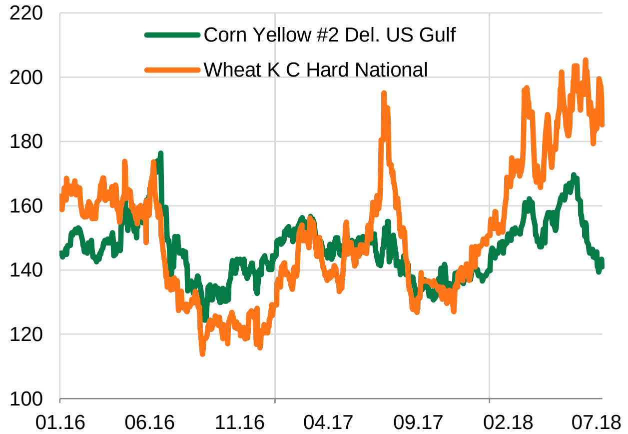
Global financial market conditions became less favorable for emerging market countries, primarily due to:

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



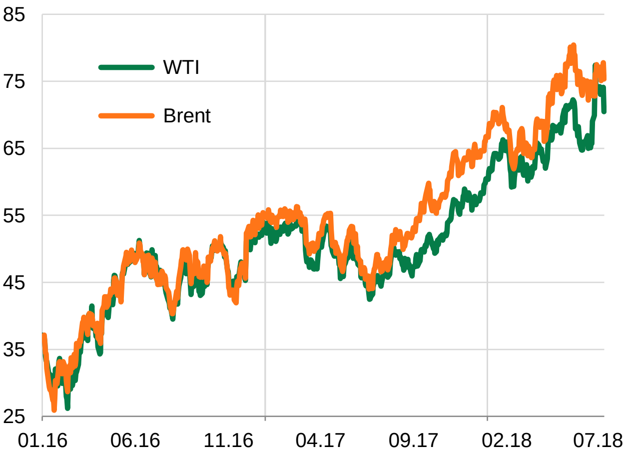
Source: Thomson Reuters Datastream.

World Grain Prices, USD/MT



Source: Thomson Reuters Datastream.

World Crude Oil Prices, USD/bbl



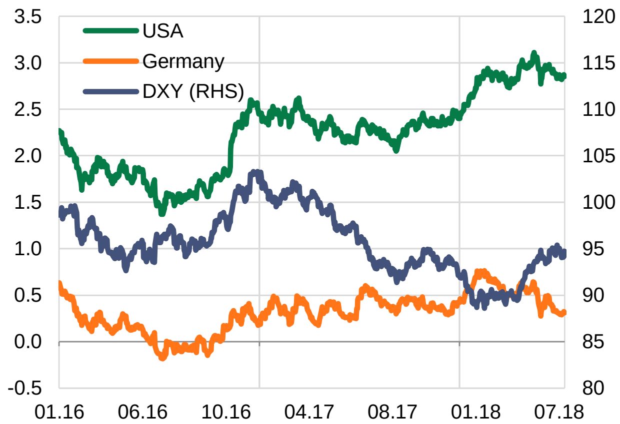
Source: Thomson Reuters Datastream.

– investors' expectations of faster monetary policy tightening by the Fed, which causes a decrease in global liquidity and capital outflows from assets with relatively higher risk levels
– rising tensions between China and the US (emerging market countries supply intermediate goods for producing finished goods that are re-exported by the said countries)
– US dollar strength, which puts pressure on the currencies and assets of these countries, as the US dollar is the intermediary currency in the so-called carry trade operations. In particular, the Bloomberg index, which measures returns from carry trades with the currencies of eight emerging market countries, had by 19 June 2018 declined by 8.9% since the start of Q2, which could be the worse quarterly result since 2011.

The MSCI Emerging Markets Index retreated amid capital outflows. An additional factor was a plunge in the Russian stock market after the US Department of the Treasury expanded sanctions that limit access to international capital markets. This particularly concerned purchases of Russia's sovereign debt obligations by foreign investors.

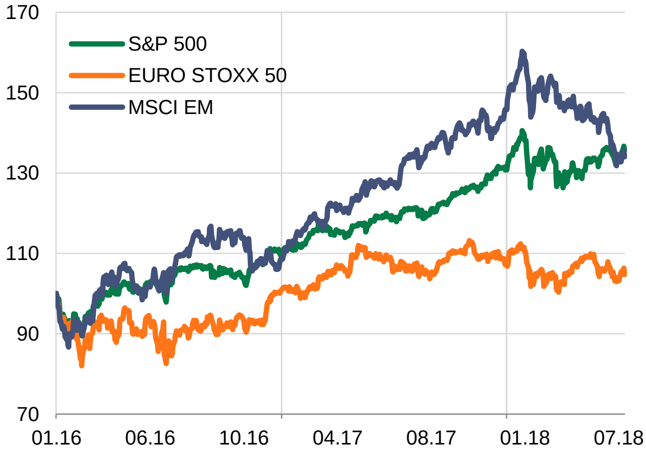
Emerging market sovereign bond prices fell, sending yields and risk premiums higher accordingly (against the background of larger foreign capital outflows from bonds as compared to equities, as estimated by the Institute of International Finance (IIF)). The US dollar appreciation on global markets exerted additional pressure on domestic currency bonds. As a result, most emerging market countries saw their domestic currencies weaken in Q2.

US and Germany 10-Year Government Bonds Yields



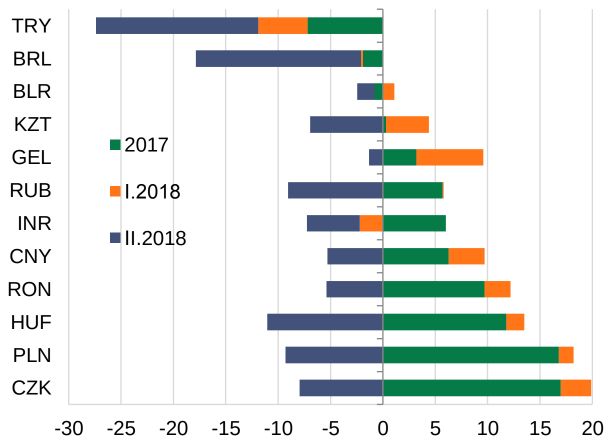
Source: Thomson Reuters Datastream.

Global Equity Benchmarks, 01 Jan 2016 = 100



Source: Thomson Reuters Datastream.

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

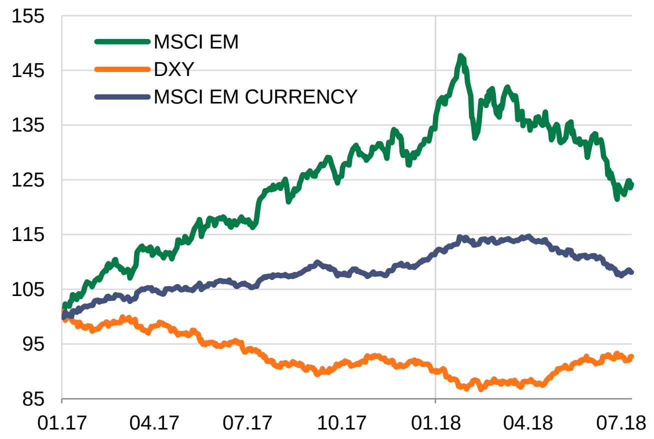


Source: Thomson Reuters Datastream.

Box: Consequences of worsened financial conditions for emerging market countries: why some countries were more vulnerable than others

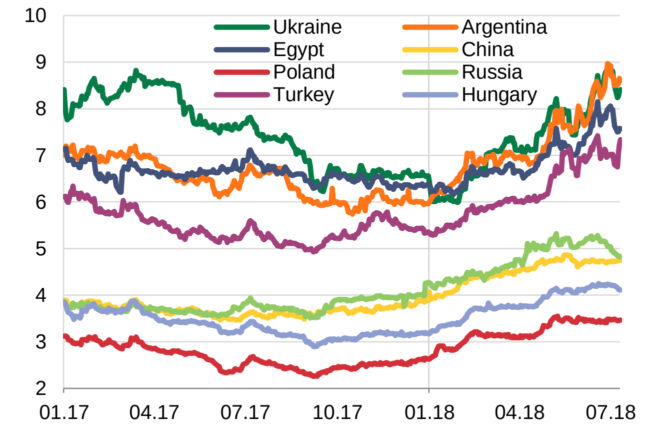
Following a period in which the global financial markets were favorable for emerging market countries due to low interest rates and ample liquidity, financial conditions deteriorated markedly in Q2 2018. Capital inflows to emerging market countries dried up since mid-April, while domestic currencies of the majority of these countries depreciated against the US dollar. All the same, these counties were generally better prepared to withstand a worsening of external conditions than they were in previous periods. This is a result of the prudent macroeconomic policies being conducted by most emerging market countries, including under the inflation targeting framework, which, among other things, implies a flexible exchange rate regime, the enhancement of the central bank's institutional independence, the resilience of the financial system, and the absence of fiscal dominance.

Global Equity Indexes, 01.01.2017=100



Source: Thomson Reuters Datastream.

J.P. Morgan Emerging Markets Bond Index EMBI+

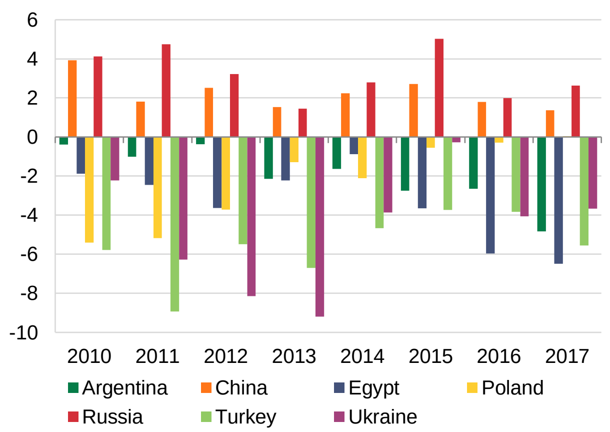


Source: Bloomberg.

Therefore, despite the fact that the forecast of capital inflows to emerging market countries for 2018 has been revised downwards[6], the IIF still expects them to remain close to the previous year's level (USD 1.2 trillion). According to the IIF, the negative impact of rising interest rates on capital flows will be in part neutralized by sustained robust growth in emerging markets, as well as trade activity backed by high commodity prices (read more in the box *Financial Conditions for Emerging Markets* in the April 2017 Inflation Report, pages 13–14).

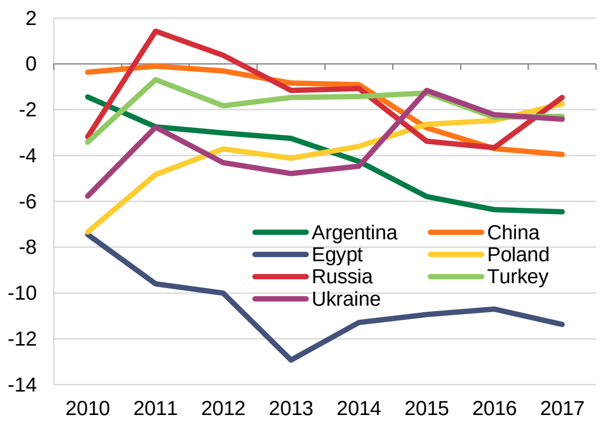
However, some countries, such as Argentina and Turkey, have proved to be more vulnerable to the worsening global financial conditions. Until recently, Argentina had enjoyed a great deal of confidence among foreign investors, despite the country's significant macroeconomic imbalances, perennial political instability, and loose fiscal and monetary policies. Its credibility was based on a number of reforms implemented since late 2015. These included the cancellation of currency controls and trade restrictions, the implementation of inflation targeting and a floating exchange rate, and the settlement of disputes with foreign private creditors. Argentina returned to the global bond market after a 15-year absence caused by its debt crisis of 2001. In April 2016, the country placed sovereign Eurobonds worth a total of USD 16 billion on the international capital markets. In

Current Account Balance of Selected Emerging Market Countries, % GDP



Source: IMF WEO, April 2018.

State Budget Balance of Selected Emerging Market Countries, % GDP



Source: IMF WEO, April 2018.

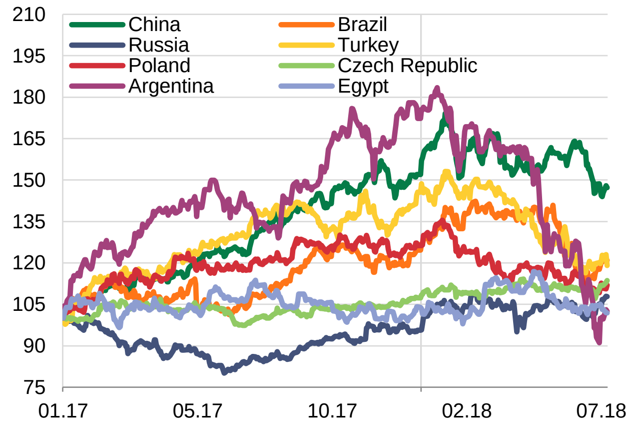
June 2017, the country issued 100-year securities worth a total of USD 2.75 billion at a coupon rate of 7.25%. The interest of

[6] According to the IIF, new investment in the bonds of emerging market countries will fall to as little as USD 255 billion in 2018, compared to USD 315 billion in 2017. However, an increase in foreign direct investment will partially offset this lower interest in bonds. In addition, despite the fact that the amount of capital inflow remained unchanged compared to the previous year, the ratio of GDP to capital inflow in developing countries will decline to 3.7% in 2018, down from 4.2% in 2017.

foreign investors was also supported by the start of a large-scale public-private partnership program (USD 26.5 billion), which envisaged launching more than 60 projects in the transportation, energy, mining, communications, healthcare, and education sectors, as well as the provision of guarantees and other measures to reduce risks for foreign investors.

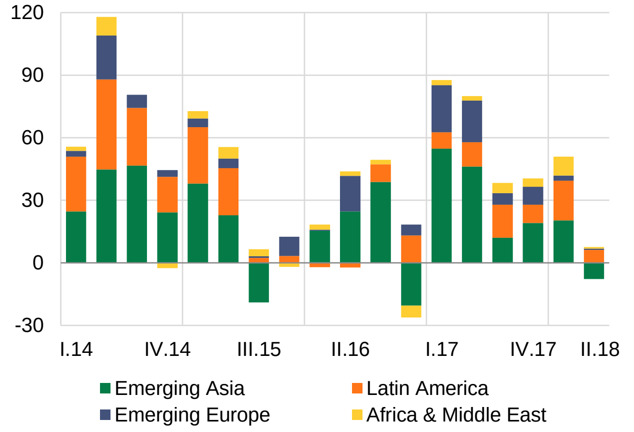
But since December 2017, Argentina started to lose the trust of international investors due to policy mistakes (particularly, as the central bank revised inflation targets[7] and lowered the key rate amid high inflation), which provoked doubt about the government's ability to curb inflation and conduct structural reforms. The situation worsened as the US dollar strengthened and interest rates in the US rose. The introduction of a capital tax on foreign investors, which came into effect in April 2018, was an additional factor.

MSCI Emerging Market Index, Selected Countries 01.01.2017=100



Source: Thomson Reuters.

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

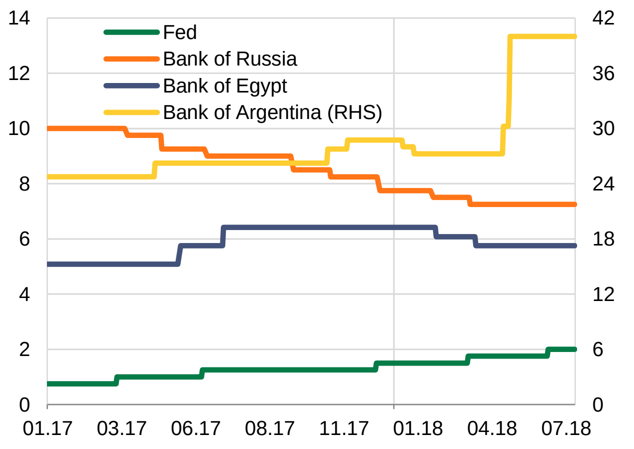


* Q2 covers data till April.
Source: Institute of International Finance.

An outflow of foreign capital from Argentina triggered a sharp depreciation of the peso. The central bank of Argentina responded with massive foreign exchange interventions (international reserves declined to USD 56 billion in mid-May from almost USD 64 billion at the start of the year) and three policy rate hikes since the end of April 2018 (to 40%). In addition, Argentina requested financial support from the IMF. On 20 June, the IMF Board of Governors approved a standby credit facility agreement worth USD 50 billion, of which USD 15 billion was granted immediately.

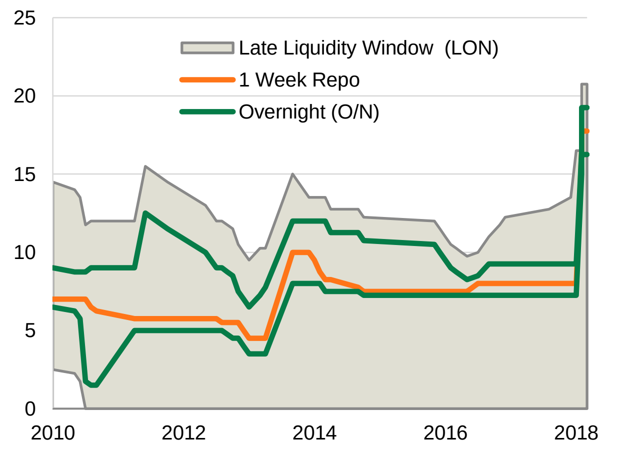
Argentina is not the only country to have faced excessive exchange rate fluctuations and sudden turnarounds in investor sentiment. Turkey is also among these countries. Although some indicators show that Turkey has a more stable macroeconomic environment, geopolitical risks, the central bank's inability to rein in high inflation, and the buildup of fiscal imbalances have driven capital out of the country.

Key Interest Rates of Emerging Market Countries and FRS, %



Source: Thomson Reuters Datastream.

Operational framework of the TCB's monetary policy, %



Source: Central Bank of the Republic of Turkey.

The relatively low degree of the Turkish central bank's institutional independence was also a major drag on its activity. Under these conditions, the country used an artificially complicated monetary policy framework, envisaging five interest rates that are changed diversely. This complicated system does not allow market expectations to be managed effectively, or the trends of fundamental indicators to be influenced. Since 2016, an increase in fiscal stimuli accompanied by a loose monetary policy led to persistently high inflation, with the central bank unable to bring inflation back to its target. This meant that the Turkish lira was

[7]In December 2017, the central bank of Argentina raised its inflation targets to 15% for 2018 (from 8–12%) and 10% for 2019 (from 5%). This undermined trust in the central bank's ability to combat inflation, leading to a jump in inflation expectations and a rapid weakening of the domestic currency.

one of the few emerging market country currencies to depreciate in 2017. Since the start of 2017, the central bank has applied a late liquidity lending rate in order to tighten its monetary policy, amid rising inflationary pressures and the depreciation of the lira.

In 2018, the situation deteriorated on the back of a general decline in interest in emerging market countries. Due to political pressure, in April the central bank raised its interest rate for late liquidity window operations to 13.5% from 12.75%, later increasing it to 16.5% per annum. At the same time, the central bank employed a broad system of reserve requirements in order to influence the exchange rate. In particular, it used a Reserve Options Mechanism, which allows banks to cover a portion of required reserves with foreign currency or gold. To support the exchange rate, the central bank in May lowered the upper limit of foreign currency resources in this mechanism to 45% from 55%, which released around USD 2.2 billion in foreign currency liquidity. In addition, the central bank made daily sales of foreign currency on the forward market in fixed amounts depending on the term (from USD 100 million to USD 250 million for six months and one month, respectively). Only in late May was a decision taken to simplify the operational framework of the country's monetary policy in order to improve its predictability. By early June the one-week repo rate was declared as the central bank's key rate, and raised to 17.75% from 16.5% per annum.

The current financial turmoil in Argentina and Turkey show that floating exchange rates alone do not necessarily minimize the adverse effects of external shocks, while delays in reform implementation leave a country vulnerable to changes in investor sentiment. The insufficient independence of a central bank in its monetary policy decisions leads to an accumulation of external and internal imbalances and reduces its credibility in the eyes of investors. Therefore, countries that are sensitive to a deterioration in global financial conditions should maintain a sufficient level of credibility among foreign investors by conducting a prudent fiscal policy and a rather tight monetary policy, and also carry out structural reforms aimed at establishing a sound macroeconomic environment.

2. Domestic Economy

2.1. Inflation Development

In Q2 2018, consumer price inflation slowed as expected (to 9.9% yoy in June). Inflationary pressure, however, remained high, with inflation still above the targets set in the Monetary Policy Guidelines for 2018 and the Medium Term (7.0% ± 2 pp as of the end of Q2 2018).

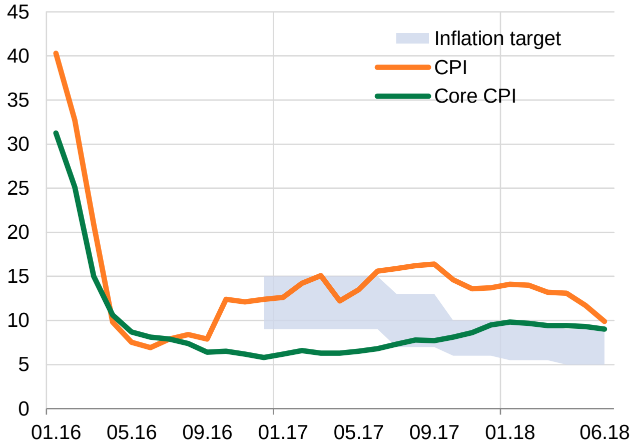
The continued decline in inflation in annual terms was mainly the result of a sharp slowdown in food price inflation. More specifically, as anticipated, the effects of the temporary supply factors that kept consumer price inflation high in H2 2017 and in early 2018 are gradually fading. This occurs amid a more ample domestic and imported supply of food.

In addition, administered prices grew at a slower pace than at the beginning of the year, as the growth in tobacco prices decelerated and public utilities rates increased at a more moderate clip.

An important factor was a tightening of monetary policy by the NBU, which manifested itself primarily in a strengthening of the hryvnia exchange rate from the end of January 2018.

At the same time, as in previous months, inflationary pressure persisted as a result of a further increase in production costs, including labor costs, and a rapid recovery in consumer demand. Underlying inflationary pressure thus continued to be significant, despite there being a slight slowdown in core inflation.

Inflation Measures, % yoy

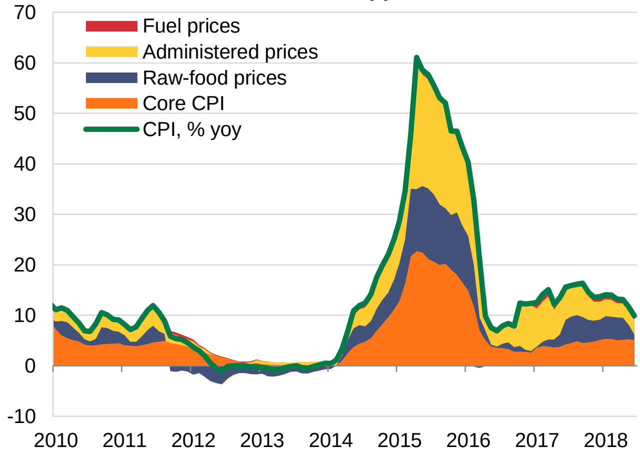


Source: SSSU.

Core Inflation

Core inflation moderated in Q2 2018 (to 9.0% yoy in June, from 9.4% in March) and came in somewhat lower than the NBU had predicted. The overall underlying inflationary pressure remained strong, even though alternative measures of core inflation[8] show that the pressure gradually subsided in late Q2. This was the result of a strengthening in the hryvnia NEER, among other things, which helped slow the rise in the cost of imported goods.

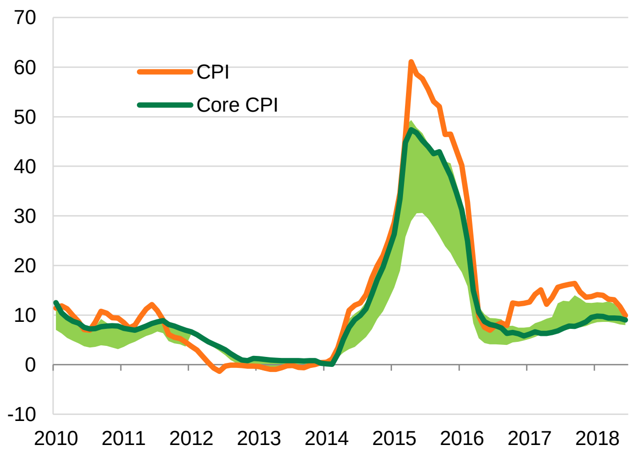
Contributions to Annual Inflation, pp



Source: SSSU, NBU staff estimates.

In Q2 2018, the inflationary expectations of most groups of respondents, apart from banks, slightly improved, thanks to a drop in the ongoing inflation. In addition, the improvement of inflationary expectations was helped by favorable conditions on the FX market. The business outlook survey conducted in Q2 2018 showed that businesses see the hryvnia exchange rate as having a significantly weaker impact on consumer price inflation. Moreover, the respondents pointed out that the impact of the prices for raw materials and supplies, labor costs, and the cost of energy had weakened, despite accelerating global oil prices.

Main Inflation Trends, % yoy



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

In Q2 2018, the growth in the cost of services decelerated (to 14.0% yoy). For the most part, the deceleration in the prices for services was the result of a sharp slowdown (to 28.7% yoy) in the growth of the dwelling maintenance costs due to a high comparison base. Along with that, movie theaters, personal care services, and healthcare showed prices rising at a slower pace, as the growth in prices for the imported components of prime cost decelerated. Growth in taxi fares also decelerated amid slower growth in fuel prices. To the upside, mobile phone tariffs recorded higher growth rates, driven, among other things, by the launch of 4G internet in Ukraine. The pick-up in consumer demand drove a

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

faster increase in the cost of some services (tourism, painting and decorating, tiling, dry cleaning, cable TV, etc.).

The growth in prices for processed foods decelerated over Q2 (to 11.2% yoy). This was primarily due to the slower growth in raw material prices amid increased imports, lower global prices of certain foods, and a strengthening of the hryvnia against the currencies of Ukraine's MTPs. In particular, meat products (with imports up by 43.0% yoy in H1), sunflower oil (with the FAO vegetable oil price index down by 9.9% yoy in June), rice, coffee, and tea recorded slower rates of price growth. At the same time, the growth in butter prices picked up (to 17.0% yoy) against the backdrop of large butter export volumes (up by 40.5% yoy in H1).

The non-food prices continued to grow moderately (by 4.1% yoy in June compared to 4.0% yoy in March) but remained under continued pressure from robust growth in consumer demand. As the bulk of these goods come from imports, the modest pace of their price growth has been driven by benign FX market conditions year-to-date. There was a slowdown in the rise of non-food prices (to 4.7% yoy), apart from prices of clothing and footwear.

The growth in domestic retail prices for clothing and footwear slightly accelerated (to 2.5% yoy), despite increased imports and a strengthening of the hryvnia NEER. This reflected robust consumer demand, specifically the rapid growth of households' final consumption expenditure on clothing and footwear. Another contributor was an upturn in the domestic production of clothing and footwear (their sales increasing by 20.8% yoy in January–May), accompanied by accelerated price growth in textile manufacturing (11.6% yoy). The acceleration in clothing and footwear prices was also attributable to the growth in import prices for new products. Along with this, the influence of the latter factor was moderated by an increased share of cheaper clothing in total imports.

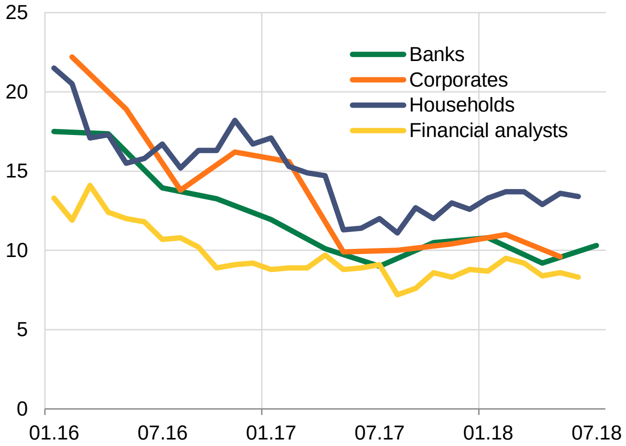
Non-Core Inflation

Over Q2 2018, non-core inflation decelerated dramatically, to 10.3% yoy in June from 17.9% yoy in March, across most of its components. Prices dropped even more quickly than the NBU projected, led by slowdown in raw food prices.

The growth in raw food prices slowed substantially in Q2, to 5.2% yoy in June. This was a consequence of, among other things, the waning effect of temporary supply factors, which had put upward pressure on the prices of these goods in preceding periods. The relatively favorable weather compared to last year led to an increase in the harvest of fruit and vegetables. Moreover, high domestic prices for foods and a strengthening of the hryvnia boosted food imports, while the prices of certain foods (such as bananas) reflected a drop in global prices. As a result, fruit and vegetable prices decreased compared with a year ago by 0.2% yoy and 12.9% yoy respectively, with the decrease partly driven by the prices of certain borsch vegetables, which were down by 14.1%, and by fruit prices, in particular bananas and citrus fruits (by 17.0% yoy and 10.3% yoy respectively). Moreover, the normalized annual growth rates of vegetable and fruit prices were below their long-term averages – more evidence that inflationary pressure has eased considerably. Also, the decline in sugar and buckwheat prices continued from the previous quarter.

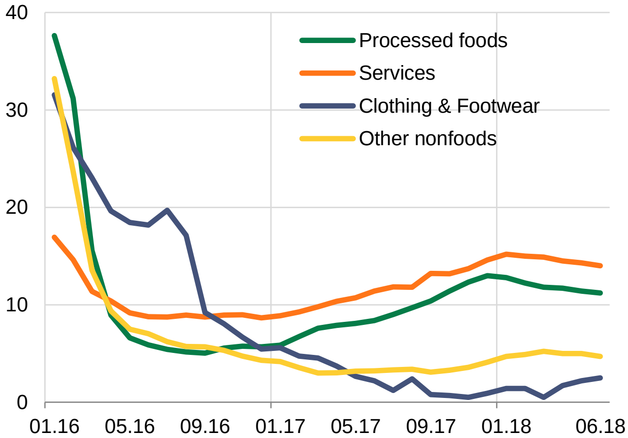
A downward trend in global prices for meat and an expansion of imports put the brakes on the growth of meat product prices in Ukraine, slowing it to 14.9% yoy. The annual change, however, is

Inflation Expectations for the Next 12 Months, %



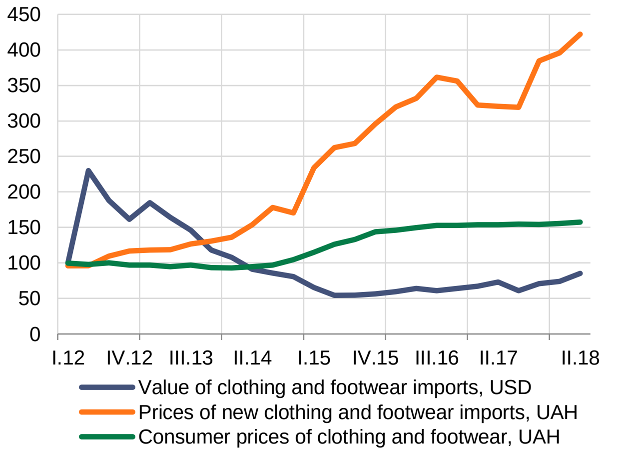
Source: NBU, GfK Ukraine.

