NATIONAL BANK OF UKRAINE

INFLATION REPORT

October 2016

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 27 October 2016.[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 26 October 2016 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. 373-рш of 27 October 2016 *On the Approval of the Inflation Report.*

CONTENTS

ABBREVIATIONS AND ACRONYMS

ATO	Anti-Terrorist Operation
BoP	Balance of Payments
BPM5	IMF Balance of Payments Manual (5th edition)
BPM6	IMF Balance of Payments And International Investment Position Manual (6th edition)
CDs	Certificate of Deposit(s)
CIS	Commonwealth of Independent States
Core CPI	Core Consumer Price Index
CPI	Consumer Price Index
DGF	Deposit Guarantee Fund
ECB	European Central Bank
EFF	Extended Fund Facility
EU	European Union
FAO	Food and Agriculture Organization
Fed	Federal Reserve System
GDP	Gross Domestic Product
GVA	Gross Value Added
IIF	Institute of International Finance
IKSO	Index of Key Sectors Output
ILO	International Labour Organization
IOM	International Organization for Migration
IMF	International Monetary Fund
MFU	Ministry of Finance of Ukraine
MSCI	Morgan Stanley Capital International
MTP	Main Trading Partner
NBU	National Bank of Ukraine
NEER	Nominal Effective Exchange Rate
OPEC	Organization of the Petroleum Exporting Countries
PPI	Producer Price Index
REER	Real Effective Exchange Rate
RF	Russian Federation
SESU	State Employment Service of Ukraine
SFSU	State Fiscal Service of Ukraine
SSSU	State Statistics Service of Ukraine
SSC	Social Security Contribution
Treasury	State Treasury Service of Ukraine
USA	United States of America
VAT	Value-Added Tax
VRU	Verkhovna Rada of Ukraine
WTO	World Trade Organization
OECD	Organisation for Economic Co-operation and Development
bn	billion
UAH	Ukrainian hryvnia
EUR	euro
USD	US dollar
RUB	Russian ruble
ppts	percentage points
bp	basis points
M0	cash outside banks
M3	Broad money
USD/bbl	US dollars per barrel
USD/MT	US dollars per metric ton
USD per EUR	exchange rate of euro to US dollar
UAH per USD	exchange rate of Ukrainian hryvnia to US dollar
RUB per USD	exchange rate of Russian ruble to US dollar
y-o-y	year-over-year, compared to the same time period in the previous year
m-o-m	month-over-month, compared to the previous month
q-o-q	quarter-over-quarter, compared to the previous quarter
y-t-d	year to date, since the beginning of the year
pa	per annum
sa	Seasonally adjusted
LT	Long-term

1. SUMMARY

Inflation pressure continues to ease

The rapid decrease in annual headline inflation that had continued since mid-2015 slowed down in Q3 2016, as expected. Consumer prices rose by 7.9% y-o-y in September 2016, which was in line with the NBU's previous projections of inflation returning to 12% by the end of 2016.

In the meantime, the underlying inflation pressure, which reflects fundamental factors, eased further and even slightly faster than expected. This was evidenced by **core inflation** moderating to 6.3% y-o-y in September 2016 thanks to declining inflation expectations amid prudent fiscal and monetary policies.

Second-round effects of falling prices for some unprocessed food items also had a significant bearing on core inflation. In addition to a higher domestic supply, downward pressure on Ukrainian food inflation also came from descending global grain prices due to this year's record global harvest. At the same time, administered and fuel prices have accelerated as predicted, driven by increases in utility tariffs and the volatility of global oil prices, respectively.

Economic activity in Ukraine's main trading partners showed signs of strengthening in Q3 2016. However, **global price conditions** became less favorable for Ukrainian exporters, particularly due to a significant drop in prices for grains and oil crops. This, alongside a seasonal increase in the demand for foreign currency, reinforced by uncertainty about disbursement of official financing by the IMF, has generated depreciation pressure on the hryvnia. As before, the NBU did not counteract the dominant trends in the FX market. However, it smoothed out sharp exchange rate fluctuations through FX interventions. NBU actions and improved market sentiments backed by the IMF decision to disburse the next tranche eased pressure on the hryvnia from mid-September. Overall, the exchange rate developments did not incur risks for inflation to exceed the tolerance band around the year-end target.

Labor market conditions have been gradually improving. However the apparent mismatch between the supply of and demand for labor impeded the scope of the improvement. Given disinflation progress, real wages rose at a high pace and real disposable income also rebounded to a positive annual growth rate. However, taking into account further increases in utility prices and the high **unemployment rate**, demand-pull pressure on inflation remained subdued.

Given the strong fiscal consolidation that took place in 2014-2015, the current year saw some relaxation due to a decrease in the social security contribution rate. Overall, **fiscal policy** was aimed at strengthening public finances and decreasing quasi-fiscal expenses. These efforts helped retain a primary state budget surplus and a primary general government budget surplus.

Inflation forecast remains unchanged

The projections for year-end **headline inflation** remains unchanged and in line with **inflation targets**: 12% for 2016, 8% for 2017, and 6% for 2018.

The supply-side effects that dampened the raw food price increase in the current year are fading out. However, prices are expected to reflect an unwinding of this factor next year. Core inflation will level off at around 5%-6%, driven by the second-round effects of falling raw food inflation, slower growth in imported prices due to the low volatility of the hryvnia exchange rate, and a further decrease in inflation expectations. Increases in utility tariffs will contribute to inflation reaching its target by the end of 2016. At the same time, a deceleration in administered price growth will be the key factor ensuring a decline of headline inflation in line with the 2017 and 2018 targets.

Investments and private consumption are the main drivers of economic growth

In Q2 2016, **real GDP growth** accelerated to 1.4% y-o-y. As expected, economic recovery was spurred by investment demand. A strong rise in investment was underpinned by improved financial results of corporations, recovering business confidence, and capital expenditures from the consolidated budget.

Households' consumption grew for the first time in a long period, having been supported not only by an increase in household income, but also by the use of their savings from previous periods. Unlike earlier, net exports made a significant negative contribution to real GDP growth in Q2 2016.

In Q3, available economic activity indicators for certain sectors suggest that real GDP growth did not change considerably (1.6% y-o-y) from a quarter earlier. Freight transportation difficulties in the east of Ukraine and Russia's tightening of transit restrictions weighed on economic recovery. At the same time, a higher yield of agricultural crops ensured a better harvest.

Also, the contribution of net exports to GDP growth likely remained negative. The **current account** recorded a USD 1.7 billion deficit in Q3, primarily due to a higher than expected merchandise trade deficit. The decrease in export of goods in annual terms deepened in response to a worsened external environment. At the same time, annual growth in merchandise imports resumed amid higher purchases of natural gas and stronger domestic demand. In addition, a primary income deficit was reported in Q3, as was anticipated, reflecting the scheduled interest payments on restructured Eurobonds and the lifting of restrictions on the repatriation of dividends accrued in 2014-2015.

In Q3 2016, the **financial account** net inflows grew as forecast, primarily due to the resumption of official financing. Although the decline in FX cash outside banks slowed down significantly, net borrowings of the private sector remained almost unchanged compared with the previous quarter. This was mainly attributed to higher borrowings of short-term loans by the real sector. Given the overall balance of payments surplus (USD 600 million) and the disbursement of the third tranche under the IMF EFF program (USD 1.0 billion), **international reserves** increased to USD 15.6 billion (or 3.7 months of future imports) as of 1 October 2016.

The Ukrainian economy will continue recovering

The forecast for real GDP growth in 2016 remained unchanged at 1.1%. In the medium-term, the economy will grow at slightly lower rates than we predicted earlier: currently 2.5% in 2017 and 3.5% in 2018. The forecast revision reflected higher negative contributions of net exports while domestic demand is forecast to remain relatively strong.

Downward revision of the medium-term outlook for Ukraine’s exports mainly reflected the less favorable **external environment** as compared with the assumptions underlying the previous forecast, as a result of a sharp drop in global prices for grains and oil crops.

Over the medium-term, **private consumption** is expected to recover moderately owing to realization of deferred demand and growing household income.

As **investment activity** is projected to remain buoyant over the forecast horizon, it will facilitate a respective increase in investment imports, particularly machinery and equipment, and primarily determine a negative contribution of net exports.

A revival of lending activity will become an additional factor driving domestic demand thanks to falling interest rates in the economy.

The narrowing of the negative output gap since H2 2015 indicated the economy had started to rebound gradually. The output gap will continue closing, reflecting lower risks of military conflict escalation and a corresponding increase in economic agents’ investment appetite and long-term consumer decisions. However, it will remain negative over the forecast horizon, signaling demand-pull inflation pressure to remain subdued.

The current account deficit forecast for 2016 was worsened to USD 2.4 billion due to less favorable terms of trade and a more rapid recovery of investment demand. Imports of services are also expected to accelerate. However, their impact will be offset by a higher than previously expected increase in private transfers. Robust investment demand and strengthening consumer demand will cause the current account deficit to widen in 2017-2018.

In 2016, the **financial account** net inflows and an overall balance of payments surplus will be primarily backed by a considerable decline in FX cash outside banks. In 2017-2018, this source will not be dominant with foreign investment and debt inflows to the private sector taking the lead. Simultaneously, the public sector will remain a net recipient of foreign financing. Therefore, thanks to an overall balance of payments surplus (USD 1.7 billion) and the IMF’s loan disbursements, gross international reserves will increase to USD 17.5 billion in 2016, making them sufficient to cover 4.1 months of future imports. Ukraine will continue replenishing its international reserves over the next few years.

Fiscal policy is projected to ease over the forecast horizon. The structural consolidated budget deficit will gradually widen. The primary consolidated budget surplus is expected at about 2% of GDP due to a large share of debt service outlays in total government expenditures. Meanwhile, the pressure of quasi-fiscal needs on public finances will ease significantly thanks to the improved financial position of PJSC Naftogaz of Ukraine and lower banking sector financing needs. Given the authorities’ efforts, the general government fiscal deficit is projected to stay within 3% of GDP.

Monetary policy easing continues

Given a steady decline in inflationary pressure amid a further alleviation of risks to price stability, the NBU continued to ease its monetary policy. In Q3 2016, the regulator cut its **key policy rate** twice. From 28 October 2016, it was set at 14.0%.

The key policy rate cuts and the buildup of market expectations of further policy easing facilitated a decrease in **market interest rates**. Accompanied by a gradual revival of economic activity and an increase in households’ spending on durable goods, it fostered an increase in demand for loans. However, **lending activity** remained weak.

Despite heightened exchange rate volatility and depreciation pressure on hryvnia in August-September, the overall situation in the FX market remained rather favorable over the last two quarters. As a result, the NBU continued relaxing FX market restrictions in Q3 2016.

Balance of risks: inflation targets will be achieved

The risks for further inflation developments are tilted to the upside this year and are symmetrical on the longer forecast horizon. However, headline inflation will remain within the target band of 12% +/- 3 ppts. Deviations from the mid-range value (12%) may be caused by short-term supply shocks. Due to the suspension of state price regulation for select socially sensitive products, administered prices may shoot beyond estimations. A faster and larger in magnitude upturn in raw food prices compared with the baseline scenario pose an upside risk for the inflation forecast in the next few years. This may be mitigated by either weaker consumer demand or more favorable external conditions.

In the longer term, external support of reforms, lack of adverse shocks in external markets, de-escalation of hostilities in the east of Ukraine and, consequently, further improvements in inflation expectations will be important preconditions for reducing inflation to the set targets.

Otherwise, the risk premium will increase, as well as currency depreciation and additional inflation pressures. Hence, ensuring a return of inflation to its targeted level will require tighter monetary policy than in the baseline scenario.

Alternatively, a rapid rise in world commodity prices, stronger foreign demand for Ukrainian goods, or faster reforms may become **positive shock**. Under such conditions, growing economic activity will be accompanied by strengthening of the hryvnia thanks to higher export proceeds and capital inflows under the financial account. This may lead to strengthening demand pressure on prices, but effects from a stronger hryvnia will be more significant. Under this scenario, the NBU will be able to lower its key policy rate faster than in the baseline scenario, thus providing additional impetus to the recovery of economic activity.

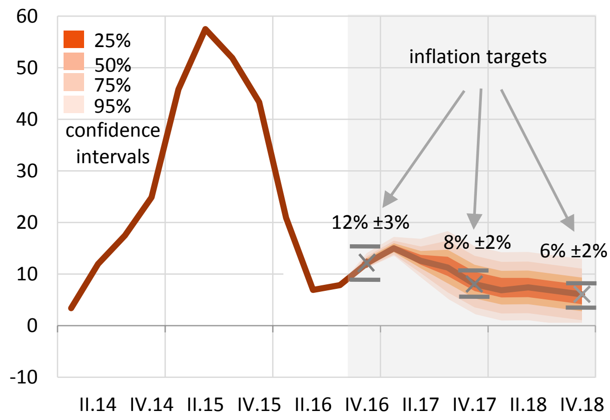
A recent government initiative to raise the minimum wage more than twofold from the current level gives an important uncertainty to the forecast. As the measure was announced on just the eve of the NBU's macroeconomic forecast approval, the effects of this initiative's implementation will be incorporated in the next Inflation Report.

Realization of the above-mentioned and other risks during the forecast horizon may cause actual inflation to deviate from the target path, prompting a relevant NBU response.

Monetary policy will be eased further, provided the inflation targets are attainable

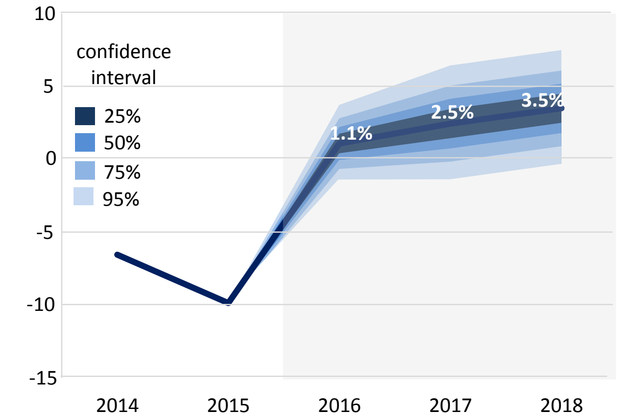
Should the situation evolve according to the NBU baseline macroeconomic scenario, i.e., the risks for price stability further abate and inflation expectations improve, the NBU will continue easing **monetary policy**. Consequently, this will facilitate a gradual reduction in market interest rates. A trend towards monetary sector stabilization will support moderate inflation, which will be in line with the targets, and promote further economic recovery.

CPI Growth Forecast and Targets, % y-o-y



Source: NBU

Real GDP Growth, % y-o-y



Source: NBU

2. CURRENT ECONOMIC SITUATION

2.1. EXTERNAL ENVIRONMENT

The weighted average of annual growth rates of Ukraine's main trading partners (MTP), except for Russia, decreased in Q2 2016 due to weaker economic activity in the euro area, Turkey, and India. At the same time, CEE and CIS countries that are included in the calculation of the index saw a significant acceleration in economic growth. In Q3 2016, economic performance of MTPs improved, according to the available data.

However, the pricing environment for Ukrainian exporters worsened in the quarter under review. The worsening mainly reflected the developments of steel, grain, and oilseed prices . In particular, following gains early in the quarter, steel prices resumed their decline due to lower demand from Turkey (due to worsened business climate), Asian, European, and the Gulf countries. Demand in certain steel markets was also adversely affected by seasonal factors. In turn, a significant drop in grain and oilseed prices resulted from high carry-over stocks from the previous year and record-high harvests this year.

In Q3, the situation in the global financial markets generally remained favorable for emerging economies. Accordingly, the risk premium for emerging markets decreased, with significant portfolio investment inflows. As a result, most EM currencies were pressured to appreciation during the quarter.

In Q2 2016, the weighted average index of annual real GDP growth of Ukraine's MTP countries (as expressed by the UAwGDP index) stayed almost at the previous quarter's level. The slowdown in Russia's GDP decline (to 0.6% y-o-y) made a significant contribution to the improved Index dynamics, despite a lower weight assigned to this country. Excluding Russia, the UAwGDP index fell, although remaining at a relatively high level. This was attributed to:

– a steady, although somewhat weaker than in the previous quarter, pace of economic growth in the Euro area (1.6% y-o-y in Q2 2016), including in the leading countries of the region - Germany and France. Growth in the Euro area was restrained by low global commodity prices, sluggish economic activity in emerging markets that are Ukraine's MTPs, the refugee crisis, as well as imbalances in the banking sector. Despite a large-scale quantitative easing program by the European Central Bank, inflation remained persistently low (0.4% y-o-y in September);

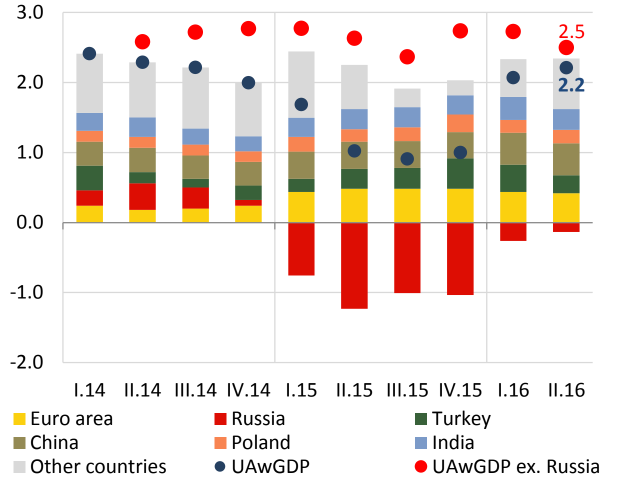
– steady economic growth in China (6.7% y-o-y in Q2). At the same time, industrial output continued to grow amid high investments in fixed assets;

– some slowdown in India, although the country was again one of the world's leaders by real GDP growth (7.1% y-o-y). A fairly weak domestic consumption in India continued to weigh on India's economy. Moderation of Turkey's economy to 3.1% y-o-y due to higher unemployment and a decline in industrial production;

– at the same time, CEE and CIS countries that are included in the calculation of the index (except for Russia) saw a significant acceleration in economic growth owing to the recovery in global commodity prices in Q2.

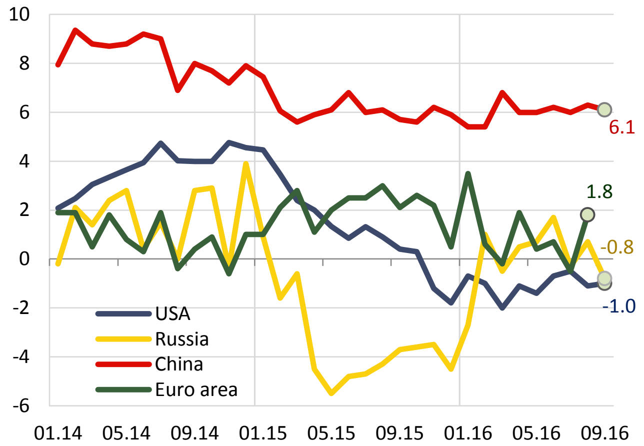
Already in Q3 2016, some of Ukraine's MTP countries demonstrated a gradual revival of economic activity. In particular, China saw a pickup in retail trade and metallurgy. Continued

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



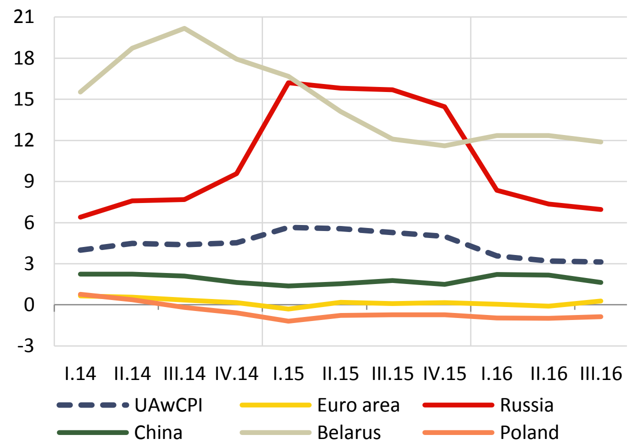
Source: NBU staff estimates (preliminary data)

Industrial Production in Selected Advanced and Emerging Economies, % y-o-y



Source: National Statistical Offices

Consumer Price Indices in Ukraine's MTP Countries, % y-o-y



UAwCPI is the index of inflation in MTP countries of Ukraine, weighted by Ukraine`s total imports of goods and services from corresponding countries.

Source: NBU staff estimates (preliminary data) growth of industrial production in the Russian Federation was propelled by a rise in the manufacturing industry and a recovery in oil and gas production. The gradual growth of industrial production in the Euro area was underpinned primarily by the respective recovery in major countries - Germany and France amid increasing foreign trade.

The weighted average index of headline inflation in Ukraine's MTPs (UAwCPI index) in Q3 2016 continued to decline despite a moderate pick-up in euro area inflation. The Index dynamics was underpinned by:

– the strengthening of emerging market currencies amid acceleration of economic activity in this group of countries; increased capital inflows on the back of US Federal Reserve's decision to postpone an interest rate hike;
– the continued deceleration of inflation in Russia amid a stronger ruble; and
– the moderation of inflation in China.

In Q3, however, the price environment for Ukrainian exporters has worsened. The Ukrainian External Commodity Price Index (ECPI) [2]decreased by 9.1% q-o-q in Q3 2016. The worsening mainly reflected the adverse developments in steel, grain, and oilseed prices.

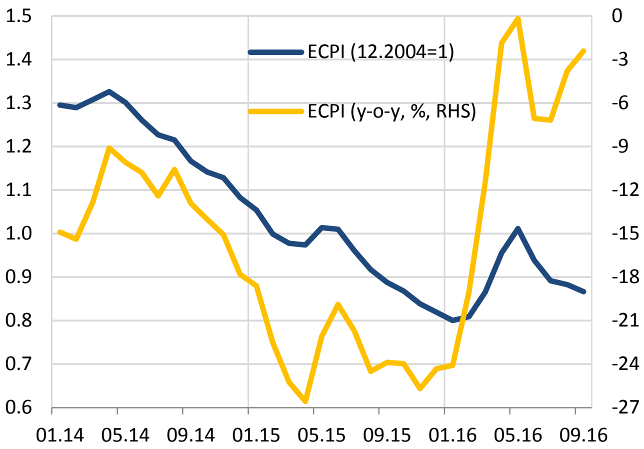
At the beginning of Q3, global prices for steel products continued to grow. The main factors behind such price dynamics were a rapid reduction in China's steel exports due to the introduction of final anti-dumping duties by the USA, India, Latin American countries, and the EU[3]. Simultaneously, the growth of Chinese companies' export quotations was mainly attributed to the strengthened domestic demand and enhanced environmental control by the Chinese authorities.

However, the upward trend of steel prices was unstable with correction occurring already in early August due to:

– the deterioration of the business climate in Turkey caused by political developments.
– It resulted in a significant drop in orders for steel beams and flat steel, as well as a reduction in foreign investments;
– a business activity slump in Asia caused by the rainy season, which lasted through the end of the quarter;
– a seasonal decline in demand for rolled steel products in Europe and some worsening of economic outlook for H2; and
– a decrease in consumption of rolled steel products in the Gulf region as the development of new oil fields has been suspended due to expectations of a further decline in oil prices amid a continued market glut.

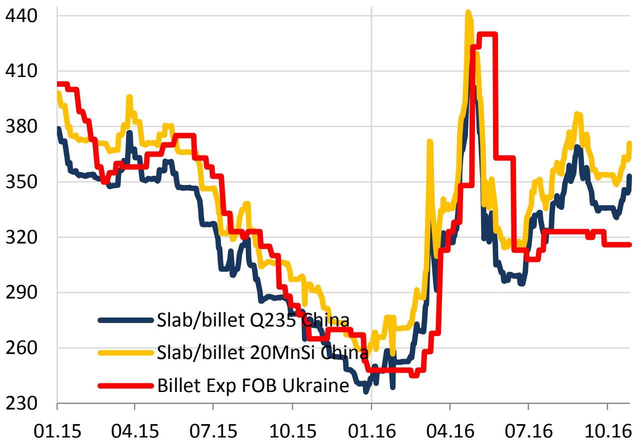
Additional factors weighing on demand in some steel and iron ore markets included celebration of the Kurban Bayrami public holiday in Muslim countries, the Mid-Autumn Festival in China (in September), and the anniversary of the founding of the People's Republic of China (the first week of October).

External Commodity Price Index (ECPI)



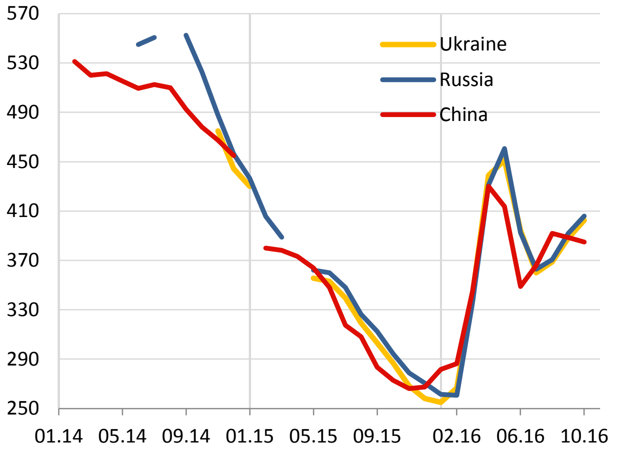
Source: NBU staff estimates

Semi-Finished Steel Prices in China and Ukraine, USD/MT, as of 26.10.2016



Source: Thomson Reuters Datastream

HRC Export Prices, USD/MT



Source: Metal Expert

[2] See more details about the ECPI index in the Macroeconomic and Monetary Review (February 2016).
[3] The EC introduced its final anti-dumping duties on Chinese high strength steel bars for the next five years, which were increased from previous 13% to 18.4%-22.5% (except for Jiangyin Xicheng Steel products, for which the rate of 9.2% was applied).

In Q3 2016, export prices for selected Ukrainian manufactured steel products (Steel Billet ExpFOB Ukraine) decreased by an average of 12.3% q-o-q.

In turn, a significant drop in grain and oilseed prices (on the average from 10% to 20% q-o-q depending on the crop) resulted from high ending stocks from the previous year and record-high harvests in the current year. Given this, in September corn prices hit their lowest level since July 2007. At the same time, the situation in global grain markets showed signs of stabilization in October.

Global oil prices remained under pressure due to oversupplied markets and overall were in line with our forecast. Oil price dynamics during the quarter under review were affected by:

– a resumption of shale oil extraction in the USA and Canada, including at oil fields suffered from wildfires;

– an increase in the average productivity of operating wells in the USA[4];

– a significant rise in crude oil stocks in the world and oil storages operating at almost full-capacity, which form deferred supply in the market;

– a rapid increase in fuel supplies from China, where local oil refinery plants were able to import oil without intermediaries (particularly from Russia and Saudi Arabia at reduced prices) and export fuels after processing;

– further ramping up of oil production and exports in Iran and Saudi Arabia; and

– moderating economic growth in the US and reduction of crude oil purchases by oil refineries as gasoline markets in the US remain oversupplied despite the peak of the driving season[5].

In addition, markets showed almost no response to such factors as supply disruptions due to strikes in Kuwait, attacks on Nigeria's oil facilities by militant groups, and the delayed resumption of operations of two main shipping terminals in Libya.

Oil prices surged in the middle of the quarter on news about the upcoming OPEC meeting to discuss a production freeze. During the meeting in Algeria at the end of September, OPEC member countries agreed to cap oil production at 32.5 million barrels per day (mbd) starting from November 2016 (currently 33.2 mbd). A further slump in prices was also prevented by:

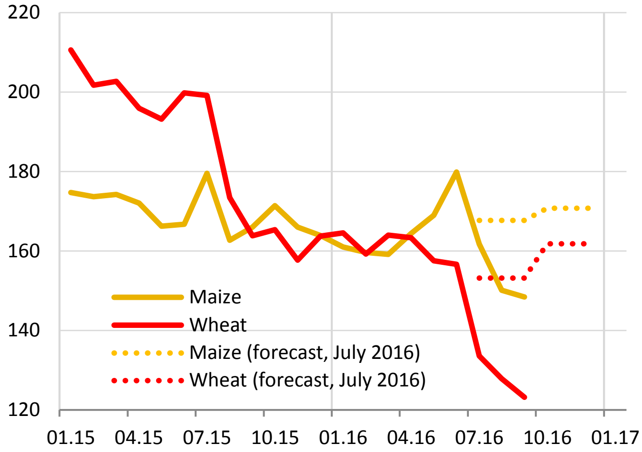
– suspension of operations in some refineries in Texas due to a series of earthquakes caused by hydraulic fracturing, the method used for the extraction of shale oil;

– signing of a joint statement between Russia and Saudi Arabia (oil production by these countries accounts for more than 21% of global consumption) on elaborating recommendations for measures and joint actions aimed at securing oil and gas market stability and predictability.

As a result, oil prices edged up in late September and early October, breaking the USD 50/bbl and remaining close to this level throughout October.

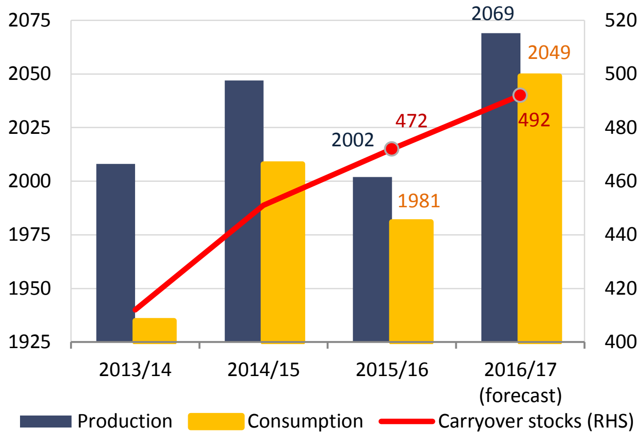
Overall, the situation in global financial markets remained favorable for emerging economies in Q3. Financial markets benefited from accommodative policies of leading central banks

World Cereal Prices, USD/MT



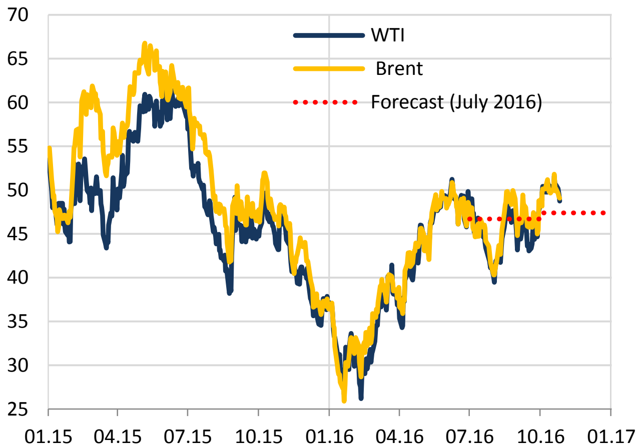
Source: IMF, NBU forecast

Forecast for World Grains Production, Consumption and Carryover Stocks*, million tons



** marketing year*
Source: International Grain Council as of 29.09.2016

Brent and WTI Crude Oil Prices, USD/bbl, as of 26.10.2016



Source: Thomson Reuters Datastream, NBU forecast

[4] According to the U.S. Department of Energy (July 2016), productivity was up by 20% m-o-m in July alone.

