NATIONAL BANK OF UKRAINE

INFLATION REPORT

January 2018

PREFACE

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

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

The Monetary Policy and Economic Analysis Department developed forecasts of inflation and other macroeconomic variables. The NBU Board approved the forecasts during a meeting devoted to monetary policy issues on 25 January 2018.[1] Macroeconomic projections, including inflation, comprise the principal input, but not the only one, the NBU Board considers in its decision-making. In addition to the projections of inflation and other macroeconomic variables, the NBU Board takes into account any new information appearing after the forecast has been developed. The assessment of risks to the outlook or relations between macroeconomic parameters may vary between members of the NBU Board.

The analysis in the Inflation Report is based on the macroeconomic data available at the date of its preparation; therefore, the time horizon of the analysis for some indicators may vary. This report used 24 January 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. 44-D as of 25 January 2018 *On the Approval of the Inflation Report.*

CONTENTS

TERMS AND ABBREVIATIONS

CPI	Consumer price index
Core CPI	Core consumer price index
PPI	Producer price index
GDP	Gross domestic product
GVA	Gross value added
IKSO	Index of Key Sectors Output
NEER	Nominal effective exchange rate
REER	Real effective exchange rate
ATO	Anti-Terrorist Operation
BPM5, BPM6	IMF Balance of Payments Manual (5th edition), IMF Balance of Payments and International Investment Position Manual (6th edition)
CIT	Corporate income tax
EFF	Extended Fund Facility
FDI	Foreign direct investment
FTA	Free trade agreement
MY	Marketing year
MTP	Main trading partner
NBFI	Non-bank financial institutions
NGCA	Non-government-controlled areas (parts of Donetsk and Luhansk oblasts temporarily not under the authority of the Ukrainian government)
PMI	Purchasing Managers' Index
SSC	Single Social Security Contribution
STA	Single Treasury Account
VAT	Value-added tax
CEE	Central and Eastern Europe
CIS	Commonwealth of Independent States
DGF	Deposit Guarantee Fund
ECB	European Central Bank
EU	European Union
FAO	Food and Agriculture Organization
Fed	Federal Reserve System
ILO	International Labour Organization
IMF	International Monetary Fund
MFU	Ministry of Finance of Ukraine
NBU	National Bank of Ukraine
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
Russia	Russian Federation
SESU	State Employment Service of Ukraine
SFSU	State Fiscal Service of Ukraine
SSSU	State Statistics Service of Ukraine
Treasury	State Treasury Service of Ukraine
US	United States of America
USDA	United States Department of Agriculture
m	million
bn	billion
UAH	Ukrainian hryvnia
EUR	euro
USD	US dollar
RUB	Russian ruble
M0	cash
M3	money supply
pp	percentage point
bp	basis point
USD/bbl	US dollars per barrel
yoy	in annual terms; year-on-year change
qoq	in quarterly terms; quarter-on-quarter change
mom	in monthly terms; month-on-month change
sa	seasonally adjusted

1. SUMMARY

Headline inflation accelerated in 2017, exceeding the NBU's target

Consumer inflation reached 13.7% yoy as of end-2017, exceeding the target of 8% ± 2 pp set by the National Bank of Ukraine (NBU) in the Monetary Policy Guidelines for 2017 and Medium Term.

Inflation accelerated from 12.4% yoy in 2016, mainly driven by factors on which monetary policy tools have only a limited effect. These factors include a decrease in the supply of some fruit and vegetables resulting from unfavorable weather conditions in the first half of 2017, unstable situation in the animal breeding sector, higher global prices and stronger demand for Ukrainian food items, especially for meat and dairy products as well as rising global crude oil prices.

Increased production costs, for labor in particular, and a rapid recovery of consumer demand also contributed to the price growth. Consumer demand picked up noticeably at the end of 2017 thanks to an increase in pensions and persistent growth in wages stemming from the minimum wage hike earlier in the year and strong labor demand, both in Ukraine and neighboring countries. As a result, underlying inflationary pressure intensified as well, as evidenced by a rise in core inflation to 9.5% yoy in December (up from 5.8% yoy in 2016). An acceleration in core inflation also reflected higher production costs due to a passthrough of higher raw food prices to the cost of processed foods and some deterioration of inflation expectations.

In addition, the worsening of FX market conditions in November-December despite overall favorable external conditions for the Ukrainian economy contributed to the rapid price growth in the final months of 2017 and the inflation rate deviating from the target more significantly than the NBU anticipated in its October 2017 Inflation Report. Indeed, the growth accelerated in Ukraine's main trading partners and conditions in global commodity markets improved amid higher steel, fertilizer and wheat prices. However, a seasonal decrease in agricultural export earnings and excess hryvnia liquidity from VAT refunds to exporters weighed on the supply of foreign currency. As a result, since the end of Q3 2017, demand for foreign currency has outstripped supply and the hryvnia exchange rate has become more volatile. Morever, depreciation of the hryvnia's nominal effective exchange rate has deepened by the end of the year as most major trading partners' currencies strengthened to US dollar amid a global weakening of the latter. An easing of fiscal policy at the end of the year also added to inflationary pressure. The easing reflected a sharp increase in pension payments and an uneven execution of budget expeditures. Expenditures were rising relatively moderately throughout most of the year, while the end of the year saw a dramatic ramp-up in spending, broadbased across the budget categories. Moreover, the shift in budget spending to the end of the year was stronger than in the previous year.

Nevertheless, the cumulative state budget deficit for the whole year was within the targets owing to a rather tight fiscal policy for most of the year. Fiscal revenues continued growing rapidly thanks to general economic conditions and tax changes. Non-tax and other non-recurring revenues contributed strongly as well. Those included dividend transfers to the state budget from state-owned companies, the transfer of previous year's profit by the NBU to the budget, and a court-ordered confiscated funds. As a significant portion of these proceeds being non-recurrent was used to finance current expenditures, risks to fiscal sustainability have increased.

With risks to inflation rising in Q4 2017, the NBU tightened its monetary policy by hiking the key policy rate in two steps by 100 bp each to 14.5% per annum as of the end of the year. That was a response to heightened risks that included a delay in official financing, an acceleration in consumer demand driven by higher social standards, and substantially higher expenditures planned in the 2018 State Budget Law than envisaged in the underlying assumptions for the NBU's October forecast.

Headline inflation is expected to slow down and return to the target range in mid-2019

Inflation will gradually slow down in 2018-2020, mainly as the central bank conducts a tight monetary policy over the forecast horizon. However, the NBU projects that inflation will remain high in 2018: headline and inflation will be 8.9% and 8.2% respectively. Such inflation pressure will stem from:

- Past increase in raw food prices (mainly meat and milk) passing through to processed food prices;
- A pick-up in consumer demand driven by rising household incomes resulting from higher social standards and a further increase in wages in the private sector amid strong labor demand;
- An increase in the external vulnerability of th Ukrainian economy due to delayed tranches from the IMF, making it more difficult for Ukraine to attract foreign capital with the resulting pressure on the hryvnia exchange rate;
- High inflation expectations of households and businesses reflecting high current paces of consumer price growth and the FX market volatility seen in recent months;
- A pick-up in global oil prices, which pushes domestic fuel prices up.

Looking ahead, inflation will slow due to a tight monetary policy, a rise in supply of foods, and a further deceleration in imported inflation. Accordingly, both raw food price growth and core inflation, which itself depends heavily on the former, will slow down. As a result, inflation is forecast to return to its target range in mid-2019, reaching 5.8% yoy as of end-2019. In 2020, inflation will decelerate to 5.0% yoy, the midpoint of the NBU's target range set at 5.0% ± 1 pp.

For reference: Annual and quarterly inflation targets are set out in the Monetary Policy Guidelines for 2018 and Medium Term.

Administrated prices will grow fastest among inflation components (approximately by 10% per year) over the forecast horizon. Their increase will reflect a gradual rise in global energy prices passing through to domestic prices, as well as the government's policy to harmonize Ukrainian tobacco excise taxes with EU rates.

Real GDP growth is estimated at 2.1% yoy in 2017

Real GDP growth came in at 2.1% yoy in Q3 2017, in-line with the NBU's estimate published in its October 2017 Inflation Report. Domestic demand continued to be the main driver of real GDP growth. Investments grew at a robust pace, supported by improved business expectations and solid corporate earnings. Consumption has started to play a key role, as expected: a slight slowdown in private consumption growth was offset by a recovery in the growth of general government consumption amid some fiscal policy easing.

Consumer demand was buoyed by the continued high rate of growth in nominal wages seen throughout 2017, which was given powerful impetus at the beginning of the year by the doubling of the minimum wage. Meanwhile, the mismatches between demand and supply persisted on the labor market and migration intensified, contributing to wage growth despite unemployment rates remaining high.

In Q4 2017, investment and private consumtion kept growing. Industrial output grew on account of rising production in machine building, manufacturing of chemicals, basic metals, and finished metal products. This alsmost completely compensated for the further fall in the mining industry and production of electricity, which primarily reflected the disruptions in production and transportation ties with the non-government controlled areas (NGCA) in early 2017. At the same time, lower yields of late grains and technical crops and a further decline in the animal production drove a decline in agricultural output. As a result, real GDP growth slowed down in Q4 2017. For the whole 2017, real GDP rose by 2.1% yoy, according to the NBU's estimates.

Large energy and machinery imports together with effects of halted trade with the NGCA (which hindered metals exports and drove coal imports higher) caused a widening in Ukraine's merchandise trade deficit. However, its widening was offset by a steady increase in private remittances. As a result, the current account deficit remained virtually unchanges from the 2016 level, amounting to USD 3 bn for the first 11 months of 2017. Meanwhile, net inflows in financial account grew to USD 5.5 bn in the first 11 months of 2017. Inflows were supported by the government's considerable foreign currency borrowings on both external and domestic markets. Foreign direct investments (FDI) also made a notable, although smaller than in 2016, contribution to the financial account inflows, as did a decrease in foreign currency cash outside banks. Thanks to a surplus in overall Balance of Payments, observed for the third consecutive year, and an IMF tranche, international reserves grew from USD 15.5 bn early in 2017 to USD 18.8 bn as of the end of the year, sufficient to cover 3.6 months of future imports.

The NBU expects economic growth to accelerate in 2018

Economic growth is expected to accelerate to 3.4% yoy in 2018. The main driver will be private consumption, supported by still high growth of real wages, as well as growth in other household incomes, including pensions. Looser fiscal policy will also be a contributing factor. Additionally, companies will continue to invest actively. The negative contribution of net exports will decrease substantially thanks to favorable terms of trade, growing access of Ukrainian exports to foreign markets, as well as recovery in selected industries that were hit last year due to a lack of access to supplies from the NGCA.

In 2019–2020, the NBU expects GDP growth to slow down to 2.9% as the effects of the fiscal easing in 2018 wear off and the impact of monetary policy tightening to bring consumer inflation back to its target level over the forecast horizon gains full strength. Furthermore, a lackluster pace of structural reforms will restrain the economy's long-term potential. Private consumption will remain a major driver of economic growth. Companies, particularly export-oriented ones (especially from the agriculture and manufacturing sectors), will continue invest actively, as well as companies that depend on capital expenditures from the budget. In particular, the government's policy to upgrade road infrastructure will boost investment in construction. In the meantime, over the forecast horizon, the recovery in lending will be gradual, largely due to institutional risks such as the low level of creditor rights protection.

In 2018, fiscal policy will be proinflationary given the already adopted initiatives increasing social expenditures (raised pensions as part of the pension reform, public sector wages, and subsidies) and the announced intentions to further raise the minimum wage after Q1 2018. High social spending will constrain the government's ability to finance capital expenditures given the need to keep the public sector deficit in-line with Ukraine's obligations to the IMF (within 2.5% of GDP). However, capital expenditures, including for road infustructure, are expected at a fairly high level. The effect of social spending on the consolidated budget and the general government budget will largely be offset by higher revenues from the single social security contribution (SSC) and taxes, including due to a further progress in bringing the labor market out of the shadows, high growth in nominal wages, and robust domestic demand.

The current account deficit will remain at around 3% of GDP in 2018–2020. Higher exports amid favorable external conditions and a recovery of production in certain industrial sectors will be offset by further growth in imports, fuelled by stronger domestic consumption and investment demand. Additionally, an increase in the number of work migrants will boost private remittances.

The continued cooperation with the IMF is the key assumption underlying the NBU's macroeconomic forecast

Over the forecast horizon, it would ensure sustained access to official financing from other organizations and to international capital markets.

In 2018, the NBU expects disbursements of approximately USD 2 bn from the IMF, in addition to loans to the government from the EU and the World Bank. Those funds will boost international reserves to a projected USD 20.5 bn (3.7 months of future imports) by the end of 2018. However, in 2019–2020, the country is expected to run a Balance of Payments deficit amid peak repayments of external public debt. Against this background, the NBU international reserves will decrease to USD 18.6 bn, covering 3.0 months of future imports.

Accordingly, a lack of the structural reforms needed to maintain macrofinancial stability and continue cooperation with the IMF amid a large volumes of scheduled foreign debt repayments poses the main downside risk to the NBU's baseline forecast scenario. An early termination of the IMF program may hinder Ukraine's access to international financial markets, which would result in worsening depreciation and inflation expectations and increase probability of facing problems with external public debt servicing in the coming years. In 2018-2020, the government and NBU together have to pay more than USD 16 bn for external debt servicing. Thus, the NBU deems further cooperation with the IMF within the existing and new programs to be critical for maintaining macrofinancial stability.

Additional fiscal policy loosening is another considerable risk. In particular, faster growth in social spending than in labor productivity may aggravate the inflationary pressure. If this case, the NBU will have to resort to creating tighter monetary conditions than in the baseline scenario.

The NBU will need to pursue a reasonably tight monetary policy to bring inflation back to the target level over the forecast horizon

In light of the risks outlined above and worsening inflation expectations, the NBU Board on 25 January 2018 decided to hike the key policy rate to 16% per annum, effective 26 January 2018. The tighter monetary policy will help reduce headline inflation to the forecasted levels and bring it back to the target range by mid-2019, also helping mitigate the highlighted inflation risks if they materialize.

The implementation of inflation targeting regime in Ukraine, and two recent hikes of the key police rate in October and December last year in particular, evidences that monetary policy works effectively through the interest rate channel. Higher interest rates will encourage deposit inflows to the banking sector, thus, restraining consumer demand. Higher rates will make hryvnia financial instruments more attractive relative to their foreign currency counterparts, which will help reduce future inflation through the exchange rate channel. In addition, a tight monetary policy will prevent inflation expectations from deteriorating further.

The NBU will continue to focus on slowing down price growth and meeting inflation targets. In the absence of clear signs that inflationary pressure is abating in the near-term, the NBU may raise the key policy rate further to return inflation to its medium-term target. As before, the central bank will seek to strike a balance between the need to reduce inflation and to minimize short-term consequences for economic growth and a recovery in lending.

2. CURRENT ECONOMIC SITUATION

2.1. EXTERNAL ENVIRONMENT

The external environment continued to improve for the Ukrainian economy as economic growth in Ukraine's MTP accelerated and as commodity prices and global financial conditions were favorable. In Q3 2017, the weighted average of annual economic growth rates of Ukraine's MTPs continued to grow at a strong pace. A pickup in global trade and an increase in domestic consumption in those countries has fueled the growth. Based on Q4 2017 data, the positive trend has continued in those countries, although the strength of the trend has weakened.

In Q4 2017, the ECPI Index[2], which tracks changes in global prices for Ukrainian exports, increased on the back of higher prices for steel, aluminum, and fertilizers. Also in Q4 2017, global wheat prices grew gradually, while corn prices were relatively subdued, fluctuating in a narrow range. On the other hand, prices for meat and sunflower oil have dropped. Crude oil prices have increased after the OPEC+ agreement was extended and on weaker drilling activity amid declining oil inventories in the US.

An acceleration of global economic growth and the further normalization of monetary policy have supported investor risk appetite. Capital continued to flow to emerging markets, which helped most emerging market currencies strengthen at the end of the year as the US dollar depreciated and commodity prices rose. This was especially true for the CEE currencies.

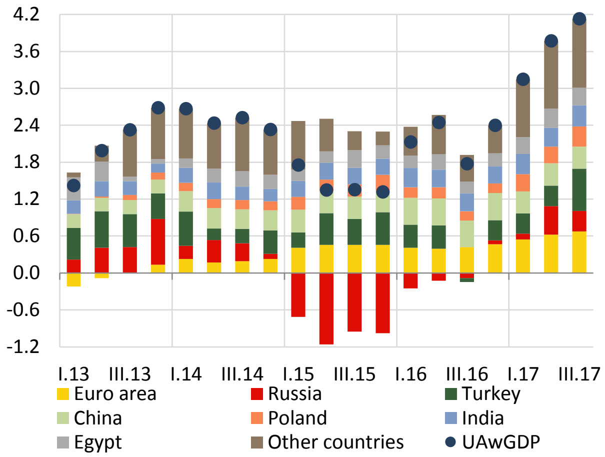
In Q3 2017, the weighted average annual growth rates of Ukraine's MTPs (as seen in the UAwGDP Index) continued to accelerate, reaching a six-year high, thanks to stronger domestic demand, indirect state support, and a pickup in trade. According to the World Trade Organization (WTO), in Q3, the World Trade Outlook Indicator[3] increased further to reach its highest point since April 2011 amid higher export volumes and increased air and container transportation.

In Q3 2017, US GDP registered the highest growth in the last three years thanks to a steady increase in domestic consumption, an acceleration in private investment growth (to 51.9% qoq in annualized terms), and exports as the US dollar depreciated. The US unemployment rate stood at 4.1%, below the natural level of 4.5%–4.7%, while inflation stayed within its target range.

Euro-area GDP also continued to accelerate. A loose monetary policy helped support domestic demand and reduce corporate and household debt loads. This has boosted investment and private consumption. The latter was also helped by a further decline in unemployment, which fell below 9% as of the end of Q3, for the first time since 2009. The overall growth in the global economy has boosted exports.

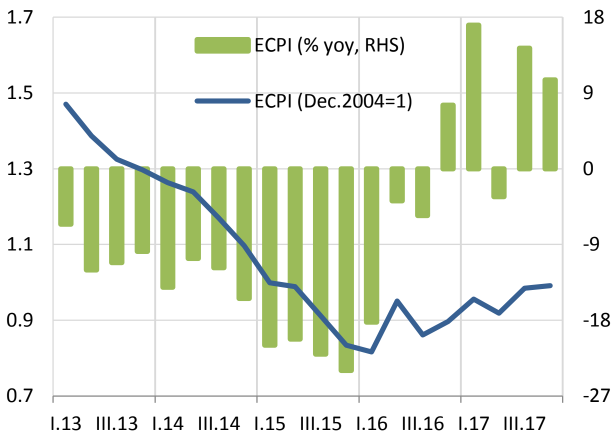
Economic growth in CIS countries, except Russia, has accelerated on the back of a pickup in agriculture, mining, and processing industries, and an increase in exports. On the other hand, the growth of the Russian economy slowed down despite faster growth in agriculture. The slowdown was driven by a decline in output in the processing industry and slower trade growth as

Contributions of Ukraine's MTP Countries to the Annual Change in UAwGDP, %



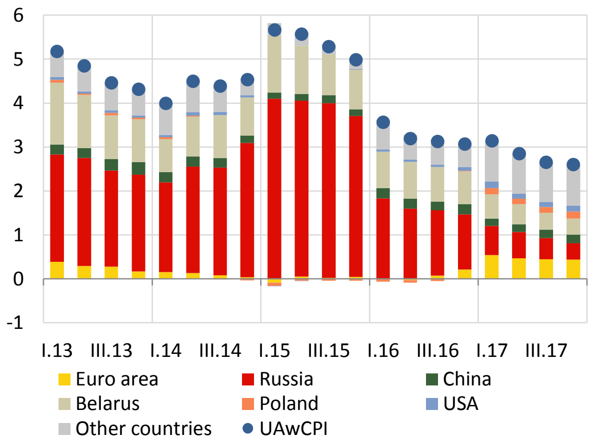
Source: NBU staff estimates (preliminary data)

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



Source: NBU staff estimates

Contributions of Ukraine's MTP Countries to the Annual Rate of Change in UAwCPI, %



Source: NBU staff estimates

[2] Read more about the ECPI Index in the Macroeconomic and Monetary Review (February 2016).
[3] The WTO calculates the World Trade Outlook Indicator, a leading indicator, based on six key elements: export orders, international air transportation, container turnover, the automobile sector, electronic components, and trade in agricultural raw materials.

domestic demand grew moderately. Steady wage growth and the consequent increase in domestic demand were important drivers of economic growth in the CEE countries included the UAwGDP index. Growth in trade turnover in the EU also boosted growth.

Higher net exports, consumption spending, and investment underpinned rapid GDP growth in Turkey and India. Economic growth in China has slowed as growth in investment and industry continued to lose momentum.

Based on Q4 2017 data, the positive trend has continued in Ukraine's MTPs, although the strength of the trend has weakened. Larger global trade volumes and strong domestic demand supported economic growth in the CIS (except Russia) and the EU. Russia saw industrial production drop in December, primarily as oil production decreased (by 2.2% yoy) and the processing industry declined. Growth in Chinese industrial production continued to slow as mining production shrank and due to the high costs related to upgrades of production facilities.

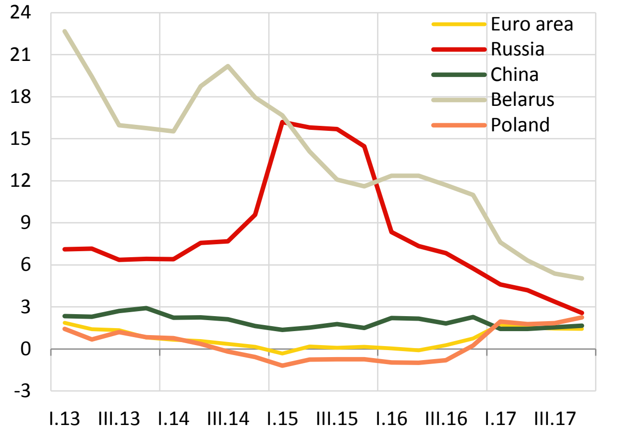
In Q4 2017, inflationary pressure from Ukraine's MTPs continued to ebb, as seen in changes in the UAwCPI[4]. Inflation in both developed and developing countries continued to move towards the targets set in those countries. Inflation in the CIS, particularly in Russia and Belarus, has contributed the most to the decline in inflationary pressure from Ukraine's MTPs (read more in the *Price Trends for Key Food Staples in Russia and Belarus* box on pages 11–12) CEE countries maintained inflation close to their targets of 2-3%.

In Q4 2017, the global price environment improved for Ukrainian exporters, primarily on higher prices for ferrous metals. Early in the fourth quarter, steel prices adjusted downwards after reaching a four-year peak. Major contributors to that trend included a pause in Chinese commodity and financial markets for celebrations of the anniversary of the People's Republic of China and faster growth in global production[5] amid a seasonal drop in demand from the construction industry in the countries of the northern hemisphere. However, steel prices rose from November, primarily as China introduced measures to cut production as a way to fight smog (in effect until March 2018). As a consequence, the pace of decline in Chinese steel exports deepened, to 34% yoy in November, while steel inventories dropped nearly 12% mom in December. Prices received an additional boost from the demand from China's construction industry (the Purchasing Managers' Index (PMI) of construction grew to 61.4% in November according to the National Bureau of Statistics of China) and higher demand from Turkish companies (according to the World Steel Association, they received 50% of Chinese steel exports in 2016).

Despite an increase in iron ore prices late in the quarter, prices generally subsided in Q4 as leading ore producers increased supply and ore inventories in China stayed high[6]. However, iron ore prices rose in late 2017 – early 2018 as China increased demand for high-grade ore after the closure of outdated production capacities and as inventories grew further ahead of an expected increase in steel production after the restrictions on productions are lifted.

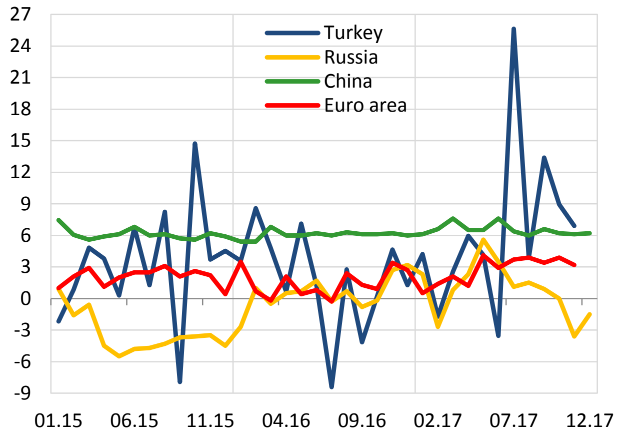
In Q4 2017, global wheat prices grew gradually. Prices were supported by the predictably smaller wheat harvest in Australia (down 42% yoy because of unfavorable weather), strong demand

Consumer Price Indices in Ukraine's MTP Countries, % yoy



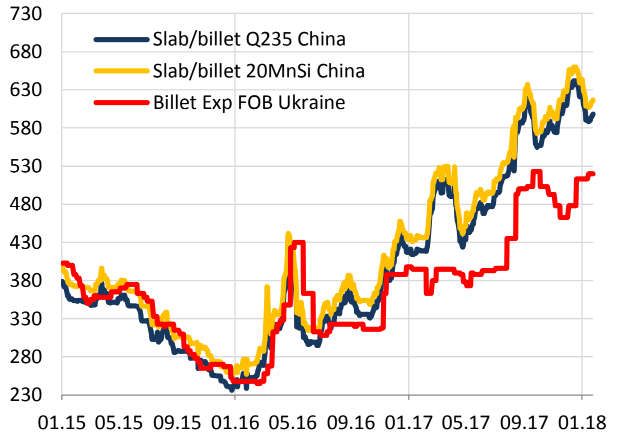
Source: National Statistical Offices

Industrial Production in Selected Advanced and Emerging Economies, % yoy



Source: National Statistical Offices

Prices on Semi-Finished Steel Products in China and Ukraine, USD/MT, as of 24.01.2018



Source: Thomson Reuters Datastream

[4] The UAwCPI is an index of inflation in Ukraine's MTPs, weighted by the volume of Ukraine's goods and services imports from each country.
[5] According to the World Steel Association, up to 5.9% yoy in October, including up to 3.4% yoy in the EU, and up to 12% yoy in the US.
[6] According to SteelHome, 143.6 m tons as of 15 December 2017, the highest level since 2004.

from countries in northern Africa and Asia (particularly Turkey and Egypt), and lower expectations for the winter crop harvest in the Black Sea region, the Baltic states, and the US. Meanwhile, improved estimates for the global wheat harvest, a gradual increase in US exports, and record high exports by Argentina restrained prices from further growth.

Corn prices remained relatively stable throughout most of the second half of the year thanks to lower demand as China cut imports (due to a state program to cut strategic stock volumes) and increased export volumes of the second bumper crop from the 2016/2017 marketing year (MY) by Brazil, which was supported by the depreciation of the Brazilian real. At the same time, prices were supported by expectations of a decrease in global corn production by 3.1% in the 2017/2018 MY along with steady consumption levels, and stronger demand from Mexico, South Korea, and Japan.

Global meat prices declined slightly in Q4 as prices for corn, the basic ingredient in mixed fodder, remained relatively low amid increasing supply.

Global prices for sunflower oil decreased as prices for other vegetable oils, especially palm and soya oil, also fell owing to large supply volumes. Most notably, Malaysian production of palm oil has reached its highest level since October 2015. Final inventories of palm oil have also grown to their highest level in a year and a half.

Global crude oil prices have grown after the OPEC+ agreement was extended (with OPEC compliance at 122% in November and 129% in December, according to OPEC), the shutdown of the Forties oil pipeline in the Black Sea for repairs, worker strikes in Nigeria, lower drilling activity and decreased inventories in the US, and the escalation of political tensions in the Middle East.

In Q4, global financial conditions remained favorable for developing markets and investors continued to show interest in the assets of those countries. In addition, the performance of developed market stock indices varied: American indices continued to grow rapidly, while European benchmarks fell.

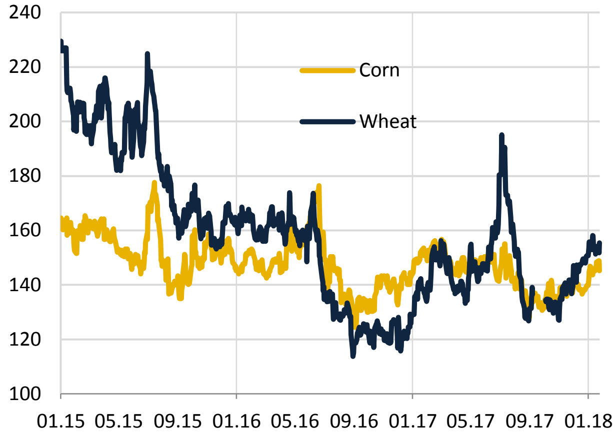
The S&P 500 Index reached a new record high and continued to grow despite heightened concerns about equity valuations and the view that investors have ignored the related downside risk. The growth in the S&P 500 was mainly driven by:

- A broad re-pricing to factor in the new tax reform
- Investors shifting their focus from the devastation caused by hurricanes to reconstruction works that carry a positive impact for the US and global economies
- A resumption of growth in bank shares ahead of the Fed's expected rate hike in December that would boost interest income
- Continued growth in corporate profits, although at a slower pace
- Investors shifting from bonds to stocks
- The US Fed's interest rate hike in December and expectations of further monetary policy tightening by the Fed
- Positive sentiment related to the appointment of Federal Reserve Chairman Jerome Powell, who is expected to continue outgoing chair Janet Yellen's monetary policy

Yields on US long-term treasury bonds continued to grow on the back of expectations of and the actual hike in the US interest rate in December.

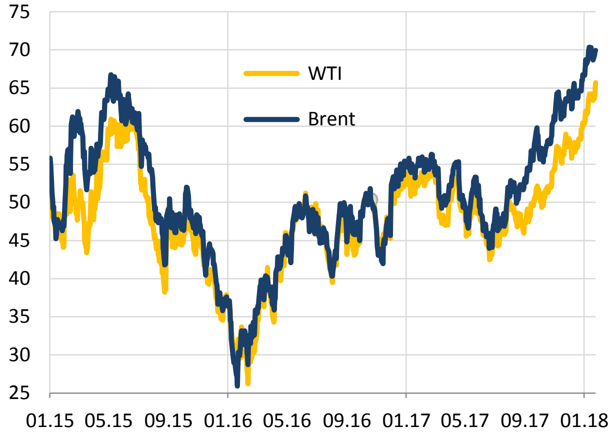
On the other hand, political uncertainty in the EU, caused by the failed attempts to create a coalition government in Germany, the

World Cereal Prices*, USD/MT, as of 24.01.2018



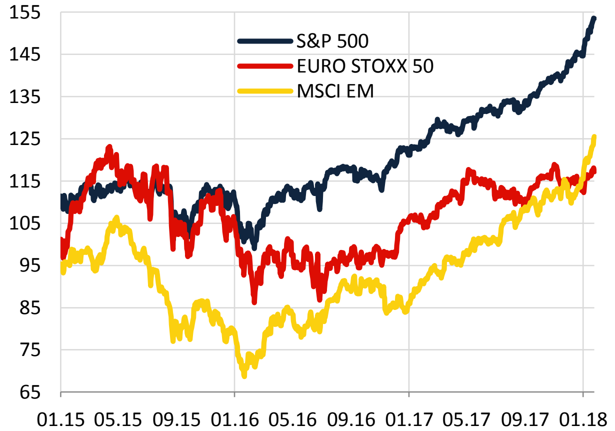
** Wheat K C Hard (HRW) National*
US Yellow Corn Memphis
Source: Thomson Reuters Datastream

Brent and WTI Crude Oil Prices, USD/bbl, as of 24.01.2018



Source: Thomson Reuters Datastream

World Stock Indices, 01 Jan 2014=100, as of 24.01.2018



Source: Thomson Reuters Datastream

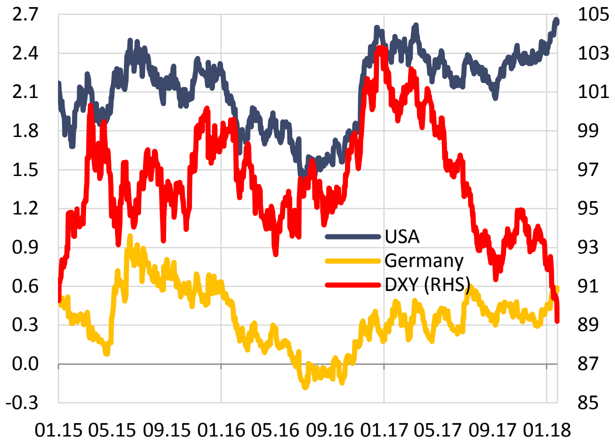
referendum in Catalonia, and difficult Brexit negotiations (despite the completion of round one), held back European stock indices. Meanwhile, the indices were supported better-than-expected quarterly corporate earnings (corporate profits in the EU were estimated to have grown 4.5% in Q3, according to Reuters), a reduction of the QE program after a meeting of the European Central Bank (ECB), an increase in the Bank of England's base interest rate, and positive macroeconomic statistics and results of bank stress tests by the Bank of England (not a single bank showed the need for an increase in capital for the first time since 2014, a sign of their resilience under a potential hard Brexit scenario).

Stock markets were helped further after the heads of leading central banks announced that, despite some discrepancies in the current approach to monetary policy, changes in the use of monetary policy tools will be gradual and will be communicated clearly to the market. Following in the footsteps of the leading central banks, the central banks of most developing countries have normalized their monetary policies. After the US rate hike, the Bank of Mexico and the Central Bank of Argentina continued to raise their rates. The Central Bank of Russia and the National Bank of Moldova reduced interest rates as inflation slowed materially.

The MSCI EM Index has risen alongside most global indices as investors are optimistic regarding the economic prospects of developing countries. EM bonds have remained in demand. With low or negative rates in developed countries, foreign investors' risk appetite remains the main driver of developing market bond performance. The sovereign bonds of EM countries, especially domestic-currency bonds, offer high yields. Favorable global financial conditions have allowed high-risk countries to access markets. According to Dealogic, as of November, non-investment-grade sovereigns have issued a record USD 75 bn in securities since the start of 2017 (+50% yoy).

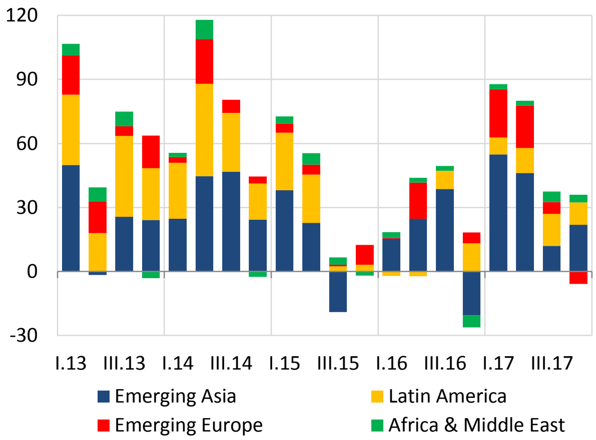
Amid large capital inflows to those countries and the depreciation of the US dollar in late 2017 – early 2018, the currencies of most developing countries, especially CEE countries, have strengthened against the US dollar. The US dollar depreciated rapidly against a basket of major currencies as financial markets expected the ECB to wind down its QE program, after Germany struck an agreement to create a governing coalition, and owing to the temporary shutdown of the US government.

Government Bonds Yields (10-year) of USA and Germany, as of 24.01.2018



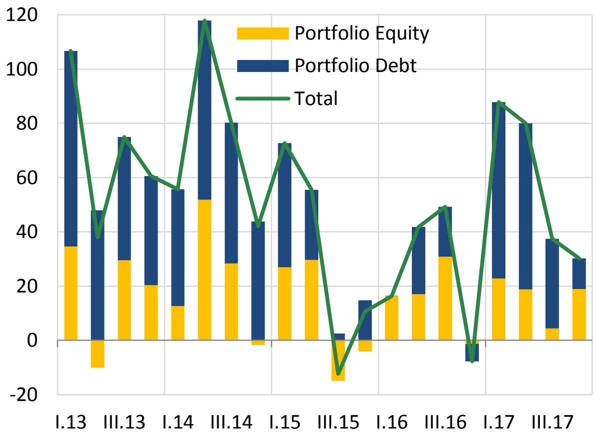
Source: Thomson Reuters Datastream.