Main Components of Core CPI, % yoy



Source: SSSU, NBU staff estimates.

Imports and Prices for Clothing and Footwear, 01.2012=100 sa



Source: SFS, SSSU, NBU staff estimates.

still high. Bread prices also continued to rise more rapidly than they have on average, which can be attributed to higher prime costs, inflated by the rising costs of grain and higher wages. Egg prices continued to grow rapidly, by 53.8% yoy, spurred by large export volumes, which have brought domestic prices closer to world prices for these goods, as sellers are competing in external markets.

Consumer prices for milk recorded further rapid growth, by 16.4% yoy, boosted by the growth of world dairy prices on the background of large export volumes. Furthermore, in 2018, the share of the more expensive high-grade and extra-grade milk in total milk production expanded, propelling a more rapid price increase in June, of 14.2% yoy, in the production of milk and dairy products, despite a drop in purchase prices of milk. At the same time, given that milk and dairy product prices in Ukraine were virtually in line with those in neighboring countries, the growth of these prices should soon be consistent with the long-term trend.

Overall, the pressure on food prices from producer prices[9] slightly abated. Most specifically, the price growth in the production of foods, beverages, and tobacco slowed to 9.6% yoy, primarily due to an expansion of imports, the downward trend in the world prices of certain raw foods, and a slower growth in selling prices for some agricultural products (the selling price index for animal breeding products fell in June 2018, to 8.1% yoy). Accordingly, the growth in meat product prices decelerated to 13.6% yoy, while the price growth in the production of beverages slowed to 17.1% yoy.

Administered prices grew less rapidly, by 13.2% yoy. For instance, the expected slowdown in the price growth of tobacco products was driven by the waning negative effects of distribution problems occurring last year. The growth in prices for postal services decelerated as well. As the increase in utility tariffs was more moderate than a year ago, the prices of utility services grew at a slower pace, by 4.7% yoy. This outweighed a further increase in the cost of railway transport after passenger tariffs were increased on 30 May 2018, and higher costs of air transportation.

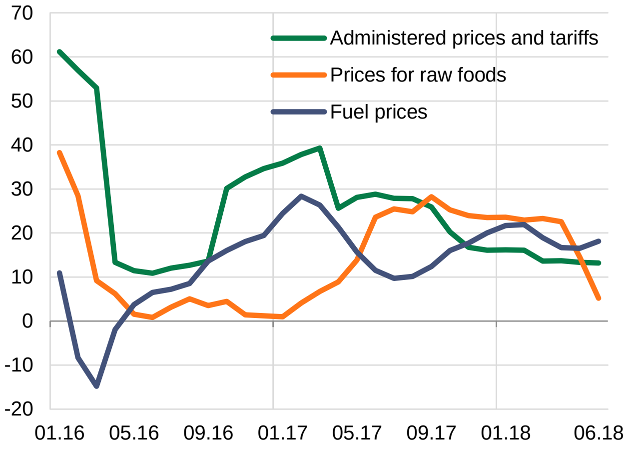
The growth in fuel prices slowed markedly in Q2, to 18.1% yoy, mainly on the back of benign FX market conditions. This significantly reduced the tax burden on fuel prices (since the excise tax rate on fuel is calculated in euros). However, these prices came in above the projection, due to a sharper than expected increase in global oil prices.

Other Measures of Inflation

In Q2 2018, the producer price index accelerated. In June, for instance, prices in the mining industry increased faster, by 25.0% yoy. In particular, a low comparison base contributed to the revival of price growth in metal ore mining, by 29.2% yoy. Apart from that, world market price trends drove a substantial acceleration of price growth in the production of crude oil and natural gas, to 18.0% yoy. Price growth sped up in coke and petroleum production, to 25.0% yoy. Higher global energy prices also led to the acceleration of cost growth in the of electricity, gas, steam, and air conditioning supplies, to 28.1% yoy.

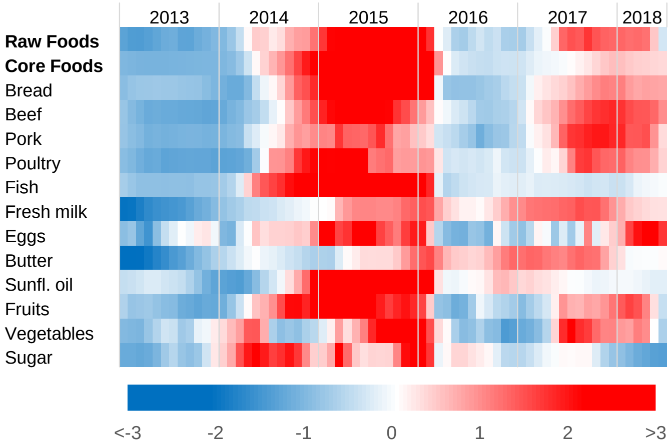
Prices i construction works kept growing rapidly, by 25.0% yoy in May, spurred by higher production costs – primarily wages. Furthermore, price growth for intermediate goods accelerated as well, to 17.6% yoy from 15.0% yoy in March. This is in line with the

Main Components of Non-Core CPI, % yoy



Source: SSSU, NBU staff estimates.

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

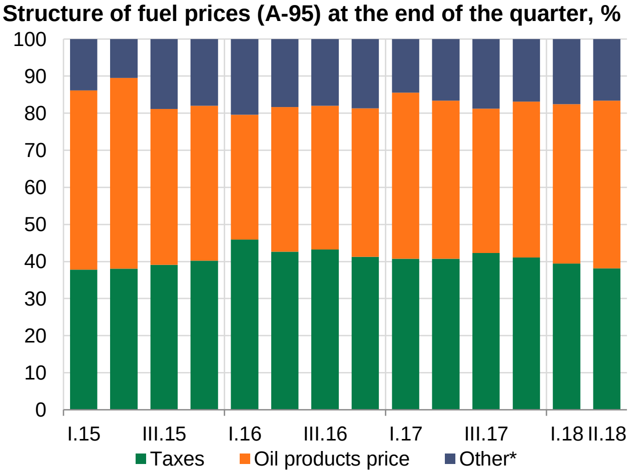


* Data are normalized by subtracting the mean change and dividing by standard deviation. Data for 2015 is excluded from mean and STD calculation. *See more at* stlouisfed.org.

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

Source: SSSU, NBU staff estimates.

Structure of fuel prices (A-95) at the end of the quarter, %



* Includes administrative costs, logistics services, trade margins, etc.

Source: Nefterynok, Thomson Reuters Datastream, NBU staff estimates.

[9] According to the NBU, price changes in the production of food, drinks, and tobacco products 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.

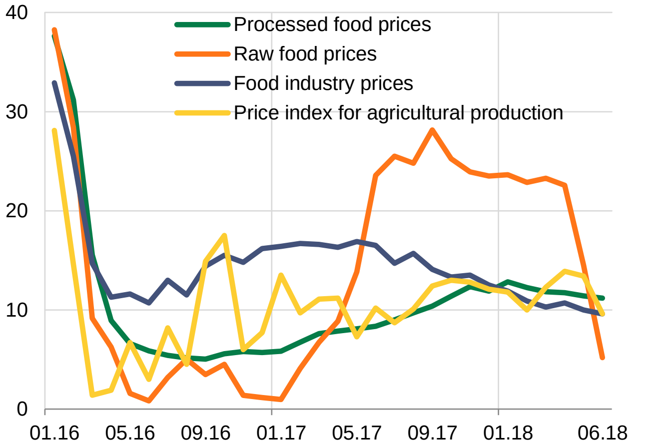
results of the Business Outlook Survey in Q2 2018. Among other things, companies anticipate that the pressure on producer prices from production costs will remain high. The percentage of respondents who over the next 12 months expect an increase in prices for raw materials, supplies, and services purchased to meet production needs, remained high at 87.5% in Q2.

At the same time, price growth in the metallurgy slowed slightly, to 18.6% yoy, owing to, among other things, lower iron ore prices in previous periods. In addition, a strengthening of the hryvnia slowed the growth in investment goods prices to 14.6% yoy.

Tariffs for the railway freight transportation of chemical cargoes[10] dropped in Q1 2018 by 35%, or by 25.3% yoy, contributing to slower price growth in June, by 8.5% yoy, in the production of chemicals.

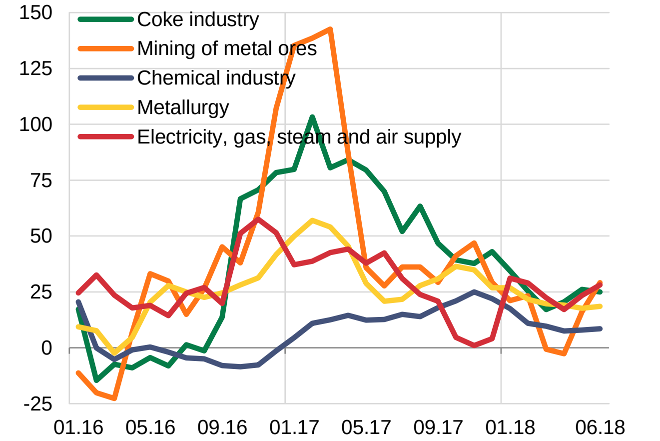
In Q1 2018, the GDP deflator decelerated, as expected. This was attributable to, in particular, a decline in consumer and industrial inflation and the slower growth in tariffs for railway freight transportation and postal and telecommunication services. Simultaneously, the drop in the GDP deflator was partially restrained by rising production costs (wages in particular) and robust external demand. The NBU expects a further decline in the GDP deflator in Q2 2018, largely due to slower increases in consumer and agricultural prices.

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



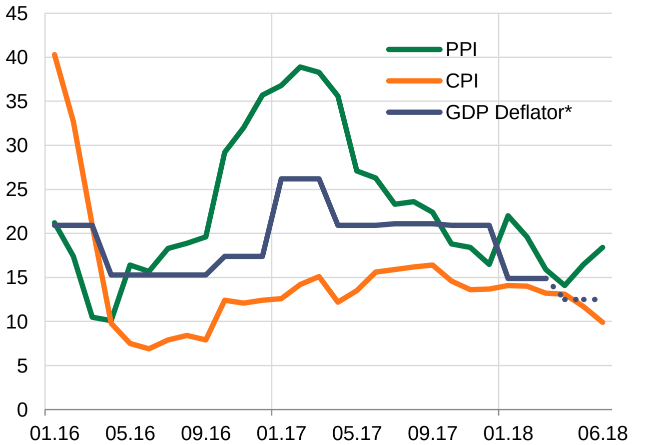
Source: SSSU, NBU staff estimates.

Producer Price Indexes in Select Industries, % yoy



Source: SSSU.

Select Inflation Indicators,% yoy



* Data for Q2 2018 – according to the NBU staff estimates
Source: SSSU.

[10] Paintwork materials, gum, oxides, hydrocarbons, etc.

2.2. Demand and Output

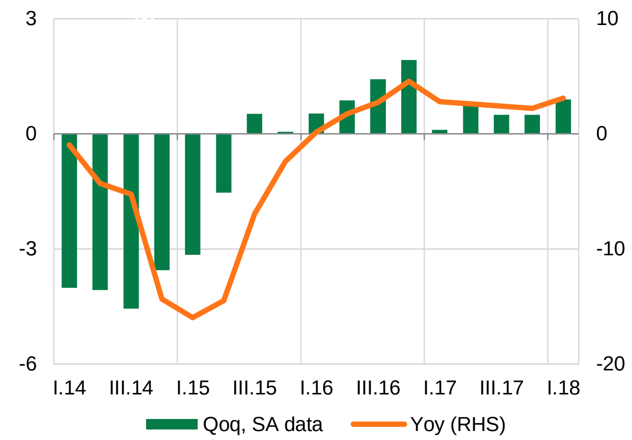
In Q1 2018, real GDP growth accelerated to 3.1% yoy and exceeded the NBU forecast of 2.3% yoy that was published in the April 2018 Inflation Report.

As in 2017, domestic demand (consumption and investment) was the main driver of real GDP growth. Higher real wages and pensions, along with improved consumer confidence, supported the sustained growth of consumer demand. Meanwhile, general government final consumption expenditure decreased, reflecting the rather restrained fiscal policy at the start of 2018. The growth in investment accelerated for the third straight quarter, due to businesses' improved expectations and a further improvement in their financial performance.

Exports of goods and services declined in Q1 2018, mainly driven by a drop in exports of grain and oilseeds. Imports fell significantly as well, primarily due to decreased fuel. On balance, the negative contribution of net exports shrank to 2.3 pp.

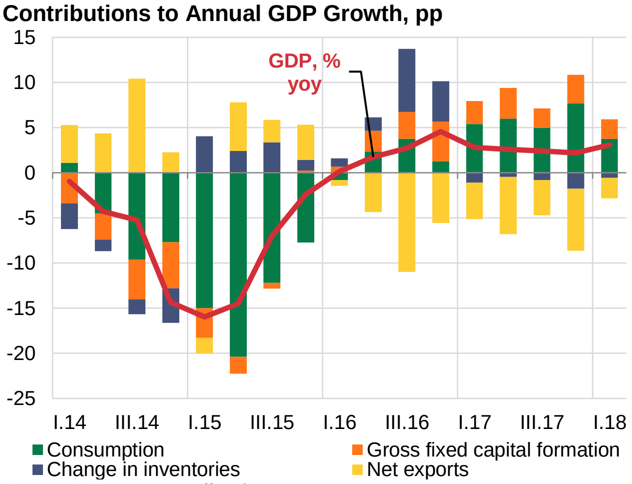
In Q2 2018, Ukraine's economy continued to grow. Companies' high business expectations added to evidence of steady growth in investment activity. The further increase in household income, including growth in military pensions, wages, and remittances, spurred consumer demand. Overall, external market conditions remained favorable. As in Q1, another contributor to economic growth was the comparison base effect of the disruption of trade with the NGCAs, and the seizure of enterprises in those areas last year. As a result, gross value added in the metals industry, mining industry, and energy sector, which saw the most damage from the seizures, grew – despite being somewhat slowed by repairs at several large enterprises of the mining and metals industries in Q2. Overall, real GDP growth in Q2 2018 is estimated at 3.2% yoy.

Real GDP, %



Source: SSSU.

Contributions to Annual GDP Growth, pp



Source: SSSU, NBU staff estimates.

Aggregate Demand

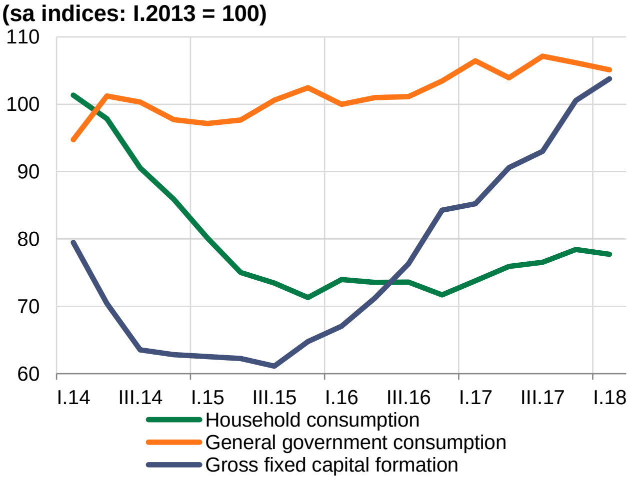
In Q1 2018, real GDP growth accelerated to 3.1% yoy and 0.9% qoq sa.

As last year, domestic demand was a major contributor to real GDP growth. However, the growth of final consumption expenditures decelerated slightly (to 4.0% yoy), driven by both private and public sector spending.

Households' consumer demand was fueled by the further increase in income and a rise in consumer confidence. As a consequence, the growth of final consumption expenditure of households continued to be strong, at 5.6% yoy, despite there being a slight slowdown compared with the preceding quarter.

In terms of household final consumption expenditure by purpose, spending on clothing and footwear, furnishings, and health increased rapidly, while expenditures on food and non-alcoholic beverages slowed sharply. Such differences in household consumption patterns can be attributed to changes in the relative prices of these groups of goods. The prices of consumer durables and clothing and footwear recorded modest growth, while prices for food and non-alcoholic beverages increased rapidly (in Q1 2018, the changes in the respective deflators were 4.7% yoy, 1.5% yoy, and 18.3% yoy).

Investment and Consumption (sa indices: I.2013 = 100)



Source: SSSU, NBU staff estimates.

Meanwhile, general government final consumption expenditure decreased by 1.4% yoy, reflecting a rather restrained fiscal policy in early 2018. Accordingly, GVA in education grew substantially more slowly, GVA in healthcare resumed decline, and GVA in public administration continued to fall.

Investment growth accelerated for the third quarter in a row (the increase in gross fixed capital formation sped up to 17% yoy). Its contributors were the improved business expectations of companies and the further improvement of their financial performance, as companies mainly used their own funds for capital investment[11] (company funds represented 76.2% of funding sources). Along with this, the share of capital investment financed by bank loans increased compared to last year, to 8.4%, while the share of budget funds in the financing of investment fell sharply, to 4.2%.

Compared to previous years, the growth of investment in Q1 2018 was to a lesser extent related to ramped up construction: the share of capital investment in buildings and structures shrank to 38% (down from an average of 50% in 2014–2016 and 45% in 2017). As a result, growth in the GVA of construction slowed sharply, to 2.2% yoy.

Meanwhile, nearly half of capital investment (49.3%) was channeled into machinery, equipment, and transport vehicles. This was reflected in the accelerated growth of investment in industries such as mining, metallurgy, and machinery building industry, as well as in the supply of electricity, gas, steam, and air conditioning (including green energy investment; read more in the box Green Energy Development in Ukraine on page 21), as well as trade and transportation. Specifically, in Q1 2018, mining companies poured substantial funds into capital investment to finance projects in the coal mining and enrichment and in the purchase of non-current assets. Metallurgical companies implemented large-scale investment projects, primarily related to carrying out planned repairs, the production of machines and installations, and the renovation of plants. Ukrzaliznytsia continued to ramp up investment in renovations, upgrades, and overhauls of the rolling stock, and the production of gondola cars (increasing investment by 2.2 times, according to company data).

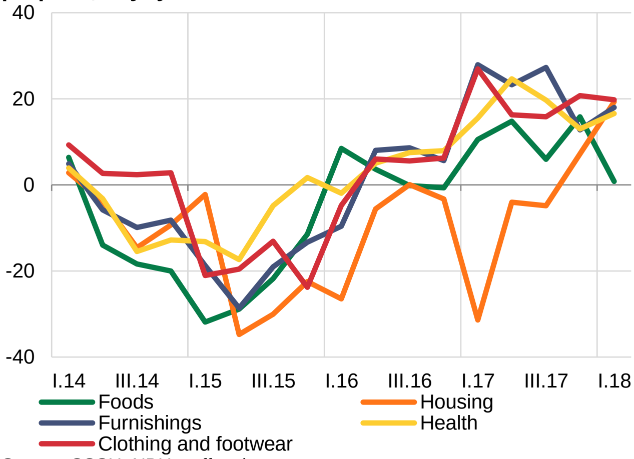
In addition, capital investment into intangible assets surged by 3.4 times yoy, primarily as a result of companies pouring funds into telecommunications (among other things, to buy 4G licenses). Companies continued to increase investment in software and databases.

Exports of goods and services declined by 9.9% yoy in Q1 2018. This was largely driven by a drop in exports of grain and oilseeds, due to last year's poorer harvest and a decline in the transit of energy resources. Imports also decreased noticeably in Q1 2018, by 5.4% yoy, mainly because of a decrease in energy imports. On balance, the negative contribution of net exports shrank, to 2.3 pp.

Output

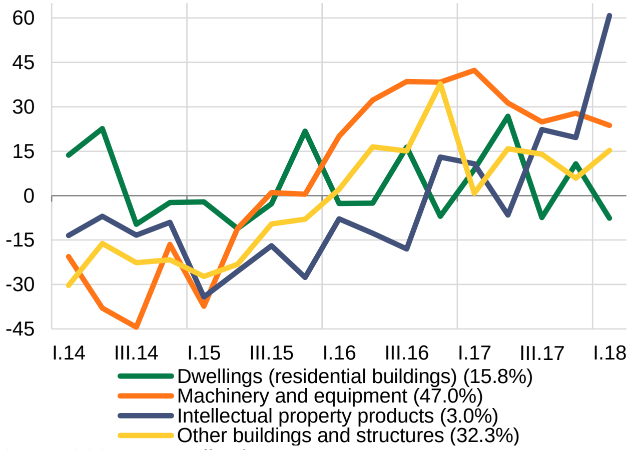
The acceleration in real GDP growth in Q1 2018 was primarily driven by increases in the output of the mining and metallurgy

Real Final Consumption Expenditure of Households by purpose, % yoy



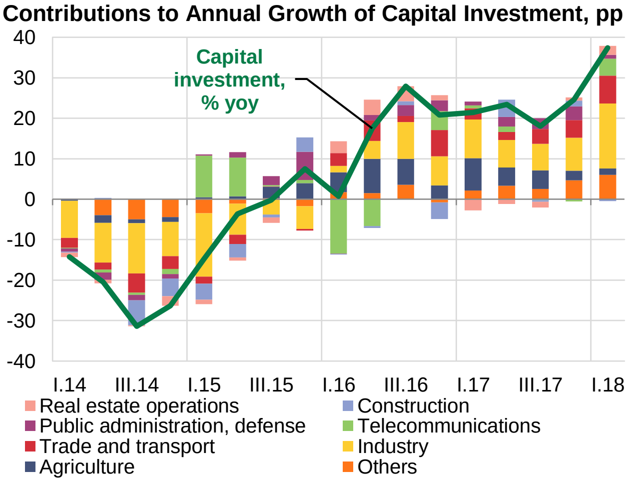
Source: SSSU, NBU staff estimates.

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



Source: SSSU, NBU staff estimates.

Contributions to Annual Growth of Capital Investment, pp



Source: SSSU, NBU staff estimates.

[11] The differences between gross fixed capital formation and capital investment arise from calculation methodologies (the calculation of capital investment includes VAT and construction in progress) and from the price factor (the growth of capital investment implies changes in face value, while increases in gross fixed capital formation represent changes in real value).

industries and the energy sector. This is due to the comparison base effect of the disruption of trade with the NGCAs and the seizure of enterprises in those areas last year, which dealt the most damage to these specific industries. Machinery manufacturing continued to grow rapidly (reflecting high investment demand), as did the chemical industry. This offset the deepening downturn in the food industry, driven by a dip in production of vegetable oil and animal fats (down by 10.0% yoy) due to a more substantial decline in inventories this year compared to last year (resulting from a lower harvest of oilseeds than in the bumper year of 2016). In addition, tobacco output fell by 29.8% yoy after the excise tax on tobacco products was raised at the start of 2018. Overall, industrial GVA made a positive contribution to GDP growth for the first time since 2016.

The largest contributor to GDP growth was the GVA of trade (up by 5.8% yoy), which is attributable to both robust consumer demand and an upturn in industrial output. Along with that, the GVA in transportation recorded slower growth, of 0.3% yoy, mainly due to a drop in freight turnover by 3.8% yoy as a result of the decreased transportation of oil and gas and bad weather late in the quarter.

The fall in agricultural GVA decelerated to 0.5% yoy on the back of robust external demand for animal breeding products.

The GVA in financial and insurance activities returned to growth (up by 9.7% yoy), reflecting the performance of both the banking and non-banking financial sectors. Other types of services (apart from the ones related to budget financing) recorded growth in Q1 2018, driven by consumer demand.

Estimates for Q2 2018

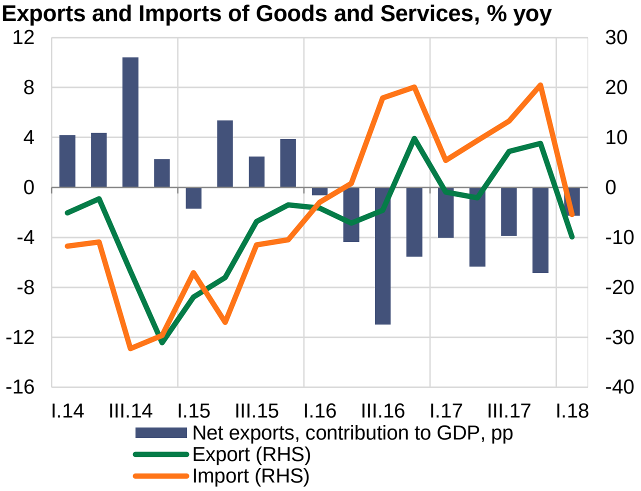
The NBU estimates that real GDP growth remained nearly flat in Q2 2018, at 3.2% yoy, and that it was primarily driven by domestic demand (both consumption and investment). Demand increased amid high business expectations and an increase in household income, including growth in military pensions, wages, and remittances. The rise in household income contributed to the robust growth of retail trade turnover.

In addition, the comparison base effect attributable to the disruption of ties with the NGCAs in Q2 2017 continued into Q2 2018. As a consequence, the ramped up output of the energy sector and mining industry made a large contribution to the growth of economic activity. Along with that, repairs at several large enterprises of the mining and metallurgical complex were a major restraining factor.

Chemicals production continued to grow at a rather fast pace, particularly on account of the effect of a low comparison base, as did the output of the engineering industry. The revival in engineering was driven by the accelerated production of electric lighting equipment, transport equipment, railway locomotives, and rolling stock. Overall, industrial production growth picked up slightly.

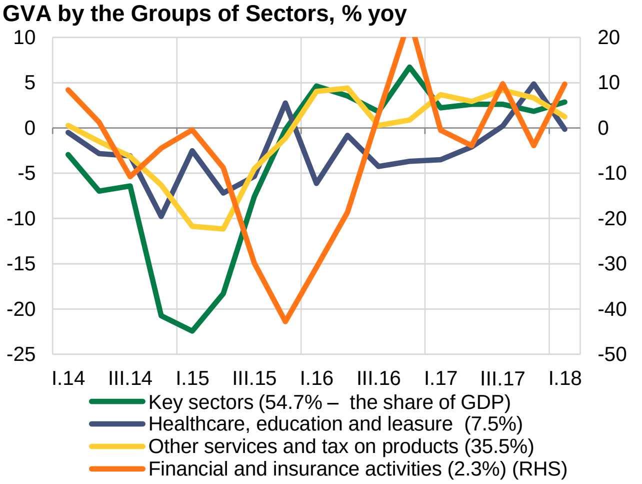
Among other economic activities, freight turnover continued to fall, particularly as natural gas imports and energy transit remained below last year's levels. The wholesale trade recorded slower growth as well.

Exports and Imports of Goods and Services, % yoy



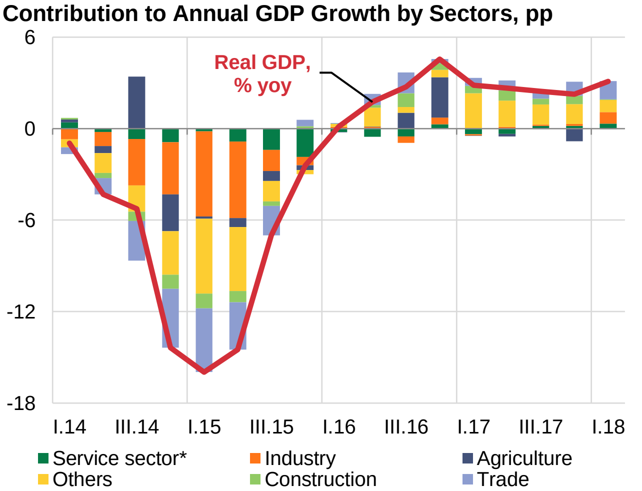
Source: SSSU, NBU staff estimates.

GVA by the Groups of Sectors, % yoy



Source: SSSU, NBU staff estimates.

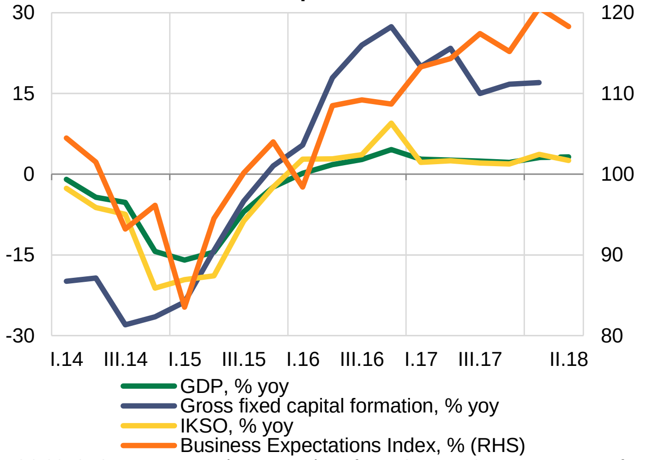
Contribution to Annual GDP Growth by Sectors, pp



* Including education, health care, financial and insurance activities.
Source: SSSU, NBU staff estimates.

For most of the quarter, the agricultural production index was driven by animal breeding, which saw an increase in farm livestock (including all types of poultry) and meat and egg output, fueled, inter alia, by robust external demand. At the same time, the grain harvest commenced earlier than last year, boosting the growth of crop production late in the quarter. However, droughts pose a persistent downside risk to the crop harvest.

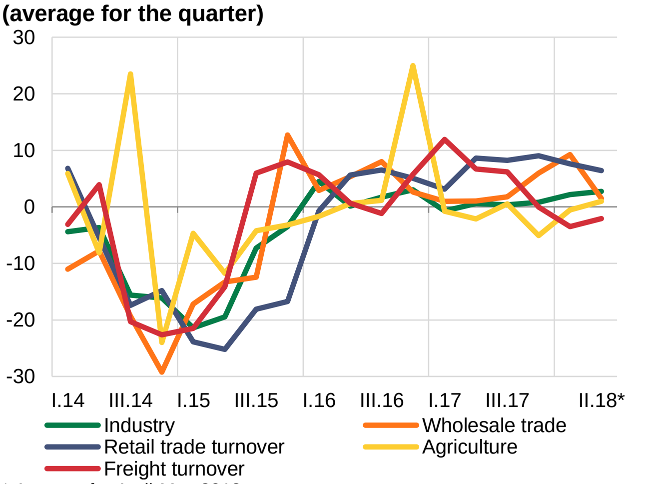
Real GDP*, Index of Key Sectors Output, Gross Fixed Capital Formation and Business Expectations



* Q2 2018: GDP – NBU estimates, Index of Key Sectors Output – average for April-May 2018.

Source: SSSU, NBU staff estimates and surveys.