[5] According to the IEA, gasoline stocks in the US, even despite their slight decrease in August, amounted to 233 million barrels as of 19 August 2016, which was 8.5% higher than last year.

amid a lack of evidence of major economic and financial instability, as well as the Brexit vote shock wearing-off. The S&P 500 index grew for the fourth quarter in a row (up by 4.1% q-o-q). The Eurostoxx 50 was back on the rise after negative reactions to Britain's vote had faded away, but the growth reversed at the end of the quarter. The situation in global financial markets worsened in the last month of the quarter as a result of:

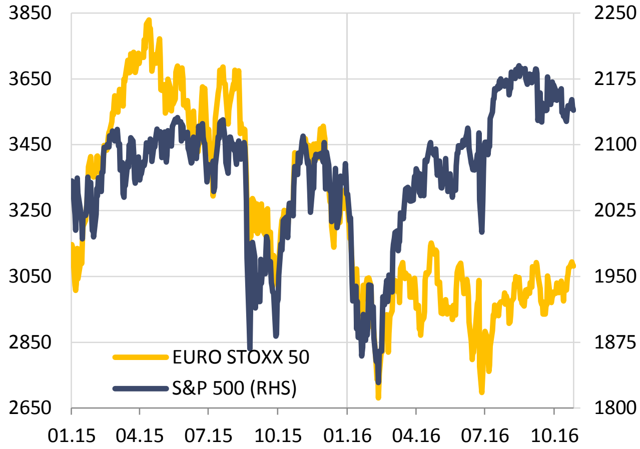
– the ECB decision in September to maintain its monetary policy measures;
– difficulties faced by the ECB and the Bank of Japan while implementing their asset purchasing programs amid diminishing supplies of bonds;
– worse than expected US economic performance, particularly regarding data on retail sales, which closely track growth of the US economy;
– significant volatility of world oil prices;
– political and geopolitical factors (the US election campaign, uncertainty as to the results of the constitutional referendum in Italy, nuclear weapons tests in North Korea); and
– mounting fears over the performance of the German banking system given the challenges faced by the country's two major banks (Deutsche Bank and Commerzbank) amid a general trend towards deteriorating profitability of European banks.

Emerging market financial assets were relatively resilient in the face of the worsening environment in global financial markets. This was evidenced by the continued positive trend of the MSCI Emerging Market index. The demand for emerging market financial assets was sustained on the back of:

– investors' expectations that leading central banks would continue monetary policy easing given that the Fed postponed its rate hike;
– interest rate differentials;
– stronger emerging market currencies; and
– differences in the pace of economic growth between emerging and advanced economies.

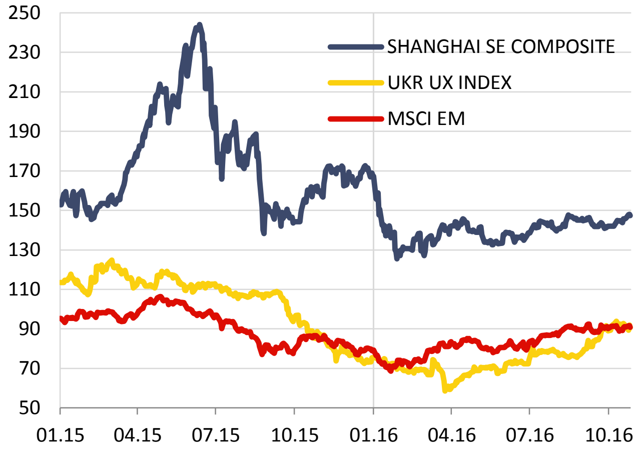
Amid the overall favorable situation in global financial markets, the risk premium for emerging markets decreased and significant inflows of portfolio investments. As a result, most EM currencies were under appreciation pressures.

World Stock Indices, as of 26.10.2016



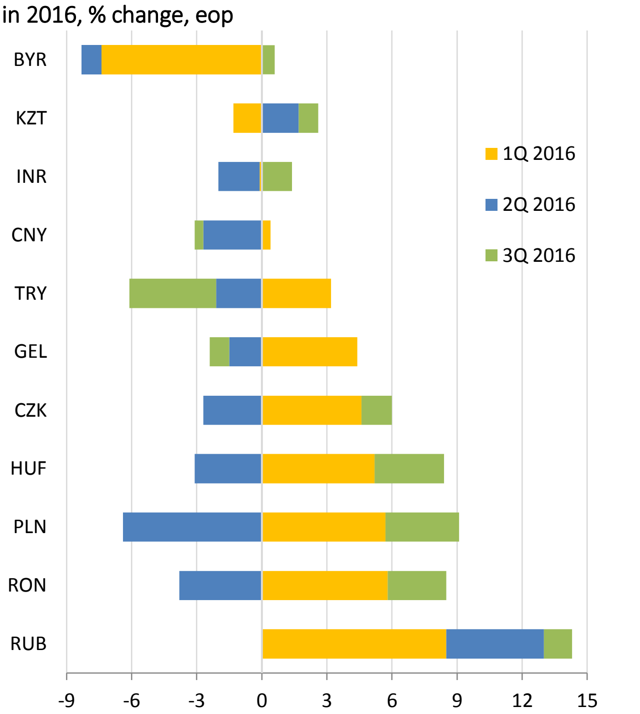
Source: Thomson Reuters Datastream

Emerging Market Stock Indices, Jan 1, 2014=100, as of 26.10.2016



Source: Thomson Reuters Datastream

Exchange Rates of Emerging Market Currencies versus US Dollar in 2016, % change, eop



Source: Thomson Reuters Datastream

Brexit: short-term risks have mitigated

As expected, a quick formation of the new UK government and wearing off of the first negative reaction to the referendum results mitigated the short-term Brexit risks despite the UK confirming its determination to leave the EU.[6] The new UK government decided not to trigger the EU exit process before 2017, until a clearly phased plan is developed to minimize the risks of changing UK-EU trade arrangements. This will allow reducing the negative impact on other trade partners as well.

At the end of August 2016, the UK Parliament prepared the briefing paper titled *Brexit: impact across policy areas*, which offered an overall view on the first steps Britain would take in its withdrawal from the EU. According to the paper:

– ‘*Trade:* options range from membership of the European Economic Area (EEA) to trading under World Trade Organization (WTO) rules. The EEA option would largely maintain access to the EU single market but would mean accepting free movement of people and contributions to the EU Budget. However, the UK would have no direct influence over EU rules. The WTO option would mean no requirement to accept free movement of people or make EU Budget contributions (the UK’s contribution was an estimated GBP 8.5 billion in 2015, around 1% of total public expenditures, and equivalent to 0.5% of GDP), but trade between the EU and UK would be subject to tariffs and other barriers to trade;

– *Foreign direct investment:* the effect on FDIs is uncertain, with much depending on the UK’s ability to improve the investment climate to compensate for its withdrawal from the EU;

– *Economic migration:* setting restrictions for migrant workers performing low-skilled labor. Employers may be able to compensate for any changes to immigration rules by recruiting more UK nationals;

– *Business and financial services:* a flexible national regulatory regime outweighs the loss of access to the Single Market. The bulk of financial services regulations currently in force derive itself from EU rules. It is likely, therefore, that a significant amount of this legislation would remain post-withdrawal;

– *Agriculture:* Brexit, in all scenarios, means a departure from the Common Agricultural Policy (CAP) and its subsidy and regulatory regime. EU farm subsidies currently make up to around 50-60% of UK farm income. That is why the UK Government has guaranteed the current level of direct subsidies until 2020 as part of the transition to new domestic arrangements;

– *Environment*: Britain may change environmental standards. However, some incentives to maintain environmental standards will remain. Moreover, as before, certain international environmental commitments and some EU standards may still apply;

– *Energy:* The UK has a competitive and open energy market, with multinational companies and investors;

– *Immigration:* The UK already maintains its own border controls and is not part of the internal border-free Schengen Area. Also, Border Force officers conduct checks on EU/EEA travelers crossing UK ports of entry;

– *Human rights:* The UK’s withdrawal from the EU would mean that the UK no longer has to comply with the human rights obligations of EU Treaties. The controversial EU Charter of Fundamental Rights would not apply, and the EU Court of Justice would not have jurisdiction over the UK. At the same time, the UK Government does not plan to withdraw from the European Convention on Human Rights;

– *Social security:* The UK will be able to impose restrictions on access to many social security benefits via immigration law by limiting access to employment and the ability of EU nationals to apply for social housing;

– *Foreign and defense policy:* The UK will coordinate its interests more closely with those of the US and not the EU. Until the UK formally leaves the EU, it will remain part of its CSDP planning structures and EU military operations. The UK’s relationship with NATO will be unaffected.’

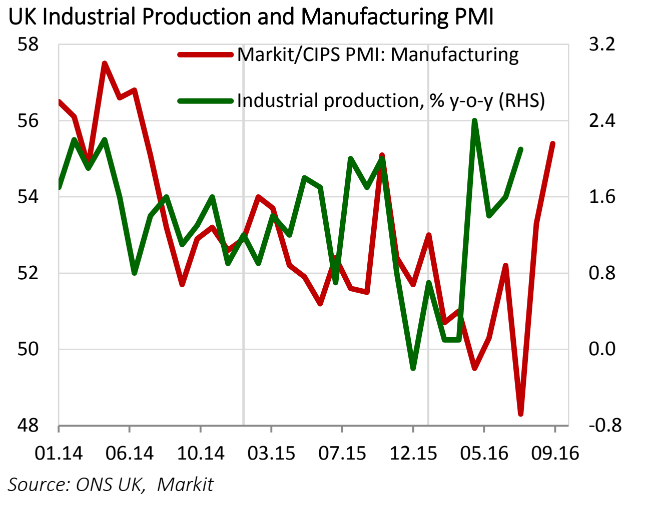
Brexit has already caused the increase in pension funds deficit in the UK due to a drop in bond yields as a result of the bank rate cut by the Bank of England; depreciation of sterling (approximately by 10%) given the uncertainty about economic outlook and the future UK relations with the EU, which restrains consumption to a certain extent.[7]. At the same time, Britain’s economy demonstrates its resilience:

– in September, the Manufacturing PMI rose to its highest level in the last two years (55.4), the second consecutive month of growth;
– Services PMI, which accounts for nearly 80% of the country’s economy, saw a record growth in August to 52.9 from 47.4 in July;
– the unemployment level continued to fall (to 4.9% in July);
– the GfK’s Consumer Confidence Index continued to grow for the second consecutive month in August and the Household Finance Index (HFI) signaled an improvement in household finances;
– real GDP growth accelerated to 2.9% y-o-y in Q2 (up from 2.1% y-o-y in Q1); and
– business investments rose by 0.5%[8] q-o-q (compared to a 0.6% q-o-q drop in Q1). Softbank, GlaxoSmithKline, and Siemens confirmed their willingness to invest capital in the UK;
– in Q2, industrial production reported the fastest growth for the last 17 years.

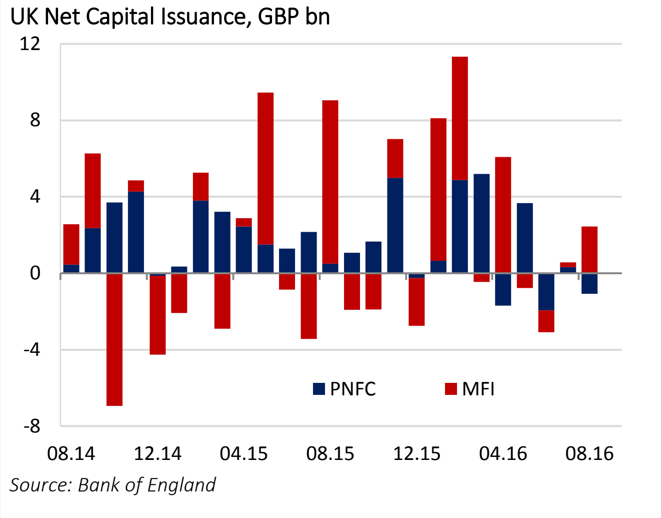
[6] For more details see a statement by David Davis, Secretary of State for Exiting the European Union, in the House of Commons on 5 September 2016 available at https://www.gov.uk/government/speeches/exiting-the-european-union-ministerial-statement-5-september-2016.

[7] According to the British Retail Consortium, retail sales dropped by 0.3% y-o-y in August;

[8] Seasonally adjusted indicator.



Source: ONS UK, Markit

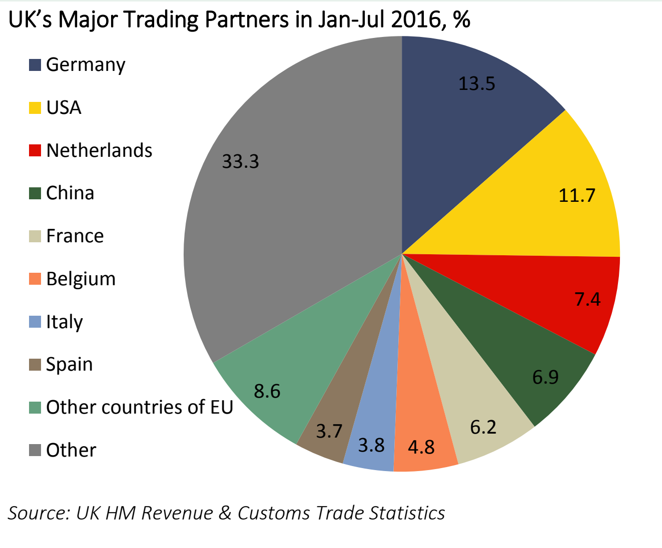


Source: Bank of England

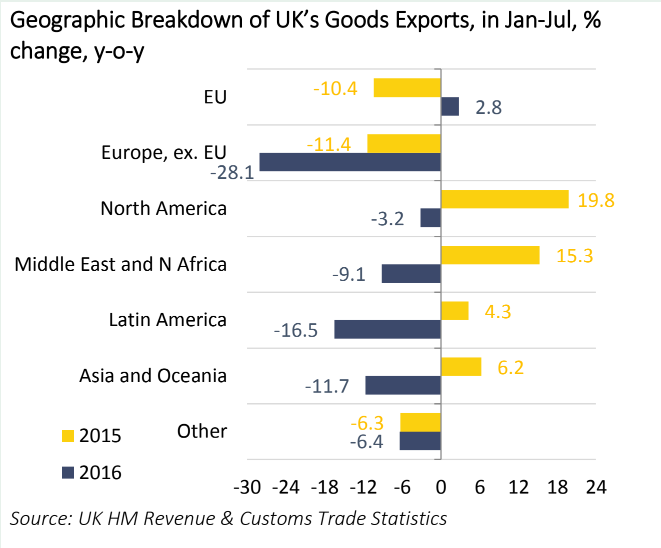
The UK Government confirmed that invoking Article 50 of the Lisbon Treaty should not be expected before 2017. This enables the gradual adjustment of the global economy to future transformations as well as the mitigation of adverse effects. In view of the above, the global economy growth rates for 2016 and 2017 were marginally revised downwards – by 0.1-0.2 pp.

The UK trade agreements with the EU and the rest of the world would represent the greatest uncertainty for the global economy. It is the developed countries that would experience the biggest transformation of trade relations, since their share in trade with the UK is relatively high. Moreover, Germany looks one of the most vulnerable European countries. Under the pessimistic scenario Germany's estimated loss from the severance of trade ties with the UK may amount to about EUR 45 billion by the end of 2017.[9]

The changes in the global financial market spurred by the Bank of England monetary policy easing and depreciation of the sterling and euro exchange rates would have an additional impact on advanced economies. The banking sector may suffer the most, as it has been bearing losses during the last few years. In particular, in 2015, net losses of the Deutsche Bank exceeded EUR 6 billion, Barclays – GBP 0.4 billion, and Credit Suisse – CHF 2.9 billion.



Source: UK HM Revenue & Customs Trade Statistics



Source: UK HM Revenue & Customs Trade Statistics

However, the impact on emerging economies is likely to be much less significant due to their lower integration into the global financial market, relatively minor trade ties with the UK, and higher dependence on developments in world commodity markets. Additionally, effects on world commodity markets would also be limited due to the prevalent impact of market specific factors (particularly, the record world grain harvest and China's share in the steel market).

[9] According to DZ Bank estimations.

2.2. DOMESTIC ECONOMY

2.2.1. INFLATION DEVELOPMENT

The sharp decline in headline inflation that had continued since mid-2015 slowed, as expected. Annual inflation remained moderate for a second consecutive quarter. However, it accelerated slightly in Q3 2016 (to 7.9% y-o-y in September) from this year's low recorded at the end of Q2 (6.9% y-o-y in June). Such dynamics in general was in line with the NBU forecast published in the Inflation Report (July 2016). The forecast envisaged a return of inflation to 12% y-o-y by the end of 2016.

Non-core inflation was the main driver of these price changes. As expected, growth of administered prices and tariffs accelerated due to higher utility tariffs. Domestic fuel prices sped up amid volatility of global oil prices. However, prices for certain types of raw foods fell deeper than expected amid a rise in domestic production.

Instead, inflationary pressures caused by fundamental factors continued to subside. This was evidenced by a further moderation in core inflation, facilitated by decreased inflation expectations amid sound fiscal and monetary policies, as well as second-round effects from lower raw food prices. The actual core inflation was also lower than predicted by the NBU.

Core inflation

In Q3 2016, core inflation slowed more than expected, to 6.3% y-o-y in September, held back primarily by:

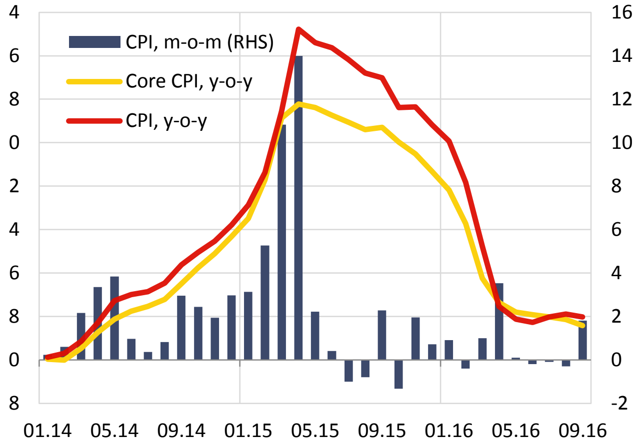
- second-round effects from lower prices for some unprocessed foods;
- hryvnia exchange rate appreciation in previous months; and
- steady improvement in inflation expectations for the next 12 months, inter alia supported by sound monetary and fiscal policies.

A high comparison base contributed to the slowdown of prices for non-food products included in the core CPI (to 7.1% y-o-y in September). In particular, deceleration of prices for clothing and footwear (to 9.2% y-o-y) made a significant contribution to the reduction in annual core inflation. Furthermore, price increases for some imported goods, including pharmaceuticals, medical goods and equipment, audio equipment, and photographic equipment slowed down, and some prices even decreased amid strengthening of the hryvnia in previous months.

Lower prices for some unprocessed foods and slower price growth for other foods led to a more restrained growth in food prices included in core CPI (mainly for processed foods) to 5.0% y-o-y in September.

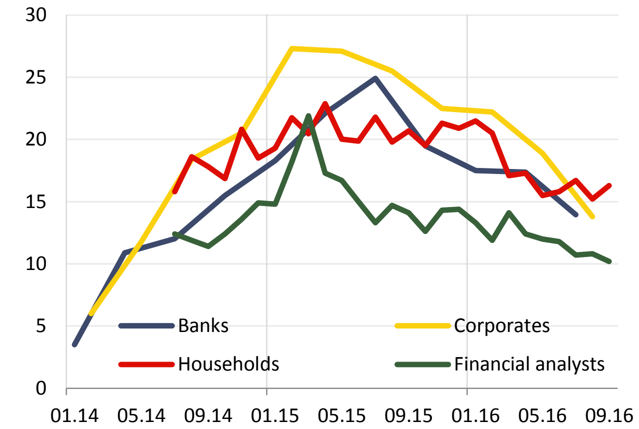
The price growth rates for the services included in core CPI remained almost unchanged (8.7% y-o-y in September). In particular, the price increase for education services slowed down (to 13.8% y-o-y) despite the seasonal rise in prices for educational courses in Q3.

Inflation Indicators, %



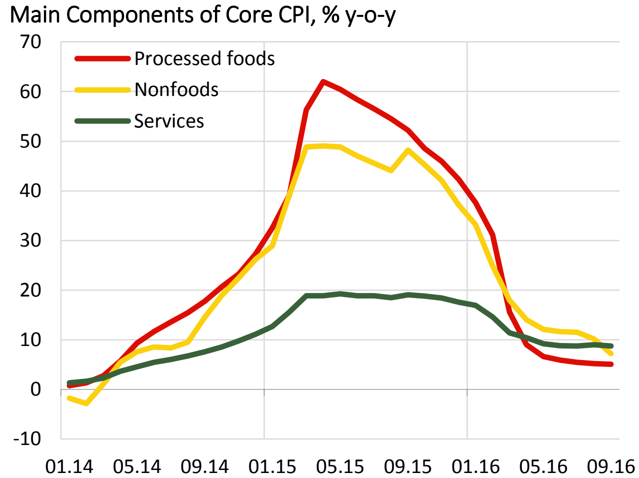
Source: SSSU

Inflation Expectations for the Next 12 Months, %



Source: NBU, GfK Ukraine

Main Components of Core CPI, % y-o-y



Source: SSSU; NBU staff estimates

Non-core inflation

Non-core inflation accelerated slightly at the end of Q3 2016 (to 9.0% y-o-y in September from 5.9% y-o-y in June), primarily on account of growth of administered prices and tariffs (picked up to 13.6% y-o-y in September).

Thus, as expected, higher utility prices and tariffs were the main contributor to administered inflation. Thus, throughout the quarter a number of tariffs were further adjusted – for hot water (in July), cold water and sewerage (in August), and electricity (in September).

The annual growth rate of prices for alcoholic beverages slowed down during Q3 as the effect of an increase in excise taxes vanished. Instead, prices for tobacco products accelerated due to pricing policies of some producers.

In addition, prices for bread and bread products also gained momentum in Q3 mainly due to increases in production costs.

Prices for raw foods slightly accelerated but remained moderate in general (3.5% y-o-y in September). Relatively subdued price developments for unprocessed foods mainly reflected a sharp decline in vegetables prices, as well as a slower growth of prices for meat, sugar, and some grains due to supply side effects.

Thus, the ample supply of vegetables and groceries was due to increased domestic production amid bountiful harvests. Sugar prices continued to decline for the second quarter in a row amid high harvest and a successful start of the season of sugar beet processing. Slower growth of meat prices was due to some increase in meat production this year compared with a year ago.

Despite low output production, a sharp y-o-y decline in prices for eggs continued into Q3, primarily reflecting a high comparison base.

These developments almost offset rising prices for chicken meat and dairy products, underpinned by increased production costs and ascending prices for these items in external markets.

Prices for some fruits were picking up in annual terms amid their lower yields and harvest volumes.

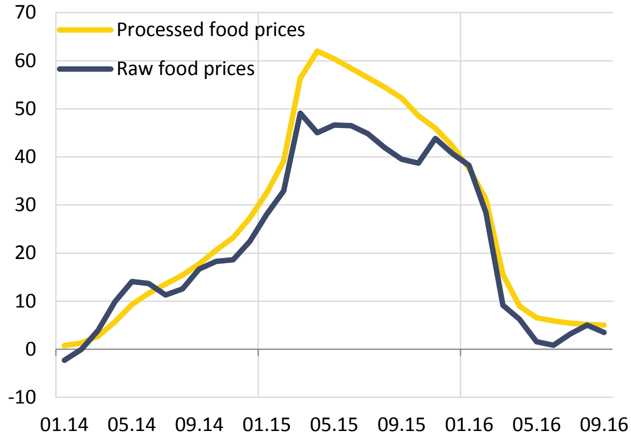
Domestic fuel prices grew moderately, affected by the volatility of global oil prices and hryvnia depreciation in August - the beginning of September. Another important factor was a surge in prices for liquefied natural gas for vehicles (by 48% y-o-y in September) amid its limited supply as a result of lower imports from Russia and Belarus. Accordingly, fuel prices accelerated to 13.6% y-o-y.

Producer Price Index

In Q3 2016, producer prices continued to be driven by global commodity price developments and the pass-through effects of the hryvnia exchange rate. In addition, retail tariffs for electricity for industrial producers increased significantly in July. As a result, producer price inflation accelerated in Q3 to 19.6% y-o-y in September.

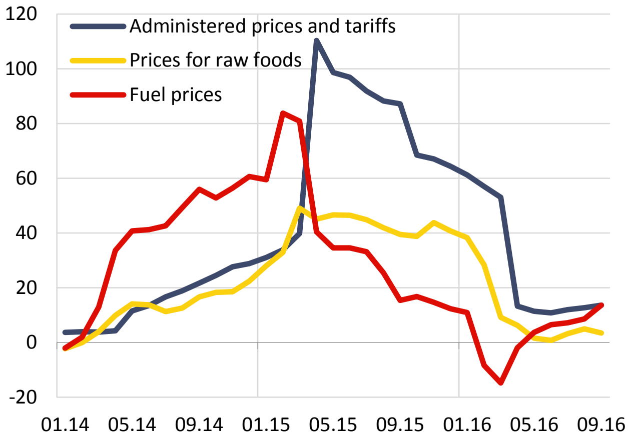
The volatility of world commodity prices amid depreciation pressure in the second half of the quarter led to a sharp rise in prices in the mining industry. Thus, global iron ore prices returned

Processed and Raw Food Prices, % y-o-y



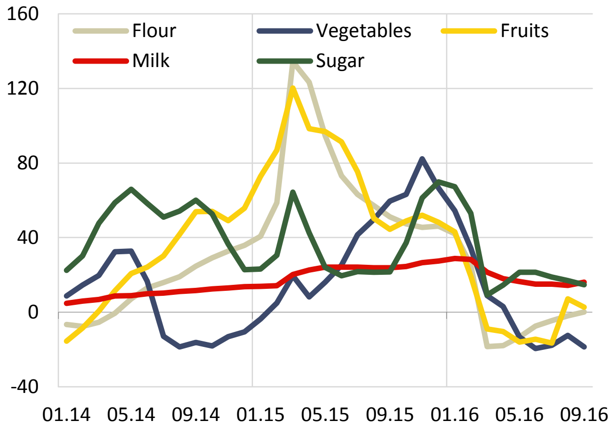
Source: SSSU; NBU staff estimates

Main Components of Non-Core CPI, % y-o-y



Source: SSSU; NBU staff estimates

Raw Food Prices, % y-o-y



Source: SSSU

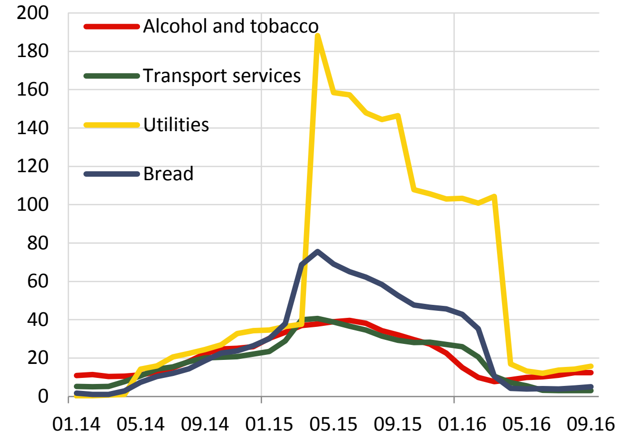
to growth in July, which (with some lag) influenced price dynamics in the mining of metal ores. Prices in the extraction of crude oil and natural gas also accelerated. Consequently, producer prices in the mining industry gained momentum, reaching 44.6% y-o-y in September.

Price trends in the mining industry during Q3 led to a build-up of price pressures with some time lag in the later stages of production, particularly in the production of refined petroleum products. In additional, in September, prices of coke and coke products production rose significantly because of raw material shortages (coking coal). As a result, prices in the production of coke and refined petroleum products accelerated significantly during the quarter (to 23.2% y-o-y in September). In the metallurgical industry, prices continued to rise rapidly.

Prices in the chemical industry have been declining since June 2016, driven lower by falling world fertilizer prices.

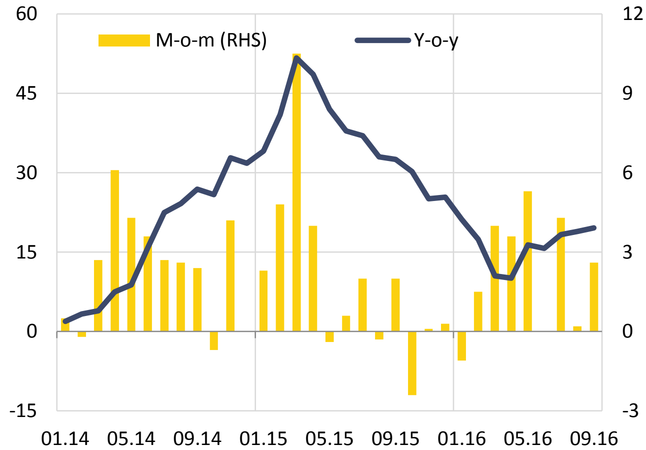
However, prices in the food processing industry accelerated due to higher production costs, declining number of livestock, and growing world food prices. In particular, prices in the manufacturing of dairy products, and meat and meat products accelerated in Q3, and prices in the sugar industry resumed annual growth.

Administered Prices and Tariffs, % y-o-y



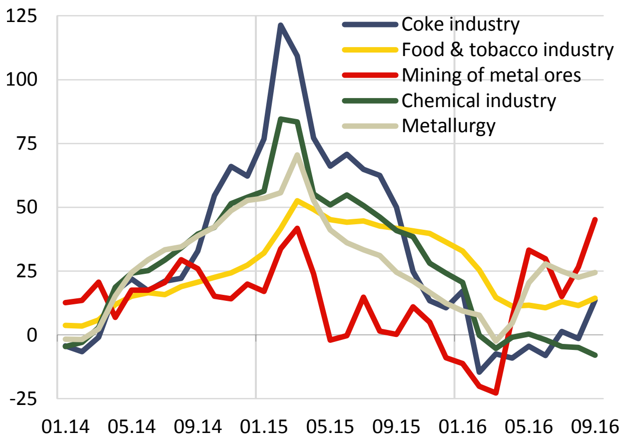
Source: SSSU

Producer Price Index, %



Source: SSSU

Producer Price Index by Select Industries, % y-o-y



Source: SSSU

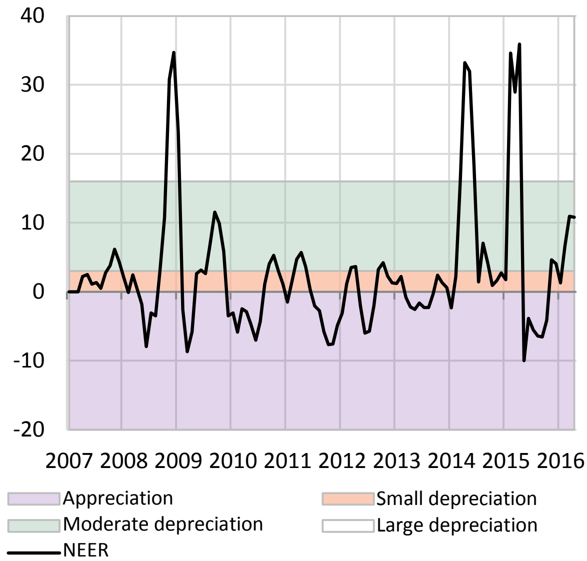
Nonlinear exchange rate pass-through to headline consumer inflation[10]

Exchange rate pass-through (ERPT) is traditionally defined as the percentage change in the price of imported goods in local currency resulting from a one percent change in the nominal exchange rate. Economic literature provides convincing arguments for asymmetry and nonlinearity of the pass-through arising from various factors. In particular, domestic prices may respond asymmetrically to different directions of exchange rate fluctuations (i.e., to domestic currency depreciation and appreciation). Meanwhile, nonlinearity may occur due to different size of exchange rate changes. Understanding the mechanism of exchange rate pass-through to consumer inflation is of particular importance for the conduct of monetary policy when forecasting inflation and allows the central bank to efficiently respond to exchange rate fluctuations and ensure price stability.

In 2014, the NBU shifted to a flexible exchange rate regime, which was a prerequisite for introduction of inflation targeting. However, the exchange rate channel remains a fairly powerful source of influence on the economy and inflation developments. Therefore, in order to increase the efficiency of monetary decisions, the NBU has carried out an extended assessment of the ERPT to Ukrainian consumer prices (also see *Exchange Rate Pass-through to Prices*, Inflation Report, March 2015), taking into account nonlinearities with respect to the direction and size of exchange rate variations.

The theoretical framework of the analysis is based on the widespread micro-founded pricing-to-market theory which implies that a foreign supplier sets the price for goods by adjusting a mark-up over its marginal costs and considering the exchange rate. A mark-up, in turn, depends on demand conditions in the destination country.