Net Non-Resident Portfolio Regional Flows into Emerging Markets, USD bn



Source: Institute of International Finance

Net Non-Resident Portfolio Flows into Emerging Markets, USD bn



Source: Institute of International Finance

Box: Price Trends for Key Food Staples in Russia and Belarus

After the economic crisis in 2009–2013, large bilateral trade turnover and other factors synchronized headline inflation trends in Ukraine, Russia, and Belarus (except in 2011, when prices in Belarus grew rapidly after the domestic currency depreciated sharply). Price trends in the three countries diverged in 2014 and the divergence widened in 2017. In 2017, inflation decelerated in Russia and Belarus (to 2.5% yoy and 4.6% yoy in December, respectively), while in Ukraine inflation accelerated. This primarily reflected different price trends for the key food staples.

Changes in foreign trade flows over 2014–2017 were the main driver of the differences in food price trends. Prices were also affected by the level of domestic saturation with local products, the peculiarities of agricultural development (primarily animal breeding), growth in wages, and FX trends.

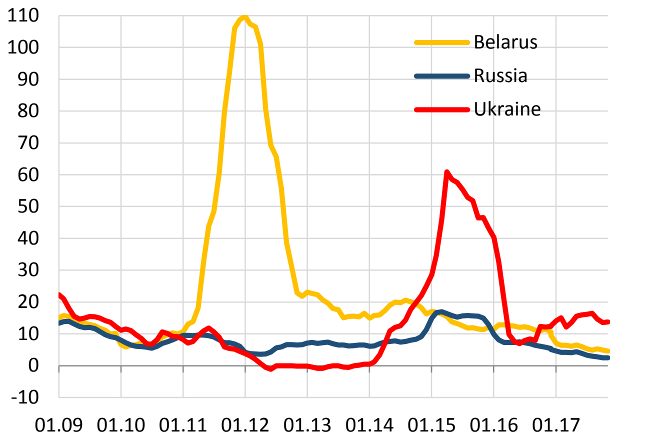
Russia is a net importer of animal products, although domestic meat output is growing gradually (up 9.5% in 2015–2016). The EU used to be Russia's main supplier of meat and dairy products, accounting for almost a third of meat imports and almost 60% of dairy imports. After Russia imposed in mid-2014 an embargo on food imports from several countries that had introduced sanctions against Russia, including the EU, Belarus became its main supplier of dairy products (almost 75%). Belarus' share of Russia's meat product imports has grown from 8% in 2013 to 25% in 2016–2017. As a result, prices for meat and dairy products in Russia and Belarus grew markedly in 2014 and early 2015. A depreciation of the domestic currencies against the US dollar was another factor. However, mutually beneficial trade between the two countries restrained prices from further growth.

Because of the growth in Belarus' agricultural sector (almost 6% in 2015–2016) and the saturation of the domestic market, large exports to Russia in 2016–2017 did not put any significant pressure on prices in Belarus' domestic market. Meat and dairy production output in Belarus exceeds domestic consumption. Dairy production is almost three times higher than consumption and meat and meat products output is 1.4 times higher than consumption, according to the National Statistical Committee of the Republic of Belarus. Thus, Belarus exports large volumes of these goods (which, moreover, are cheaper than Russian and European goods), mostly to Russia. Russia accounts for almost a 100% share in Belarus' exports of certain types of meat, milk, and dairy products.

On the other hand, in Ukraine, prices for animal breeding products soared in 2014–2015, but numerous shocks curbed their growth in 2016, resulting in increased food supplies in the domestic market. In 2016, Russia included Ukraine in the food product import embargo and banned Ukrainian goods from transiting through Russia. Ukraine partially managed to shift to other markets, including the EU. However, this has taken time for some products, while some of the new markets (such as Belarus) had lower prices than the Russian market. Other shocks included the shift of Turkish goods from the Russian market and export restrictions on some animal products due to the epizootic situation.

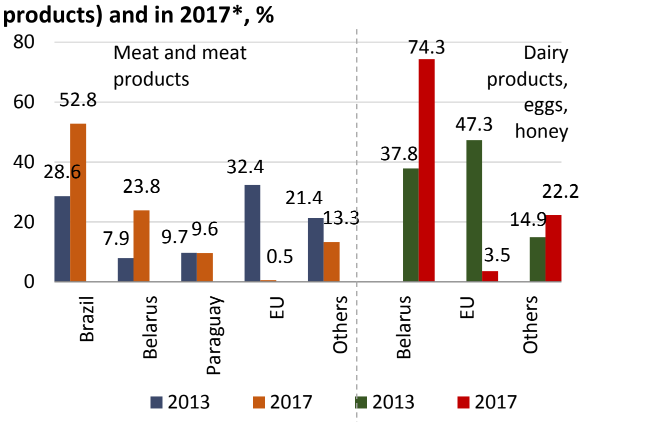
Most of these factors faded in 2017, except for Russia's embargo and transit ban. Additionally, physical volumes of exports

Consumer Price Indices in Ukraine, Russia and Belarus, %, yoy



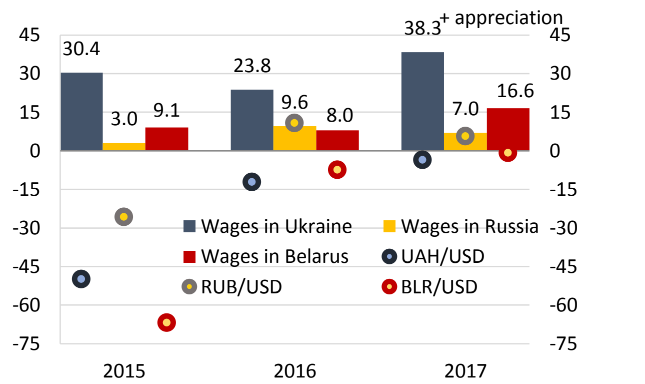
Source: National Statistical Offices

Composition of Russian Imports of Selected Food Products in 2013 (prior to the embargo on EU food products) and in 2017*, %



*Source: International Trade Centre, *9 months 2017*

Nominal Wages and Exchange Rates versus US Dollar, % change, eop

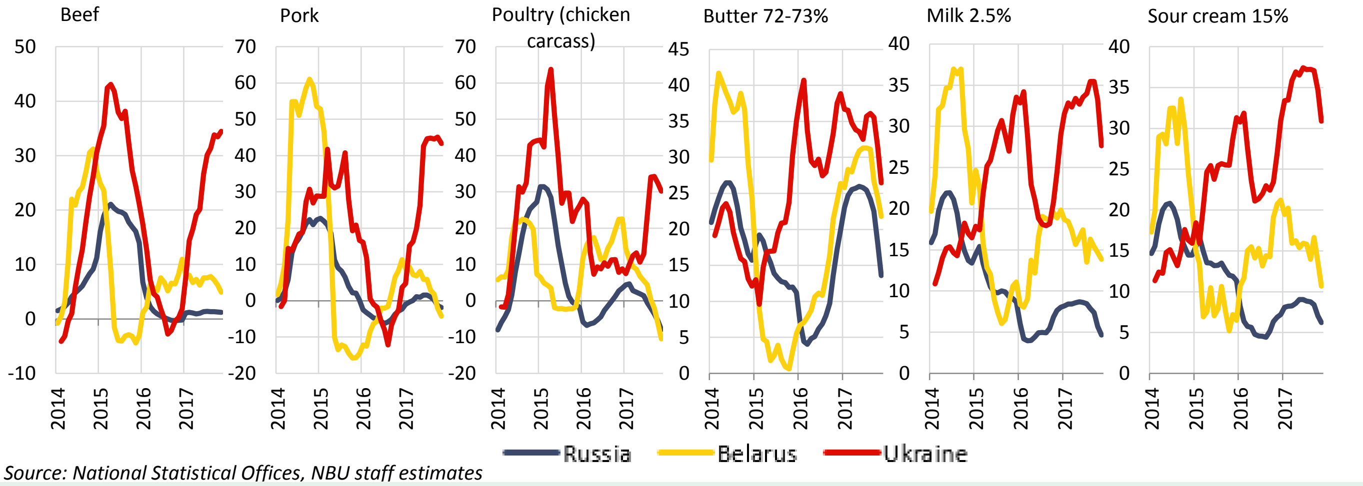


Note: change in nominal wages over 11 months 2017 (LHS)
Source: National Statistical Offices

continued to grow amid high external demand and more export opportunities for Ukrainian producers[7]. Despite the difficulties in the animal breeding industry[8], the domestic output of meat (except pork), milk, and dairy products exceeds domestic consumption. However, when including exports, domestic production of virtually all types of livestocks does not cover domestic demand: over the last two years, the share of exports in the structure of demand for meat and dairy products has grown by 8 pp for beef and poultry (to 18.6% and 21.3%, respectively, over the first 10 months of 2017) and by almost 3 pp to 7.4%[9] for milk. In Ukraine, prices were additionally driven by the rapid growth of wages over the last few years, whereas the wage policies in Russia and Belarus have remained relatively conservative. The hryvnia's depreciation against the US dollar has also contributed to the price growth.

An increase in prices for meat and dairy products in Europe was an important driver of the soaring prices in Ukraine (whereas the Russian market was relatively protected from this impact). In 2018, prices are expected to decelerate in global food markets and even decrease for some products, thanks to an expansion of global supply, especially in Europe. This will also have a positive influence on food prices in Ukraine because of the domestic market's openness.

Prices for Selected Food Products in Russia, Belarus, Ukraine, % yoy



Source: National Statistical Offices, NBU staff estimates

[7] According to the State Service of Ukraine for Food Safety and Consumer Protection, as of November 2017, 109 companies were permitted to supply food products to the EU (93 as of the end of 2016). In 2016–2017, 15 dairy producers obtained permits to export production to the EU. Permits were also issued to producers of eggs, meat, and poultry.
[8] According to the State Statistics Service of Ukraine (SSSU), the index of animal breeding production has been in decline for four consecutive years (in total by almost 7% over 2014–2017).
[9] Based on SSSU data for 2015 and an estimate using open data sources for the first 10 months of 2017.

2.2. DOMESTIC ECONOMY

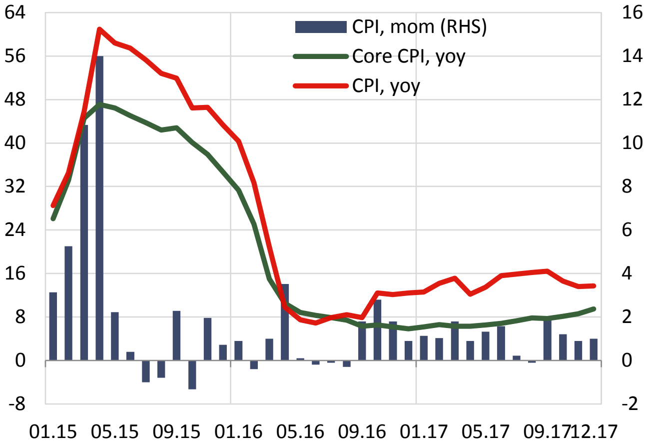
2.2.1. INFLATION DEVELOPMENTS

In 2017, headline inflation reached 13.7%, exceeding the target of 8% ± 2 pp set by the National Bank of Ukraine (NBU) for the end of the year in the Monetary Policy Guidelines for 2017 and the Medium Term.

Inflation accelerated from the pace in 2016 (12.4% yoy) mainly owing to factors on which monetary policy tools have only a limited effect. Inflation was driven by a decrease in the supply of certain goods resulting from unfavorable weather conditions in the first half of 2017, instability in the animal breeding sector, and an increase in global prices and demand for Ukrainian food items, especially meat and dairy products. An increase in production costs, particularly labor costs, and a rapid recovery of consumer demand also contributed to the growth in prices.

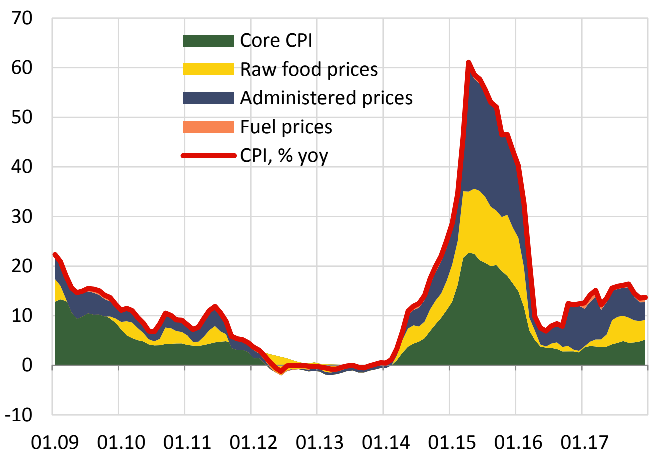
Moreover, year-end inflation exceeded the October forecast owing to a deterioration of FX market conditions and looser fiscal policy (higher pension payments, etc.). This prompted a stronger underlying inflationary pressure, as evident in core inflation. At the same time, the impact of higher administered prices met expectations.

Inflation Indicators, %



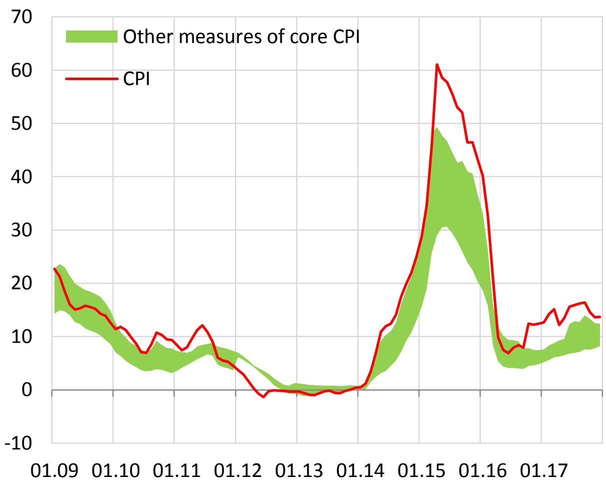
Source: State Statistics Service of Ukraine

Contributions to Annual Inflation, pp



Source: State Statistics Service of Ukraine, NBU staff estimates

Main Inflation Trend, %



* Green field – a range of core inflation indices

Source: NBU staff estimates

Core Inflation

A year-end core inflation accelerated to 9.5% yoy in 2017 from 5.8% yoy in 2016. This was driven by higher costs of goods and services on the back of stronger second-round effects from increased prices for raw foods and an increase in other production costs, as well as stronger consumer demand. All alternate calculation methods also showed a similar slight increase in underlying inflationary pressure[10].

The pace of growth of prices for services included in core inflation sped up materially in 2017 (to 14.6% yoy). Most notably, prices for fast food, post-secondary education, and dwelling maintenance contributed the most to the growth in service prices. Those prices accelerated on the back of rising production costs and a pickup in consumer demand driven by the increase in the minimum wage and pensions. According to NBU estimates, in 2017 the increase in social standards impacted inflation primarily through increased production costs. The doubling of the minimum wage is estimated to have added approximately 2 pp to annual inflation.

Prices for processed foods also accelerated, rising 13.0% yoy due to secondary effects from higher prices for raw food products, as well as large exports of certain food products (e.g., butter). Prices for processed meat and dairy products grew rapidly (22.0% and 22.1% yoy, respectively) amid lower production in animal breeding, large exports, and global prices exceeding domestic prices. In addition, an increase in production costs drove prices for bakeryand farinaceous products higher.

At the same time, growth in prices for non-food goods, which are mostly imported, was slower than last year: 3.3% yoy compared with 4.8% yoy. This was mainly the result of favorable foreign exchange market conditions throughout most of the year and

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

moderate inflation in Ukraine's MTPs. Prices for clothing and footwear rose at a slower pace (+0.9% yoy) as most sellers purchase their sale inventory a few months prior to the season.

However, prices for non-food products (especially pharmaceuticals, medical products, and home appliances) accelerated slightly after the hryvnia weakened against foreign currencies in October–December.

The inflation expectations of all groups of respondents had been decreasing gradually since the start of 2017. However, in September 2017, those expectations began to deteriorate as a result of FX market conditions[11], high current inflation, and the government's announcement of plans to raise social standards. Business outlook surveys conducted in Q4 2017 showed that businesses see the hryvnia exchange rate, household incomes, and social spending having a greater impact on consumer price inflation. The share of companies that expect prices for their products/services to rise in the following 12 months (including because of a stronger impact of labor costs, energy prices, and the hryvnia exchange rate) has increased[12].

Non-Core Inflation

Non-core inflation accelerated to 19.4% yoy as of end-2017 from 17.5% yoy in 2016. Rapid growth in prices for raw foods and fuel drove the 2017 number, which was not the case in 2016 when administered prices were the main contributor to non-core inflation.

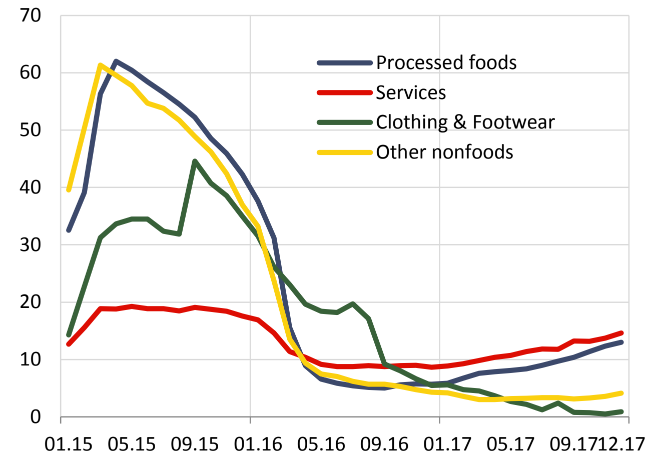
Raw food prices accelerated substantially in 2017 to 23.5% yoy. That was mostly driven by supply factors as well as a gradual revival of consumer demand for food products in response to an increase in household incomes.

Prices for raw meat and milk grew rapidly (30.3% and 23.1% yoy, respectively) and egg prices returned to growth (21.2% yoy). Higher global prices for those goods, robust external demand, and limited domestic supply amid a decreasing number of livestock (except poultry) and an unstable epizootic situation were key contributors to the price growth. Total demand, exports and domestic consumption, exceeded domestic production of animal products[13].

In addition, prices for fruits and vegetables resumed their growth in 2017 (24.7% and 34.5% yoy, respectively) due to several reasons. First, unfavorable weather in the first half of the year affected the supply of some fruits and vegetables. For example, prices for berries, apples, and some root vegetables (carrots and beets) grew by almost 1.5 times. Second, supply-side effects that in 2016 had curbed price growth for certain fruits and vegetables faded in 2017. Most notably, the supply of Turkish goods in Ukraine fell after Russia lifted its trade restrictions on Turkish goods.

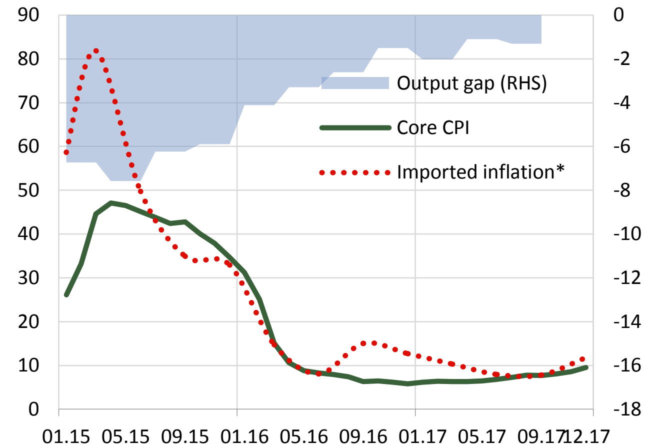
Meanwhile, sugar prices continued to decline (7.4% yoy) on the back of low global prices and high domestic supply. Higher than last

Main Components of Core CPI, % yoy



Source: State Statistics Service of Ukraine, NBU staff estimates

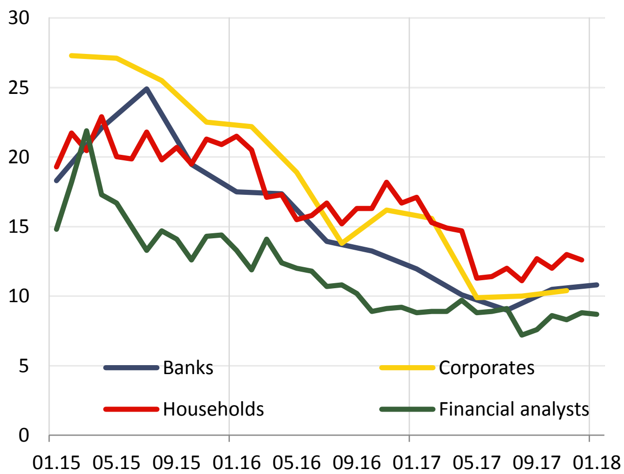
Core and Imported Inflation, % yoy, and Output Gap, %



* Imported inflation is calculated as a quarterly change of UAwCPI, the indicator of consumer inflation in the countries - MTP, adjusted for the change of Hryvnia NEER (for more information see Inflation Report April 2016, p. 9)

Source: State Statistics Service of Ukraine, NBU staff estimates

Inflation Expectations for the Next 12 Months, %



Source: NBU, GfK Ukraine

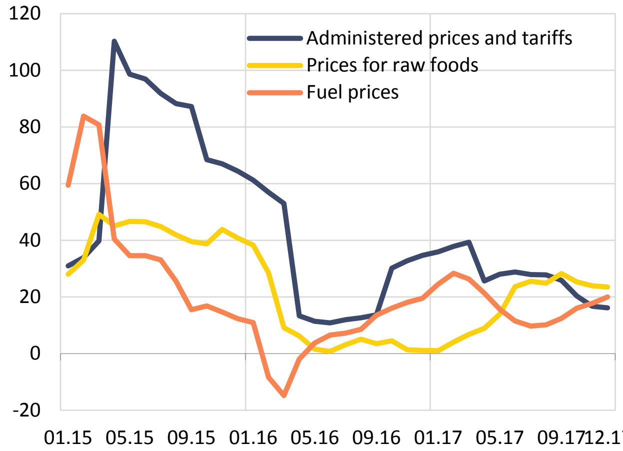
[11] Empirical studies(O. Coibion and Y. Gorodnichenko, 2015) show that inflation expectations in Ukraine depend not only on the current rate of inflation, but also on changes in the UAH/USD exchange rate.
[12] Read more in the Business Outlook Survey Q4 2017.
[13]Read more about the impact of the situation in animal breeding on inflation in the October 2017 Inflation Report, pages 22–23.

year harvest continued to push buckwheat prices down (28.9% yoy).

As expected, growth in administered prices slowed to 16.1% yoy, which was partly due to a favorable comparison base: unlike in 2016, public utility rates grew much more slowly in 2017. Price growth for alcoholic drinks also slowed materially against a high comparison base (to 11.7% yoy): in 2016, the government raised minimum prices by much more than in 2017. In the meantime, higher excise taxes and distribution problems in spring 2017 spurred growth in prices for tobacco products (to 36.3% yoy). Growth in prices for bread accelerated as well to 20.1% yoy due to higher costs, including wages and raw materials. Increased costs have also pushed up prices for postal services and passenger transportation. Urban transport fares have risen substantially and additional railway services have become more expensive.

In 2017, growth in fuel prices remained as fast (20.0% yoy) as in 2016 owing to higher oil prices and the depreciation of the hryvnia against the euro (fuel excise taxes are set in euro). Meanwhile, prices for liquefied gas grew at a slower pace (3.5% yoy) thanks to a diversification of supply at the end of the year.

Main Components of Non-Core CPI, % yoy



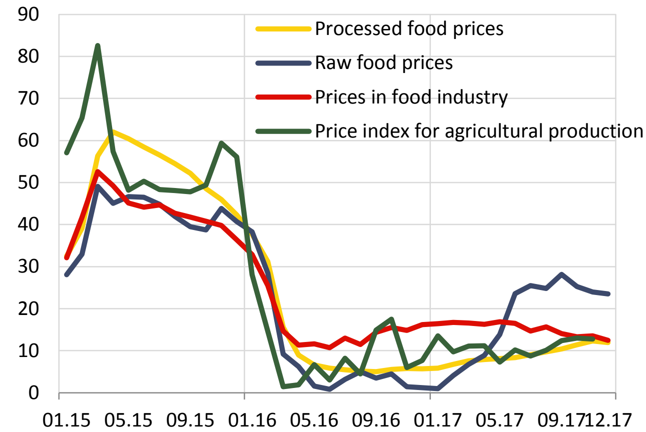
Source: State Statistics Service of Ukraine; NBU staff estimates

Producer Price Index

Growth in the Producer Price Index (PPI) slowed substantially to 16.5% yoy from 35.7% in 2016. In 2017, global trends slowed annual price growth in the mining industry. With global oil prices moderating, crude oil and natural gas prices rose at a slower pace (16.1% yoy), while lower global prices for iron ore have restrained the growth of metal ore prices (to 29.3% yoy). At the same time, rising global prices caused coal prices to accelerate to 47.8% yoy.

Price trends in the mining industry have impacted price developments in subsequent links of the production chain. Price growth slowed for coke and refined petroleum products (to 43.0% yoy) and metal products (to 26.9% yoy).

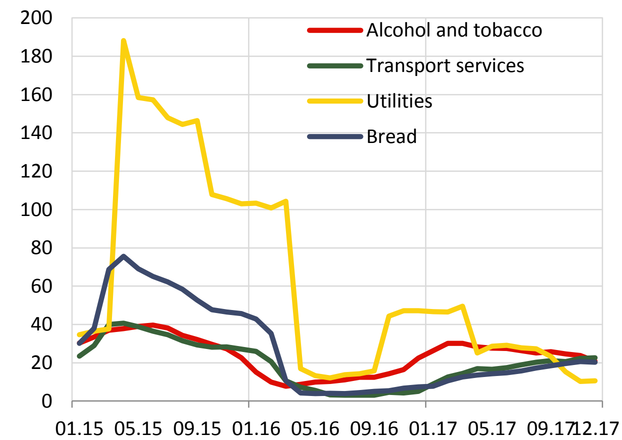
Raw and Processed Food Prices, Prices in Food Industry and Agricultural Production, % yoy



Source: State Statistics Service of Ukraine

Prices in manufacture of food products rose at a slower pace in 2017 (12.5% yoy) than in 2016, although certain agricultural inputs pressured prices to a greater degree this year. The selling price index for agricultural products grew to 12.8% yoy in November 2017 from 6.0% yoy in November 2016. First of all, prices for dairy products and meat and meat products rose the fastest, 18.3% yoy and 29.0% yoy, respectively. Prices for bread and farinaceous products also grew faster (17.5% yoy), driven by higher production costs. At the same time, prices in the food industry decelerated from 2016 as sugar prices fell (8.1% yoy) on the strength of a good sugar beet harvest, global sugar prices declined, and price growth for beverages slowed down (to 15.8% yoy).

Administered Prices and Utility Tariffs, % yoy



Source: State Statistics Service of Ukraine

Price inflation for the supply of electricity, gas, steam, and air conditioning decelerated substantially, to 4.0% yoy. That was driven largely by an increased share of cheaper nuclear power in the structure of electricity production. In addition, slow growth in electricity prices for industrial producers has been driven by the phased-in elimination of cross-subsidization and the need to gradually align electricity prices for households and other consumers. Higher water levels in rivers and inflows to reservoirs also contributed to a lower average price for hydroelectricity.

At the same time, after a drop in 2016, prices in the chemical industry grew rapidly (21.9% yoy) on an increase in global prices, strong demand from agricultural companies, and new anti-dumping duties on nitrogen fertilizers from Russia.

High investment demand drove further price growth in the machine-building industry (16.2% yoy). In addition, the faster growth in electrical equipment prices (21.2% yoy) have likely been driven by high external demand for graphite electrodes.

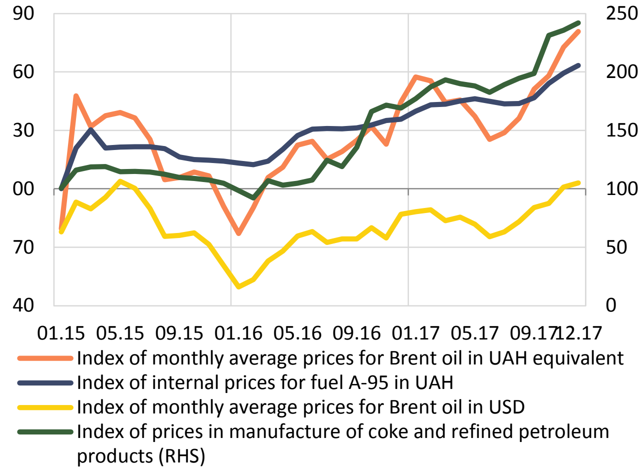
Price growth for construction works accelerated to 15.5% yoy in November as robust investment growth continued in construction.

Price growth in different economic sectors has generally had a relatively low impact on consumer prices. Overall, the NBU estimates that only price changes in the production of food, drinks, and tobacco products are closely related to the food products and non-alcoholic drinks item in the Consumer Price Index (CPI)[14].

The GDP deflator is a measure that aggregates the impact of internal supply-side factors of inflation. The trends of price changes in various economic activities are reflected in the GDP deflator. In Q3 2017, slower price growth in industrial production was offset by faster growth of prices in construction and agriculture. As a result, the GDP deflator remained almost unchanged in Q3 2017 (20.2% yoy) compared with the previous quarter.

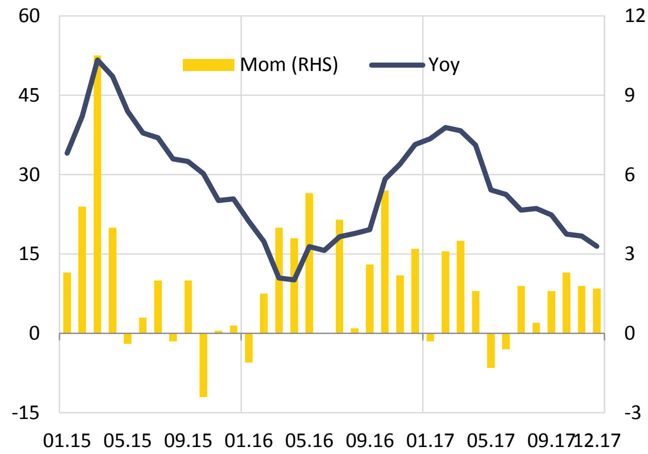
The NBU expects a lower GDP deflator in Q4, primarily due to the deceleration of price growth in industrial production. However, foe the whole year the GDP deflator is expected at 20.5% yoy, higher than in 2016, primarily owing to increased labor costs and faster growth in export prices amid strong external demand.

Price Indexes for Fuel and Oil (12.2014 = 100)



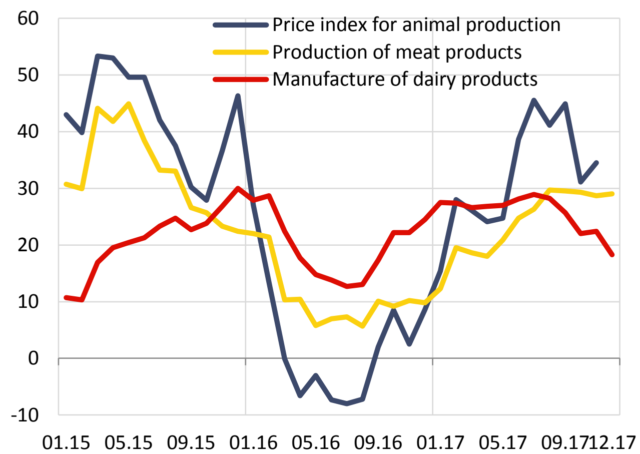
Source: State Statistics Service of Ukraine, Thomson Reuters Datastream

Producer Price Index, %



Source: State Statistics Service of Ukraine

Prices for Animal Products, % yoy



Source: State Statistics Service of Ukraine

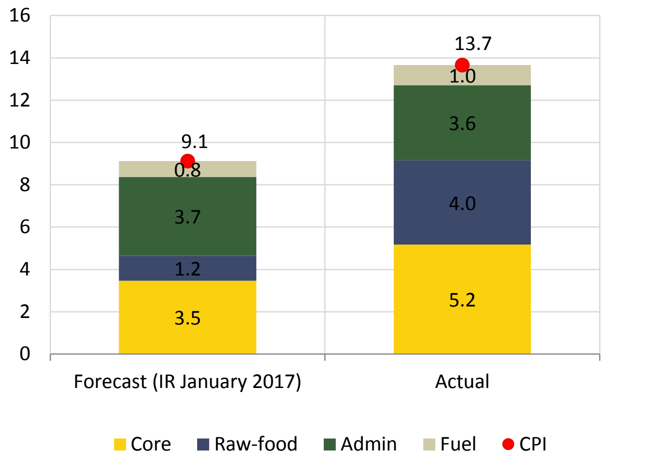
[14] Read more about the impact of industrial inflation on consumer prices in the July 2016 Inflation Report, pages 16-17.

Box: The Deviation of Inflation from Targets: Ukrainian and International Experience

In 2017, consumer prices grew 13.7% in Ukraine, exceeding both the inflation target (8% ±2 pp) and the inflation forecast published in the Inflation Report in early 2017 (9.1%). Given the monetary policy horizon (9–18 months), we analyze deviations from the forecast prepared 12 months ago to determine the impact of various factors. Actual inflation missed the forecast by 4.6 pp. Faster growth in raw food prices accounted for the largest share (almost half) of that deviation, driven largely by domestic supply factors. Unfavorable weather was a factor, as was an increase in meat and dairy exports on the back of higher global prices and a corresponding decline in domestic supply.

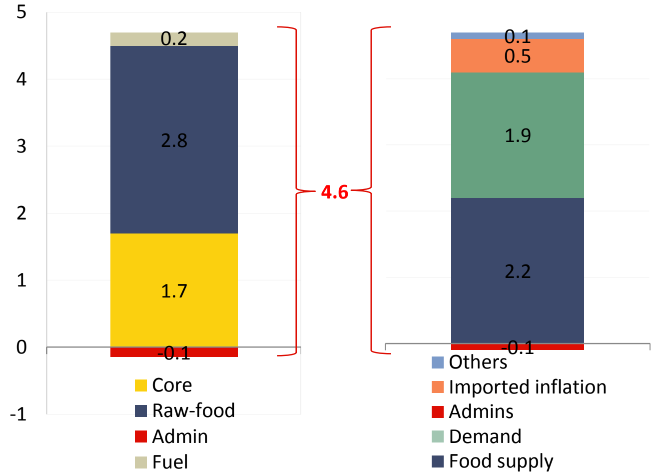
Ukraine is a small open economy with commodity-oriented foreign trade, which makes it vulnerable to shocks on global commodity markets. At the same time, shifting to a floating exchange rate has reduced the country's vulnerability to the influence of global markets (for example, growth in global metals prices creates pressure for the hryvnia appreciation, which eases domestic price pressures). In 2017, global meat prices grew by almost one third, boosting Ukrainian meat exports. However, meat has only a small share of total exports. Therefore, it has not brought significant export proceeds and has not created sufficient pressure for the hryvnia to strengthen.

Forecast and Actual Annual CPI Growth by Main Components, pp



Source: SSSU; NBU staff estimates

Annual CPI Growth Forecast Error by Main Components and Factors, pp



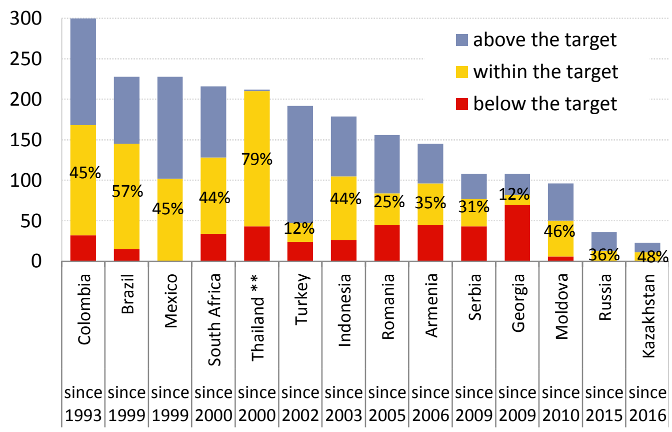
Source: SSSU; NBU staff estimates.

The acceleration in raw food prices accompanied by the strong external demand have driven faster-than-expected growth in prices for the processed foods included in core inflation. Meanwhile, the pace of growth in administered prices (16.1% yoy) was close to the forecast (16.9% yoy). Some factors offset each other. Most notably, the greater contribution of the rapidly rising prices for tobacco products was offset by the absence of gas tariff hike for households.

When pursuing inflation-targeting, central banks typically focus on eliminating demand shocks and only respond in a minor way to supply shocks. Many occasional factors may cause inflation to deviate from the target, especially over the short term when a central bank has no time to react. It would not be reasonable to respond with a much tighter monetary policy, which suppresses economic activity, as the economy was not overheated. In cases like this, central banks allow inflation to deviate from the target.