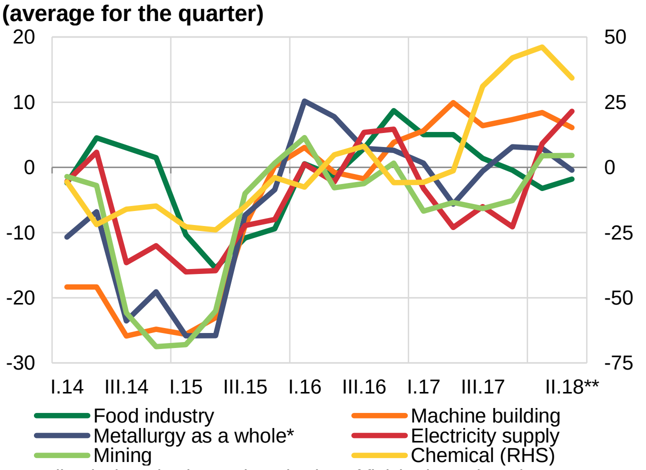
Output by Selected Types of Activity, % yoy (average for the quarter)



* Average for April-May 2018.

Source: SSSU, NBU staff estimates.

Output by Selected Types of Industrial Activity, % yoy (average for the quarter)



* Metallurgical production and production of finished metal products.

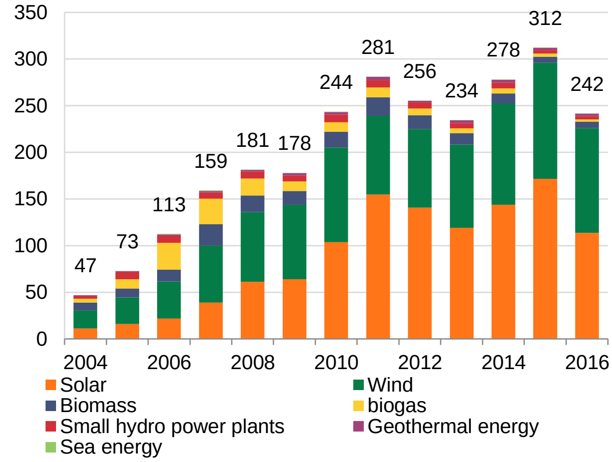
** Average for April-May 2018.

Source: SSSU, NBU staff estimates.

Box: Development of green energy sector in Ukraine

Increased investment in green energy and the broadening of its role are a global trend. This is due to the depletion of conventional fossil fuel resources, energy crises, and accidents at nuclear power plants. Some EU countries have started to give up using nuclear power. For example, Germany has announced its intention to close all of its nuclear power plants by 2022. Belgium intends to do the same by 2025. Switzerland has declared that it will gradually phase out nuclear power over a period of 10–15 years. Interest in renewable energy has also been fueled by the high cost of traditional energy sources, their highly volatile prices, and by the energy dependence of some countries on others. As a result, global investment in renewable energy totaled EUR 1.092 trillion between 2012 and 2016.

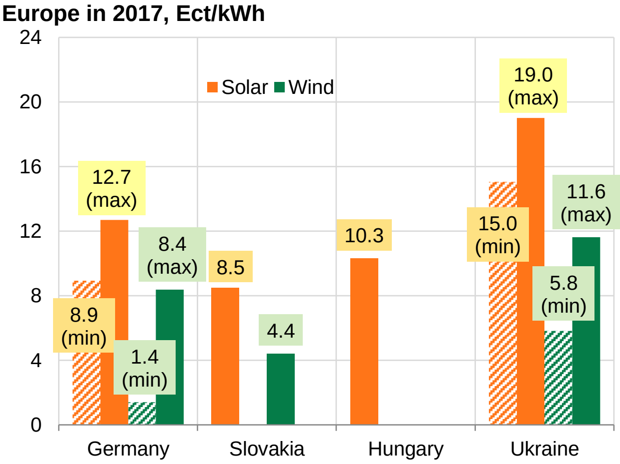
New Investment in Renewable Energy by types of energy sources, USD bn



Source: International Renewable Energy Agency.

Green energy facilities generate both electricity and heat, but global and Ukrainian investors are presently most interested in electricity production. The EU plans to bring the share of renewable energy in its final consumption of energy to 20% by 2020[12] (in line with the European Parliament's 20-20-20 energy goals), and to 50% of total energy production by 2030. According to the Energy Strategy of Ukraine, renewable energy is to account for 25% of the country's total electricity generation by 2035.

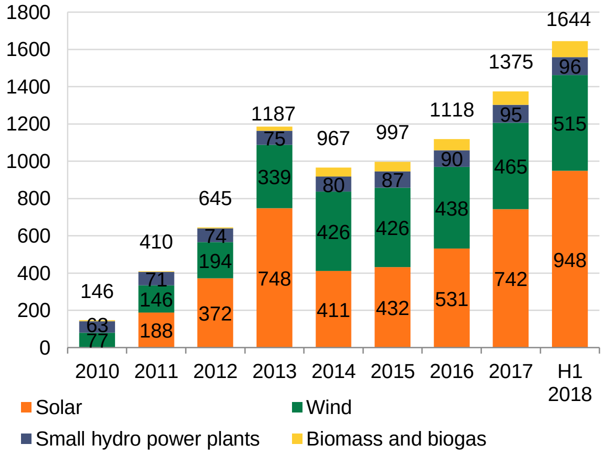
The size of the green tariff for electricity in Ukraine and Europe in 2017, Ect/kWh



Source: according to RES-Legal.

In Ukraine, the green energy sector started to develop in 2009, when the Law on Promoting the Use of Alternative Energy Sources was adopted. The law envisages a special tariff pegged to the euro (the hryvnia equivalent is recalculated at the official NBU rate on a quarterly basis) at which the Energorynok State Enterprise is to purchase electricity generated from renewable energy sources. The tariff exceeded and continues to exceed the average market price of electricity in Ukraine, as well as the corresponding tariffs in some European countries (this is especially true for solar power generation). The development of the Ukrainian green energy sector has also been supported by tax benefits and customs privileges (particularly for purchasing imported equipment). As a result, renewable energy investments pay back faster in Ukraine than in the EU.

Installed RES capacity in Ukraine*, MW



*- Excluding Crimea and Sevastopol and also a part of the NCGA area since 2014
Source: State Agency on Energy Efficiencyand Energy Saving of Ukraine.

Rapid growth in the installation of green energy generating capacity started in Ukraine in 2012. Most of the facilities were put into operation in 2012 and 2013 (mainly solar power stations in Crimea), but the bulk of these are now in non-government controlled areas. After the crisis of 2014–2015 subsided, growth in installed capacity resumed from 2016 through 2018.

Over the period from 2012 to H2 2018, the green energy sector's installed capacity has increased by two-and-half times, to reach 1.6 GW[13] (around 3.1% of the total electricity generating capacity of Ukraine). According to estimates by the National Commission for State Regulation of Energy and Public Utilities, the total investment in Ukraine's green energy sector has reached EUR 2.7 billion over this period.

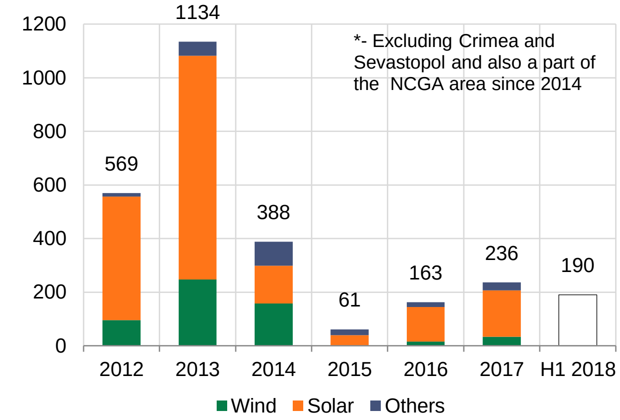
At year-end 2017, the number of renewable energy facilities was 376. These are mostly solar power stations and small hydroelectric power stations. Solar power stations lead in terms of installed electricity generating capacity, although wind power stations outmatch them in terms of the volume of electricity they

[12]According to Eurostat data, from 2012 to 2016 the share of renewable energy in the EU's final consumption of energy grew by 1 pp per year on average, totaling approximately 17% in 2016.
[13]This excludes the capacity in Crimea and in Donetsk and Luhansk oblasts.

generate.[14]

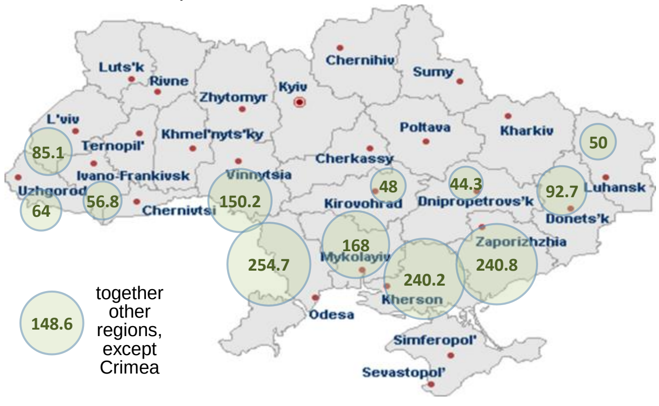
Today, the largest renewable energy facilities are located in Odesa, Zaporizhzhia, Kherson, Mykolaiv, and Vinnytsia oblasts. The role of western oblasts is also rising. The number of private households producing solar energy is growing every year[15], which is being fostered by state energy efficiency programs, among other factors.[16]

Investment in RES in Ukraine*, EUR m



Source: NEURC, State Agency on Energy Efficiencyand Energy Saving of Ukraine.

Location of RES capacities by regions as of the end of the first half of 2018, MW

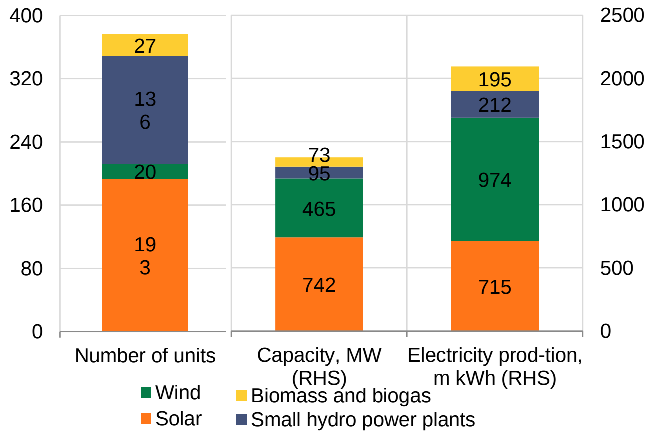


Source: NEURC.

However, despite the rapid development seen in the last few years, the role of green energy in Ukraine's energy system is still minor: green energy accounted for around 6% of total energy production in 2016–2017 and 1.5% in the total electricity generation.

As of the end of H1 2018, solar and wind power stations together produced 89% of the country's green electricity. At the same time, the share of bioenergy in total green energy production is much smaller (9% in 2017) due to its having a lower green tariff. However, its role is essential in green heat production (96% in 2016).

The composition of RES by number of objects, capacity and volumes of electricity production in 2017



Source: State Agency on Energy Efficiencyand Energy Saving of Ukraine.

In June 2018, Ukraine's parliament registered [the draft law *On Amendments to Certain Laws of Ukraine to Ensure Competitive Conditions for the Production of Electricity from Alternative Energy Sources*]. This document envisages a new mechanism of state support for the green energy sector, particularly through the use of auctions to allocate the state support quota. The auction price is expected to be lower than the current green tariff. At the same time, facilities that were put into operation by 1 July 2019, and those not put into operation but for which investors concluded the preliminary power purchase agreements under the green tariff, will continue to be covered by the state support program until 2029, inclusive. Therefore, H2 2018 and 2019 should see a considerable increase in investment (USD 0.7–0.8 billion) and the launch of new renewable energy facilities. Taking into account the fact that almost two thirds of renewable energy investment is spent on imported equipment, the growth in investment will lead to a higher current account deficit in the coming years. Meanwhile, the increase in renewable energy capacity is expected to be financed with foreign capital – both in vestment and debt capital.

While the current green energy price is high – (payments for electricity generated from renewable energy sources accounted for 7.5% of total electricity payments in 2017, although its share in the total electricity production was just 1.5%) – the price should decline every year due to advances in technology[17] and the expected introduction of auctions to set tariffs for renewable energy. Apart from that, the development of renewable energy has a number of benefits for society and the economy. Renewable energy generation will contribute to the energy independence of Ukraine, which is now importing large volumes of energy resources. Renewable energy is inexhaustible and environmentally safe. However, the profitability of renewable energy companies is very susceptible to regulatory influence, which creates high risks for the further development of this sector.

[14] The total generating capacity does not correspond to actual electricity production, as production depends heavily on weather conditions, particularly wind speeds, cloudiness, etc.

[15] According to the State Agency on Energy Efficiency and Energy Saving of Ukraine, 1,901 households installed solar panels in 2017 (up by 120% from 2016) and another 543 households did so in Q1 2018 (2.7 times more than in Q1 2017). Over the period from 2015 to Q1 2018, some 3,532 households installed solar panels with a total capacity of 62.9 MW, while investments amounted to EUR 64 million.

[16] Currently in effect are the regional energy efficiency and energy saving programs and the Cabinet Resolution *On Approval of the State Targeted Economic Program for Energy Efficiency and Development of Renewable Energy Sources and Alternative Fuels for 2010–2020* dated 1 March 2010, which stipulate a compensation for a portion of loans for the purpose of purchasing energy-efficient equipment and/or materials.

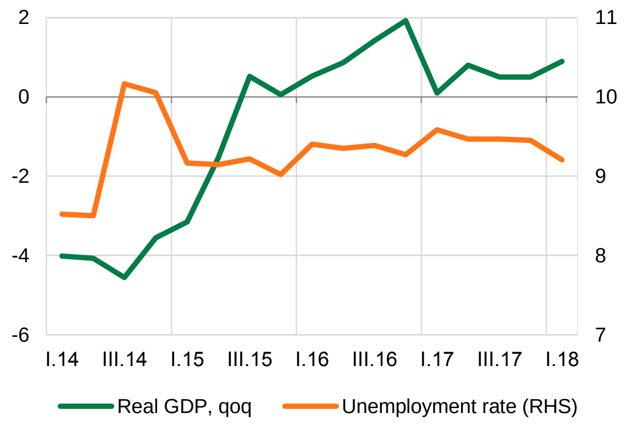
[17] According to [the report *Renewable Power Generation Costs in 2017* by IRENA], the prices of solar panels were 81% less in 2017 compared to 2009.

2.3. Labor Market and Household Income

In early 2018, the labor market gradually started satisfy the high demand for workforce seen over the past two years. However, the labor demand remained substantial due to the mismatch between supply and demand in the labor market coupled with ongoing labor migration. The main contributors to the rise in employment were rising wages and changes to pension laws. This is evidenced by an increase in the number of economically active, employed people, and staff. As a result, the seasonally adjusted unemployment rate, according to the ILO methodology, fell slightly in Q1 2018.

In Q1 2018, nominal household income increased substantially, even though its growth decelerated somewhat, to 23.6% yoy, as expected. The slowdown was the result of the slower growth in wages – household income's largest component – and in social transfers in kind. As a result,, the growth of real disposable household income slowed to 10% yoy, but remained strong, supporting consumption.

ILO Unemployment* and Real GDP, sa, %



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

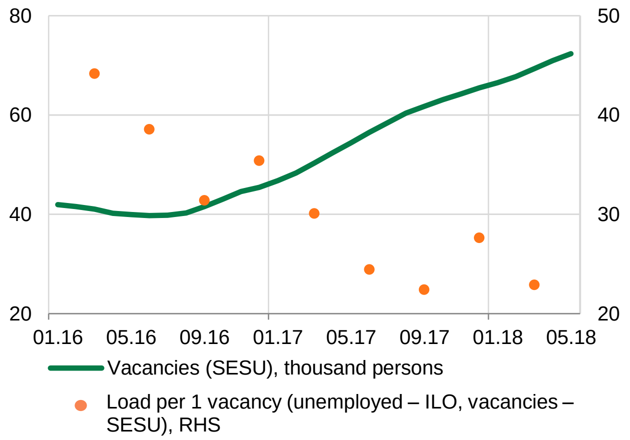
Labor Market

The high demand in the labor market of Ukraine, seen over the past two years, has gradually started to be satisfied, as evidenced by the slightly slower growth in the number of vacancies. However, labor demand remained strong mainly due to the mismatches between supply and demand for labor (both regional and qualification ones), coupled with ongoing labor migration.

According to SESU data, the number of vacancies grew in January–May 2018 by 7.9% yoy as more companies began cooperating with the service. In January–May 2018, most economic activities saw a year-over-year increase in vacancies, except for trade and the hotel and catering business. The most vacancies were recorded in education and the utilities sector. The vacancy distribution by professional groups remained substantially skewed towards skilled manual workers and workers for the maintenance, operation and control of technological equipment (38.8% of all SESU-registered vacancies). While the load per one vacancy declined overall, certain occupations in the labor market recorded a significant excess of supply over demand. According to SESU data, by type of activity, the number of job applicants per vacancy in early June 2018 continued to be the highest in the finance, insurance, public administration, defense, and compulsory social security segments, and by professional groups - among legislators, senior government officials, executives, and managers.

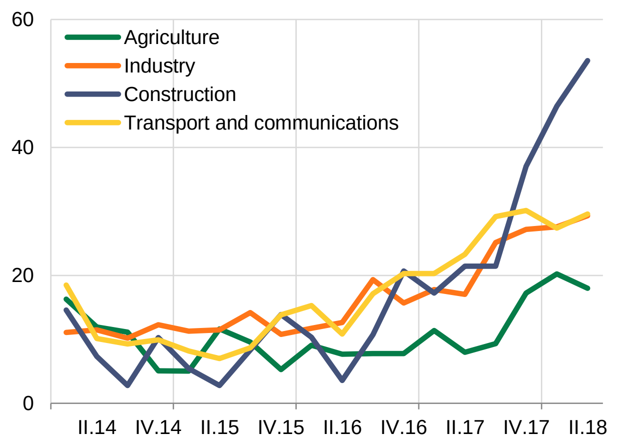
Business outlook surveys (hereinafter the Surveys) also pointed to sustained robust demand for labor. According to businesses' estimates, the constraining impact of the skilled-workers shortage on businesses' ability to ramp up production increased considerably in H2 2017, especially in such activities as construction, industry, agriculture, transport, and telecommunications. This was attributed to the mismatches in the labor market and strong labor migration noted above (according to Poland's regional employment offices, nearly 50% of Ukrainian labor migrants applied for jobs in these types of economic activity in 2017). Simultaneously, in Q2 2018 businesses' expectations in

Vacancies (1-year moving year), Load per 1 Vacancy (for the quarter)



Source: SSSU, NBU staff estimates.

Influence of the Factor "Lack of Skilled Workers" on the Ability of Enterprises to Increase Production (Respondents' Assessment)



Source: Business outlook survey of Ukraine (NBU).

Q2 2018 regarding employment growth in the next 12 months slightly eased compared to last quarter but remained rather high, potentially indicating that labor supply has been gradually starting to satisfy demand since early 2018.

Until early 2018, the growth in labor market vacancies was not accompanied by a substantial drop in seasonally adjusted unemployment rate according to ILO methodology.[18] In particular, the Beveridge curve shows that since mid-2015 structural shifts have taken place in Ukraine's labor market – the ability of the labor force to meet labor demand has diminished. In Q1 2018, however, the situation improved somewhat – the unemployment rate, according to ILO's methodology (as a percentage of the economically active population aged 15 to 70) dropped to 9.7%, despite the traditionally lower labor demand in Q1 2018 (and to 9.2% in seasonally adjusted terms, following a long-term stabilization). In Q1 2018, the highest unemployment rate was seen among young people aged 15–24 (19.7%), experiencing substantial difficulty in finding a job after completing their education (for more details see Box "Youth Unemployment in Ukraine" on page 27). Across regions, Luhansk and Donetsk oblasts registered the highest unemployment rates (16.7% and 14.5% respectively).

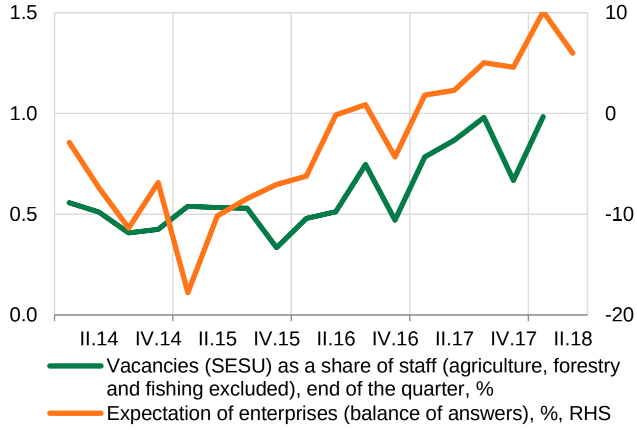
The economically active population also increased in Q1 2018, by 0.4% yoy to 17.7 million, following prolonged decline. This took place as the economically inactive population shrank.[19] This was primarily the result of people starting to look for work more actively after changes to the pension laws were announced ((in particular, the increase of the necessary insurance period to qualify for a retirement pension), and because of the rapid growth in wages. Thus, the largest increase in the economically active population in Q1 2018 was seen among individuals aged 40 to 59, primarilyamong women. This, amid robust labor demand, contributed to the increase in the number of the employed persons. This number grew by 0.9% yoy, to 16.0 million people, both among men and among women, with most of the growth occurring in urban areas.

The year-on-year growth in the number of full-time employees in April–May 2018[20], which account for almost half of all those employed, could be evidence that people were more motivated to seek official employment. Apart from amendments to pension laws, this could be a reflection of the changes announced in the subsidy system.[21] The trend in the number of staff employees improved across most activities, apart from in agriculture and transport. Meanwhile, industry, especially metallurgy, recorded a decline in the number of staff.

Household Income and Savings[22]

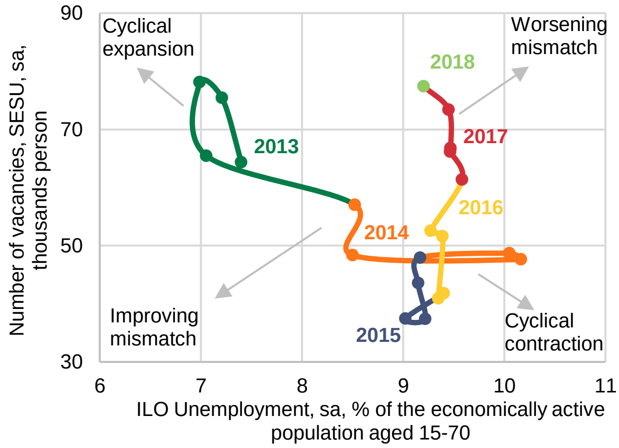
In Q1 2018, nominal household income kept growing rapidly, despite a slight slowdown to 23.6% yoy. The growth in nominal

Vacancies (SESU) as a percentage of staff* and Expectation of Enterprises as to the Change in the Number of Employees for the Next 12 Months



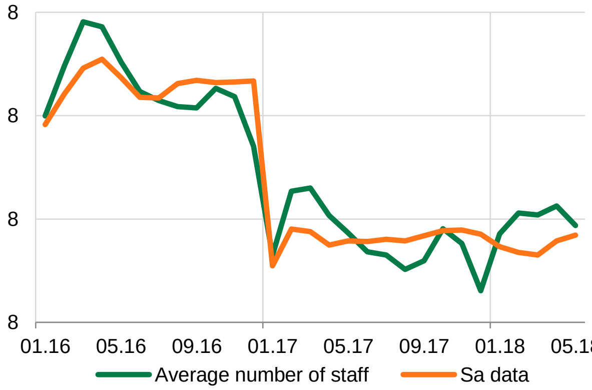
* Agriculture, Forestry and Fishing excluded.
Source: SSSU, SESU, NBU, NBU staff estimates.

Beveridge Curve



Source: SSSU, NBU staff estimates.

Average Number of Staff, million persons



Source: SSSU, NBU staff estimates.

[18] For the correct comparability of data from 2013 to 2018, the unemployment rate was chosen as an alternative to the number of unemployed by ILO methodology due to the exclusion of Crimea, the city of Sevastopol, and some areas of Donetsk and Luhansk oblasts since 2014 and the absence of comparable data for previous periods.
[19] This category includes individuals with no desire and no need to work (pensioners, students, and homemakers), people discouraged from the job search, those who do not see a suitable job available, and those who do not know how and where to search for a job. Read more about the structure of the population in the *Unemployment Level by ILO Methodology* box in the September 2015 Inflation Report, pages 24–25.
[20] Full-time employees include employees of legal entities and their affiliates with 10 or more employees.
[21] http://zakon0.rada.gov.ua/laws/show/329-2018-%D0%BF
[22] In accordance with the revised SSSU data on private remittances to Ukraine in 2015–2017.

income was driven by its largest components: wages[23], which represented nearly half of total household income, and social benefits.

Despite a slight slowdown in the growth of wages (to 27.6% yoy), it still made the largest contribution, 13.5 pp, to the growth of nominal household income. The growth in wages was fueled by the rise in the minimum wage and intensive labor migration. The latter puts the upward pressure on wages from both the shrinking labor supply in the labor market and the convergence of wages in Ukraine with those in its neighbors. For example, the ratio between wages in Poland (the country's main recipient of Ukrainian labor migrants) and Ukraine gradually declined until mid-2017, primarily due to high rates of wage growth in Ukraine. Along with this, the sustained growth of Poland's economy and the strengthening of its currency (zloty) caused the gap between the two countries' wages to start widening again in H2 2017. In view of that, Ukrainians' labor migration to Poland may continue, as wages in different sectors of the Polish economy exceed those in Ukraine by 4–6 times (with the widest wage gaps in agriculture and construction). Also due to sustained migration, current transfers (including migrants' remittances from abroad) continued to grow at a solid 15.1% yoy.

The growth of social benefits (by 35% yoy) reflected the ongoing effect of the updating of pensions by raising them in Q4 2017 as part of the pension reform. Growth in household income was accompanied by the slower growth of social transfers in kind.

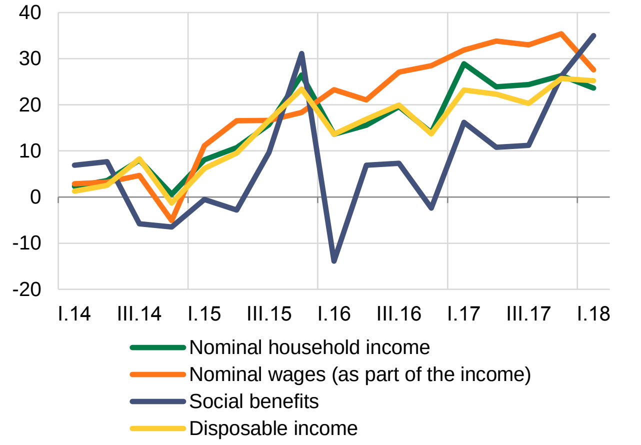
The growth in nominal income from other sources also remained moderate: income from business – profit and mixed income – increased by 17.1% yoy, while property income dropped further, by 6.1% yoy.

Rapid growth in nominal household income amid somewhat eased inflationary pressure drove the sustained solid growth of real disposable household income (10% yoy). This in turn supported the growth of consumer demand.

Although nominal household income increased in Q1 2018, household savings continued to decline. The drop in household savings had two fundamental contributors: a decline in non-financial assets (mainly due to residential property depreciation) and a decrease in financial assets, primarily driven by the increased amount of new loans compared to repaid loans[24] – evidence of a revival in consumer lending. This led to the point where households' propensity to save has been approaching zero for the third straight quarter, in seasonally adjusted terms.

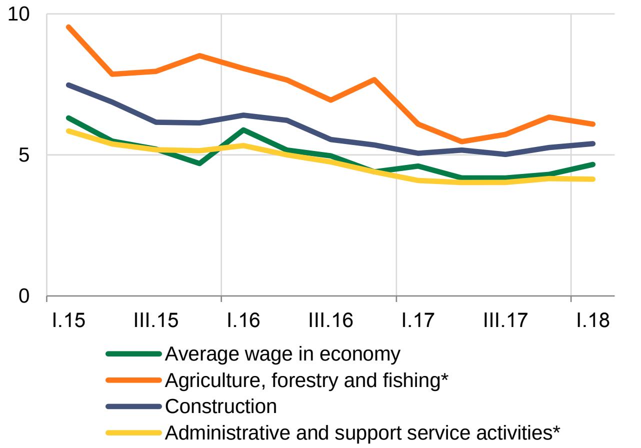
In Q2 2018, household income continued to grow. Thus, the further rise in the minimum wage and the continued migration processes, coupled with robust labor demand and labor market mismatches, supported the rapid growth in wages. Meanwhile, the increase in military pensions and the recalculation of the years of pensionable service for those continuing to work after retirement ensured there was sustained rapid growth in one of household income's largest components – social benefits (the average

Nominal Wages and Household Income, % yoy



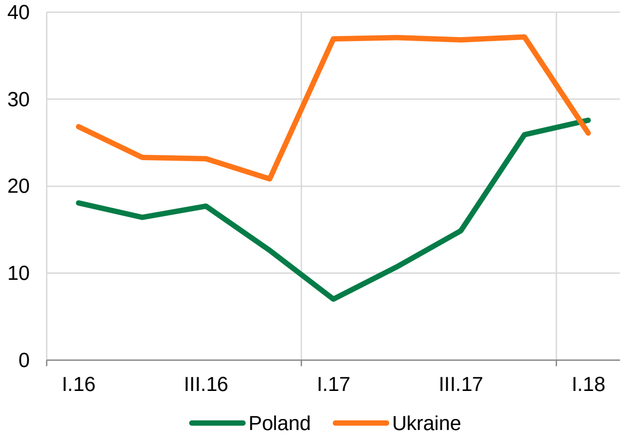
Disposable income = Nominal household income – Social transfers in kind – Property income (payable) – Current payable taxes on income, wealth.
Source: SSSU.

The Ratio of Nominal Wages in Poland and Ukraine, times



* quarterly average wages in Poland calculated using cumulative numbers
Source: Statistical Information Centre of Poland, SSSU, NBU staff estimates.

Average Nominal Wages in Ukraine and Poland, % yoy



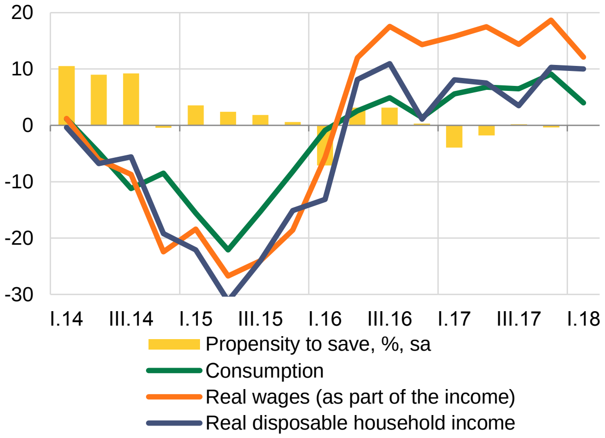
Source: Statistical Information Centre of Poland, SSSU, NBU staff estimates.