NEER 3m Percentage Change and Threshold Values, %

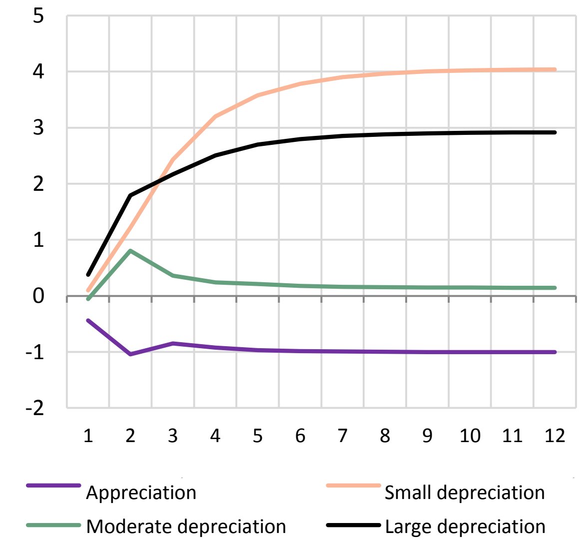


Source: SSSU, NBU calculations

The empirical analysis uses 258 CPI components and hryvnia NEER[11]. Changes in the marginal costs of a foreign supplier and demand for its goods are reflected with Fuel Price Index (FPI)[12] and Industrial Production Index (IPI) gap[13]. The analysis relies on monthly data from January 2007 through April 2016, covering periods of exchange rate stability and periods of its moderate and sizable fluctuations.

An econometric assessment of NEER pass-through to consumer prices was carried out with the use of a dynamic panel model taking into consideration the persistence of dependent and independent variables. Thereafter, a linear model was expanded by including threshold parameters that divide the time span of the analysis into periods of quarterly appreciation and small, moderate, and large depreciation. The choice of threshold values was based on time series statistical peculiarities. In particular, appreciation episodes were captured when a NEER change is less than zero, small depreciation when a change is less than the median (≈3%), moderate depreciation when a change is less than two standard deviations (≈16%), and otherwise a large depreciation.

Accumulated Response of Core CPI to a 10% NEER Change, %



Source: SSSU, NBU calculations

Estimated coefficients of the above model were used to compute standardized cumulative impulse responses of certain price groups to a 10% change in the NEER. The results clearly indicate nonlinearity in the ERPT mechanism. In particular, the pass-through amounts to 4.0% and 2.9% for small and large quarterly depreciation of the NEER, respectively. However, it is statistically insignificant for moderate depreciation. In addition, NEER

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[10] A non-technical summary of the research results published in the article: Oleksandr Faryna (2016). Nonlinear Exchange Rate Pass-Through to Domestic Prices in Ukraine. Visnyk of the National Bank of Ukraine, No. 236.

[11] The analysis is based on the hryvnia's NEER despite the fact that the UAH/USD exchange rate is one of the most important relative prices in Ukraine affecting households' inflation expectations. This decision was caused by lengthy periods of the functioning of a de facto fixed UAH/USD exchange rate regime, whereas Ukrainian prices were indirectly affected by changes in exchange rates of other world currencies to the US dollar.

[12] The FPI set by the IMF includes prices for natural gas, coal, and Brent oil.

[13] The IPI gap was estimated by using the Hedrick-Prescott Filter.

appreciation did not cause prices to fall (the pass-through amounts to -1.0%), which can partly be explained by the presence of residual effects from past sharp depreciation in the periods of domestic currency appreciation.

The nonlinear response of prices to exchange rate changes can be interpreted within the pricing-to-market framework. Depreciation of domestic currency may involve extra costs for a foreign supplier assosiated with changes in the invoice price. Following a small depreciation, a supplier may consider such extra costs unreasonable. As a result, if the invoice price is set in producer's currency, which is relevant for Ukraine as foreign currency accounts for about 97% of external trade transactions[14], the ERPT to prices will be full. However, a supplier may adjust its mark-up in the case of relatively larger exchange rate changes in order to maintain its market share. Consequently, the ERPT will be weaker. Furthermore, the pass-through may be higher in periods of financial or confidence crises, when foreign exporters have no incentives to absorb cost increases in their margins due to uncertainty in future incomes. These arguments are in line with the results for Ukraine as the pass through effect was higher for the episodes of the sharp hryvnia depreciation in 2008, 2014, and 2015 when the crisis developments have increased adjustment needs.

Therefore, according to the estimates, the response of Ukrainian consumer prices to exchange rate fluctuations rises in periods of small and large depreciation. On the contrary, in periods of moderate depreciation and given macroeconomic stabilization is maintained, a portion of exchange rate fluctuations is absorbed through an adjustment of a foreign supplier's mark-up, which, consequently, reduces the sensitivity of aggregate consumer price level to exchange rate changes. Therefore, the NBU has been smoothing excessive hryvnia exchange rate fluctuations while allowing for fundamental trends to prevail in the FX market.

[14] According to the currency composition of settlements in the BoP external trade in goods in 2015.

2.2.2. DEMAND AND OUTPUT

In Q2 2016, real GDP growth accelerated to 1.4% y-o-y.

As expected, domestic investment demand was the main driver of the economic recovery. Better financial results and improved business expectations facilitated investment growth. At the same time, capital expenditures of the consolidated budget on transport infrastructure increased. As a result, gross fixed capital formation growth accelerated to 17.6% y-o-y, contributing 2.2. pp to real GDP growth.

Private consumption recorded growth (4.3% y-o-y) for the first time over a prolonged period. The key factors underpinning this growth were higher households' real disposable incomes and the use of savings accumulated in previous years.

In contrast to previous periods net exports made a significant negative contribution to real GDP growth (3.5 pp). In particular, the fall in imports slowed to almost zero amid rising investment demand amplified by a low base effect due to the presence of import duty surcharge last year.

Across types of activities, the economic recovery was spurred primarily by more favorable domestic trade performance. Growth of GVA in domestic trade accelerated to 7.1% y-o-y, primarily on account of the wholesale segment, according to the NBU estimates. The industrial sector grew at a much slower pace this quarter (by 0.9% y-o-y). As expected, industrial activity was affected by transportation difficulties in the east of the country at the end of the quarter.

Output decomposition by economic sectors suggests little changes to GDP growth in Q3 2016(expected at 1.6% y-o-y). Transport capacity in the eastern part of the country remained restricted. Moreover, the Russian Federation tightened the transit restrictions it imposed earlier. At the same time, early crop production has increased due to higher yields. As a result, a pick-up in grains exports spurred growth in the wholesale trade.

Output

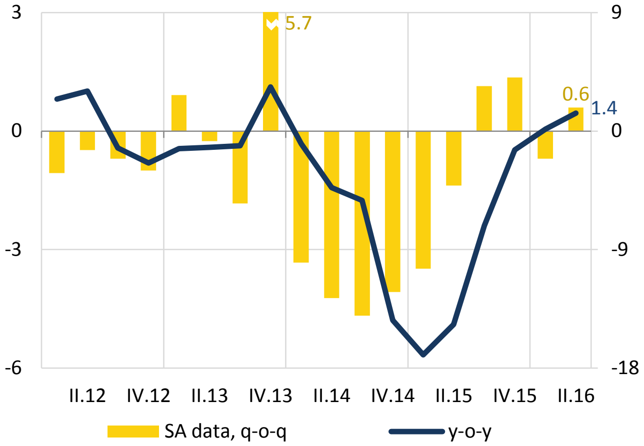
In Q2, real GDP grew by 0.6% q-o-q in seasonally adjusted terms. This confirmed our estimates on the temporary nature of adverse external factors that restrained economic recovery in the previous quarter. In annual terms, real GDP growth accelerated to 1.4% y-o-y - slightly less than forecasted in the previous Inflation Report (1.6% y-o-y).

Across types of activities, the economic recovery was spurred primarily by improved domestic trade performance. Growth of GVA in the trade sector accelerated to 7.1% y-o-y, according to our estimates, driven primarily by the wholesale segment.[15] The latter was underpinned by domestic investment demand recovery and higher volumes of trade in crops compared with the respective period last year.

Seasonally adjusted figures indicate a weakening of the retail trade activity. While households' real income rose in Q2 2016,

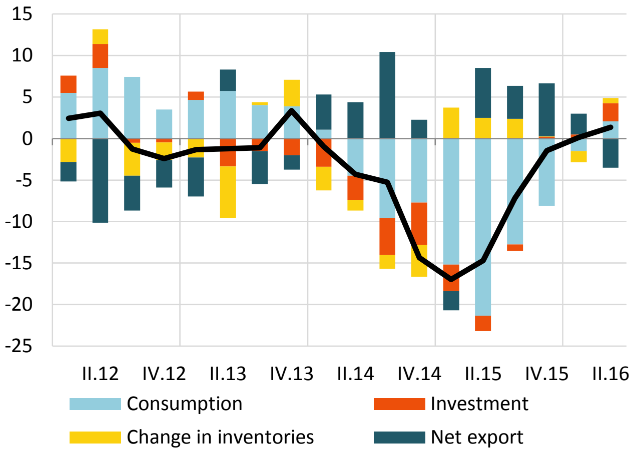
[15]Wholesale trade turnover increased by 5.5% y-o-y and retail by 3.0% y-o-y.

Real GDP Growth, %



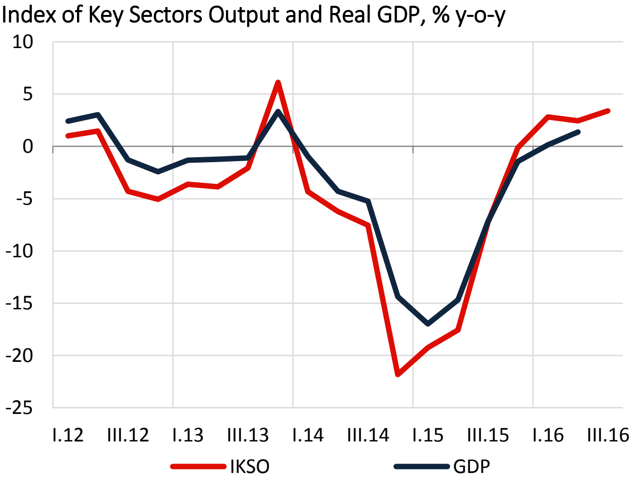
Source: SSSU

Contributions to Annual GDP Growth, ppts



Source: SSSU; NBU staff estimates

Index of Key Sectors Output and Real GDP, % y-o-y



Source: SSSU; NBU staff estimates

consumer sentiments remained subdued amid utility tariff increases and high unemployment.

GVA of construction recorded the highest growth (14.9% in Q2), reflecting an increase in investment demand in the economy. The increase in construction was mostly facilitated by the growth of housing construction, in particular due to the lower housing prices in USD equivalent. Due to higher capital expenditures of the consolidated budget, engineering construction continued to increase, particularly in the construction of transport infrastructure.

The industrial sector's GVA grew at a much slower pace (0.9% y-o-y). As expected, transportation difficulties in the east of the country at the end of the quarter weighed on industrial activity. In particular, the railway workers strike disrupted supply chains for input raw materials and finished products of iron and steel enterprises, and impaired replenishment of coal stocks for power generating plants. As a result, coal and metal ores output production declined (by 5.2% y-o-y and 2.7% y-o-y, respectively), which eventually led to the fall in GVA of the overall mining industry (by 3.7% y-o-y). At the same time, coke and steel production decelerated (to 15.2% y-o-y and 7.8% y-o-y, respectively), which was a significant factor behind a slowdown of the processing industry's GVA growth (by 3.4% y-o-y).

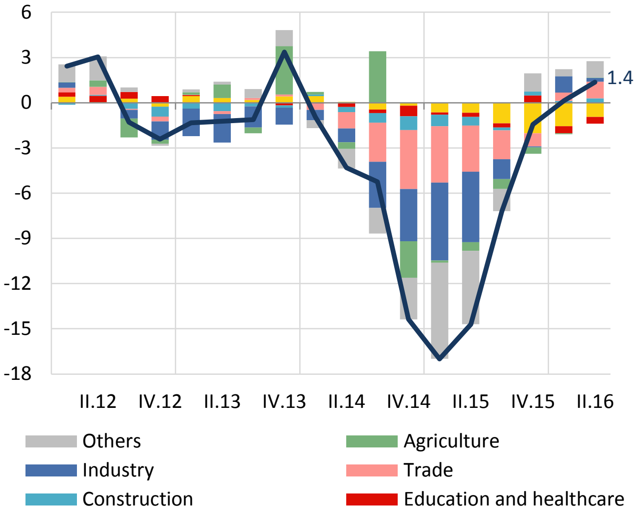
Among other processing industries, production of foods, beverages, and tobacco products declined in the reporting quarter. This was primarily due to lower production of alcoholic beverages, as high stocks of these products were produced and accumulated before the increase in excise taxes on alcohol in early March this year. Instead, production of oil, poultry, etc., grew, inter alia, owing to enforcement of the Association Agreement with the EU.

Additionally, machine building production declined by 0.8% y-o-y, which was primarily due to a fall in the sub-sectors most affected by fundamental factors (weaker domestic demand and the loss of markets in CIS countries). Capacity utilization remained low in the domestic automotive industry, where output fell by 40% y-o-y. Production of railway cars and passenger vehicles remained at the last year's level thanks to a contract for the supply of wagons to Turkmenistan. However, production of machinery and equipment for the purposes of specific sectors showed a significant y-o-y growth, indicating a recovery in investment demand. Among others, production of agricultural machinery and equipment, food industry, and metallurgical production grew rapidly, up by 20% y-o-y, 17.5% y-o-y, and 20.4% y-o-y, respectively.

Increased production of some industrial goods reflected a partial reorientation of the domestic consumption towards domestic products. Thus, production of rubber goods and chemical products for household use continued to grow. Amid increased demand from the construction sector, production of cement, lime, concrete, and related products rose as well.

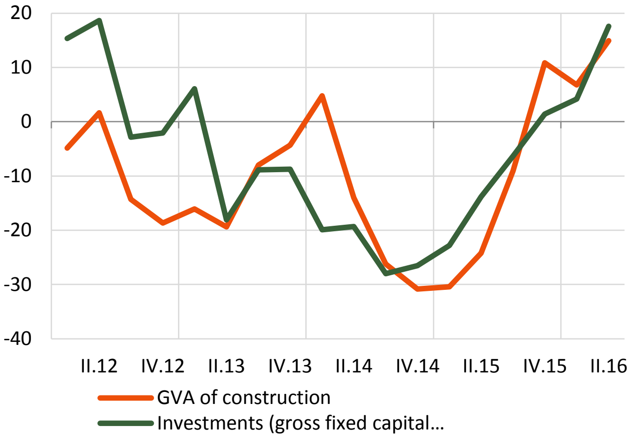
As expected, agricultural GVA grew (by 0.6% y-o-y) due to the early start of the harvesting campaign and high yields. Nevertheless, livestock production output continued to decline. In particular, the decline in milk production (by 1.9%

Contributions of Select Types of Activity to the Annual GDP Growth, ppts



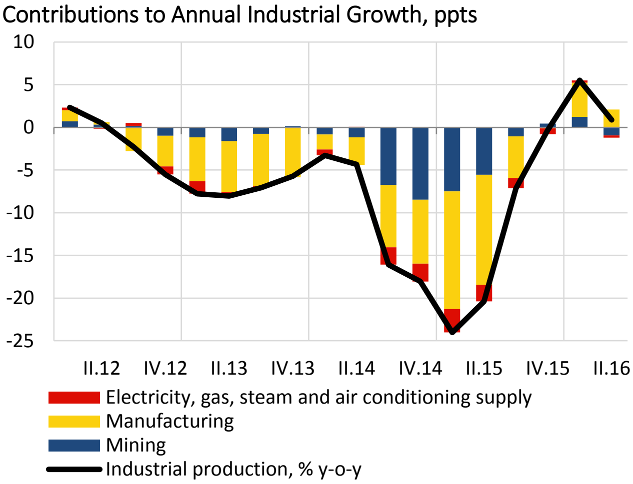
Source: SSSU; NBU staff estimates

GVA of Construction and Investments, % y-o-y



Source: SSSU; NBU staff estimates

Contributions to Annual Industrial Growth, ppts

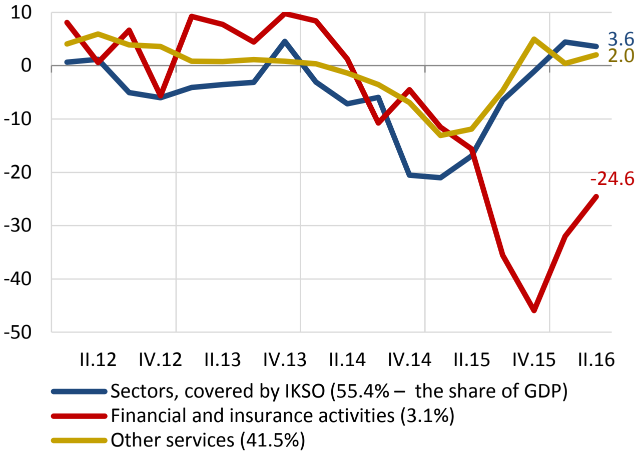


Source: SSSU; NBU staff estimates

y-o-y) was due to a further reduction in the number of cows. The fall in egg production slowed due to a low comparison base. However, it remained significant (9.8% y-o-y) amid limited export opportunities and a significant drop in domestic prices.

The fall in GVA of some service sectors for which high-frequency data are not available continued to be a drag on real GDP growth. Amid increasing social expenditures in the budget (particularly to support the Pension Fund and subsidies), GVA in the health care sector continued to fall (by 4.1% y-o-y) and the GVA decline in the education sector accelerated (to 7.9% y-o-y). The decrease in GVA of financial and insurance activity slowed, but remained significant (24.6% y-o-y) due to a sizable reduction in banks' interest income.

GVA Change by Groups of Economic Sectors, % y-o-y



Source: SSSU; NBU staff estimates

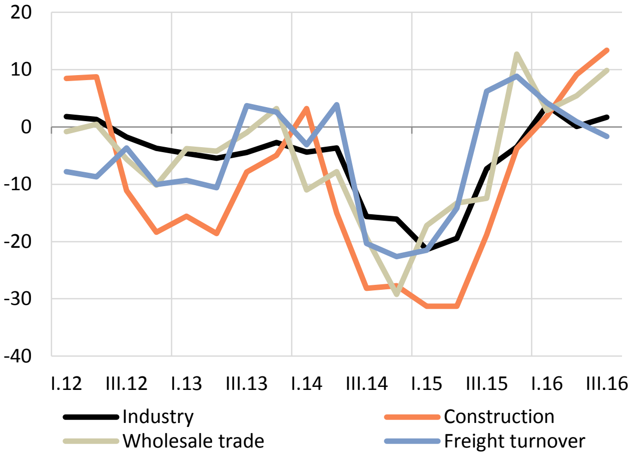
Estimates for Q3 2016

Monthly output data in production sectors, as well as data on trade and freight turnover, suggest no significant changes in the pace of economic growth in Q3 2016. According to the NBU, GDP growth was estimated at 1.6% y-o-y (seasonally adjusted real GDP remained unchanged in the quarter under review). The real growth of construction works accelerated further. Production of capital industrial goods continued to increase, signaling investments remained a key contributor to economic growth, according to NBU estimates. In addition, the growth of trade turnover accelerated. In particular, buoyant grain exports became the driving force of wholesale trade, while a slight improvement in consumer confidence amid a robust increase in real wages spurred retail trade growth.

However, industrial production overall remained subdued over the quarter, constrained both by external and internal factors. In particular, the eastern region of Ukraine was still suffering from cargo transport restrictions, holding back a recovery in metallurgy and related industries. In addition, global prices of certain Ukrainian export products saw a correction after surging in the previous quarter. Since the beginning of Q3, the Russian Federation increased its transit restrictions, which affected the operation of the manufacturing industry.

The crop production industry saw considerably higher yields compared to the previous year thanks to favorable weather conditions. As a result, the yield of early-ripening grain crops was high despite a reduction in sown area. In particular, the wheat harvest was only 1% lower than in the respective period last year. Therefore, the forecast for this year harvest was revised upwards. Most crops mostly harvested in Q3 and Q4 also recorded higher yields compared to the previous year. Consequently, agricultural output is projected to increase significantly at the end of the year due to higher yields despite a decline in livestock production. Moreover, agriculture will be a major driver of annual real GDP growth this year.

The Output in Certain Economic Sectors, % y-o-y

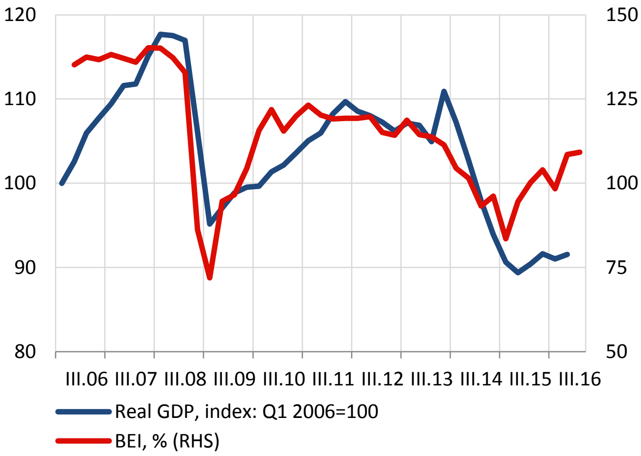


Source: SSSU; NBU staff estimates

Domestic demand

In Q2 2016, economic growth in the country was mainly driven by domestic demand. Specifically, investment demand experienced the most rapid recovery, as predicted. Thus, gross

Index of Key Sectors Output and Real GDP



Source: SSSU; NBU staff estimates

fixed capital formation growth accelerated to 17.6% y-o-y, contributing 2.2 pp to the annual growth of real GDP.

Investment in machinery and equipment increased markedly, up by almost 29% y-o-y, driven by improved financial performance of enterprises and their improved business expectations. Furthermore, investment demand was underpinned by higher capital expenditures from the consolidated budget, particularly on the construction of transport facilities. It spurred investment in non-residential buildings and constructions (were up by 16% y-o-y), according to NBU estimates.

After a prolonged period of decline, real disposable income of households grew, giving way to the resumption of growth of their final consumption expenditures (up by 4.3% y-o-y). Moreover, for the second consecutive quarter households relied significantly on the use of past savings to maintain their consumption.

Growth was recorded across all main categories of private consumption in the reporting quarter. Only consumption of utilities declined (although the decline significantly slowed down due to a low comparison base), most likely reflecting thrifty household behavior amid a considerable rise in tariffs.

Since retail trade turnover contracted as compared to the previous quarter (in seasonally adjusted terms), an increase in private consumption (1.1% q-o-q) can be attributed primarily to the consumption of services. According to NBU estimates, the quarter saw significantly higher demand for recreational and cultural services, which is not typical for this period. As a result, renewed growth in consumption of these services was recorded in annual terms.

In Q2, general government consumption resumed its decline (2.4% y-o-y), particularly through the reduction of individual consumer spending. Such expenses include, inter alia, spending on the purchase of goods and services for their subsequent provision to households free of charge or at a preferential price. In Q2, a reduction of certain social norms and ratios for individual consumption of utility services was carried out, and the procedure for granting utility subsidies and benefits was changed. Consequently, the consumption of subsidized utilities by households went down.

Changes in inventories made a minor positive contribution to real GDP dynamics (0.6 pp). In particular, wholesalers reported an accumulation of inventories of steel products and motor vehicles, while they declined in the same quarter last year.

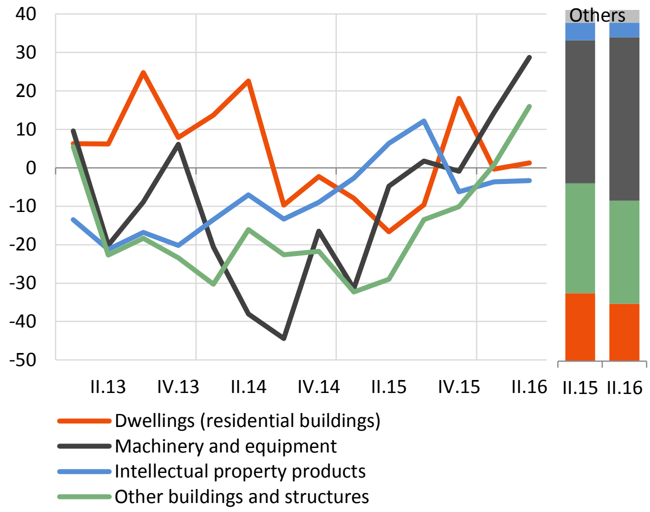
External demand

Net exports negatively contributed (3.5 ppts) to real GDP growth in Q2, for the first time since early 2014 (except for Q1 2015).

The decline in exports deepened to 6.5% y-o-y. According to our estimates, physical volumes of grain exports grew in Q2. However, the growth of metallurgical exports (physical volumes) slowed down along with a continued decline in machinery and chemical exports. At the same time, the decline in imports moderated to almost zero, underpinned by the

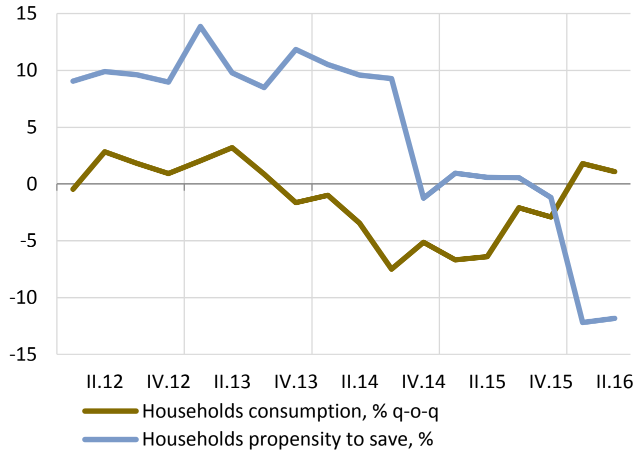
Gross Fixed Capital Formation by Types of Non-financial Assets, % y-o-y

Structure of Fixed Capital Formation, %



Source: SSSU

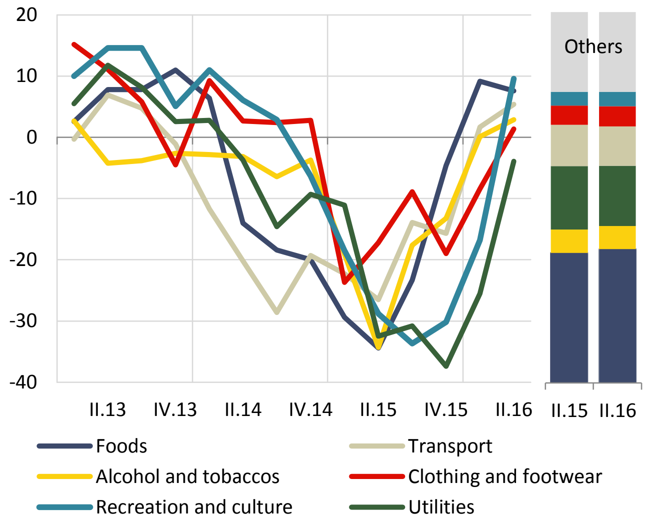
Households Consumption and Propensity to Save* (sa)



** The ratio of personal savings to disposable income*
SSSU; NBU staff estimates

Final Consumption Expenditures of Households by Purpose, % y-o-y

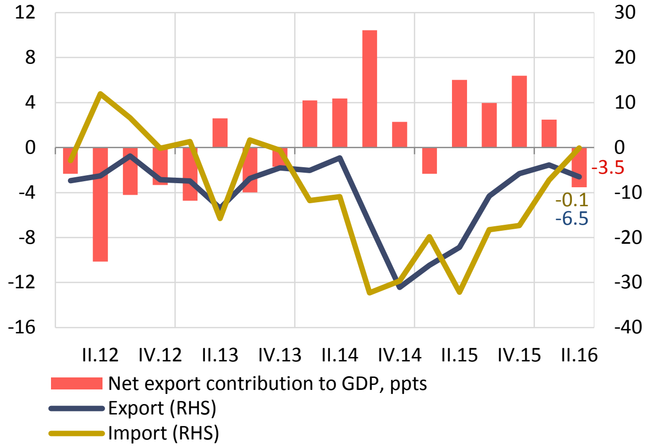
Expenditure structure, %



Source: SSSU

revival of investment imports and a low comparison base (the latter determined by the presence of an import duty surcharge last year). In addition, service imports accelerated (especially, under the “travel” item).

Exports and Imports of Goods and Services, % y-o-y



SSSU; NBU staff estimates

2.2.3. LABOR MARKET AND HOUSEHOLD INCOME

Labor demand has been recovering, driven by a pick-up in economic activity that took place in H1 2016. Despite this, the seasonally adjusted ILO unemployment rate remained high, indicating a significant mismatch between labor supply and demand.

Nominal household income rose further in Q2 2016, to 14.3% y-o-y, mainly due to its largest component, wages, increasing by 22.8% y-o-y. The average wage (per staff member) also increased. Household income from sources other than wages rose at a much slower pace. This, together with easing inflationary pressures, resulted in a y-o-y increase in real wages and real disposable income, the first positive reading in the last two years. Real disposable income growth remained weak, although it did drive consumption up. Indeed, private individuals resorted to savings in order to keep their consumption at the previous level - savings dropped by UAH 5.3 billion in Q2 2016, among other things, due to FX sales by private individuals. Nevertheless, taking into account further increases in utility prices and a still high unemployment rate, the NBU considers demand-pull pressures on inflation as subdued.

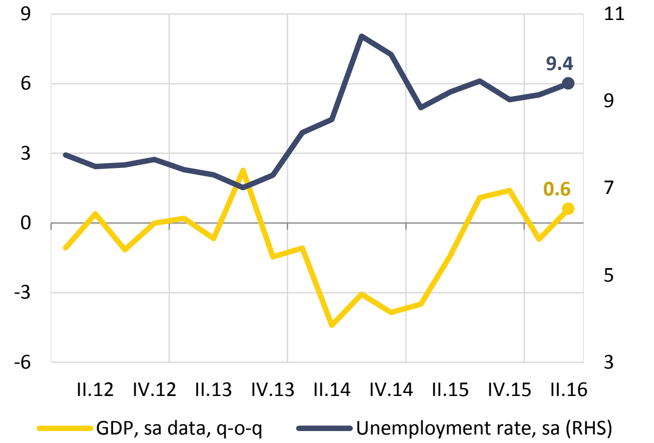
Labor Market[16]

In Q2 2016, the ILO unemployment rate (in a percent of the economically active population aged 15 - 70) dropped to 9%, reflecting a seasonal increase in demand for labor, mainly in agriculture and construction. However, the seasonally adjusted unemployment rate remained high, hovering between 8.9% - 9.4%.

Following a decline since late 2015 through Q1 2016, the number of the economically active population aged 15 - 70 and the economic activity rate rose again, driven by a seasonal increase in the number of employed persons. This was mainly attributed to rising employment of males in rural areas, mainly due to a pick-up in seasonal works. In seasonally adjusted terms, however, the economic activity rate and the unemployment rate continued to fall. The highest employment rate in H1 2016 was reported among middle-aged people (35 to 49 years old). In the meantime, the employment rate among people aged 15 - 70 exceeded the average figure for Ukraine in 10 regions, with the highest rates reported in the city of Kyiv, Kharkiv and Dnipropetrovsk oblasts. The highest y-o-y increases were registered in Chernivtsi and Khmelnytskyi oblasts.