However, an increase in production costs, particularly labor costs, and a rapid recovery of consumer demand had a stronger effect on the deviation of inflation from the target in the second half of the year. The higher minimum wage has proven to have a stronger impact than had been expected. In early 2017, the NBU estimated that the doubling of the minimum wage would add 1–1.5 pp to headline inflation. That number was revised to approximately 2 pp as the private sector followed and hiked wages amid high demand for labor and a strengthening of migration flows. That has prompted an acceleration in prices for services that are included in the core CPI. The higher-than-forecasted growth in consumer prices was also driven by a faster pace of imported inflation at the end of the year.

Number of Months when Inflation was:



* in case of point target we assume +-1% band

** targets core inflation

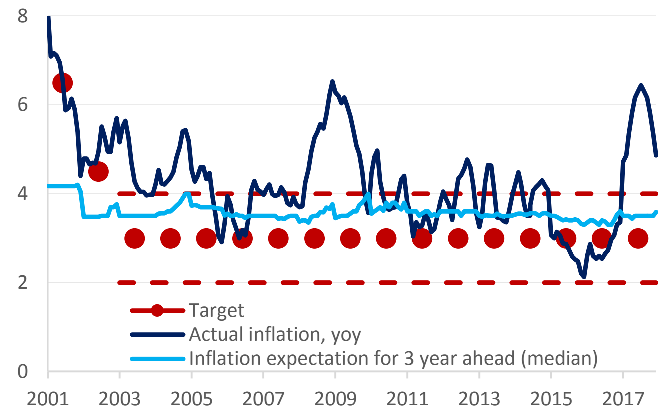
Source: Central banks

The NBU responded to higher inflation risks by tightening monetary policy. Overall, the NBU pursued a restrained approach to monetary policy in 2017, with real interest rates (accounting for inflation expectations) ranging between 5% and 7% throughout the year. However, the tight monetary policy was unable to fully eliminate inflationary factors. That is partly because the impact of monetary policy on the economy is delayed. Therefore, to neutralize the inflationary factors that materialized in the second half of the year, the NBU had to have started to raise its key policy rate as early as in Q2 2017. At that time, however, factors pointing to an easing of policy manifested themselves over the forecast horizon: a resumption of cooperation with the IMF, appreciation pressure on the hryvnia, and slower administered price inflation. And, most importantly, inflation expectations had been continuing to improve. Secondly, a sharper and faster tightening of monetary policy could have led to a deterioration in expectations during a period when the materialization of the inflation risks was not yet clear. That may have resulted in an unjustified loss of economic growth. Expereince of other inflation targeters shows that a central bank can deliberately allow inflation to deviate from the target. This happens in several cases. First, when supply shocks are rapid and powerful but do not threaten a return of inflation towards its target over the medium term. Second, when a central bank believes that a sharp shift to tighter monetary policy would cause an excessive adverse effect on the economy.

Forecast error can be another reason for the deviation. That can occur due to an error in modeling (inaccurate simulation of the current structure of the economy), errors to forecast assumptions (e.g., higher-than-expected imported inflation), or inaccurate estimates of the impact of non-recurring events in the economy (e.g., the doubling of the minimum wage).

IActually, inflation often deviates from the target in many countries. However, this does not mean that the inflation-targeting regime is not effective, as it is aimed at stabilizing inflation expectations, which can be firmly anchored even at a time of significant fluctuations in inflation. Economic agents understand that the central bank will will do its best to bring inflation back to the target. However, those attempts need to fall within the bounds of reason as a central bank's efforts to react to all shocks to keep inflation extremely close to the target could yield unjustified economic losses.

Mexico: Inflation and Inflation Expectations



Source: Bank of Mexico

Inflation exceeded target band due to peso depreciation, energy prices liberalization and minimum wage increase in January 2017

2.2.2. DEMAND AND OUTPUT

In Q3 2017, real GDP grew 2.1% yoy, in-line with the NBU's estimate as published in the October 2017 Inflation Report. Domestic demand remained the key driver of economic growth in Ukraine. Investment grew quickly, although slightly slower than in previous quarters. The continued growth has been propelled by an improved business outlook and robust corporate earnings in Q3. Consumption started to play a dominant role, as expected: a slight decrease in private consumption was offset by the return to growth of general government spending amid an easing of fiscal policy.

Growth in export volumes has accelerated on the back of a favorable external price environment, large carry-over stocks of grain and oil-bearing crops, and metals producers adjusting to new conditions after the suspension of trade with the non-government-controlled areas (NGCA). At the same time, a pickup in domestic demand, especially investment demand, spurred import growth. As a result, net exports continued to contribute negatively to the change in GDP (-3.8 pp).

According to the NBU's estimates, GDP growth decelerated to approximately 1.5% yoy in Q4. This was primarily due to a significant drop in crop farming caused by lower yields of late grain and industrial crops. At the same time, output grew in manufacturing, particularly in the machinery, chemicals, and metals industries. These gains offset a further decline in mining and electricity generation, which primarily reflected the disruptions to production and transportation ties with the NGCA at the start of the year.

Overall, the NBU estimates real GDP growth for 2017 at 2.1% yoy. According to the NBU's estimates , in 2017, the suspension of trade with the NGCA affected real GDP by a smaller degree than expected at the start of the year (0.9 pp actual impact versus 1.3 pp expected), as metals producers shifted faster to new raw material supplies amid an improving external environment and growing domestic demand.

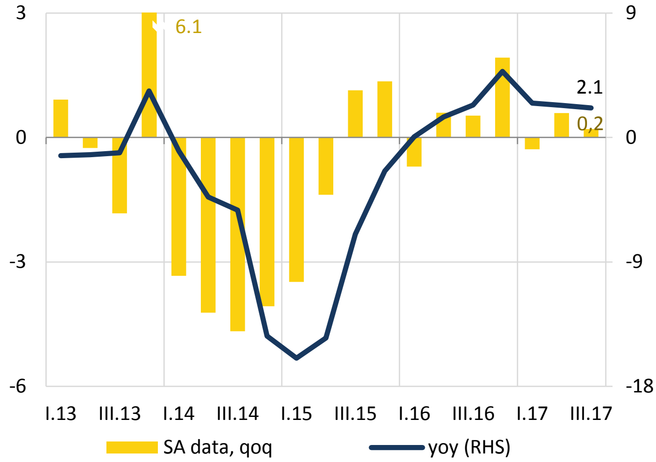
Domestic Demand

In Q3, the growth of the Ukrainian economy continued to slow in line with the NBU's estimates published in the October 2017 Inflation Report. Real GDP increased 2.1% yoy and 0.2% qoq sa. Overall, real GDP grew an estimated 2.3% yoy over the first nine months of 2017.

The rate of investment growth remained high, although gross fixed capital formation grew slower (15.8% yoy), primarily due to last year's high comparison base. In Q3 2017, improved business expectations reached their highest level since mid-2013 and supported the investment growth. A further improvement in corporate financial performance and robust export proceeds amid favorable external conditions also contributed to the growth in investment.

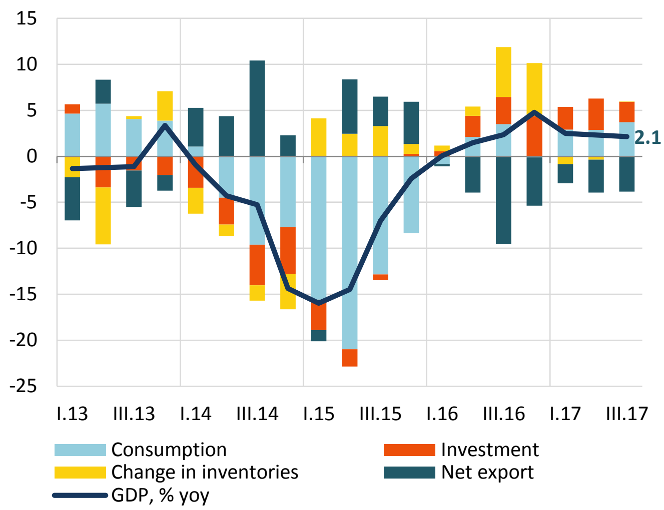
As before, own funds of enterprises were the main source of investment activity financing (more than 70%). The share of budget-financed investment grew from the previous year: up to 8.7% over January–September from 5.9% in the same period in 2016. This reflected solid growth (especially in the first half-year)

Real GDP Growth, %



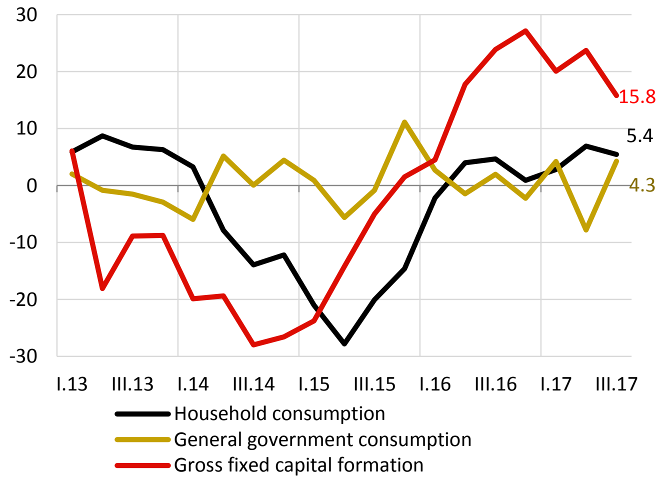
Source: SSSU

Contributions to Annual GDP Growth, pp



Source: SSSU, NBU staff estimates

Domestic Expenditure Components, % yoy



Source: SSSU

of capital budgetary spending on investment programs and regional development projects, including for road and transport infrastructure. On the other hand, as part of the investment financing structure, the share of household investment into housing construction has fallen slightly to 8.5% over January–September 2017. Bank loans and foreign investment remained a minor source of investment financing.

In Q3 2017, investment into machinery and equipment continued to grow the fastest despite a further slowdown to 26.1% yoy. Investment into intellectual property products resumed its growth, particularly into computer software and databases. This may be related to increased spending on software security, both in the corporate and public sectors.

Agriculture, industry (particularly upgrades at energy companies), trade, and transportation remained the main consumers of capital investment. Investment in those areas grew by 20%–30% yoy. Investment continued to grow rapidly in service sectors – education (75.4% yoy), healthcare (65.7% yoy), and professional, academic, and technical activities (53.9% yoy) – as a result of their heavy underinvestment in past years. Investment into public administration and defense also grew rapidly (47.8% yoy).

Private household consumption grew 5.4% yoy in Q3, boosted by fast growth in real wages and improved household consumer sentiment[15] (a significant improvement from one year ago). At the same time, private consumption growth slowed from the prior quarter, possibly related to slower growth in real disposable household income amid higher inflation.

Growth in spending on food products slowed to 1.8% yoy and to 0.2% yoy on alcohol and tobacco. However, the pace of spending growth on household goods has accelerated to 28.3% yoy on the back of deferred demand from past years. Growth rates remained high for healthcare (27.9% yoy) on the back of the *Affordable Medicines* program. General government expenditures (on both individual needs of households and collective needs) increased once again (by 4.3% yoy) as fiscal policy eased. This also slowed the decline in the gross value added of public administration and defense.

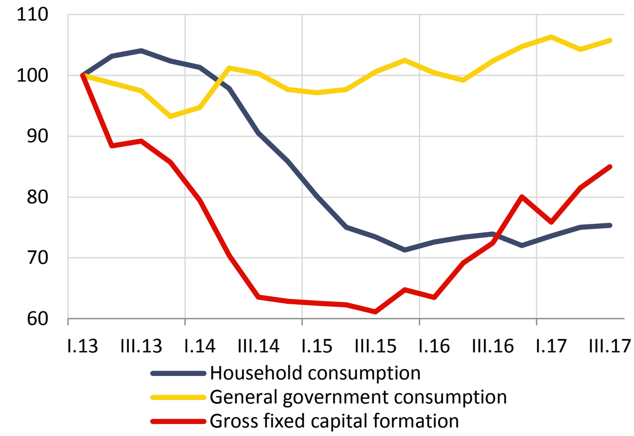
Exports also returned to growth (6.9% yoy), amid favorable external conditions, large carry-over stocks of grain and oil-bearing crops, and high yields of some crops (wheat, rape). In particular, export volumes of oils and fats, and oilseeds (primarily rapeseed) grew faster, while the decline in ferrous metals exports slowed. Gas transit volumes also grew faster. However, import growth accelerated as well (up to 13.2% yoy) on the back of higher energy imports, mostly coal and petroleum products. On balance, the negative contribution of net exports rose to 3.8 pp.

Output

Almost all sectors regained some momentum in Q3.

Performance improved in manufacturing, which grew 4.8% yoy, and in the energy industry, whose decline slowed to 5.1% yoy. In the metals industry, output of cast iron, steel, and ferrous metals declined slower as metallurgical companies resumed operations or

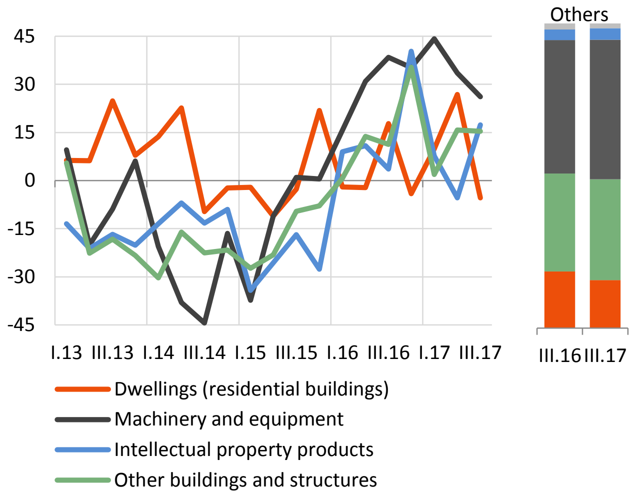
Investments and Consumptions (sa indices: I.2013=100)



Source: SSSU, NBU staff estimates

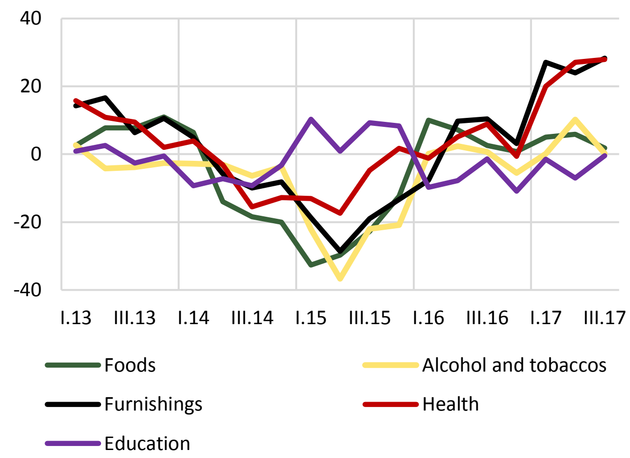
Gross Fixed Capital Formation by Types of Non-financial Assets, % yoy

Structure of Fixed Capital Formation, %



Source: SSSU, NBU staff estimates

Real Final Consumption Expenditure of Households by purpose, % yoy



Source: SSSU, NBU staff estimates

[15] According to a survey by GfK Ukraine.

increased their capacity utilization rates [16] amid a favorable external environment and a faster-than-expected shift towards alternate raw material sources. Chemical production grew the fastest as previously idle companies resumed operations.[17]

Growth in the remaining manufacturing sectors slowed. Growth rates decreased in the machinery, mainly due to lower output of computers, electronics, optical products (more specifically, in military applications), and transport vehicles.

Mining production continued to shrink, declining 6.5% yoy primarily owing to a halt to anthracite coal mining and the effect of last year's comparison base.[18]

The decline in gross value added (GVA) in agriculture slowed to 0.1% yoy as the harvest was active in Q3, catching up after a late start to the harvest compared with the previous year, and strong yields of wheat, legumes, and potatoes. A slight improvement in animal breeding, primarily in poultry farming and egg production, was an additional positive factor for agriculture.

The overall positive industry performance and robust exports of agricultural products contributed to growth in GVA in trade and transportation.

GVA in construction continued to grow the fastest (25.2% yoy), although the pace of growth has slowed.

Robust growth in real wages fed into positive performance across the service sector, except in education, which is funded largely through government budgets. More specifically, GVA in the hotels sector continued to grow and the decline in GVA in the arts, sports, entertainment, and recreation slowed. Growth accelerated markedly in the finance and insurance sectors as bank lending has increased.

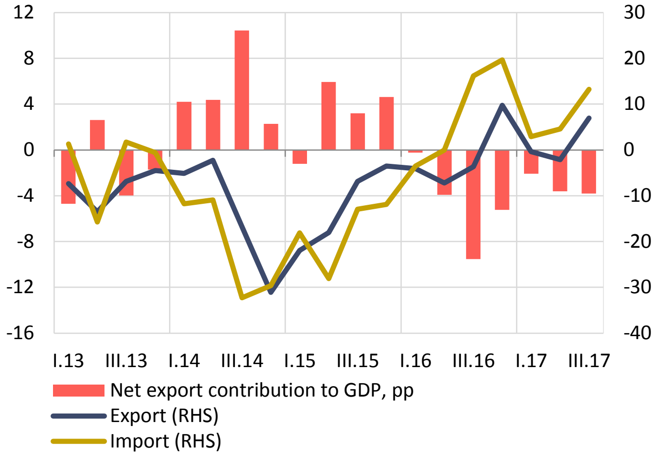
Estimates for Q4 2017

The NBU estimates real GDP growth slowed to 1.5% yoy in Q4, primarily due to a slump in crop farming on the back of lower yields of late grain and industrial crops.

Domestic demand, including both investment and consumer demand, remained the main driver of economic growth. Expectations of improved corporate earnings supported the investment growth. At the same time, growth in investment demand continued to slow in Q4 against a high comparison base and a slight deterioration of business expectations.

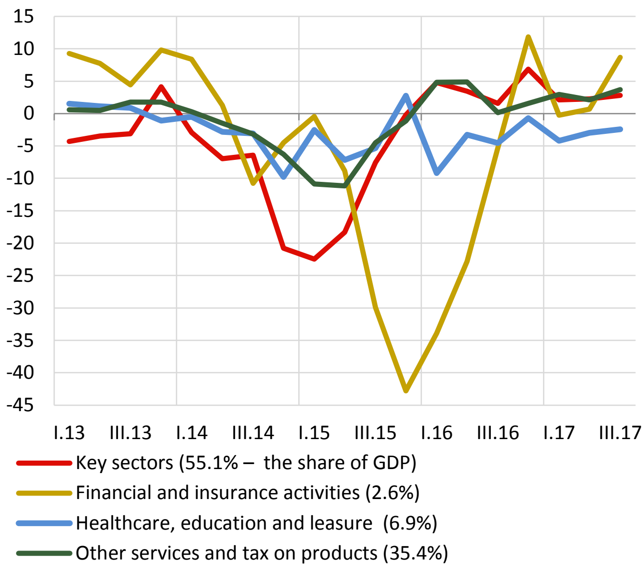
Consumer demand accelerated year-on-year, according to the NBU's estimates, as indicated by the steady growth in retail turnover. This was facilitated by a further improvement in household consumer expectations[19] amid rising real wages and pensions. Growth in general government consumption spending remained fast on continued fiscal policy easing.

Exports and Imports of Goods and Services, % yoy



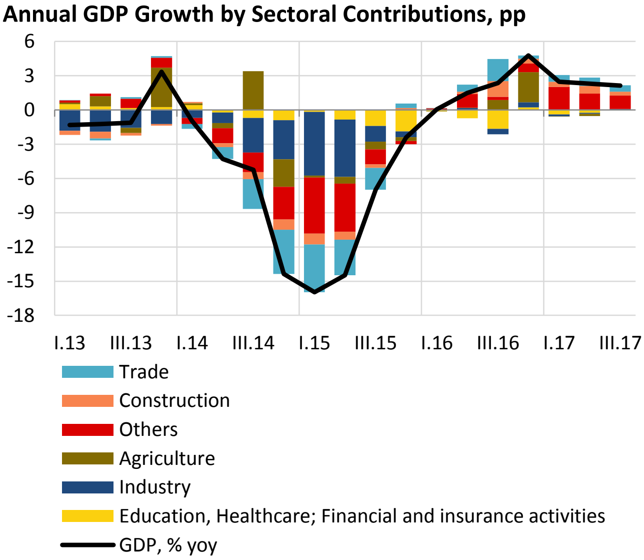
Source: SSSU, NBU staff estimates

GVA by the Groups of Sectors, % yoy



Source: SSSU, NBU staff estimates

Annual GDP Growth by Sectoral Contributions, pp



Source: SSSU, NBU staff estimates

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[16] In July, Dneprovskiy Metallurgical Plant returned to normal operations after cutting production and shutting down during 2017.
[17] Karpatnafnokhim, a producer of ethylene, polyethylene, and PVC, resumed operations in June after being idle for five years. Also, fertilizer producers increased output in Q3 after completing major repairs on production facilities.
[18] According to the Ministry of Energy and Coal Mining, Ukraine produced 2.2 m tons of run-of-mine anthracite in Q3 2016 and 1.5 m tons in Q2 2016. No anthracite was produced in Q2 and Q3 2017.
[19] According to a survey by GfK Ukraine.

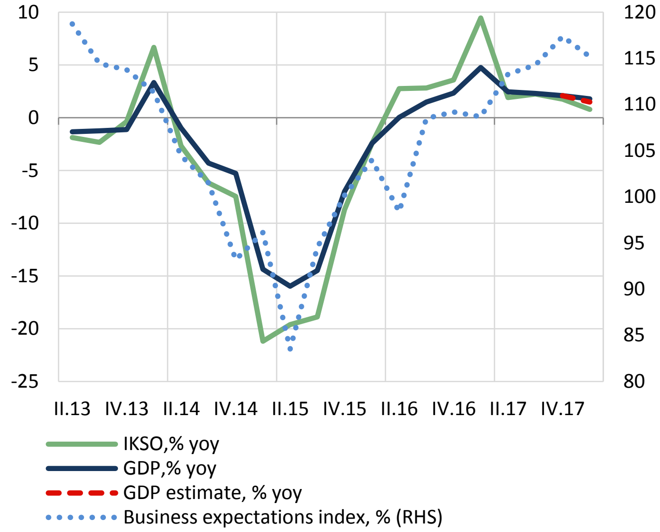
In Q4, export growth accelerated, mainly on larger deliveries of ferrous metals. Meanwhile, the pace of import growth remained virtually unchanged, due to which the contribution of net exports turned positive.

IAdditionally, industrial output grew slightly year-on-year as some chemicals producers continued to increase production after an idle period. Output growth has accelerated in the machinery industry. Automobile and railway machinery production continued to grow the fastest, which, against the backdrop of a faster decline in exports of those products, points to a of steady domestic demand. The growth in food production continued to lose momentum as production of oils and fats, meat, bread and bakery products, and flour fell.

In Q4, agricultural production volumes dropped substantially due to lower yields of late grain and industrial crops. Corn was the main culprit, reflecting a drought during its vegetation period. At the same time, the pace of decline in animal breeding slowed, driven by higher volumes of milk and egg production (amid high external demand), as well as a slightly slower decrease in pig livestock.

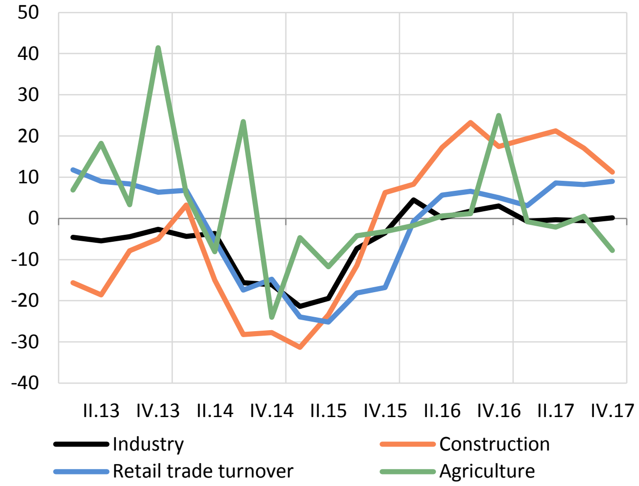
Overall in 2017, the NBU estimates real GDP growth at 2.1% yoy. That exceeds the NBU's forecast from April 2017, which incorporated the estimated economic losses incurred as a result of the suspension of trade ties with the NGCA and the disruption of production links. The performance of the metals industry and a number of related sectors exceeded expectations as metals producers shifted more quickly to alternate supplies of raw material amid a more favorable global price environment and stronger domestic demand (including from the construction and machinery industries). Some companies even increased output of steel and cast iron from the previous year. Accordingly, several related industries, including mining and transportation, performed better than expected (mining industry, transport, etc). That has offset the lower-than-expected results in electricity production (partially caused by warm weather in late 2017) and coke production. Therefore, the NBU has revised downward its estimate of the negative impact of the trade ban with the NGCA on real GDP in 2017 to 0.9 pp (from the previous estimate of 1.3 pp).

Real GDP, Index of Key Sectors Output and Business Expectations



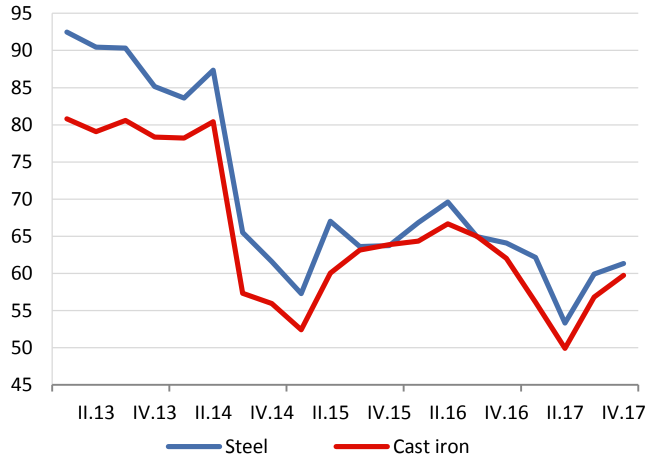
Source: SSSU, NBU staff estimates and surveys

Output by Selected Types of Activity, % yoy



Source: SSSU, NBU staff estimates

Average Daily Production of Steel and Cast Iron, thousand tons*



** Average daily indicators for months, provided by Ukrmetalurgprom, are averaged for each quarter*

Source: Ukrmetalurgprom, NBU staff estimates

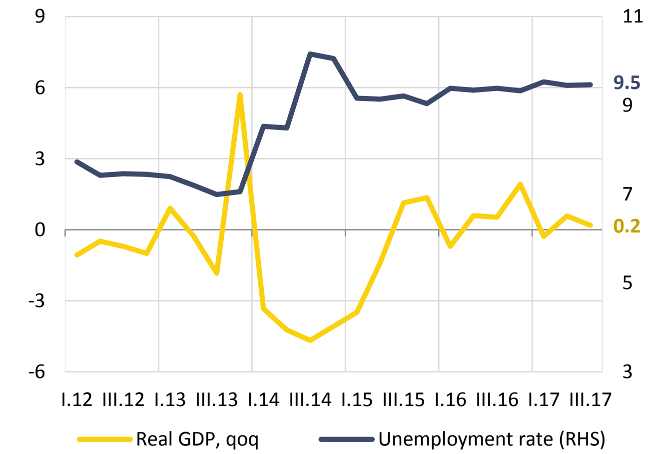
2.2.3. LABOR MARKET AND HOUSEHOLD INCOME

In 2017, demand for labor continued to grow, although the annual rate of growth in the number of vacancies slowed in H2. The revival of economic activity, improvement of corporate financial health and business expectations, and stronger migration processes contributed to the high labor demand. The same factors propelled rapid growth in nominal wages throughout all of 2017, after the minimum wage was doubled early in the year.

However, in Q3 2017, the seasonally adjusted unemployment rate (ILO methodology) remained high and even grew year-on-year on average through the first nine months of 2017. This suggests that labor supply and demand mismatches (by regions and by economic activities and qualification requirements) persist.

Nominal household income increased faster in Q3 2017, to 20.2% yoy, thanks to higher nominal wages and social transfers in kind (subsidies). Meanwhile, growth in other types of nominal household income (from business and property, social benefits) has been moderate. Growth in real disposable household income has remained weak (0.2% yoy) amid accelerating consumer price inflation (and since social transfers in kind are not a part of disposable income). According to the NBU, further rapid wage growth and social initiatives by the government, particularly bringing pension payments up to date, have bolstered consumer demand in Q4 2017.

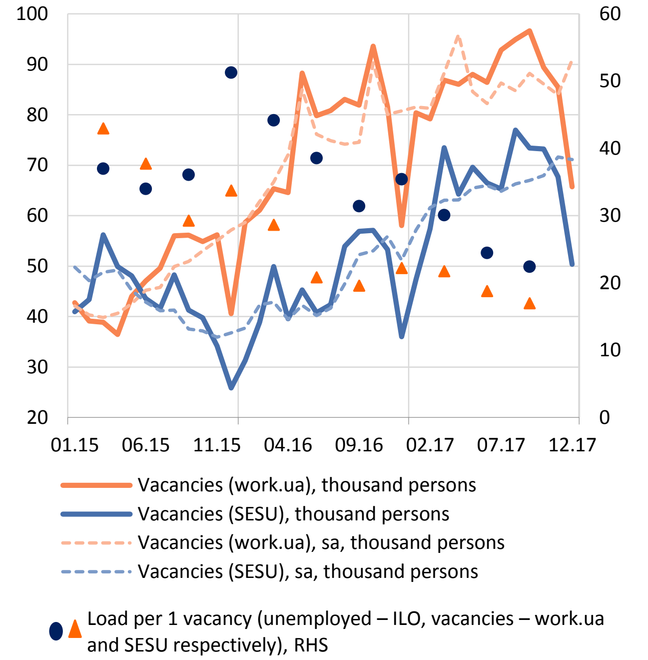
ILO Unemployment* and Real GDP, sa, %



** % of economically active population aged 15 – 70 years*

Source: SSSU, NBU staff estimates

Vacancies (SESU and work.ua), Load per 1 Vacancy



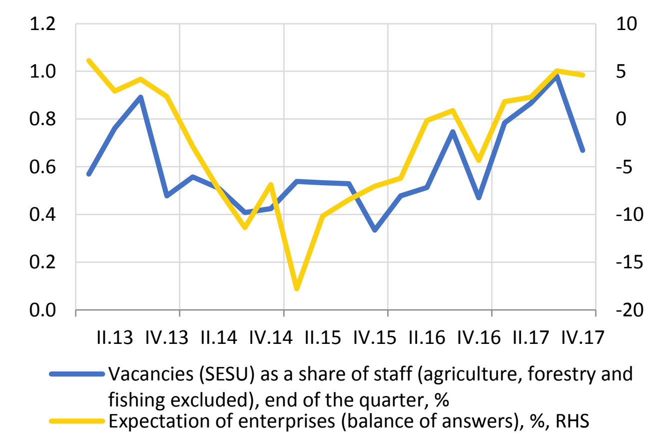
Source: SSSU, www.work.ua, NBU estimates

Labor Market

In 2017, demand for labor continued to grow as revealed by data from the SESU and job search websites. According to the SESU, the greater number of vacancies may be attributed to an increase in the number of employers who worked with employment offices (up by 11%). At the same time, across professional groups, blue-collar jobs and equipment maintenance, operations, and control workers recorded the highest growth rate. Job search websites also showed an increase in the number of vacancies in 2017. The growth came across most business activities except real estate and insurance. The fastest growth occurred among workers, blue collars in the finance and banking sectors (as the banking system returned to profitability and retail lending picked up), accounting and audit, as well as in transportation and logistics.

Business outlook surveys also pointed to increased demand for labor in 2017. The expectations of businesses for changes in staff quantity over the following 12 months improved throughout 2017[20], mostly in trade and manufacturing as well as among medium-sized enterprises of between 50 and 250 employees. That contributed the most to the increase in the number of vacancies in those sectors.

Vacancies (SESU) as a share of staff (Agriculture, Forestry and Fishing excluded) and Expectation of Enterprises as to the Change in the Number of Employees for the Next 12 Months



Source: SSSU, SESU, NBU staff estimates, Bussiness outlook survey of Ukraine (NBU)

High labor demand has led to a slower decline in permanent staff (down to 7.7 m persons in November 2017), who make up almost half of the entire workforce and work at legal entities and their affiliates with 10 or more employees. This is a sign that companies have adapted to structural changes, including the minimum wage hike and the suspension of trade with the NGCA in early 2017. After the large-scale closure of many sole proprietorships in late 2016 – early 2017, the number of registered sole proprietors stabilized at

[20]The balance of employment expectations stood at 4.6% in Q4 2017, while its annual average grew to 3.4% after decreasing by 2.4% on average in 2016.

1.7–1.8 m individuals in February 2017 (according to Opendatabot[21]).

Labor supply did not meet the demand for labor in 2017. Demographic reasons aside, regional and qualification mismatches on the labor market as well as stronger migration processes may be the cause (read more in the *Migration Impact on the Ukrainian Labor Market* box on pages 26–28).

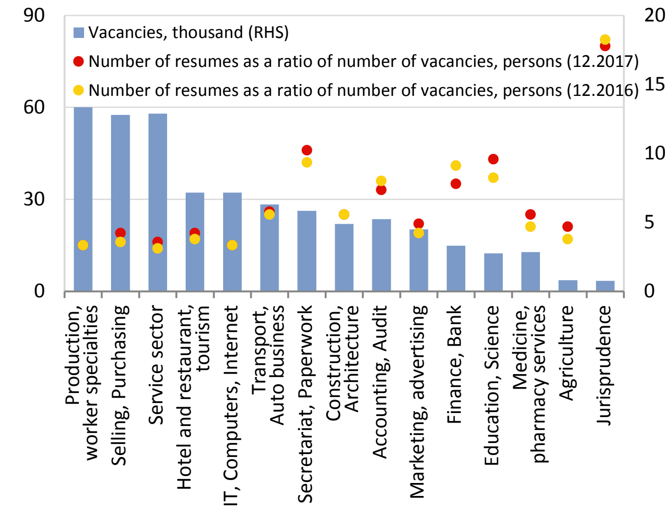
In Q3 2017, the number of economically active population continued to decrease, down 0.5% yoy to 18 m. Demographic processes were the main cause of the decrease, whereas the seasonally adjusted level of economic activity remained almost unchanged. This may have been driven by previously inactive individuals[22] returning to the job search amid growing wages and the changes announced to the pension system (an increase in the qualifying period for a government pension). The economically active population grew in the 30–34 and 40–49 age groups, both among women and men, on average for the first nine months of 2017, with an overall growth rate estimated at 1.7% yoy.

The number of individuals employed also dropped 0.6% yoy in Q3 2017 to 16.4 m. Men experienced the steepest decline (down 1.3% yoy), which might be due to labor migration and low availability of jobs in some sectors, particularly mining, where the number of employees decreased 8.5% yoy in Q3. By contrast, female employment grew for the second consecutive quarter, up 0.8% yoy in Q2 and 0.2% yoy in Q3 respectively.

As in the previous quarter, in Q3 2017 the seasonal increase in labor demand (largely from transport and agriculture) brought down the unemployment rate according to ILO methodology to 8.9% (in percent of the economically active population aged 15 to 70). The seasonally adjusted unemployment rate has not changed, remaining high at 9.5%. At the same time, on average over the first nine months of 2017, the unemployment rate increased 0.2 pp yoy to 9.4%.

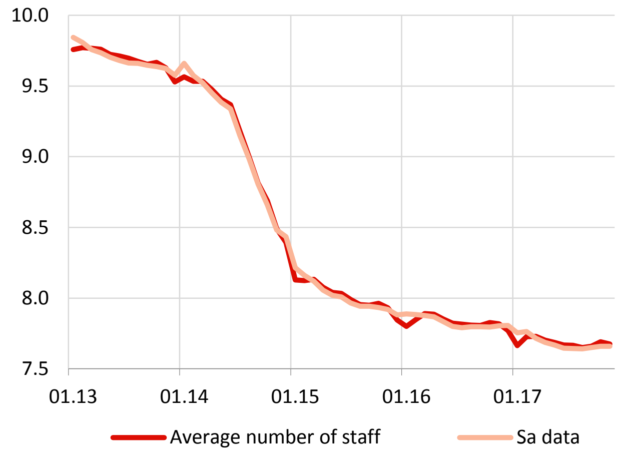
The persisting mismatches on the labor market were evident from the disparity between the number of CVs submitted and jobs offered across various sectors. According to data from job search websites, the legal sector reported the largest number of applicants per vacancy (76 individuals), followed by secretaries and paperwork (44), education and academia (40), and the financial and banking sector (33). The market mismatches grew stronger as, on the one hand, wages offered to applicants were not high enough[23], while on the other, employers set strict qualification requirements to candidates. Over the first nine months of 2017, youth aged 15–24 showed the highest unemployment rate (18.9%), experiencing substantial difficulty in finding a job after completing their education. By regions, Luhansk and Donetsk oblasts registered the highest unemployment rates, 16.4% and 14.5%, respectively. According to the SESU, as of the end of December 2017, the city of Kyiv, Lviv oblast, Kyiv oblast, and Dnipro

Vacancies on www.work.ua, the Number of Resumes as a Ratio of the Number of Vacancies by Types of Activities (December 2017)



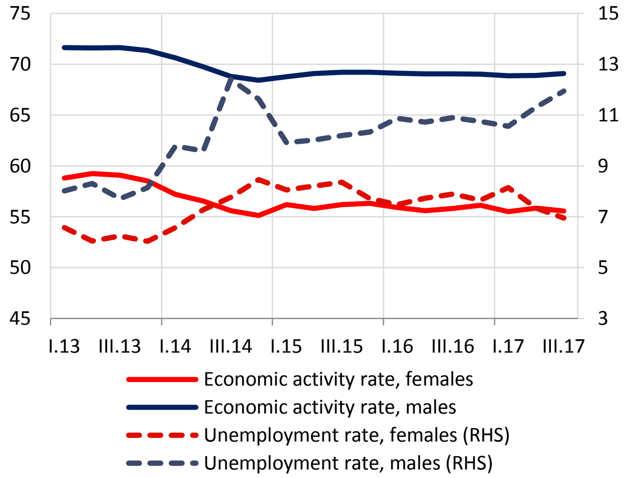
Source: www.work.ua, NBU estimates

Average Number of Staff, million persons



Source: SSSU, NBU staff estimates

Economic Activity Rate, % of the population aged 15-70, and ILO Unemployment Rate, % of the economically active population aged 15-70, by sex, sa



Source: SSSU, NBU staff estimates

[21] Data from Opendatabot may differ from the SESU's 2017 data that are scheduled to be published in November 2018 (as per the Draft Plan of State Statistical Surveys for 2018).