[23] The growth rates of wages as part of of income and the average nominal wage (per one employee) differ due to the different calculation methodologies used. Wages as part of household income are calculated based on a larger sample, which includes, among other things, armed forces pay and allowances, temporary disability payments, and self-employment income, as well as other payments that are not included in the calculation of the average nominal wage per employee.

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

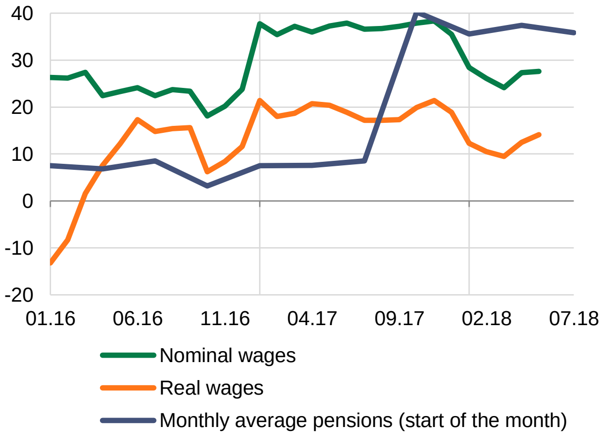
monthly pension, as of 1 July 2018, was up by 35.8% from the previous year).

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



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

Wages and Average Monthly Pensions, % yoy



Source: SSSU, PFU.

Box: Youth unemployment in Ukraine

Even though Ukraine's economy has recovered from the 2014–2015 crisis, unemployment in Ukraine is still high at 9.3% in 2016 and 9.5% in 2017. First, this is explained by the fact that Ukraine's economy runs below potential, despite positive GDP growth. Under the modern interpretation of Okun's law (as in Knotek, 2007), unemployment rate surpasses full employment by 0.5 pp if the economy deviates from its potential level by one percent. At the same time, this law is more of a rule of thumb, whereas the results of empirical studies that sought to test the law's validity differ across countries and phases of the economic cycle (Knotek, 2007; Marth, 2015). These differences are in part attributable to the peculiarities of national labor markets, such as employment laws, the role of trade unions, technological progress, social norms and traditions, and demographic trends (Ball et. al., 2013; Nickell, 1997; Layard et. al., 2005). Second, the slow return of unemployment to pre-crisis levels or even its hysteresis (irreversible changes) is supported by the results of a large body of research (Blanchard and Summers, 1986; Brunner et. al., 1980; Camarero et. al., 2004; Coibion et. al., 2013).

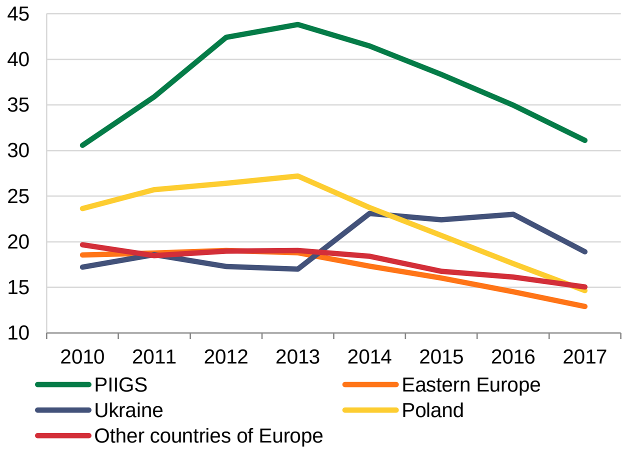
Consequently, Ukraine's high unemployment level is driven by a rise in structural unemployment related to, among other things, the economy's rapid transformation as a result of crises and discrepancies between labor supply and demand.[25] Protracted unemployment has negative effects on both individuals and the entire economy due to the loss of human capital, the contraction of private consumption, a decline in future wages, and multiple social implications, including crime, health, etc. (Esteban-Pretel, 2005; Hurd and Rohwedder, 2010;Johnson and Feng, 2013; Stevens, 1997;Barnette and Michaud, 2011; Brand, 2016; Bell and Blanchflower, 2009).

These problems are most typical of youth unemployment, as young people are one of the labor market's most vulnerable population groups (Blanchflower and Freeman, 2000; OECD, 2008). According to the report "Ukrainian Youth's Transition to the Labor Market" (Libanova et al, 2014) (hereinafter the Report), young people in search of their first-ever place of employment face numerous hurdles, the worst of which are poor job-search skills, lack of experience, and, very frequently, excessive expectations of college graduates about pay and terms of employment.

Furthermore, the impacts of economic recessions vary across individuals' ages, with unemployment among young people growing more rapidly than for middle-aged people (O'Higgins, 2010; Banerji et. al., 2015). Unemployment remains an extremely pressing issue not just in Ukraine but around the globe, especially among young people, as high levels of youth unemployment reflect lost potential in terms of economic growth and raise the risks of intensified labor migration (brain drain). According to Word Bank data, in 2017, global unemployment (by ILO methodology) among young people aged 15–24 stood at 13.6%, in particular 19.2% in EU countries (with the highest levels recorded in Greece (42.8%) and Spain (39.4%) and the lowest in Germany (6.4%)).

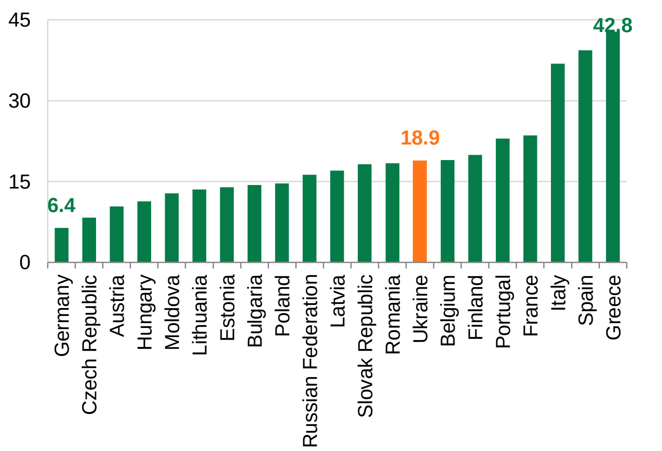
In Ukraine, the majority of young people aged 15–24 are economically inactive (nearly 65.6% in 2017), as most of them go to school at that age (high-school and university students represented close to 85% of the economically inactive population aged 15–24). Meanwhile, according to SSSU data, in 2017, unemployed youth people between 15 and 24 years of age totaled 262,000, accounting for over 15% of Ukraine's unemployed population, and 18.9% of the economically active population of the same age. According to the Report, nearly 25% of unemployed young people spend more than one year looking for a job, potentially making them lose their skills and eroding their motivation. Despite being well-educated and tech-savvy, youngsters are often overlooked by employers, who prefer to hire older and more experienced professionals. Unemployment rate among

The Unemployment Rate for the Population aged 15 – 24, % of the economically active population aged 15 – 24



Source: SSSU, Worldbank.

The Unemployment Rate for the Population aged 15 – 24 in 2017, % of the economically active population aged 15 – 24



Source: SSSU, Worldbank.

[25]For more details see Box "Employment in Ukraine" on page 31 of the January 2017 Inflation Report.

young people aged 25–29, for instance,[26] was at 11.3% in 2017 (1.5 times less than in the youngest group), and among individuals aged 30–34 it was 9.8%.

The high unemployment level for persons aged 15–24 is driven by their lack of the kind of professional skills and expertise that employers require. According to the Report, while the majority of young Ukrainians employed have jobs that match their education levels, nearly a third of young workers are overqualified. Furthermore, according to the employer survey entitled Ukrainian University Graduates as Seen by Employers, young professionals often find themselves lacking not only professional competencies but also trouble-shooting skills. Along with that, employers point to a lack (or insufficient mastery) of so-called soft skills among young workers (including communication, presentation, negotiation, and emotional control skills), which can be a serious hurdle at work.

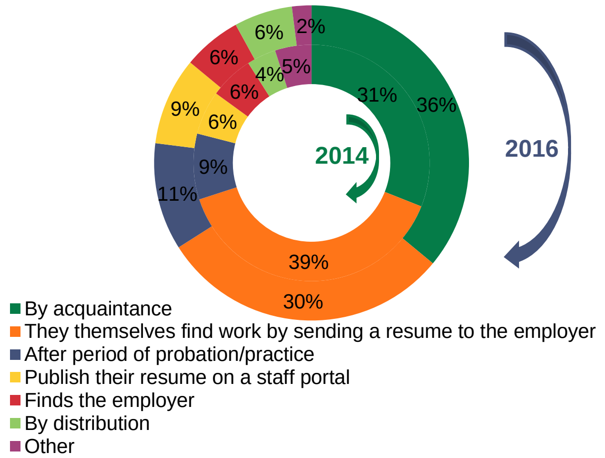
ILO Unemployment by age group, % of the economically active population of the relevant age

Population`s groups	Years							
	2010	2011	2012	2013	2014	2015	2016	2017
Total population	8.2	8.0	7.6	7.3	9.3	9.1	9.3	9.5
15-24	17.2	18.6	17.5	17.0	23.1	22.4	23.0	18.9
25-29	10.0	9.4	9.8	8.9	11.1	11.2	11.7	11.3
30-34	8.1	7.4	7.0	6.8	9.3	9.7	8.9	9.8
35-39	7.9	7.3	6.5	6.2	8.1	7.2	8.0	8.4
40-49	6.8	6.4	6.2	6.3	7.3	7.6	7.7	8.7
50-59	5.5	5.2	5.3	5.2	6.0	6.3	7.3	8.1
60-70	0.0	0.1	0.1	-	0.1	0.1	0.1	0.1

Source: SSSU.

At the same time, the number of companies that regularly hire students and young professionals is gradually increasing. A survey by the international HR portal Headhunter Ukraine shows that in 2014, only a third of the polled businesses regularly hired people with no experience, or enrolled students in training programs or internships, while in 2017 the share of these companies expanded to 42%. Coupled with growing demand in the labor market and intensified labor migration, this led to a drop in the unemployment rate among people aged 15–24 in 2017.

How do graduates get a job? (Survey 2014 and 2016)



Source: HeadHunter Ukraine.

Potential measures to tackle youth unemployment comprise optimizing the operation of employment offices, including through cooperation with private businesses, launching a system to provide young people with jobs for a set term following university graduation so that they can gain experience[27], broadening internship programs for pre-graduates and young professionals, inviting seasoned professionals to teach, etc. In addition, continuing to reform the education system and bringing the knowledge acquired by young people closer to that required by employers remain crucially important for the future labor market. Creating necessary conditions for the quick and sustained provision of youth with jobs is one of the key preconditions for the growth of Ukraine's economy.

[26] The Law of Ukraine *On the Promotion of the Social Formation and Development of Youth in Ukraine* classifies young people as citizens of Ukraine between 14 and 35 years of age. Unemployed young people may include the following groups of the population: high-school graduates, vocational college and university graduates, military reservists, individuals laid off as a result of changes in production processes and labor turnover, women on maternity leave, and other categories.

[27] Survey of youth as part of the EXCEPT project. EXCEPT is an international project launched as a joint effort of ten research institutions from nine European countries to study the situation of young people in the labor market, and the risk of their social exclusion.

2.4. Fiscal sector

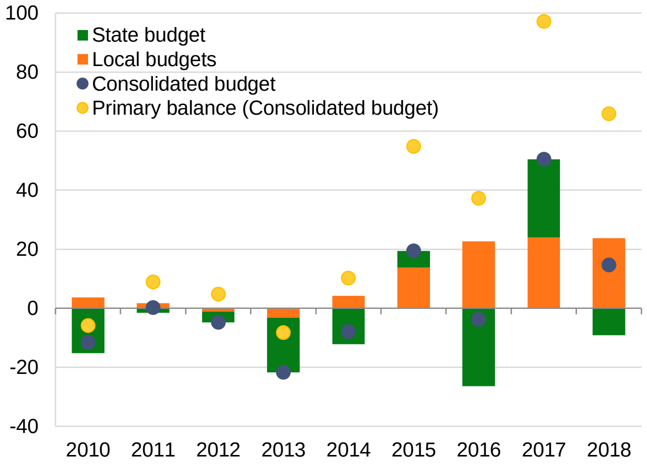
In H1 2018 fiscal policy remained reasonably tight, although the growth in expenditures sped up. In January – May 2018, the consolidated budget recorded both an overall (UAH 14.6 billion) and a primary surplus (UAH 65.8 billion), thanks to an improvement in revenues for April – May.

Revenues were driven by general economic factors, such as a further improvement in the corporate financial performance and an increase in household income. Temporary factors also played an important role. The most significant temporary factors were one-off payments of corporate income tax and VAT made by Naftogaz PJSC as a result of a decision by the Stockholm Arbitration Court, along with a large portion of the NBU's 2017 profit transferred to the budget due to a change compared to last year in the schedule for transferring the NBU's profit. At the same time, the moderate revenue growth reflected a high comparison base (in April 2017, confiscated funds were sent to the budget).

Meanwhile, the growth in current and capital expenditures accelerated. Among current expenditures, social spending increased substantially – mainly expenditures on utility benefits and subsidies for households, as well as transfers of budgetary funds to the Pension Fund. Expenditures on debt servicing also grew.

Public and publicly guaranteed debt dropped by 6.9% ytd, to UAH 1.993 trillion or 62% of GDP in late May 2018, mainly due to large repayments.

Consolidated Budget Balance in January – May, UAH bn

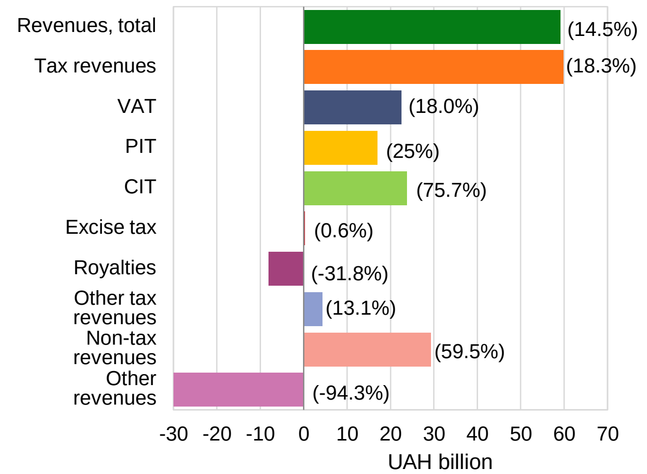


Source: STSU, NBU staff estimates.

Revenues

The growth in consolidated budget revenues was moderate in January – May 2018, although it sped up in April – May. This was attributed to both economic and temporary factors. The effect of some temporary factors faded (legislative changes to taxation and the decision by made the Stockholm Arbitration Court), while others still lingered (the effect of the comparison base arising from the funds confiscated in April 2017 and the change in the schedule for transferring the NBU's profit to the budget). In Q1, tax-revenues accounted for the bulk of revenues, while in April – May, non-tax revenues became an important additional revenue source.

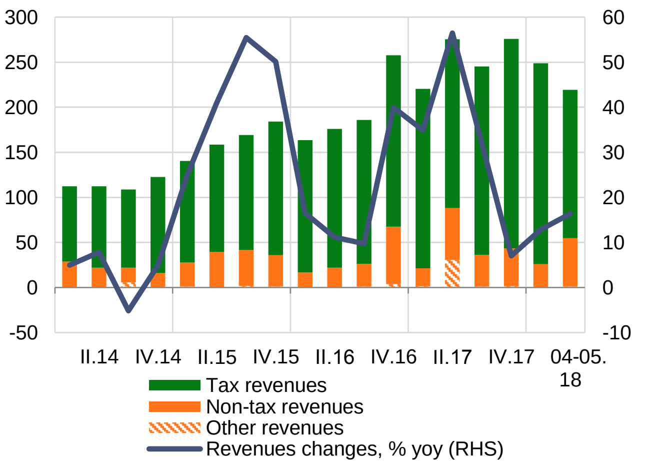
Consolidated Budget Revenues in January – May, change, UAH bn and % yoy



Source: STSU, NBU staff estimates.

Several economic and temporary factors were responsible for the rather moderate growth in tax revenues seen over the first five months of the current year. That said, personal income tax proceeds were a stable revenue source throughout the entire period. These proceeds continued to rise at a fast clip, thanks to, among other things, the sustained growth in nominal wages. Corporate income tax receipts also surged. This mainly reflected an improvement in the corporate financial performance, as well the one-off payments that were made by Naftogaz PJSC in Q1 that reflected the decision of the Stockholm Arbitration Court.

Consolidated Budget Revenues, UAH bn and yoy change, %



Source: STSU, NBU staff estimates.

Notwithstanding the large VAT proceeds recorded in April – May, the total growth in VAT revenues was moderate in January – May. More specifically, although VAT proceeds were partly affected by an increase in VAT refunds and changes in the legislation that governs the mechanism for managing VAT risks[28], the strongest

[28] In December 2017, the mechanism for managing VAT risks was suspended in order to elaborate the coordinated decision, which would entail no significant risks for any business segment. On February 21, 2018, the Resolution № 117 was passed, which regulated the functioning of the mechanism for managing VAT risks further on.

dampening effect came from depressed energy imports and a strengthening of the hryvnia. Conversely, growth in VAT proceeds was propped up by the steady increase in retail trade and the additional one-off payments made by Naftogaz PJSC following the positive decision by the Stockholm Arbitration Court.

In the first five months of 2018, excise tax revenues were practically unchanged year-over-year. This was mainly attributed to a decline in the output of some excisable goods, mainly tobacco products (by 23.7% yoy in January – May, with the sharpest drop seen at the beginning of the year). Weak imports of excisable goods and a stronger hryvnia also contributed significantly to the decline. These two factors also decelerated the growth in proceeds from international trade duties. Despite there being a noticeable improvement in April – May and reasonably stable hydrocarbon output, royalty revenues dropped year-over-year, due to, among other things, changes in the administration of the tax.

Non-tax revenues grew rapidly over the first five months of 2018 due to a spike recorded in April – May (to 81.6% yoy), driven mostly by temporary factors. First, the schedule for transferring a portion of the NBU's 2017 profit was shifted to Q2. As a result, these proceeds more than doubled in April – May compared to 2017, when such payments were more evenly distributed over the year. Second, the sales of 4G licenses generated a sizeable one-off proceeds, which were even larger than expected. Budgetary institutions' own receipts also remained high. A significant negative contribution to revenue growth (15.6 pp) was made by a decline in other revenues resulting from last year's high comparison base (in April 2017 confiscated funds were sent to the budget).

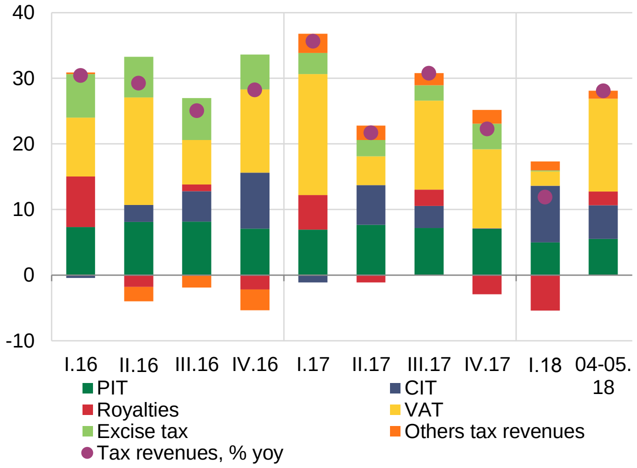
Expenditures

Consolidated budget expenditures grew at a rather fast pace in January – May 2018, driven by a hike that started in March.

Social spending was one of the major contributors to the expenditure growth. The surge in social spending seen in March – May not only offset the sharp fall in these expenditures recorded in January – February, but was also the main driver of current expenditure growth over the period. The growth in social spending was fueled by higher transfers to the Pension Fund and by other social payments. The former rose, in part, on the back of updating pensions to different categories of pensioners that took place in late 2017 and early 2018. The growth in other social payments was propelled by a significantly larger increase in expenditures on utility benefits and subsidies for households compared to last year, due to, among other things, the harsh weather conditions seen in March, and, consequently, a longer heating season. Wages also grew at a rather fast rate, driven, in particular, by the rise in the minimum wage that took place in early 2018 (by 16.3% to UAH 3,723).

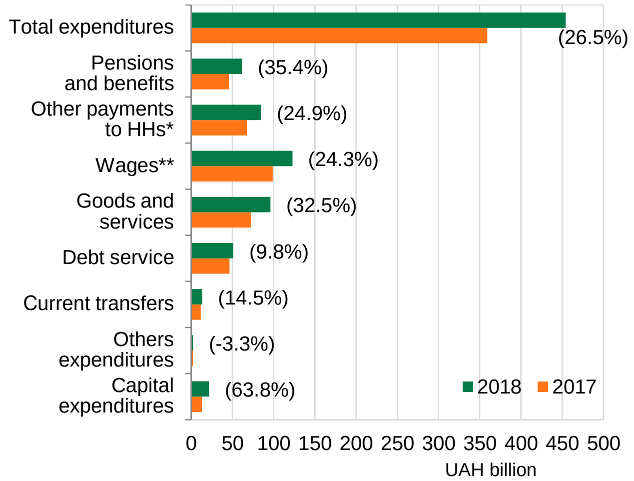
There was also a sizable increase in expenditure on the consumption of goods and services (because of purchases of items and tools and payments for utilities and energy), as well as capital expenditures. As is typically the case, capital expenditures, including those on developing the road infrastructure, were made primarily from local budgets. Although accelerating in April – May, the growth in expenditures on current transfers to companies remained moderate.

Contributions to Change inTax Revenues of the Consolidated Budget, pp



Source: STSU, NBU staff estimates.

Consolidated Budget Expenditures, economic classification, UAH billion (% yoy in January – May 2018)

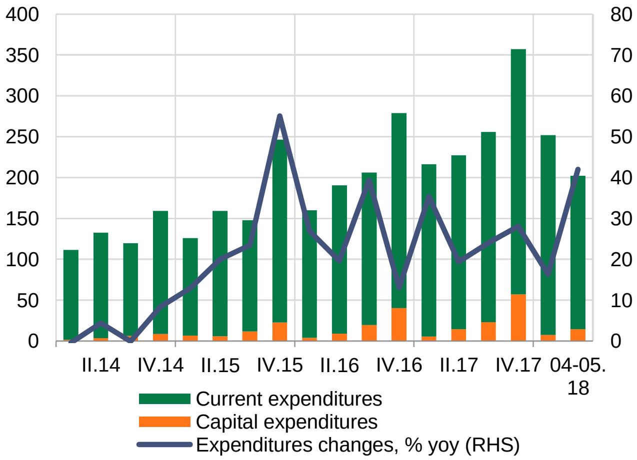


* Other payments to the population include benefits and subsidies to households for utility payments, scholarships, etc.

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

Source: STSU, NBU staff estimates.

Consolidated Budget Expenditures, UAH bn and yoy change, %



Source: STSU, NBU staff estimates.

Debt service spending grew in April – May, as expected, driven by domestic debt servicing expenditures. The latter expenditures were affected by, among other things, the reprofiling of NBU-held domestic government bonds, as the main payments related to the servicing of these bonds fall due in May and November. Overall, however, the growth in debt service spending remained moderate, thanks to a stronger hryvnia and issues of securities being smaller in volume than expected.

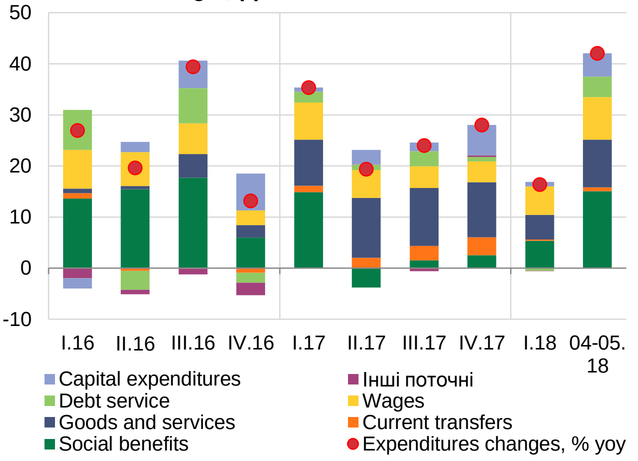
Balance

The consolidated budget ran a surplus of UAH 14.6 billion in January – May 2018. The positive balance was largely generated by local budgets, which recorded a surplus throughout the entire period. The state budget posted a surplus in April – May mainly due to the improvement in revenues. This reduced the large overall deficit recorded in Q1, to UAH 9.2 billion in January – May. The consolidated budget also retained a sizeable primary surplus.

With the state budget in deficit and a tight debt repayment schedule, the government borrowed heavily, mainly on the domestic market. Apart from hryvnia-denominated domestic government bonds, the government also issued foreign currency-denominated bonds. External borrowing was low during that period, and noticeably smaller than the repayments of external debt.

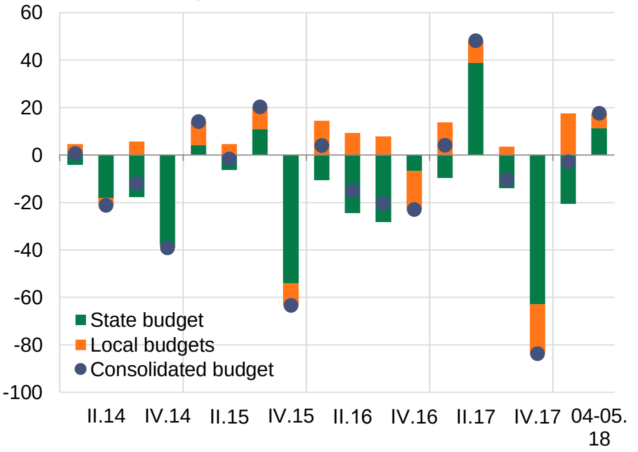
All of these debt operations together had by late May 2018 pushed public and publicly guaranteed debt down by 6.9% ytd. Apart from repayments being significantly higher than borrowing, other reasons for the debt reduction included the strengthening of the hryvnia against the US dollar (since a substantial portion of debt is denominated in foreign currency), and a pick-up in economic activity. Consequently, the downward trend in the debt-to-GDP ratio maintained, at 62% to GDP in late May.

Contributions to Change in the Expenditures of the Consolidated Budget, pp



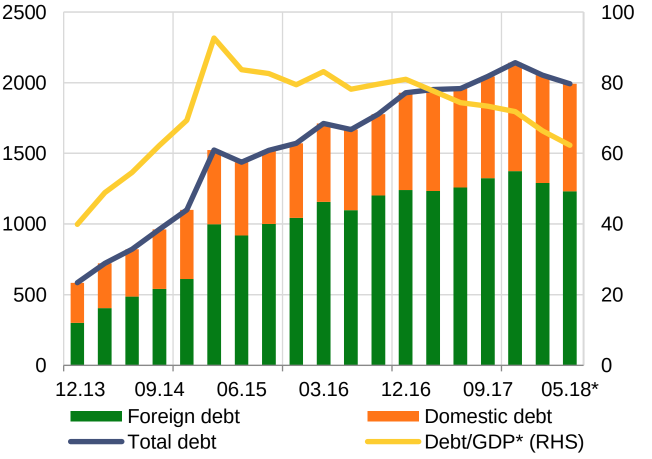
Source: STSU, NBU staff estimates.

Consolidated Budget balance, UAH bn



Source: STSU, NBU staff estimates.

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



* GDP for 2018 is calculated as a quarterly moving average based on the SSSU actual data and the NBU estimates for Q2.2018.

Source: MFU, SSSU, NBU staff estimates.

2.5. Balance of Payments

A benign global environment supported the growth in exports of goods. Nevertheless, despite lower energy imports, the growth in imports of goods outpaced that of exports, fueled by higher domestic demand, mainly for investment. As a result, the deficit of trade in goods continued to widen gradually in January – May 2018 (to USD 3.4 billion, compared to USD 2.6 billion in the same period last year). The widening, however, was counterbalanced by further growth in remittances. As a consequence, the current account ran a small deficit (USD 0.4 billion), which was similar in level to the deficit recorded in the same period last year.

Financial account inflows continued in January – May 2018 – net inflows totaled USD 0.7 billion. However, this was less than in the same period of the previous year. In contrast to Q1 2018 and the same period of 2017, in April – May only the private sector generated capital inflows, while the public sector recorded capital outflows due to the reduction in the portfolio of hryvnia domestic government bonds held by non-residents. Overall, foreign direct investment was relatively small, at USD 0.3 billion. As in Q1, the bulk of this investment was directed in the real sector, mainly in the form of equity.

In spite of the balance of payments posting a surplus of USD 0.6 billion in April – May, international reserves in late May, at USD 18.2 billion or 3.1 months of future imports, held steady at last quarter's level as the government and the NBU repaid debt to the IMF (USD 0.4 billion). International reserves decreased to USD 18.0 billion in June, due to repayments of foreign-currency denominated debt.

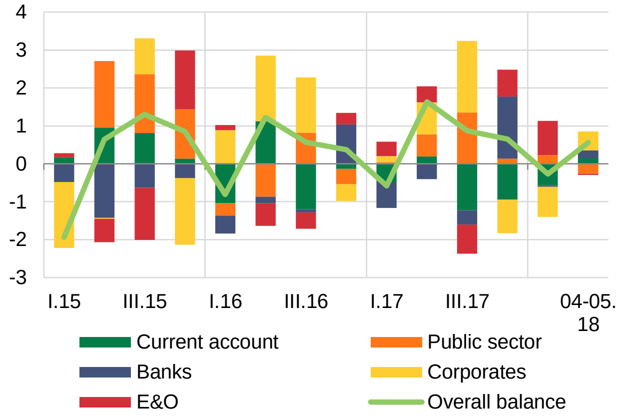
Current Account

High global export prices remained the main driver of exports in 2018. In April – May, export growth was also driven by an increase in volumes, which was partly attributed to last year's low comparison base resulting from the halt of trade with non-government controlled areas. As a result, the growth in exports of goods accelerated to 16.5% yoy compared to Q1.

Export growth was led by the metallurgy industry in the current year, as the value of metallurgical exports rose by 45.4% yoy in April – May, with volumes being responsible for almost half of the increase. While EU countries, mainly Italy, remained the main markets for metal products, a pick-up in construction in some Asian countries caused a notable increase in exports of rolled metal, in particular to Turkey and India.