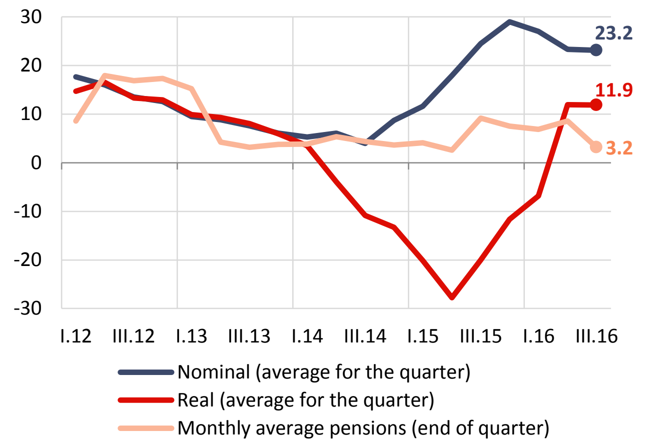
At the same time, H1 2016 saw fewer persons employed (by 1% y-o-y), mostly reflecting demographic changes. A reduction in the number of people employed in the informal sector could be an additional sign of recovering labor market. People in rural areas are more likely to be employed in the informal sector (40.6% of all employed people). The same is true for people aged 15-24 (34.6% of all employed people from that age group, particularly because they need to financial support while studying), as well as for people aged 60-70 (36.6% of all employed people from that age group, due to low pension benefits). Across economic activities, a significant number of informally employed people was recorded in agriculture,

ILO Unemployment* (sa) and Real GDP, %



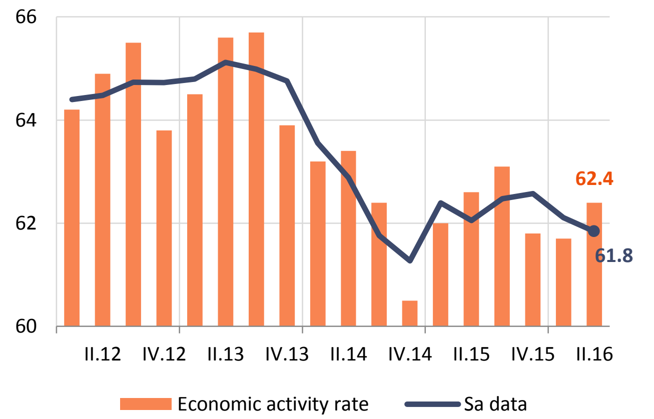
** % of economically active population aged 15-70*
Source: SSSU; NBU staff estimates

Wages and Monthly Average Pensions, % y-o-y



Source: SSSU; NBU staff estimates

Economic Activity Rate of the Population, % of the population aged 15-70



Source: SSSU; NBU staff estimates

[16] From the beginning of 2015, SSSU publishes data excluding part of the ATO zone; therefore, some labor market indicators may be underestimated.

forestry and fishery, trade and construction, accounting for 40.6%, 21.8%, and 14.4% of the total informal workforce, respectively.

In the meantime, there was a relatively significant number of marginally attached workers that include certain groups of the economically inactive population that could put more effort into the job search under more favorable circumstances, and therefore be classified as unemployed rather than as economically inactive persons. SSSU defines them as persons who are not in the labor force because they are discouraged from finding a job and/or believe no suitable work is available for different reasons, or that there are no jobs for which they would qualify, but who want a job and are available for it. According to NBU estimates, the number of these people stood at 230,000 persons in Q2 2016, 2.1% of economically inactive persons aged 15-70 and 1.3% of economically active persons aged 15-70).[17]

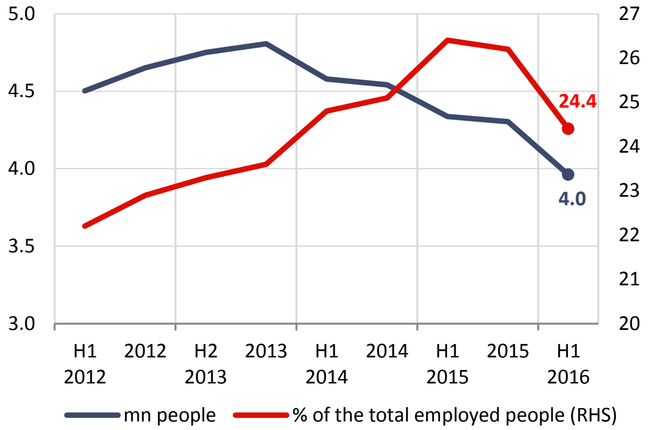
In Q3 2016, signs that demand for labor was recovering became stronger, as evidenced by data from the SESU and job search web-sites. The SESU reported that labor demand had risen by 37.8% y-o-y in September 2016, in seasonally adjusted terms increasing by nearly 44% y-t-d. The seasonally adjusted load per 10 vacancies fell by 39% y-t-d in September. However, regional disproportions, further aggravated by mismatches in demand and supply by economic activities, remain one of the biggest problems. Indeed, in H1 2016, over 40% of all vacancies could be found in the city of Kyiv, Dnipropetrovsk, as well as in Kyiv, Odesa and Kharkiv oblasts.

Meanwhile, more and more unemployed and employed persons have been searching for jobs online, without registering in the State Employment Office.[18] Today, searching for jobs online is one of the most effective ways of finding a job. Indeed, by the end of Q3 2016, the number of CVs registered on the sites of some private recruitment agencies rose by 12.4% y-o-y, with the number of offered vacancies was up by 48% y-o-y. The average monthly wage for most vacancies was about UAH 7,000 (up by 16% y-o-y).

Labor demand kept recovering, as evidenced by a Beveridge curve, even excluding data for Kyiv city, the capital of Ukraine, which has the highest number of vacancies available. The Beveridge curve shows the relationship between the number of unemployed persons aged 15-70 according to the ILO methodology, and the number of vacancies offered by a job search web-site.[19] However, taking into account the fact that the unemployment rate has been virtually flat, the Beveridge curve for 2016 also shows a significant mismatch between labor supply and demand.

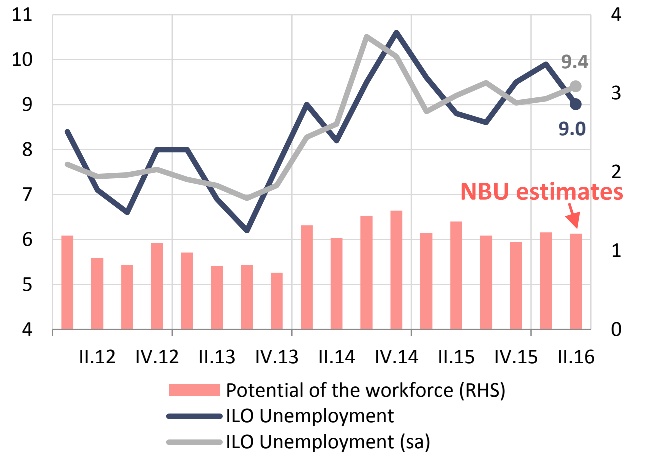
Higher labor demand is also evidenced by some businesses returning to employing their staff full time. Indeed, SESU

Numbers of Informally Employed People*



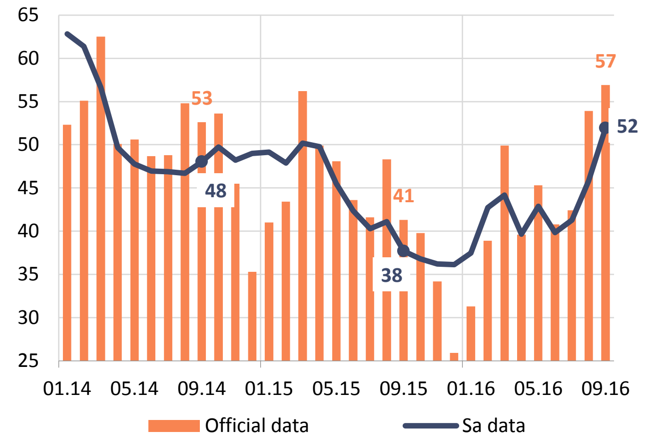
* *Excluding Crimea and Sevastopol since 2014 and also part of ATO since 2015*
Source: SSSU

ILO Unemployment and Potential of the Workforce, % of the economically active population aged 15-70



Source: SSSU; NBU staff estimates

Labor Demand from Employers, end of month, thousand person



Source: SSSU; NBU staff estimates

[17] SSSU measures the figure for working-age people, while the NBU recalculated the figure for people aged 15-70.

[18] This can be explained by the requirements people have to meet in order to get registered or retain the unemployment status, as well as the unwillingness of some people to contact public employment offices because they offer low-paid jobs and a low level of unemployment benefits.In Q3 2016, the average level of unemployment benefits, at UAH 1,741 per month, was only slightly higher than the subsistence wage for working-age persons. The SESU reported that as of 1 July 2016 half of all vacancies had been for jobs paying less than UAH 2,000 per month, or 40% of the average wage. Only 5.1% of vacancies were for jobs paying over UAH 5,000 monthly.

[19] This data should be treated with some caution when applying to Ukraine as a whole as online data is generally biased towards certain industries and occupations as well as big cities.

reported that the number of people who had been put onto a short working day/week schedule due to economic reasons had decreased to 5.5% of the average number of employees, returning to the figure for H1 2012. This type of employment was most prevalent in Zaporizhzhia, Donetsk and Luhansk oblasts, where 11-14% of employees worked part-time. Industry and agriculture had the largest number of underemployed people. Meanwhile, the number of people on unpaid leave doubled in H1 2016, to 1.6% of the average number of employees.

The number of permanent staff members amounted to 7.8 million people as of the end of August 2016 (down by 1.8% y-o-y, while remaining flat y-t-d). Various sectors demonstrated diverging employment trends: the number of permanent staff members in agriculture, trade and transportation increased, but it declined in the vast majority of other sectors, possibly due to massive layoffs that were previously planned. According to the SESU, during January – August 2016 the number of employees informed about the layoff in the future has grown by 8.2% compared with the corresponding period of last year and amounted to 223,100 persons. The bulk of those workers (about 60%) were people employed in public administration and defense, as well as social security.

Household income and savings

Nominal household income grew faster in Q2 2016, mostly driven by an increase in wages (by 22.8% y-o-y). - The latter accounts for the largest share in nominal household income of almost 45% of the total.[20] Meanwhile, household income from sources other than wages grew at a much slower pace. Subsidies and other received current transfers, another important component of nominal household income (about 40% of total household income), rose by 12.3% y-o-y.

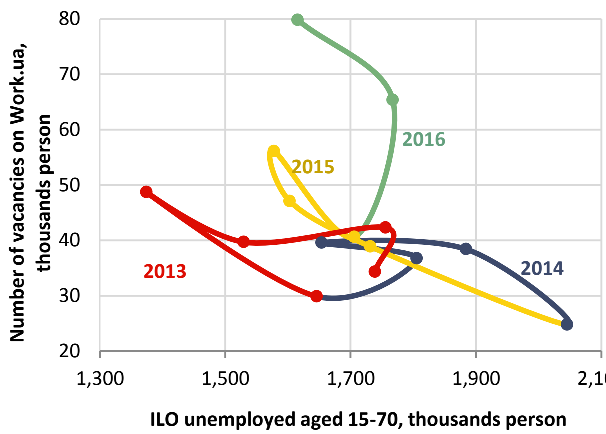
The easing of inflationary pressures alongside with higher nominal wages and nominal household income drove real wages and household income up. Indeed, in Q2 2016, real disposable income and real wages, as a part of household income, rose by 5.6% y-o-y and 13.6% y-o-y respectively, a positive annual reading for the first time in the last two years.

In Q3 2016, the average nominal and real wage per permanent staff member continued to increase at a high pace (up by 23.2% y-o-y and 11.9% y-o-y respectively), with the average nominal wage standing at UAH 5,311 in Q3.

However, amid increased utilities expenses and higher prices for some other goods, household consumption has been rising faster than household income since the end of 2014. As a result, people have been relying on their past savings to maintain their consumption.

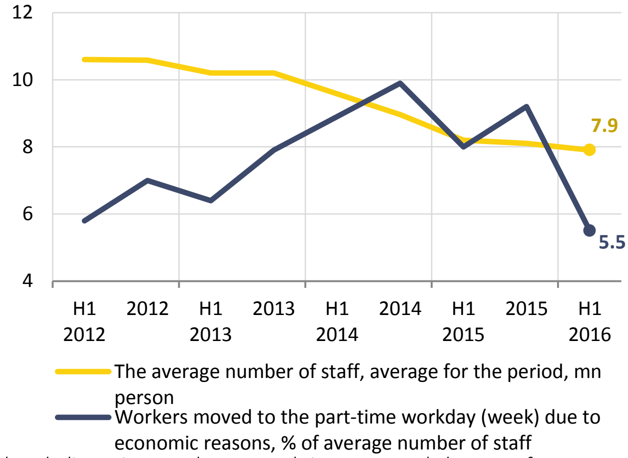
Indeed, savings declined by UAH 5.3 billion in Q2 2016, due to, among other things, FX sales by private individuals (FX sales have been exceeding FX purchases since early 2015, with sales outpacing purchases twofold in Q2 compared to Q1 2016). SSSU also reported a decrease in non-financial assets, largely due to

Beveridge Curve



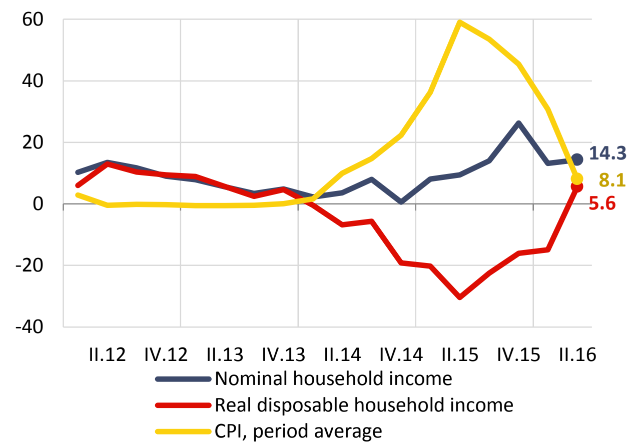
Source: SSSU; work.ua

The Average Number of Staff and Level of Forced Part-Time Employment*



** Excluding Crimea and Sevastopol since 2014 and also part of ATO zone since 2015*
Source: SSSU

Household Income and CPI, % y-o-y



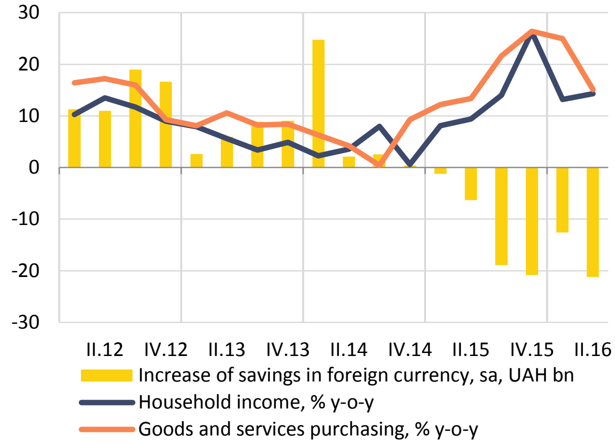
Source: SSSU

[20] The growth rate of wages as a component of household income differs from that of nominal average wages (per permanent employee) as a result of methodological peculiarities during the corresponding calculations. Thus, estimates of wages as a part of household incomes are based on a larger sample size. In particular, cash allowance for military staff and freelance staff, payments for temporary disability, wages of individual entrepreneurs, and other payments, which are not considered when calculating average nominal wages (per permanent employee) are taken into account.

residential property depreciation. In the meantime, household savings as a share of financial assets have been growing for three quarters in a row.

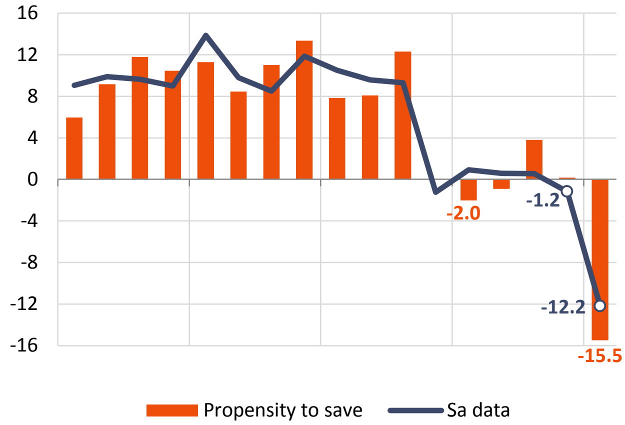
The decline in household savings resulted in a negative propensity to save, although in Q2 2016 the actual and seasonally adjusted figures somewhat improved compared with a quarter before.

Household Income, the Growth of Goods and Services Purchases and FX Savings



Source: SSSU; NBU staff estimates

Propensity to Save*, %



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

2.2.4. FISCAL SECTOR

Fiscal policy in 2016 has reflected government measures aimed at further strengthening public finances. This was evidenced in retaining primary consolidated budget surplus and reducing quasi-fiscal expenditures. This resulted in public sector fiscal surplus in H1 2016. However, following active consolidation in 2014 -2015 some fiscal easing took place, also due to the SSC reform.

A gradual economic recovery along with tangible effects of tax changes introduced at the beginning of the year boosted tax revenues. This, in part, offset lower-than-projected non-tax revenues and ensured a modest increase in total revenues of the consolidated budget.

Meanwhile, total expenditures growth accelerated in Q3 in line with expectations. Unlike in the previous quarter, this resulted not only from a significant increase in secured social expenditures, but also due to expanding expenditures in other areas, including debt service and capital spending.

Given that the consolidated budget balance in July-August was close to zero, its deficit recorded in the third quarter was formed in September. This was attributed to a rapid increase in the state budget deficit and narrowing of local budgets surplus.

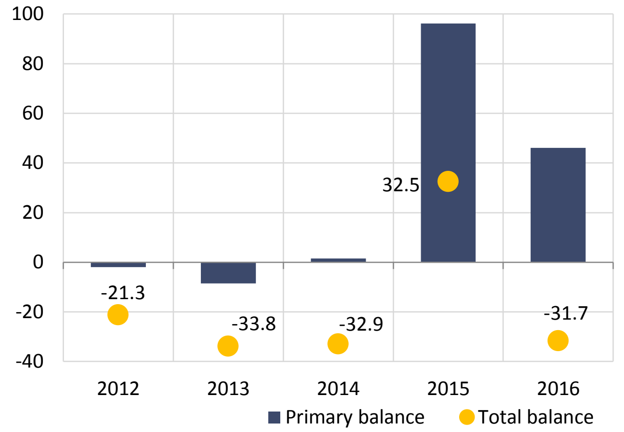
Revenues

The growth of consolidated budget revenues slowed down (to 9.7% y-o-y in Q3 2016). The slowdown was mainly a result of a 37.2% y-o-y reduction in non-tax revenues in Q3 2016 amid the absence of NBU transfers to the budget over the past nine months[21].

At the same time, tax revenues kept growing at a high pace (by 25.1% y-o-y in Q3), although decelerating from the previous quarter. Such growth rates primarily reflected improved macroeconomic situation, as well as the effect of tax changes introduced early this year. Specifically, the growth of revenues from corporate profit tax accelerated significantly (to 84.1% y-o-y). This was mainly attributed to a marked improvement of the companies' financial standing, including state-owned enterprises (profit before tax increased, according to the H1 2016 results), due to statistical effects from changes in the tax administration, which were introduced at the beginning of 2016. Additionally, the growth of revenues from personal income tax somewhat accelerated (to 41% y-o-y) as nominal wages continued to increase at a solid pace amid unification of a tax rate since the start of the year. Performance of royalty proceeds improved significantly as compared to the previous quarter.

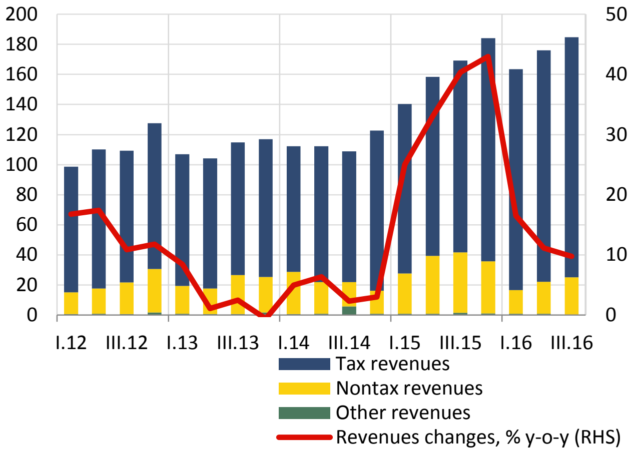
The growth of revenues from excise tax also accelerated (to 42.5% y-o-y) on the back of recovering retail trade, high imports and depreciation of the hryvnia. These factors also drove up revenues from taxes on international trade, which continued to grow in comparable terms (excluding proceeds from import duty surcharge in 2015). However, overall revenues from taxes on international trade were significantly lower than last year due to the abolition of the above-mentioned duty.

Consolidated Budget Balance in January-September, UAH bn



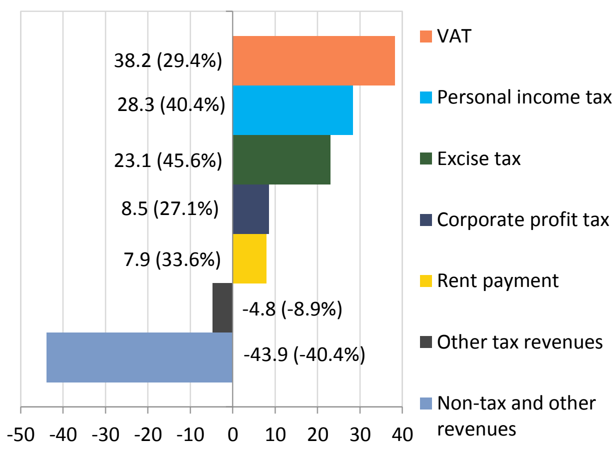
Source: Treasury; NBU staff estimates.

Consolidated Budget Revenues, UAH bn



Source: Treasury; NBU staff estimates.

Consolidated Budget Revenues in January-September 2016, compared with the respective period of the previous year, UAH bn and %

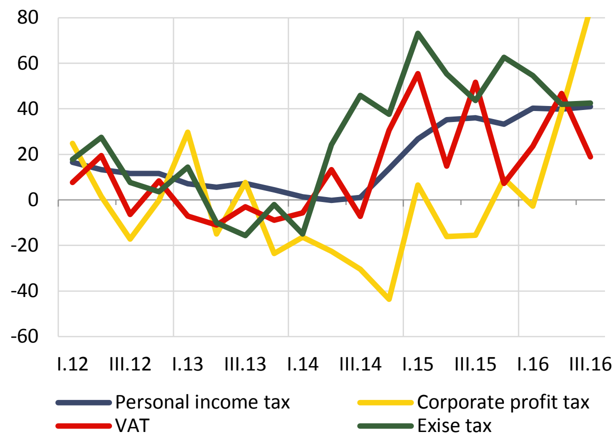


Source: Treasury; NBU staff estimates.

[21] Pursuant to *Article 51. Profit before Distribution* of the Law of Ukraine *On the National Bank of Ukraine,* the transferof profit before distribution to the State budget of Ukraine is carried out only upon validation by an external auditor and approval by the NBU Council of annual financial statements introduced early in the year, as well as after the formation by means of this profit of general and other reserves in amounts specified bythe law. Some UAH 39.1 billion was transferred to the budget over the first 9 months of 2015

Notably, the third quarter saw a substantial slowdown in the growth of revenues from VAT (to 19% y-o-y). On the one hand, the growth was supported by a pick-up in trade turnover and the hryvnia depreciation in the second half of Q3. On the other hand, volumes of VAT refunds were particularly high in Q3 (UAH 27.6 billion, up by 46.5% y-o-y). Higher VAT refunds were mainly due to July efforts to make up for low VAT refunds in June, as well as high settlement of VAT refund claims in September (UAH 9.3 billion). Therefore, VAT refund arrears shrank to UAH 15.2 billion as of 1 October 2016, yet they were higher by UAH 2.4 billion than at the beginning of the year.

Main Budget Tax Performance, % y-o-y



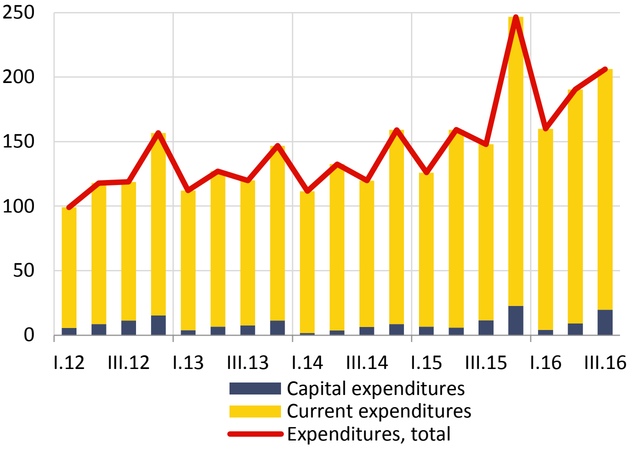
Source: Treasury; NBU staff estimates.

Expenditures

In Q3, the growth of the consolidated budget expenditures accelerated significantly (to 39.4% y-o-y). The growth was attributed to an increase in both current and capital expenditures.

The growth of current expenditures (by 36.9% y-o-y) stemmed mainly from significant spending on debt service and social assistance and insurance programs. Thus, social security spending grew at the fastest pace, underpinned by higher transfers to the Pension Fund as cutting SSC rate, a major revenue source for the Fund, led to a noticeable reduction in its own revenues. Additionally the sooner than expected adjustment of natural gas and heating prices to households contributed to an increase in both planned annual expenditures and the actual ones in Q3 incurred as a result of providing benefits and utility subsidies to households. Budget expenses on wages and salaries grew also rapidly (33.9% y-o-y), particularly due to higher allowances for Ukrainian military personnel. However, payroll tax expenditures declined (by 17.1% y-o-y).

Consolidated Budget Expenditures, UAH bn



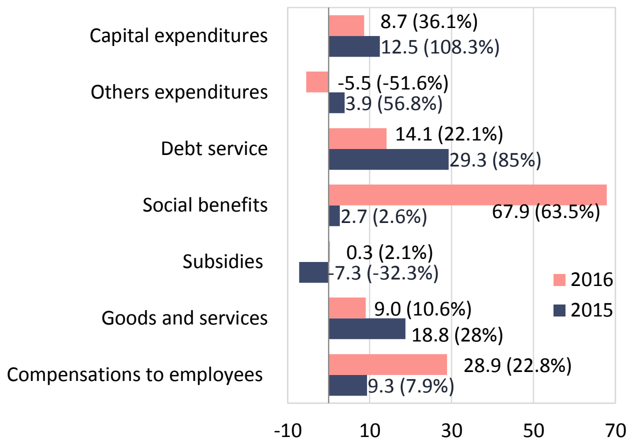
Source: Treasury; NBU staff estimates.

Also, expenditures to debt service, especially external ones, grew substantially in Q3, as contrasted with last year's low volumes. The main factor behind this growth was the next coupon payment under newly issued Eurobonds in September this year[22]. Expenditures to service domestic debt grew marginally amid the government's active operations in the domestic debt securities market. However, total debt service expenditures in the quarter under review were lower than projected, remaining flat compared with the previous quarter. This was, among other things, related to lower than planned issuances of short-term domestic bonds and later than planned placement of the US-guaranteed sovereign Eurobonds.

Growth in expenditures was driven by higher other than socially secured expenditures, which were contained during H1 2016. Thus, in Q3 expenditures on use of goods and services were on the rise (to 23.8% y-o-y). Spending on medicine contributed significantly to the growth in expenditures after the resumption of their centralized procurements, including through international organizations (WHO, UNICEF), as did the spending on purchasing items and equipment. Current transfers of enterprises and other current expenses continued to decrease, although at a slower pace than in the previous period.

Capital expenditures were increasing, mostly driven by active repairs of the road infrastructure mainly at the expense of local budgets. They accounted for 70% of total capital expenditures.

Consolidated Budget Expenditures by Economic Classification in January-September 2016, compared with the respective period of the previous year, UAH bn and %



Source: Treasury; NBU staff estimates.

[22] Within the framework of debt operation with the public and publicly guaranteed debt, in November 2015 the Ministry of Finance issued Eurobonds with coupon payments being carried out every six months (1 March and 1 September).

According to the functional classification, expenditures on social security, public order and safety grew at the fastest pace in the current year. However, a marked acceleration of growth of almost all expenditures was noted in Q3. Health care and education expenditures grew particularly fast, given a low level of financing in the previous two years.

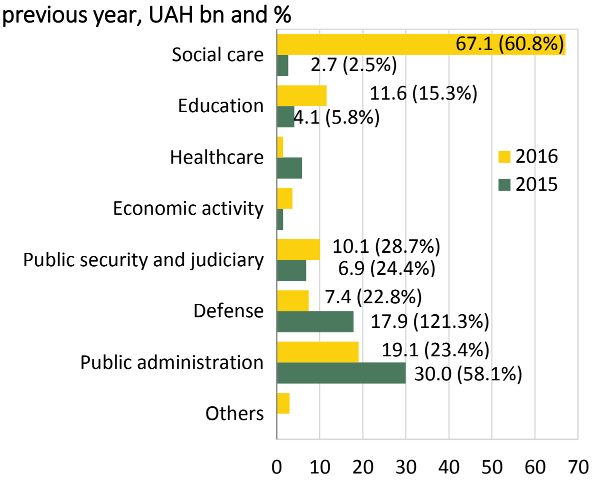
Balance

Since the consolidated budget balance was close to zero in July-August, the situation in Q3 was determined by September indicators. In Q3, the consolidated budget deficit increased to UAH 20.4 billion against the backdrop of higher state budget deficit (to UAH 28.3 billion) and decreasing surpluses of local budgets (to UAH 7.9 billion).

The deficit was primarily financed by issuing government bonds. In Q3 2016, the budget received a total of UAH 14.1 billion from the placement of domestic debt securities (UAH 35.9 billion over the nine months of the year). The lion's share of borrowings in the domestic market this year were securities maturing in one to three years. At the same time, the easing of monetary policy contributed to a gradual decrease in the cost of funds borrowed by the Ministry of Finance in the domestic market in the current year. This allowed for expenditures to be allocated to other sensitive areas, particularly to the defense sector. Also, the government continued to issue domestic debt securities denominated in foreign currency, in the amount of almost USD 0.6 billion in Q3 alone. Further, the placement of sovereign Eurobonds under the US government guarantee (USD 1 billion) took place in late September following the completion of the second review under IMF's EFF program. The state deficit was also financed by the single treasury account funds.

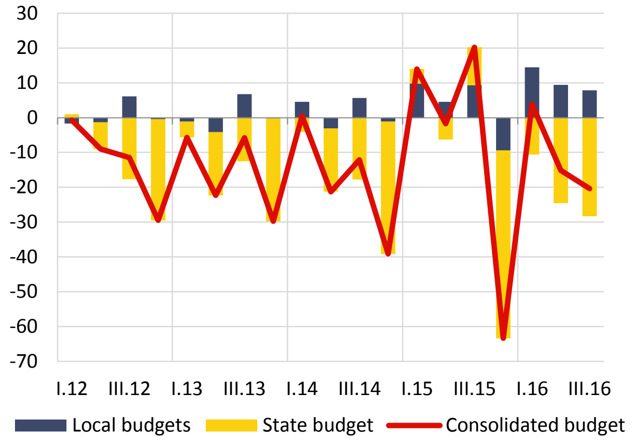
Despite some losses of financial resources resulting from the SSC reform, the government efforts were aimed at strengthening public finances, as well as ensuring the fiscal stability. This was reflected in the public sector fiscal surplus, although not significant, reported for H1 2016. The surplus was formed mostly thanks to a significant reduction of quasi-fiscal expenses despite a general government fiscal deficit resulting from the need to compensate for losses of own revenues of the Pension Fund. Thus, the financial stance of NJSC Naftogaz of Ukraine improved significantly owing to utility tariffs adjustment to their cost covering levels earlier than planned. Despite the issue early this year of domestic sovereign bonds to boost the state banks' authorized capital, quasi-fiscal expenditures on the banking sector declined, including due to sufficient resources available in the Deposit Guarantee Fund.