[22] 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.

[23] According to the SESU, 27% of vacancies as of the end of November 2017 offered minimum wage, 41% of vacancies had wages ranging from the minimum wage to UAH 5,000, 21% from UAH 5,000 to UAH 7,000, and only 11% of vacancies offered more than UAH 7,000.

oblast accounted for more than 40% of open vacancies.

Household Income and Savings

Growth in nominal household income accelerated to 20.2% yoy in Q3 2017. This was primarily driven by wages,[24] which constitute the largest component of nominal household income: the share of wages grew 3.1 pp yoy to 43.3%. At the same time, in Q3 2017, the growth rate of social transfers in kind almost doubled from the previous quarter to 37.1% yoy. The faster growth was enabled by the resolution of technical difficulties with calculating subsidies in the previous quarter after the program for utility subsidies to households was amended.

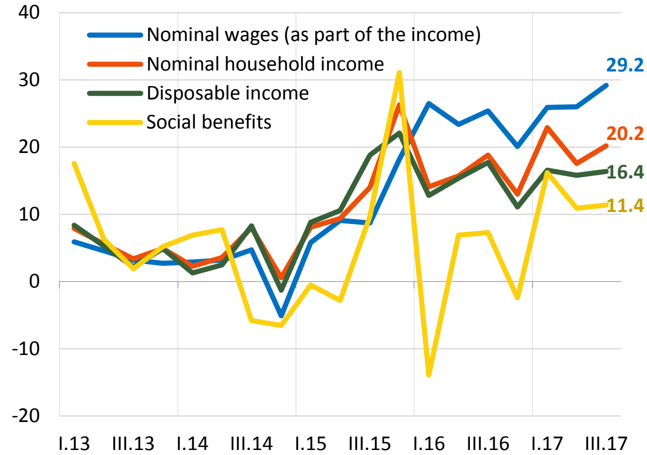
Growth in nominal household income from operating a business (profit and mixed income) accelerated slightly to 9.8% yoy, driven by higher incomes from retail trade and agriculture. Property income continued to drop (by 0.8% yoy), although slower than in previous quarters.

In Q3 2017, amid moderate growth of disposable household income (16.4% yoy) and an acceleration of consumer price inflation, growth in real disposable household income slowed to 0.2% yoy.

Despite the slow growth in real disposable household income, consumption of goods and services grew faster, primarily on the back of wage increases. Household deposits also grew moderately. This, together with growth in non-financial assets largely owned by households engaged in agriculture (traditional for Q3), boosted the growth of savings to UAH 3 bn. Nevertheless, the seasonally adjusted household propensity to save remained negative, posing a risk of a further increase in consumer demand pressure on inflation.

Average nominal and real wages per permanent employee increased at a higher pace (to 37.1% and 19.1% yoy, respectively, in January – November 2017), thanks to the doubling of the minimum wage in early 2017. Wage growth has been broad-based across sectors. As expected, wages in budget-financed sectors showed the fastest growth. In the private sector, wages also grew rapidly throughout the year as the initial upward impetus from the doubling of the minimum wage early in the year was then supported by existing supply-and-demand mismatches. Along with that, the re-calculation of pensions within the framework of the pension reform will support consumer demand in late 2017 and early 2018.

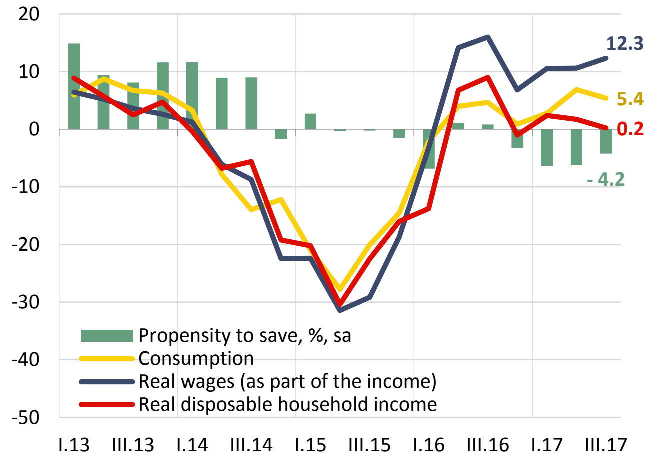
Nominal Wages and Household Income, % yoy



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

Source: SSSU

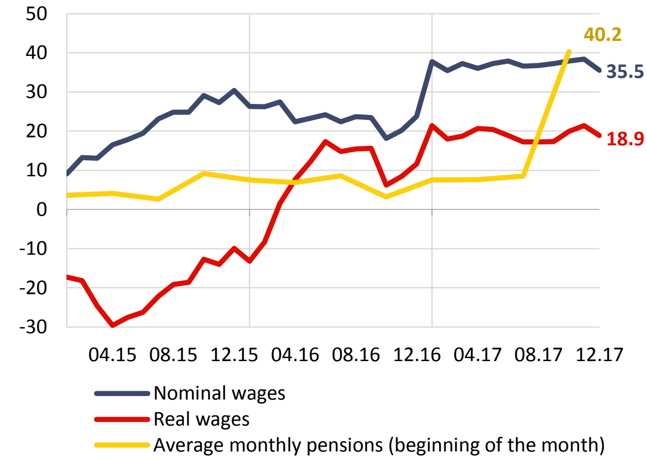
Real Disposable Household Income, Real Wages, Private Consumption and Propensity to Save*, % yoy



*Savings to disposable household income ratio

Source: SSSU, NBU staff estimates

Wages and Average Monthly Pensions, % yoy



Source: SSSU

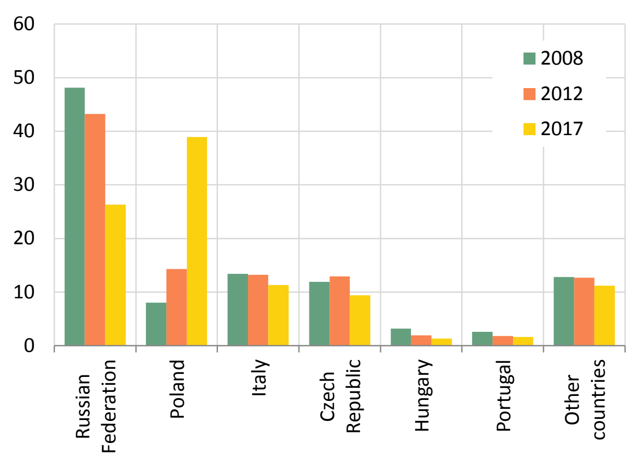
[24] The growth rates of wages within the structure of income and the average nominal wage (per one employee) differ due to the different calculation methodologies used. Wages as part of household income are calculated based on a larger sample, which includes, among other things, armed forces pay and 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.

Box: Migration Impact on the Ukrainian Labor Market[25]

International labor migration is an important economic development factor for both recipient and donor countries, as its scale and intensity have significant effect on the labor market and its development, the employment rate, and, therefore, the change in potential and actual GDP. In recent years, some European countries, including Ukraine, have faced a human capital drain caused by different levels of social and economic development and open borders. In Ukraine, internal and external labor migration has also been driven by the military conflict, the macroeconomic crisis, a decrease in the household living standards, and high youth unemployment.

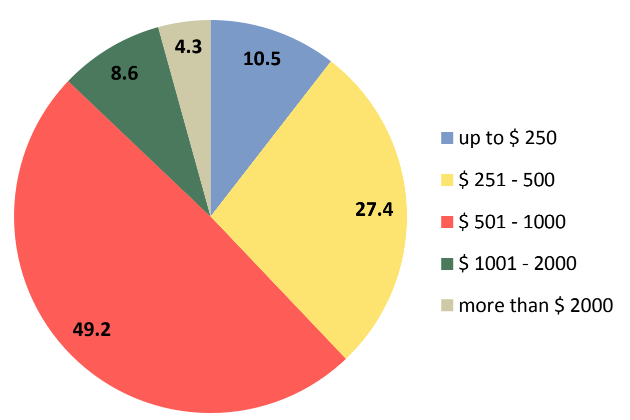
In December 2017, the SSSU published the Bulletin *External Labor Migration (Based on Findings of Modular Sampling Survey)* (referred to as the Survey). Similar surveys were conducted in 2008 and 2012 under the EU project *Effective Governance of Labor Migration and its Skills Dimensions* by the ILO in cooperation with tripartite partners in Ukraine and Moldova, the ILO, the World Bank, and the SSSU together with the Ptoukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine. The 2017 Survey shows that the number of labor migrants[26] aged 15–70 has reached 1.3 m individuals (4.5% of all individuals of that age). That represents an increase of 10.3% compared to the period of the previous Study (2010–2012). According to the latest Survey, short-term migrants accounted for almost half of all labor migrants,[27] 43.2% were migrants who returned to Ukraine, and 8.3% were migrants working abroad for 12 months or more. Over the surveyed period, the largest number of Ukrainians traveled for work to Poland, Russia, Italy, and the Czech Republic. Thus, migration from Ukraine to Poland has grown considerably in recent years amid economic growth in Poland, simplified employment rules, privileges and opportunities for Ukrainians holding the Polish Card (Karta Polaka)[28], and simpler rules for crossing borders thanks to the visa-free framework with the EU.[29] At the same time, migration to Russia has declined due to the tense relations between the countries as well as other factors.

Ukrainian Labor Migrants by Countries of Migration, % of the total number



Source: SSSU

Ukrainian Labor Migrants by the Size of the Average Monthly Earnings (2015-2017 роки), %



Source: SSSU

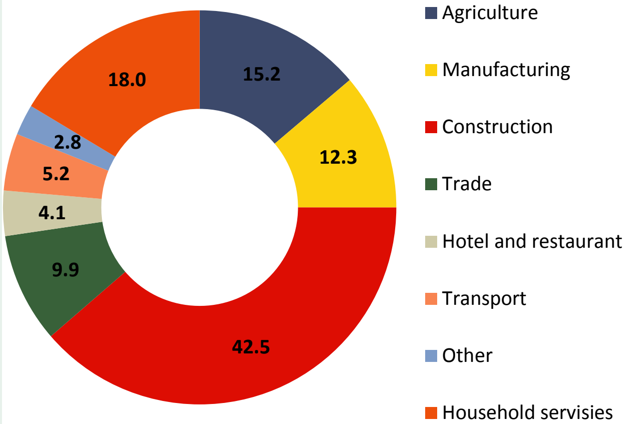
Labor migrants are mostly men (70%) and individuals with technical and vocational education and full secondary education (64%). However, more recently, the number of individuals with higher education and basic or incomplete higher education has grown 17% and 25%, respectively, compared with the previous survey.

Overall, labor migration is mainly driven by wages abroad that are 2-3 times higher than in Ukraine. Per the Survey's findings, a labor migrant earned an average monthly wage of USD 722,

[25] The analysis was based on the latest available data as there is no single comprehensive system to collect data on labor migration in Ukraine. As of today, different institutions collect data on labor migration, while country-level data are often contradictory and vary significantly in different sources (http://www.iom.org.ua/sites/default/files/mom_migraciya_yak_chynnyk_rozvytku_v_ukrayini.pdf).
[26] Labor migrants refer to individuals who worked abroad or looked for a job outside Ukraine from 1 January 2015 to 18 June 2017.
[27] Short-term migrants are individuals who were away from their households at least once for a period of less than one year (and expecting to return within the following 12 months) for the purposes of working or looking for a job abroad (excluding cross-border commuters and persons who work and get paid in Ukraine and travel abroad for business purposes).
[28] The *Act on the Polish Card* was adopted in September 2007. At the same time, in early 2016 Poland amended the government's financial support for the program.
[29] After Ukraine entered into the visa-free framework with the EU, Poland and later Hungary allowed Ukrainians to work without resident permits or work visas. This means Ukrainian citizens can travel to those countries using their biometric passports and can find a job on the spot. According to a poll by the rabota.ua website, 41% of survey respondents leverage the visa-free travel to meet potential employers.

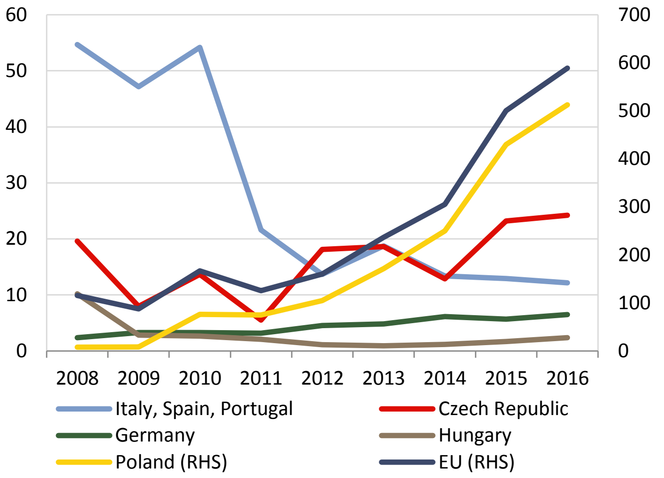
while a permanent employee in Ukraine earned USD 200 in 2016 (USD 262 in January – November 2017[30]). However, only some

Ukrainian Labor Migrants by Activities (2015 – 2017), %



Source: SSSU

The Number of Residence Permits Issued in the EU to Ukrainians, thousand persons



Source: Eurostat

of the migrants succeed in finding a job to match their qualification. The Survey found that as few as 26.8% of labor migrants were employed abroad according to their qualification, 36% worked as unskilled laborers, and almost 30% worked in domains other than their qualification at home. Most labor migrants, irrespective of education, were engaged in low-skill activities: men worked at construction and women were employed as housemaids. Moreover, many migrants from Ukraine work in agriculture as seasonal workers. However, the number of people willing to leave Ukraine to search for better jobs and higher wages is significant and is increasing.[31]

According to Eurostat, Ukrainians obtained the largest number of residence permits in the EU (589,000 or 17.6% of the total number of permits), 17.8% higher than the 2015 level. Poland accounted for 87% of those residence permits and the Czech Republic for 4.1%. Ukrainians account for 87.5% and 30.3% of the total number of permits issued by the two countries, respectively. Ukrainians secured 82.7% of permits with the aim of working abroad, 4.4% for study purposes, and 5.5% for family reasons. The Ministry of Family, Labor, and Social Policy of Poland reports that in H1 2017, Polish employment offices registered 905,000 applications from Ukrainian citizens (95.5% of all work permits issued by Poland).

However, the scale of labor migration could be even larger than the official statistics show. According to the results of the study by Rating Sociological Group, in December 2016, 35% of respondents were officially employed abroad, 61% worked abroad unofficially, 4% provided no answer. Experts at the Ptoukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine estimate the number of Ukrainian labor migrants at 2.2 – 2.3 m individuals (or 8% of the population aged 15 – 70).

Migration processes may grow stronger in the coming years. According to preliminary calculations by the Polish Union of Entrepreneurs and Employers, the country needs to attract 5 m labor workers to maintain the country's economic growth rate. New rules took effect in Poland starting 1 January 2018 that allow citizens of Ukraine, Belarus, Armenia, Georgia, Moldova, and Russia enabling Ukrainian citizens to work in Poland for nine months out of every 12 months. Poland's openness to labor migrants is the result of a large number of vacancies, created by the country's growing economy and labor migration of Poles to Europe (especially to Great Britain, Germany, and Ireland[32]). The

Total Population Aged 15 – 70 and the Share of Ukrainian Labor Migrants

* Excluding Crimea and Sevastopol since 2014 and separate areas of Donetsk and Luhansk oblasts since 2015

Source: SSSU, Institute for Demography and Social Studies of the NASU

[30] At the average UAH/USD exchange rate for the period.

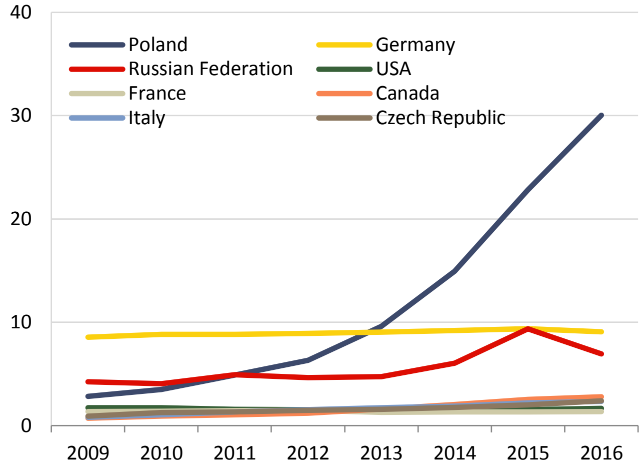
[31] According to the poll by rabota.ua, in early 2016, 19% of all respondents were willing to leave Ukraine to search for a better job. According to the Ukrainian Institute for Social Studies, that figure was 25%. Research conducted by Rating Sociological Group in September 2017 shows that the number of people willing to work abroad stood at 44% of all respondents, up 3 pp from the previous year, while the number of those willing to permanently reside abroad increased 5 pp to 35%.

[32] After Poland entered the EU in 2004, more than 2 m people left the country. A survey by IBRIS sociological institute https://www.ibris.pl/ shows that as few as 6% of Poles working in Great Britain intend to return to Poland. At the same time, Poland expects some Polish migrants to return after Great Britain exits the EU

Labor Migration Barometer report[33] by Polish company Personnel Service revealed that 16% of respondent companies had hired or were hiring Ukrainians in H1 2017, while Ukrainians accounted for up to 5% of employees at Polish companies. At 8% of companies, Ukrainians accounted for 26% – 50% of all employees. Meanwhile, one company in five intended to look for employees from Ukraine in the near future.

The increasing number of students that are studying abroad constitute an additional risk related to labor migration from Ukraine. According to preliminary data from CEDOS,[34] the number of Ukrainian students in foreign universities increased 56% in the 2016/2017 academic year (compared to the 2012/2013 academic year, when the number of Ukrainians in foreign universities started to grow rapidly[35]) to 72,000 individuals. Of those, 46% or 33,400, studied in Poland. Young Ukrainians also expressed a desire to study in Germany and Russia.

Ukrainian Students Studying at Foreign Universities, thousand persons



Source: Analytical center CEDOS

Labor migration carries considerable risks to the development of the labor market and the economy as a whole, although it may carry positive effects as well. First, a decrease in the labor force can reduce potential GDP, which further weighs on economic growth. Secondly, public spending on education, development, and support to individuals who then leave the country becomes non-productive. Third, the population aging problem is aggravated (especially with mandatory contributions to the general pension fund) as mostly working-age individuals go abroad. In addition, inflation pressure may increase due to the increase in wages because Ukrainian employers will have to bring wages closer to European levels to attract new qualified employees or retain current employees, while productivity growth is expected to be more moderate. That said, labor migration (Yavuz KÜL, 2007) eases tensions on the labor market (as the number of individuals who cannot find a job in their home country declines – Oleksii Pozniak, 2012), raises living standards of migrants' families, reduces poverty, and stimulates private consumption. Private money transfers are an important source of foreign currency inflows to a country and can boost investment if directed for business development.

Economic research (e.g., M. Clemens, 2014) shows that migration processes can weaken after a country reaches a certain level of per-capita GDP at purchasing power parity. Although it is difficult to reverse the migration flow in the short-term, donor countries enact measures to develop labor markets (A. Brown, 2012) in addition to stimulating active economic growth. Many European countries run government campaigns to persuade citizens, especially young people, to return home. For example, Poland has implemented the *Powroty* ("Return") program, which helps individuals find housing, jobs, and medical care. In Romania, a dedicated union of businesses and universities offers free education and employment privileges to returning migrants. Latvia provides jobs in the public sector. Essential elements of these measures include re-education and retraining of those whose professional skills are not in demand, and reducing labor market mismatches, which can be done by ensuring the labor supply meets employer needs, particularly by continuing to reform the education system. The issue of labor market development is becoming more relevant for Ukraine in light of increased migration from the country.

(Poland's *Inflation Report*, July 2016), even though within the coming two years at least two-thirds of Polish citizens working in Great Britain will receive the right to permanent residence.

[33] *Labor Migration Barometer* report by Polish company Personnel Service, which specializes in recruiting Ukrainians for Polish employers.

[34] CEDOS is a research organization that collects and analyzes data about the number of Ukrainian citizens who study in foreign universities (33 countries of Europe, North America, and Australia).

[35] The most rapid growth in the number of Ukrainian students abroad occurred in the 2014/2015 and 2015/2016 academic years, led by Poland (up 52.7% and 31.6% in the two years).

2.2.4 FISCAL SECTOR[36]

Fiscal policy was eased in late 2017, as is always the case at the end of the year. However, the easing was more pronounced in 2017 than in 2016. With fiscal restraint enforced throughout most of the year in 2017, a considerable primary surplus persisted, while the overall consolidated budget deficit remained moderate. That was caused mainly by the state budget, which generated a cumulative surplus through the first 11 months of 2017 and closed the year with a significantly smaller deficit than in 2016.

Consolidated budget revenues grew rapidly throughout 2017, although slowing in Q4. In H1, non-tax revenues[37] (mainly confiscated funds and corporate dividends) drove the rapid growth of revenues. Tax revenues became the main driver starting in Q3. The increase in the latter was largely the result of macroeconomic factors, including a rebound in domestic demand against the backdrop of improved corporate financial performance and growth in nominal household income.

After being restrained throughout most of the year, growth in almost all types of expenditures spiked at the end of the year. Nevertheless, overall in 2017 expenditures grew moderately.

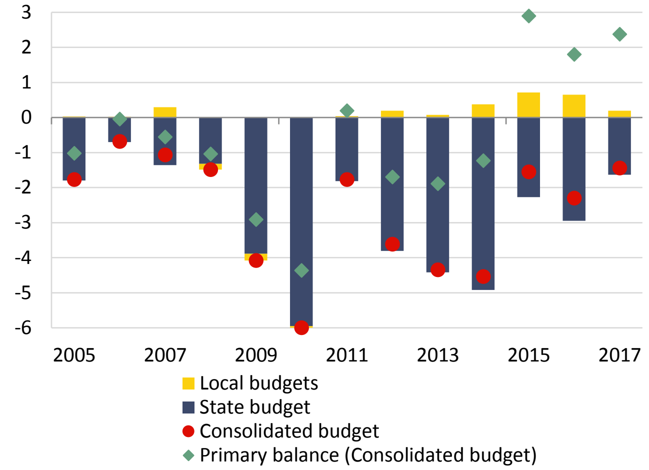
In 2017, government and government-guaranteed debt increased 11% yoy to UAH 2,142 bn as of the year-end. Growth in debt was prompted by Ukraine's return to international debt markets (with 15-year Eurobonds placed in September), the disbursement of funds from international lenders, and new issuance of domestic government securities. Overall, however, debt grew moderately as official financing was lower, while redemptions were larger than expected at the start of the year.

Revenues

Consolidated budget revenues grew 29.9% yoy in 2017, even as the growth slowed significantly in Q4. The deceleration was driven by a 34% yoy drop in non-tax revenues, mainly due to different schedules for transfers of the NBU's profit to the budget in 2016 and 2017. The NBU sent its entire 2015 profit in three tranches in Q4 2016, whereas in 2017 the profit transfers were evenly distributed throughout the year. Meanwhile, non-tax revenues again made a significant contribution to growth in revenues in 2017 as the NBU transferred[38] a larger portion of its 2016 profit in 2017, state-owned companies payed more in dividends (in particular Naftogaz, which sent UAH 13.3 bn in dividends for 2016 to the state budget), and non-recurring revenues (funds confiscated by court order) increased.

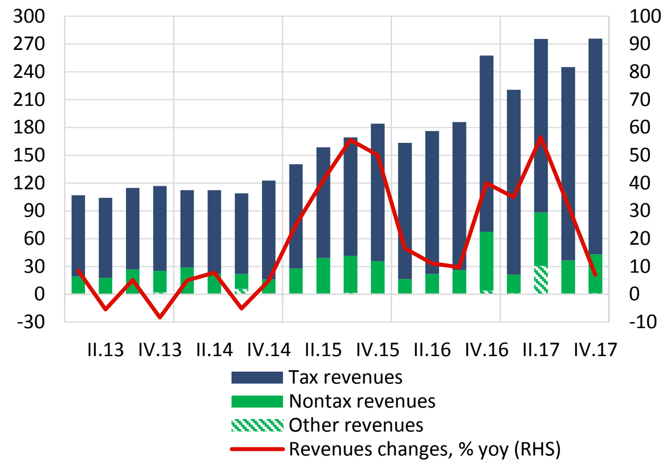
Tax revenues remained the main source of the growth in consolidated budget revenues both in 2017 and Q4. The high rates of growth resulted largely from economic factors, including improved corporate financial performance and growth in nominal wages and consumption. More specifically, personal income tax proceeds grew rapidly throughout 2017. Corporate income tax proceeds also increased in 2017, mainly on the back of an improvement in the corporate financial performance, including state-owned corporations, especially Naftogaz of Ukraine. However, corporate income tax growth slowed dramatically in Q4, largely, due to changes in the administration of the tax: in 2017,

Consolidated Budget Balance, % of GDP



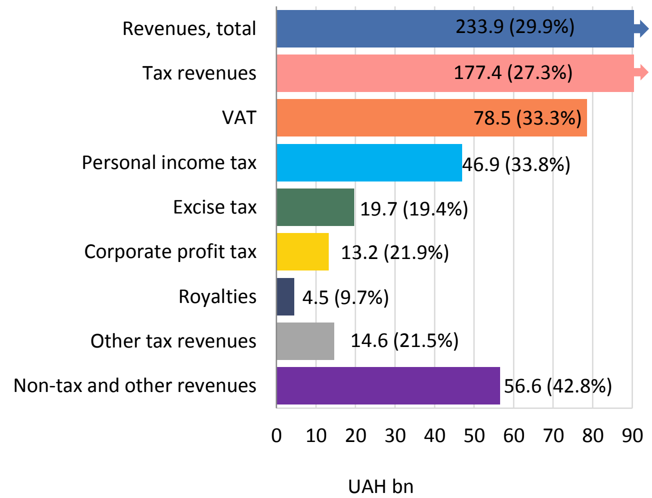
Source: STSU; SSSU; NBU staff estimates

Consolidated Budget Revenues, UAH bn and yoy change, %



Source: STSU; NBU staff estimates

Consolidated Budget Revenues, change, UAH bn and % yoy



Source: STSU; NBU staff estimates

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[36] Estimates of nominal GDP and NBU forecasts were used to calculate the ratios of fiscal figures to GDP for 2017 and 2018.
[37] For analytical purposes, non-tax revenues include budget revenues that are classified as non-tax revenues, capital income, dedicated funds, and other revenues.
[38] In 2016, the NBU sent UAH 38.2 bn to the budget, while in 2017 the NBU transferred UAH 44.4 bn, or 5.6% of total state budget revenues.

the tax was paid entirely on a quarterly basis, while in November-December 2016, companies still made advance payments of this tax.[39]

VAT receipts grew at a fast pace of 34.3% yoy in Q4, supported by a rebound in domestic demand, large import volumes including energy imports, and the heightened depreciation pressure on the hryvnia late in the year. Although the repayment of VAT refunds slowed significantly to 6% yoy, mainly due to last year's high comparison base, the amount of VAT refunds remained substantial. Overall for 2017, VAT refunds rose 27.2% yoy to UAH 120 bn, and the monthly volatility of refunds decreased noticeably after the VAT refund electronic register was launched in April 2017. In the meantime, the stock VAT refund claims increased at the end of 2017.

The growth in excise tax receipts accelerated markedly in Q4 (to 26.4% yoy), driven by an increase in the production of some excisable goods, a recovery in retail trade, the depreciation of the hryvnia at the end of the year, and large imports. Those same factors served to accelerate growth in receipts from international trade duties. At the same time, international trade duties and excise tax showed moderate growth in 2017, with the latter adversely impacted, among other factors, by a drop in domestic production of excisable goods (alcoholic beverages and tobacco) in H1.

Among the largest taxes, only royalty payments declined in Q4 compared to the same quarter a year ago. For the full-year, however, their proceeds increased, partly due to an indexation of rates and an increase in domestic gas production.

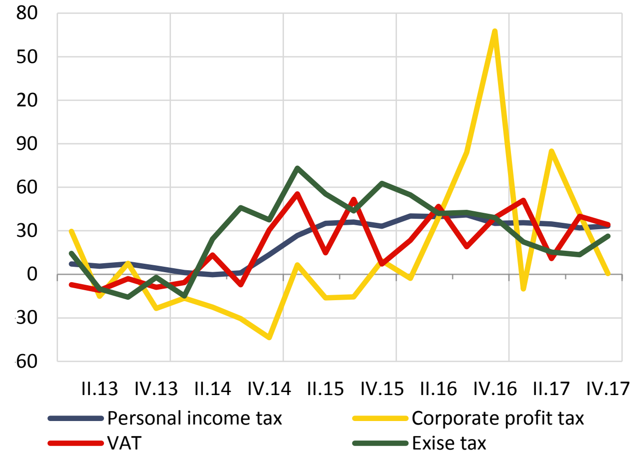
Expenditures

Despite a high comparison base, expenditure growth accelerated to 28% yoy in Q4 2017, as consolidated budget expenditures were shifted towards the end of the year. Both current and capital expenditures contributed the growth.

Growth in social spending accelerated, albeit only slightly. Specifically, transfers to the Pension Fund, boosted by the pension reform, were largest in Q4 2017. Nevertheless, the annual transfer amount remained within budget law figures, as the Pension Fund brought in more of its own funds thanks to higher nominal wages. Moreover, larger transfers to the Pension Fund in Q4 were compensated for by smaller expenditures on benefits and subsidies for households. Expenditures on utility benefits and subsidies for households exceeded the planned indicator, however, were smaller in Q4 than last year due to the increase in nominal household income against the backdrop of a moderate growth in utility prices this year, as well as due to changes to the rules for calculating subsidies.[40] Overall for the year, however, those expenditures significantly exceeded last year's amount. The growth in salaries accelerated in Q4, but remained moderate for the full-year.

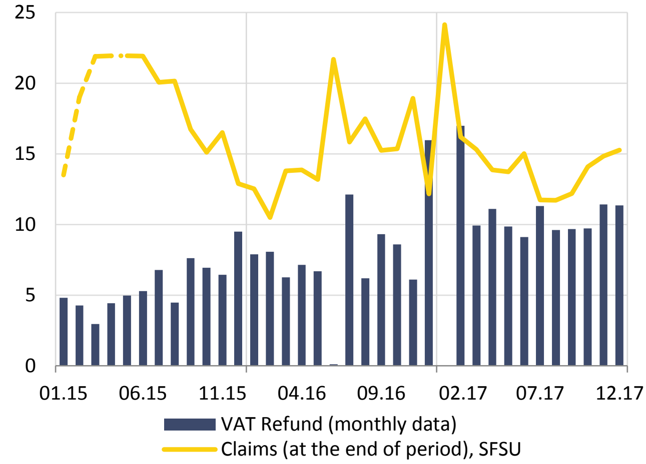
Other current expenditures, such as spending on the consumption of goods and services and current transfers to companies, maintained rapid growth and contributed significantly to the total

Main Budget Taxes, % yoy



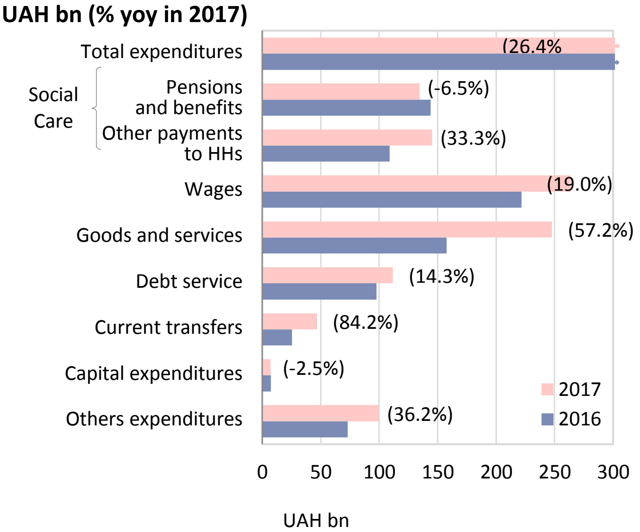
Source: *STSU; NBU staff estimates*

VAT Refund Payments and the Stock of VAT Refund Claims, UAH bn



Source: STSU; SFS; NBU staff estimates

Consolidated Budget Expenditures, economic classification, UAH bn (% yoy in 2017)



** Other payments to the population include benefits and subsidies to households for utility payments, scholarships, etc.*
*** Wages, salaries to military officers, and payroll charges.*

Source: *STSU; NBU staff estimates*

[39] Under amendments to the Tax Code that came into effect in early 2016, in the first three quarters of 2016 companies paid the tax for the previous quarter, while in Q4 they prepaid an amount equal to two-ninths of the tax paid in the first three quarters of the year.
[40] Government Decree No. 300, dated 26 April 2017, that came into effect on 1 May 2017, increased the amount of living space for which utility subsidies are given to households consisting of one or two disabled individuals. The decree also changed the period for which income is considered for subsidy eligibility from the previous calendar year to the four quarters preceding the subsidy application.

expenditure growth both in Q4 and and in 2017. Growth in spending on the consumption of goods and services slowed slightly in Q4 to 47.6% yoy, but remained significant, driven by expenditures on food and regional government programs. In contrast, expenditures on current transfers to companies that include allowances for agricultural producers continued to grow rapidly in Q4. Growth was substantial for the full year in 2017.

As expected, debt service expenditures were high in Q4, as expected. In annual terms, however, the growth was moderate both in Q4 and 2017. As a result of the reprofiling of NBU-held domestic government bonds that took place in Q4, the interest on the reprofiled bonds was paid, as envisaged by the reprofiling procedure, along with scheduled payments. At the same time, in November-December, domestic debt interest payments declined, as expected. In contrast, expenditures for external debt service grew moderately in Q4.

Despite a high comparison base last year, growth in capital expenditures accelerated further in Q4. Local budgets were the main source of capital expenditure financing, particularly for road improvements. Capital expenditures were boosted by funds received from the customs experiment[41] and maintained a high growth rate of 36.2% yoy in 2017, on par with last year. Capital expenditures grew to 9.4% as a share of total expenditures in 2017, up from 8.7% in 2016.

Overall, even though expenditures grew at the end of the year, following their typical growth pattern, their annual growth was moderate at 26.4% yoy, slightly faster than in 2016.

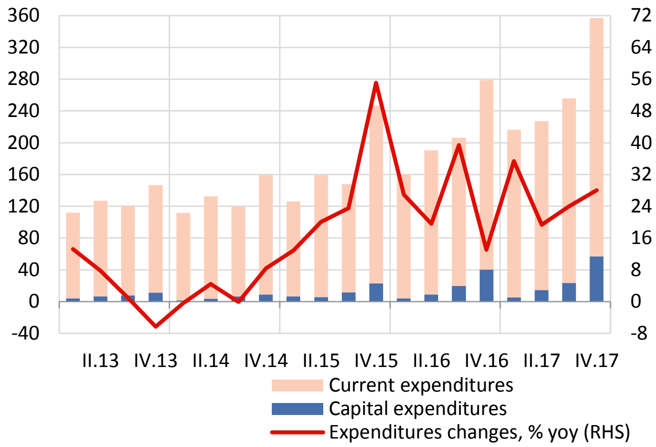
Balance

The consolidated budget deficit widened to UAH 83.7 bn in Q4, as expected, particularly as a result of a rapid catch-up in expenditures late in the year. In Q4, state and local budget deficits were the largest recorded in most recent years.