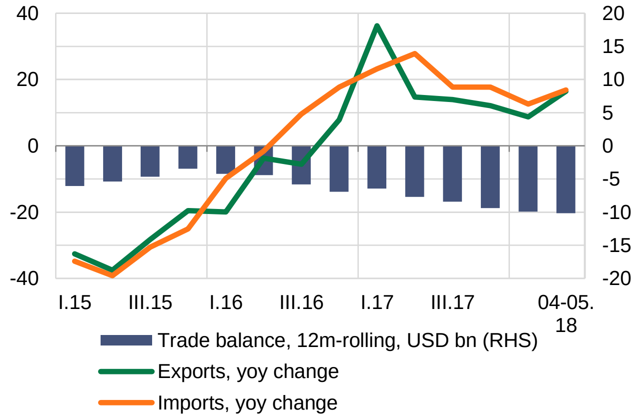
Favorable external economic conditions led to a rebound in food exports (these exports were up by 2.5% yoy in April – May compared to the decline of 4.7% yoy seen in Q1). In particular, a surge in global wheat and corn prices offset a drop in the volumes of wheat and corn exports that had resulted from a poorer harvest of these crops compared to last year. The current season is characterized by a slight shift in grain and oil-bearing crop exports to Asian markets. The rising international popularity of oil-cake residues as animal fodder is pushing up prices for this product. This brought about further growth in the value of exports of some food residues (to 17% yoy in April – May), despite there being a decrease in the volumes of these exports. China started to import

Overall Balance, USD bn



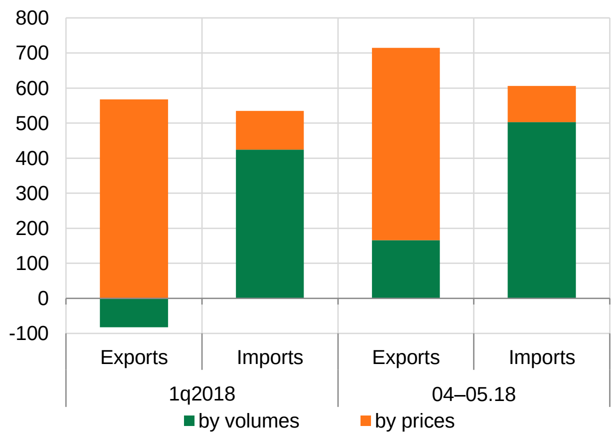
Source: NBU.

Exports and Imports



Source: NBU.

Exports and Imports*, yoy change, USD m



* 75% of goods in exports. 55% of goods in imports
Source: NBU.

Ukrainian oil-cake residues in December 2017. Ukraine remains the largest global supplier of sunflower seed meal, accounting for over half of global exports. The monthly average value of meat and dairy product exports remained at the level seen early this year, despite the growth in these exports decelerating slightly.

As a result of the shift in food and metallurgical exports, the role of Asian countries as importers of Ukrainian products significantly increased, with the share of these countries rising to 34.2% in April – May (up from 29.4% in the same period last year). This share almost equaled that of the European countries (despite there being a further rise in exports to European countries, their share shrank to 34.5%, compared to 36.2% before). Exports of grain and sunflower seed oil were responsible for the slowdown in the growth of exports to European countries. Exports to Russia also declined, due to the almost complete halt in engine exports since August last year, with their share decreasing to 7.5%.

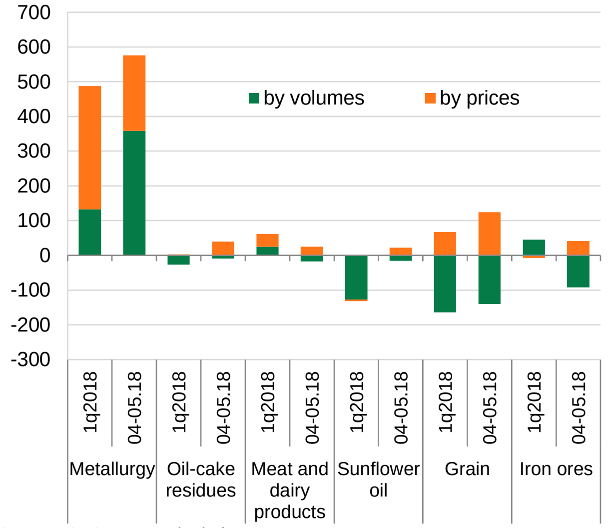
The geographical breakdown of imports was more stable, with European countries being Ukraine's main partner over the last four years (40.5%). At 26%, the CIS countries accounted for the second largest share of Ukrainian imports, largely due to energy imports (coal and oil products), while chemical and machinery imports mainly came from Asian countries (21%).

In 2018, the growth in imports of goods was mainly driven by non-energy imports – both investment and consumer imports. At the same time, it was precisely the increase in the monthly average volumes of energy imports seen in April – May compared to Q1 that sped up imports of goods the most in April – May, to 16.9% yoy.

Sustained domestic consumer demand helped maintain high rates of growth in food imports (23.7% yoy in April – May) and industrial products imports (15.6% yoy). Investment demand increased further, as evidenced by robust growth in machinery imports (the growth accelerated to 19.6% yoy compared to 15.2% yoy in Q1). Among machinery imports, imports of capital equipment (industrial equipment, pumps, spare parts, and so on) and consumer goods (computers, mobile phones, vacuum cleaners, and boilers) grew the fastest. Meanwhile, imports of agricultural machinery continued to decline (by 13% yoy), partly attributable to the government's initiative to reimburse agricultural producers for a portion of the cost of domestically produced agricultural machinery and equipment.

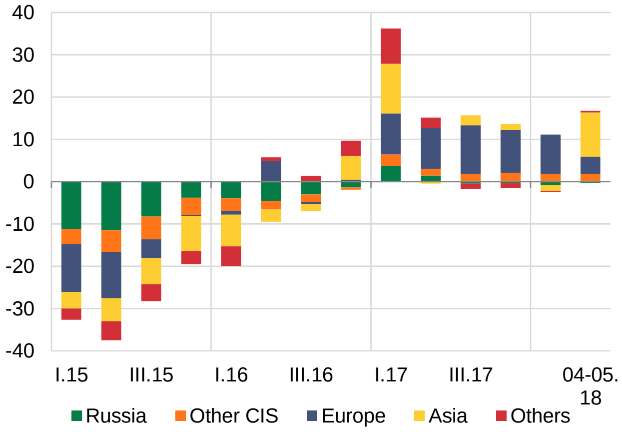
The growth in energy imports rebounded in April – May (by 11.4% yoy) on an increase in the quantity of gas pumped into storages, compared to Q1, when the stock of gas in storages was minimal. Thus, following the 62% yoy drop in the volumes of gas imports that was recorded in Q1, April – May saw a decline of only 18% yoy. The price was an additional driver of the energy import growth. Indeed, although the volumes of oil product imports remained unchanged, the value of these imports rose by 28.9% yoy in April – May, while the value of gas imports remained at the previous year's level even though there was a decline in volumes of gas imports. April – May also witnessed a rise in the volumes of coal imports (by 24% yoy). This year, coal imports are being driven by the growth in coking coal imports seen after Avdiivka Coke Plant recommenced uninterrupted operations. However, the value

Export of Selected Goods, yoy change, USD m



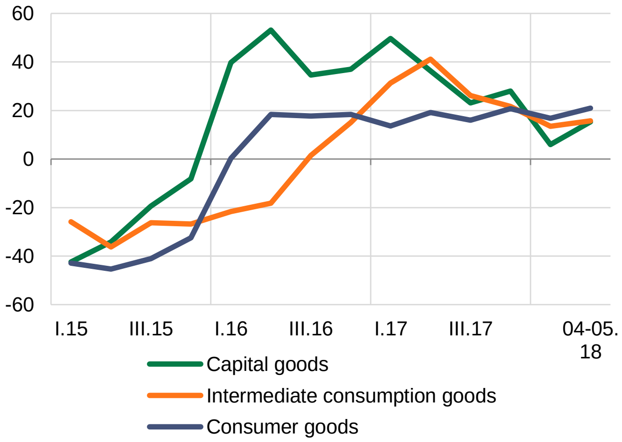
Source: SFS, NBU calculations.

Contribution to Annual Change in Exports by Regions, pp



Source: NBU.

Imports by Broad Economic Categories, yoy change



Source: NBU.

of coal imports increased only moderately (by 4.6% yoy), due to a fall in global prices and a further rise in the share of imports of cheaper Russian coking coal. Coke imports slumped as domestic coke production resumed.

Although trade in services ran a surplus (USD 0.2 billion in April – May), as is usually the case, its composition underwent slight changes. Exports of services were up by 11.5% yoy in April – May, bolstered by an ongoing expansion in toll refining and air transportation services. The new toll refining facilities launched in earlier periods helped accelerate the growth in toll refining services to 16.4% yoy, with the share of these services rising to 13% of total exports of services. More buoyant domestic demand and the 2018 UEFA Champions League Final played in Ukraine, together with foreign low-cost airlines' greater penetration of the Ukrainian market and new flights launched by domestic airlines, pushed up exports of air transportation services by 35% yoy in April – May, and increased the share of these services to 9% (up from 7.4% in the same period last year). The growth in imports of services was fueled by a rise in travel services.

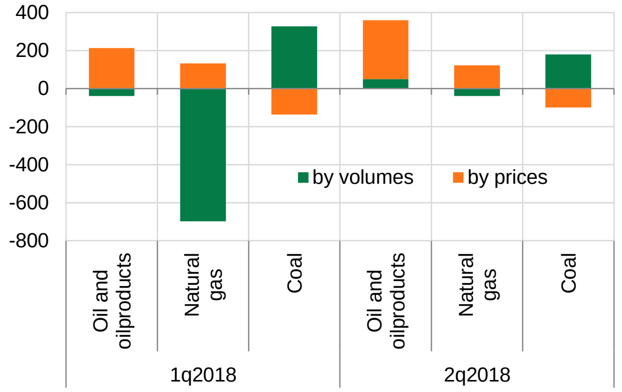
Remittances maintained a strong pace of growth (24.4% yoy in April – May), buoyed mainly by a further increase in the number of labor migrants. Poland has accounted for about a third of all remittances for two years in a row. Despite recording a further drop in its share, Russia remains second in terms of remittances (11.5% in Q1 2018). This is attributed to the improved economic performance seen in the countries that host Ukrainian labor migrants. As a result, primary and secondary account receivables increased significantly. Despite there being a rise in primary income account payables on the back of larger dividend payments[29], the primary and secondary income accounts surplus grew noticeably in April – May compared to the same period last year. This counterbalanced the widening in the trade deficit recorded in April – May.

Financial Account

Financial account inflows persisted into 2018, with net inflows increasing to USD 0.4 billion in April – May. In contrast to 2017, the inflow was generated solely by the private sector – both the banking and the real sectors. Growth in the net external liabilities of the banking sector was driven by inflows of foreign direct investment[30] and a reduction in the banks' assets resulting from purchases of foreign-currency denominated domestic government bonds. Net inflows to the real sector (USD 0.5 billion) came on the back of the successful placement of Eurobonds worth UAH 111 million by a leading Ukrainian mobile network operator, a USD 0.3 billion rise in net trade credit debt, and an inflow of foreign direct investment.

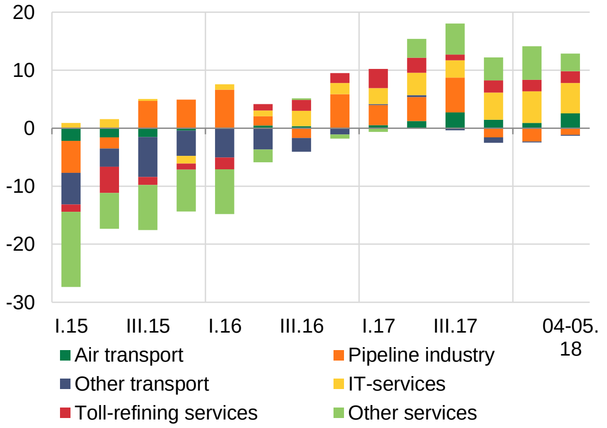
At the same time, total foreign direct investment remained relatively minor, at USD 0.3 billion. As in Q1, the bulk of this investment was directed the real sector, mainly in the form of equity. Foreign direct investment in the banking sector from debt-to-equity operations totaled USD 85 million or 29% of total foreign direct investment.

Energy Imports in 2018, USD m



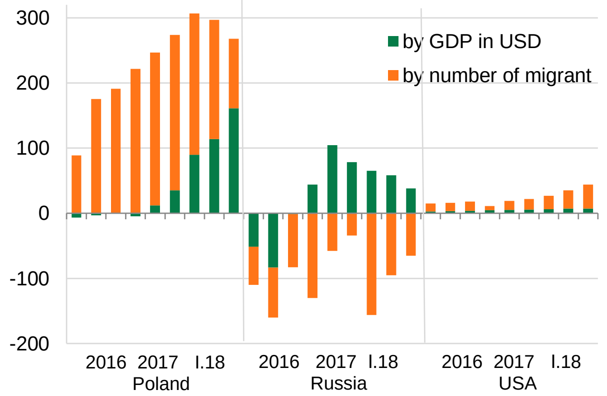
Source: SFS, Ukrtransgaz, NBU calculations.

Contribution to Annual Change in Services Exports, pp



Source: NBU calculations.

Absolute Annual Change in Remittances by Selected Countries, USD bn



Source: NBU calculations.

[29]In November 2017, the NBU granted permission to repatriate dividends for the period up to and including 2013, while in March 2018 it permitted the repatriation of dividends for 2017.

[30]Foreign direct investment data for 2017 – 2018 were revised to factor in the income reinvested in the banking sector.

Debt inflows to the private sector (USD 0.3 billion) reflected a rise in the real sector's net trade credit debt (USD 0.3 billion) and net borrowing through issuing Eurobonds worth USD 0.1 billion. Rollover in the real sector continued to improve, to 89% in April – May 2018. Although being significantly higher than 100%, rollover in the banking sector had only a limited influence on overall rollover in the private sector, due to borrowing and repayment being insignificant in absolute terms. Overall, rollover in the private sector rose to 92%.

Rollover of long-term private external debt[31], %

	Q2 2017	Q3 2017	Q4 2017	2017	Q1 2018	April – May 2018
Banks	43	64	132	54	133	124
Real sector	91	96	50	68	71	89
Total	85	89	59	66	80	92

The impact of the general government sector on the financial account decreased to some extent. The interest of external investors weakened somewhat on the back of a less favorable global financial environment for developing economies and the continued strengthening of the hryvnia exchange rate. Indeed, after spiking in Q1 2018, the portfolio of hryvnia-denominated domestic government bonds held by non-residents started to shrink. Repayments of long-term loans also contributed to the reduction of the public sector's external debt. As a result, in contrast to previous periods, the net external liabilities of the general government sector dropped by USD 0.3 billion in April – May.

Reserve Assets

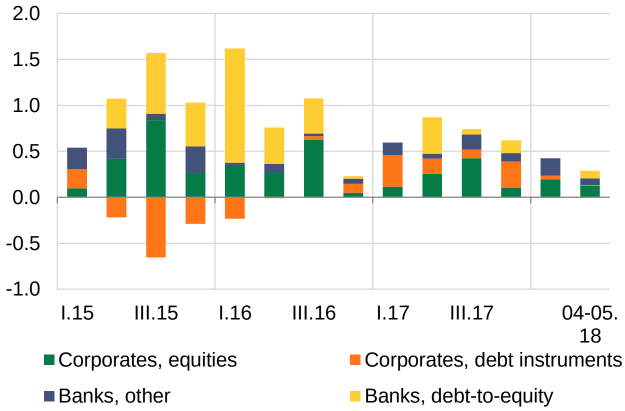
In spite of the balance of payments showing a surplus of USD 0.6 billion in April – May, international reserves in late May, at USD 18.2 billion or 3.1 months of future imports, remained at the level seen at the end of the previous quarter, as the government and the NBU repaid debt to the IMF (USD 0.4 billion). International reserves decreased to USD 18.0 billion in June, due to repayments of foreign-currency denominated public debt.

External Sustainability

In Q1 2018, the external sustainability and international reserve adequacy indicators showed divergent trends. With external debt almost unchanged in absolute terms, the GDP growth in the U.S. dollar equivalent recorded in Q1 2018 improved the relative measures of external debt. Meanwhile, international reserve adequacy measures deteriorated, as international reserves decreased – largely due to repayments of IMF loans. More specifically, the ratio of gross external debt to GDP fell to almost 100% (by 16.6 pp over the last 12 months), while the ratio of

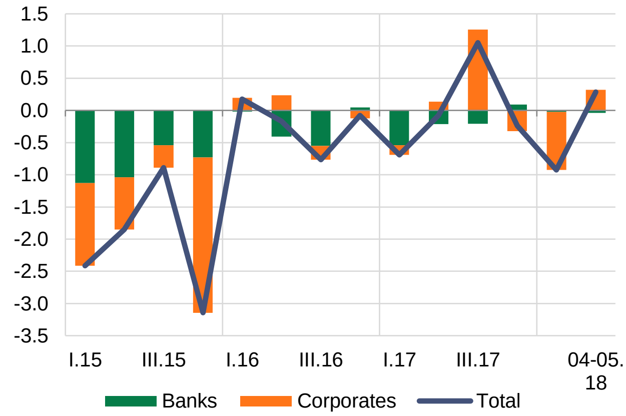
[31]Excluding debt-to-equity operations.

Foreign Direct Investment, USD bn



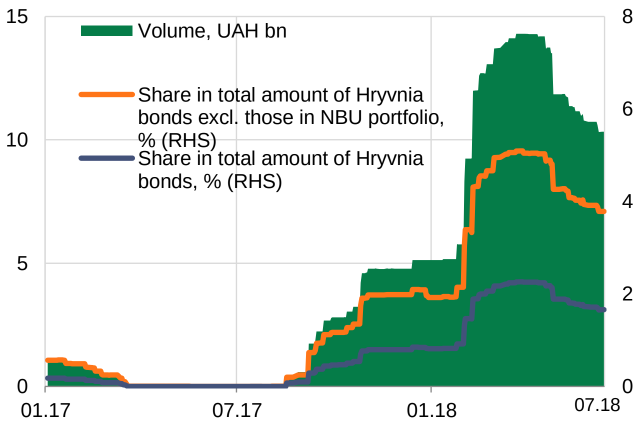
Source: NBU.

Overall Debt Flows*, USD bn



* Positive value – capital inflows
Source: NBU.

Volume and Share of Non-Residents in Hryvnia Bonds



Source: NBU.

reserves to the IMF composite measure (ARA metrics) dropped by 2.6 pp, to 63% of the minimum required level.

A reduction in the liabilities of the general government sector resulting from repayments of IMF loans worth USD 0.5 billion in Q1 2018 was offset by the depreciation of the U.S. dollar to other currencies, and non-residents' larger investment in hryvnia-denominated domestic government bonds. This pushed up the debt of the general government sector by USD 0.3 billion qoq, and by USD 2.6 billion yoy. Although remaining practically unchanged compared to the end of 2017, the external debt of the central bank rose by USD 1 billion compared to the same period last year, due to the arrival of an IMF tranche in April 2017.

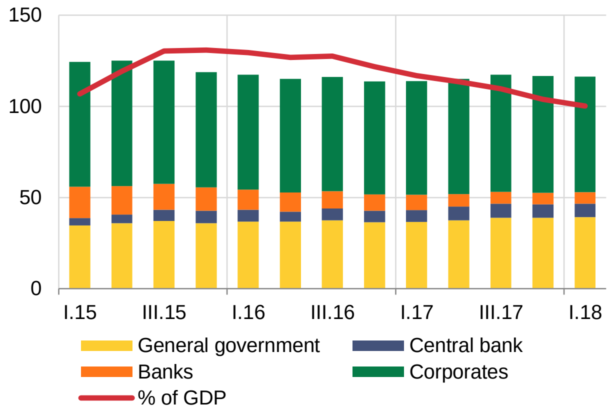
The banking sector issued Eurobonds worth USD 0.2 billion, driving up its external long-term liabilities for the first time since 2014. Overall, however, the debt of the private sector dropped by USD 0.6 billion, mostly reflecting a decline in outstanding trade credits to the real sector.

The public sector was largely responsible for a rise in short-term external debt by remaining maturity, to USD 47.2 billion, or 86% of exports of goods and services. Over the last year, the debt of the government and the central bank maturing within the next 12 months has increased, from USD 2.7 billion to USD 3.3 billion as of the end of Q1 2018 (of which USD 2.1 billion is debt to the IMF). Consequently, the ratio of short-term debt to gross debt grew for the first time since late 2016.

The drop in international reserves, to USD 18.2 billion, seen in Q1 2018 worsened reserve adequacy criteria. More specifically, reserves in terms of months of future imports decreased to 3.1 months (105% of the minimum required level). Following the improvement recorded in 2017, the ratio of reserves to the IMF's composite measure (ARA metrics) at the end of Q1 2018 stood at 63% of the minimum required level. The ratio of reserves to short-term debt (the Guidotti-Greenspan criterion) decreased to 38.5%. In spite of the drops seen in the last three quarters, reserves as a 20% share of broad money were more than double the threshold for international reserve adequacy.

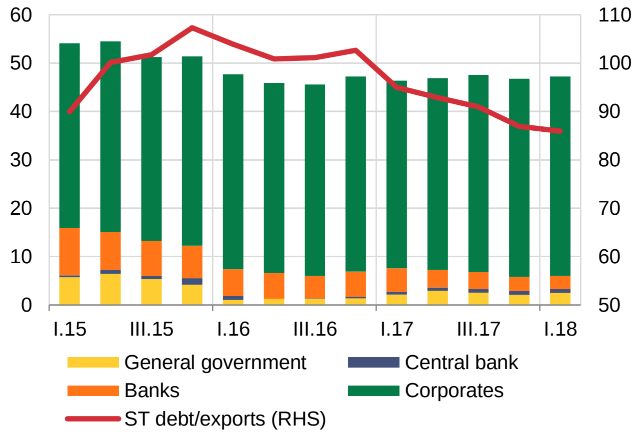
Despite there being an improvement in most external sustainability indicators, the increase in the ratio of short-term to gross debt and the worsening in international reserve adequacy criteria show that Ukraine becomes increasingly vulnerable to external shocks over the short-term.

Gross External Debt, USD bn



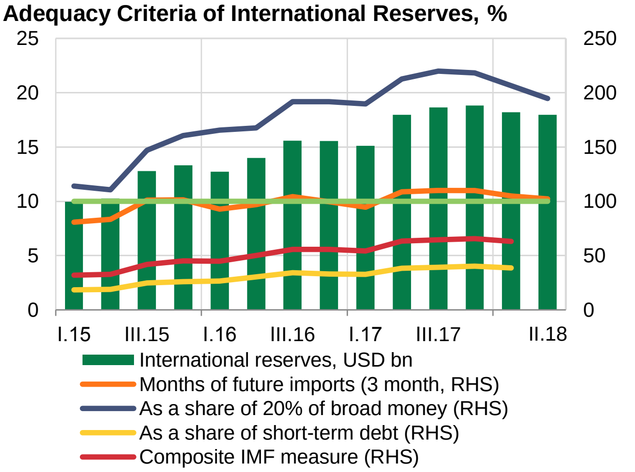
Source: NBU.

Short-Term External Debt by Remaining Maturity, USD bn



Source: NBU.

Adequacy Criteria of International Reserves, %



Source: NBU.

External Sustainability and International Reserve Adequacy Indicators

%	I.16	II.16	III.16	IV.16	I.17	II.17	III.17	IV.17	I.18*
External debt/GDP	129.4	126.8	127.4	121.8	116.8	113.5	109.6	103.8	100.2
External debt/exports of goods and services	255.8	252.9	257.8	247.0	233.0	227.7	224.5	216.8	211.6
Short-term debt/gross debt	40.6	39.9	39.2	41.6	40.8	40.8	40.5	40.1	40.6
Short-term debt/GDP	52.6	50.6	50.0	50.6	47.6	46.3	44.4	41.6	40.7
Short-term debt/exports of goods and services	103.9	100.9	101.1	102.7	95.0	92.8	90.9	86.9	85.9
Openness of the economy[32]	105.0	104.4	104.9	105.5	106.4	106.8	104.7	103.5	102.5
Reserves/short-term debt	26.7	30.5	34.2	32.9	32.6	38.3	39.2	40.2	38.5
Reserves, composite IMF measure	44.8	50.0	55.7	55.7	54.3	63.6	64.6	65.4	63.0
Reserves in months of future imports (3 months)	92.8	96.9	104.2	99.6	94.5	108.7	110.0	109.8	104.7
Broad money coverage of reserves	165.6	167.7	191.5	191.6	189.8	212.5	219.9	218.3	206.6
Current account/GDP, 12-month cumulative	0.7	1.0	-1.2	-1.4	-0.8	-1.6	-1.6	-2.2	-2.2
Net international investment position/GDP	-36.3	-34.4	-35.9	-30.3	-28.8	-26.1	-27.1	-23.7	-23.3

* the green color shows an improvement in the indicator compared to the previous quarter, while the red color indicates a deterioration.

[32] Calculated as a ratio of the 12-month moving average of the sum of exports and imports to GDP for the corresponding period.

2.6. MONETARY SECTOR AND FINANCIAL MARKETS

In Q2 2018, the NBU Board maintained its key policy rate at 17.0% per annum. Following several hikes in previous quarters, monetary conditions were considered to be reasonably tight to bring inflation in line with the medium term targets over the forecast horizon.

As before, interest rates on hryvnia interbank loans and government bond yields tracked the key policy rate closely. With the key policy rate kept unchanged in recent months, the effect of previous hikes gradually faded, with minor fluctuations of retail interest rates mainly reflecting specific factors for selected segments of money market.

Interest rates on hryvnia corporate loans increased in Q2 2018, mainly driven by stronger demand for loans. Alongside it was reflected in the growth in outstanding loans of NFC. A rise in interest rates on loans over one year was offset by the lower cost of short-term loans. Increasing competition among the banks for corporate clients contributed to higher yields on hryvnia deposits of NFC, whereas yields on HH deposits remained almost flat from the the previous quarter due to steady inflow of HH funds.

As a result of the tight monetary policy, yields on hryvnia government bonds in real terms remained some of the highest among emerging markets. Accordingly, the Ukrainian market was relatively less exposed to the impact of the worsened global financial market conditions that were affecting emerging markets countries, although there was still a moderate outflow of foreign capital from hryvnia securities. The favorable external price conditions and a rise in private remittances contributed to the appreciation of hryvnia against the US dollar, while most emerging markets saw their currencies depreciate versus the US dollar. This led to an appreciation of the hryvnia against the basket of currencies of Ukraine's MTPs in both nominal and real terms, contributing to lower pressure from imported inflation.

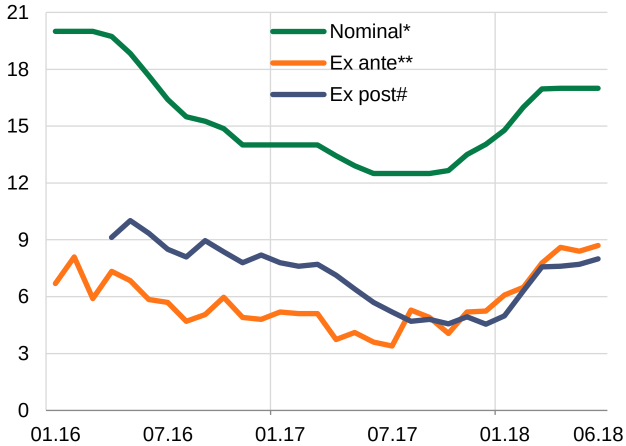
Interest Rates

In Q2 2018, the NBU Board decided to keep its key policy rate at 17.0% per annum. Keeping the key policy rate on hold during this period aimed at maintaining monetary conditions reasonably tight to bring inflation in line with the medium term targets over the forecast horizon. The real key policy rate ranged from 7% to 9% – far above the neutral level (see the box "A Neutral Real Interest Rate in a Case of Small Open Economy: The case of Ukraine" on page 43).

The cost of hryvnia interbank loans remained tightly bound to the key policy rate. With the key policy rate kept unchanged in recent months, the effect of previous hikes gradually faded, with minor fluctuations of retail interest rates mainly reflecting factors specific for selected segments of money market. In view of the liquidity surplus in Q2 2018, the Ukrainian Index of Interbank Rates (UIIR) continued to fluctuate within a narrow range near the lower boundary of the NBU interest rates corridor.

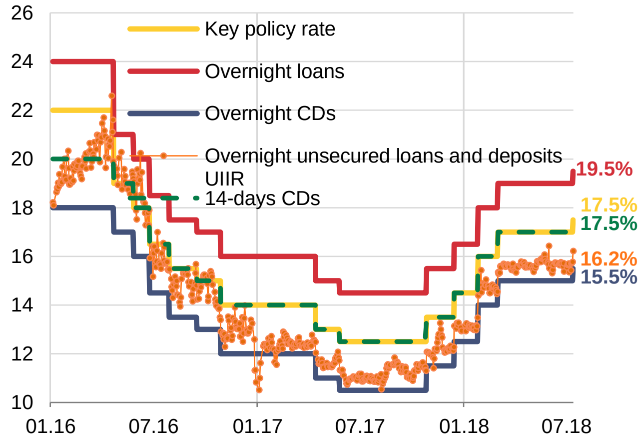
Yields on HH term deposits remained at the previous quarter's levels, while demand deposit yields declined slightly. This could be attributed to the banks' efforts to improve the term structure of their deposit portfolios amid a sustained large surplus of liquidity and continued inflow of HH funds. Yields on hryvnia deposits of NFC (both term and demand) also grew in Q2 2018 due to increased competition for corporate clients among banks.

Real Key Policy Rates, % pa



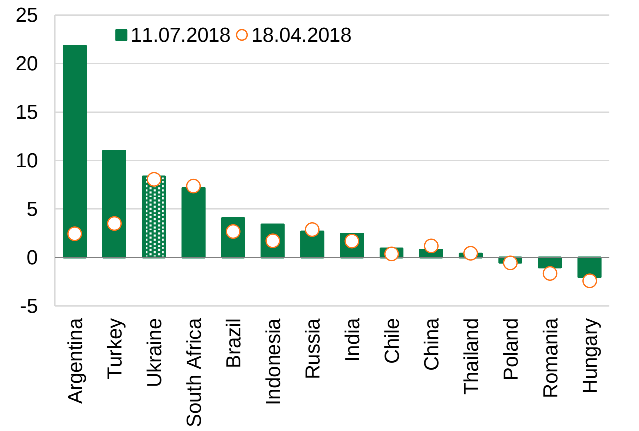
* Average monthly interest rate on 14-day CDs.
** Deflated by 12-month ahead inflation expectations of financial analysts.
\# Deflated by annual rate of core inflation.
Source: NBU`s estimates.

NBU Policy Rates and Ukrainian Index of Interbank Rates, % pa



Source: NBU.

Real Interest Rates* on Emerging Market bonds, % pa



* Real interest rate is calculated as a difference between 1-year bond yield on the primary market and inflation forecast as of 2018 (eop) from the IMF, for Ukraine – based on NBU`s estimates.
Source: DekaBank, Consensus Economics, Thomson Reuters, NBU`s estimates.

In contrast, the cost of hryvnia corporate loans continued to rise in Q2 2018. This was largely a reflection of higher demand for loans, especially for replenishing of working capital. Interest rates on retail loans over one year increased slightly as a result of tightening lending standards by large banks in view of higher collateral risks and deteriorated expectations of consumer solvency, on the back of a pickup in car loans and real estate lending. However, this was offset by the lower cost of short-term loans.

Despite high interest rates, non-residents reduced their portfolios of hryvnia securities in Q2 2018. The outflow of foreign capital was moderate, and was mainly associated with a reassessment of expected returns due to hryvnia appreciation since the start of the year, as well as global capital outflows from emerging markets. The moderate demand for hryvnia bonds and limits on other funding sources available to the budget prompted the MoF to raise yields slightly across selected maturities, and to conduct unscheduled placements of FX denominated government bonds. In real terms, hryvnia bond yields remained some of the highest among emerging markets. In the meantime, some of these countries, particularly Argentina and Turkey, raised their interest rates on public debt substantially due to capital outflows on the back of monetary policy tightening in advanced counties and the strengthening of the US dollar.