Consolidated Budget Expenditures by Functional Classification in January-September 2016, compared with the respective period of the previous year, UAH bn and %



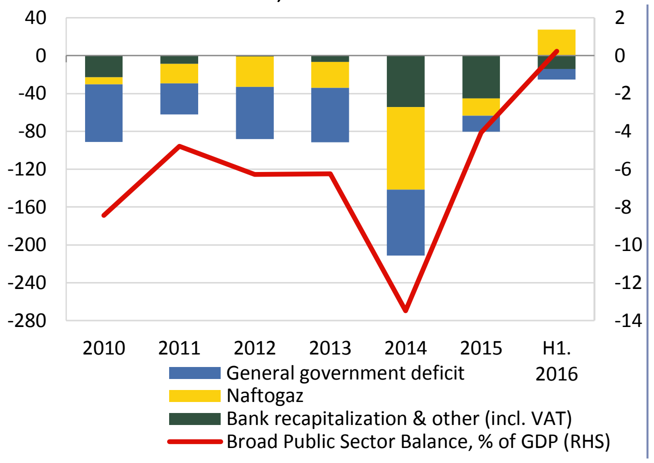
Source: Treasury; NBU staff estimates.

Budget Balance Indicators, UAH bn



Source: Treasury; NBU staff estimates.

Public Sector Fiscal Balance, UAH bn and % of GDP



Source: Treasury; MFU; IMF; NBU staff estimates.

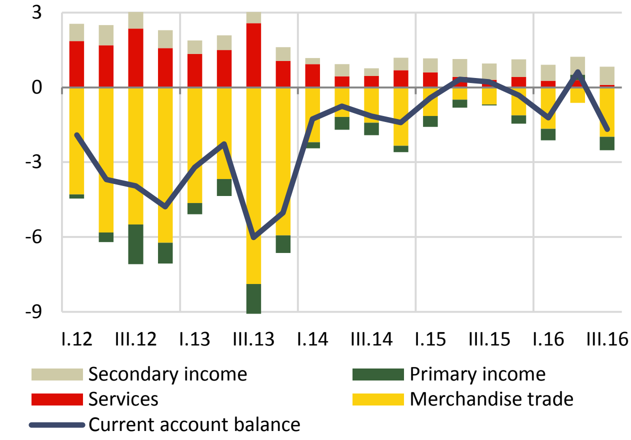
2.2.5. BALANCE OF PAYMENTS

The current account balance returned to a deficit (USD 1.7 billion) in Q3 2016, largely due to the trade in goods deficit widening more than expected. Merchandise exports dropped somewhat faster y-o-y, mainly due to external economic conditions worsening. Meanwhile, merchandise imports returned to growth in annual terms, driven by an increase in gas imports and domestic demand. Apart from that, scheduled interest payments on restructured Eurobonds and the lifting of restrictions on the repatriation of dividends accrued in 2014-2015 resulted in an expected widening of the primary income deficit.

Net financial account inflows rose to USD 2.2 billion, as expected, driven by the resumption of official financing. The government issued Eurobonds guaranteed by the US government worth USD 1 billion. Net borrowing by the private sector increased compared to the previous quarter, in spite of a slower reduction in FX cash outside banks. This was mainly attributed to higher FDI inflows to the real sector.

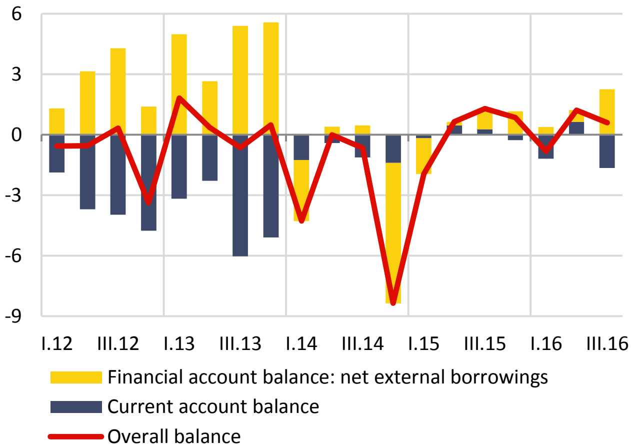
A USD 600 million surplus on the overall balance of payments and a third IMF tranche of USD 1 billion disbursed under the EFF brought about an increase in international reserves to USD 15.6 billion, or 3.7 months of future imports, as of 1 October 2016.

Current Account Balance, USD bn



Source: NBU

Overall Balance of Payments, USD bn



Source: NBU

Current account

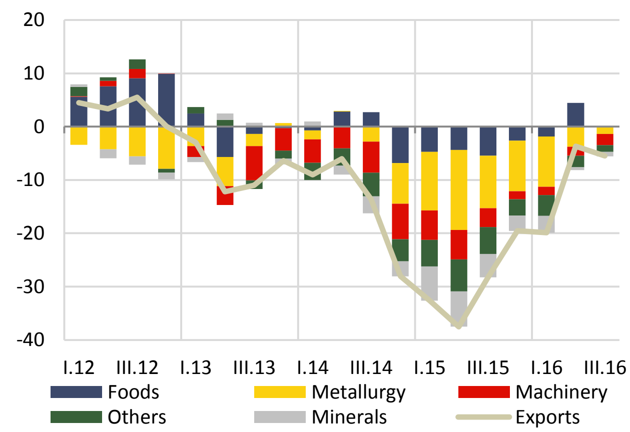
The current account recorded a larger deficit in Q3 than expected, due to investment demand increasing faster than projected. Apart from that, the decline in exports accelerated (to 5.5% y-o-y), driven by trade conditions deteriorating more sharply than envisaged by the forecast.

This was mostly the consequence of weaker foods and machinery exports. Although the volume of grain exports grew further (to 8.5% y-o-y[23]), the value of these exports dropped by 3.1% y-o-y, which reflected a fall in global prices. Apart from that, the high demand for sunflower oil from EU countries and South Asia seen in previous periods lowered the carry-over stocks of oil crop seeds. As a consequence, growth in the volumes of exports of sunflower seeds and oil slowed significantly. With global prices virtually flat, this resulted in the slowdown in export growth to 19.9% y-o-y (down from 32.8% in Q2).

Other factors included Turkey declaring a state of emergency, which made it more difficult for ships to pass through the Bosporus, and Russia introducing additional restrictions.[24] Metallurgical exports also fell by 5.1% y-o-y. Lower global prices have not yet affected the prices of Ukrainian exports in Q3, since the latter respond to global price changes with a time lag. However, cargo transportation difficulties weighed on the growth of steel export volumes.

Apart from that, machinery exports dropped by 21.9% y-o-y, as some supply contracts were executed in previous periods, and exports to CIS countries dropped further after Russia introduced additional restrictions on the transit of Ukrainian goods.

Contribution to Annual Changes in Exports, ppts



Source: NBU staff estimates

[23] NBU estimates.

[24] On 1 July 2016, Russia introduced new restrictions on the transit of some Ukrainian goods destined for Kazakhstan and Kyrgyzstan.

Across regions, Asian countries remain the main importers of Ukrainian goods, accounting for 35.3% of total exports. In particular, drought in the region spurred demand for Ukrainian wheat. Grain exports to African countries also grew. Meanwhile, the share of European countries narrowed, driven by a drop in sunflower oil exports, while that of CIS countries fell due to Russia's transit ban on Ukrainian goods.

In contrast to exports, merchandise imports rose faster in Q3 (by 8.1% y-o-y) than expected. The growth in investment imports remained strong, although slowed slightly to 37% y-o-y. Imports of agricultural machinery grew at the highest pace.

Imports of motor cars also expanded at a fast pace (76.1% y-o-y), despite a slight slowdown in q-o-q terms. Consumer goods imports grew fairly fast (up by 18% y-o-y), reflecting a further increase in real household income and a stable economic situation. In particular, food and industrial imports grew by 15% y-o-y and 13.7% y-o-y respectively.

Gas imports rose dramatically in Q3, to 3.4 bn m^3, driven by the need to replenish the gas reserves in underground storages. The gas reserves in the storages had risen to 14.3 bn m^3 by 1 October 2016, up by 47% q-o-q, although down by 9% y-o-y. As before, Ukraine imported gas solely from Europe. The diversification of gas supply sources has reduced the share of total imports from Russia while increasing that of European countries.

The surplus on trade in services narrowed to USD 103 million y-o-y in Q3, which was in line with the NBU's projections.

Exports of services changed only marginally in Q3, down by 0.1% y-o-y. Exports of travel services fell by 6.5% y-o-y in Q3, as visitors were spending less in the dollar equivalent. Exports of pipeline transportation services also declined by 3.8% y-o-y because of last year's high base of comparison.[25] However, this was offset by a rise in IT-service exports (by 16.8% y-o-y), reaching 18.5% as a share of total exports of services.

The economic recovery together with improved consumer sentiments drove imports of services up by 6.9% y-o-y. In particular, imports of transportation and travel services grew by 15.2% y-o-y and 13.3% y-o-y respectively.

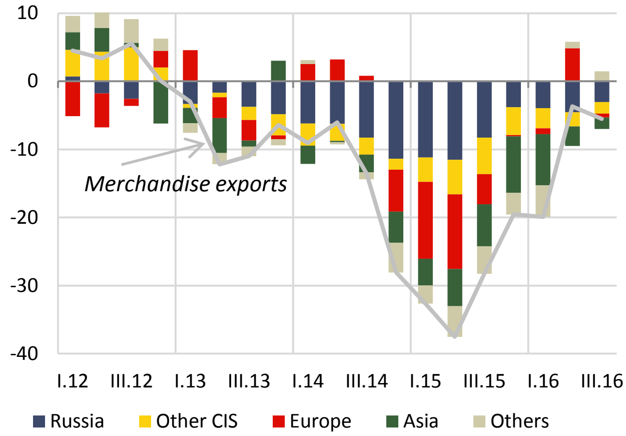
The primary income account recorded a large deficit of USD 542 million. This was attributed to the scheduled interest payments related to restructured Eurobonds that were made in September (USD 0.5 billion), and the lifting of the ban on the repatriation of dividends to foreign investors accrued for 2014-2015.

Remittances to Ukraine rose further in Q3, by 8.5% y-o-y to USD 1.4 billion. Remittances from European countries and the US continued to grow, while those from CIS countries declined, as expected, reflecting unfavorable financial and economic environments in most of these counties. As a result, the surplus on secondary income account widened to USD 727 million.

Financial account

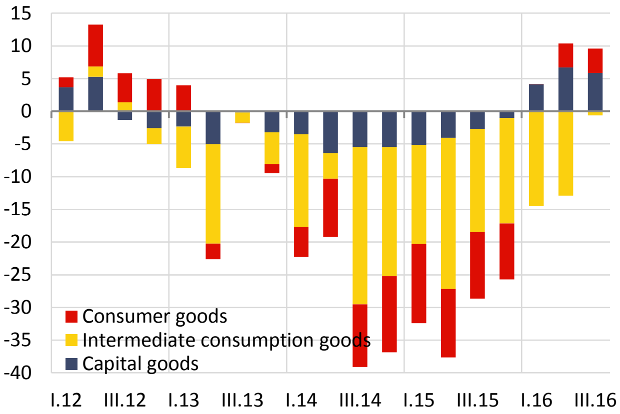
Net financial account inflows increased in Q3 2016, driven primarily by the resumption of official financing. This was in line

Contribution to Annual Changes in Exports by Regions, ppts



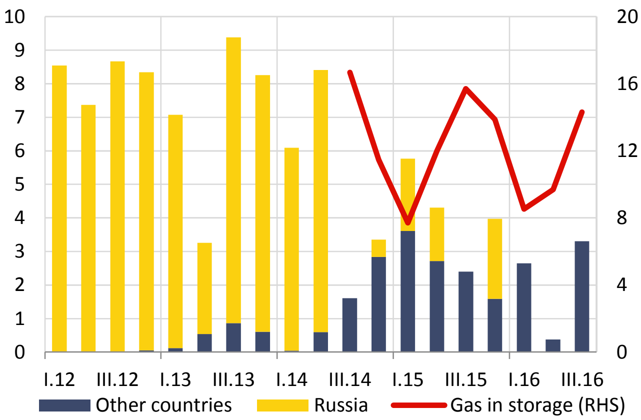
Source: NBU staff estimates

Contribution to Annual Changes in Imports by Broad Economic Categories, ppts



Source: NBU staff estimates

Natural Gas Imports, bn m^3



Source: Naftogaz, Ukrtransgaz

[25] The transit of gas has risen significantly since July 2015, after Gazprom lifted restrictions on the transit of gas through Ukraine in April 2015.

with NBU expectations. Borrowing by the private sector increased slightly versus Q2, in spite of the deceleration in FX cash outside banks reduction. Large net inflows to the private sector resulted from an increase in FDI inflows to the real sector. The banking sector was completing recapitalization programs for the largest foreign-owned banks.

External financing of the government sector resumed after the second review of the IMF EFF was successfully completed at the end of Q3. The government issued US-guaranteed Eurobonds worth USD 1 billion in September.

In spite of slowing in q-o-q terms, the reduction in FX cash outside banks (by USD 1.4 billion) was primarily responsible for financial account inflows. The real sector attracted net debt inflows of USD 190 million, predominantly in the form of short-term loans. However, this was accompanied by an increase in arrears (up by USD 0.5 billion), although at a much slower pace than in previous quarters.

FDI inflows to the real sector almost doubled, to USD 497 million. However, FDI inflows to the banking sector reduced to USD 411 million after the recapitalization program for the largest foreign-owned banks was completed. As before, these investments were almost solely used for debt-to-equity operations. As a consequence, debt outflows from the banking sector decreased to USD 478 million, down from USD 804 million in Q2.

The rollover of long-term private external debt increased to 52% (up from 40% in Q2), with rollover excluding debt-to-equity operations making up about 70%.[26] Rollover improved in both the banking and the corporate sectors.

Rollover of long-term private external debt, %

	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016
Banks	79	18	22	9	20	41
Real sector	31	26	57	67	53	65
Total	54	22	35	31	40	52

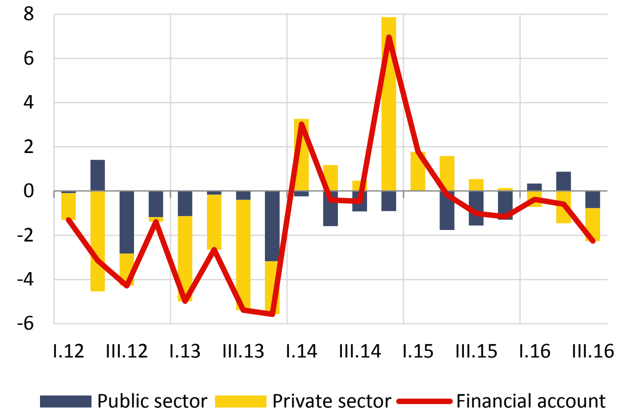
Reserve assets

A surplus on the overall balance of payments and a third IMF tranche of USD 1 billion disbursed under the EFF increased international reserves by USD 1.6 billion in Q3, to USD 15.6 billion, or 3.7 months of future imports as of the end of September.

External sustainability

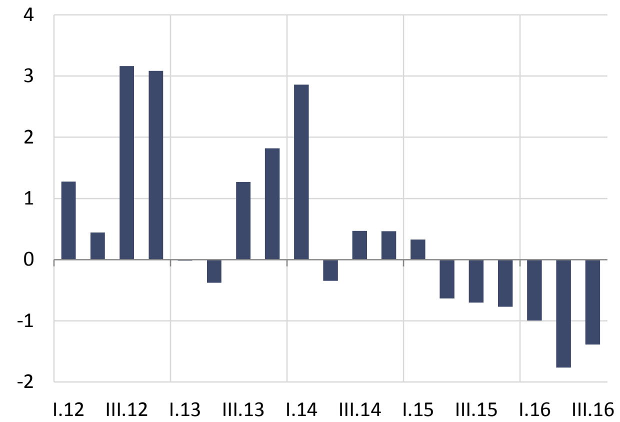
Most external sustainability indicators improved gradually in Q2 2016. This was mainly attributed to a decrease in gross external debt and short-term debt by remaining maturity. International reserves adequacy indicators also improved.

Financial Account: Net External Assets, USD bn



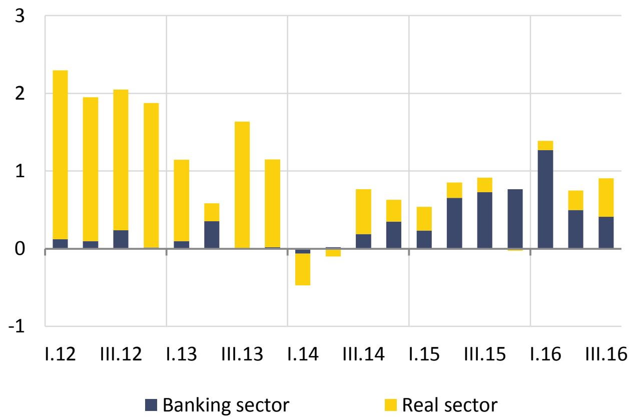
Source: NBU

FX Cash outside Banks, USD bn



Source: NBU

Foreign Direct Investments, USD bn



Source: NBU

[26] When calculating rollover, debt-to-equity operations are included in the repayment of debts to parent banks. However, they are excluded from FDIs received by banks.

External Sustainability and International Reserve Adequacy Indicators

%	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016
External debt/GDP	106.7	119.3	130.5	131.3	129.8	127.2
External debt/exports of goods and services	206.9	229.8	248.3	248.1	255.9	252.8
Short-term debt/gross debt	43.5	43.6	41.0	43.1	40.6	39.8
Short-term debt / GDP	46.4	52.0	53.5	56.6	52.7	50.6
Short-term debt/exports of goods and services	90.0	100.1	101.7	107.0	103.8	100.5
Openness of the economy[27]	106.6	106.9	107.9	107.7	104.3	103.7
Reserves/short-term debt	18.4	18.8	24.9	26.0	26.7	30.6
Reserves, composite IMF measure	31.9	32.9	41.9	45.2	44.8	50.1
Reserves in months of future imports (3 months)	82.7	85.3	104.3	109.5	102.5	111.4
Reserves as a share of broad money	22.8	22.1	29.4	32.1	33.1	33.5

Ukraine's gross external debt retreated by USD 2.4 billion in Q2, to USD 115 billion, driven by a decrease in the debts of all sectors.

The debt of the banking sector declined mainly due to banks repaying their loans from parent banks. The debt of the real sector declined due to a drop in debts arising from long-term loans, which was partly offset by the build-up of arrears.

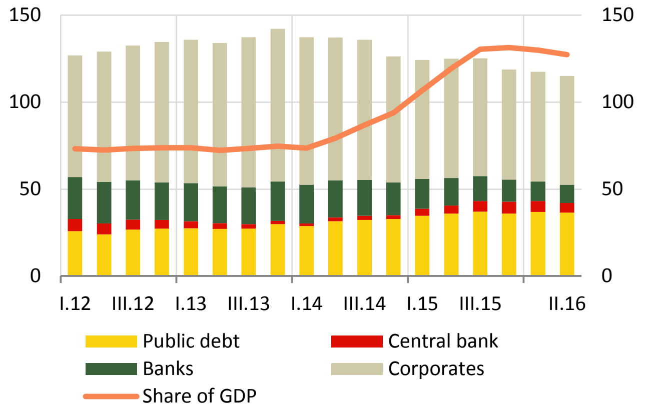
The external debt of the general government sector declined by USD 0.2 billion as a result of Kyiv Municipal State Administration restructuring its Eurobond-related debts, and the central bank repaying USD 0.8 billion under a swap agreement.

Short-term external debt by residual maturity fell by USD 1.9 billion in Q2 2016, to USD 45.7 billion. Short-term government debt by residual maturity remained almost flat, while that of the central bank retreated to almost zero.

The debt of the real sector dropped by USD 0.9 billion, mostly reflecting a decline in short-term debt on trade credits. The debt of the banking sector decreased mainly due to debt-to-equity operations.

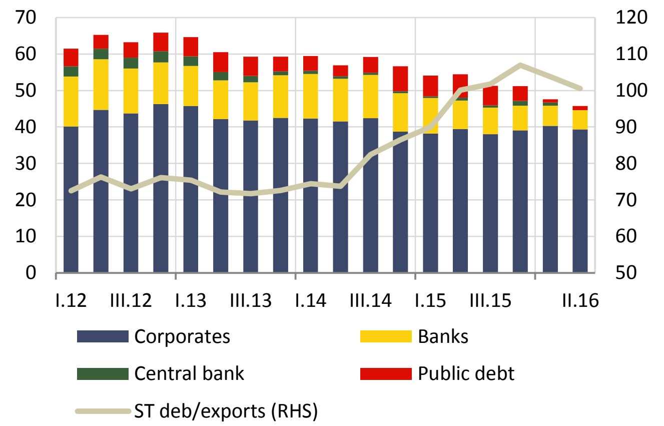
The USD 1.3 billion rise in international reserves that took place in Q2 improved reserve adequacy indicators. In particular, the ratio of reserves to short-term debt (Guidotti - Greenspan criterion) and the composite IMF measure (ARA metrics) increased to 30.6% and 50.1% respectively (up from 26.7% and 44.8%), with the norm being 100%. Reserves in months of future imports grew from 3.1 months to 3.3 months, while the ratio of reserves to broad money changed only marginally.

Gross External Debt, USD bn



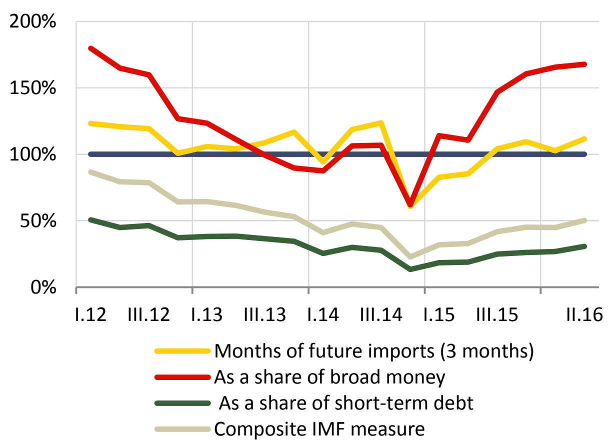
Source: NBU

Short-term External Debt by Remaining Maturity, USD bn



Source: NBU

Adequacy Criteria of International Reserves, %



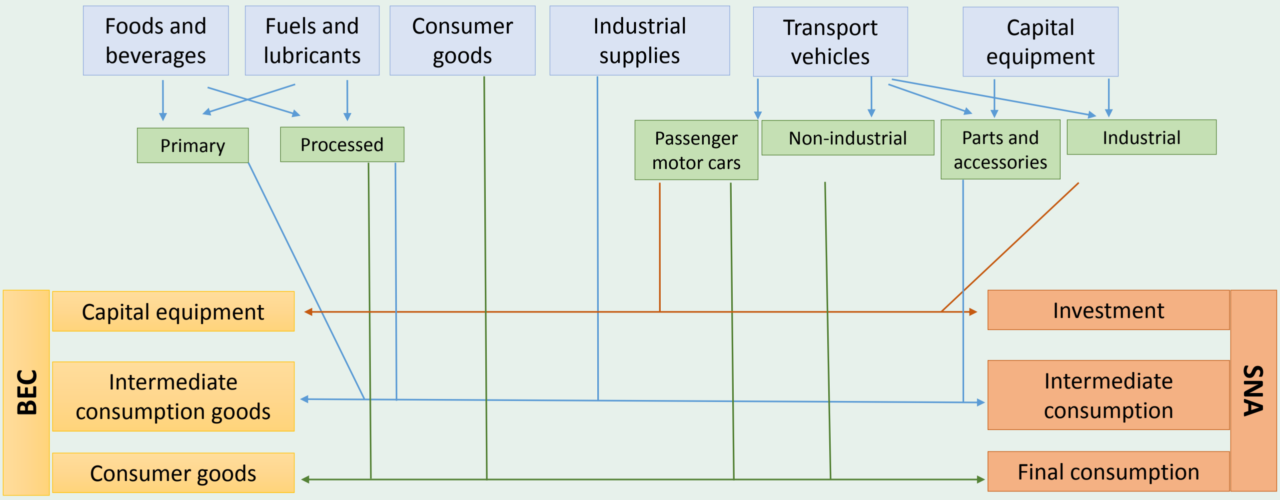
Source: NBU staff calculation

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

Analysis of Ukraine's external trade in goods by broad economic categories

Traditionally, for the analysis of merchandise trade indicators geographical and merchandise breakdown has been used. However, the classification by Broad Economic Categories (BEC) has been developed upon the recommendation from the UN Statistical Commission in order to deepen the analysis and to better understand the correlation between external trade, SNA, and input-output tables, as well as international trade in goods..

Interconnections between commodities, BEC and SNA



According to BEC, goods are subdivided into foods, industrial supplies, capital equipment, and consumer durables and non-durables. BEC comprises a total of 19 main categories, 16 of which belong to three broad categories of final consumption: consumer goods, capital goods, and semi-finished products. The fourth category (other goods) consists of goods that are difficult to classify under the above three. BEC calculations have been applied by the NBU since 2008 with a retrospective view to 2005 data.

Until recently, Ukraine's merchandise export and import structure based on BEC has been rather stable. However, gradual changes with more pronounced tendencies within the import structure could be observed since 2013.

Thus, Ukraine's export structure has largely biased towards intermediate consumption goods (their share in the country's total exports is about 80%). This reflects the dependency of the country's exports and economy as a whole on raw materials, which makes the Ukrainian economy highly vulnerable to external shocks.

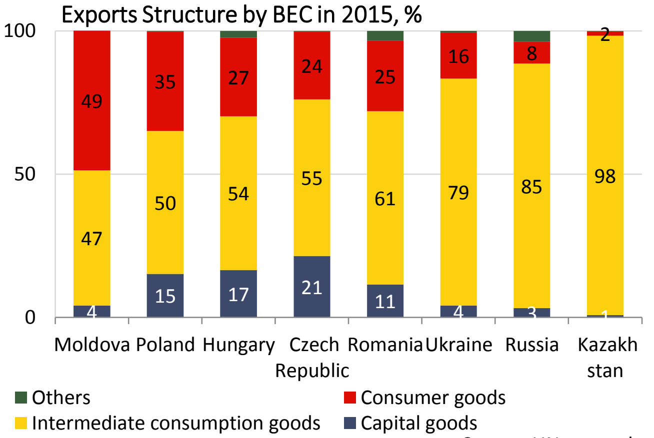
Foods (grains, sunflower oil) and metallurgical products (semi-finished products) account for the lion's share of intermediate consumption goods. At the same time, worsened price conditions for metallurgical enterprises and high external demand for grains and sunflower oil caused changes within the intermediate consumption structure. As a result, the share of agriculture in total GDP also grew to 12%.

After 2013, the share of consumer goods in total exports has been gradually growing, among other things due to the Association Agreement with the EU that eased access to the European market for Ukrainian food products. This stimulated an increase in the share of food processing within the total industrial production to 33.5%.[28]

Consumer durables and non-durables have a consistently low share of about 4% in exports.

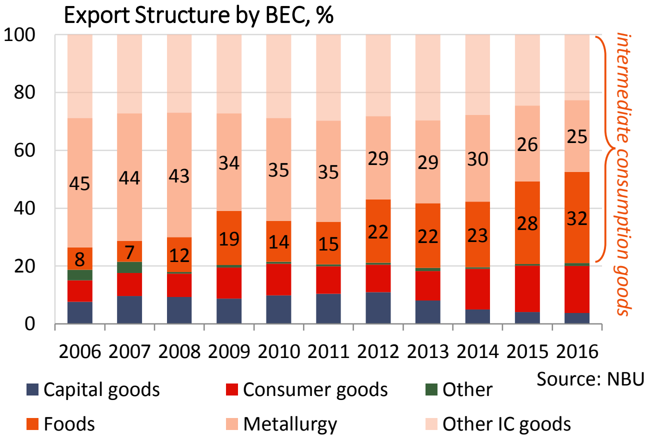
Slow pace of the reforming the Ukrainian machinery sector coupled with conforming to developed countries' technical

Exports Structure by BEC in 2015, %



Source: UNcomtrade.

Export Structure by BEC, %



Source: NBU

[28] Hereinafter – data for H1 2016.

requirements were responsible for the industry's export concentration on CIS markets. Since 2012, "trade wars" with the Russian Federation and later on de-facto imposition of a ban on transit of Ukrainian goods through the Russian territory to third countries have caused a substantial decline in exports and production of machinery. As a result, the share of capital goods in total merchandise exports declined considerably after 2012, mainly due to a reduction in exports of transport equipment, particularly railway and transport vehicles. Capital goods exports have also been dropping, although at slower rates (average annual decline was 48% and 30% in 2014-2016, respectively).

Import structure changes according to BEC have been more pronounced, which suggests that qualitative changes indeed have been taking place. Intermediate consumption goods are responsible for the largest share in imports-, which proves the Ukrainian economy's high import-dependence. According to input-output tables (latest data available for 2014), imports amounted to about 30% of intermediate consumption. Machinery, chemical and pharmaceutical industries account for the highest share in the manufacturing (about 50%).

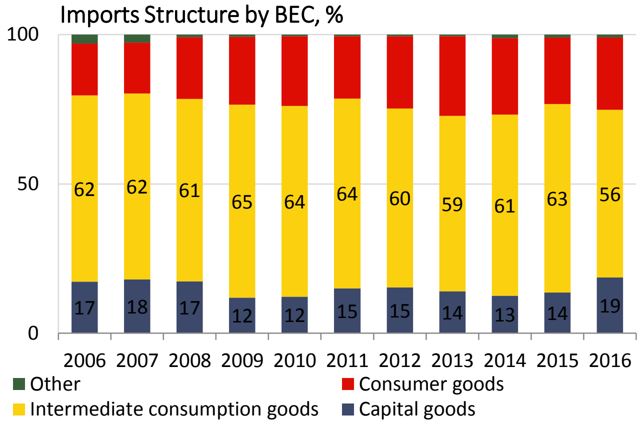
However, for the last few years, capital goods and processed industrial goods for production have been steadily growing as a share of intermediate consumption goods. At the same time, energy imports (natural gas, oil, etc.) have been steadily contracting due to a gradual reduction in the industrial sector energy intensity. However, energy intensity of the Ukrainian economy remains one of the world's highest.[29]

Consumer goods account for the second largest share in total imports, notwithstanding its gradual decline during the last few years due to falling household incomes and hryvnia depreciation. Higher decline rates of consumer goods imports compared with those for private consumption during the last few years may signal the import substitution processes have begun.

The share of investment imports has been the smallest. However, it started to grow as a result of machinery imports growth in 2016, mainly for agricultural purposes. This was caused by the need to renew fixed assets and was supported by increased export proceeds of the agrarian producers due to high grain and sunflower harvests. Moreover, domestic production of investment purpose goods has also been growing, particularly agricultural machinery, which supports our view that investments play a key role in the economic recovery in 2016-2017.

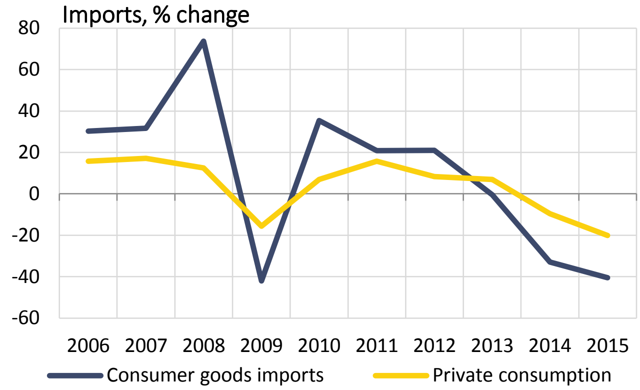
Further investment build-up will foster qualitative economic changes owing to lower energy intensity of production, increased labor productivity, and higher competitiveness of Ukrainian products in global markets.

Imports Structure by BEC, %



Source: NBU

Private Consumption and Consumer Goods Imports, % change



Source: SSS, NBU.