The consolidated budget ran a large cumulative surplus up to and including November (UAH 33.9 bn), generated by budgets of all government levels. In December, however, the consolidated budget recorded an exceptionally large deficit of UAH 76 bn as expenditures caught up and revenues increased only marginally. Despite the large December deficit, the 2017 consolidated budget deficit came in at UAH 42.1 bn, lower than the UAH 54.8 bn deficit in 2016. In 2017, the consolidated budget also recorded a substantial primary surplus of approximately UAH 70 bn.

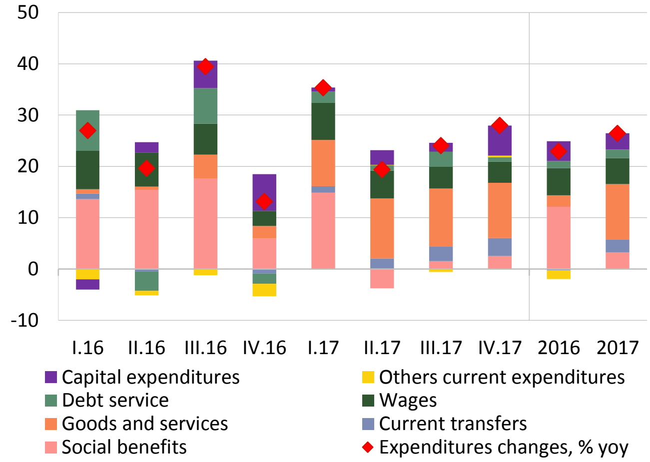
Although privatization proceeds increased in 2017 to UAH 3.4 bn (20% of the targeted amount), borrowing remained the main source of deficit financing. Short-term securities (with maturities from one to three years) accounted for the bulk of domestic borrowing. The government continued to issue domestic government bonds denominated in foreign currency (USD 1.8 bn in 2017). It also issued government bonds to raise the authorized capital of banks. In 2017, Ukraine brought in proceeds from the issuance of Eurobonds in September and funds from international partners, while domestic and external debt redemptions increased.

Consolidated Budget Expenditures, economic classification, UAH bn and % yoy



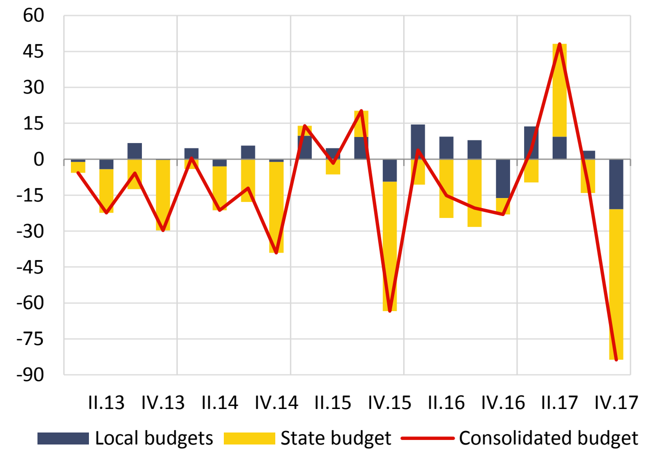
Source: STSU; NBU staff estimates

Contributions to Changes in Expenditures of the Consolidated Budget, pp



Source: STSU; NBU staff estimate

Consolidated Budget Balance, UAH bn

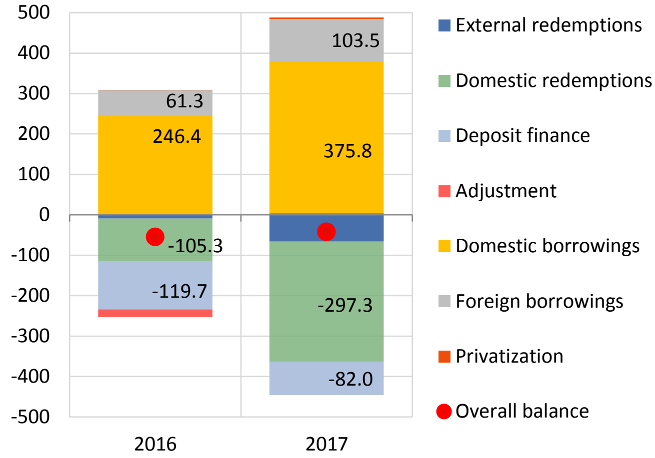


Source: STSU; NBU staff estimates

[41] The experiment of financing road development using customs proceeds is governed by clause 33, section VI Final and Transitional Provisions of the Budget Code of Ukraine. Under the plan, 50% of the above-target amount of total monthly indicative proceeds from customs duties, excise taxes, and VAT on imported goods, as set forth in the state budget's plan for the general fund, will be allocated to special funds within local budgets to finance road construction and repair. These funds are first transferred to the general fund of the state budget, after which they are allocated to special funds within local budgets.

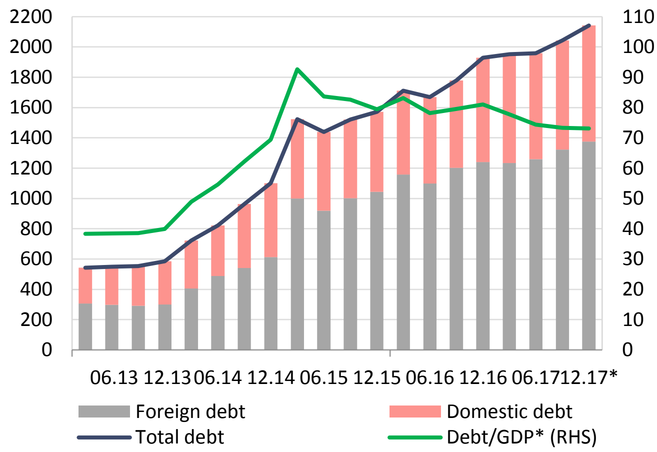
All the debt operations, conducted over the course of 2017, including the reprofiling of NBU-held domestic government bonds, pushed up government and government-guaranteed debt by 11% over 12 months to December 2017. In the meantime, Ukraine's debt-to-GDP ratio gradually came down throughout the year, reflecting faster growth in nominal GDP and the low volatility of the hryvnia exchange rate.

Consolidated Budget Balance Financing, UAH bn



Source: STSU; NBU staff estimate

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



* GDP for 2017 – NBU estimate.

Source: MFU; SSSU; NBU staff estimates

Box: Ukraine's 2018 State Budget in Figures

The 2018 state budget was prepared based on macroeconomic variables (real GDP growth of 3% and year-end headline inflation of 9.0%) that closely match the NBU's projections.[42] The budget law envisages moderate growth in revenues, especially non-tax and other revenues. *Nevertheless, expenditures are expected to increase faster than revenues. That will cause the deficit to widen to 2.4% of GDP, despite a positive primary balance of 1.5% of GDP.*[43] *There are methodological differences in accounting for confiscated funds in budget revenues. As a result, the budget deficit may exceed the IMF's target. In addition, the NBU sees risks of budget revenues underperforming, expenditures revised upward, and funds from non-debt sources not being received in full. Fiscal policy will stimulate economic growth through an increase in consumer demand and capital spending, but it is also expected to push inflation higher in 2018.*

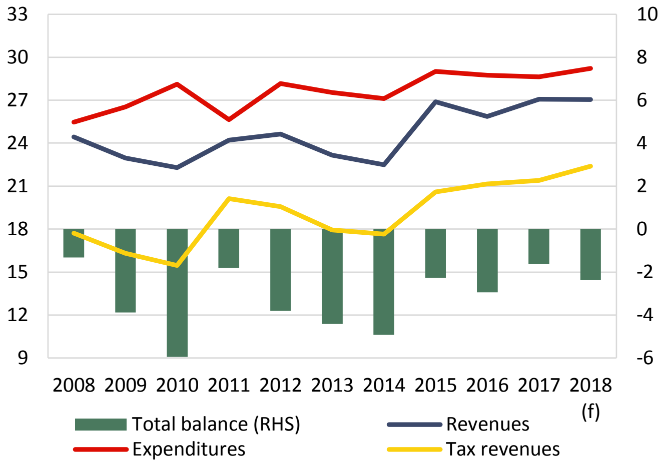
Under the 2018 budget revenues are set to grow 15.7% yoy. Such a moderate growth will be due to slower growth in non-tax and other revenues, especially smaller proceeds from confiscated funds (UAH 4.7 bn compared to UAH 29.7 bn in 2017).[44] In addition, an increase in non-tax revenues is contingent on higher transfers of the NBU's profit, net profit and dividends from state-owned companies, and proceeds from the sale of 4G telecom licenses. Non-recurring revenues account for a substantial portion of those non-tax proceeds and actual amounts may deviate materially from the target amounts.

Main State Budget Indicators

Indicators, UAH bn	2016	2017		2018
	Actual	Law	Actual	Law
Revenues	**616.3**	**771.0**	**793.3**	**917.9**
yoy change, %	*15.3*	*25.1*	*28.7*	*15.7*
Tax revenues	503.9	630.1	627.2	759.9
yoy change, %	*23.1*	*25.0*	*24.5*	*21.2*
Non-tax revenues	103.6	112.1	128.4	145.0
yoy change, %	*-13.6*	*8.2*	*23.9*	*12.9*
Other revenues	8.8	28.8	37.7	13.0
Expenditures	**684.7**	**841.4**	**839.2**	**991.7**
yoy change, %	*18.7*	*22.9*	*22.6*	*18.2*
Net lending	1.7	7.5	1.9	6.8
Balance ("-" deficit)	**-70.1**	**-77.9**	**-47.8**	**-80.6**

Source: Treasury, VRU; NBU estimate.

Main State Budget Indicators, % of GDP



Source: Treasury; State Budget Law for 2018; GDP in 2017- NBU estimate and GDP in 2018 - NBU forecast.

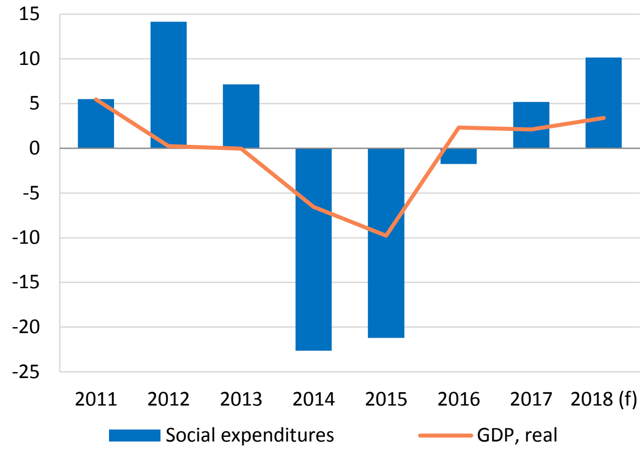
Tax revenue growth is targeted at 21.2% yoy. In contrast to previous years, the targets for tax revenues account for minor tax changes, such as the indexation of some rates and measures to improve tax administration. Key rates and approaches to taxation have remained unchanged. Nevertheless, the ratio of tax revenues to projected GDP is expected to rise in 2018. This could reflect an improvement in administration and a further reduction in the shadow economy, or it could indicate the risk that the tax revenue targets have been overestimated. Those risks may arise from an extension of the customs experiment until 1 January 2019, since proceeds transferred to special funds within local budgets were double the targeted amount in 2017. There is also reason for doubting whether proceeds from the VAT on domestic goods (including VAT refunds) will grow around 33%, after 2017 proceeds fell short of the target by 22%. The lower-than-budgeted proceeds from VAT on domestic goods were more than compensated by proceeds from VAT on imported goods, which were significantly higher than expected. However, the planned 20% increase in proceeds in 2018 from VAT on imported goods also appears ambitious.

Almost all expenditures are set to grow, especially earmarked for road improvements, the energy and agricultural sectors (including on allowances for agricultural producers), and defense spending. This will drive up the ratio of expenditures to GDP. Meanwhile, social security expenditures will drop slightly as a percentage of total expenditures. Expenditures on utility benefits and subsidies for households will remain roughly on par with their 2017 level mainly on the back of improved household finances, resulting from the doubling of the minimum wage and the modernization of pensions in 2017. Support for the Pension Fund will decrease due to an increase in local budget subventions to pay social benefits, including benefits to those not eligible for a pension under the pension reform. Nevertheless, support for the Pension Fund and the social spending remain substantial as a percentage of total state budget expenditures.

[42] Ukraine's 2018 State Budget Law.
[43] Those funds can be classified as "budget financing through debt" since they are not a revenue source according to the nature of their economic role.
In 2018, the NBU is expected to transfer UAH 50.5 bn in profit to the budget, up from UAH 44.4 bn in 2017.

In addition, expenditures are likely to be revised upwards. Key risks are related mainly to social spending. More specifically, although the budget law sees minimum wage growth slowing significantly from 2017 (by 16.3% to UAH 3,723), the budget does leave room for an increase to up to UAH 4,200 depending on budget performance in Q1. The Pension Fund may also need more funds for pension payments, which would require additional funding from the budget. In 2017, more funds were spent on the modernized pension system than had been expected. The government also intends to modernize military pensions in 2018. In addition, in 2018, expenditures on utility benefits and subsidies for households could exceed the target amount – in 2017 the target was revised upwards three times during the year (from UAH 47.1 bn to UAH 68.8 bn), with the actual amount spent was about UAH 1 bn higher than the last target.

GDP and Social Expenditures*of Public Sector, yoy, %



Wages with SSC, social care and pension payments from the Pension Fund. Social expenditeres are deflated by CPI.

Source: SSSU; Treasury; State Budget Law for 2018

The deficit will be financed through new debt – the government increased the target for domestic borrowing and privatization proceeds (to UAH 21.3 bn). Despite the adoption of the privatization law that is designed to speed up, ease, and make privatization more transparent, there is still a risk that privatization proceeds will fall short of the target. However, the launch of a privatization process requires subordinate legislation to be adopted under the already passed law, and that could take some time.

The NBU expects a significant easing of fiscal policy in 2018, which will be mainly driven by an increase in social spending by the general government sector (including Pension Fund expenditures). Capital spending is also expected to grow quickly, which, together with a pick-up in consumer demand, will promote economic growth. At the same time, if social spending rises such that its growth in real terms exceeds economic growth, it will become another inflation driver (for more details see 3.3. Real Economy on page 53).

Selected Indicators of the State Budget Revenues

UAH bn	2017		2018	2017	2018	2016	2017	2018
	Actual	% to plan	Law	*yoy, %*		*% of GDP*		
Tax revenues, incl.	**627.2**	**-0.5**	**759.9**	***24.5***	***21.2***	**21.1**	**21.4**	**22.4**
PIT	75.0	-2.8	91.1	*25.5*	*21.4*	2.5	2.6	2.7
Corporate income tax	66.9	-0.3	82.3	*23.1*	*23.0*	2.3	2.3	2.4
Excise tax	108.3	-4.4	124.1	*20.2*	*14.6*	3.8	3.7	3.7
VAT	314.0	3.7	384.3	*33.3*	*22.4*	9.9	10.7	11.3
VAT on domestic goods	63.5	-22.2	84.3	*17.4*	*32.9*	2.3	2.2	2.5
VAT on imported goods	250.5	13.2	300.0	*38.1*	*19.7*	7.6	8.6	8.8
Non-tax revenues	**128.4**	**14.2**	**145.0**	***23.9***	***12.9***	**4.3**	**4.4**	**4.3**
Other revenues, incl.	**37.7**	**31.1**	**13.0**	***330.5***	***-65.5***	**0.4**	**1.3**	**0.4**
Confiscated funds by court order	29.7	**31.5**	4.7	-	-84.2	-	1.0	0.1

Source: Treasury, VRU; NBU estimate.

2.2.5. BALANCE OF PAYMENTS

Ukraine's balance of payments has recorded a surplus for three years running. Moreover, the surplus of the overall balance of payments increased to USD 2.5 bn over 11 months of 2017 compared to the same period of 2016, in spite of the trade in goods deficit widening to USD 7.8 bn, due to the suspension of trade with the non-government controlled areas and a further rise in investment imports.

As expected, the breaking of production links resulting from the suspension of trade with the non-government controlled areas reduced volumes of ferrous metal exports. Overall, however, exports of goods grew at a fast pace (by 20.1% yoy in 11 months of 2017), thanks to rising food exports, favorable external prices, and mining and smelting companies adjusting to new conditions more quickly. Meanwhile, the growth in imports (21.8% yoy) outperformed that of exports. This was attributed to a rise in energy imports, driven, among other things, by coal shortages on the domestic market, since in previous years a large portion of coal came from the non-government controlled areas. Other factors included high rates of growth in investment imports and a pick-up in consumer imports.

The widening in the trade deficit was compensated for by an increase in the secondary income surplus, and a drop in the primary income deficit, primarily due to the sustained growth in remittances. As a result, the current account deficit remained at the 2016 level (USD 3 bn over 11 months of 2017).

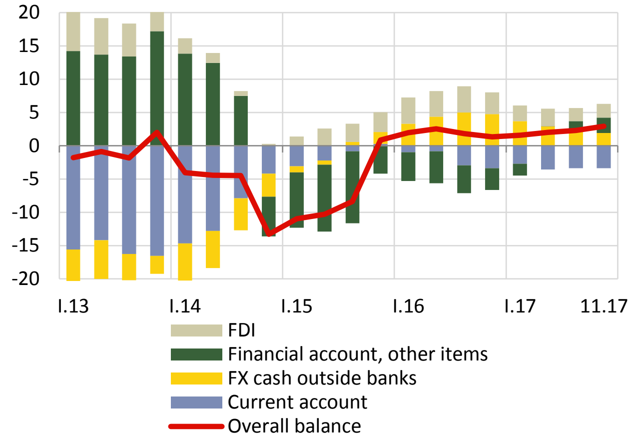
Net financial account inflows grew to USD 5.5 bn from January through November 2017. These inflows were mainly supported by the government's active foreign currency borrowing on the domestic and international markets. The contribution of foreign direct investment was also noticeable, as was that of a decrease of FX cash outside banks, even though the amounts were lower than in 2016.

Due to the surplus in the overall balance of payments and the disbursement of a further tranche of the IMF's Extended Fund Facility, international reserves increased to USD 18.8 bn as of the end of the year, which is enough to cover future imports for a period of 3.6 months.

Current Account

The merchandise foreign trade deficit widened to USD 7.8 bn in January - November 2017 compared to USD 6 bn in the same period a year ago. The widening was largely expected, as the breaking of production and logistics links with companies in the non-government controlled areas affected the output and exports of ferrous metals, heightening the need for energy imports, largely on account of shortages of coal (anthracite and coking coals) on the domestic market. However, mid-2017 microdata, coupled with the industry's and external trade indicators already showed that the industry had adapted to new conditions faster than anticipated in early 2017. Moreover, in October and November, volumes of ferrous metal exports were at the level of the same period of 2016. Meanwhile, higher global prices pushed up the value of these exports by 34.6% yoy, as a result of which overall exports of goods increased to 17.3% yoy (up from 14% yoy in Q3 2017). At the same time, strong demand from metallurgy caused volumes of iron ore

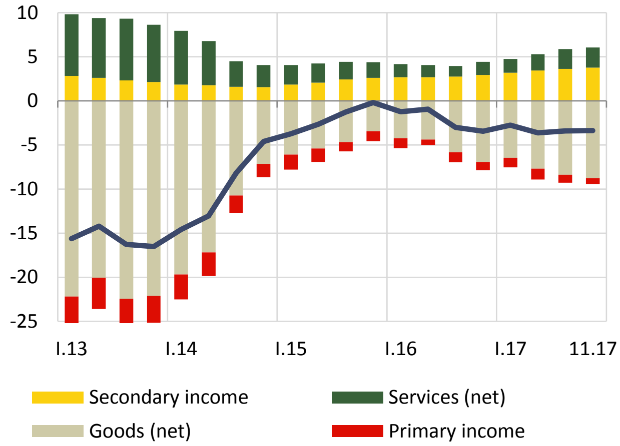
Overall Balance of Payment*, 12-month cumulative, USD bn



** Positive value – capital inflows*

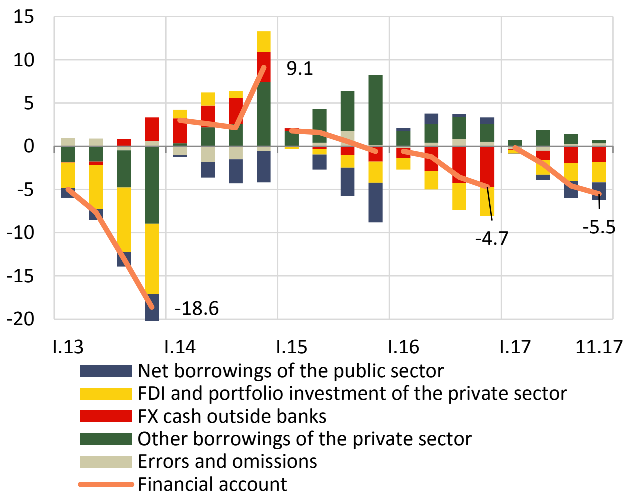
Source: NBU

Current account balance, 12-month cumulative, USD bn



Source: NBU

Financial Account: Net External Assets, cumulative YTD, USD bn



Source: NBU

exports to decrease by 7.2% yoy. In spite of that, the value of iron ore exports grew by 21.8% yoy, driven by higher Ukrainian export prices.

The rebound in ferrous metal exports seen in late 2017 outweighed a significant slowdown in food export growth (to 3.8% yoy in October-November), which had resulted mainly from a drop in grain exports (by 9.7% yoy). More specifically, volumes of corn exports fell by 42.5% yoy in October-November, due to both a poorer corn harvest and low global corn prices. The growth in exports of vegetable oil and fats retreated to 1.7% yoy, as expected, due to the poorer sunflower harvest seen in 2017. Despite that, the high exports of grain, oil and fats seen in H1 2017 pushed up overall exports of these goods for eleven months of the year by 9.9% yoy and 21.2% yoy respectively.

In addition, October and November saw an increase in exports of other foods, in particular dairy and meat products (60.2% yoy and 3.7% yoy respectively), which, however, slowed down in the wake of lower global prices and a limited supply (mainly of meat of bovine animals and swine). Nevertheless, robust exports of these products that took place in H1 2017 drove a sharp growth in overall exports of dairy and meat products for 11 months of 2017 (49.4% yoy and 36.5% yoy respectively).

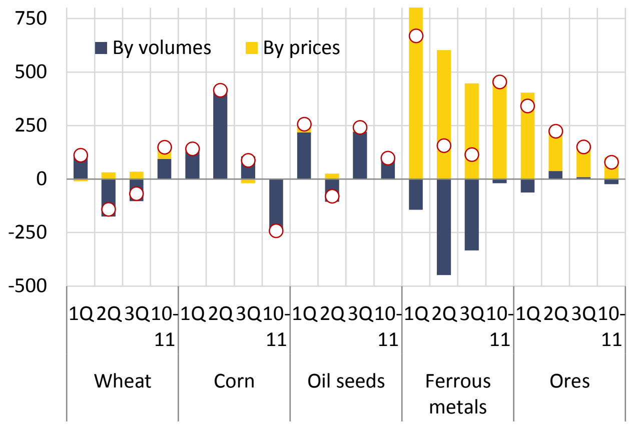
Across regions, the share of Europe and the United States in Ukraine's exports increased further over 11 months of 2017 (to 36.1% and 2.8% respectively, compared to 32.7% and 2.2% in 2016), driven by exports of foods (oilseeds, sunflower oil and vegetables). A decline in grain exports decreased the share of African countries to 10.2%, while lower exports of machinery products (mainly turbo-jets to Russia) led to a decrease in the share CIS countries in Ukraine's exports to 17.4%.

The suspension of trade with NGCA resulted in a significant increase in coal imports from May, with volumes of these imports rising 1.7 times yoy in October-November. Imports of more expensive U.S. coal that took place in late 2017 doubled the value of coal imports. At the same time, the percentage of coal imports from Russia remained large (70% compared to 20% U.S. imports) because of ease of shipment and price attractiveness. As a result, the growth in imports of goods accelerated to 19.5% yoy in October-November.

The growth in energy imports slowed to 25.9% yoy in October-November compared to 39.6% yoy in Q3, largely due to a drop in gas imports. Overall, gas imports grew by 1.5 times over 11 months of 2017. Although these imports remained at the level seen in recent months, last year's high comparison base resulted in a 9.8% yoy drop in gas imports. In general, 2017 gas imports were higher than expected, due to private importers ramping up imports.

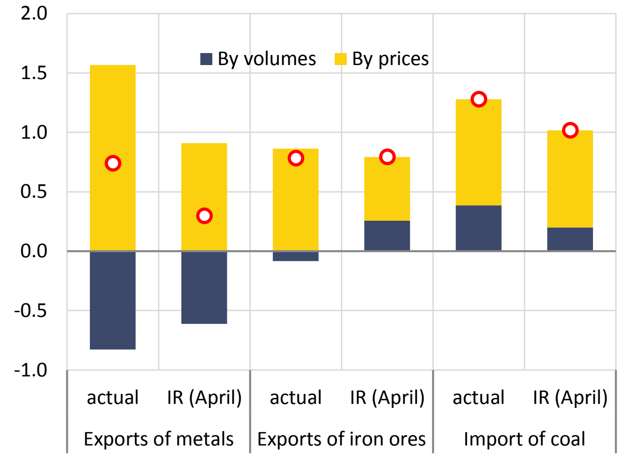
In 2017, import growth was also driven by chemical imports. The agricultural sector's strong demand for fertilizers pushed up imports of these commodities by 39% yoy over 11 months of 2017. Despite the introduction of anti-dumping duties,[45] the growth in imports of fertilizers sped up to 50.3% yoy in October-November compared to 25.1% yoy in Q3. In high demand were two- or three-component fertilizers, which are currently practically not produced

Export of Selected Goods, yoy change, USD m



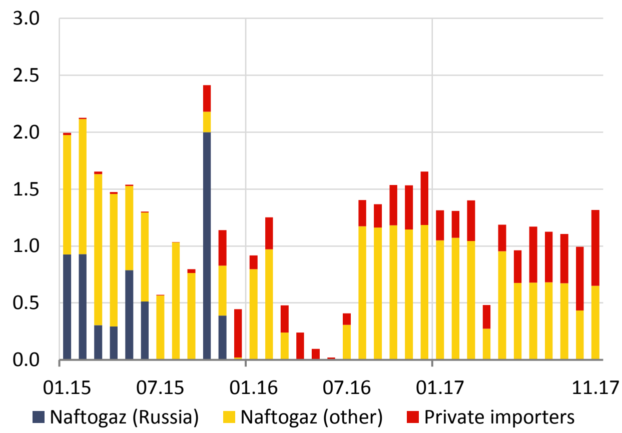
Sources: NBU calculations

Actual and Forecast Changes in Ukraine's Foreign Trade of Selected Goods Compared with 2016 due to the Trade Suspension with NGCA, USD bn



Source: SFS, NBU calculations

Gas imports, bcm



Source: Ukrtransgaz, Naftogaz, NBU

[45] The Inter-Agency Commission for International Trade in May 2017 imposed anti-dumping duties on Russian fertilizers.

in Ukraine. In contrast, imports of nitrogenous and potassic fertilizers declined, due to some Ukrainian chemical plants recommencing operations. Pharmaceutical imports also grew, as the government stepped up its procurement efforts.

Buoyant investment demand was an import driver in 2017, especially for machinery products, such as agricultural machinery and cars. At the same time, the growth in imports of these products slowed slightly in October-November, as the export proceeds of agrocompanies declined and households favored the purchase of used cars. Imports of machinery products increased by 31.6% yoy over 11 months of 2017. As a consequence, the percentage of means of production in total imports rose to 19.2% yoy over 10 months of 2017 compared to 18.2% yoy in 2016.

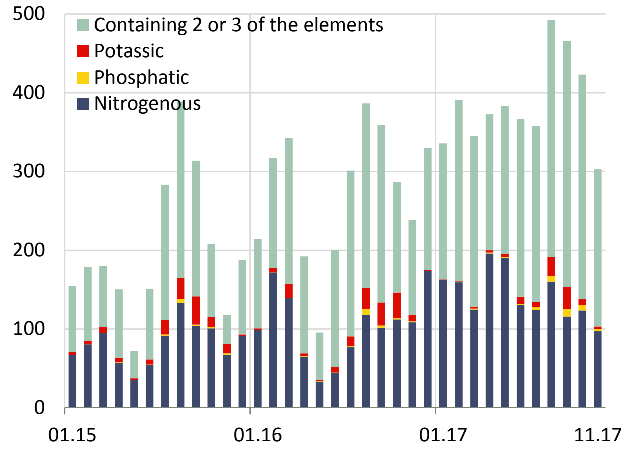
Across regions, imports from all regions were on the rise, but especially from Europe, thanks to imports of machinery products, and from Russia, due to imports of coal and oil products. Machinery products were also the main driver of imports from Asian countries. In 2017, buoyant coal imports pushed up the percentages of Russia and the United States in imports, to 14.3% and 6.7% respectively, while higher gas imports caused the percentage of Europe to grow further, to 41.2%. In contrast, the percentages of Asian and other CIS countries dropped, to 20% and 11.2% respectively.

The 2017 pipeline industry, IT, and air transport services led export growth in services. More specifically, gas transit increased by 15.9% yoy over 11 months compared to the same period a year ago. The launch of the Nord Stream pipeline after repairs in September cut Ukrainian gas transit to European countries in October-November, slowing the growth in exports of services to 10.7% yoy. In the meantime, the growth in air transport services accelerated to 56.9% yoy on the back of increased international air transportation, including due to the introduction of visa-free regime with the EU.[46]

The influence of visa-free regime on imports of services was moderate, as expected.[47] Moderate rates of growth in household incomes restrained the growth in imports of travel services (12.1% yoy over 11 months of 2017). As result, the growth in imports of services (6.9% yoy over 11 months and 9.8% yoy in October-November) lagged behind that of exports, while the surplus in services widened slightly compared to a year ago (USD 2.1 bn over 11 months).

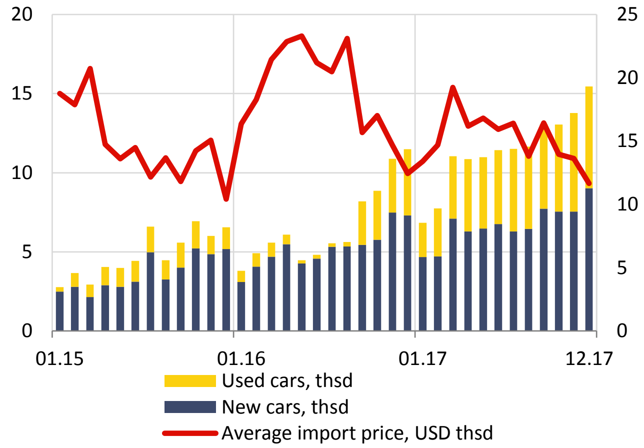
Remittances continued to increase in 2017 amid accelerating migration trends (see Box *Migration Impact on the Ukrainian Labor Market* on pages 26-28) and appreciating currencies in Eastern Europe. An increase in IT services led to a rise in remittances from the United States. The growth in remittances counterbalanced dividend payments, which were higher than a year ago. This pushed up the primary and secondary income surpluses to USD 200 m and USD 700 m in October-November respectively.

Fertilizers Imports, mn t



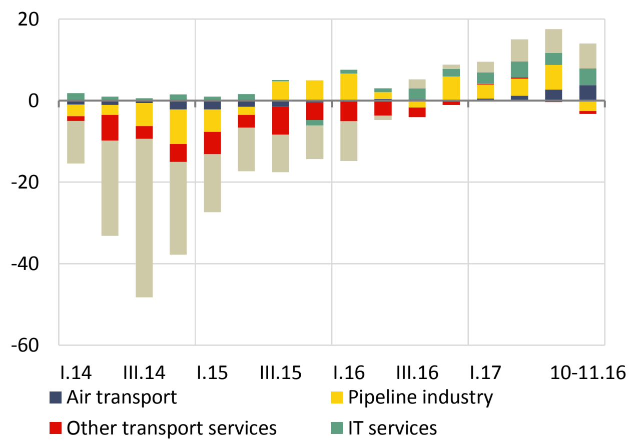
Source: SFS

Car Imports



Source: SFS

Contributions to Annual Change in Services Exports, p. p.



Source: NBU calculations

[46] In particular, since June 2017, Zhuliany and Kharkiv airports have noticeably stepped up international carriage of passengers.
[47] According to the preliminary estimate, about 4 m biometric passports were issued in 2017, while only about 400,000 people took advantage of visa-free regime.

Financial Account

Financial account inflows grew to USD 5.5 bn over 11 months of 2017. In contrast to last year, the government sector made a significant contribution to capital inflows by actively borrowing foreign currency funds on the external and domestic markets.

The successful third review of the EFF program with the IMF allowed the government to receive another USD 600 m in macro-financial assistance from the European Commission. In September 2017, after a four-year hiatus, Ukraine returned to the international debt markets by issuing sovereign Eurobonds worth USD 1.3 bn net. Meanwhile, the banking system's assets shrank by USD 600 m, due to banks purchasing domestic government bonds denominated in foreign currency.

The decrease of FX cash outside banks remained an important source of financial account inflows in 2017. However, the inflows from this source declined noticeably compared to a year ago – FX cash dropped by only USD 1.8 bn from January through November 2017. In addition, FX cash outside banks grew by USD 137 m in October-November, largely reflecting a further increase in workers' remittances and a seasonal deterioration in households' depreciation expectations.

Although the private sector continued to attract foreign direct investment inflows, the inflows were smaller than in January-November 2016. This drop in inflows was mainly attributed to most banks completing their recapitalization programs, and consequently, with debt-to-equity operations down to USD 600 m year-to-date (USD 2.1 bn in the same period a year ago). Excluding such operations, foreign direct investment grew by 27% yoy over 11 months of 2017, to USD 1.5 bn.

Rollover in the real sector decreased significantly in October-November 2017, due to a rise in the repayments made by the sector. However, the relatively high rollover ratio recorded in Q2 and Q3 resulted in a slight increase in rollover over 11 months compared to a year ago. Rollover in the banking sector somewhat deteriorated, as long-term borrowing was virtually absent. As a result, overall private sector rollover remained at the previous year's level (59%).

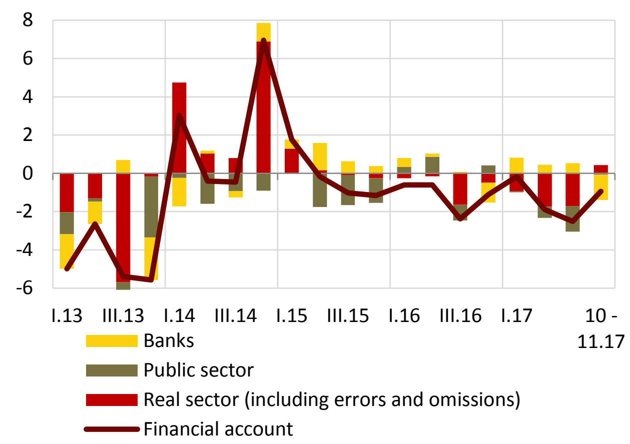
Rollover of long-term private external debt,[48] %

	2016	Q1 2017	Q2 2017	Q3 2017	Oct.-Nov. 2017	Jan.-Nov. 2017
Banks	58	21	46	61	55	55
Real sector	60	45	91	96	27	63
Total	59	39	86	89	30	59

Reserve assets

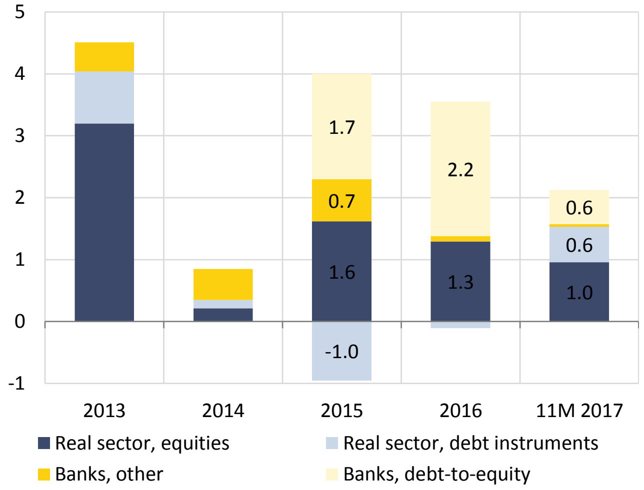
Due to a surplus in the overall balance of payments and the arrival of a further tranche under the IMF's EFF, international reserves increased to USD 18.8 bn as of the end of the year, which is enough

Financial Account: Net External Assets, USD bn



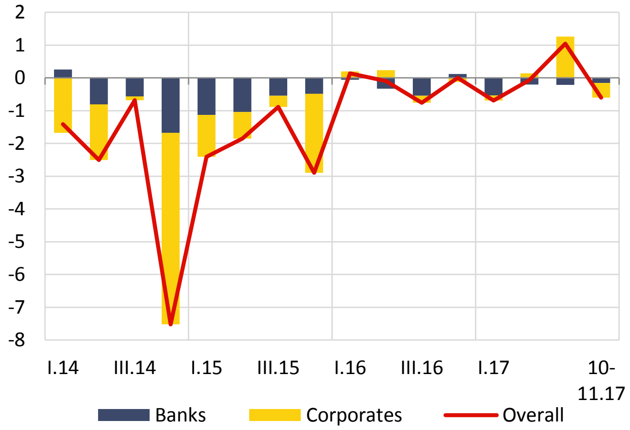
Source: NBU

Foreign Direct Investment, USD bn



Source: NBU

Overall Debt Flows*, USD bn



** Positive value – capital inflows*

Source: NBU

[48] Excluding debt-to-equity operations.

to cover future imports for a period of 3.6 months. Gross international reserves rose by USD 3.3 bn or 21% yoy in 2017.