Meanwhile, the NBU improved the primary placement mechanism for domestic government bonds, with the aim of reviving the domestic government bond market. Starting on 1 September 2018, primary dealers will perform brokerage functions for their clients by purchasing domestic government bonds at primary placement on their own behalf and at the expense of their clients. The bonds can be credited to the primary dealer's own account in a case of failed or late payment by a client. Moreover, the payment period in a primary placement was extended to five working days.

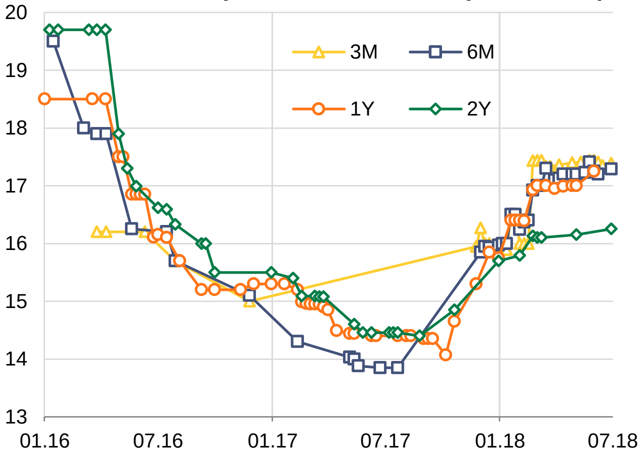
FX Market

In Q2 2018, FX market conditions remained favorable as the hryvnia appreciated against the US dollar. Conversely, the majority of other emerging markets countries saw their currencies depreciate versus the US Dollar. The average official UAH/USD exchange rate appreciated by 4.2% in Q2 2018 over the previous quarter. As of the end of June, the official UAH/USD exchange rate had appreciated by 6.7% since the start of the year.

The appreciation of hryvnia was fostered by the NBU's tight monetary policy, which kept real yields on hryvnia bonds at some of the highest levels among emerging markets, and helped slow capital outflows from domestic government bonds to a moderate level. The hryvnia exchange rate appreciation was also supported by a generally favorable external price environment and an increase in private remittances, which, coupled with a stabilization in exchange rate expectations, led to sizeable growth in the supply of FX cash. Meanwhile, the demand for FX cash remained at almost the same level as in the previous quarter. This allowed the NBU to purchase FX in order to replenish international reserves. In Q2 2018, the NBU's net FX purchase was positive, amounting to USD 508 million (USD 1.3 billion since the start of the year).

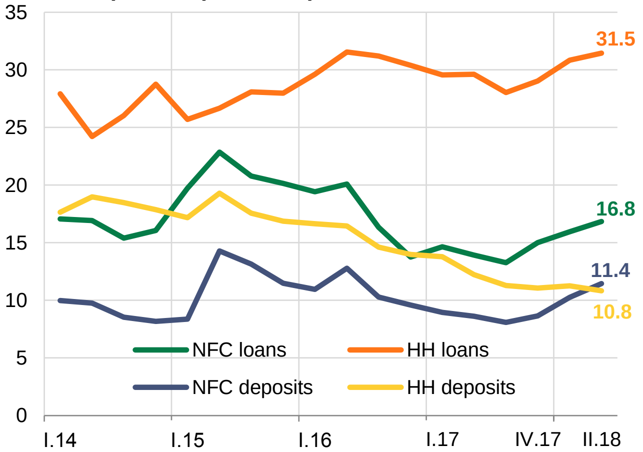
The hryvnia's appreciation against the US dollar against the background of currency depreciation in the majority of Ukraine's MTPs resulted in the significant NEER strengthening in April–May 2018. In annual terms, the NEER gained 0.6%. Alongside

Term Structure of Hryvnia Yields on Primary Market, % pa



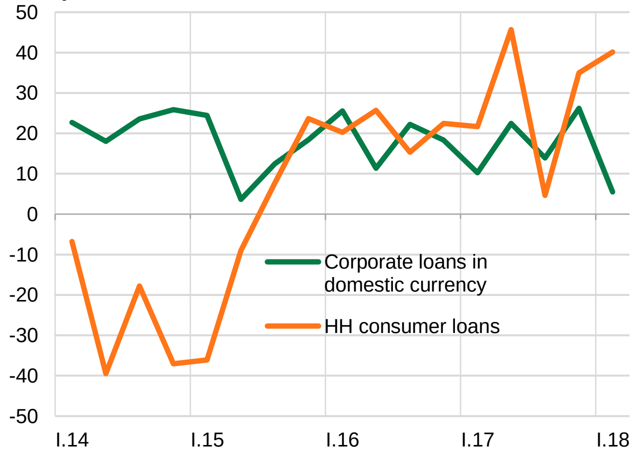
Source: NBU.

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



Source: NBU.

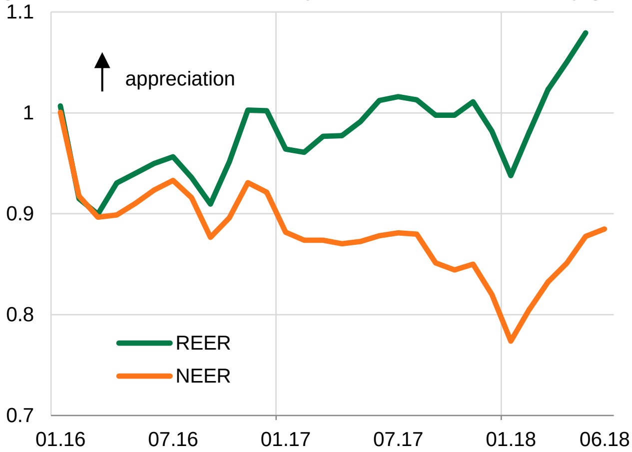
Banks Evaluation of Change in Demand for Loans, % respondents



Souce: Lending Survey (April 2018).

with much higher inflation in Ukraine versus MTPs, this led to a more significant appreciation of the REER compared to the forecast (up to 8.8% yoy).

Hryvnia REER and NEER Indices (based on interbank exchange rate, 12.2015=1, average)



Source: NBU.

New foreign exchange regulation model

On 21 June 2018, the President of Ukraine signed the Law of Ukraine "On Currency and Currency Operations", aimed at ensuring a transition to a new and modern FX regulation model based on the principle of "everything that is not explicitly forbidden by law is allowed". The law is aimed at improving the investment climate and making Ukraine more attractive to foreign investors. Its adoption will encourage the further liberalization of FX regulations, with the ultimate goal of establishing freedom of FX transactions for market participants. At the same time, the law stipulates that FX restrictions will be gradually lifted when macroeconomic conditions are favorable.

The basic principles of the new model of currency regulation

Principle	Comment
Freedom to conduct FX operations	"everything that is not explicitly forbidden by law, is allowed"
All transactions in hryvnia, except	foreign investment, banks', non-banks', national postal operators' financial services and other, determined by the NBU
Only two types of licenses	banking (includes FX) FX - for non-bank financial institutions
Currency supervision	authorities: NBU, SFS agents: authorized agencies
Anti-crisis measures and temporary FX restrictions	last up to 6 month

Source: Law of Ukraine "On Foreign Currency Transactions".

Moreover, under the law, the NBU remains able to make timely and effective responses when there are signs of a crisis – namely, unsustainable financial conditions in the banking system, a deterioration in Ukraine's balance of payments, and other crisis phenomena that threaten financial stability – and to prevent a crisis by taking primary protective measures for terms of up to six months.

The law was adopted on 7 July 2018 and comes into effect on 7 February 2019.

More details about the changes envisaged by the law are available via this link and on the website of the Verkhovna Rada of Ukraine.

Base Money and Liquidity[33]

In 2018, the banking system maintained a large liquidity surplus, which grew further in Q2 2018, exceeding the levels seen in Q1 2018 and Q1 2017. As in the previous quarter, this was reflected in a faster increase in the average daily stocks of deposit certificates (up by 22.1% qoq), while the average daily stocks of banks' correspondent accounts have remained almost flat over the past three quarters.

Government operations were the main source of liquidity for the banking system in Q2 2018. Due to an acceleration of the growth in budget spending, the government became a net liquidity supplier. The impact of these transactions on the liquidity of the banking system is estimated at UAH 20.8 billion.[34] Moreover, for the second consecutive quarter, the NBU's FX purchases to replenish international reserves (UAH 13.2 billion) remained one

[33] Preliminary data.

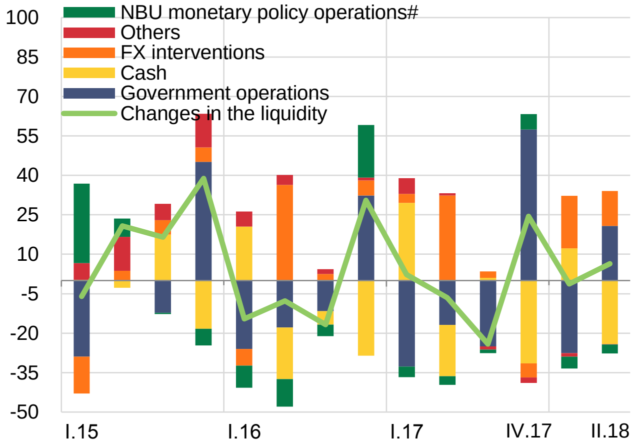
[34] The impact of fiscal factors on the growth in banking system liquidity was estimated based on the following main factors: the growth in single treasury account balances (up by UAH 1.1 billion), the portion of the NBU's profit transferred to the budget (UAH 38.0 billion), debt repayments by the government to the NBU (UAH 13.8 billion).

of the main liquidity growth drivers. However, the effect of this factor was weaker in Q2 2018 than in the previous quarter.

Traditionally for this period, liquidity was absorbed through growth in cash in circulation (up by UAH 24.2 billion). Moreover, the banks' repayments of previously received refinancing loans (UAH 3.4 billion) and transactions by banks liquidators and the DGF (UAH 2.9 billion in total) also continued to absorb liquidity.

The larger cash volumes and increase in the stock of banks' correspondent accounts as of the end of June led to a 6.8% qoq increase in the monetary base. In annual terms, its growth slowed to 10.0%.

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



* Quarter to previous quarter .
** Banking Liquidity includes CDs and correspondent accounts.
# Excludes operations with CDs.
Source: NBU.

Money Supply and Its Components

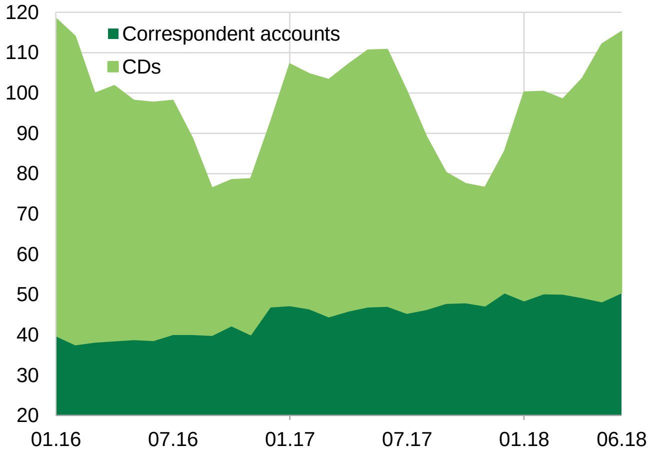
In April–May 2018, the growth in hryvnia deposits in the banking system continued to accelerate (to 15.9% yoy in May). This was due to banks actively increasing their HH deposit portfolios, as well as to resumed growth of NFC deposits . In April–May 2018, demand deposits and term deposits up to one year were the most popular for both retail customers and NFCs, whereas the stock of longer-term deposits declined. This can be attributed to the flattening of the deposit yield curve in view of higher uncertainty about large future expenditures of the government on the back of postponing of official international financing .

Improved financial results from businesses boosted the stock of NFC accounts in April–May 2018 (up by 7.8% qoq) and contributed to their faster annual growth (11.6%). Demand deposits grew the most, as businesses faced higher needs for working capital.

Retail deposits also rose over the two months, albeit at a somewhat slower pace (2.8% qoq and 19.4% yoy), which reflects a seasonal increase in spending during the holidays in May. Growth in real wages and the improved attractiveness of hryvnia deposits amid the appreciation of the domestic currency bolstered active growth in HH deposits in the domestic currency.

Owing to the increase in the stock of deposits, the annual growth in the money supply accelerated to 10.0% yoy in May 2018. According to Lending Survey (April 2018), most banks expect deposits to continue growing over the next 12 months.

Banking System Liquidity (monthly average daily stocks), UAH bn



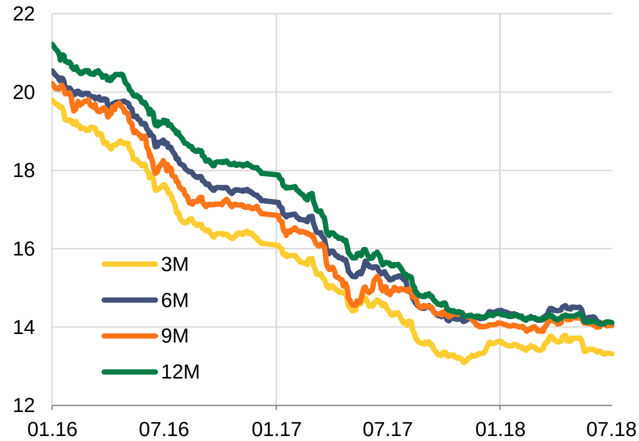
Source: NBU.

Loans

Bank lending in hryvnia continued to increase gradually in April–May 2018: growth in the stock of loans accelerated to 16.9% yoy. Lending to HH grew the most, primarily on account of a rise in consumer lending. Car loans and loans for other consumer needs increased rapidly. Demand for mortgage loans rose as well. Higher household incomes were among the factors encouraging demand for retail loans. In addition, demand for loans was fueled by growing prices for durable goods combined with improved consumer sentiment and easing of lending standards (primarily in the consumer segment).

NFCs also showed stronger demand for loans, attributable to increased need for working capital and capital investment. The leaders in this growth in demand for loans in April–May 2018 were companies in the manufacturing and agriculture sectors, and in wholesale and retail trade.

Ukrainian Index of Retail Deposit rates (5-day moving average), % pa

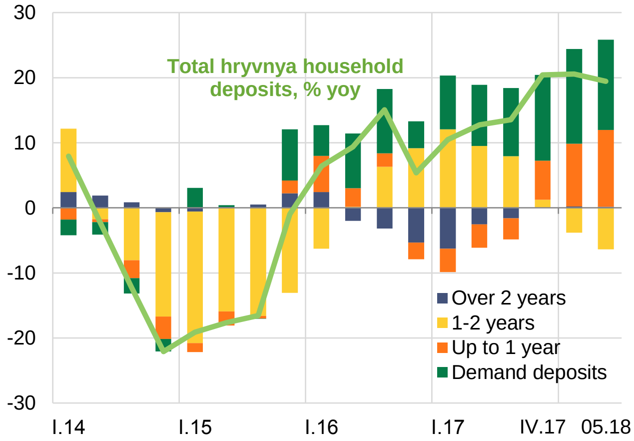


Source: Thomson Reuters.

The stock of FX loans to NFCs (in the US dollar equivalent) also picked up slightly (3.2% yoy).

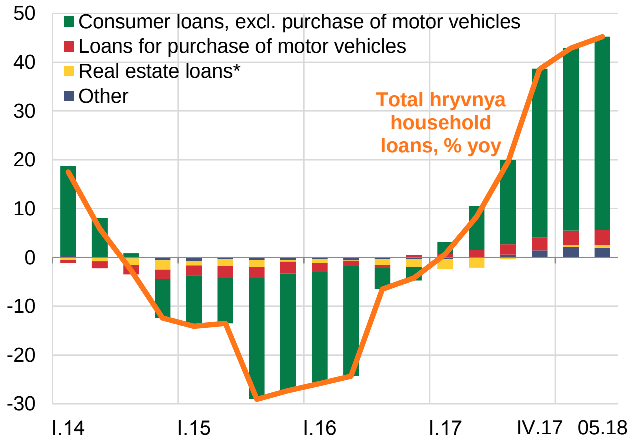
The banks remain optimistic about their lending prospects and plan to continue increasing their loan portfolios. The Draft law "On Lending Resumption" approved by the Verkhovna Rada of Ukraine will also foster growth in loan portfolios. On the one hand, it will make bank loans more accessible for individuals and legal entities, while on the other it will enable banks to reduce their credit risks. Moreover, the law is aimed at eliminating legal loopholes that allow borrowers to evade responsibility for not paying debts on loans. More details about the draft law are available via this link and on the website of the Verkhovna Rada of Ukraine.

Annual Change in Households' Deposits in Domestic Currency Breakdown by Maturity, pp



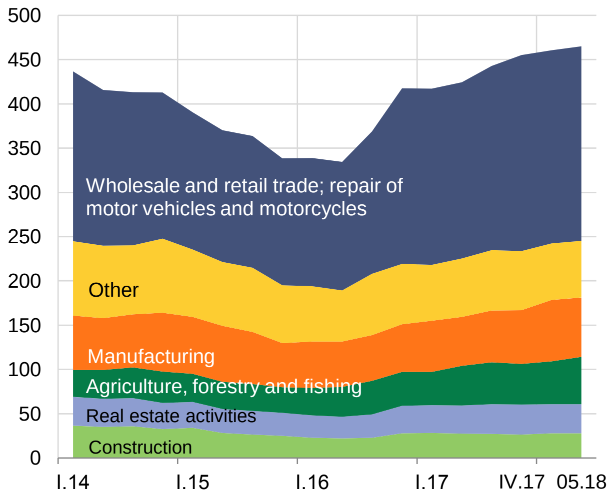
Source: NBU.

Annual Change in Households' Loans in Domestic Currency Breakdown by Type, pp



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

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



Source: NBU.

Box: A neutral real interest rate in a case of small open economy: application to Ukraine[35]

Under an inflation-targeting regime (IT), inflation forecasting is the basis for monetary policy decisions and, thus shifts in the monetary stance. As the NBU conducts its monetary policy using IT, the key policy rate is its main monetary policy tool, while the interbank overnight rate is the operational target. If the projected inflation is above the target, monetary policy tightening is applied to restrain inflation – that is, the interest rate is raised. Conversely, when projected inflation is below the target level, monetary policy is eased by cutting the interest rate. In the end, by managing the interest rate, the central bank influences macroeconomic variables such as GDP and inflation.

Determining the neutral real (equilibrium) interest rate as the level of the short-term, risk-free real interest rate consistent with output at its potential level and inflation at its target level after the effects of all cyclical shocks fade away is important for the purposes of monetary conditions analysis. According to the Taylor rule (Taylor, 1993), the real interest rate must exceed the 2% "neutral" real interest rate if inflation is above the target, and vice versa, ceteris paribus. While in Taylor's paper past inflation serves as a proxy for expected inflation, many central banks use inflation forecasts, effectively relying on inflation forecasts targeting (Svensson, 1997).

In practice, estimating the neutral interest rate is a challenging task for monetary policy makers. First, it is an unobservable variable and has to be inferred from economic indicators, often with a high degree of uncertainty. Second, whereas the neutral rate of interest should by definition reflect slow-moving, long-term structural factors, these are quite unstable – especially in emerging market economies that are exposed to rapid structural changes and recurring financial crises.

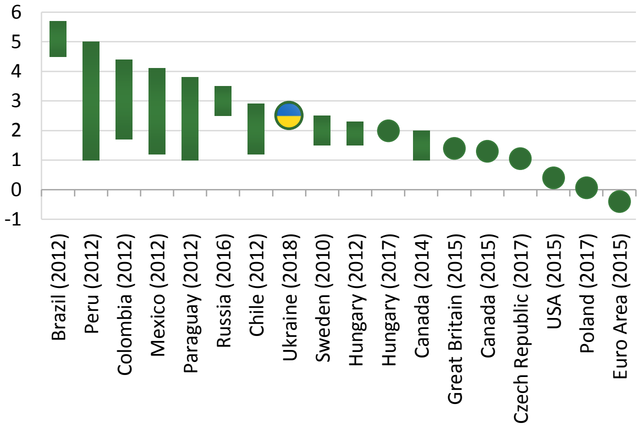
The issue of measuring neutral real interest rates has generated a great deal of interest among researchers, with a particular emphasis on emerging economies, where low interest rates have failed to provide the necessary economic stimulus. Researchers have pointed to the fact that neutral interest rates there have fallen significantly, even to negative levels. In Holston et al. (2017), Ball et al. (2016), and Carvalho et al. (2016) the main reason for the decline in the neutral real interest rate in advanced economies are demographic trends (a shift towards aging and savings-oriented population) along with slower productivity growth, an overall excess of savings, and stable low demand for capital.

Notable recent papers on estimating neutral interest rates in emerging economies include a study by Stefański (2017), who introduces some innovations to the method of Laubach and Williams (2003), applying it to the economies of Central and Eastern Europe (CEE). He concludes that the neutral interest rates in CEE countries declined from the pre-crisis levels (before 2008) as a result of spillovers from advanced economies. Slower growth in potential GDP on the back of global factors was the main source of these spillovers. Population ageing in the EU also contributed to the decline in neutral interest rates, although this was not the main factor.

The latest empirical studies of emerging and advanced economies indicate rather low neutral interest rates, ranging from 0 to 2%. This reflects ample global liquidity and other internal and external factors specified in the above empirical studies. Their average estimates are close to 2%. Brazil's has about 5%, but this is rather an exception, as it historically had the highest level of interest rates in the region.

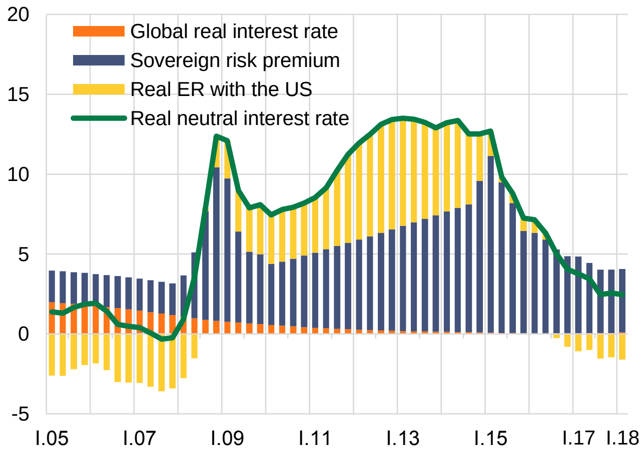
The methodology for calculating the neutral real interest rate for Ukraine is based on the equation of uncovered interest rate parity, and all estimations are made using the NBU's Quarterly Projection Model (QPM). The QPM is a small semi-structural model with rational expectations. The model is outlined in the research papers by Nikolaychuk and Sholomytskyi (2015) and Grui and Lepushynskyi (2016). Currently similar models are used

International estimates of the real neutral interest rate, % pa



Source: Magud and Tsounta (2012), Kreptsev et al. (2016), Baksa et al. (2013), Stefanski (2017), Sveriges Riksbank (2010), Mendes (2014), Laubach and Williams (2017).

Real neutral interest rate decomposition, % pa



Source: Federal Reserve Bank of San Francisco, NBU`s estimates.

[35] This is a summary of the results of a study described in an article by Grui, Lepushynskyi, Nikolaychuk (2018), which was published in issue No. 243 of the Visnyk of the National Bank of Ukraine.

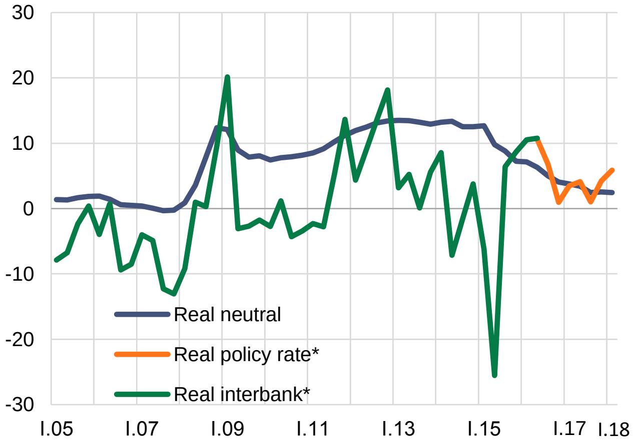
by the central banks of Armenia, Romania, Serbia, Slovakia, and many others.

The neutral real interest rate is determined by the interaction between the demand for investment and the supply of savings. In the case of a small open economy like Ukraine the supply of savings is determined outside of the economy, on the global markets. This makes the cost of resources very dependent on external conditions. Instead, domestic factors such as the sovereign risk premium (which depends on fiscal and external sustainability, political turbulence, the banking sector performance, and demographic changes) and changes in the real exchange rate prevail.

The level of the neutral rate of interest for Ukraine is close to the results obtained by Magud and Tsounta (2012) for the majority of Latin American countries. The estimated results show that in Ukraine the neutral interest rate varied greatly during the period of study. It has been quite volatile for the last 12 years, mostly driven by the high volatility of the risk premium. At the same time, changes in the real exchange rate and global neutral rates had a major impact on the trend of Ukraine's neutral rate. However, in 2016 and 2017, Ukraine's neutral interest rate declined to 2.5% on the back of a lower sovereign risk premium and the renewed appreciation trend of the real exchange rate, amid revived productivity growth.

According to forecasts of the long-term neutral interest rate based on projections of productivity, demographic trends, changes in the real exchange rate, and risk premiums, the natural rate will gradually decrease from 2.5% in early 2018 to 2% in real terms, or to 7% in nominal terms under 5% medium-term inflation target. Meanwhile, the long-term real neutral interest rate is subject to uncertainty due to possible fluctuations of its components: investor sentiment can change the level of the sovereign risk premium, while faster growth of the global economy could push up the neutral interest rate to its pre-crisis level.

Monetary policy stance in Ukraine, % pa



* Deflated by model-consistent inflation expectations.
Souce: NBU`s estimates.

Estimating the neutral interest rate provides a useful tool for policy analysis. For instance, it shows that in the past (before the IT introduction) short-term interest rates remained below the neutral rate for a long period of time. Such an explicitly accommodative stance of monetary policy caused foreign exchange crises and inflation spikes in Ukraine. Since the beginning of 2016, the NBU has been maintaining its real key policy rate above the neutral interest rate, thus ensuring disinflation in line with the declared IT framework. In the medium term prospect, the NBU's key policy rate should remain at a level sufficiently above the neutral interest rate in order to ensure disinflation and stabilize inflation expectations close to the target.

3. Economic outlook for Ukraine

3.1. Forecast assumptions

Rapid growth will continue in the global economy in 2018 through 2020, however its pace will gradually slow in both developed countries and in the majority of exporters of raw commodities and industrial goods. In the case of developed economies, this will be due to their quickly ageing populations and low growth in productivity. For emerging market countries, it will be due to their increased vulnerability to destabilizing volatility on the financial markets. Additional factors that may limit growth include: a rise in global protectionism driven by the import tariffs on steel and aluminum imposed by the US, which have caused a chain reaction from other countries, and higher crude oil prices as a result of geopolitical tensions in the Middle East.

On the other hand, greater investment, relatively high commodity prices, and a pickup in global trade will provide important support to the global economy. According to the European Central Bank (ECB), global trade has been in cyclical recovery for the last 18 months. Global imports increased by more than 5% in 2017, which is 1.5 pp above the average level of 2011–2016. Moreover, the growth in global imports outpaced the growth in economic activity for the first time in three years. Cyclical growth in investment was an important factor behind this trend (during previous quarters, global investment increased at a pace similar to its pre-crisis levels).[36]

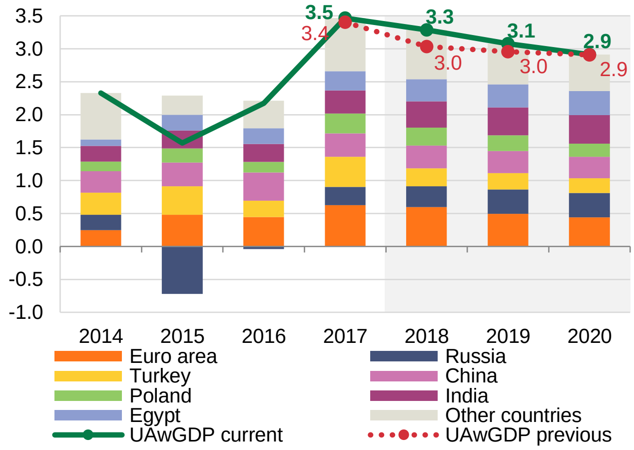
The US economy will continue to grow rapidly, thanks to a release of additional funds on the back of a decreased tax burden and higher budget expenditures, as well as the strengthening labor market due to lower unemployment and higher wages.

The euro area's economy will grow at a steady pace, although there will be a slowdown in growth over the medium term. The growth will be supported by improved labor market conditions owing to companies raising their spending on labor, and by an increase in lending to the private sector driven by low interest rates and favorable bank lending conditions.

As a result, inflation is expected to accelerate in developed countries and their monetary policies will normalize accordingly. In particular, the Fed is expected to continue raising its interest rate and to gradually reduce the assets on its balance sheet. The ECB has already announced plans to gradually wind-up its quantitative easing program. The ECB is expected to raise its interest rates in H2 2019.

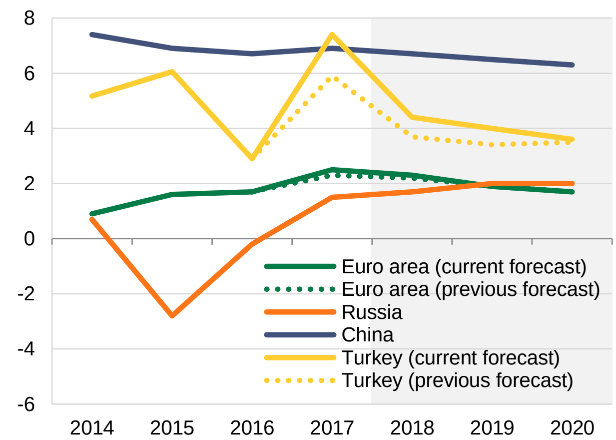
These developments will decrease the demand for risky financial assets among investors, thus leading to tighter financial conditions for emerging market countries. The financial markets of these countries already faced increased pressure in H1 2018 amid the appreciation of the US dollar – this especially concerned the countries that are the most vulnerable to external factors, namely Argentina and Turkey. In general, however, developing countries are currently better prepared to withstand financial pressures than they were, for example, on the eve of the Asian crisis of the late 1990s or the global financial crisis of 2007–2008. These countries now have larger international reserves, lower current account deficits, more flexible exchange rate regimes, and more systematic macroprudential tools.

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



Source: NBU staff estimates based on IMF.