[29] https://yearbook.enerdata.net/energy-intensity-GDP-by-region.html

2.2.6. MONETARY SECTOR AND FINANCIAL MARKETS

After five months of an appreciation trend, the hryvnia came under depreciation pressure in August and early September. The pressure was mainly generated by a seasonal increase in FX demand. Moreover, it was driven by worsened market sentiments amid growing uncertainty over disbursement of official external financing and intensified tensions over Crimea and in the east of the country. However, NBU actions to mitigate the excessive exchange rate volatility and improved market sentiments on the back of the IMF decision to disburse the next tranche have reduced considerably hryvnia depreciation pressures from mid-September. This led to the appreciation of the hryvnia in the second half of September and in October, and also enabled the NBU to resume FX purchase auctions to replenish international reserves.

Given a steady decline in inflationary pressures, the NBU continued to ease its monetary policy. In Q3 2016, the regulator cut its key policy rate twice. From 28 October 2016, it was set at 14.0%. The coherent monetary policy easing has been gradually transmitting to market interest rates.

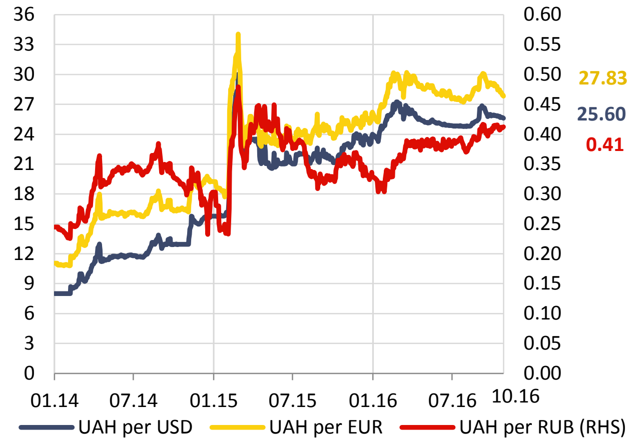
Bank lending activity remained subdued, though the stock of domestic currency loans grew slightly at the end of Q3 2016. The demand for loans also showed signs of increase.

FX market

The FX market saw a temporarily heightened seasonal volatility in the second half of Q3 2016. In July and early August, the hryvnia maintained an appreciation trend that prevailed over the past few months. However, volatility and depreciation pressure on the hryvnia increased from mid-August. This resulted from a seasonal increase in FX demand. Growing uncertainty over disbursement of external financing by the IMF, and psychological factors, such as worsened sentiments due to intensified tensions over Crimea and in the east of the country, have also contributed.

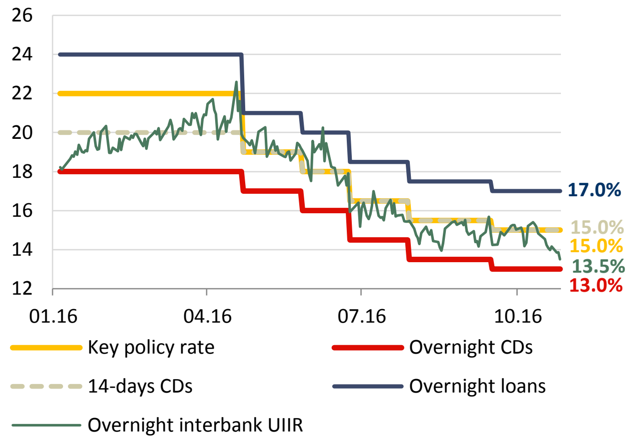
At the end of August, the NBU resumed FX purchase auctions to smooth excessive exchange rate fluctuations. NBU actions and improved market sentiments, backed by the IMF decision to disburse the next tranche, considerably eased pressure on the hryvnia in the second half of September. As a result, the official hryvnia exchange rate partially recouped losses, having, however, depreciated by 4.4% with respect to USD for Q3 2016 as a whole (by 8.0% from the beginning of the year to the end of September). Stabilization of the FX market situation enabled the NBU to resume FX purchase auctions to replenish international reserves in September. For Q3 2016, the NBU remained a net FX buyer, accumulating USD 114.2 million on a net basis. During October, the situation in the FX market remained favorable with the official hryvnia exchange rate to US Dollar appreciating by 1.2% (as of 26 October 2016). This allowed the NBU to continue replenishing international reserves by carrying out FX purchase auctions (in the amount of USD 214.5 million as of 26 October 2016). In September-October, the situation in the cash FX market also improved.

The Official Hryvnia Exchange Rate, as of 26 October 2016



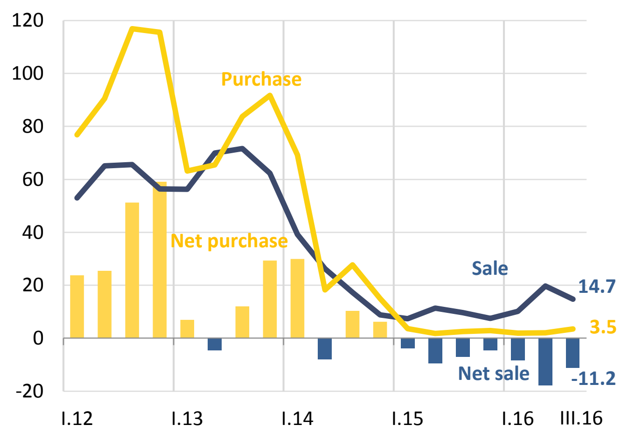
Source: NBU

NBU's Policy Rates and UIIR, as of 26 October 2016, % pa



Source: NBU

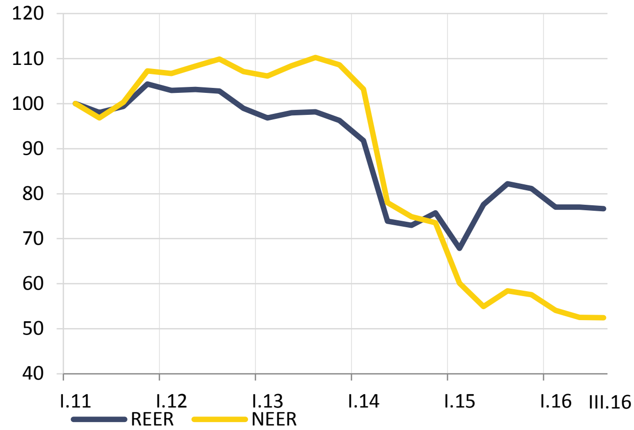
Daily Average Amount of Cash FX Purchases/Sales by Households, USD million



Source: NBU

The average official hryvnia exchange rate to US Dollar depreciated mildly in Q3 2016 (by 0.5% q-o-q) due to its depreciation in August and at the beginning of September, despite its rebound later in September. Most MTP currencies also weakened with respect to the USD (on average for the quarter). As a result, the hryvnia NEER remained virtually unchanged compared with the previous quarter. However, in annual terms the decline in the NEER has deepened to 10.2%. Given a sharp easing of inflation in Ukraine, the hryvnia REER also declined by 0.4% q-o-q and by 6.7% y-o-y.

Hryvnia REER and NEER Indexes (Based on Interbank Exchange Rate, I.2012=100, quarterly average)



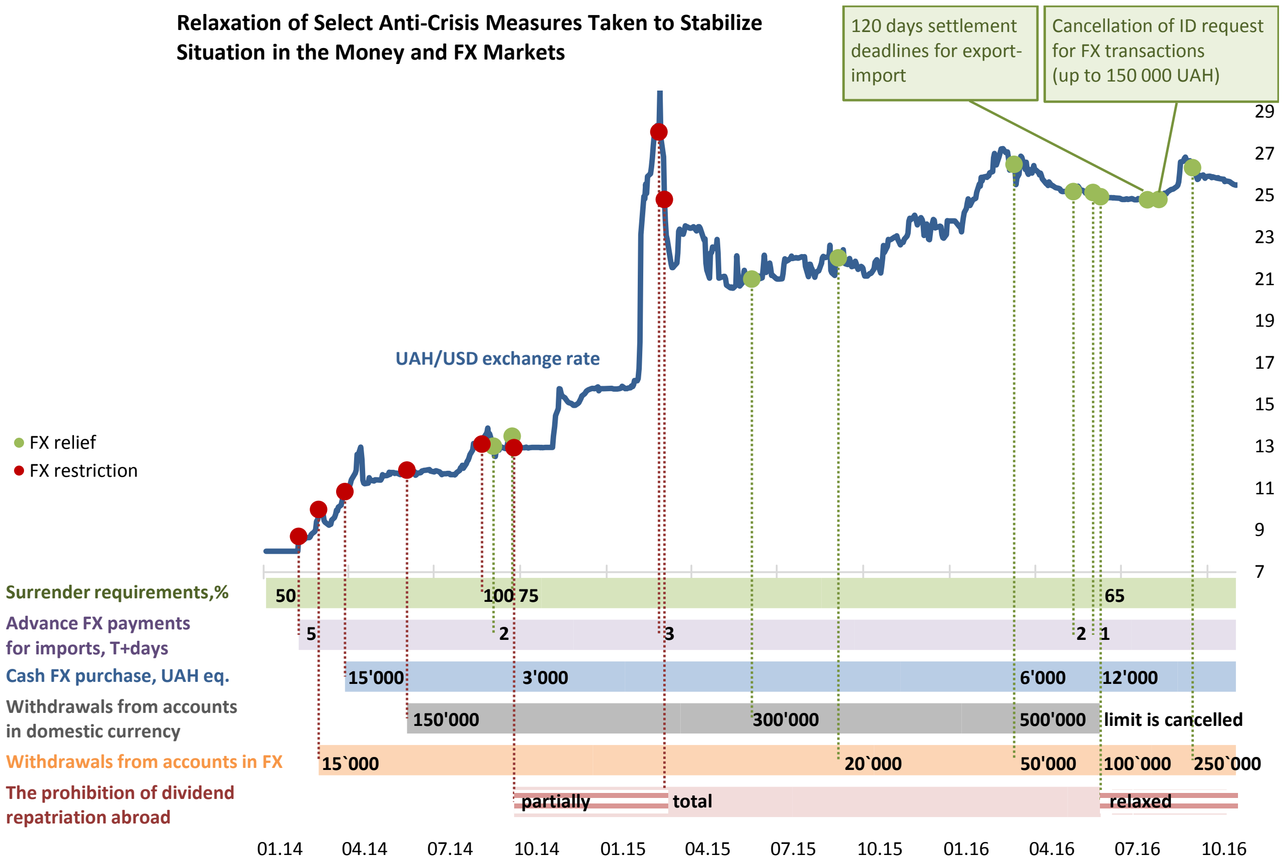
** preliminary data*
Source: IFS, staff estimates

In view of generally favorable situation in the FX market during two last quarters and despite a temporary seasonal increase in volatility of the hryvnia exchange rate in August - the beginning of September, the NBU continued to relax FX market restrictions in Q3 2016. In particular, the NBU:

- extended the time limit for settlements on export/import transactions from 90 to 120 calendar days;
- eased conditions for settlements of import contracts with clients;
- cancelled the requirement concerning submission of documents by individuals when performing FX transactions in amounts up to the equivalent of UAH 150,000;
- simplified the procedure for conducting external economic operations;
- increased the maximum amount of FX cash or investment metals that may be issued per day per customer to the equivalent of UAH 250,000.

Moreover, the procedure for issuing individual licenses for some FX transactions was streamlined.

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



Monetary Base and Bank Liquidity

In Q3 2016, banking system kept working with liquidity surplus, although the surplus narrowed compared to the previous quarter. In particular, the average daily balances in banks' correspondent accounts in Q3 were higher than those in Q2. However, they decreased at the end of September as compared to the end of June. In addition, banks' balances with the NBU CDs accounts decreased compared with the previous quarter, though the average daily balances remained higher than in the corresponding quarter of the previous year.

The amounts of excess liquidity used to purchase NBU CDs decreased primarily due to active liquidity absorption via other channels. In particular, in Q3 2016 the net liquidity effect from government operations was negative at estimated UAH 11.6 billion.[30] In addition, liquidity decreased due to repayment of previously granted refinancing loans (net volumes stood at UAH -4.4 billion) and higher cash holdings (up by UAH 5.1 billion). Increased demand for cash was supported by a relatively protracted period of the hryvnia exchange rate appreciation (from March till the first ten days of August), a steady reduction in inflation pressures, and a gradual economic recovery.

During August-September 2016, liquidity was also absorbed via FX channel-as FX sale auctions were resumed. However, for Q3 2016 as a whole, the NBU FX operations led to an increase in banks' correspondent accounts by UAH 2.5 billion. DGF transactions also contributed to an increase in liquidity by estimated UAH 2.4 billion.

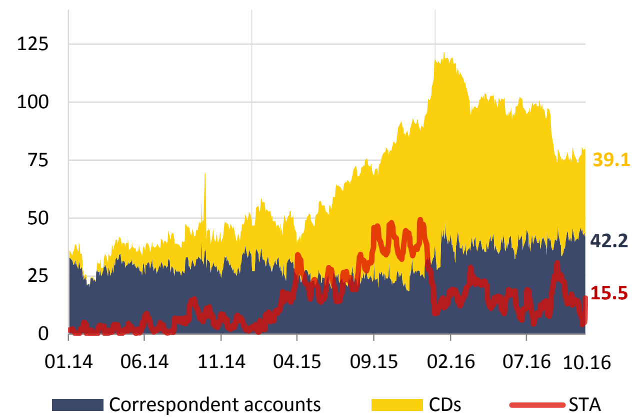
As the increase in cash exceeded the reduction in banks' correspondent accounts at the end of the period, monetary base reported a slight increase of 0.7% q-o-q in Q3 2016. In annual terms, the growth accelerated to 10.6%.

Money Supply and Its Components

In Q3 2016, the past relatively sustained growth in the stock of the domestic currency deposits has stalled. This partially resulted from their August decrease due to a shift from hryvnia deposits into FX ones (in August, the stock of FX deposits grew by 1.1% m-o-m) as a response to intensified depreciation pressure on the hryvnia in August. Seasonal household expenditures on the eve of a new school year and tax payments by economic entities were additional factors behind a decrease in hryvnia deposits. Although the inflow of deposits recovered in September, the total stock of domestic currency deposits declined by 0.7%q-o-q. Minor improvement in annual growth rate of the respective deposits reflected a favorable comparison base.

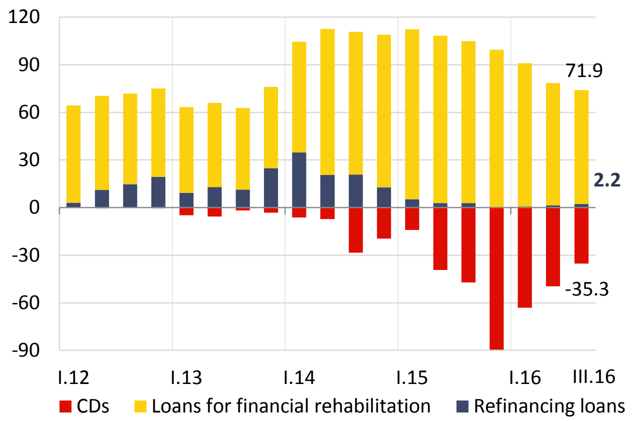
As FX deposit flows reversed in September, responding to improved FX market situation, their total stock as of the end of September did not change compared with the end of June. Due to a further decrease in the base of comparison, the annual rate of

Select Indicators of Banking System Liquidity, as of 26 October 2016, UAH bn



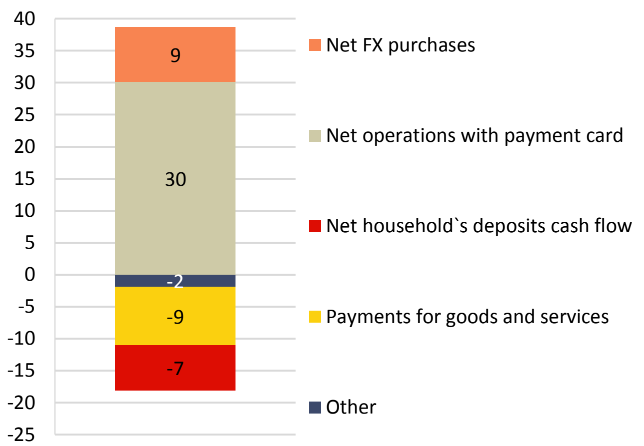
Source: NBU

Banking System Liquidity by Type of Operation, Stock, UAH bn



Source: NBU

Channels of M0 Issuance/Withdrawal, Q3 2016 compared to Q3 2015, UAH bn



Source: NBU

30 The NBU estimated the impact of fiscal factors on the decrease in banking system liquidity based on changes in the balances in the Single Treasury Account (declined by UAH 4.5 billion in Q3 2016), government service payments for bonds in the NBU portfolio (UAH 20.9 billion), and conversion of FX funds by the State Treasury (UAH 4.8 billion).

decline of FX deposits (in USD equivalent) slowed down sharply to 3.3%.

Notwithstanding developments in the stock of deposits, an increase in cash outside banks and valuation effects due to the hryvnia exchange rate movements caused the money supply to expand by 1.7% q-o-q and 12.6% y-o-y in Q3 2016.

Loans

Bank lending activity remained subdued due to elevated credit risks, weak solvency of borrowers, and still rising non-performing loans. The share of past due loans (excluding insolvent banks) grew from 22.1% of total loans at the beginning of the year to 25.8% as of 1 September 2016. The increase in their share partially reflected a delayed recognition of problem loans by some banks. At the same time, the stock of domestic currency loans edged slightly up at the end of Q3 2016, although an increase partially reflected restructuring of FX loans.

At the same time, according to the *Lending Survey* for Q3 2016,[31] demand for loans from both non-financial corporations and households has been strengthening. This was driven by a gradual revival of economic activity and increased households' spending on durable goods. Demand for loans was also facilitated by a gradual reduction in interest rates on loans.

In Q3 2016, the total stock of domestic currency loans went up by 7.2% q-o-q, thereby causing the annual rate of decline to ease to 1.5%. Meanwhile, the stock of loans to non-financial corporations grew by 10.3% q-o-q, whereas those to households decreased by 0.6% q-o-q. of the total stock of FX loans fell by 4.6% q-o-q (by 15.3% y-o-y).

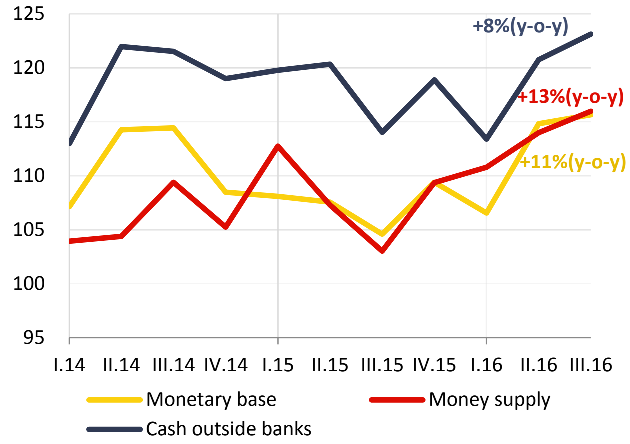
Interest Rates

Owing to a further alleviation of risks to price stability, the NBU continued to ease monetary policy. In Q3 2016, the regulator cut the key policy rate twice, setting it at 15.0% from 16 September 2016[32].

The coherent monetary policy easing prompted a reduction in the interbank rates to 15.4%. The average weighted interest rates on new household deposits, and loans (excluding overdrafts) to non-financial corporations and households in both domestic and foreign currencies declined as well. A slight increase in deposit rates for non-financial corporations in September was in response to the August outflow of funds for tax payments.

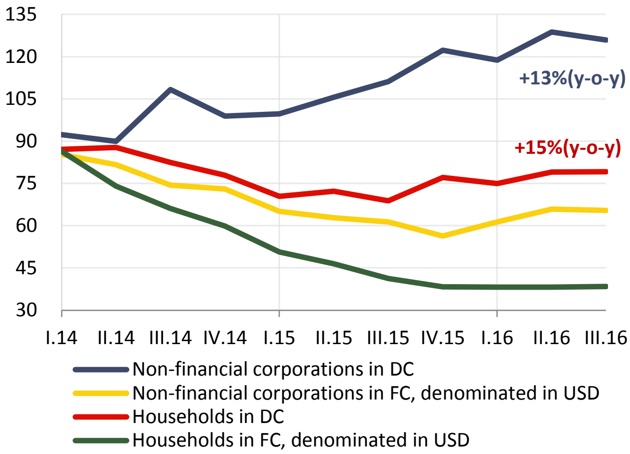
The buildup of market participants' expectations of further monetary policy easing facilitated a gradual reduction in sovereign bond yields as well as supported an extension of the longer end of the yield curve. An increase in demand for medium-term domestic government bonds led to flattening of the yield curve. From the beginning of the year, yields on hryvnia domestic government

Monetary Indicators, IV.2013=100



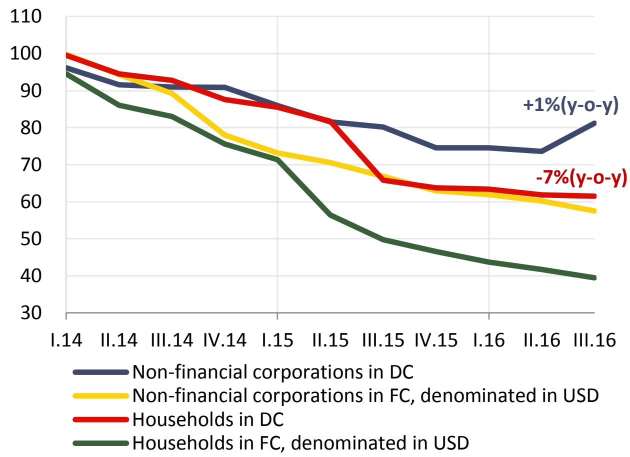
Source: NBU

Deposits, IV.2013=100



Source: NBU

Loans, IV.2013=100



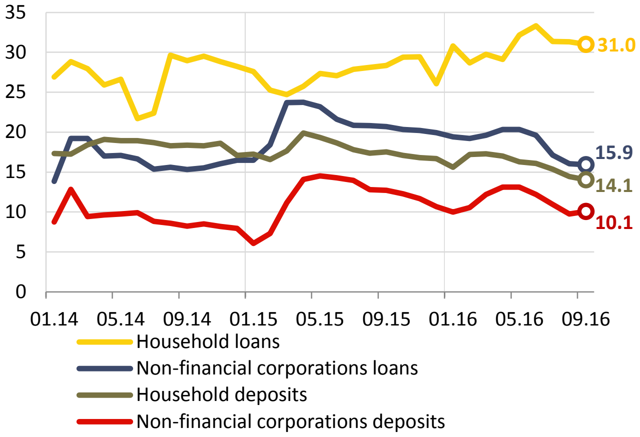
Source: NBU

[31] For more information see https://bank.gov.ua/doccatalog/document?id=34661557.
[32] For more information see https://bank.gov.ua/control/en/publish/article?art_id=36648513&cat_id=76291.

bonds in the secondary market have been also moderately declining.

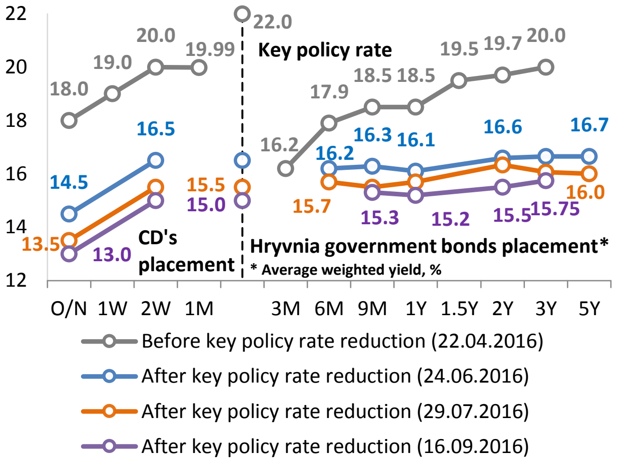
The ownership structure of domestic government bonds also changed. In particular, the share of government securities held by the NBU dropped by 11 ppts from the beginning of the year to 66% as of 1 October 2016. On the contrary, the share of bonds owned by commercial banks grew by 12 ppts to 28%.

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



Source: NBU

The Yield Curve on NBU's and Ministry of Finance Operations in 2016, as of 26 October 2016, % pa



Source: NBU

Transmission of the NBU key policy rate changes to financial markets

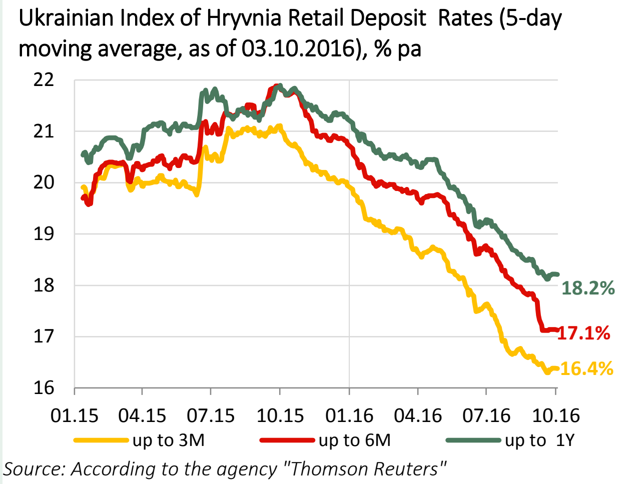
Successful implementation of the inflation targeting policy, the transition to which the NBU announced last year, depends on the effectiveness of the monetary transmission mechanism. Therefore, the NBU took measures aimed at enhancing its efficiency, including by redesigning monetary policy instruments. In particular in 2015, the NBU strengthened the role of the key policy rate, while at the beginning of 2016 it improved the operational design of the monetary policy (for more information see *The New NBU Interest Rate Policy Framework in Inflation Report, April 2016).*

These changes were attributed to the fact that, under inflation targeting, the central bank affects money market interest rates by changing the key policy rate, the rate for main liquidity management operations. A change in the key policy rate is transmitted to short-term interest rates in the interbank market, which, in turn, affect other interest rates, including government bond yields, banks' lending and deposit rates. These rates have a direct impact on consumption and investment decisions of both households and legal entities, and, therefore, on aggregate demand and inflation.

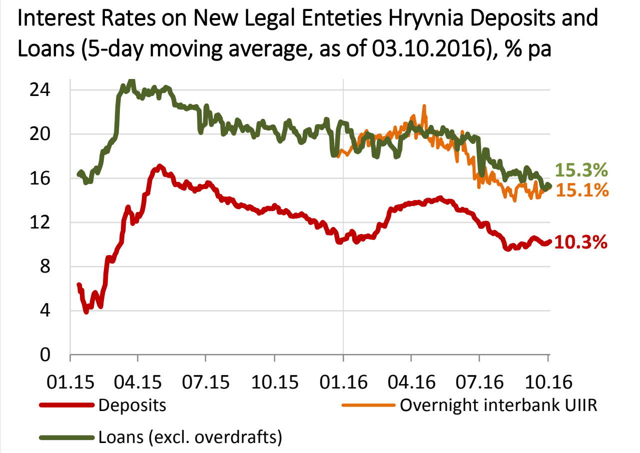
The period during which the NBU actively uses the interest rate as its main monetary policy instrument is quite short, thus restricting empirical modeling of monetary policy transmission via interest rates (IRPT). Yet, the period is long enough to draw preliminary conclusions concerning the NBU's ability to affect market developments via setting the key policy rate. In 2016, the NBU reduced its key policy rate five times (from 22% to 15%), prompting a decrease of the main interest rates in the Ukrainian financial market, including interest rates in the interbank market.

The estimates of the IRPT and its properties vary substantially across countries[33], with some recent literature suggesting a weakening of the IRPT mechanism (in particular, the financial crisis caused the IRPT to fell from typical 0.7–1.1 in the pre-crisis period to 0.05–0.3 in the post-crisis period). In addition, when the maturities and/or volumes of loans, the responsiveness of interest rates to the changes in the key policy rate decreases.

[33]For information see: N. Gigineishvili. *Determinants of Interest Rate Pass-Through: Do Macroeconomic Conditions and Financial Market Structure Matter?* IMF Working Paper, July 2011. According to estimates, the average IRPT for loan interest rates in emerging economies amounts to 0.25 for the short-term period and 0.30 for the long-term period.

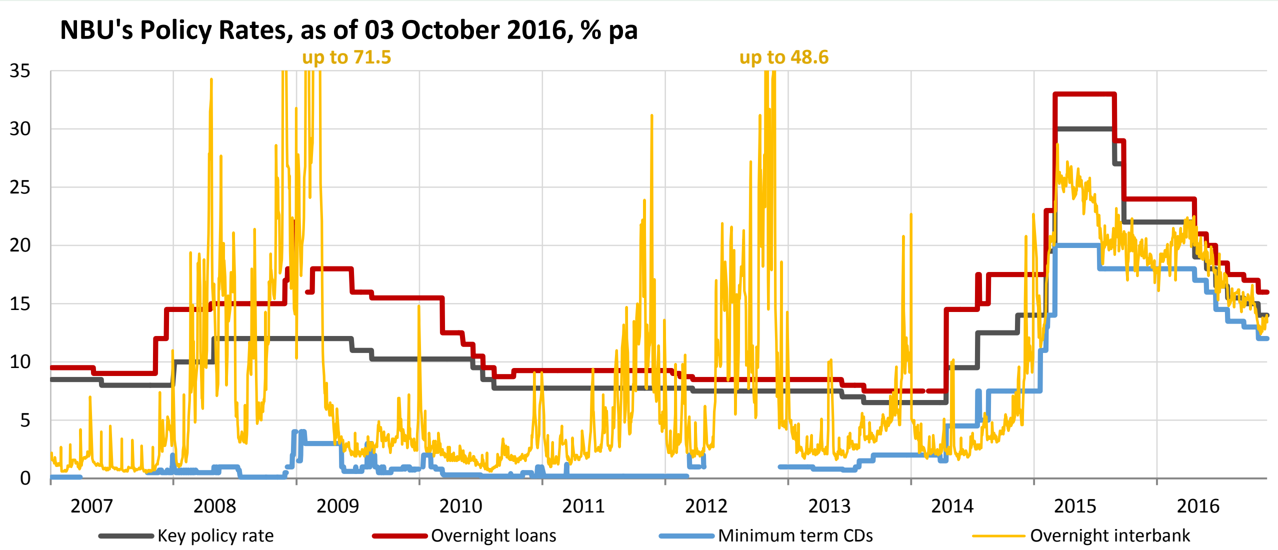


Source: According to the agency "Thomson Reuters"



Source: NBU

According to preliminary NBU estimates, since 2015 the IRPT coefficients for the Ukrainian financial market correspond to those for emerging economies. The low efficiency of the interest rate channel of the monetary transmission mechanism before 2015 can be explained by a rather symbolic role of the key policy rate in the money market. The tenuous correlation between NBU interest rates and real market rates was one of the main reasons behind limited ability of the NBU to build up the yield curve and affect inflation at a later stage of the transmission mechanism. Analysis of the interbank interest rate impact on interest rates for banks' loans to the real economy and deposits in the correspondent period shows weak initial impulse of the monetary policy (5.1%–6.8% and 6.7%–7.5%, respectively).



Responsiveness of banks' retail interest rates to changes in the interbank market rates

Parameter	01.01.2013–31.12.2014		01.01.2015–03.10.2016	
	impact on the lending rate (loans to the economy)	impact on the deposit rate	impact on the lending rate (loans to the economy)	impact on the deposit rate
Long-run effect	0.0679	0.0667	0.6222	0.5754
Short-run effect	0.0505	0.0749	0.6137	0.5610

Source: NBU estimates

Analysis of the domestic financial market identified a number of factors, which will help strengthen the IRPT in the short-run, and those, which will keep impair it. In addition, one should take into account a global trend towards weakening the IRPT and the impact of financial crises on the interest rate transmission, which is evident for both advanced and developing economies, in particular, due to high market volatility and large credit risk exposure.

IRPT factors in Ukraine's financial market

Factors strengthening the IRPT	Factors impairing the IRPT
decline in inflation	slow economy recovery
rejection of the fixed exchange rate	persistently high credit risks
decrease in volatility of the financial market in general and a reduction in the interest risk in particular	low quality of banks' loan portfolios
sufficient level of banks' liquidity	banks' recapitalization needs
increase in banking system transparency	low profitability of bank's operation

An increase in effectiveness of the monetary transmission is one of the NBU priorities envisaging efforts to develop both government securities and derivative markets, liberalization of the FX regulation, and revamp the banking system. Realization of the above measures will allow the NBU to strengthen the transmission, thus providing an effective mechanism for controlling inflation.