External Sustainability (data for Q3 2017)

Despite a moderate rise in external debt, Ukraine's external sustainability and international reserve adequacy measures improved further, due to a gradual recovery of the Ukrainian economy and a stable exchange rate. Gross external debt grew to USD 117.4 bn, which is largely due to Ukraine's return to the international debt markets by issuing Eurobonds. Meanwhile, the ratio of gross external debt to GDP retreated to 111%. Despite an improvement in virtually all external sustainability indicators for four quarters running, Ukraine remains very vulnerable to external shocks, due to, among other things, the economy's significant openness and a large debt burden projected over the mid-term.

The government and real sectors were responsible for the moderate growth in gross external debt seen in Q1-Q3 2017. The disbursement of another tranche from the IMF and macro-financial assistance from the EU were the main drivers of the debt growth that took place in H1. The issue of Eurobonds pushed up the debt of the general government sector by another USD 1.5 bn in Q3. The total debt of the general government sector grew by USD 2.5 bn year-to-date, due to both the government's transactions (USD 1.6 bn) and the effect of exchange rate changes (USD 900 m), resulting from the US dollar's depreciation against the euro and the SDR. The NBU's external liabilities, at USD 7.6 bn, remained at the level of the previous quarter, while increasing by USD 1.3 bn year-to-date, largely, after the disbursement of the fourth IMF tranche in April 2017. The external debt of the real sector grew by USD 2.4 bn over nine months of 2017, to USD 64.3 bn, driven by a rise in debt on short-term trade credits and advances, the issue of the Eurobonds, and an increase in guaranteed loan debt. Trade credits were largely responsible for the growth in direct investor loans (by USD 600 m from the start of the year).

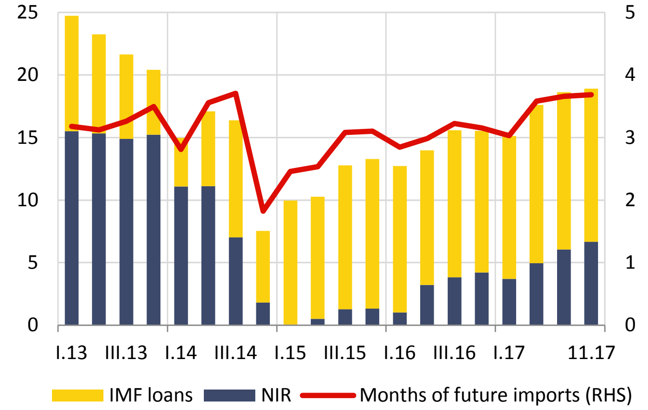
The external debt of the banking sector dropped by USD 300 m in Q3, while shrinking by 27.4% to USD 6.5 bn from the start of the year.

This was mainly attributed to a USD 1.2 bn fall in interbank loan debt (including due to USD 500 m in debt-to-equity operations), and a USD 900 m drop in the liabilities of Ukrainian banks on short-term foreign deposits.

An increase in short-term external debt by residual maturity (by USD 600 m to USD 47.5 bn or 91% of exports of goods and services) in Q3 resulted from a USD 1.3 bn rise in the real sector's debt on short-term loans and advances that fall due within the next 12 months. The general government debt fell by USD 300 m, to USD 3.3 bn, USD 2.1 bn of which was debt to the IMF. The banking sector's debt declined by USD 200 m, to USD 3.5 bn, with short-term debt accounting for 62% of the debt.

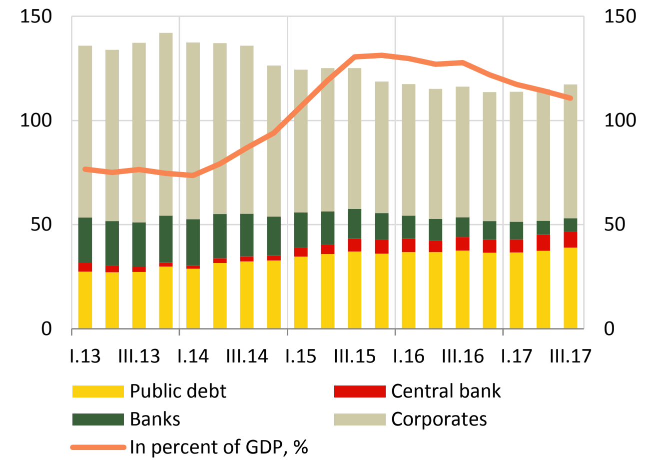
A further increase of international reserves, to USD 18.6 bn as of end of September or by 19.6% yoy, improved the adequacy of reserves. More specifically, reserves in months of future imports increased by 3 pp to 3.7 months. The ratio of reserves to the IMF composite measure (ARA metrics) rose by 1 pp, to 64.6%. In spite of an increase in short-term debt by residual maturity in absolute terms, the ratio of reserves to short-term debt (the Guidotti-

International reserves, USD bn



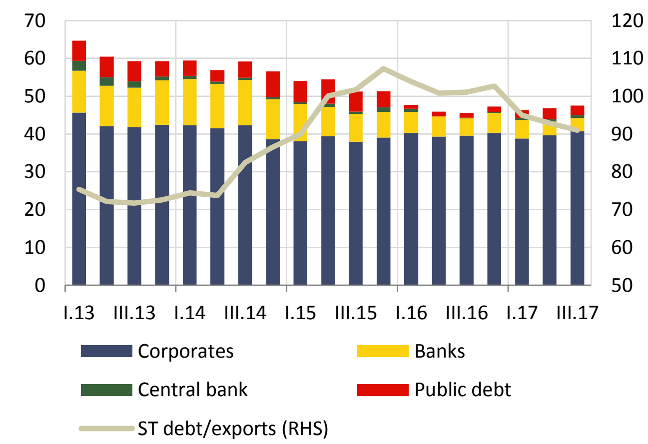
Source: NBU

Gross External Debt, USD bn



Source: NBU

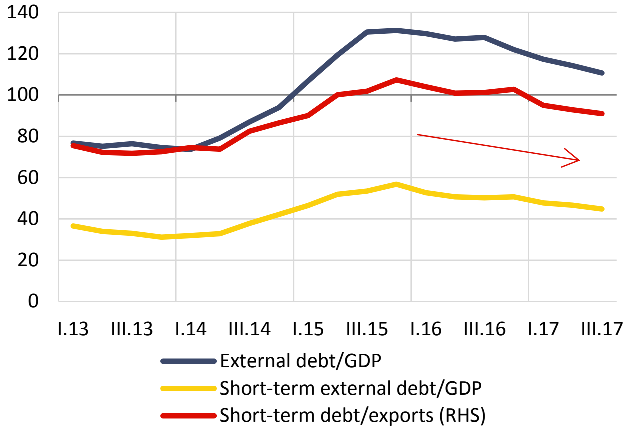
Short-Term External Debt by Residual Maturity, USD bn



Source: NBU

Greenspan criterion) rose by 0.9 pp, to 39.2%. Although dropping by 0.8 pp to 214.7%, reserves as a share of broad money were more than double the threshold for international reserve adequacy.

Selected Indicators of External Sustainability, %



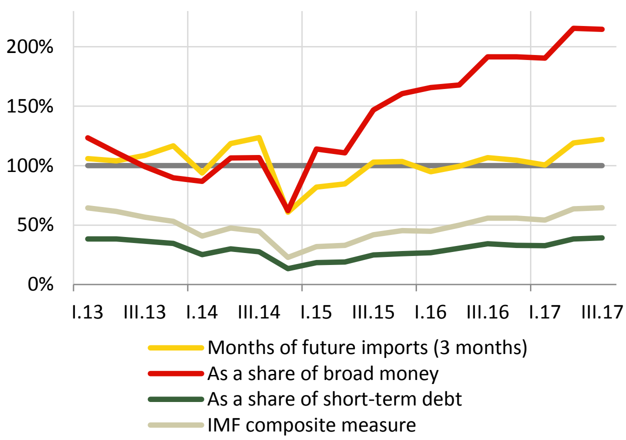
Source: NBU calculations

External Sustainability and International Reserve Adequacy Indicators

%	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017*
External debt/GDP	130.5	131.3	129.7	127.0	127.8	121.9	117.2	114.2	110.7
External debt/exports of goods and services	248.3	248.1	255.8	252.9	257.8	247.0	233.0	227.7	224.6
Short-term debt/gross debt	41.0	43.3	40.6	39.9	39.2	41.6	40.8	40.8	40.5
Short-term debt/GDP	53.5	56.8	52.7	50.7	50.1	50.7	47.8	46.6	44.8
Short-term debt/exports of goods and services	101.7	107.3	103.9	100.9	101.1	102.7	95.0	92.9	91.0
Openness of the economy[49]	107.9	107.7	104.5	103.8	104.3	104.6	105.6	106.1	104.3
Reserves/short-term debt	24.9	25.9	26.7	30.5	34.2	32.9	32.6	38.3	39.2
Reserves, composite IMF measure	41.9	45.2	44.8	50.0	55.7	55.7	54.3	63.6	64.6
Reserves in months of future imports (3 months)	102.8	103.3	94.8	99.3	106.8	104.6	100.6	119.1	122.1
Broad money coverage of reserves	146.8	160.6	165.6	167.7	191.5	191.6	190.4	215.5	214.7

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

Adequacy Criteria of International Reserves, %



Source: NBU calculation

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

Box: Economic Effects from FTA: International Experience and Lessons for Ukraine

In recent years, Ukraine has noticeably stepped up its trade liberalization efforts. More specifically, the Association Agreement between the EU and Ukraine entered into force on 1 September 2017. Ukraine has entered into a free trade agreement with Canada (pending ratification by the Senate of Canada), and is negotiating free trade agreements with Turkey, Israel, and several African and Asian countries. What has prompted these efforts, and what results are they likely to bring?

Trade liberalization includes measures that aim to promote foreign trade by gradually removing existing barriers to external trade, cutting import and export duties, and granting of tariff benefits in foreign trade. Types of regional economic integration include:

- preferential trade agreements, which are signed by two or more countries with the purpose of easing international trade between these countries by reducing domestic tariffs (2014 Ukraine-EU)

- free trade areas, where member countries remove tariff barriers for one another, while applying domestic tariffs to non-member countries (1993 BAFTA, 1994 NAFTA, 1992 ASEAN, and 2016 Ukraine-EU)

- customs unions, where member countries remove tariff barriers not only for one another but also agree on unified tariffs for non-member countries (1963 EU-Turkey Association Agreement and 1964 ACM)

- common markets, where factors of production (such as capital, labor force and technology) and goods and services move freely, which shows a higher degree of economic integration when integration starts directly at the production stage (1960 LAFTA, 1991 MERCOSUR, 1973 CARICOM)

- economic unions, which arise when there is a clear need to harmonize various aspects of national foreign economic policy, through conducting a single (unified) global economic policy with respect to non-member countries and other integration associations. Economic unions are defined by the removal of all trade restrictions, a single foreign trade policy, free movement of goods, services, capital and people, and strictly coordinated (in essence unified) economic, financial and social policies (1993 EU; Benelux since 1960; the Soviet Union until 1991).

Numerous studies provide evidence of the positive effects of trade liberalization. Indeed, Alcala and Ciccone (2004) show that a 1% increase in trade openness in real terms[50] pushes up productivity by about 1.2%. A study by Wacziarg and Horn Welch (2008) demonstrates, by conducting a panel regression analysis of data for 133 countries over the 1950 – 1998 period, that countries that liberalized their trade regimes experienced average annual growth rates of GDP that were about 1.5 pp higher than before liberalization, with postliberalization foreign direct investment rates rising by 1.5 – 2.0 pp. Caliendo and Parro (2015), through the example of NAFTA, and Borraz, Rossi and Ferres (2012), through the example of MERCOSUR, reveal that a country's participation in regional trade agreements positively affects wages and labor productivity. Čihák and Fonteyne argue that the Visegrád Group and the Baltic countries, which liberalized their trade, saw higher economic growth and labor productivity. Mattoo at el. (2017) discover a strong positive relationship between free trade agreements and export growth, which is reinforced by deep and comprehensive free trade agreements. IMF, WB, and WTO (2017) see a connection between trade openness and lower poverty rates, while Dabla-Norris et al. (2015) observe a link between trade openness and a reduction in income inequalities between countries.

At the same time, in spite of the abundant evidence of a generally positive impact from increased economic openness and trade liberalization, public opinion about economic openness and trade varies significantly, both in advanced and developing economies (IMF, WB, and WTO, 2017). The potential repercussions of economic openness are of special concern to the labor market. This is due to the fact that economic adjustment to new conditions comes at a price - labor demand and requirements change, and there is stronger competition, especially from imports, which can impact performance indicators, and consequently, employment in some sectors O'Leary et al., 2012), as well as increase the pay gap between qualified and unqualified labor (Goldberg and Pavcnik, 2007). However, some researchers argue that the adverse impact of trade liberalization is mainly due to the poor institutional framework of the labor market, absent or ineffective policies/programs to adapt the economy (including the labor force) to new trade conditions, and inadequate policies related to social security, education and competition (OECD, 2017, IMF, WB, and WTO, 2017).

The trade preferences given by the EU in 2014, together with the Deep and Comprehensive Free Trade Agreement signed by Ukraine and the EU, have yielded their first positive results. Exports of goods recorded the smallest drop in 2014-2016, while showing the largest growth in 2017 among the regions. Since 2014, there has been a widening in the geographical diversification of exports in all main commodity groups (apart from mineral exports) to European countries. The percentage of EU countries in foreign trade turnover rose to 34.6% in 2016, and hit 36.5% in 2017. In 2016, exports of goods to EU countries grew by 2.4%, to USD 10.7 bn compared to the previous year, while imports rose by 12.8%, to USD 15 bn. The slower rate of growth in exports compared to imports resulted from a fall in the global prices for Ukrainian exported goods, and large imports of natural gas,

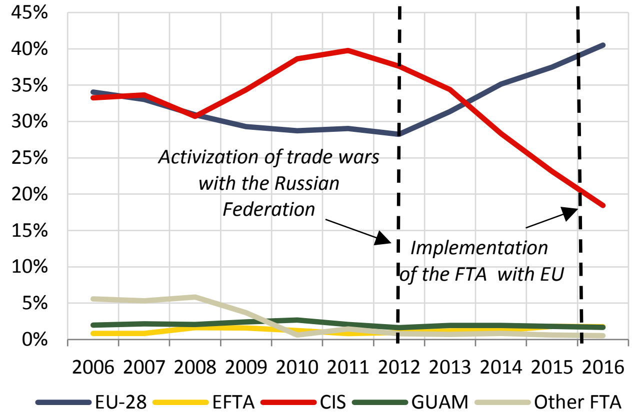
[50] The traditional measure of economic openness is expressed as a ratio of exports and imports of goods to GDP in current prices. In contrast, a PPP-based ratio of exports and imports to GDP is used to avoid distortions that could arise from exchange rate fluctuations and changes in other relative prices.

cars and agricultural machinery. However, already in January-November 2017, exports of goods to EU countries grew by 32.7% yoy, with imports rising by only 23.9% yoy despite a 1.3 times increase in volumes of natural gas imports compared to the previous year. In addition, the unilateral trade preferences adopted by the EU in 2014 in favor of Ukraine noticeably increased the product range of Ukrainian exports. In particular, exports of foods and wood industry products rose at the highest pace.

Looking ahead, the presence of Ukrainian exported goods is expected to get greater on EU markets, as the competitiveness of the goods gradually improves. Apart from that, the Ukraine-EU free trade agreement provides for a liberalization in the movement of capital, and in payments and remittances that are reflected in the current account. When implemented, this provision will make it easier for Ukrainian companies to access external financial resources, and help improve the investment climate. Stronger competition from European banks is expected to improve client servicing in Ukraine's banking system.

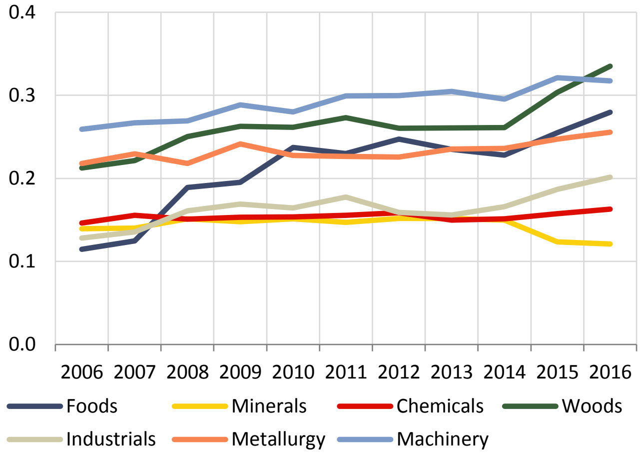
International experience has shown, however, that macroeconomic and social development receives the biggest boost when free trade agreements are combined with domestic comprehensive economic reforms aimed at enhancing competitiveness and adapting businesses and the labor force to new conditions. In particular, economic globalization is increasing international competition for qualified staff, making it essential for Ukraine to carry out the required labor market reforms. These include delivering the legal, economic and institutional conditions for improving employment by harmonizing Ukrainian employment and labor laws with international laws, eliminating structural mismatches between labor supply and demand in terms of professions, continuing the pension reform, and reducing the shadow employment market.

The Share of FTA-countries in Ukraine's External Trade Turnover, %



Source: SSSU; NBU estimates

Index of Ukrainian Export Penetration into European Markets



Source: WITS; NBU estimates at the level of HS headings

2.2.6. THE MONETARY SECTOR AND FINANCIAL MARKETS

In light of heightened inflation risks in Q4 2017, the NBU tightened its monetary policy by raising the key policy rate twice. The tighter monetary policy was aimed at preventing inflation expectations from further deterioration, and bringing inflation back to the target range in 2018. The rate was increased in response to risks that official financing would be delayed, consumer demand growth would speed up, driven by higher social standards, and that expenditures planned in the 2018 State Budget Law would be significantly higher than assumed in the NBU's October forecast.

The policy rate increases that took place in late October and in mid-December were effectively transmitted to hryvnia market interest rates, which boosted hryvnia household deposits.

Throughout most of the year, the FX market remained largely stable, although short-term spikes in exchange rate volatility temporarily increased depreciation pressure on the hryvnia. From late Q3 2017, depreciation pressure intensified, despite generally favorable external underlying factors. This was caused by a range of temporary and seasonal factors that typically occur at the end of a year. As a result, the hryvnia's NEER fell further, driven by strengthening currencies of most of Ukraine's trading partners as the US dollar exchange rates weakened in international markets late in the year.

Interest Rates[51]

In Q4 2017, the NBU Board raised the key policy rate twice, by a total of 200 bp, to 14.5% per annum. In real terms, however, the key policy rate increased more moderately because of the deterioration in inflation expectations seen in recent months – it stood at about 5% and was lower than in 2016.

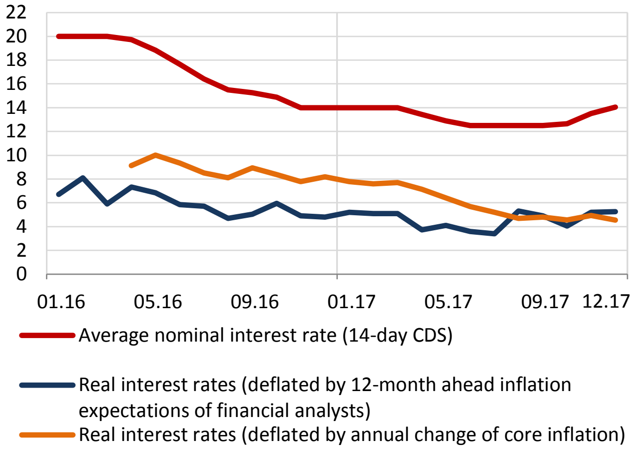
As in previous periods, the key rate changes were effectively transmitted into hryvnia market interest rates. In particular, in Q4, the interest rate on domestic currency interbank loans rose by 0.9 pp 12.4% per annum compared to Q3, while the Ukrainian index of interbank rates was up by 2.3 pp. The yields of domestic currency government bonds grew for all maturities on the primary market. The higher yields of government bonds reflected in part an increase in government activity on the domestic debt market at the end of the year. The yield growth outweighed the deterioration in inflation expectations, which drove up the real interest rate on domestic government bonds. It was also one of the highest among emerging markets.

The weighted average rates on hryvnia deposits of non-financial corporations also grew, as short-term deposits responded to the the key policy rate hike and narrowing liquidity conditions in Q4. The interest rates on domestic currency household deposits increased – average December rates were higher than September figures by 0.9 pp.However, average interest rates on both demand and time deposits of households dropped slightly in Q4 compared to Q3. This was due to the fact that household deposit rates respond slower to changes in the key policy rate.

Q4 also saw an increase in the weighted average interest rates on loans to non-financial corporations (especially on maturities up to one month) and households (especially on maturities from six

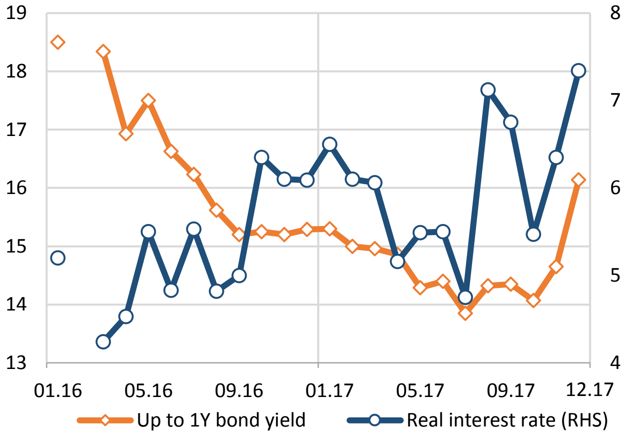
[51] Preliminary data.

Real Key Policy Rates, %



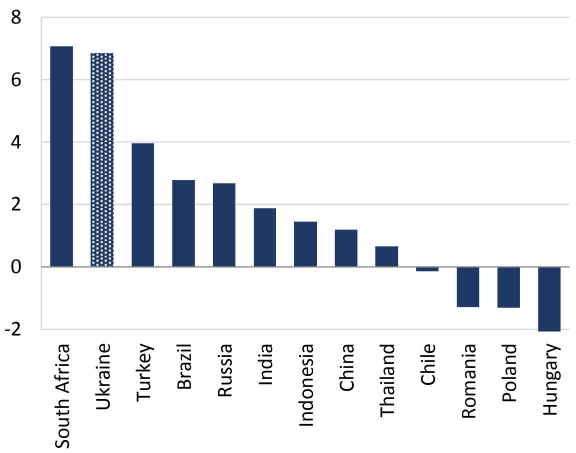
Source: NBU`s estimates

Real Interest Rate on Government Bonds on the Primary Market*, %



* Real interest rate is calculated as a difference between up to 1 year bond yield on the primary market and the 12-month ahead inflation expectations of financial analysts.
Source: NBU`s estimates

Real Interest Rates* on Emerging Market bonds, %



* Real interest rate is calculated as a difference between 1-year bond yield on the primary market as of 10.01.2018 (up to 1 year for Ukraine), and the 12-month ahead inflation forecast from the IMF (for Ukraine – based on NBU`s estimates).
Source: Thomson Reuters, NBU`s estimates

months to one year). On average in 2017, compared to 2016, interest rates on loans dropped both for non-financial corporations and households.

Foreign Exchange Market

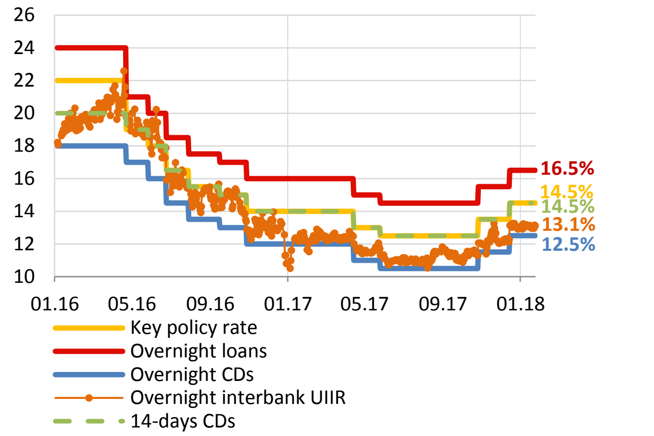
Throughout most of 2017, the FX market remained largely stable. With global prices being generally favorable for Ukrainian exports, the hryvnia gradually started to strengthen against the US dollar in the latter half of January. In September, the volatility of the UAH/USD exchange rate started to gradually increase, while the pressure on the hryvnia changed to downward, including in the cash market. This resulted from a stronger demand for FX from private oil and gas traders, which was fueled by growth in global oil prices. Other factors, which appeared later, included a decline in export receipts from certain commodity groups (grain and oil-bearing crops, due to a poorer harvest in 2017), and a seasonal increase in demand for FX from the fuel and energy industry. There was also a psychological factor – the negative experience of hryvnia depreciation occurring in the autumn and winter in recent years, to which the FX cash market has become particularly sensitive. Despite a generally favorable global price environment, depreciation pressure on the hryvnia prevailed in early 2018.

In 2017, the NBU maintained its presence on the FX market in order to replenish international reserves and to smooth out excessive exchange rate fluctuations. This, however, did not counteract prevailing trends. In Q4 2017, the NBU's FX sales totaled USD 190.8 m. In 2017, however, the NBU was a net buyer of USD 1.3 bn.

As a result, the average official UAH/USD exchange rate dropped by 4.1% both in 2017 yoy and in Q4 qoq, while falling by 3.2% since the beginning of 2017.

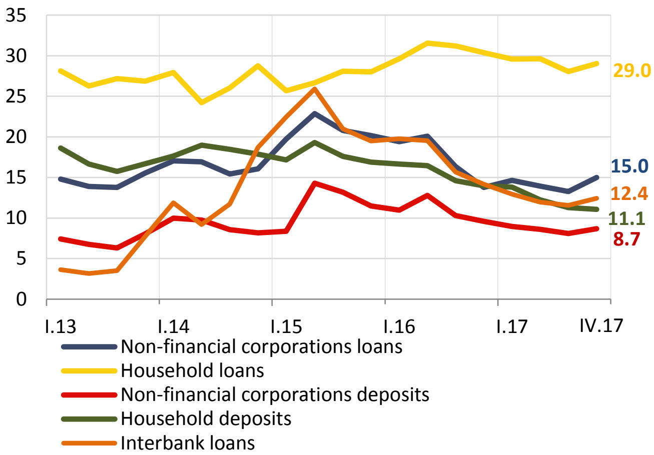
In spite of a moderate weakening of the UAH/USD exchange rate, the hryvnia's NEER dropped by 11% in 2017 (yoy in December). This was attributed to the strengthening of the euro, and the appreciation of most central and eastern European currencies and the yuan, especially late in the year. As a consequence, despite appreciation throughout most of the year, the hryvnia's REER also weakened (by 2.1%).

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



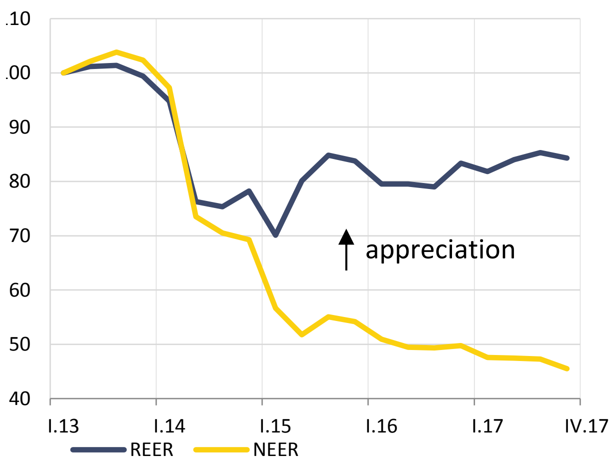
Source: NBU

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



Source: NBU

Hryvnia REER and NEER Indices
(Based on Interbank Exchange Rate, I.2013=100, average)



Source: NBU

Box: The NBU's measures to liberalize FX market and improve the functioning of financial markets[52]

In Q4 2017, the NBU continued its efforts to ease FX market restrictions and to deregulate certain FX transactions that have become ineffective and irrelevant. Among other things, the NBU:

cancelled the requirement that banks submit scanned copies of some documents so it could analyze FX purchases and transfers abroad carried out by the banks' clients

allowed banks and non-bank financial institutions to obtain individual licenses to purchase and transfer FX abroad with the purpose of placing a guarantee deposit on accounts of international payment systems

extended the period for which Ukrainian companies can pay dividends to foreign investors, and permitted resident borrowers that are being liquidated to repay their foreign loans before they fall due

simplified FX advance payments for imported goods for businesses and the rules for Ukrainian residents bringing FX cash in and out of Ukraine

extended the list of transactions to which surrender requirements do not apply by including customers' own FX funds returned by foreign banks

allowed businesses to repay loans in which a foreign country is involved before they fall due, and lifted the limit on FX amounts that authorized banks with individual licenses are allowed to transfer

improved the procedure for issuing individual licenses to transfer FX abroad by revising the list of documents to be provided and the list of transactions that do not require a license

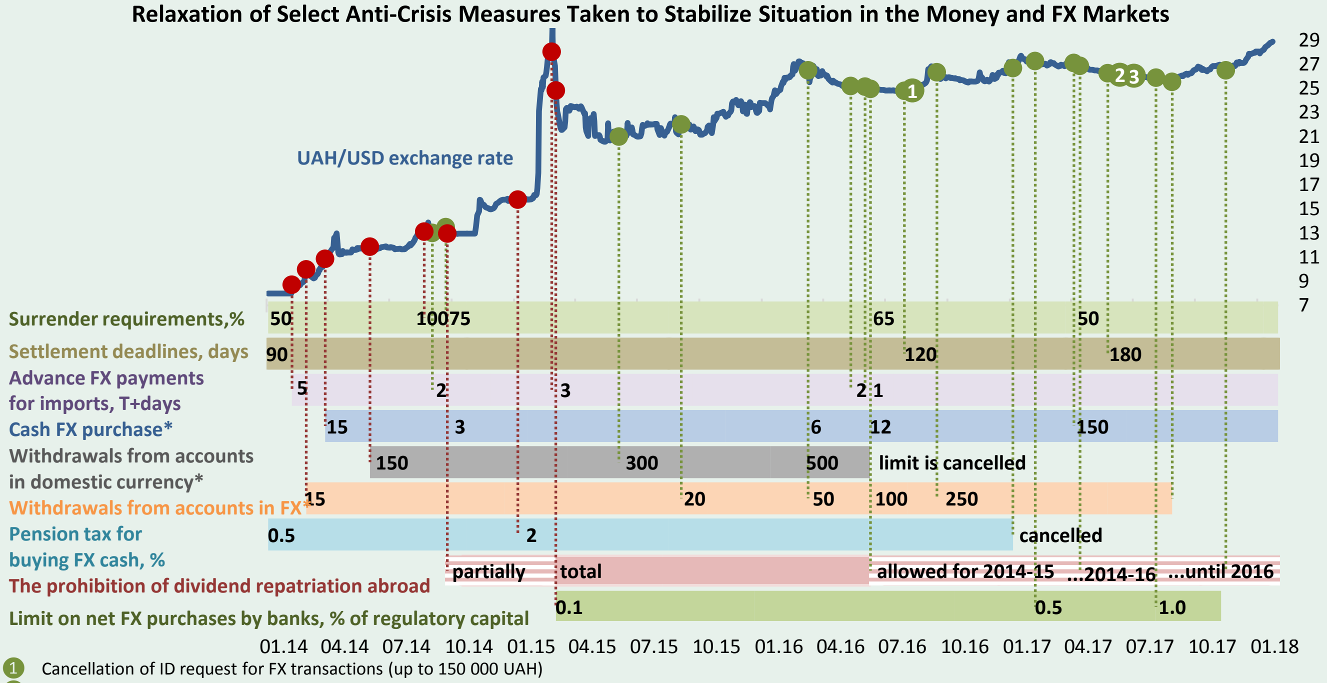
relaxed the rules for moving investment metals across Ukraine's customs border

improved the conditions for issuing general licenses to conduct FX transactions to non-bank financial institutions, including UkrPoshta

simplified FX trading conditions for banks and international financial institutions, including conditions for margin arbitrage trading

In addition, with a view to enhancing the banks' abilities to manage their liquidity, the NBU cancelled the requirement of holding 40% of the required reserves in the correspondent accounts of banks at the beginning of each business day.

Relaxation of Select Anti-Crisis Measures Taken to Stabilize Situation in the Money and FX Markets



1 Cancellation of ID request for FX transactions (up to 150 000 UAH)

2 Lift of select restrictions on: (i) repatriation of funds invested in Ukraine and (ii) transfers abroad by individuals related to non-commercial operations. (iii) Increase of annual limit for investing abroad from 0.6 to 2.0 bn USD.

3 Launching E-licenses for FX transfers abroad by individuals

* measured in thousand UAH

[52] Hyperlinks in this box are not active as English versions of the attached documents are not available (please refer to the Ukrainian version).

Base Money and Liquidity[53]

In 2017, the banking system maintained a large liquidity surplus, which started to narrow in the latter half of the year. This resulted mainly from substantial tax and non-tax payments to the budget, and later from rising demand for cash, as well as FX interventions turning from a liquidity injection channel to a liquidity absorption channel. Despite typical widening in December, the banking system's liquidity shrank by 11.4% qoq in Q4. Banks responded to the gradual narrowing in liquidity by decreasing their stocks of NBU certificates of deposit. In addition, H2 saw a temporarily increase in demand for liquidity by some banks, causing them to occasionally apply for NBU refinancing loans. This, however, did not hamper the banks from conducting transactions in due time.

In Q4, liquidity was mainly absorbed by the surge of cash outside banks (by UAH 31.5 bn or 9.6% qoq), as is typically the case in December. This was attributed to advance payments of pensions (this practice has made seasonal changes in cash in December-January more pronounced over the last three years), and budgets catching up on the considerable expenditure backlog late in the year. Liquidity was also absorbed through the FX channel, as the NBU mainly sold FX in Q4 2017 in order to smooth out excessive UAH/USD exchange rate fluctuations. The NBU's net sales stood at UAH 5.4 bn. Bank liquidators also contributed to liquidity absorption (UAH 1.8 bn). In contrast, transactions by the Deposit Guarantee Fund, open market operations, and swap transactions did not significantly affect liquidity.

The widening in liquidity seen in Q4 2017 was largely attributed to government transactions, the net impact of which was estimated at UAH 57.4 bn.[54] With increased budget expenditures, which typically pick up at the end of every year, the influence of this factor became very pronounced in the last days of the year. Liquidity was also injected through the loan channel, with refinancing loans totaling UAH 5.9 bn.

In 2017, the growth in the monetary base slowed to 4.6% yoy (down from 13.6% in 2016), due to a decrease in stocks of banks' correspondent accounts seen at the end of the year, and weaker demand for cash.

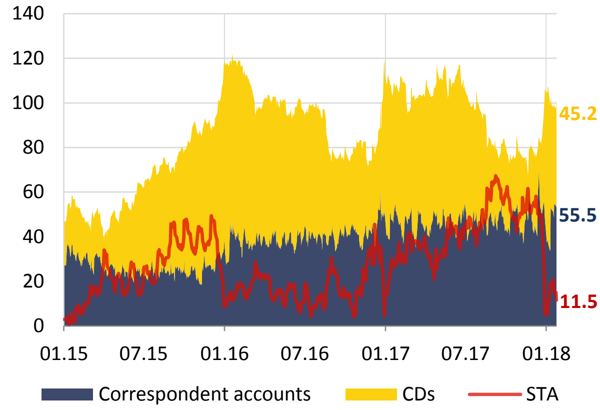
Money Supply and Components[55]

Hryvnia deposit inflows picked up in 2017. Domestic currency deposits grew at a faster pace, driven by a gradual improvement in the financial soundness of businesses and a rise in households' income. The faster deposit inflow that occurred in Q4 2017 was also attributed to large budgetary spending at the end of the year.