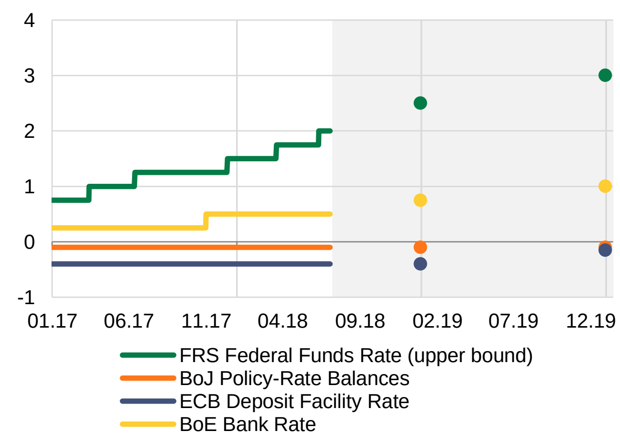
Real GDP* of Selected Ukraine's MTP Countries, % yoy



*- forecasts are updated on the basis of recent data coming from national statistical agencies.

Source: NBU staff estimates.

Key Policy Rates of Major Central Banks, %



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

[36] https://www.ecb.europa.eu/pub/economic-bulletin/html/eb201803.en.html#IDofBox1.

Against this background, economic growth in CEE, Turkey, and China is expected to moderate, on the back of slower growth in exports and the fading positive effect of budget support. On the other hand, economic activity will pick up in a number of CIS countries thanks to a gradual growth in energy prices and looser domestic monetary policies.

The steady global economic growth will support prices on the global commodity markets. After some corrections in Q2 2018, global prices for Ukrainian exports will stabilize, followed by a mild upward trend in prices for certain goods.

Prices for ferrous metals are expected to remain high on the majority of regional markets thanks to stronger global demand. According to the World Steel Association, in 2018 global consumption of steel will increase by 1.8% yoy. Eurofer estimates that demand could grow by 1.9% yoy and another 1.6% yoy in 2019. Demand in some countries in south-western Asia will also remain stable at a high level, in particular in India and China, as they continue to implement a number of infrastructure projects. Demand in the US is expected to grow by 1.5%–2.5%, and in Brazil by 6.5%–7.5%, primarily due to a pickup in the construction sector.

However, any further escalation of the trade war between the US and China is a high risk, as it could become a significant drag on business activity in all regional markets. In particular, if the US imposes a 20% tax on European cars and other products in the automobile industry, the steel market might fall into a lasting recession, with both the US and Europe incurring large losses.

Iron ore prices may drop to 55–60 USD/ton in the medium term in view of the sizable expansion in global supply, especially from Australia, Brazil, and India. A number of large corporations have already announced the launch of new iron ore projects, with the aim of replacing depleted mines with new ones. A deceleration of demand growth in certain territories caused by the escalating trade conflict between the US and China will be an additional factor.

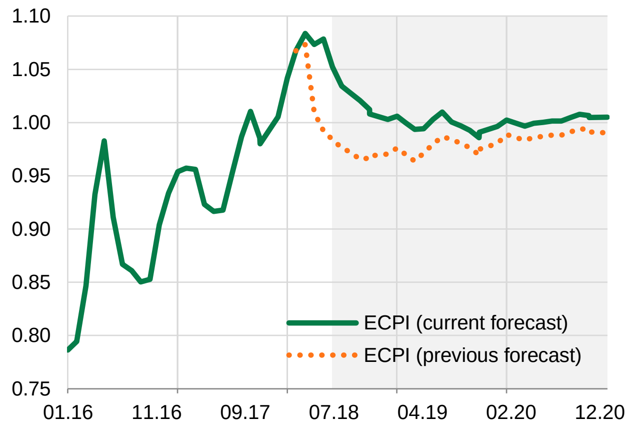
Global grain prices will increase gradually on the back of faster growth in global consumption, driven also by supply factors. In the 2018/2019 marketing year, global production of wheat will decline by 1.8% yoy.[37] Concern over lower yields in some wheat-growing regions (Russia, India, Pakistan) will continue to buoy prices. On the other hand, this will be offset by better harvests in the US, Argentina, Australia, and Canada. Global consumption volumes will grow by 1% yoy, which may lead to a 2.3% decrease in carry-over inventories.

At the same time, the US Department of Agriculture (USDA) estimates that global production of corn will increase by 1.7% yoy in the 2018/2019 marketing year, fueled by better yields in China, Argentina, Russia, and Ukraine. In contrast, yields in the US and the EU will drop, due to a reduction in sown areas as farmers shift to more profitable crops. Yields will also decline in Brazil, where the lasting drought might affect the second harvest. Global consumption will continue to gain momentum (up by 1.9% yoy), with its volume exceeding production for the second consecutive year. This will cause carry-over inventories to shrink by almost 20% yoy.

Global crude oil prices will vary in a relatively narrow range in the coming months. Oil prices will be supported by higher demand (growing by approximately 1.5% per annum), supply disruptions

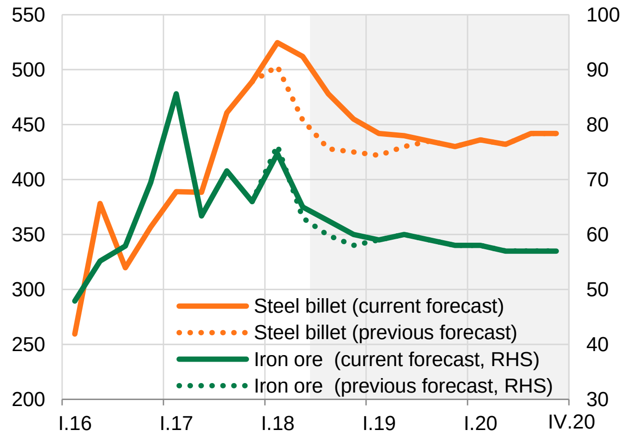
[37] USDA "Grain: World Markets and Trade" (June 2018).

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



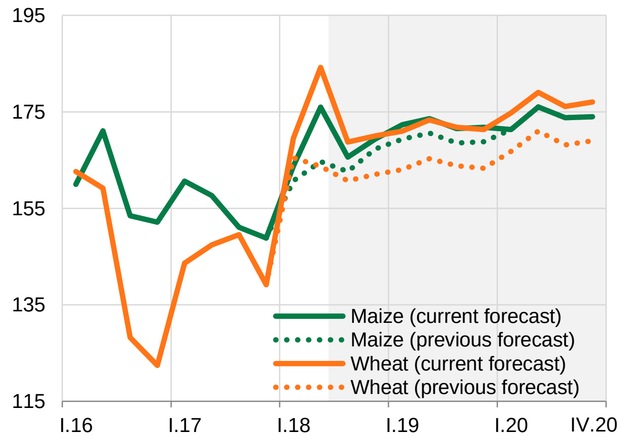
Source: NBU staff estimates.

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



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

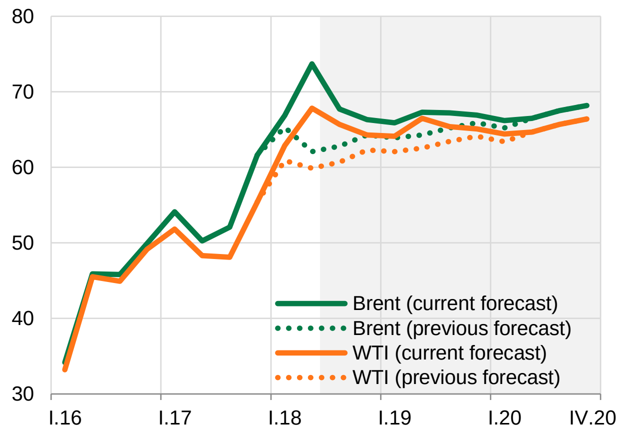
World Cereal Prices, USD/MT, quarterly average



Source: NBU staff estimates.

caused by geopolitical conflicts in the Middle East, lower oil production by Venezuela due to its economic crisis, a sanctions-driven decrease in oil export volumes by Iran, and a decline in oil inventories across the world. On the other hand, an increase in oil production by OPEC+ countries in line with their recent agreements, and a rise in output of shale oil in the US and Canada will restrain price growth.

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



Source: NBU staff estimates.

	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	2.5	1.5	2.3	1.13	58.3	231.5	54.5	411.0	155.3
2018	1.5	3.7	2.0	2.3	1.7	2.5	1.21	59.6	269.9	68.6	466.4	172.4
2019	1.6	4.0	2.0	1.9	2.0	2.2	1.20	60.0	279.4	66.8	426.3	173.7
2020	2.0	4.0	2.0	1.7	2.0	2.2	1.20	60.0	280.1	67.1	436.2	176.4
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*	*1.4*
2018							*7.1*	*2.2*	*16.6*	*25.9*	*13.5*	*11.0*
2019							*-0.8*	*0.7*	*3.5*	*-2.6*	*-8.6*	*0.8*
2020							*0.0*	*0.0*	*0.2*	*0.4*	*2.3*	*1.6*

*Average for the year.
** Average weighted by volume, excluding oil.

3.2. Inflation developments

In 2018, the inflation forecast remained unchanged at 8.9%, whereas the core inflation projection was lowered to 7.1%. The faster-than-expected disinflation in May–June 2018 will be offset in the second half-year by pro-inflation factors. This is due to expectations of a greater-than-anticipated increase in administered prices at the end of the year, as domestic gas prices move closer to the import parity price. This factor will also influence inflation levels in the first three quarters of the next year, which will prevent the NBU from bringing inflation into its target range before Q4 2019.

At the same time, in H2 2018 and 2019, inflation will be exposed to a number of factors that are more fundamental than the rise in administered prices. Among them will be:

– a pickup in consumer demand fueled by higher household income (owing to improved social standards and further growth in wages and remittances from abroad, on the back of increased labor migration)
– inflation expectations continuing to exceed the NBU's inflation targets
– weakening in investors' appetite for Ukrainian sovereign debt, as a result of the global outflows from emerging market assets, as well as the delay in the provision of financing under the IMF cooperation program.

The NBU's tight monetary policy will offset the effect of these factors and will be among the key factors in bringing inflation into the target range in Q4 2019. This will also be supported by a conservative fiscal policy due to budget constraints caused by large repayments of the public debt, moderate imported inflation against the backdrop of relatively low exchange rate volatility, and decreased pressure from administered prices.

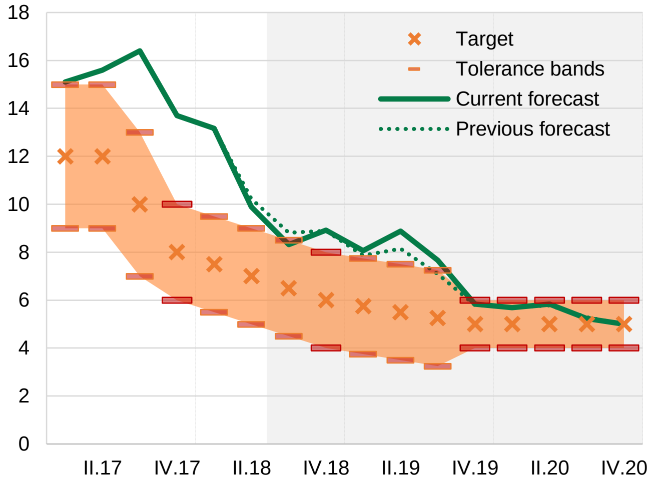
Other factors include the easing food price pressures in the current year. This is especially related to the prices of fruit and vegetables. However, robust external demand, the convergence of Ukrainian food prices with the prices in neighboring countries, and greater export opportunities for Ukrainian businesses will boost the growth in prices of some foods (particularly butter and eggs).

Therefore, the inflation forecast for this and the coming years remains unchanged: headline inflation will be 5.8% at year-end 2019, and decelerate to 5.0% in 2020, reaching the midpoint of the target range (5.0% ± 1 pp).

By the end of this year, core inflation will decline to 7.1%, driven by the NBU's tight monetary policy, second-round effects from the slowdown in food inflation, and lower imported inflation against the background of moderate exchange rate volatility. The rapid growth in household income (particularly wages, pensions, and remittances from abroad) will remain the main factors behind the rise in core CPI determining demand-side inflationary pressure. In addition, the rapid growth in wages will boost the production costs of businesses, thus leading to higher prime costs of their products. As a result, the highest increase among the components of core inflation will be seen in the price of services, in which the share of labor costs is the largest.

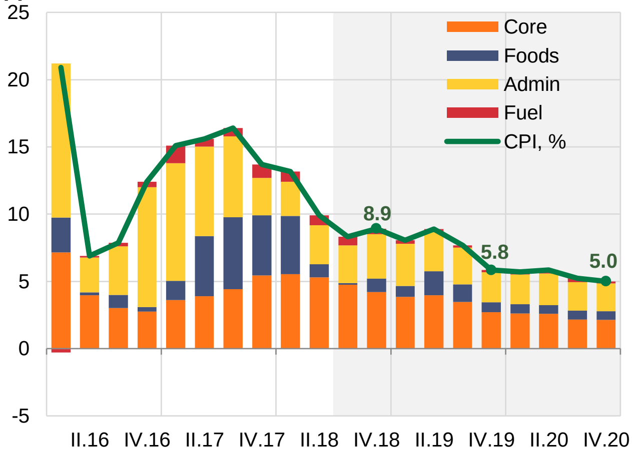
In 2019 and 2020, core inflation will continue to decline (to 4.6% and 3.6%, respectively) due to low imported inflation and tight monetary and fiscal policies.

CPI, %



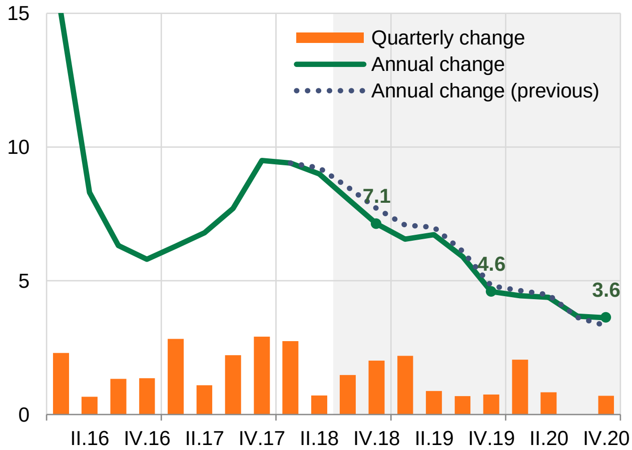
Source: SSSU, NBU staff estimates.

Contributions to Annual CPI Growth by Main Components, pp



Source: SSSU, NBU staff estimates.

Core Inflation, %



Source: SSSU, NBU staff estimates.

Raw food inflation will decrease markedly in 2018 (to 5.4%), driven by the wearing off of supply factors related to a pickup in exports of some Ukrainian goods, which caused an acceleration of food inflation last year. The increased shift of Ukrainian food producers to exports will continue to put additional upward pressure on prices by decreasing the supply of food products on the domestic market.

In the medium term, prices for raw foods are expected to grow moderately (4.0% at year-end 2019 and 3.5% at year-end 2020), provided there are no significant supply shocks. This will be largely driven by higher nominal and real household income, as well as the convergence of domestic food prices with global prices on the back of growth in international trade. The expected higher output of the agricultural sector, driven by past investments and improved productivity, will curb food inflation.

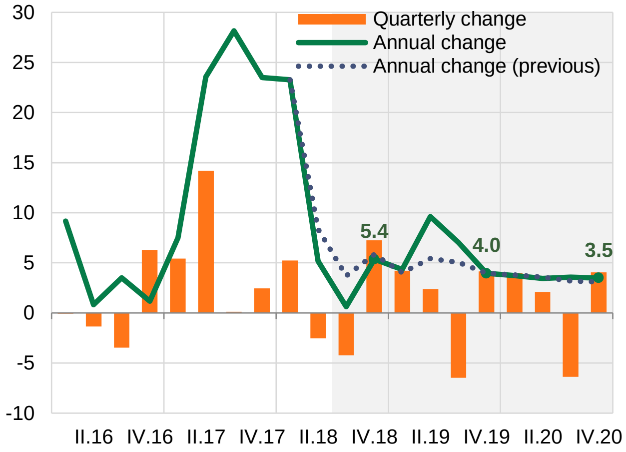
Administered prices will rise by 16.6% in 2018. Administered inflation will accelerate at the end of the year, as the baseline scenario foresees the government fulfilling its commitment to the IMF to bring the price of household gas closer to its import parity price. In addition, further wage growth, particularly the wages of the staff of utility companies, will also gradually push up administered prices, including in the medium term.

Higher prices for tobacco and alcohol products will contribute substantially to administered price inflation – they are expected to grow by 19% and 11% respectively in 2018, and by 9%–13% in subsequent years. The increase in prices for these products will largely be due to the continued rise in excise tax rates in the coming budget periods.

In 2019–2020, administered prices will grow more slowly, although this growth will remain high, at around 10%.

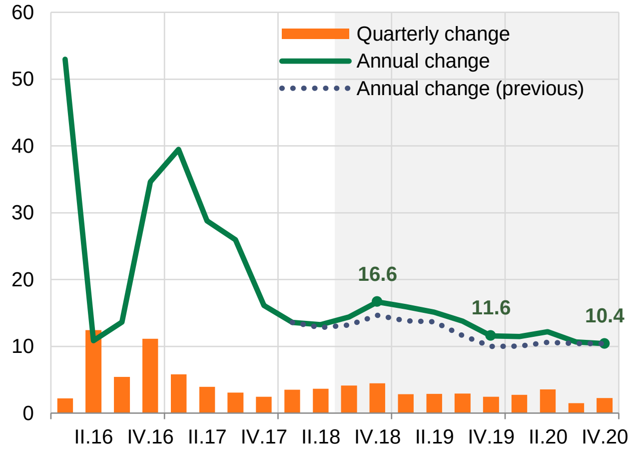
The fuel component of the consumer basket (namely fuel and lubricants) is projected to grow by 10% in the current year. Later, its growth will slow to 4%–5% per annum, mostly reflecting changes in global oil prices in the hryvnia equivalent.

Raw Food Inflation, %



Source: SSSU, NBU staff estimates.

Administered Prices Inflation, %



Source: SSSU, NBU staff estimates.

3.3. Demand and output

After speeding up in 2018, economic growth will slow down slightly. As before, the NBU forecasts that real GDP growth will accelerate to 3.4% in 2018. The main growth driver will continue to be private consumption, which is being boosted in the current year by higher wages, remittances, and pension payments. Investment activity is expected to remain high. Favorable terms of trade, a recovery in the industrial sector, together with the expanding access of Ukrainian exporters to foreign markets will cause a decrease in the negative contribution of net exports to GDP.

However, economic growth is expected to decelerate to 2.5% in 2019 (versus 2.9% in the previous forecast). This will be due to the waning effects of higher social standards, as well as the tight monetary conditions required to bring inflation back to its target. Fiscal policy will also be quite tight due to the need to repay large volumes of public debt.

In 2020, the economy will grow by 2.9% in real terms. In the medium term, growth will mainly be driven by private consumption, which will be additionally fueled by remittances as a result of increased labor migration. At the same time, migration will also have a reverse effect on economic growth, by cutting the available labor force, and businesses being less able to invest due to the rapid rise in wages.

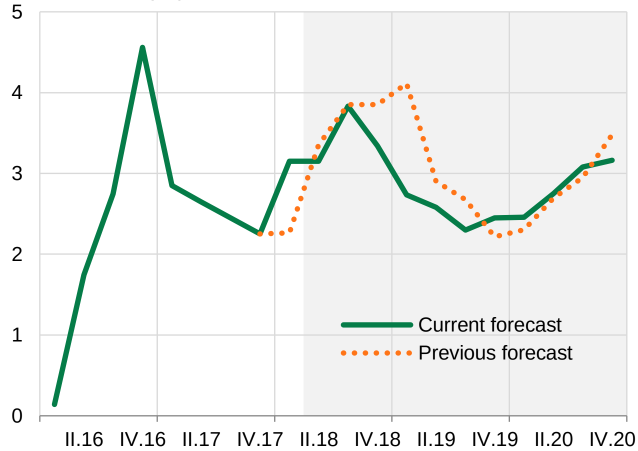
Private consumption will be the main driver of economic growth over the entire forecast horizon. This year, it will increase by 5.5% on the back of strong growth in real wages and other household incomes, particularly pensions. Remittances from abroad, which have increased due to intensification of labor migration, will be an additional stimulus for private consumption. However, further on, private consumption will grow at a slower pace (3.7% in 2019 and 3.0% in 2020), not least due to the fading of the effects of fiscal easing in 2018, a shift to a tighter fiscal policy in the coming years, and the tight monetary policy stance. The continuation of the policy of gradually cutting utility subsidies and higher energy prices will be the restraining factors.

Active investment will be a significant contributor to economic growth. Investment activity will continue to be stimulated by the need to modernize production facilities and certify products in order to obtain wider access to the EU market. Investment will continue to be the fastest-growing of the components of GDP, but will slow over the medium term (to approximately 7% per annum), as investment gradually reaches a level necessary to support production needs. As before, high investment activity will be supported primarily by export-oriented enterprises (especially those of the agriculture and processing industries). The government's investment spending may be limited over the forecast horizon due to the need to save funds (primarily through cutting capital and unprotected budget expenses) in the light of large repayments of public debt.

The growth of capital investment will lead to higher investment imports, especially machinery and equipment. Stronger demand for machinery and chemical products (particularly from farmers) will mostly be met by imports. Households are also expected to create additional demand for imported goods as real disposable incomes grow. Consequently, total import volumes will grow by 4% this year.

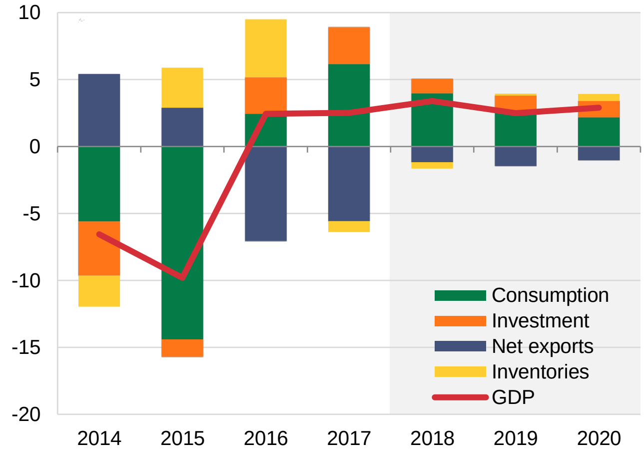
Lower volumes of energy imports will be a restraining factor. In the medium run, the share of energy in imports will decrease, through

Real GDP, % yoy



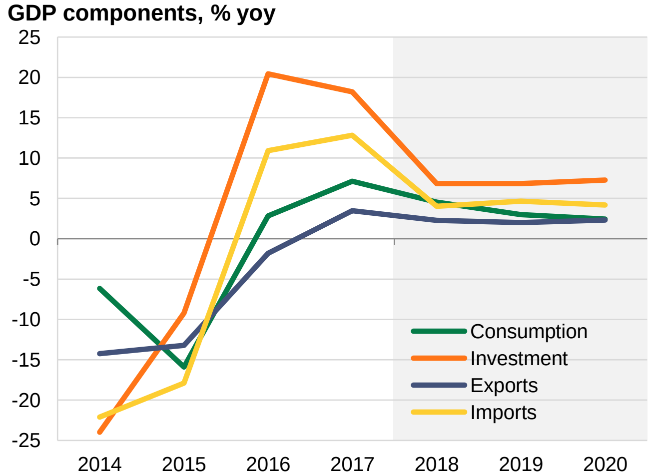
Source: SSSU, NBU staff estimates.

Contributions to Real GDP Growth, pp



Source: NBU staff estimates.

GDP components, % yoy



Source: SSSU, NBU staff estimates.

improved energy efficiency and gradual growth in the domestic production of energy resources. As a consequence, in 2019–2020, the pace of import growth will remain moderate (within 4%–5% per annum).

The volume of exports will grow by 2%–2.5% per annum in 2018–2020. This will be supported by an increase in exports by the metallurgy industry on the back of high demand from external markets, resumed production in the chemicals industry, and the expansion of external markets for machinery and agriculture products.

The NBU's macroeconomic forecast is based on rather conservative assumptions regarding the pace of implementation of structural reforms. More resolute measures – in particular the launch of the land market in full, the implementation of judicial reforms aimed at enhanced protection of rights to private property, a lower level of corruption, the privatization of a number of ineffective and even loss-making state-owned enterprises, etc. – will boost investment and the potential for economic growth in Ukraine.

Potential GDP and the cyclical position of Ukraine's economy

The growth of potential GDP will continue to accelerate to 3.8% in 2018–2020. The main driver of potential GDP growth will remain the convergence of Ukraine's economy with the advanced economies, which will lead to an increase in total factor productivity.

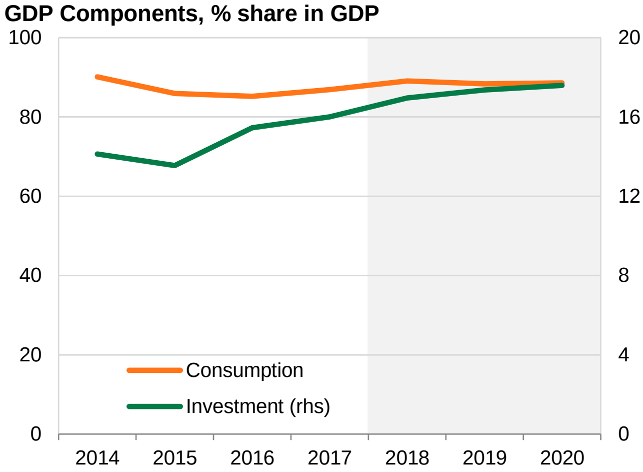
Continued labor migration, which will lead to a decline in the size of the economically active population, will remain the main drag on potential GDP growth. The natural rate of unemployment will continue to be high due to structural imbalances in the labor market. In 2018, the negative contribution of capital to potential GDP will shrink 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 output gap disappeared in Q1. Moreover, the additional fiscal impulse generated by higher social spending by the Ukrainian government, along with sustained favorable terms of trade, will cause the output gap to turn positive in 2018. However, in 2019–2020, the output gap will turn negative against the backdrop of tight monetary and fiscal policies. However, the negative value will not exceed 1.5%.

The impact of fiscal policy this year is seen as being pro-inflation. This is mostly due to higher social spending in the public sector, particularly on pensions on the back of pension reform, and on the wages of public sector employees and military personnel. Therefore, in 2018 the public sector budget deficit is expected to exceed last year's level and reach approximately 2% of GDP.

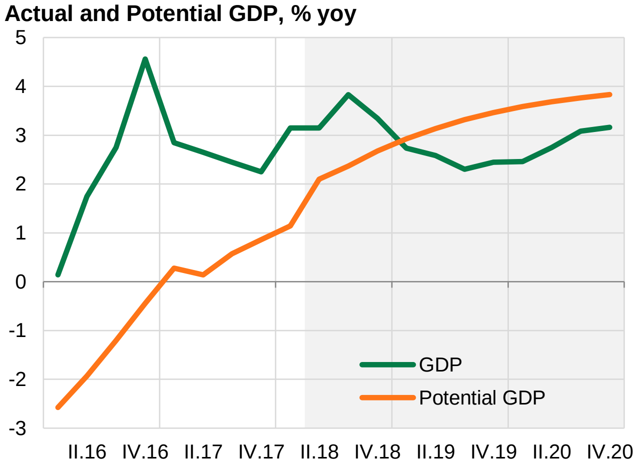
The growth in tax revenues to the consolidated budget is estimated at 16% in 2018. According to the NBU, the highest growth (more than 20%) will be seen in revenues from corporate income tax and individual income tax, which will be driven by the rapid growth in nominal wages.

GDP Components, % share in GDP



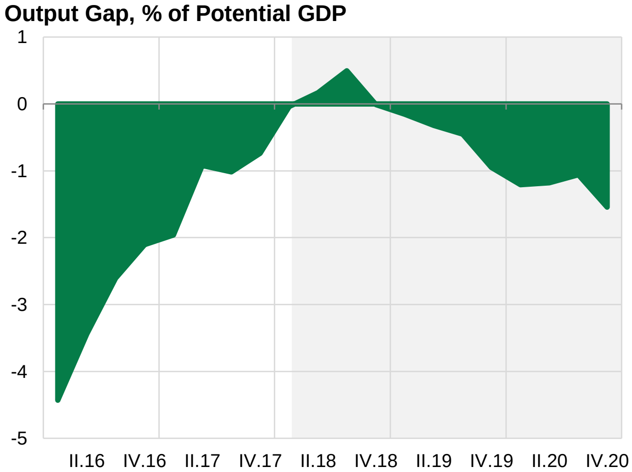
Source: SSSU, NBU staff estimates.

Actual and Potential GDP, % yoy



Source: SSSU, NBU staff estimates.

Output Gap, % of Potential GDP



Source: NBU staff estimates.

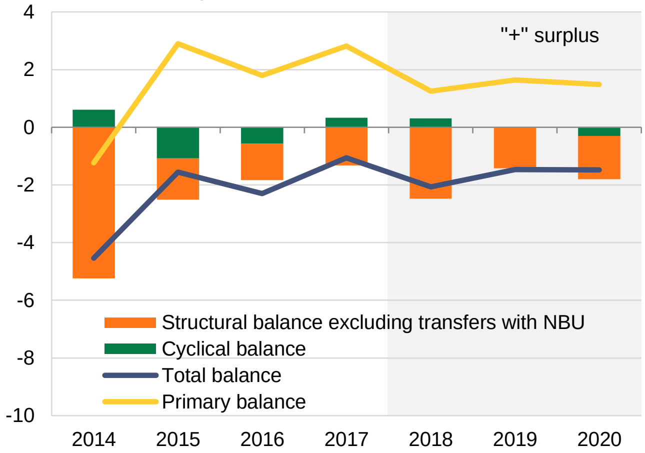
The high rate of growth of social spending (by more than 20%) by the government will boost domestic demand. However, the need to keep the budget deficit in line with Ukraine's obligations to the IMF will considerably limit the government's ability to increase capital expenditures – they will remain at the level of around 3% of GDP. In addition, spending (as well as the budget deficit) will be restrained by a deterioration in budget liquidity, caused by the underperformance of the planned revenues to the state budget, and lower amounts of financing (particularly from external borrowing and privatization).

The looming peak of payments on the external public debt, amid higher global interest rates and the IMF program ending in 2019, create the grounds for tightening fiscal policy in 2019–2020, which will restrain both economic growth and inflation. In line with the baseline scenario, during this period, the budget deficit is projected to be lower than 1.5% of GDP, while the primary balance will be positive at approximately 1.5% of GDP.

Meanwhile, public and publicly guaranteed debt will continue to decrease as a ratio to GDP over the forecast horizon. This will be facilitated by the rapid nominal GDP growth , moderate exchange rate volatility, and a gradual decline in the external public debt as large debt repayments are made.