3. PROSPECTS FOR THE DEVELOPMENT OF THE ECONOMIC SITUATION IN UKRAINE

3.1. ASSUMPTIONS OF THE FORECAST

In 2016, economic growth in Ukraine's MTP countries has been accelerating, albeit at a slightly lower pace compared with the previous forecast amid slower growth of some economies in H1. Growth in Ukraine's MTP countries is expected to continue in 2017-2018.

Key risks to the economic recovery in these countries remain:

– the UK vote to exit the EU (Brexit);

– rising political and geopolitical tensions stemming from the threat of further weakening of relations among the EU countries, the aggravation of disputes in the South China Sea, mounting concerns over the situation in Syria, etc.; and

– sluggish world trade growth, including due to further strengthening of protectionist measures.

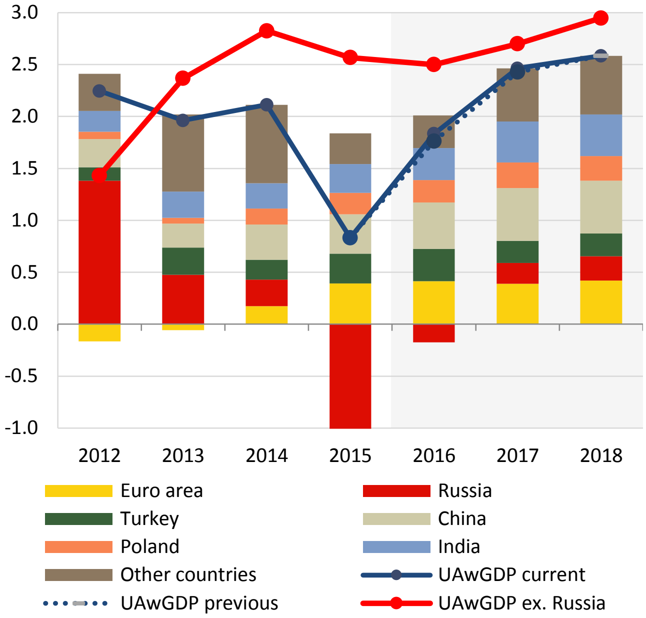
The following trends will be emerging in some of countries:

– The UK economic growth is expected to slow down next year to around 0.5% as rising uncertainty will affect companies' investment and employment decisions, as well as households' propensity to purchase durable goods. In addition, there is a risk of recession in case Brexit negotiations with the EU turn tougher than expected and trade agreements would have to be renegotiated based on WTO rules (without any preferences). This very factor can have a serious impact on economic growth of Germany and France. In this regard, more deliberate trade negotiations with the provision of a transition period will be a likely scenario. At the same time, the Bank of England's accommodative monetary policy will support the UK economy.
In general, the euro area should see weaker growth next year with a gradual recovery in 2018. The economic activity of the euro area will be restrained by financial imbalances (particularly in the banking sector), low inflation, as well as Brexit uncertainties. These factors will also affect CEE countries amid smaller amounts of available funding from EU development funds. The ECB policy will aim to further stimulate economies in the region;

- China's economic growth is expected to decelerate over the coming years as the country is shifting towards consumption-driven growth. However, concerns over a sharp Chinese slowdown in the near term have faded away. Corporate debt overhang estimated at USD 18 trillion, or 169% of GDP, high enough to potentially trigger a financial shock, poses a considerable challenge to the country's economy. However, the government is planning measures to reduce corporate debts by encouraging mergers and acquisitions, allowing bankruptcies, debt-for-equity swaps, and debt securitization in accordance with principles developed by the State Council;

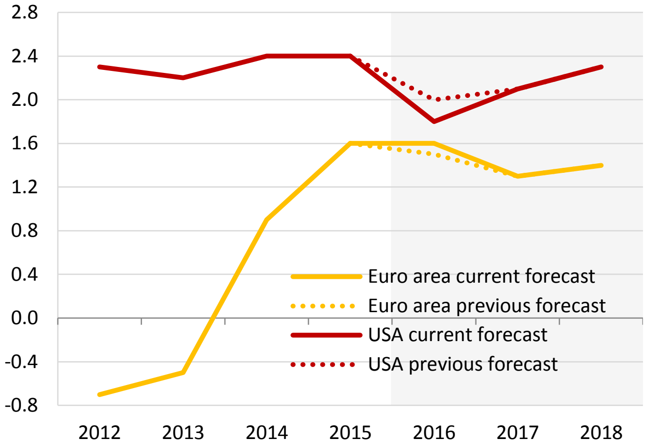
- the recovery of consumer demand, thanks to falling inflationary pressures and stabilization of the exchange rate of the ruble against the US dollar, will contribute to a slowdown of Russia's GDP decline with the subsequent revival of economic activity in the following years. However, the positive effect of such dynamics for Ukraine will be limited given the existing trade restrictions. At the same time, a stronger Russian economy will have a positive effect on some of the CIS

Contributions of Ukraine's MTP Countries to the Annual Change of UAwGDP, % y-o-y



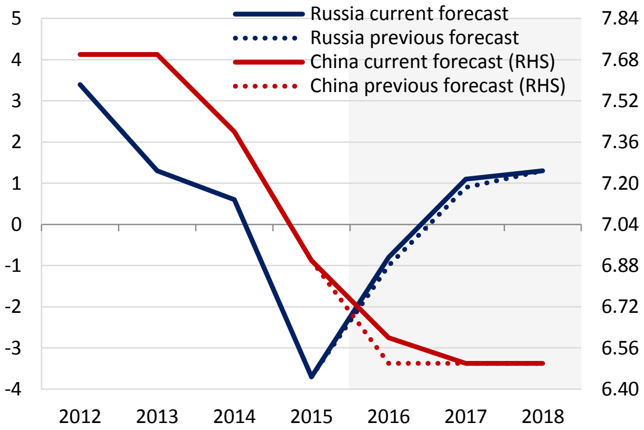
Source: NBU staff estimates (preliminary data)

Real GDP of Euro Area and USA, % y-o-y



Source: NBU staff estimates

Real GDP of Russia and China, % y-o-y



Source: NBU staff estimates

countries, such as Kazakhstan and Belarus. This will be indirectly reflected in an improved external environment for Ukrainian producers as well.

Despite further acceleration of economic growth in Ukraine's MTP countries, the external price environment for Ukrainian exporters will worsen by the end of this year and in the next two years, as compared to the previous quarter's assumptions. A sizable drop in prices for grains and oilseeds will be a major cause behind such developments. The decline in iron ore prices and relatively low prices of steel amid high output volumes will also play their role.

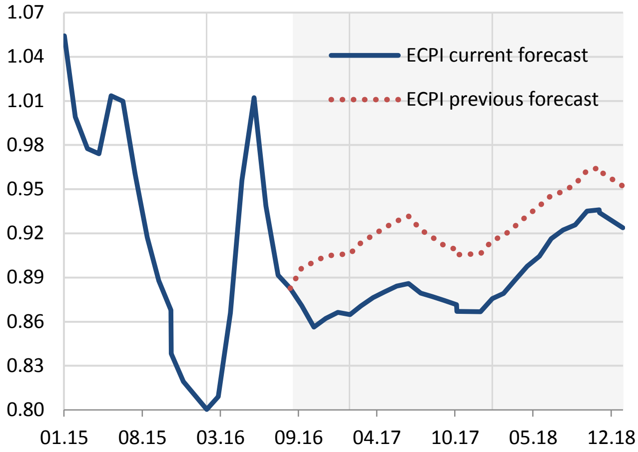
The forecast for global grains production in the 2016-2017 MY is the largest on record [34]. Expectations for the wheat crop have been raised on the back of improved weather conditions in Australia, Canada, China, and the United States. However, despite the expected upsurge in demand, grain stocks this year will hit the seven-year highs. In this context, grain prices will remain low due to sufficient stocks and record harvests.

Despite a temporary recovery during the current year, iron ore prices are expected to remain depressed in 2017-2018 amid increased supplies from the world's two largest iron-ore exporters (Brazil and Australia). Thus, Brazil plans to boost its supplies by 29.4%, while Australia's shipments are expected to grow by 11.9% by 2020. Given such increases in supplies, excess supply in the market will grow 2.8 times by 2018 (to 56 million tons).[35] Simultaneously, Iran, ranked as the world's 11th leading iron ore exporter in 2015 (14.8 million tons), is also seeking to increase iron ore exports .This will be made possible thanks to the commissioning in late 2016 of a new plant by the country's major Sangan Iron Ore Complex.

By late 2016-2017, the dynamics of steel prices will be determined not only by the policies of leading producers (China, Japan, India, USA, Turkey), but also by the market demand for these commodities. Despite the reduction of China's excess steel production capacities, the market will remain oversupplied. At the same time, the growth in demand from India may not compensate for falling demand from EU countries amid weaker economic growth due to Brexit. Only the introduction of final anti-dumping duties by certain countries will help prevent prices from collapsing. The gradual revival of the global economy in 2018 will drive steel prices upwards.

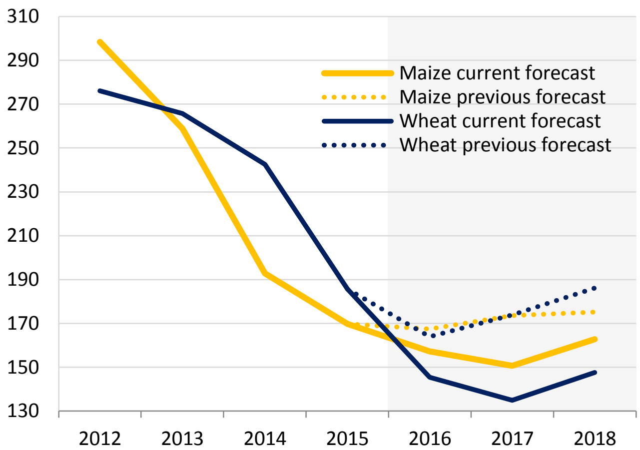
Starting from Q4 2016 through late 2018, the global oil market supply and demand is expected to come into balance. The main factor curbing supply growth will be the implementation of agreements between OPEC members to cap their extraction, which may also be supported by Russia. At the same time, non-OPEC production is expected to increase starting from 2017. Specifically, oil production will grow in such countries as Kazakhstan (thanks to the earlier launch of a new field in Kashagan, where reserves are estimated at 4.8 billion tons), Canada, and the USA (amid gradual recovery of shale oil production), as well as in Norway, Brazil, Yemen, and Azerbaijan. Simultaneously, India will see a gradual recovery in demand in 2017, helping offset falling demand in the EU. The

External Commodity Price Index (ECPI)



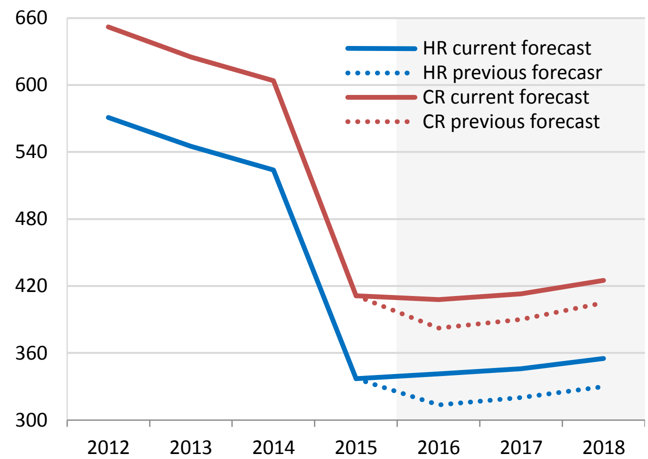
Source: NBU staff estimates

World Cereal Prices, USD/MT, annual average



Source: NBU staff estimates, based on IMF

Average Emerging Markets Steel Prices, USD/MT

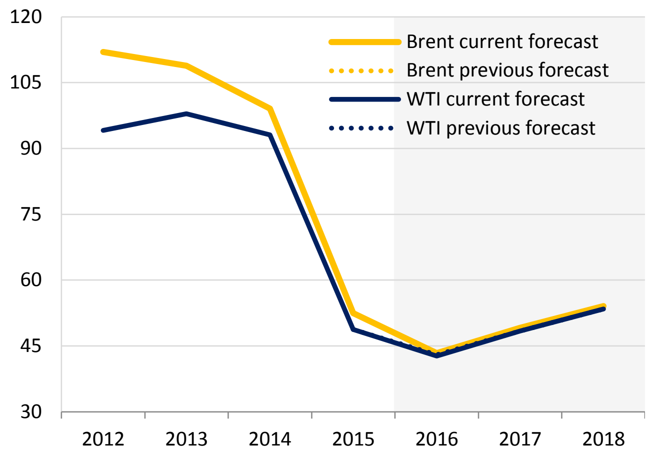


Source: NBU staff estimates, based on Steel Insight.

[34]According to the forecast of the International Grain Council from 29 September 2016.
[35]According to Bloomberg.

global oil market should see supply and demand in balance in 2018. According to our estimates, oil prices will be close to the USD 50/bbl until the end of 2016, and will stay in the range of USD 48-55/bbl barrel in 2017-2018.

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



Source: NBU staff estimates, based on Consensus Economics, IMF, U.S. Energy Information Administration, CME Group

	CPI, change as of the end of period, %			GDP, annual change, %			Exchange rates*		Commodity Prices**, USD			
	Euro area	Russia	USA	Euro area	Russia	USA	USD/EUR	RUB/USD	Imported gas, per 1m³	Brent crude oil, per bbl	Ferrous metals export, per ton	Grain export, per ton
2014	-0.2	11.4	0.8	0.9	0.6	2.4	1.33	38.3	292.5	99.1	481.5	201.2
2015	0.2	12.9	0.7	1.6	-3.7	2.4	1.11	61.0	274.0	52.5	336.1	166.9
2016	0.2	6.1	1.4	1.6	-0.8	1.8	1.12	67.6	198.8	43.4	294.4	148.0
2017	1.1	5.0	1.9	1.3	1.1	2.1	1.13	66.7	227.6	49.1	305.0	141.8
2018	1.4	4.0	2.0	1.4	1.3	2.3	1.15	67.5	258.4	54.1	316.3	154.1
annual change, %												
2015							-16.5	59.1	-6.3	-47.0	-30.2	-17.1
2016							0.7	11.0	-27.5	-17.3	-12.4	-11.3
2017							1.0	-1.3	14.5	13.2	3.6	-4.2
2018							1.5	1.1	13.5	10.2	3.7	8.7

** Average for the year.*

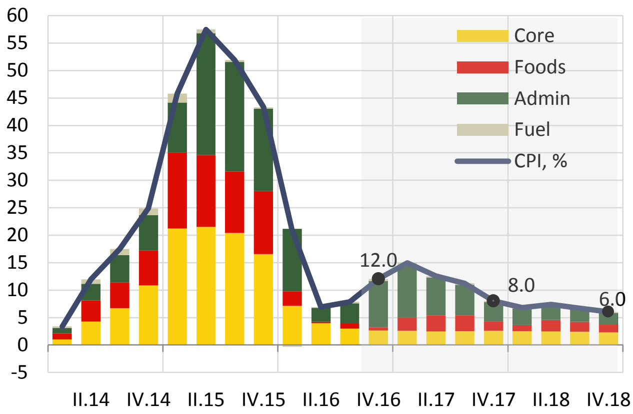
*** Average weighted by volume, excluding oil*

3.2. PRICES

The projected inflation will remain at target levels: 12% in 2016, 8% in 2017, and 6% in 2018.

Raw food inflation has been restrained by supply factors in the current year. While their effect is waning, it was a crucial factor for the forecast revision downwards to 2.0% (from 3.6%) in 2016. An upward price adjustment in the domestic food market will largely take place already next year. Core inflation will stabilize at 5% to 6%, restrained by the second-round effects of falling prices for raw foods and slower imported inflation due to lower hryvnia exchange rate volatility and better anchored inflation expectations. Increases in utility prices will bring inflation closer to its target for 2016. At the same time, slower administered inflation will be a major factor behind the overall CPI growth slowdown according to the targets in 2017-2018.

Contribution to Annual Growth of CPI, p.p.

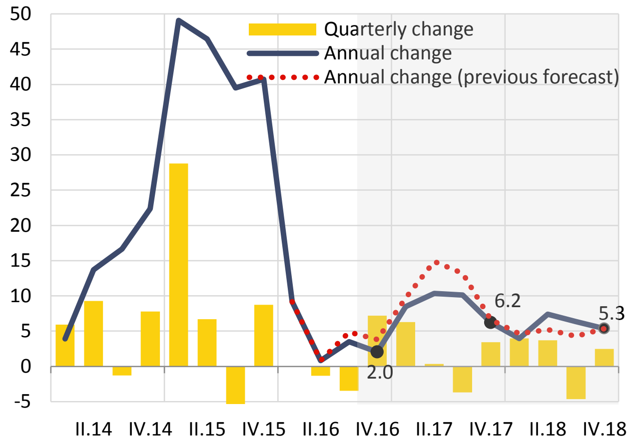


Source: SSSU; NBU staff estimates

Prolonged effects of supply shocks (shifting of trade flows from other countries due to trade bans by the Russian Federation, and difficulties with the export of certain Ukrainian foods to the Middle East), resulting in low raw food inflation in 2016, determined a downward revision of the forecast for this CPI component to 2.0% as of the end of the year (from 3.6% in the previous forecast). However, most of these factors are considered temporary. If eliminated, it will cause an upward correction in prices in the domestic food market. Nonetheless, this correction will not be fully realized by the end of this year, and will partly influence prices next year.

In 2017-2018, the prices for this group of products will grow by 6.2% and 5.3%, respectively, including due to renewed growth in food prices in global markets. However, the expected higher harvests, of grains in particular, will be a factor restraining food price inflation over the next two years.

Raw Food Inflation, %

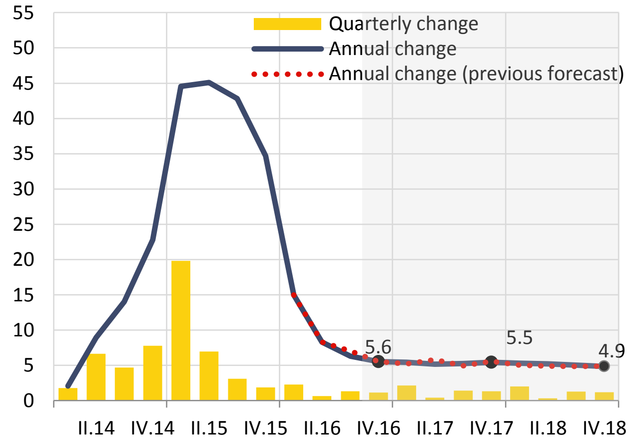


Source: SSSU; NBU staff estimates

The core inflation forecast has remained almost unchanged on the forecast horizon. In 2016, core inflation fell to a single digit, reflecting the impact of tighter monetary policy, subdued demand, low imported inflation, and a sharp drop in real wages. We expect a slowdown in core inflation to 5.6% by the end of the year due to both second-round effects arising from a fall in raw food inflation, and low imported inflation amid lower exchange rate volatility and better anchored inflation expectations.

Core inflation is expected to stabilize at 5% in the medium term. Imported inflation is expected to be low on the forecast horizon due to low inflation in MTP countries and acceptable nominal exchange rate volatility. The volatility of the real exchange rate will be also relatively low on the forecast horizon, and the hryvnia REER appreciation will be restrained by a moderate increase in labor productivity in Ukraine. The effect of consumer demand will be subdued; the economy will approach gradually its potential level on the forecast horizon.

Core Inflation, %



Source: SSSU; NBU staff estimates

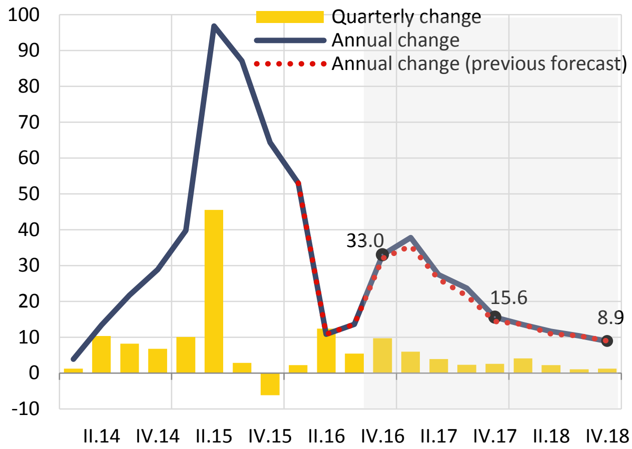
Administered prices are expected to increase by 33% in 2016 (32% in the previous forecast). The contribution of this component to inflation will be 2.8 pp by the end of the year, including 2.4 pp attributed to increased tariffs for heating.

Growth rates of administered prices will be significantly lower in 2017-2018 (15.6% and 8.9%, respectively) remaining, however, a significant inflation driver (with contributions of 3.5 pp and 2.0 pp, respectively). Particularly, gas tariffs for households are expected to be reviewed quarterly under the IMF's EFF according to evolution of imported gas prices. A corresponding pattern is also projected for the related tariffs - central heating and hot water.

The expected increases in excises on tobacco and alcohol products are forecast to lead to a general increase in prices for these products respectively by 18% and 13% in 2017 and 12% and 10% in 2018.

The projected 19% rise in fuel prices in 2016 will be largely attributed to a partial recovery in global oil prices. Fuel prices over the next few years will follow changes in world oil prices adjust to hryvnia exchange rate developments as well as tax changes.

Administered Prices, %



Source: SSSU; NBU staff estimates

3.3. THE REAL ECONOMY

In 2016, the economic growth forecast remained unchanged at 1.1%. In the medium-term, the economy is forecast to grow at a slower pace than projected earlier: 2.5% in 2017 and 3.5% in 2018 (in the previous forecast, 3.0% and 4.0%, respectively). The downward forecast revision was driven by relatively stronger domestic demand growth, and a larger negative contribution of net exports.

At the same time, the recovery of private consumption is forecast to remain subdued in the medium term.

The forecast for private consumption growth in 2016 has been revised upwards to 2.3% (from 1.6%) owing to improved consumer sentiments and, also, taking into account actual data for H1, which proved to be better than projected. However, a substantial increase in households' expenses on utilities in the aftermath of raising administratively regulated prices and tariffs will continue to restrain a stronger recovery of private consumption. In 2017, fiscal policy, biased towards social expenses to compensate for part of the expenses on utility payments for the most vulnerable households through subsidies, will not be able to provide a strong impetus for private consumption growth. Thus, in the medium-term, we expect a more moderate growth of private consumption: 3.4% in 2017 and 2.6% in 2018 (4.2% and 3.2%, respectively, in the previous forecast) that will be underpinned by deferred demand and higher incomes of the population. The gradual pickup in lending enhanced by declining interest rate in the economy is expected to further bolster private consumption.

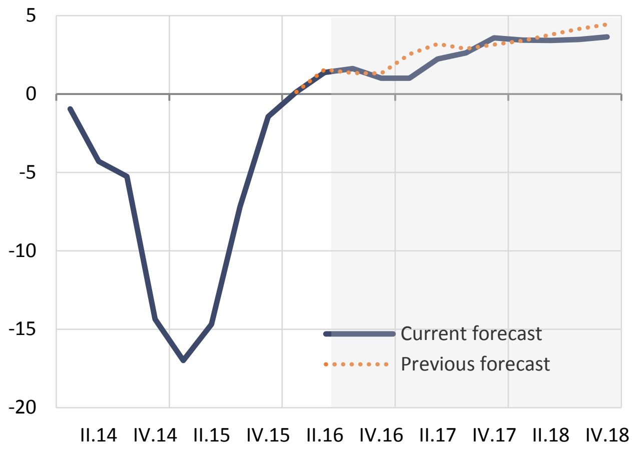
A surge in capital investment in H1 2016 prompted an upward forecast revision for the growth for this GDP component to 9.8% y-o-y against 6.3% y-o-y projected earlier. Correspondingly, given a higher comparison base for the next year, this will statistically translate into lower investment growth in 2017 (4.3% compared with 6.3% according to the previous forecast), with the forecast for the real investment in levels remaining unchanged.

Such growth of investment, which is largely driven by improved financial stance of exporters, is reflected in higher investment imports, including machinery and equipment. Accordingly, we have revised downwards our estimate of the real rate of decline in imports this year to 1.4% from 3.0% in the previous forecast, while in 2017-2018, imports are expected to grow at 3.9% and 3.0%, respectively, underpinned by a revival in consumer demand.

Following the decline in energy imports this year (mainly due to the decrease in imports of natural gas), we expect their slight increase in 2017 due to a stronger recovery in certain industries (particularly, production of chemicals) and the need to replenish reserves in underground gas storages before the start of the next heating season. However, implementation of energy-saving solutions amid rising global energy prices, together with economically justified heating and natural gas prices, will weaken household demand for gas, contributing to subdued energy imports in the medium-term.

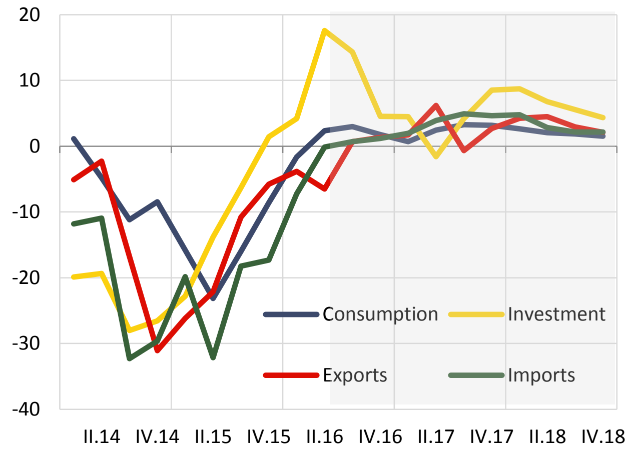
We have somewhat improved the outlook for exports. Following a decline of 2.0% in the current year, export is expected to grow in excess of 2% per year in the medium-term, mainly due to a revival of external demand from Ukraine's MTP countries and higher

Real GDP, % y-o-y



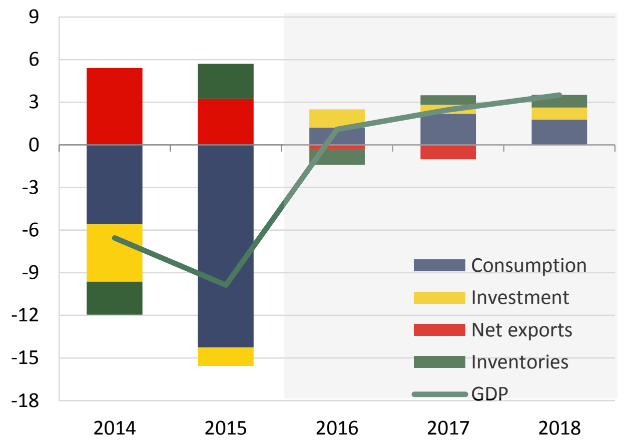
Source: SSSU; NBU staff estimates

GDP Growth by Components, % y-o-y



Source: NBU staff estimates

Contributions to Real GDP Growth, ppts



Source: NBU staff estimates

world prices for key export commodities. This will spur the development of the main export-oriented industries (particularly, metallurgy and chemicals). Higher crop yields, supported by growing investments in the agricultural sector, will have a positive effect on agricultural exports.

As in the previous forecast, a negative contribution to GDP in 2016 (-1.2 pp) is expected from changes in inventories, mainly as a result of a downward revision for the need of natural gas reserves in storages in the medium-term and coal inventories at warehouses of power generating companies. However, we now expect a positive contribution from changes in inventories to real GDP growth in 2017 prompted by resolution of difficulties with the stocks issue in the energy sector.

Evaluating the potential level of GDP and cyclical position of the Ukrainian economy

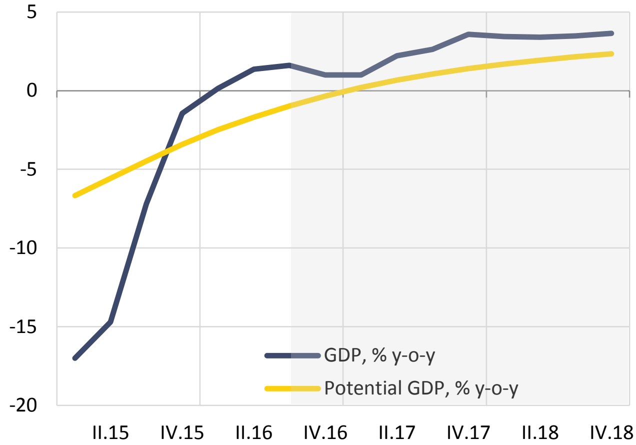
In early 2016, the decline of potential GDP slowed down significantly in annual terms reflecting a diminishing effect of the withdrawal of temporarily occupied territories from statistical reporting. Potential GDP will resume growth in annual terms already in early 2017, accelerating to 2.4% by the end of the forecast period. The driving force underlying its growth will be TFP increases due to real convergence[36] of the Ukrainian economy. We project that TFP growth will accelerate to 3% amid subsiding risks of military conflict escalation and progress in the implementation of structural reforms.

However, the growth of potential GDP will be partially restrained by an insufficient capital stock. Despite a significant growth in investment in Q2 2016, we project that the accumulation of fixed assets will be somewhat slower than their depreciation over the forecast horizon. Therefore, the level of capital in real terms will be gradually declining.

Another constraining factor will be an unfavorable demographic trend, which will weigh on the supply of workforce. Migration, particularly to Poland, will remain crucial factor on the forecast horizon[37]. At the same time, the natural rate of unemployment will remain high due structural mismatches in the labor market.

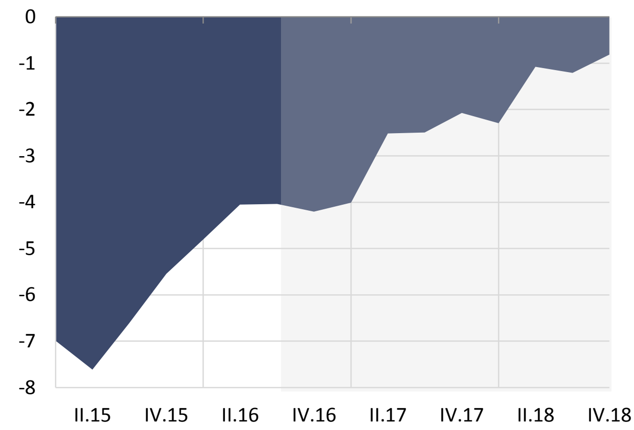
The output gap in H2 2016 is projected to remain negative, although it has been narrowing since the beginning of 2015. Lower risks of military conflict escalation and a corresponding increase in the economic agents' propensity to invest and to consume durables are among the key factors behind the narrowing of the output gap. The restraining effects of tight fiscal and monetary policies have also been diminishing. These factors will lead to a further reduction in the negative output gap over the forecast horizon, with the gap projected at -0.8% by the end of 2018. Such dynamics of the GDP gap suggest that demand-pull inflation pressures are likely to remain subdued on the forecast horizon.

Potential GDP, % y-o-y



Source: SSSU; NBU staff estimates

GDP Gap, %



Source: NBU staff estimates

Fiscal sector

As in the previous forecast, we consider the fiscal policy in the current year as moderately tight (the structural balance of the consolidated budget is expected to be close to zero) followed by a gradual easing on the forecast horizon. The primary consolidated

[36] In general, emerging countries see their production effectiveness growing faster than in developed countries. This is attributed to higher yields on each additional unit of capital and the ability to transfer and copy new technologies.
[37] See http://www.nbp.pl/en/publikacje/raport_inflacja/iraport_july2016.pdf (page 64).

budget surplus is expected to amount to about 1.9% of GDP with a gradual reduction in subsequent years driven by a sizable share of expenditures on debt servicing (over 4% of GDP) within the government expenditures.