The strongest growth (19.4% over the year) was seen in hryvnia household deposits, excluding sole proprietors. Despite moderate growth over the year, the stock of hryvnia corporate deposits increased by 11.4% or UAH 26.1 bn in 2017. The spike seen at the end of the year largely reflected the hike in budgetary spending.

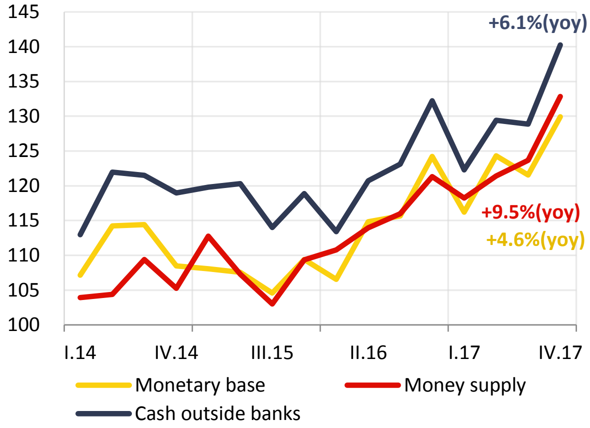
FFX corporate deposits (in the US dollar equivalent) continued to grow gradually in 2017 (by 8.6% yoy), driven mainly by large FX

Select Indicators of Banking System Liquidity, UAH bn



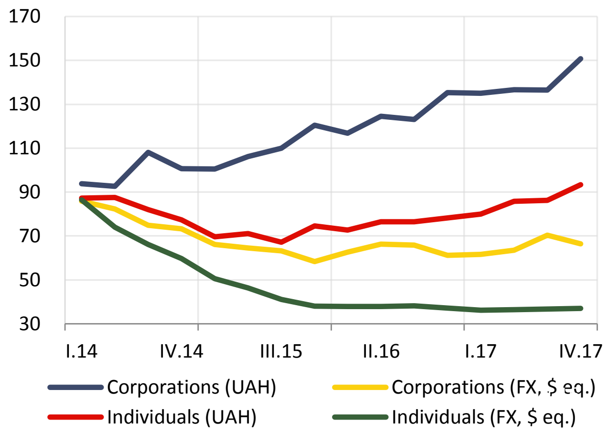
Source: NBU

Monetary Indicators, IV.2013=100



Source: NBU

Deposits*, IV.2013=100



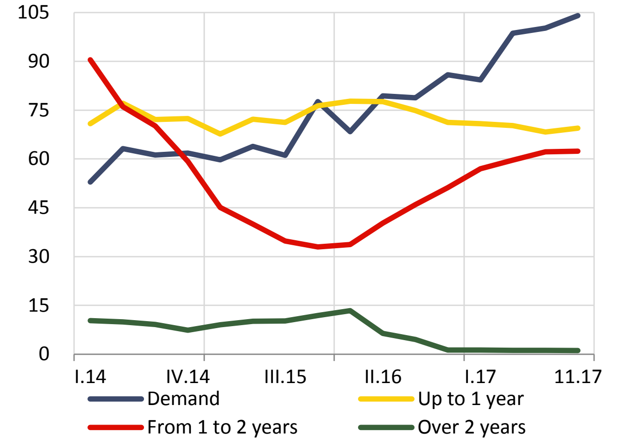
** The stock of household deposits excluding private entrepreneurs.*
Source: NBU

[53] The information provided is based on preliminary data.
[54] The influence of fiscal factors on liquidity in the banking system was assessed on the basis of changes in stocks of the single treasury account (down by UAH 54.9 bn), debt repayments by the government to the NBU (UAH 14.5 bn), a part of the NBU's profit transferred to the budget (UAH 14.4 bn), and the government's net sale of FX to the NBU (UAH 2.9 bn).
[55] The information provided is based on preliminary data.

inflows from non-residents. In contrast, FX household deposits in the US dollar equivalent, excluding deposits of sole proprietors, were practically flat compared to end-2016.

Total deposit growth and a rise in cash outside banks, especially in December, pushed up the money supply by 9.5% yoy in 2017.

Household Deposits in Domestic Currency by Maturity, UAH bn



Source: NBU

Loans[56]

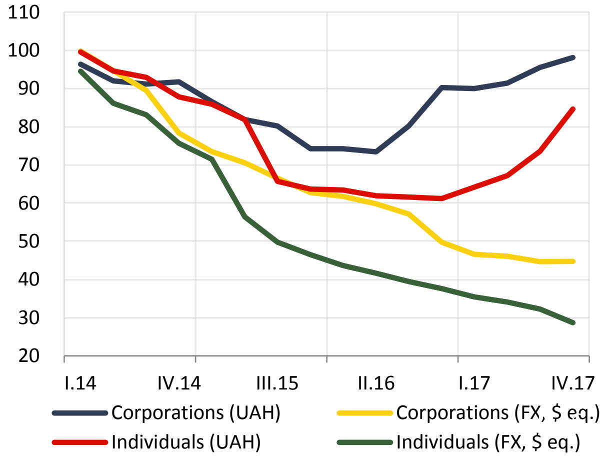
In 2017, banks continued to gradually revive hryvnia lending activity. Despite a high comparison base resulting from the restructuring of FX loans in H2 2016, the total stock of hryvnia loans grew by 13.0% in 2017.

Hryvnia lending to households grew the most, largely due to a pick-up in consumer lending. In particular, car loans and loans for other consumer needs increased at a fast pace. Demand for mortgage loans was also on the rise. In November 2017, the stock of mortgage loans grew month-on-month for the first time over the last year-and-a-half, yet continued to decline year-on-year. Household demand for loans was fueled by gradual cuts in loan rates throughout most of the year, and some easing in lending standards. Consumer lending standards eased amid stronger competition among banks, increased borrower solvency, and an economic recovery.

Corporate demand for loans also persisted, especially for short-term and hryvnia loans.The growth in demand resulted from interest rate cuts throughout most of the year, as well as the need for investment and working capital. In 2017, stocks of hryvnia loans to non-financial corporations increased by 8.7% yoy, with a rapid slowdown in the loan growth compared to 2016 due to a higher comparison base. Banks expect demand for all types of corporate loans to keep on rising.

In 2017, stocks of FX loans (in the US dollar equivalent) both to households and the corporate sector dropped further.

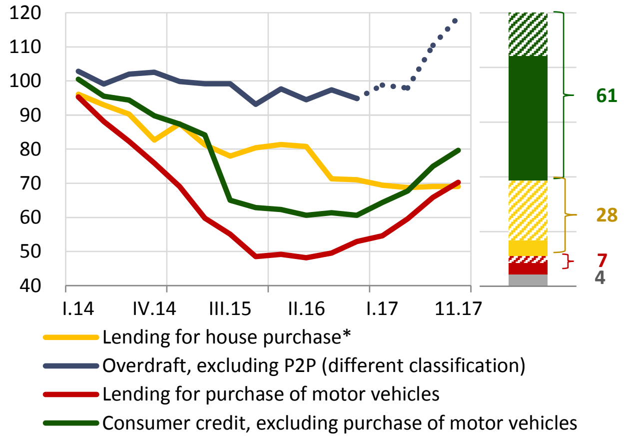
Loans*, IV.2013=100



** The stock of loans to individuals excluding private entrepreneurs.*
Source: NBU

Select Indicators of Lending in Hryvnia to Households, IV.2013=100

Structure of Outstanding Amount of Loans to Households, %**



** Include lending for real estate purchase, its development or reconstruction.*
*** Solid area stands for relative share of loans in hryvnia, while shaded – foreign currency. Gray area denotes other loans in all currencies.*
Source: NBU

[56] The information provided is based on preliminary data.

3. ECONOMIC OUTLOOK FOR UKRAINE

3.1. FORECAST ASSUMPTIONS

Developed and developing economies are expected to continue growing in sync in 2018–2020. Faster growth in domestic demand and a pickup in global trade will be the key growth drivers. Investment growth will be an additional factor as financial conditions still remain loose despite a gradual normalization of monetary policy by leading countries. However, geopolitical developments, particularly rising tensions in the Middle East, the escalation of the conflict between the US and North Korea, and US trade policy towards partner countries (particularly under NAFTA) continue to weigh on economic prospects. Across countries, the following trends will prevail:

– US GDP growth will accelerate, supported by a lower corporate tax burden after the new tax reform, stronger domestic demand against stable unemployment (0.3–0.5 pp below its natural level), and investment boosted by favorable financial conditions. The US Federal Reserve is likely to raise the key interest rate three times in 2018 and two times in 2019 as it gradually unwinds its balance sheet.

– The euro area economy will continue to grow, bolstered by an increase in domestic consumption on the back of rising employment, expansionary monetary policy by the European Central Bank (ECB), and a gradual rise in inflation. Brexit will cause a deceleration over the medium-term that will lead to significant changes in trade and financial policy, although this will have a less adverse effect than previously expected.

– CEE economies will grow steadily thanks to further growth in domestic demand boosted by an increase in employment and wages, more appealing financial assets, and exports driven by stable demand from major trading partners (particularly the EU and China). Economic growth will additionally be driven by China's increasing investment into CEE economies and wider cooperation under the 16+1 program.

– China will see softer growth, but will remain one of the world's fastest growing economies. The closure of obsolete production capacities and a large corporate debt burden, which will hinder investment, will cause that slowdown. On the other hand, public investment into infrastructure and production-related projects along with a more prominent role of the service sector and domestic consumption will support the Chinese economy.

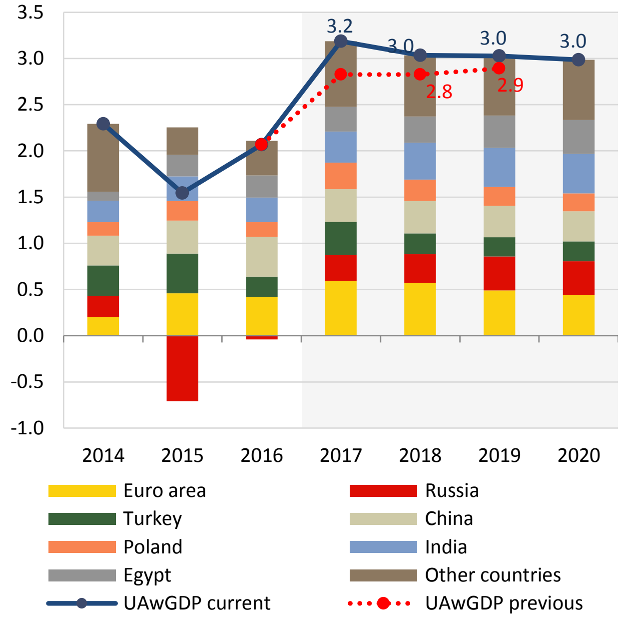
– The economies of Turkey and Egypt will expand as exports grow owing to the depreciation of the domestic currencies, especially the Turkish lira, and stronger demand from their main trading partners.

– Growth in the CIS economies will gain momentum amid a moderate increase in commodity prices, particularly for oil and grains. A pickup in domestic demand driven by lower inflationary pressures and an increase of real household incomes will contribute to economic growth.

After a correction in early 2018, global prices for Ukrainian exports will stabilize followed by a weak upward trend in 2018–2020.

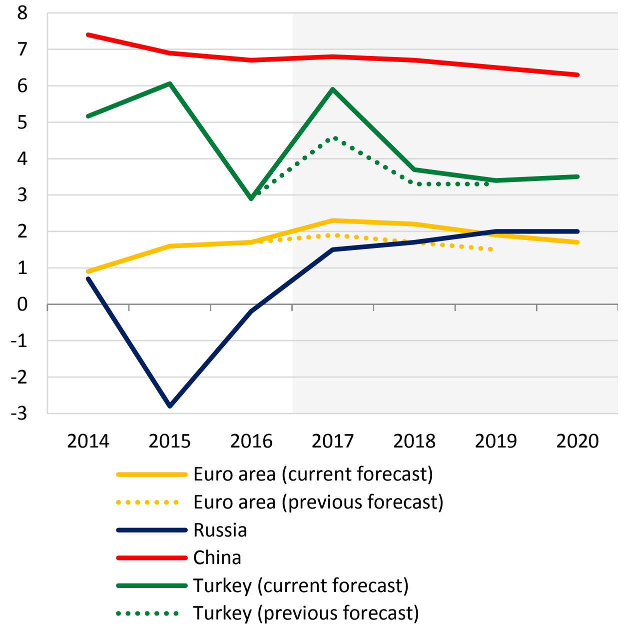
Prices for ferrous metals will remain high despite a downward adjustment after Chinese producers become more active once current restrictions are lifted on 15 March 2018. Prices will mainly grow on a further expansion of demand for ferrous metals driven by the global economic growth, especially in construction and the

Contributions of Ukraine's MTP Countries to the Annual Change in UAwGDP, % yoy



Source: NBU staff estimates (preliminary data) based on IMF

Annual Growth Rate of Real GDP in Selected Ukraine's MTP Countries, % yoy



Source: NBU staff estimates

machinery industry. In Europe, demand for steel will increase 1.5% yoy in 2018 (according to Moody's). In China, demand is expected to grow faster, rising 2.1% yoy to 726 m tons (according to China Metallurgical Industry Planning and Research Institute), while production will expand 0.7% yoy. At the same time, steel production is expected to increase in Japan and India. A prolongation of anti-dumping duties in some countries will be an additional factor behind high prices.

Despite the steady demand for ferrous metals, iron ore prices will decline on robust market supply. Although steel production is expected to pick up in China, demand for iron ore in the country will increase only 0.2% yoy in 2018[57], weighed down by record high inventory levels. High-grade iron ore will be especially in demand. The market supply of iron ore will remain ample as global leaders Australia and Brazil (BHP Billiton, Rio Tinto, Vale SA) increase production amid lower production costs (e.g., down to USD 7.7/ton at Vale's S11D mine).

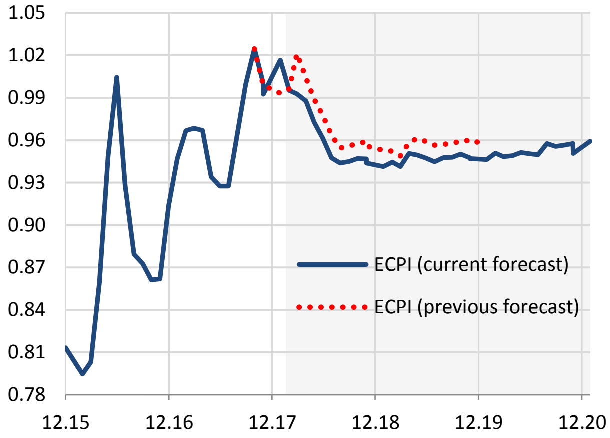
Global grain prices will gradually increase as output declines, particularly corn output, while consumption remains steady. The United States Department of Agriculture (USDA) sees global production of corn decreasing 3.1% in the 2017/2018 marketing year (MY) while consumption volumes remain largely unchanged, which will lead to an 11.5% drop in carry-over inventories. The decrease in global production will come from lower outputs in Russia and Brazil (in Brazil sown areas will decline on lower domestic corn prices after the record-high levels of 2016/2017 MY). In addition, production costs for Brazilian corn are expected to rise due to a higher tax on imports of pesticides.

Wheat prices will grow on the back of stronger industrial demand, even though, according to the USDA, global production is projected to grow roughly proportionately to consumption amid a faster increase in carry-over inventories in 2017/2018 MY. The latter are expected to grow 5% yoy, primarily driven by bumper crops in Canada and lower supplies to Egypt, the world's largest importer, as a result of the 20% increase in sown areas under wheat. Meanwhile, in 2017/2018 MY, industrial consumption of wheat will hit a record high of 355.8 m tons, primarily on accelerating demand from producers of starch, biofuel, and beer. Growth will reach 3%, exceeding the five-year average[58].

Global oil prices are expected to grow moderately as global demand rises and major oil producers comply OPEC+ agreement to cut production. Global demand will be supported by steady global economic growth, increased lending to industrial and construction sectors in developed and emerging market countries, and growth in the transportation sector. The transportation sector is expected to be the major contributor to the increase in demand for oil. The US, China, South Korea, and Middle East countries will show the largest growth in demand for oil products. OPEC estimates that total demand will increase by 1.5 m barrels per day, or 1.6% yoy, in 2018 alone. Geopolitical conflicts in the Middle East, which may cause interruptions in the production and supply of oil, will additionally support prices.

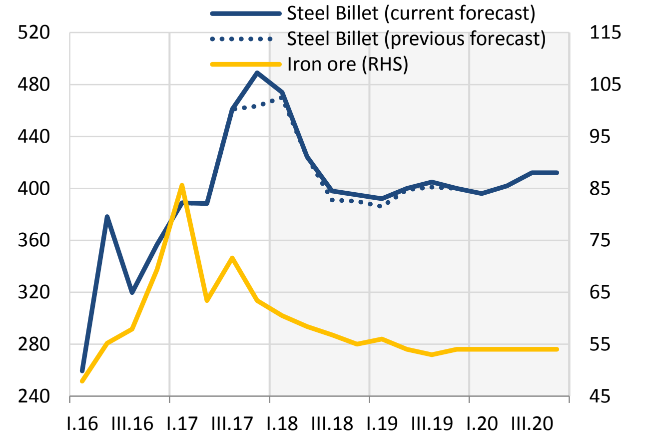
In the meantime, increased investment and a higher number of rigs in the US will boost oil production in the US (to approximately 1 m

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



Source: NBU staff estimates

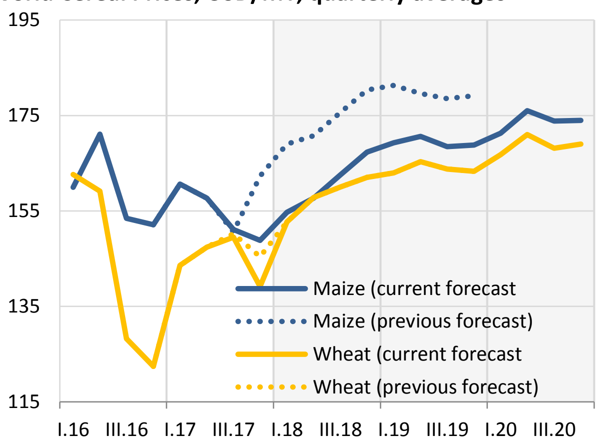
Global Ferrous Metal and Iron Ore Prices*, USD/MT, quarterly averages



* Respectively, 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 averages

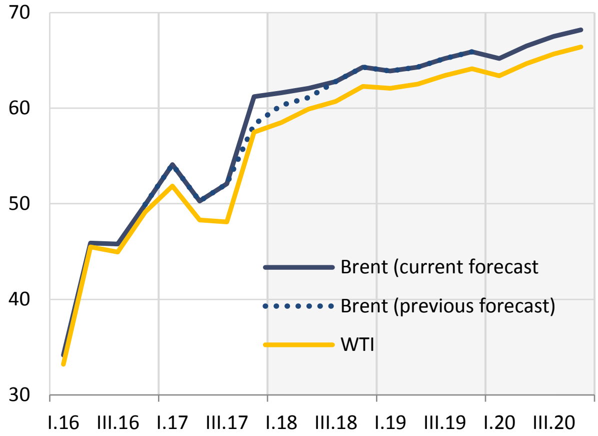


Source: NBU staff estimates

[57] According to China Metallurgical Industry Planning and Research Institute.
[58] Based on estimates of the International Grains Council (November 2017).

barrels per day only in 2018, or 10% higher yoy[59]). An increase in productivity in Canada driven by the approved use of new technologies in oil production projects will also contribute to the output growth. These conditions will restrain rapid growth in oil prices.

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



Source: NBU staff estimates

	CPI, eop, % yoy			GDP, % yoy			Exchange rates*		Prices of goods**, USD			
	Euro area	Russia	US	Euro area	Russia	US	USD/EUR	RUB/USD	imported gas, per 1,000 m3	Brent oil, per barrel	exports of ferrous metals, per ton	exports of grains, per ton
2014	-0.2	11.4	0.8	0.9	0.7	2.4	1.33	38.3	292.5	99.1	481.5	201.2
2015	0.2	12.9	0.7	1.6	-2.8	2.6	1.11	61.0	274.0	52.5	336.1	166.9
2016	1.1	5.4	2.1	1.7	-0.2	1.6	1.11	67.1	200.9	43.9	299.4	153.2
2017	1.4	2.8	2.0	2.3	1.5	2.3	1.13	58.4	229.1	54.4	411.0	155.5
2018	1.5	4.0	2.0	2.2	1.7	2.4	1.18	58.5	237.8	62.7	396.9	162.9
2019	1.6	4.0	2.0	1.9	2.0	2.2	1.18	58.5	260.3	64.8	379.6	168.2
2020	2.0	4.0	2.0	1.7	2.0	2.2	1.18	58.5	275.0	66.9	401.4	172.8
% yoy												
2015							*-16.5*	*59.3*	*-6.3*	*-47.0*	*-30.2*	*-17.1*
2016							*0.0*	*10.0*	*-26.7*	*-16.4*	*-10.9*	*-8.0*
2017							*1.8*	*-13.0*	*14.0*	*23.9*	*37.3*	*1.5*
2018							*4.4*	*0.2*	*3.8*	*15.3*	*-3.4*	*4.8*
2019							*0.0*	*0.0*	*9.4*	*3.3*	*-4.4*	*3.2*
2020							*0.0*	*0.0*	*5.5*	*3.2*	*5.7*	*2.8*

** Annual average.*
***Weighted average by volume, excluding oil.*

[59] As estimated in the OPEC Monthly Oil Market Report – December 2017.

3.2. PRICES

Bringing headline inflation back to its target range will take longer than earlier forecasted. Despite a tightening of monetary policy by the NBU, inflation will remain high at 8.9% yoy in 2018 due to a number of factors:

- The pass-through effect of raw food price increases, which has already taken place, on highly processed food items
- A pick-up in consumer demand driven by household income growth resulting from higher social standards and wage increases in the private sector amid stronger labor demand
- The heightened external vulnerability of Ukraine's economy due to a delay to cooperation with the IMF, which impedes Ukraine's access to borrowing, while exerting pressure on the hryvnia exchange rate
- Sticky inflation that stem from the worsening of expectations against the background of high ongoing inflation rates
- An uptick in global growth, which, among other things, exerts upward pressure on energy prices

Those factors will keep underlying inflationary pressure high in 2018 (year-end core inflation is projected at 8.2%). Looking ahead, inflation will moderate owing to a relatively tight monetary policy over the forecast horizon, the waning effect of the surge in food prices, and a further deceleration of imported inflation amid relatively low exchange rate volatility. Raw food prices, as well as core inflation, which itself is a function of those food items, will slow accordingly. Consequently, inflation is expected to return to its target range in mid-2019, dropping to a projected 5.8% yoy as of end-2019. In 2020, inflation will decelerate to 5.0%, the mid-point of the target range (5.0% ± 1 pp).

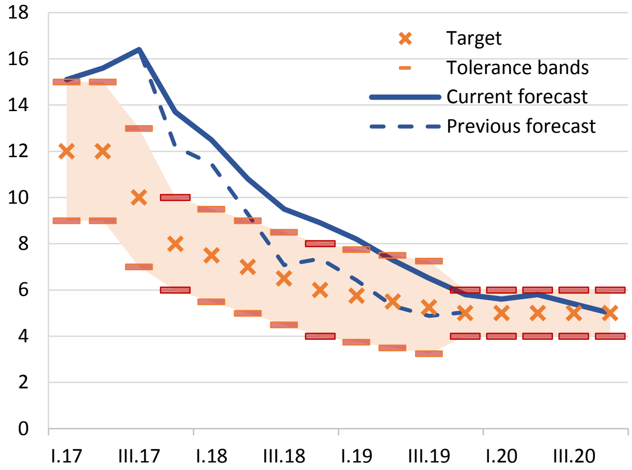
Administered prices will be the fastest-growing component of inflation at approximately 10% annually. Their growth will be driven mainly by an upturn in global energy prices and the government's policy to harmonize tobacco excise taxes in Ukraine with those in the EU.

Core inflation will slow to 8.2% in 2018. Underlying inflationary pressure will remain high throughout the year and will be fostered by rising household incomes and production costs in the aftermath of wage increases (after further increases in the minimum wage), as well as increased pension expenditures. Service prices are projected to increase the most among core inflation components, similar to 2017. Core inflation will decelerate slowly owing to rising processed food prices due to secondary effects from higher raw food prices in the previous year (due to lagged effects). The central bank's tighter monetary policy will help restrain core inflation. Also, lower imported inflation amid low exchange rate volatility and a persistently high unemployment rate will further curb inflation.

Looking ahead, core inflation will decelerate to 4.8% in 2019 and 3.2% in 2020. The continuing growth of household incomes, including as a result of higher social standards, will be main factors behind the slowdown. Imported inflation is projected to subside over the forecast horizon thanks to low inflation in Ukraine's MTPs.

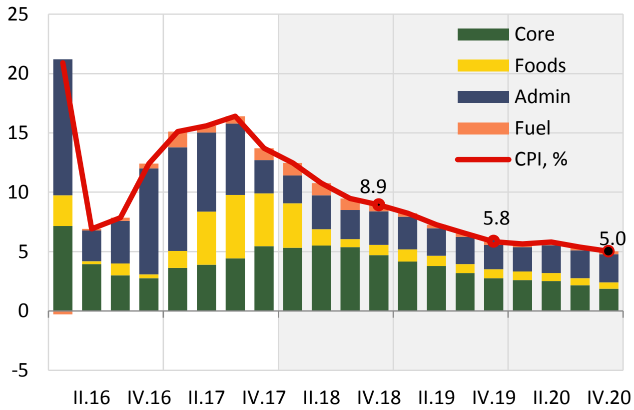
Raw food inflation will slow notably this year to 4.6% from 23.5% in 2017. The waning of food supply effects from the previous year, caused by partial crop damage due to unfavorable weather conditions in spring 2017 will be the key driver. Global food prices

CPI, %



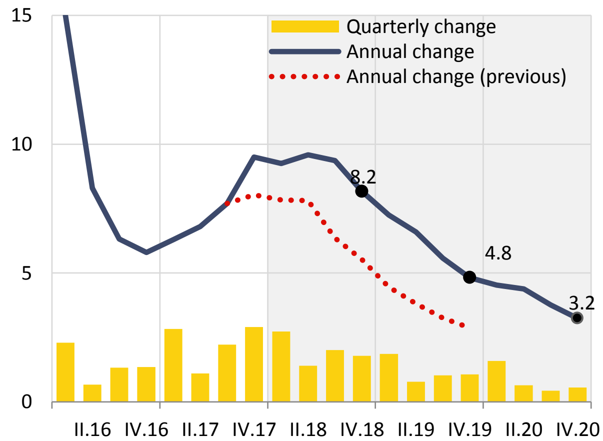
Source: SSSU, NBU staff estimates

Contributions to Annual CPI Growth by Main Components, pp



Source: SSSU, NBU staff estimates

Core Inflation, %



Source: SSSU, NBU staff estimates

(meat and dairy products) will help restrain raw food inflation in Ukraine as prices in major export markets are coming down.

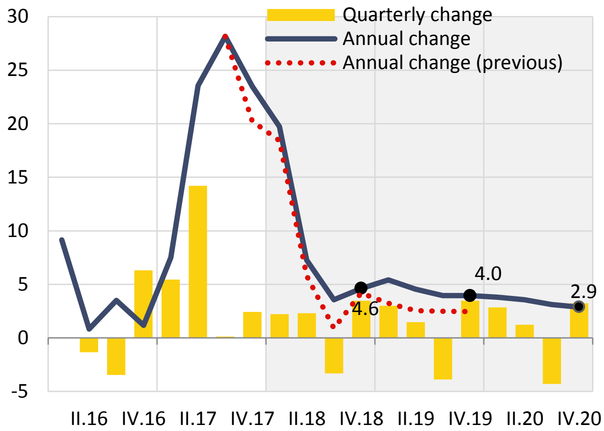
Raw food prices are expected to grow moderately (4% in 2019 and 2.9% in 2020) provided there are no significant supply shocks, including in global markets. Higher crop yields and agricultural output driven by past investments and improved productivity will rein in food inflation. However, rising nominal and real household incomes will contribute to upward pressure on inflation. In addition, the convergence of domestic food prices with global prices as global trade turnover increases is seen as a proinflationary factor.

Administered prices are expected to increase 13.8% in 2018. Main administered inflation drivers include further growth in energy costs, specifically natural gas, the main component in central heating and hot water rates for households, as well as the rising costs of utility providers caused by wage increases. Further hikes in excise tax rates by the Ukrainian government (given Ukraine's commitment to harmonize tobacco excise taxes with EU rates) will drive up prices for tobacco products and alcoholic beverages by 18% and 11% in 2018, respectively, and 9%-13% in the subsequent years. Looking ahead, the growth in administered prices is expected to moderate, but the paces of increase in 2019-2020 will remain rather high at around 10%.

Fuel prices will continue increasing, reflecting changes in global oil prices in the hryvnia equivalent (10.8% in 2018 and decelerating to 5.0%-5.5% annually in the following years).

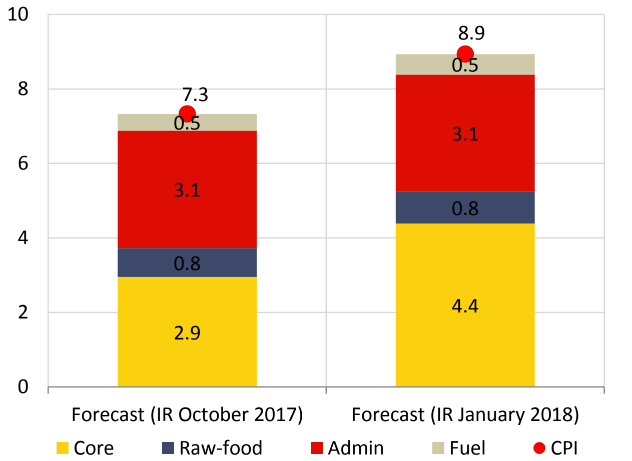
The NBU has raised its CPI forecast for 2018 by 1.6 pp, mainly owing to the stronger effect of demand factors due to faster growth in wages and a positive fiscal impulse. The impact of imported inflation will rise as well on the back of a weaker NEER at the beginning of the year. A tighter monetary policy will contribute negatively given the need to counteract the above inflation factors.

Raw Food Inflation, %



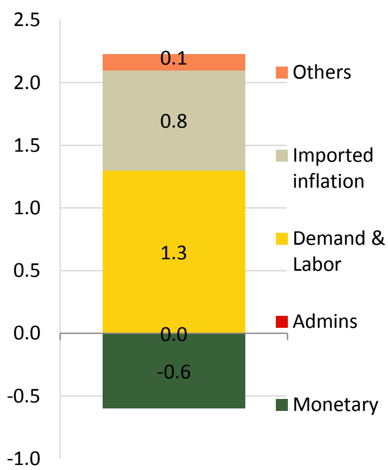
Source: SSSU, NBU staff estimates

Contributions to 2018 Inflation Forecast by Components, pp



Source: SSSU, NBU staff estimates

Contributions to 2018 Inflation Forecast by Factors, pp



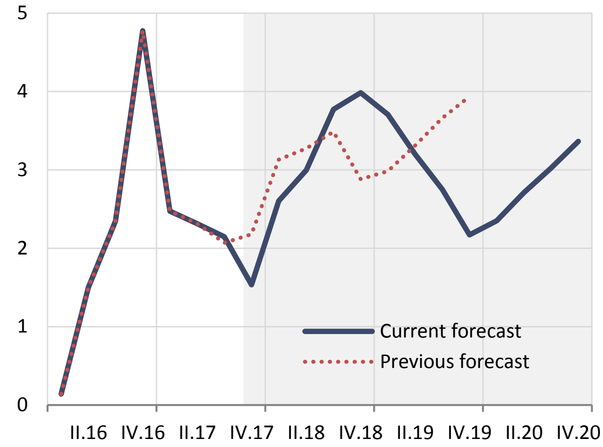
Source: NBU staff estimates

3.3. REAL ECONOMY

Economic growth is expected to accelerate to 3.4% yoy in 2018, driven mostly by private consumption on the back of sustained high growth in real wages and other household incomes, including pensions. A more loose fiscal policy will also be a factor. Additionally, companies will continue to invest actively. The negative contribution of net exports will decrease substantially thanks to favorable terms of trade, greater access for Ukrainian exports to foreign markets, as well as a recovery in individual industrial sectors that had generated losses last year because of a lack of access to production facilities located in the NGCA.

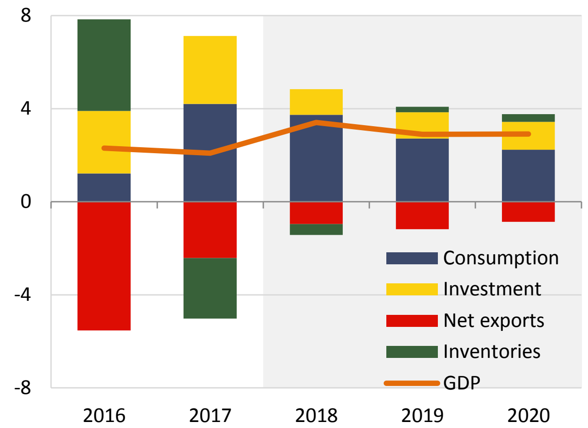
In 2019–2020, the NBU expects GDP growth to slow to 2.9% as the effects of the fiscal easing in 2018 wear off and monetary policy is tightened to bring consumer inflation back to its target level over the forecast horizon. Private consumption will remain a major driver of economic growth. High investment activity will be supported primarily by export-oriented enterprises (especially in the agriculture and processing sectors), as well as companies that depend on increased capital expenditures from the budget. The government's policy to renewal road infrastructure will boost investment in construction.

Real GDP, % yoy



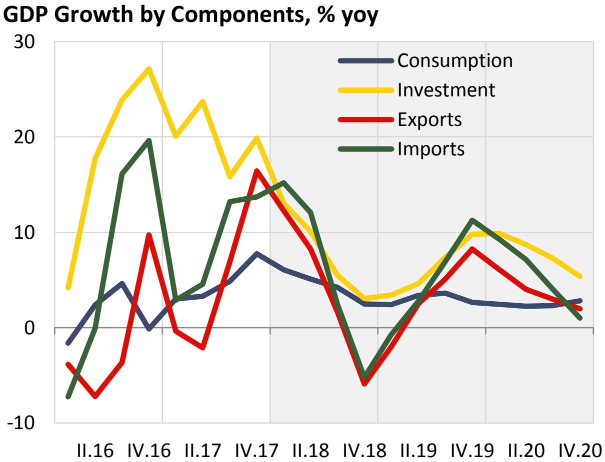
Source: SSSU, NBU staff estimates

Contributions to Real GDP Growth, pp



Source: NBU staff estimates

GDP Growth by Components, % yoy



Source: SSSU, NBU staff estimates

Private consumption will be the main driver of economic growth over the forecast horizon. It is projected to grow 5% in 2018 on the back of further increases in real wages and pensions as part of the government's efforts to raise living standards. In the mid-term, private consumption will grow at a slower pace (3.5% in 2019 and 3.0% in 2020), but still outpace the GDP growth rate. Consumption in the future will be supported by a revival in lending, but a further reduction of utility subsidies will restrain that growth.

The growth of investment into the economy will slow to 6.8% in 2018 due to rising labor costs for businesses and the statistical effect of a high comparison base (after last year's 20% increase). In 2019-2020, investment will grow quicker (7% in each year) and offset the declines of previous years. High investment activity will be supported primarily by export-oriented enterprises (especially the agriculture and processing sectors), as well as companies that depend on increased capital expenditures from the budget. The government's policy of road infrastructure renewal will boost investment in construction.

Capital investment growth will be reflected in higher investment imports, particularly by export-oriented companies. An increase in real household income fueled by the government's expansionary fiscal policy will also create additional demand for imported goods. Energy imports share will decline even as the economic growth continues, which will be possible thanks to enhanced energy efficiency and the ramping up of domestic production of energy resources. Import volumes are projected to grow by around 5% over the forecast horizon.

Real exports are projected to grow 3%-4% over the forecast period. The recovery of metals production after it was affected by the suspension of trade with the NGCA will be a major driver of exports. Other branches of manufacturing, particularly machinery production, will also feed the growth. Entry into new foreign markets and higher global demand for food products will propel growth in agricultural exports.

Potential GDP and the Cyclical Position of Ukraine's Economy

In 2018-2020, growth in potential GDP will accelerate to 3.6% as of the end of 2020. An increase in total factor productivity will remain the main driver of potential output, reflecting the convergence of Ukraine's economy with advanced economies. In H2 2017, growth in potential GDP decelerated as businesses shifted their production capacities after the suspension of trade with the NGCA. In 2018, the short-term effect from the trade suspension will fade.