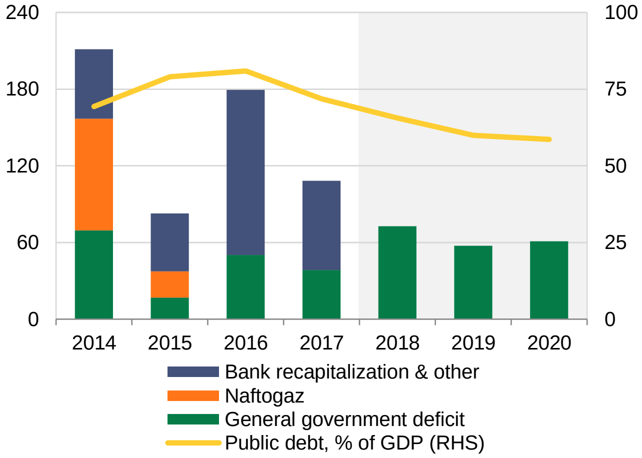
Labor market conditions will improve gradually, with the level of unemployment declining over the forecast horizon. This will be driven by both economic growth and the continued migration of labor force to neighboring countries. This will encourage competition for labor among employers in Ukraine, which will lead to further growth in wages. The growth in nominal wages will outpace inflation (in particular by around 21% in 2018), while real wages will rise by 9.5% in 2018, 5.6% in 2019, and 4.2% in 2020. The government policy of continuing to raise the minimum wage will also contribute to wage growth.

Consolidated Budget, % of GDP



Source: NBU staff estimates.

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



Source: MFU, SSSU, NBU staff estimates.

3.4. Balance of Payments

The external trade deficit will persist, if not widen, as a large portion of domestic consumer demand and fixed investment will be met through imports. Exports will also expand, primarily due to stronger demand from Ukraine's main trading partners. Labor migrant remittances will also rise, spurred by an increase in the number of migrants and growth in their nominal income in the US dollar equivalent. The current account deficit will gradually widen to 2.4% of GDP in 2020.

The key assumption underlying the macroeconomic outlook is that Ukraine will make progress in implementing the structural reforms required by the current IMF EFF program, and sign a new program in 2020. This will secure access to the international capital markets over the forecast horizon. At the same time, investment and debt inflows to the private sector, and government market borrowing, are expected to be rather moderate. Government's Eurobonds placement in 2018 – 2020, together with external public loans, will help refinance a portion of external public debt, most of which matures in 2019 – 2020. FX cash outside banks will also be almost unchanged, as the rise in labor migrant remittances is offset by an increase in households' sales of FX.

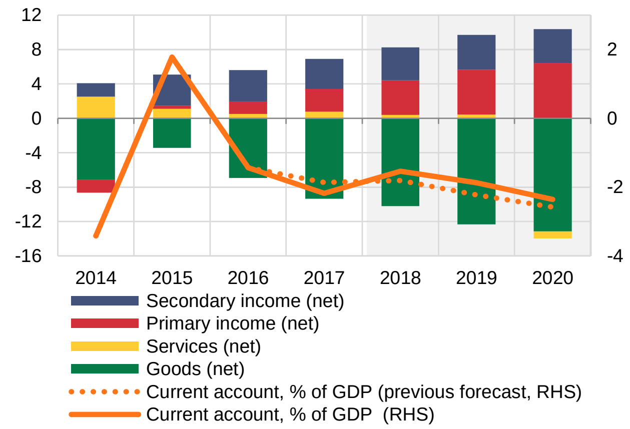
In 2018, a surplus of the overall balance of payments, coupled will IMF loans, will push up international reserves to USD 20.7 billion, or 3.5 months of future imports. However, by 2020, reserves are expected to drop to USD 19.7 billion, or three months of future imports, on the back of a small deficit of the overall balance of payments and repayments of IMF loans.

The current account deficit will widen, driven by a larger trade deficit, reaching 2.4% of GDP in 2020. In 2018 exports and imports of goods and services are expected to grow at a similar pace: robust investment demand, improved consumer sentiment and an increase in the number of travelers will bolster import growth, while export growth will be supported by more favorable terms of trade. In 2019 – 2020, the growth in imports of goods and services will outpace that of exports: the growth of imports will be propelled by sustained high domestic demand, while exports growth will decelerate on less favorable terms of trade than those seen in 2018.

Exports of goods are expected to grow by about 10% in 2018, due to persisting favorable terms of trade – mainly high metals prices amid rising global demand, and robust grain prices on expectations of a poorer harvest because of drought affecting the main grain exporters. Metallurgical exports are projected to grow by 29%, driven by increased deliveries largely to the Asian market due to the rising demand from India. Grain exports will increase by about 12%, fueled by higher prices (by 11%), and are expected to hit about 40 million tons in the 2017/2018 marketing year.

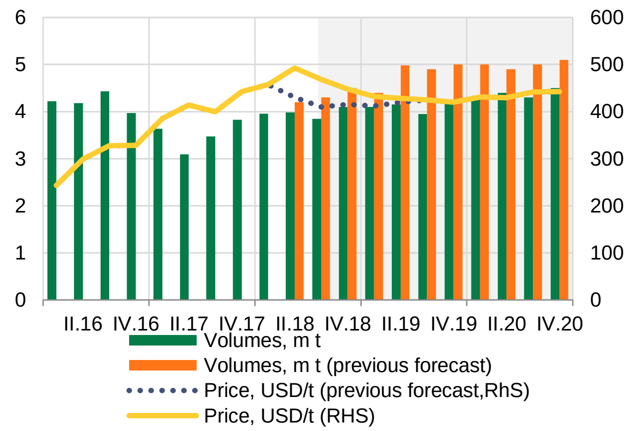
In 2019, exports of goods will almost remain at the level of 2018, as terms of trade deteriorate. However, exports of goods are expected to rebound in 2020, rising at 5%. Physical volumes of exports will expand in 2019 – 2020, supported by higher productivity in the agricultural sector and a better grain harvest. Metallurgical exports will also continue to grow, propelled by robust demand from the Asian market. Machinery exports are also

Current Account, USD bn



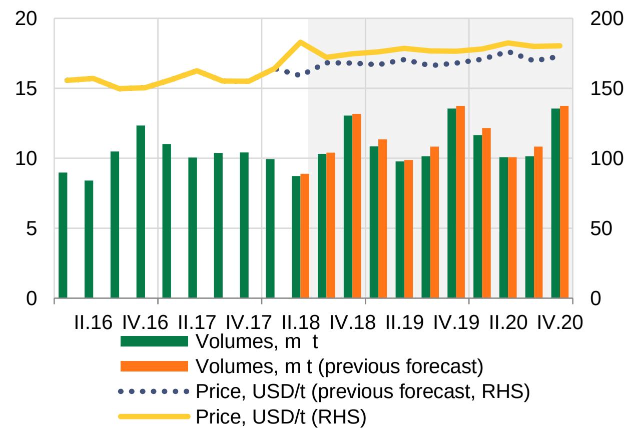
Source: NBU.

Ferrous Metals Exports (four main sub-groups)



Source: NBU.

Grain Exports



Source: NBU.

expected to rise. An increase in the output of fertilizers, together with the government's anti-dumping measures, are expected to facilitate export growth.

Imports of goods are projected to grow by 10% in 2018, driven by a 12% increase in non-energy imports in the current year. In 2019 and 2020, the growth in imports will slow to 4% and 6% respectively. An improvement in households' purchasing power thanks to higher real wages and social payments, pensions in particular, in 2018, will foster consumer imports growth – mainly food, industrial goods and cars. Growth in machinery imports will be propped up by the continuing need to upgrade fixed assets in the metallurgy and agricultural industries. Gas imports will slump by about 4 billion cubic meters, to 10 billion cubic meters in 2018, due to there being large gas inventories at the beginning of the year. Meanwhile, coal imports – mainly of coking coal – are expected to expand by 3 million tons on the back of recommenced operations at Avdiivka Coke Plant. A slight increase in energy imports in 2018 – 2020 will be due to higher energy prices.

In 2018 – 2019, the services trade surplus is expected to be on par with previous years. The ongoing increase in the number of travelers and, consequently, imports of travel services, will be counterbalanced by growth in transportation and IT exports. A drop in gas transit after the current agreement with Gazprom expires in 2020 could lead to a deficit in the trade in services.

The upward trend in the number of labor migrants will persist into 2018 – 2019, largely due to the simplification of employment terms in Poland and the Czech Republic because of labor shortages in those countries. Although the increase in the number of labor migrants is expected to diminish starting in 2020, economic growth in those countries will push up remittances further.

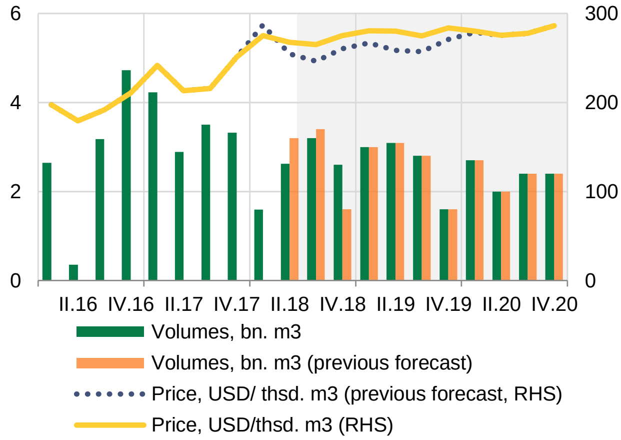
Accrued dividend payments will remain significant in the years to come, driven by the gradual liberalization of capital flows and the strong financial performance of foreign-owned companies.

Net financial account inflows are expected to total USD 4 billion in 2018, mainly due to public sector borrowing. Continued cooperation with the IMF will secure EU loans worth USD 600 million in both 2018 and 2019, and WB loans worth USD 800 million. The placement of Government's Eurobonds is expected to continue in 2018 – 2020, at USD 1.5 billion, USD 1.5 billion, and USD 2.5 billion respectively. Overall, net capital inflows are expected to decrease in 2019 – 2020, as repayments of external debt by the government peak in those years. Ukraine expects to sign a new program with the IMF and the EU in 2020.

The debt capital inflows to the private sector will increase moderately over the forecast horizon, reflecting high interest rates. Foreign direct investment will remain almost unchanged because of the very slow improvement in the business climate. FX cash outside banks will be little changed, as the rise in labor migrant remittances is offset by an increase in households' sales of FX.

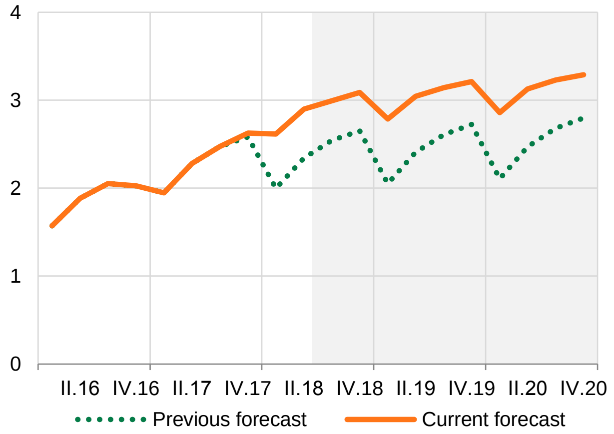
A surplus in the overall balance of payments, together with the loans received under the IMF's EFF, will push up international reserves to USD 20.7 billion, or 3.5 months of future imports, by the end of 2018. As a result, the ratio of reserves to the IMF's composite measure will increase to over 70% of the minimum

Gas Imports



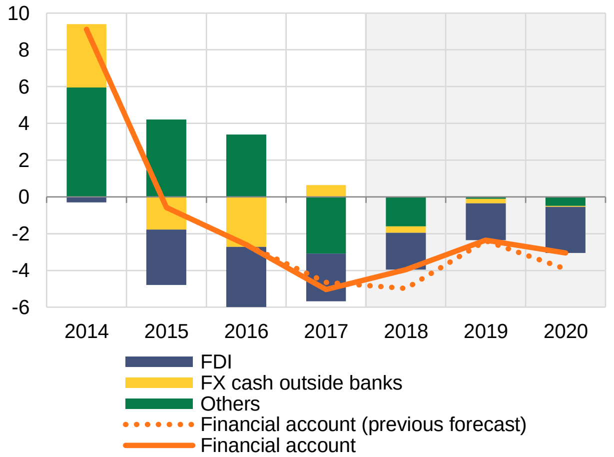
Source: NBU.

Remittances to Ukraine, USD bn



Source: NBU.

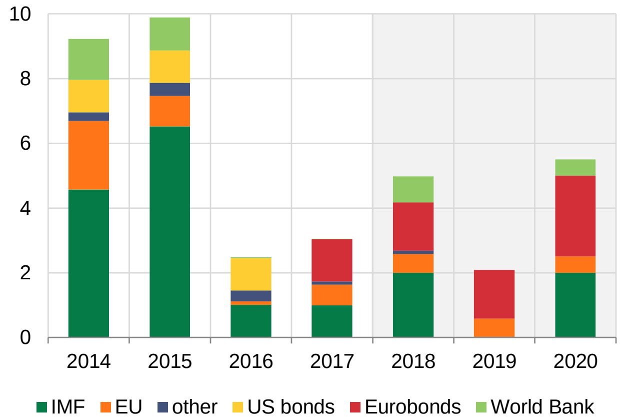
Financial Account, USD bn



Source: NBU.

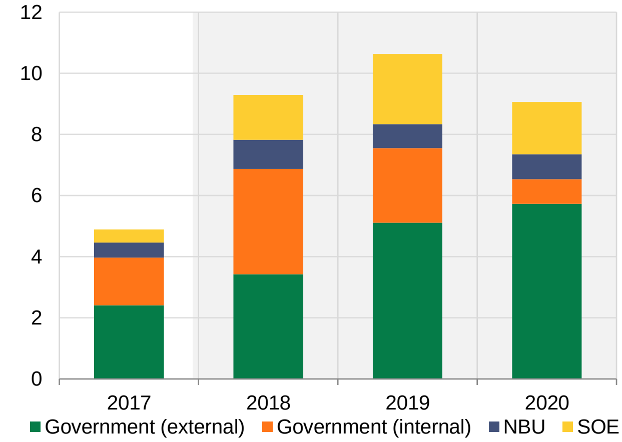
required level. However, by the end of 2020, international reserves will decrease to USD 19.7 billion, or three months of future imports.

Official Financing and Eurobond Placement, USD bn



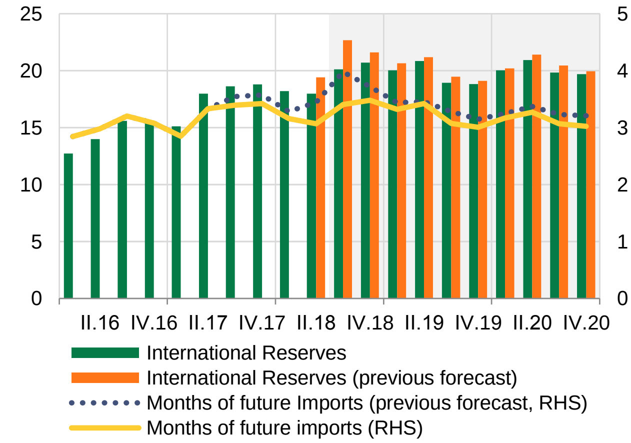
Source: NBU.

FX Public Debt Repayments, USD bn



Source: NBU.

International Reserves, USD bn



Source: NBU.

3.5. Monetary sector and financial markets

The central bank expects that it will continue to pursue a reasonably tight monetary policy over the forecast horizon. The persistence of inflation risks and the need to bring inflation back to the target level will be the major factors keeping the key policy rate high.

High real interest rates will dampen demand for cash, along with the further development of cashless payments. They will also support the continued rapid growth in domestic currency savings.

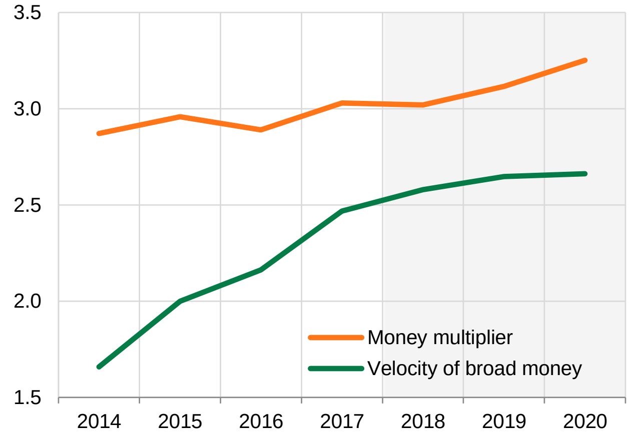
The demand for cash grew somewhat in Q2 2018, fostering faster-than-expected monetary base growth. As a result of tight monetary policy, the money supply will grow more slowly than nominal GDP in H2 2018. In particular, the high opportunity cost of holding cash and the continued development of cashless payments will limit the increase in cash in circulation. Coupled with gradual growth in the banks' correspondent accounts, this will cause the monetary base to increase by around 11% this year and by 5%–6% over the next two years.

At the same time, high real interest rates will prompt a gradual increase in the propensity of households to save. As a result, the money supply is expected to expand by 8%–10% over the forecast horizon. Meanwhile, the recovery in lending is being held back by significant institutional risks and a high NPL ratio. The adoption of the Draft Law "On Amendments to Certain Legal Acts of Ukraine on Resumption of Lending" is expected to mitigate creditor risks, lower the cost of credit, and ease access to bank loans (for more details see page 42).

The liquidity surplus will be maintained this year, and the NBU's issuing of certificates of deposit will remain the main instrument for managing the liquidity of the banking system. However, the volume of these operations will shrink in following years as the liquidity of the banking system gradually declines. The main contributors to the decrease in liquidity will be the redemption of domestic government bonds in the NBU's portfolio and a rise in currency in circulation. This decrease will be partially offset by the NBU's purchases of FX to replenish international reserves, and by the transfer of the NBU's profit to the state budget. In case of stronger demand for cash and/or the government purchase of FX from the NBU to repay external debt, the banking system may shift to a structural deficit. Under these circumstances, the NBU will switch to liquidity provision operations.

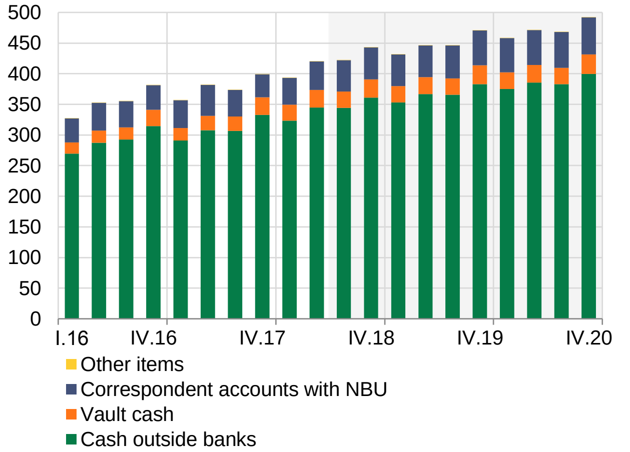
Keeping the key policy rate high will maintain reasonably tight monetary conditions to drive disinflation, bring inflation back to its target range by the end of 2019 and reach the target range midpoint – the medium-term inflation target of 5% – in 2020.

Money Multiplier and Money Velocity



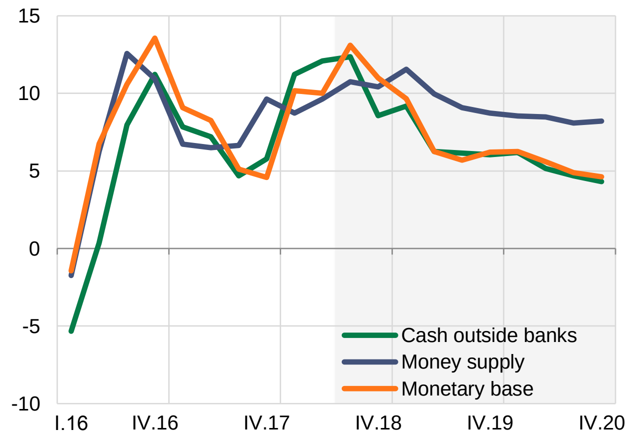
Source: NBU.

Monetary Base (Components), UAH bn



Source: NBU.

Monetary Indicators, % y-o-y



Source: NBU.

3.6. Risks to the Forecast

The lack of structural reforms, which are essential to maintaining macrofinancial stability and for continuing cooperation with the IMF, poses a major risk to the implementation of the scenario given above, according to the regulator. Any further delays in taking the actions stipulated in the IMF cooperation program will reduce the likelihood that Ukraine will receive financing from the fund. The delays are increasingly narrowing the country's window of opportunity to secure financing from international capital markets, which is required for making public debt repayments. Receiving less than the planned amount will make the financing of budgetary spending more difficult, and will worsen devaluation and inflation expectations. The latter will also, as usual, deteriorate due to uncertainty in the run-up to next year's elections.

And to a significant extent, the uncertainty about the inflation outlook is connected to the bringing of prices of natural gas for households to import parity levels. Delays in taking this action, and changes in the calculation of the import parity price, may shift the inflation trajectory away from the baseline scenario substantially by altering the size and timing of adjustments made to administered tariffs.

The risk of food supply shocks related to crop yields, prices, and Ukrainian food products' access to international food markets is symmetric over the forecast horizon.

The situation in eastern Ukraine also remains a significant source of uncertainty. If the situation improves, Ukraine will become more attractive for investors as the risk premium declines, which will foster capital inflows, spur economic growth, and strengthen the hryvnia. On the other hand, any escalation of hostilities would damage expectations and bring negative social and economic consequences.

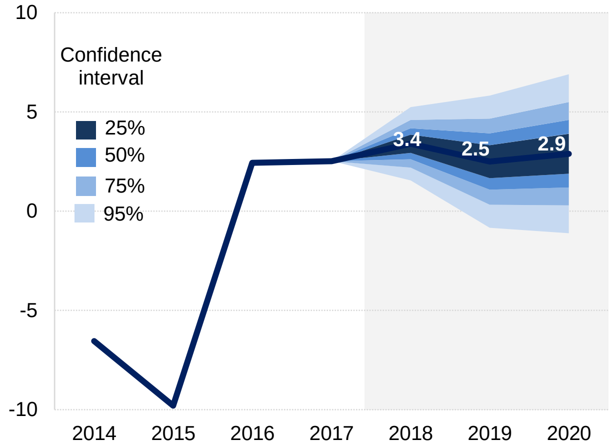
Labor migration is a major medium-term risk under the baseline scenario. A further rapid outflow of workers from Ukraine will continue to exacerbate the disparity between supply and demand in the labor market, and will be accompanied by wage growth. The continuation or strengthening of the outflow of workers will also have negative implications for the country's economic potential.

Meanwhile, risks to the baseline scenario also include uncertainty over the volume of gas transit through Ukraine, as pipelines bypassing the country are being built to deliver gas to Europe and West Asia. This implies that Ukraine may see a substantial decline or a complete halt in gas transit through its pipelines from 2020 onward.

Considering that growth in many countries will remain above the trend in 2018–2019, the global economy is highly likely to overheat and gradually move into recession. Other potential recessionary factors include risks of escalating trade wars between the United States and the other world's biggest economies (the EU and China). Multiple trade standoffs and incipient problems in the financial system of China, the world's largest commodity importer in most markets, may trigger a downturn in global trade, which has the potential to dramatically alter the overall landscape of the global economy.

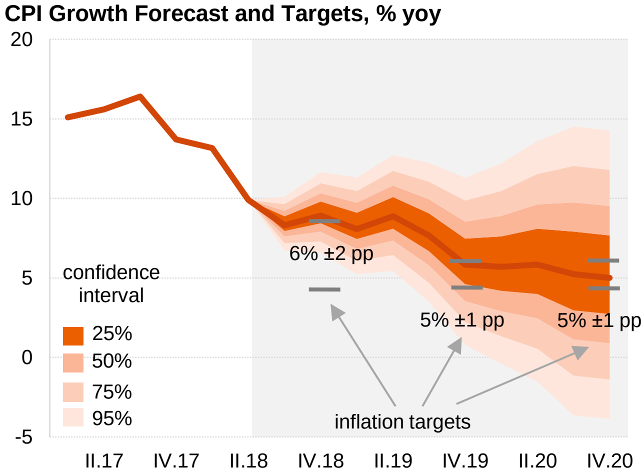
Any mounting global confrontation would cause an excess in the supply of raw commodities and corresponding downward pressure on prices. In this case, or if access to some markets is lost, Ukraine's foreign currency proceeds from exports will decline, which will put pressure on the hryvnia exchange rate and, hence,

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.

drive up inflation. In that event, the NBU would have to tighten its monetary conditions beyond the level built into the baseline scenario in order to eliminate the adverse effect of external economic shocks on inflation.

The risk of capital flight from emerging markets is also on the rise. One of the potential triggers of these events would be an overly rapid shift by the leading economies to tighter monetary policies. As a result, Ukraine and other emerging markets could be hit by capital flight.

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 (July 2018)

Indicators	2015	2016	2017	2018 I	2018 II	2018 III	2018 IV	2018 current forecast	2018 forecast 04.18	2019 I	2019 II	2019 III	2019 IV	2019 current forecast	2019 forecast 04.18	2020 I	2020 II	2020 III	2020 IV	2020 current forecast	2020 forecast 04.18
REAL ECONOMY, % yoy, unless otherwise stated																					
Nominal GDP, UAH bn	**1989**	**2385**	**2983**	700	772	969	1019	**3460**	3451	782	859	1074	1130	**3845**	3842	858	935	1171	1224	**4188**	4186
Real GDP	**-9.8**	**2.4**	**2.5**	3.1	3.2	3.8	3.3	**3.4**	3.4	2.7	2.6	2.3	2.4	**2.5**	2.9	2.5	2.8	3.1	3.2	**2.9**	2.9
GDP Deflator	**38.9**	**17.1**	**22.0**	14.9	12.5	11.0	10.3	**12.2**	11.9	8.7	8.5	8.3	8.2	**8.4**	8.2	7.0	6.0	5.4	5.0	**5.9**	5.9
Consumer prices (period average)	48.7	13.9	14.5	-	-	-	-	10.7	10.9	-	-	-	-	7.7	7.4	-	-	-	-	5.5	5.5
Producer prices (period average)	36.0	20.5	26.3	-	-	-	-	15.7	13.5	-	-	-	-	8.1	8.1	-	-	-	-	8.1	7.8
Consumer prices (end of period)	**43.3**	**12.4**	**13.7**	13.2	9.9	8.3	8.9	**8.9**	8.9	8.1	8.9	7.7	5.8	**5.8**	5.8	5.7	5.8	5.2	5.0	**5.0**	5.0
Core inflation (end of period)	34.7	5.8	9.5	9.4	9.0	8.1	7.1	7.1	7.7	6.6	6.7	5.9	4.6	4.6	4.8	4.4	4.4	3.7	3.6	3.6	3.3
Non-core inflation (end of period)	49.7	17.5	19.4	17.9	10.3	8.6	11.3	11.3	10.5	10.1	11.7	10.0	7.5	7.5	7.1	7.4	7.8	7.3	6.8	6.8	7.2
raw foods (end of period)	40.7	1.2	23.5	23.3	5.2	0.6	5.4	5.4	5.9	4.3	9.6	7.0	4.0	4.0	4.0	3.7	3.5	3.6	3.5	3.5	3.1
administrative prices (end of period)	64.4	34.6	16.1	13.6	13.2	14.4	16.6	16.6	14.6	15.9	15.1	13.8	11.6	11.6	10.0	11.5	12.2	10.6	10.4	10.4	10.4
Producer prices (end of period)	**25.4**	**35.7**	**16.5**	15.9	18.4	15.0	10.4	**10.4**	8.8	9.0	7.0	8.0	8.6	**8.6**	8.4	6.9	8.8	8.6	8.1	**8.1**	8.1
FISCAL SECTOR																					
Consolidated budget balance, UAH bn	**-30.9**	**-54.8**	**-42.1**	-	-	-	-	**-71.4**	-81.9	-	-	-	-	**-56.4**	-100.3	-	-	-	-	**-61.7**	-84.1
% of GDP	-1.6	-2.3	-1.4	-	-	-	-	-2.1	-2.4	-	-	-	-	-1.5	-2.6	-	-	-	-	-1.5	-2.0
Public sector fiscal balance (IMF methodology), UAH bn	**-17.0**	**-50.3**	**-38.4**	-	-	-	-	**-72.7**	-82.8	-	-	-	-	**-57.4**	-98.9	-	-	-	-	**-61.0**	-82.1
% of GDP	-0.9	-2.1	-1.3	-	-	-	-	-2.1	-2.4	-	-	-	-	-1.5	-2.6	-	-	-	-	-1.5	-2.0
General government and Naftogaz financing, UAH bn	-37.5	-50.3	-38.4	-	-	-	-	-72.7	-82.8	-	-	-	-	-57.4	-98.9	-	-	-	-	-61.0	-82.1
General government and Naftogaz financing, % of GDP	-1.9	-2.1	-1.3	-	-	-	-	-2.1	-2.4	-	-	-	-	-1.5	-2.6	-	-	-	-	-1.5	-2.0
BALANCE OF PAYMENTS (NBU methodology)																					
Current account balance, USD bn	1.6	-1.3	-2.4	-0.6	0.4	-1.5	-0.3	-2.0	-2.4	-0.8	-0.4	-1.4	0.0	-2.6	-3.2	-1.3	-0.4	-1.4	-0.5	-3.6	-3.9
Financial account, USD bn	1.2	-2.6	-5.0	-0.3	-0.1	-2.2	-1.4	-4.0	-5.0	-0.6	-1.8	-0.1	0.1	-2.4	-2.4	-2.0	-1.3	0.2	-0.3	-3.5	-3.9
BOP overall balance, USD bn	**0.8**	**1.3**	**2.6**	-0.3	0.5	0.7	1.1	**2.0**	2.6	-0.2	1.3	-1.3	-0.1	**-0.3**	-0.8	0.7	0.9	-1.6	-0.2	**-0.1**	0.0
Gross reserves, USD bn	**13.3**	**15.5**	**18.8**	18.1	18.0	20.1	20.7	**20.7**	21.6	20.0	20.8	18.9	18.8	**18.8**	19.1	20.0	20.9	19.8	19.7	**19.7**	20.0
Months of future imports	**3.1**	**3.2**	**3.3**	3.1	3.1	3.4	3.5	**3.5**	3.7	3.3	3.4	3.1	3.0	**3.0**	3.1	3.2	3.3	3.1	3.0	**3.0**	3.2
Export of goods, % yoy	-29.9	-5.3	18.3	8.7	14.7	8.9	7.0	9.7	6.3	-0.9	-1.9	0.5	2.3	0.1	4.5	4.6	4.7	6.0	5.8	5.3	5.7
Import of goods, % yoy	-32.6	4.2	21.1	12.6	12.2	10.6	4.2	9.6	5.9	4.9	6.3	3.3	1.9	4.0	5.6	6.4	3.3	4.9	7.5	5.6	4.7
MONETARY ACCOUNTS (Cumulative since the beginning of the year, %)																					
Monetary base	**0.8**	**13.6**	**4.6**	-1.5	5.2	5.8	11.0	**11.0**	11.0	-2.6	0.7	0.8	6.2	**6.2**	5.2	-2.6	0.2	-0.5	4.6	**4.6**	3.8
Broad money	**3.9**	**10.9**	**9.6**	-3.3	0.1	3.0	10.4	**10.4**	10.6	-2.3	-0.3	1.7	8.7	**8.7**	8.5	-2.5	-0.6	1.2	8.2	**8.2**	8.3
Velocity of broad money (end of year, times)	**2.0**	**2.2**	**2.4**	-	-	-	-	**2.6**	2.6	-	-	-	-	**2.6**	2.6	-	-	-	-	**2.7**	2.7