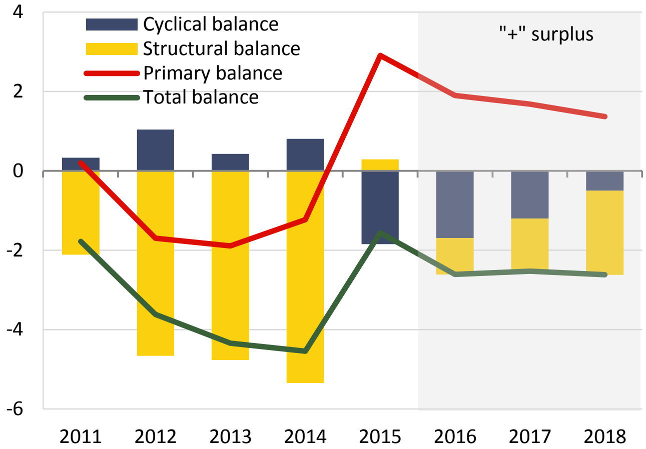
The growth of consolidated budget revenues in 2016 is expected to exceed headline inflation by 2 pp with a significant increase in all tax revenues (by a total of 24%), except for those from taxes on international trade, which will fall by half due to the abolition of the import surcharge since the beginning of this year. The growth of budget revenues will be restrained by non-tax revenues (-17%) due to a decline in NBU transfers to the budget (to 1.7% of GDP against 3.1% of GDP last year).

A substantial increase in the amount of funds transferred to cover the Pension Fund deficit due to the SSC rate cut, as well as a significant growth in utility subsidies to households this year, as well as high spending on the defense sector will narrow the budget resources available to finance development projects. Therefore, capital expenditures will be mostly determined by capacities of local budgets that have reported substantial budget surpluses this year.

Meanwhile, the pressure of quasi-fiscal needs will ease significantly this year. Specifically, there will be no fiscal need to cover Naftogaz losses thanks to adjustment of utility tariffs to cost covering levels for primary energy, while the completion of the banking sector clean-up will reduce the quasi-fiscal needs of the banking sector and the Deposit Guarantee Fund.

Thus, we leave the outlook for fiscal policy unchanged. If implemented, this policy will help keep the consolidated budget deficit within the limits of 2.6% of GDP, and the general government fiscal deficit (excluding Naftogaz and banks recapitalization needs) within 3% of GDP.

Consolidated Budget, % of GDP



Source: NBU staff estimates

3.4. BALANCE OF PAYMENTS

The current account deficit is expected to widen to USD 2.5 billion in 2016, while in 2017-2018 it is forecast to increase insignificantly, to USD 2.9 billion and USD 2.8 billion respectively. Current account deficit projections were revised upwards, due to terms of trade worsening and investment imports recovering faster than expected.

The current account will deteriorate along with a rise in financial account inflows. In 2016, financial account inflows and the overall balance of payments surplus have been driven mainly by a decrease in FX cash outside banks. However, in 2017-2018, the surplus will be driven mainly by foreign investments and debt inflows, while FX cash will not be a key factor anymore. The general government sector will continue to attract financing.

As a result, owing to a BoP surplus of USD 1.7 billion, together with financing received from the IMF, international reserves will increase to USD 17.5 billion by the end of 2016, or 4.1 months of future imports. International reserves are expected to grow further in 2017-2018, reflecting a BoP surplus and IMF loans.

In 2016, current account deficit projections were increased to USD 2.5 billion (versus USD 1.8 billion in the previous forecast) or 2.8% of GDP, due to investment imports recovering at a faster pace and terms of trade worsening as a result of falling grain prices. A narrower surplus on trade in services resulting from a faster increase in imports of travel services will be offset by a rise in private money transfers.

The rate of decline in merchandise exports is expected to decelerate to 7.2% in 2016 (down from 8.8%) amid an expected increase in the harvest of sunflowers and grain crops, some chemical plants recommencing operations, and a rise in ferrous metal prices.

In the 2016/2017 marketing year, the forecast of grain exports was raised to 39 million tons, up from previous 36 million tons. However, the positive effect from higher harvest will be partly offset by a sharper than expected fall in grain prices. As a result, the rate of decline in the value of grain exports is projected to decrease to 3.1%, down from 6.2%. Projections for the growth of sunflower oil exports were also revised upward, to 14.8% (up from 13%).

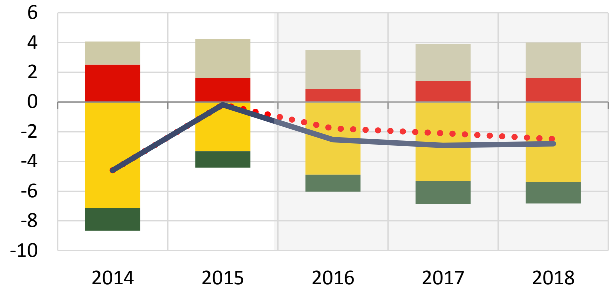
Chemical exports are expected to decline less significantly than in the previous forecast (23% versus 29.5%, respectively) as some chemical plants have recommenced their operations. Ferrous metal exports is also forecast to decline at a slower pace (3.7% compared to 5.0% projected earlier) due to higher than expected prices.

In 2016, the decline in merchandise imports is now forecast to be less significant – 2.9% (versus previous 6.8%) owing to a faster rise in machinery imports, as well as past revisions of informal trade volumes.

Fostered by expectations of a better harvest, farmers upgraded their machinery faster than expected, driving machinery imports, which are now forecast to increase by 27.4% in 2016, up from previous 20.5%. In addition, they increased the fertilizer imports to ensure that the future crop yields remain high.

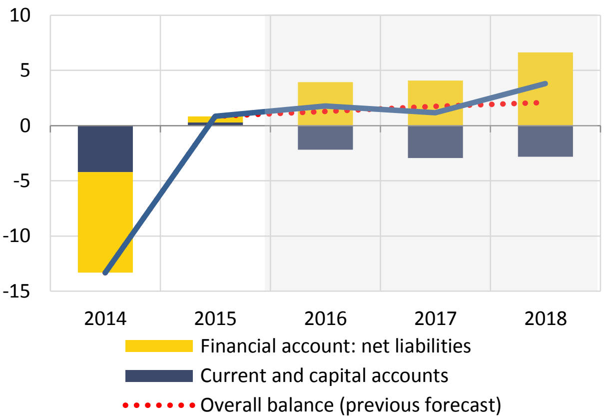
Following past revisions of informal imports data for H1 2016,

Current Account, USD bn



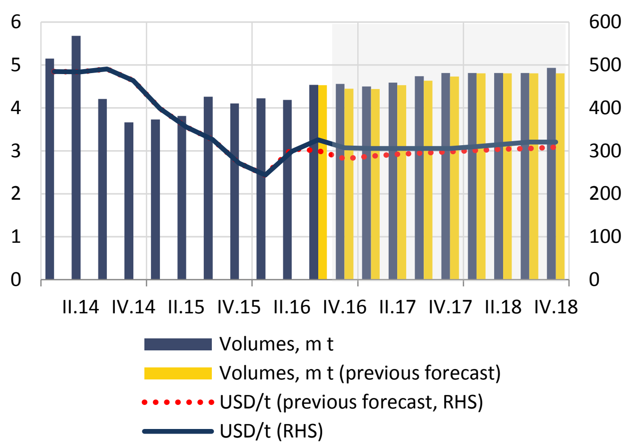
Source: NBU

Overall BoP Balance, USD bn



Source: NBU

Ferrous Metals Exports (four main sub-groups)



Source: NBU

projections for the share of these imports were increased significantly. Projections for foods imports were also revised upwards, reflecting higher domestic demand.

As a result, non-energy imports are now forecast to increase by 10% (compared with previous 5.5%). The outlook for energy imports also has been revised upwards, mainly due to a smaller-than-expected reduction in imports of oil products (19.9% versus previous 30.8%). The latter, in turn, reflected stronger demand (including from farmers) and faster price rises than the previous forecast had predicted.

An acceleration of domestic trade turnover, the economic upturn and growing real household income since Q2 2016 also drove imports of services that are now forecast to increase by 2.6% compared with a 1.1% reduction in the previous forecast). Projections for imports of transportation and travel services were revised upwards. Meanwhile, the forecast for exports of services was left practically unchanged.

In contrast to a slight decrease in the previous forecast, remittances to Ukraine are expected to rise by 3.3%, due to larger-than-expected remittances from the EU and the US.

As the previous forecast takes into account the lifting of a ban on the repatriation of dividends accrued in 2014-2015, the forecast for dividend payments was little changed.

The current account deficit is projected to widen to USD 2.9 billion and USD 2.8 billion in 2017-2018 respectively (up from USD 2.1 billion and USD 2.5 billion). The widening reflected an increase in the deficit on trade in goods. Merchandise exports are forecast to grow by 4.2% and 5.5% in 2017 and 2018, respectively, faster projected earlier. The upward revision is mainly attributed to a good grain and sunflower harvest, due to higher yields of these crops.

Chemical exports are projected to remain on the track of growth. Metallurgical exports will also rise at a faster pace, driven by higher prices and a slight increase in volumes.

Projections for merchandise import growth were revised even more significantly, to 4.7% and 5.0% in 2017 and 2018 respectively. The revision was underpinned by higher machinery and foods imports as domestic demand for these goods gradually revives.

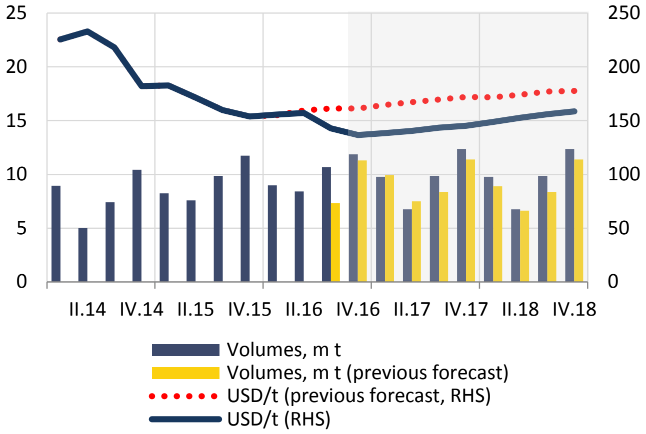
The surplus on trade in services is forecast to narrow in 2017 and 2018, reflecting a rise in imports of services, in particular travel services. This will be offset by an increase in remittances, due to a rise in the number of Ukrainian migrant workers in EU countries.

Projections for net financial account inflows were revised upwards, to USD 3.9 billion (up from USD 2.8 billion), due to FX cash outside banks dropping faster than projected earlier, driven, among other things, by a revision of informal import volumes.

The outlook for FDI inflows was improved to USD 3.2 billion (up from USD 2.4 billion), due to investments in the real sector recommencing. FDI inflows to the real sector are expected to reach USD 1 billion in 2016.

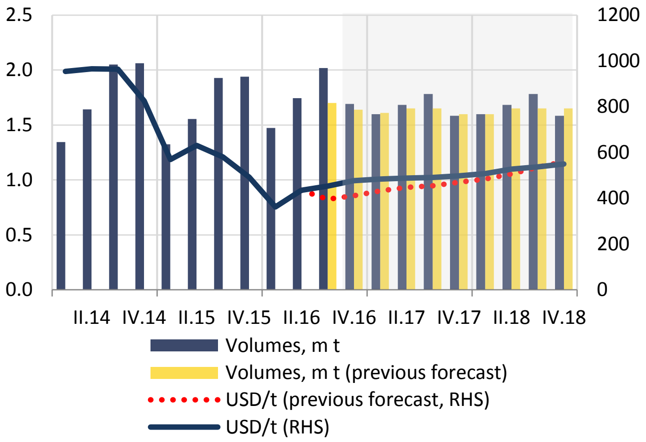
Net debt inflows to the real and banking sectors were somewhat lower than anticipated; therefore, projections for net debt inflows in 2016 were revised downwards. As a result, the rollover of long-term private external debt was decreased to 58% (down from 70%), while rollover excluding debt-to-equity operations was decreased to 71%.

Grains Exports



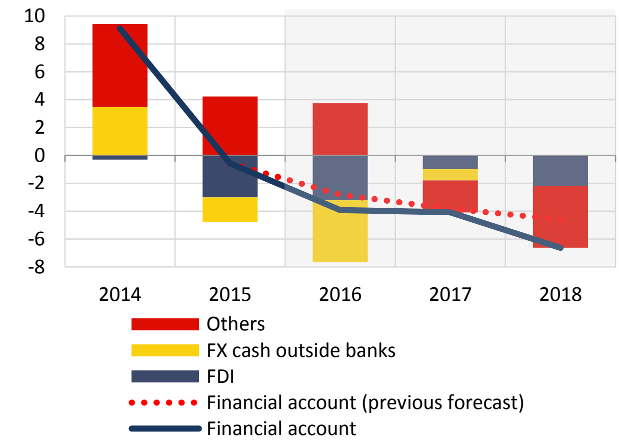
Source: NBU

Oil Products Imports



Source: NBU

Financial Account: Net External Assets, USD bn



Source: NBU

Projections for official financing, at USD 4.8 billion (including USD 2.3 billion of IMF loans), were left unchanged in 2016.

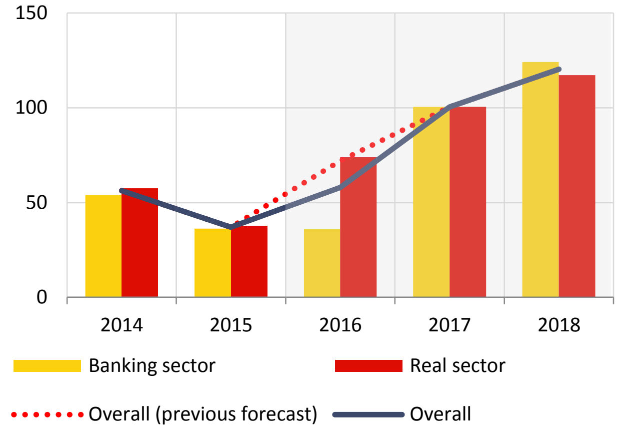
The outlook for 2017 net financial account inflows was revised upwards, to USD 4.1 billion. This was attributed to a further decrease in FX cash outside banks, by USD 0.8 billion (the previous forecast did not envisage such decrease).

Meanwhile, FDI growth, at USD 1 billion, is expected to be weaker (down from USD 1.6 billion), due to the investment climate recovering more slowly. However, in contrast to 2016, the real sector will be the main recipient of FDIs. As in the previous forecast, the debt inflows to the private sector are expected to increase, driving rollover up to 100%.

Net financial account inflows are projected to increase to USD 6.6 billion in 2018 (up from USD 4.6 billion), largely due to an additional issue of Eurobonds worth USD 2 billion. As in the previous forecast, rollover of the LT private sector external debt is expected to rise to 120%, reflecting a further decrease in systemic risks to the Ukrainian economy.

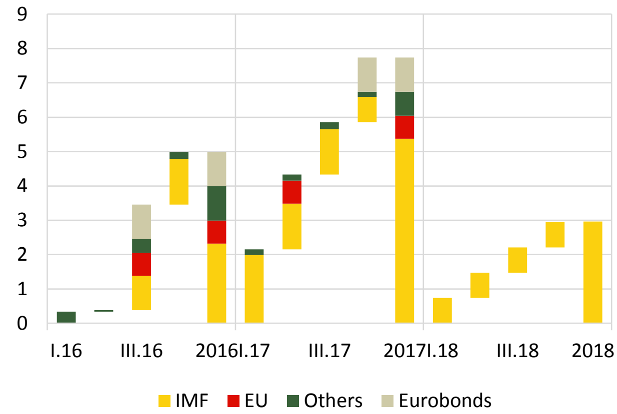
International reserves accumulation will continue over the forecast horizon, to USD 17.5 billion as of end-2016 and to USD 27.8 billion as of end-2018. The latter amount will be close to 100% of the IMF's composite measure for reserve adequacy. The corresponding reserve accumulation will be achieved owing to overall BoP surpluses over the next three years, and IMF disbursements under the EFF.

Rollover of LT Private Sector External Debt, USD bn



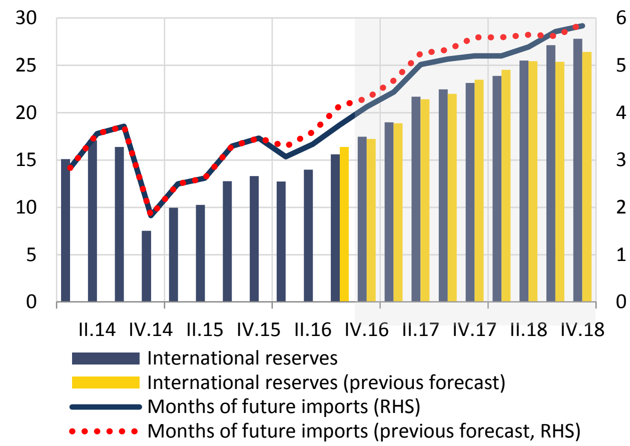
Source: NBU

Official Financing in 2016 - 2017, USD bn



Source: NBU, IMF

International Reserves, USD bn



Source: NBU

3.5. MONETARY SECTOR AND FINANCIAL MARKETS

Growing public confidence in the banking system, recovering economic activity, and higher real household incomes will support the ongoing deposit inflow to banks. Money demand will recover gradually amid a steady decrease of inflation and market interest rates.

In 2016, both the money supply and monetary base are projected to increase by about 9%. The growth of monetary base will be equally driven both by banks' correspondent accounts and cash in circulation.

Until the end of 2016, CDs will be the main NBU tool to manage banking system liquidity.

NBU FX purchase auctions to replenish international reserves will remain the main source of liquidity provision for the banking system through the next year.

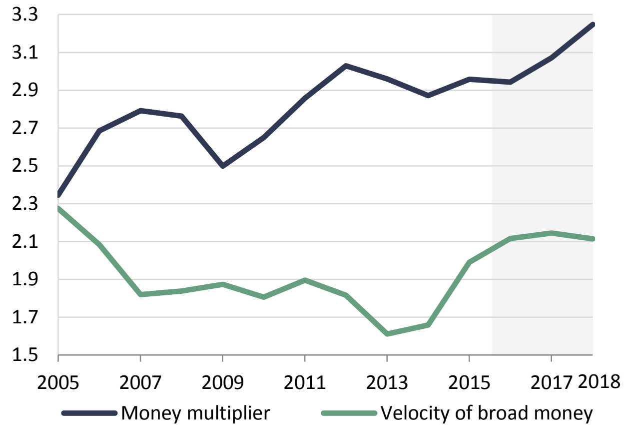
Given further alleviation of risks to the macroeconomic environment and improving inflation expectations, the NBU will continue easing its monetary policy. Accordingly, this will facilitate a gradual reduction in market interest rates.

Monetary stability is projected to be enhanced during 2017 and 2018. A slowdown of inflation and a pick-up in economic growth, along with a lower cost of funds, should spur demand for money.

Continuing cooperation with the IMF will allow replenishing the country's international reserves and provide access to other IFIs' and investors' financing, which will support economic growth.

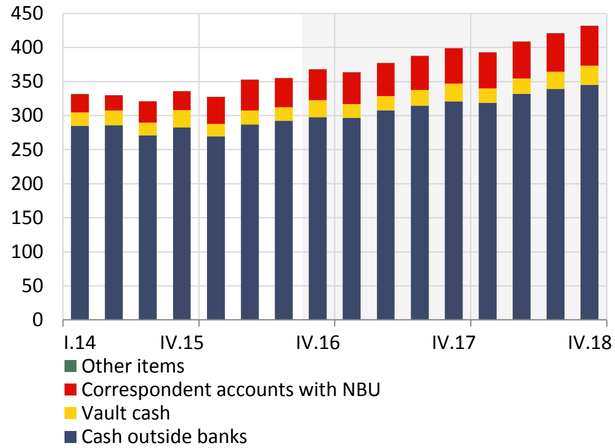
In 2017 and 2018, money supply growth (by 16% and 17%, respectively) is expected to be driven by developments in both deposit and cash components. The substitution of cash for non-cash transactions will further induce money creation. Under such conditions, monetary base is forecast to grow at a slightly lower pace (about 8% per year).

Money Multiplier and Velocity of Broad Money



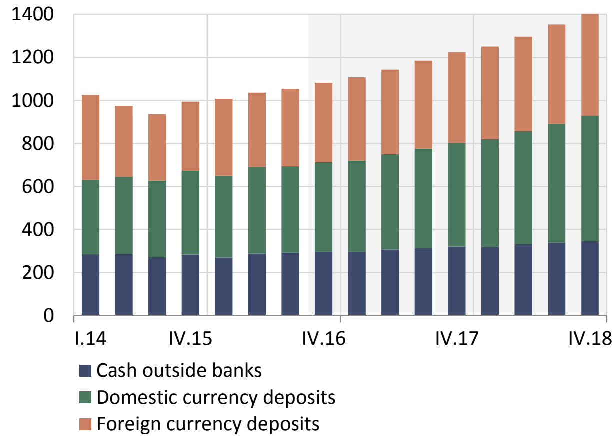
Source: NBU

Monetary Base by Components, UAH bn



Source: NBU

Money Supply (M3) by Components, UAH bn



Source: NBU

3.6. RISKS TO THE FORECAST

Possible escalation of hostilities in the east of Ukraine, falling global commodity prices, and lower external support in case of slower reform progress remain the main negative risks to the economic growth forecast.

On the external front, a significant risk is generated by a further fall in prices on world commodity markets, increasing pressure on the currencies of commodity-exporting economies, and the corresponding reduction in their demand. This may cause a decrease in earnings of Ukrainian exporters and, correspondingly, increase pressure on the hryvnia exchange rate. In such scenario, the impact on inflation will be multidirectional – on the one hand, the worsening of global conditions will cause a slowdown in economic activity and a decline in commodity prices in foreign currency, which will curb inflation; on the other hand, the weakening of the hryvnia will be passed through to prices, pressuring them upwards. The monetary policy response will be determined by these two counteracting factors. However, the probability of a more restrained monetary policy as compared to that in the baseline scenario will be higher for keeping inflation within the targets.

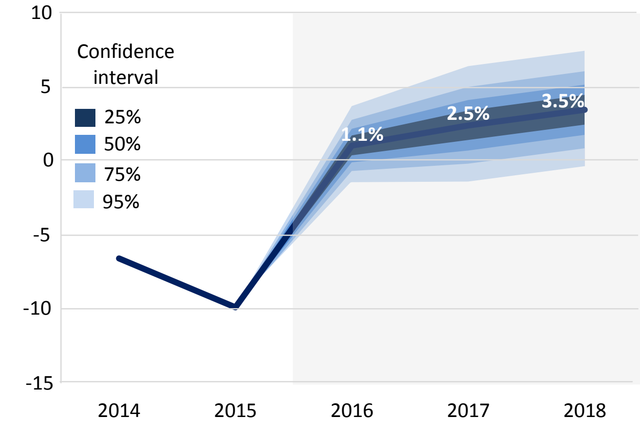
In the event of a slower or inefficient reform progress, political instability and, consequently, risk premium may rise, which will worsen inflation and exchange rate expectations, increase inflation pressure, and cause tightening of monetary policy to mitigate inflation risks. The faulty privatization campaign may become an indicator of the worsening reform progress, which will likely to lead to deterioration in investors' confidence and worsening of the economic outlook.

The basic assumption of the optimistic scenario is a rapid rise in world commodity prices. Taking into consideration a sizable share of exports of raw materials (metals and grains), this will cause an increase in export earnings and capital inflows in the financial account. Under such scenario, the appreciation pressure on the hryvnia may intensify. The growth of physical volumes of exports will stimulate a pick-up in economic activity, which can speed up core inflation. However, the effects of hryvnia appreciation are likely to be more significant. Therefore, the NBU will be able to further reduce its key policy rate, thus attracting investments and facilitating economic recovery.

The distribution of risks to the inflation outlook remains biased to the upside in the current year, whereas it will remain symmetrical for the next year. Deviations of headline inflation from 12% by the end of 2016 will be observed if short-term supply shocks materialize. Due to a suspension of state regulation for select administered prices, they may overshoot the forecast. The vanishing of some supply-side effects in the food market builds up certain risks for next year inflation to exceed the target. Nevertheless, more significant effects from weaker consumer demand and better external environment are seen as restraining factors.

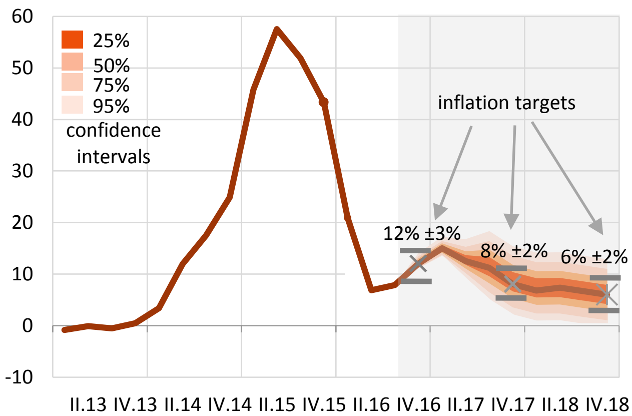
A recent government initiative to raise the minimum wage more than twofold from the current level gives an important uncertainty to the forecast. As the measure was announced on just the eve of the NBU's macroeconomic forecast approval, the effects of this initiative's implementation will be incorporated in the next Inflation Report.

Real GDP Forecast, % y-o-y



Source: NBU staff estimates

Headline CPI Forecast and Targets, % y-o-y



Source: NBU staff estimates

The forecast is given as a FanChart. This chart type depicts the probability of various outcomes for the projected indicator. For instance, the probability that the inflation rate will be in the range of the darkest shading area on the chart (around the central line) stands at 25%. The same applies to other chart areas, meaning that the probability that the inflation rate will be in the range of the lightest area is 95%.

Macroeconomic forecast (October 2016)

Indicators	2013	2014	2015	2016						2017						2018					
				I	II	III	IV	current forecast	forecast 07.2016	I	II	III	IV	current forecast	forecast 07.2016	I	II	III	IV	current forecast	forecast 07.2016
REAL ECONOMY, % y-o-y, unless otherwise stated																					
Nominal GDP (SNA'2008), UAH bn	**1465**	**1587**	**1979**	453	532	655	650	**2290**	2282	513	609	752	754	**2627**	2632	581	686	847	849	**2964**	2983
Real GDP	**0.0**	**-6.6**	**-9.9**	0.1	1.4	1.6	1.0	**1.1**	1.1	1.0	2.2	2.6	3.6	**2.5**	3.0	3.4	3.4	3.5	3.6	**3.5**	4.0
GDP Deflator	**4.3**	**15.9**	**38.4**					**14.4**	14.0					**12.0**	12.0					**9.0**	9.0
Consumer prices (period average)	-0.3	12.1	48.7	-	-	-	-	13.8	11.7	-	-	-	-	11.6	11.9	-	-	-	-	6.4	6.4
Producer prices (period average)	-0.1	17.1	36.0	-	-	-	-	18.5	14.2	-	-	-	-	16.7	11.1	-	-	-	-	9.9	8.9
Consumer prices (end of period)	**0.5**	**24.9**	**43.3**	1.5	3.5	1.4	5.2	**12.0**	12.0	4.2	1.3	0.2	2.2	**8.0**	8.0	3.1	1.8	-0.4	1.5	**6.0**	6.0
Core CPI (end of period)	0.1	22.8	34.7	2.3	0.7	1.3	1.2	5.6	5.5	2.2	0.4	1.4	1.4	5.5	5.6	2.0	0.3	1.3	1.2	4.9	4.9
Non-core CPI (end of period)	0.9	26.8	50.9	0.9	5.7	1.4	8.8	17.8	17.7	6.1	2.0	-0.9	2.9	10.3	10.2	4.0	3.1	-2.0	1.8	7.1	7.1
administrative prices (end of period)	3.5	29.0	64.4	2.2	12.4	5.4	9.7	33.0	32.0	6.0	3.9	2.3	2.6	15.6	14.4	4.1	2.3	1.1	1.2	8.9	8.9
Producer prices (end of period)	**1.7**	**31.8**	**25.4**	4.4	9.1	7.2	2.3	**24.9**	17.1	3.7	3.1	2.2	1.4	**10.8**	10.0	2.9	3.5	1.3	0.9	**8.9**	8.3
FISCAL SECTOR																					
Consolidated budget balance, UAH bn	**-63.6**	**-72.0**	**-30.9**	-	-	-	-	**-59.8**	-58.3	-	-	-	-	**-71.9**	-70.0	-	-	-	-	**-79.9**	-74.4
% of GDP	-4.3	-4.5	-1.6	-	-	-	-	-2.6	-2.6	-	-	-	-	-2.7	-2.7	-	-	-	-	-2.7	-2.5
Public finance overall balance (IMF method), UAH bn	**-57.5**	**-70.3**	**-17.0**	-	-	-	-	**-64.2**	-66.9	-	-	-	-	**-80.9**	-77.8	-	-	-	-	**-88.2**	-81.4
% of GDP	-3.9	-4.4	-0.9	-	-	-	-	-2.8	-2.9	-	-	-	-	-3.1	-3.0	-	-	-	-	-3.0	-2.7
General government and Naftogaz financing, % of GDP	-5.8	-9.9	-1.8	-	-	-	-	-2.8	-2.9	-	-	-	-	-3.1	-3.0	-	-	-	-	-3.0	-2.7
BALANCE OF PAYMENTS (NBU methodology)																					
Current account balance, USD bn	-16.5	-4.6	-0.2	-1.2	0.6	-1.7	-0.2	-2.5	-1.8	-1.1	-0.3	-1.3	-0.3	-2.9	-2.1	-1.1	-0.2	-1.3	-0.3	-2.8	-2.5
Financial account, USD bn	-18.6	9.1	-0.6	-0.4	-0.6	-2.2	-0.7	-3.9	-2.8	-0.6	-1.6	-1.1	-0.7	-4.1	-3.8	-1.6	-1.6	-2.7	-0.7	-6.6	-4.6
BOP overall balance, USD bn	**2.0**	**-13.3**	**0.8**	-0.8	1.2	0.6	0.7	**1.7**	1.3	-0.5	1.4	-0.2	0.5	**1.2**	1.7	0.5	1.4	1.4	0.4	**3.8**	2.1
Gross reserves, USD bn	**20.4**	**7.5**	**13.3**	12.7	14.0	15.6	17.5	**17.5**	17.2	19.0	21.7	22.5	23.1	**23.1**	23.5	23.9	25.5	27.2	27.8	**27.8**	26.4
Months of future imports	**3.5**	**1.8**	**3.3**	3.1	3.3	3.7	4.1	**4.1**	4.3	4.4	5.0	5.1	5.2	**5.2**	5.6	5.2	5.4	5.7	5.8	**5.8**	5.9
Export of goods, % y-o-y	-7.5	-15.0	-29.9	-19.9	-3.7	-5.5	0.1	-7.2	-8.8	12.8	-2.6	3.2	4.5	4.2	2.5	7.4	5.1	4.5	5.4	5.5	3.6
Import of goods, % y-o-y	-5.3	-27.8	-32.6	-12.5	-2.2	8.1	-4.5	-2.9	-6.8	8.7	5.9	-2.6	8.0	4.7	4.0	5.1	2.9	4.6	7.1	5.0	4.7
MONETARY ACCOUNTS (Percentage changes from end of previous year)																					
Base money, %	**20.3**	**8.5**	**0.8**	-2.6	5.0	5.7	9.5	**9.5**	8.2	-1.1	2.5	5.3	8.4	**8.4**	8.7	-1.6	2.5	5.5	8.2	**8.2**	9.0
Broad money, %	**17.6**	**5.3**	**3.9**	1.3	4.2	6.0	8.9	**8.9**	10.8	2.4	5.6	9.4	13.2	**13.2**	16.1	2.1	5.8	10.4	14.5	**14.5**	16.8
Velocity of broad money (end of year)	**1.59**	**1.64**	**2.0**	-	-	-	-	**2.1**	2.1	-	-	-	-	**2.1**	2.1	-	-	-	-	**2.1**	2.0