Stronger migration trends over the past years will restrain potential output growth due to to the shrinking economically active population, which will lower quantity of labor force in Ukraine. At the same time, structural labor market imbalances will yield a high natural rate of unemployment. In early 2018, the negative contribution of capital to GDP will drop to zero due to an increase in the share of capital investment in GDP in previous years. In 2018-2020, the positive contribution of capital to potential GDP growth will gradually increase, as fixed capital formation exceeds depreciation, resulting in real capital growth.

Already in Q2 2018, the negative GDP gap is expected to close thanks to favorable terms of trade and a revival of consumer and investment demand. Moreover, the positive fiscal impulse generated by higher social spending initiated by the Ukrainian government will contribute to a positive GDP gap in 2018. However, GDP gap is forecasted to turn negative in 2019-2020 against the backdrop of a tighter monetary policy and the waning effect of fiscal stimulus, however, not exceeding 1%.

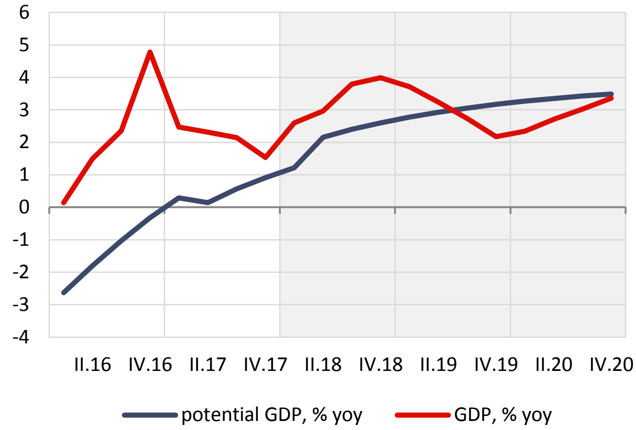
In 2018, **fiscal policy** will be expansionary, with the fiscal impulse generated by fiscal easing estimated at 1% of GDP.

Fiscal stimulus of aggregate demand will mainly be carried out through an increase in pensions, as set out in the adopted pension reform, and by raising wages for public sector employees. The pension reform adopted last year will create an additional contribution of 0.8 pp to inflation in 2018 and 0.4 pp to aggregate demand. Further increases in minimum wages (to UAH 4,200) after H1 2018 will add inflationary pressure (0.5 pp increase in CPI). Overall, public-sector social spending (pensions and public-sector wages) is projected to increase approximately 10%.

The continuation of the "customs experiment" (channeling a part of customs payments in excess of targets to local budgets for road infrastructure repairs) and the operational launch of the Road Fund will help sustain a high level of capital expenditures (over 3% of GDP) on road infrastructure upgrades. However, a high level of social expenditures will constrain the government's ability to finance development if it commits to the budget deficit approved with the IMF under the EFF Program.

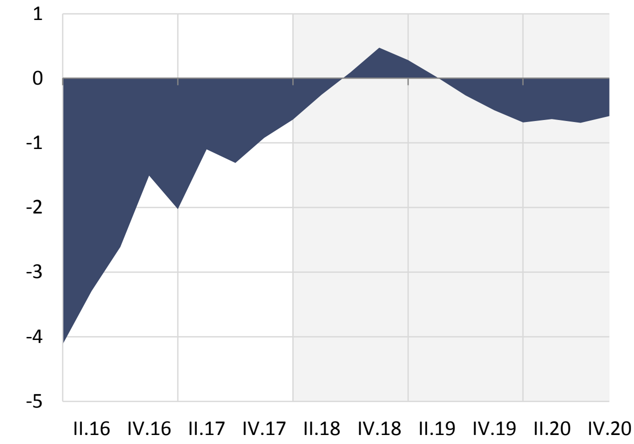
Over the forecast horizon, the deficit of the general government's budget is projected at 2.0%-2.6% of GDP. The

GDP and Potential GDP, % yoy



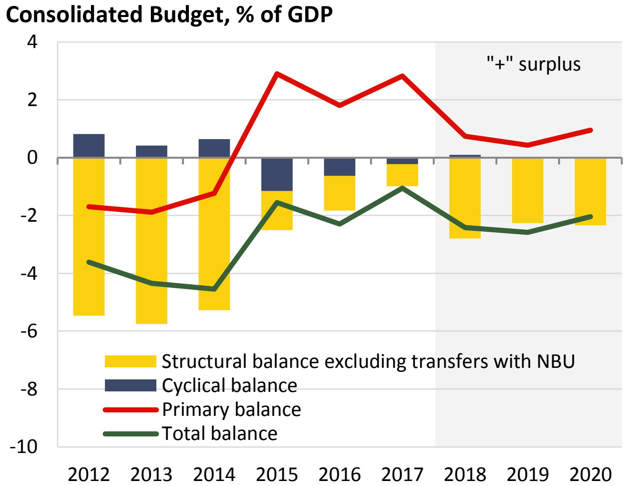
Source: SSSU, NBU staff estimates

GDP Gap, % of Potential GDP



Source: NBU staff estimates

Consolidated Budget, % of GDP

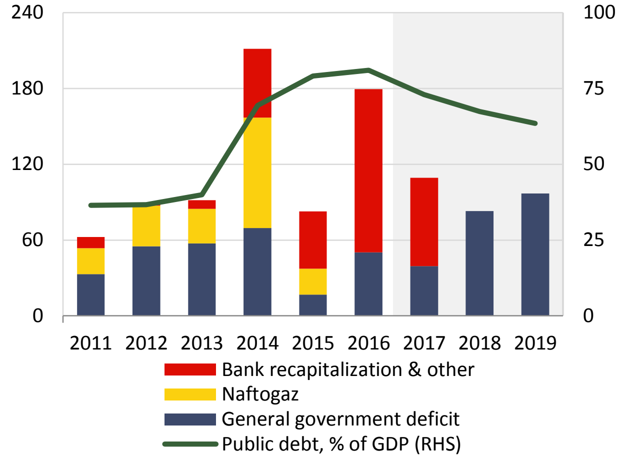


Source: NBU staff estimates

primary surplus will remain but will narrow as government spending on servicing debt decreases.

Public and publicly guaranteed debt is expected to decrease over the forecast horizon, falling below 70% of GDP in 2018. The projections are based on assumptions of further rapid growth in nominal GDP, low exchange rate volatility, and a gradual decrease of external public debt amid peak debt repayments (see the following section for more details).

Public Sector Deficit, UAH bn



Source: MFU, SSSU, NBU staff estimates

3.4. BALANCE OF PAYMENTS

The current account deficit will continue to hover near 3% of GDP in 2018–2020. Imports will grow as consumer confidence improves, bolstered by an expansionary fiscal policy. The import growth will be further supported by a sustained high level of investment demand to be channeled to fixed asset upgrades. Exports will grow, although at a slower pace than imports, as economic growth in Ukraine's main trading partners accelerates and as trade conditions remain favorable. Migration will result in higher remittances, which will offset the expansion of the trade deficit.

In 2018, the current account deficit will be offset by financial account inflows, which will enable further growth in international reserves. The NBU expects that foreign direct investment (FDI) in the real sector will rise and debt inflows to the private sector will recover as early as in 2018-2020 as the investment climate gradually improves. The placement of government's Eurobonds slated for 2018-2020 will help refinance a part of Ukraine's external debt.

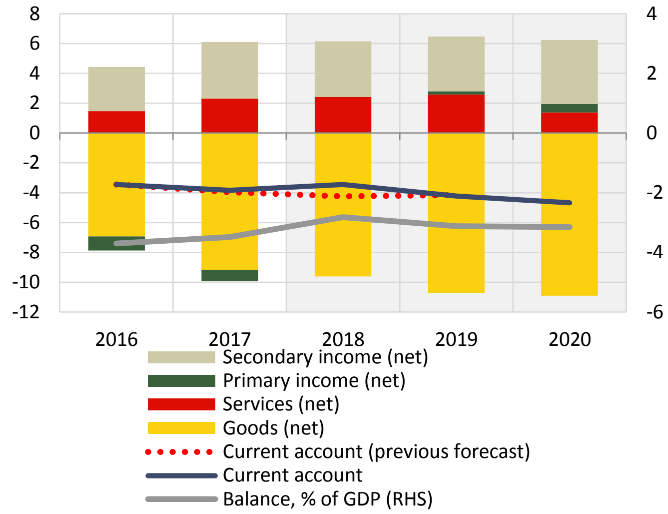
As a result, the surplus in the overall balance of payments in 2018 coupled with IMF financing will contribute to an increase in international reserves to USD 20.5 bn, or 3.7 months of future imports as of the end of 2018. However, in 2019 and 2020, the overall balance of payments is expected to run a deficit and international reserves are projected to decrease to USD 18.6 bn (3.7 months of future imports) by the end of 2020 amid peak repayments on external public debt. The forecast is contingent on key assumptions of Ukraine's continued cooperation with the IMF in 2018 under the EFF and a new lending program with the fund by 2020 (with a USD 2 bn disbursement that year). Over the forecast horizon, the funding will ensure uninterrupted access to international capital markets.

Despite an expanding trade deficit, the current account deficit in 2018–2020 will continue to hover near 3% of GDP, supported by the expected increase in remittances. In 2018-2019, imports will grow faster than exports, largely owing to strong consumer confidence amid an expansionary fiscal policy and high investment demand, particularly from the agriculture sector. Export growth is projected to accelerate in 2020, bearing the fruits of investment in prior periods, which will prevent the trade deficit from expanding further.

Goods exports are projected to grow 3.3% yoy in 2018 amid sustained favorable trade conditions and a decline in metallurgical exports by Asian producers. Grain exports are projected to grow 7.3% yoy on the back of higher crop yields in 2018. Further growth in exports in 2019-2020 will be propped up by improved efficiency in the agriculture sector and a ramping up of metallurgical exports. Exports of machinery are also expected to grow, particularly spare parts for the automobile industry after foreign-owned plants opened in Ukraine, as well as for the aviation industry following the signing of several contracts at air shows in 2017. Exports of chemicals will increase after major fertilizer producers restored production.

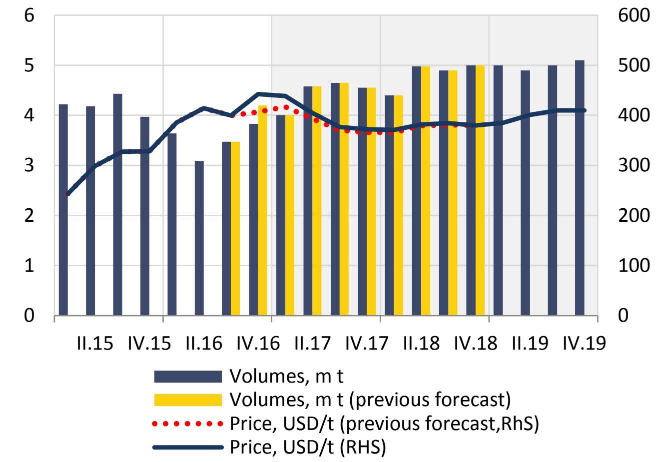
Goods imports are projected to grow 4%-6% in 2018-2020, largely due to non-energy imports, which are expected to increase around 7% annually. Consumer imports, particularly food and industrial imports, will grow, supported by social initiatives by the Ukrainian

Current Account, USD bn



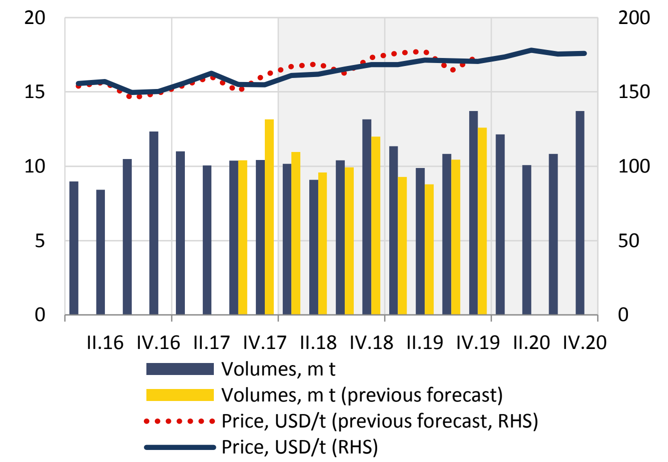
Source: NBU

Ferrous Metals Exports (four main sub-groups)



Source: NBU

Grain Exports

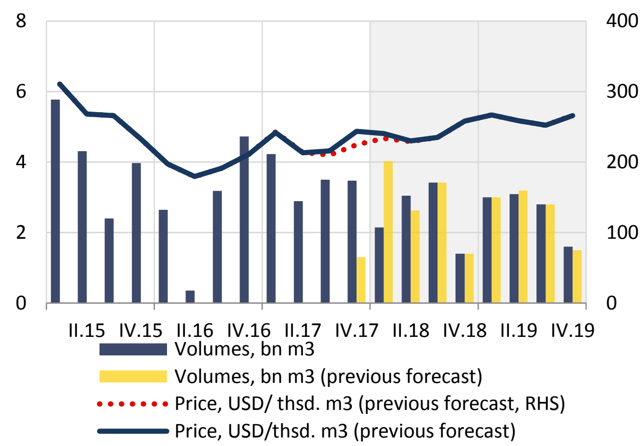


Source: NBU

government in 2018-2019. Imports of machinery are projected to grow 10%, driven by further upgrades of fixed assets in the agriculture and metals industries. Agricultural producers will increase their demand for fertilizers and crop protection agents.

nergy imports will shrink 6% yoy in 2018 as Ukraine accumulates sufficient stocks of natural gas in underground storage facilities, develops domestic gas production and introduces energy-saving technologies. As a result, gas imports will decrease to 10 bn cubic meters in 2018. Energy imports, particularly oil products and coal, will increase further, but only on the price side.

Gas Imports

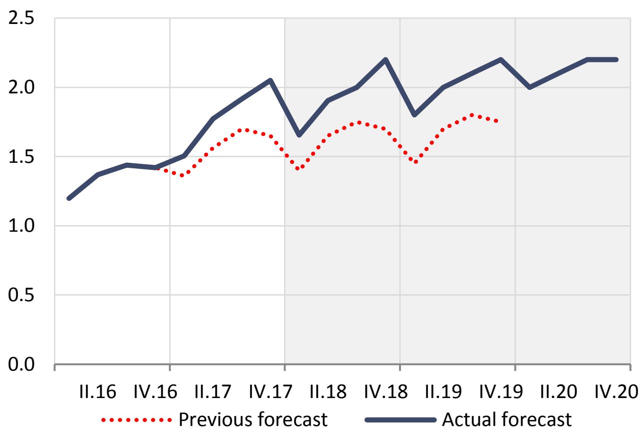


Source: NBU

The services trade balance is expected to remain in surplus in 2018-2019, close to the level in previous years. The transportation and IT services sectors will remain the main drivers of service exports. Service exports are expected to decline in 2020, mainly due to lower gas transit volumes after the current gas transit contact with PJSC Gazprom expires. At the same time, rising travel expenses and transportation costs, bolstered by a higher turnover of goods, will push service imports up further.

Remittances to Ukraine will continue growing in 2018-2020 as the number of Ukrainian migrant workers to EU countries increases, especially as Poland and the Czech Republic have streamlined employment permit application procedure.[60]

Private Remittances to Ukraine, USD bn



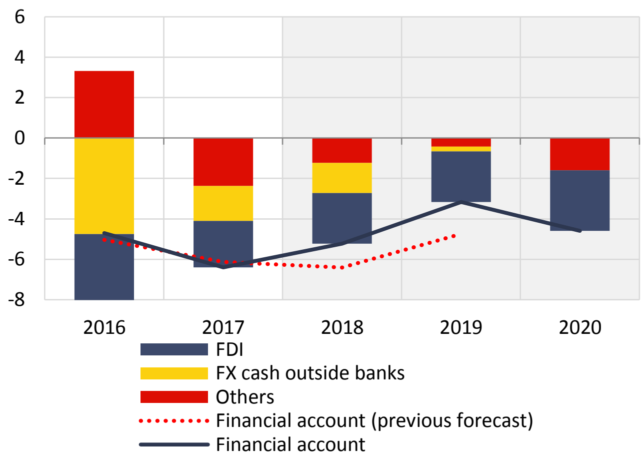
Source: NBU

Dividends repatriation will remain at USD 2 bn per year as capital restrictions are gradually liberalized. At the same time, interest payments will fall slightly as both external public and private debt is reduced.

Net financial account inflows are projected to come in at USD 5.2 bn in 2018, but should drop slightly in 2019-2020 as a large portion of public debt is due for repayment. Looking ahead, a gradual increase in FDI and a recovery of debt inflows to the private sector will be offset by a slower rate of decline in FX cash outside banks. However, the NBU expects that an improvement of the investment climate will help increase in FDI inflows to USD 2.5 bn in 2018-2019 and USD 3 bn in 2020.

Although Ukraine is gradually restoring its access to global capital markets, the long-term external private debt rollover rate should fall to a projected 54% in 2018 as state-owned enterprises (SOEs) repay debt. However, net debt inflows are expected to recover in 2019-2020, both in the form of long- and short-term borrowings. The decline of FX cash outside banks is expected to slow in 2018–2020 and come to a halt in 2020.

Financial Account, USD bn



Source: NBU

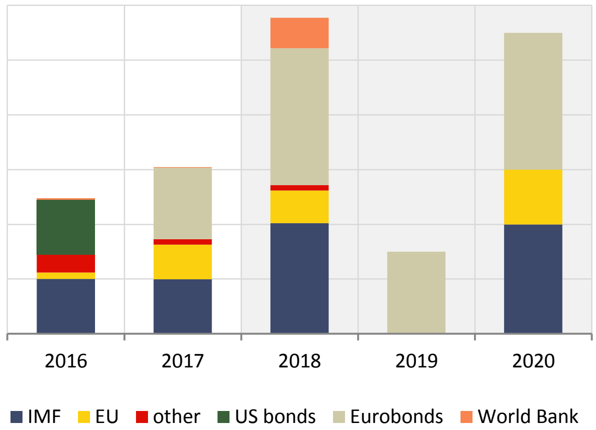
The government's heavy debt repayment schedule in 2019-2020 will create the need for additional borrowings to maintain international reserves at appropriate levels. In 2018, Ukraine expects to secure another IMF tranche of USD 2.0 bn and loans from the EU and the World Bank (USD 0.6 bn each). Following the successful placement of USD 3 bn in Eurobonds in 2017, the government plans to continue issuing Eurobonds in 2018-2020 (USD 2.5 bn in 2018, USD 1.5 bn in 2019, and USD 2.5 bn in 2020). Moreover, Ukraine expects to receive disbursements in 2020 under new lending programs with the IMF (USD 2 bn in disbursements in 2020) and EU (USD 1 bn).

The overall balance of payments and net inflows of IMF EFF financing in 2018 will help boost international reserves to USD 20.5 bn, or 3.7 months of future imports, by the end of 2018. That

[60] Remittances in 2017 were adjusted to include the revised number of migrant workers in Poland.

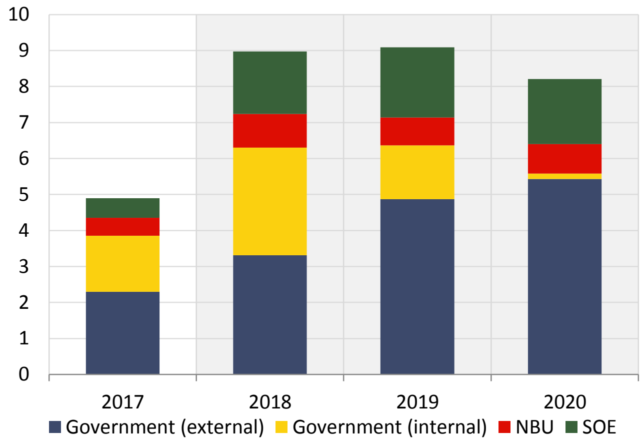
amount corresponds to 70% of the IMF's composite measure for reserve adequacy. At the same time, international reserves are forecasted to decrease to USD 18.6 bn, or 3.0 months of future imports, by late 2020 as Ukraine hits the peak of public debt repayments.

Official Financing and Eurobond Placement, USD bn



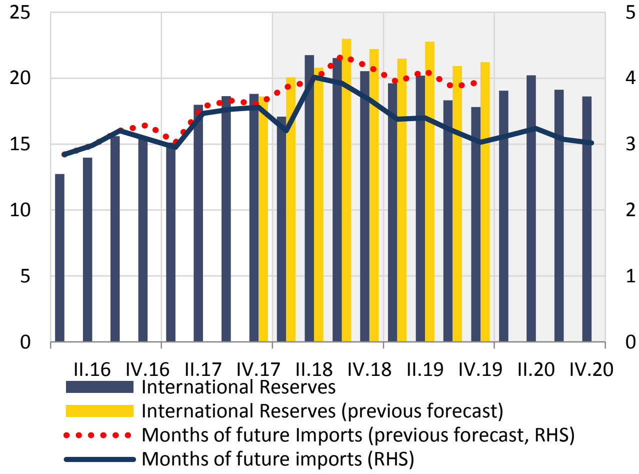
Source: NBU

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 to pursue a tight monetary policy over the forecast horizon. The key policy rate will remain at a sufficiently high level to bring inflation back to its target. The actual rate will be determined by inflationary risks, macrofinancial stability, and inflation expectations dynamics.

With the banking sector continuing to see a structural surplus of liquidity, the NBU's certificates of deposit will remain the main instrument for regulating interbank interest rates. However, a reduction of the structural liquidity surplus in the second half of the year may lead some banks to seek refinancing loans. Demand from banks for the NBU's certificates of deposit and refinancing loans in 2019-2020 will depend on the banking system's structural liquidity position.

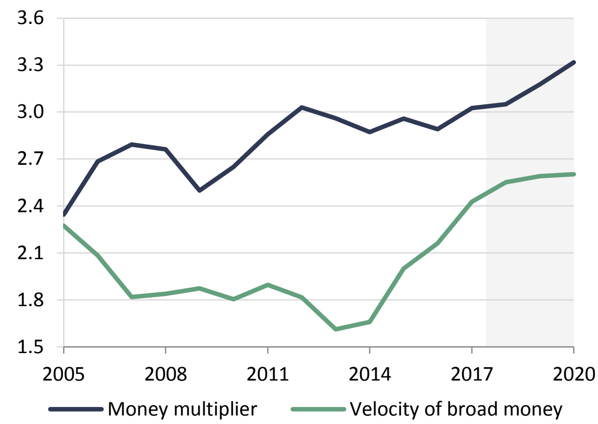
Deposit inflows will continue throughout 2018, both in the national currency and foreign currencies. Deposits are expected to increase faster (11% yoy) than cash outside banks (7%). The money supply is forecasted to grow 10% yoy. The gradual development of the banking system and an increase in cashless payments will boost the money multiplier. Although borrower solvency is improving, the revival in lending activity will be held back by high interest rates and institutional risks.

The monetary base is expected to grow approximately 9%, driven by cash and funds held in correspondent bank accounts.

With a structural surplus of liquidity in 2018, the NBU's issuance of certificates of deposit will remain the main instrument for regulating interbank interest rates. However, the structural liquidity may decrease in the second half of the year as government accounts seasonally accumulate funds, which may lead some banks to seek refinancing loans. In the future, the structural liquidity position will be determined by demand for cash, the impact of fiscal factors, and the NBU's purchases of foreign currency to build up international reserves. Demand from banks for the NBU's certificates of deposit and refinancing loans in 2019-2020 will depend on the banking system's structural liquidity position: if a deficit arises, refinancing loans will be the main instrument for regulating interest rates.

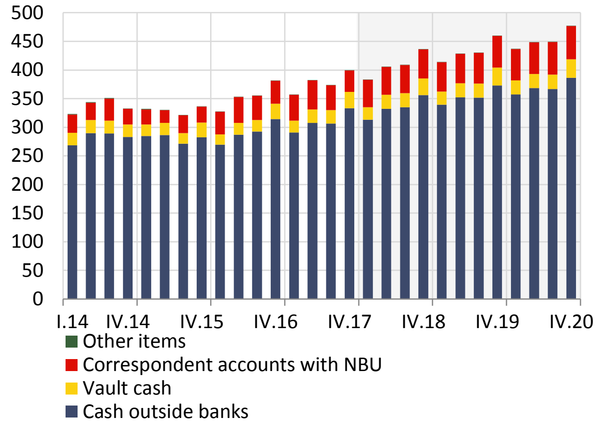
Over the forecast horizon, the central bank will steer monetary policy to bringing headline inflation to its target range in 2019 and towards the midpoint of the target range, the medium-term inflation target of 5%, in 2020. A high key policy rate will be the cornerstone of the tight monetary conditions in a bid to spur disinflation and bring inflation back to its target range in mid-2019. In the future, the monetary policy will be tight enough to keep inflation in-line with its target. The implementation of this scenario will depend on macrofinancial stability risks, continued cooperation with the IMF, prudent fiscal policy, and the speed at which inflation expectations improve.

Money Multiplier and Money Velocity



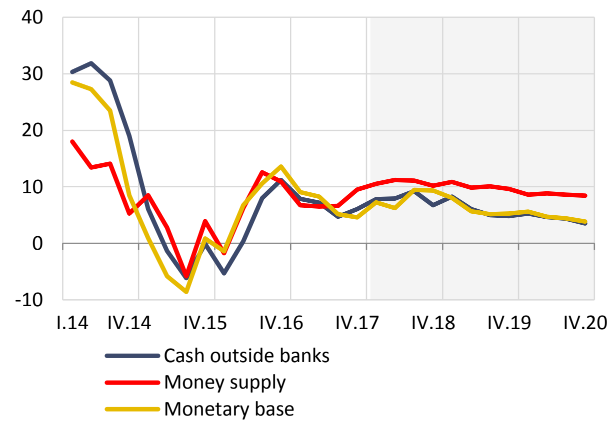
Source: NBU

Monetary Base by Components, UAH bn



Source: NBU

Monetary Indicators, % yoy



Source: NBU

3.6. RISKS TO THE FORECAST

The NBU sees several risks to its baseline forecast. The main economic risk relates to the lack of progress in the country's structural reform agenda. A sufficient pace of reforms is needed to preserve macrofinancial stability and continue cooperation with the IMF as Ukraine faces large external debt payments in the coming years. A premature termination of the IMF program could impede Ukraine’s access to international financial markets, which would fuel a currency depreciation, worsening inflation and depreciation expectations, and increase the likelihood of defaulting on external sovereign debt, with the peak of Ukraine’s payments coming in 2019.

Inflationary pressures may be aggravated by the government’s expansionary fiscal policy, especially if social spending grows faster than total labor productivity. In that event, the NBU would have to tighten monetary conditions beyond the level currently built into the baseline scenario.

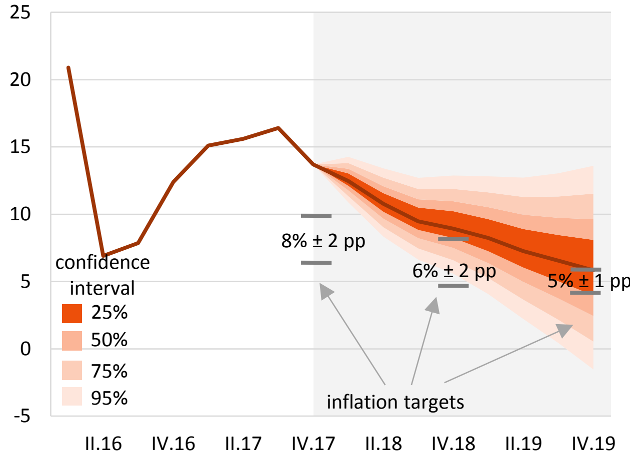
The situation in eastern Ukraine remains a source of uncertainty. Any favorable developments would decrease risk premiums, which would improve investment attractiveness, boost capital inflows, accelerate economic growth, and drive an appreciation of the hryvnia. Any escalation of hostilities would worsen expectations and bring negative social and economic consequences.

Another source of uncertainty for inflation is related to the magnitude and time frames for an increase in administered tariffs (particularly gas, heating, and electricity for households), which could lead inflation to deviate from the projected trajectory of the baseline scenario in either direction in the short-term. Food supply shocks related to the harvest and food prices on global markets will yield symmetric effects over the forecast horizon.

Ukraine’s external risks are largely related to global commodity prices. If commodity prices fall, Ukraine’s export revenues would diminish, which would affect the current account, fuel depreciation pressure on the hryvnia and increase inflation pressures. At the same time, the weaker competitiveness of domestic export-oriented enterprises and their declining effective demand would weigh on economic activity. In this case, there is an elevated risk of inflation deviating from the target path and GDP growing slowly. The NBU would have to maintain tight monetary conditions to smooth out the adverse impact of external shocks.

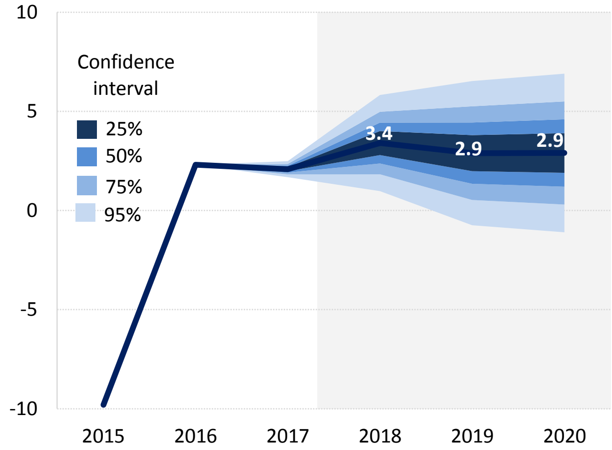
An increase in external demand and global prices for Ukrainian exports would boost GDP growth, strengthen the hryvnia, and will lead to a faster deceleration in inflation. That scenario would allow the NBU to reduce the key policy rate faster than currently foreseen in the baseline scenario.

CPI Growth Forecast and Targets, % yoy



Source: NBU

Real GDP Growth, % 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.

Macroeconomic forecast (January 2018)

Indicators	2014	2015	2016	2017	2018						2019						2020				
				оцінка	I	II	III	IV	current forecast	forecast 10.2017	I	II	III	IV	current forecast	forecast 10.2017	I	II	III	IV	current forecast
REAL ECONOMY, % yoy, unless otherwise stated																					
Nominal GDP (UAH bn)	**1587**	**1989**	**2383**	**2930**	677	761	954	1002	**3394**	3270	762	850	1061	1106	**3779**	3628	834	926	1157	1200	**4117**
Real GDP	**-6.6**	**-9.8**	**2.3**	**2.1**	2.6	3.0	3.8	4.0	**3.4**	3.2	3.7	3.2	2.7	2.2	**2.9**	3.5	2.3	2.7	3.0	3.4	**2.9**
GDP Deflator	**15.9**	**38.9**	**17.1**	**20.5**	13.0	12.5	11.5	11.0	**12.0**	10.0	8.5	8.2	8.1	8.0	**8.2**	7.2	7.0	6.0	5.5	5.0	**5.9**
Consumer prices (period average)	12.1	48.7	13.9	14.5	-	-	-	-	11.0	9.1	-	-	-	-	7.3	5.8	-	-	-	-	5.7
Producer prices (period average)	17.1	36.0	20.5	26.3	-	-	-	-	15.2	12.0	-	-	-	-	8.6	8.7	-	-	-	-	8.1
Consumer prices (end of period)	**24.9**	**43.3**	**12.4**	**13.7**	12.5	10.8	9.5	8.9	**8.9**	7.3	8.2	7.3	6.5	5.8	**5.8**	5.0	5.6	5.8	5.4	5.0	**5.0**
Core inflation (end of period)	22.8	34.7	5.8	9.5	9.3	9.6	9.4	8.2	8.2	5.5	7.3	6.6	5.6	4.8	4.8	2.9	4.5	4.4	3.8	3.2	3.2
Non-core inflation (end of period)	26.8	50.9	18.3	19.4	16.7	12.4	9.6	9.9	9.9	9.8	9.6	8.2	7.8	7.2	7.2	7.9	7.1	7.7	7.5	7.4	7.4
raw foods (end of period)	23.2	40.7	1.2	23.5	19.7	7.3	3.6	4.6	4.6	4.2	5.4	4.5	4.0	4.0	4.0	2.5	3.8	3.6	3.1	2.9	2.9
administrative prices (end of period)	29.0	64.4	34.6	16.1	12.7	14.0	12.5	13.8	13.8	13.8	13.3	11.2	10.8	9.6	9.6	11.6	9.5	10.8	10.6	10.6	10.6
Producer prices (end of period)	**31.8**	**25.4**	**35.7**	**16.6**	14.8	19.0	15.1	9.8	**9.8**	9.8	8.5	7.8	8.8	9.0	**9.0**	8.5	7.8	7.9	7.9	8.4	**8.4**
FISCAL SECTOR																					
Consolidated budget, balance	**-72.0**	**-30.9**	**-54.8**	**-42.1**	-	-	-	-	**-82.2**	-74.1	-	-	-	-	**-98.6**	-89.4	-	-	-	-	**-83.2**
% of GDP	-4.5	-1.6	-2.3	-1.4	-	-	-	-	-2.4	-2.3	-	-	-	-	-2.6	-2.5	-	-	-	-	-2.0
Public finance overall balance (IMF method)	**-70.3**	**-17.0**	**-50.3**	**-39.3**	-	-	-	-	**-82.8**	-74.8	-	-	-	-	**-96.9**	-93.5	-	-	-	-	**-81.0**
% of GDP	-4.4	-0.9	-2.1	-1.3	-	-	-	-	-2.4	-2.3	-	-	-	-	-2.6	-2.6	-	-	-	-	-2.0
General government and Naftogaz financing, UAH bln.	-157.6	-37.5	-50.3	-39.3	-	-	-	-	-82.8	-74.8	-	-	-	-	-96.9	-93.5	-	-	-	-	-81.0
General government and Naftogaz financing, % of GDP	-9.9	-1.9	-2.1	-1.3	-	-	-	-	-2.4	-2.3	-	-	-	-	-2.6	-2.6	-	-	-	-	-2.0
BALANCE OF PAYMENTS (NBU methodology)																					
Current account balance, USD bn	-4.6	-0.2	-3.4	-3.8	-1.1	0.0	-1.9	-0.5	-3.5	-4.2	-1.3	-0.2	-1.7	-0.9	-4.2	-4.2	-1.3	-0.4	-1.7	-1.3	-4.7
Financial account, USD bn	9.1	-0.6	-4.7	-6.4	0.2	-3.2	-2.2	0.0	-5.2	-6.4	-0.9	-1.4	-0.4	-0.5	-3.2	-4.7	-2.0	-1.6	-0.2	-0.8	-4.6
BOP overall balance, USD bn	**-13.3**	**0.8**	**1.3**	**2.6**	-1.2	3.2	0.3	-0.5	**1.8**	2.2	-0.4	1.1	-1.3	-0.5	**-1.1**	0.6	0.8	1.2	-1.5	-0.5	**-0.1**
Gross reserves, USD bn	**7.5**	**13.3**	**15.5**	**18.8**	17.1	21.8	21.5	20.5	**20.5**	22.2	19.6	20.2	18.3	17.8	**17.8**	21.2	19.0	20.2	19.1	18.6	**18.6**
Months of next year's imports	**1.8**	**3.1**	**3.2**	**3.6**	3.2	4.0	3.9	3.7	**3.7**	4.2	3.4	3.4	3.2	3.0	**3.0**	3.9	3.1	3.2	3.1	3.0	**3.0**
Export of goods, % yoy	-14.5	-29.9	-5.3	18.8	0.5	6.6	4.5	1.9	3.3	3.3	3.0	4.9	6.4	6.1	5.1	3.7	7.8	4.6	6.1	6.4	6.2
Import of goods, % yoy	-29.0	-32.6	4.2	21.1	4.0	4.7	7.1	-0.7	3.6	4.2	6.7	6.4	4.6	7.5	6.3	2.5	7.4	4.0	4.5	5.7	5.4
MONETARY ACCOUNTS (Percentage changes from end of previous year)																					
Base money, %	**8.5**	**0.8**	**13.6**	**4.6**	-4.1	1.6	2.4	9.3	**9.3**	6.2	-5.2	-1.8	-1.5	5.3	**5.3**	5.0	-4.9	-2.3	-2.3	3.8	**3.8**
Broad money (current exchange rate), %	**5.3**	**3.9**	**10.9**	**9.5**	-1.6	1.6	3.4	10.2	**10.2**	9.1	-1.0	1.3	3.4	9.6	**9.6**	9.8	-1.9	0.5	2.4	8.4	**8.4**
Velocity of broad money (end of year)	**1.66**	**2.0**	**2.2**	**2.4**	-	-	-	-	**2.6**	2.5	-	-	-	-	**2.6**	2.6	-	-	-	-	**2.6**