NATIONAL BANK OF UKRAINE

Inflation Report

January 2016

PREFACE

The Inflation Report reflects the opinion of the National Bank of Ukraine (the NBU) as to the current and future economic state of Ukraine with a focus on inflationary developments, which are the basis for monetary policy decision-making. The Inflation Report is published quarterly in accordance with the forecast periodicity.

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

The forecasts of inflation and other macroeconomic variables were developed by the Monetary Policy and Economic Analysis Department and approved at the NBU Board (the Board) meeting devoted to monetary policy issues on January 28, 2016[1]. Macroeconomic projections, including inflation, are the principal input, but not the only one, the Board considers in its decision-making. In addition to the projections of inflation and other macroeconomic variables, the Board members take into account the 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 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. January 22, 2016 was the cut-off date for the data used in the Report.

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 Resolution No. 40 as of January 28, 2016 "On the Approval of the Inflation Report".

CONTENTS

ABBREVIATIONS AND ACRONYMS

ATO	**A**nti-**T**errorist **O**peration
BoP	**B**alance **o**f **P**ayments
BPM5 **BPM6**	IMF **B**alance of **P**ayments **M**anual (**5**th edition) IMF **B**alance of **P**ayments And International Investment Position **M**anual(**6**th edition)
CD(s)	**C**ertificate of **D**eposit(s)
CIS	**C**ommonwealth of **I**ndependent **S**tates
CMU	**C**abinet of **M**inisters of **U**kraine
Core CPI	**Core C**onsumer **P**rice **I**ndex
CPI	**C**onsumer **P**rice **I**ndex
CRUspi	The **CRU S**teel **P**rice **I**ndicators
DGF	**D**eposit **G**uarantee **F**und
DXY	**US D**ollar **I**ndex
ECB	**E**uropean **C**entral **B**ank
EFF	**E**xtended **F**und **F**acility
EU	**E**uropean **U**nion
FAO	**F**ood and **A**griculture **O**rganization
Fed	**F**ederal **R**eserve **S**ystem
FTA	**F**ree **T**rade **A**rea or **F**ree **T**rade **A**greement
GDP	**G**ross **D**omestic **P**roduct
GVA	**G**ross **V**alue **A**dded
IIF	**I**nstitute of **I**nternational **F**inance
IKSO	**I**ndex of **K**ey **S**ectors **O**utput
ILO	**I**nternational **L**abour **O**rganization
IMF	**I**nternational **M**onetary **F**und
Markit PMI	**M**arkit **P**urchasing **M**anagers' **I**ndex
MFU	**M**inistry of **F**inance of **U**kraine
MSCI	**M**organ **S**tanley **C**apital **I**nternational
MTP	**M**ain **T**rading **P**artners
NBU	**N**ational **B**ank of **U**kraine
NEER	**N**ominal **E**ffective **E**xchange **R**ate
OPEC	**O**rganization of the **P**etroleum **E**xporting **C**ountries
PFTS	**PFTS** Stock **E**xchange, **F**irst **S**tock **T**rade **S**ystem
PPI	**P**roducer **P**rice **I**ndex
REER	**R**eal **E**ffective **E**xchange **R**ate
RF	**R**ussian **F**ederation
SESU	**S**tate **E**mployment **S**ervice of **U**kraine
SFSU	**S**tate **F**iscal **S**ervice of **U**kraine
SSSU	**S**tate **S**tatistics **S**ervice of **U**kraine
Treasury	**S**tate **T**reasury **S**ervice of **U**kraine
UN	**U**nited **N**ations
USA	**U**nited **S**tates of **A**merica
VAT	**V**alue-**A**dded **T**ax
VRU	**V**erkhovna **R**ada of **U**kraine
WTO	**W**orld **T**rade **O**rganization
OECP	**O**rganisation for **E**conomic **C**o-operation and **D**evelopment
mn	million
bn	billion
UAH	Ukrainian hryvnia
EUR	euro
USD	US dollar
RUB	Russian ruble
ppts	percentage points
bp	basis points
M0	cash money
M3	Broad money
USD/bbl	US dollars per barrel
USD/MT	US dollars per metric ton
USD/EUR	exchange rate of euro to US dollar
UAH/USD	exchange rate of Ukrainian hryvnia to US dollar
RUB/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	since the beginning of the year
LT	Long-term

1. SUMMARY

The external environment was generally unfavorable for the Ukrainian economy in Q4 2015, reflecting moderate global economic growth, weak external demand, and a further decrease in commodity prices. One of the downside risks to the outlook, highlighted in the previous Report, was related to a further decline in world prices for key Ukrainian export products (such as steel and grains) and indeed materialized. Its deteriorating impact on Ukraine's terms of trade was only partially compensated for by a sharp decline in oil prices. Concerns about potential spillover effects of a stronger slowdown in China and geopolitical tensions in the Middle East on the global economy have intensified. The outflow of private capital from emerging markets increased amid a worsening macroeconomic situation in these countries and expectations of the Fed's funds rate increase, realized in mid-December 2015. **The currencies of the commodity-exporting countries depreciated further and may remain under depreciation pressure in the near future.**

The de-escalation of the military conflict in the east was a crucial domestic factor affecting the economic situation of Ukraine in the second half of the year. Lower inflation shaped into a steady trend, business expectations improved, decline in real household income moderated, and agriculture demonstrated solid performance.

As a result, **our previous estimates that the economy bottomed out in the first half of the year proved true**. Already **in Q3 2015, real GDP grew by 0.5% compared to the previous quarter** (adjusted for seasonal factors) and continued growing in Q4, according to our estimates. For the whole of 2015, the decline in real GDP was estimated at around 10.5%.

In the second half of 2015, the NBU monetary policy was focused on securing macrofinancial stability. As expected, domestic currency deposits continued to grow since Q2[2]. A steady disinflationary trend and resumed inflow of domestic currency funds in the banking system allowed the National Bank of Ukraine **to reduce the discount rate to 22% per annum and ease some administrative restrictions on the foreign exchange market**. However, following nearly six months of stability in the foreign exchange market, since mid-October enhanced volatility and moderate depreciation of the hryvnia against the US dollar were recorded. These developments were underpinned by both external factors (intensified depreciation pressure on the currencies of countries comprising Ukraine's main trade partners, a further decline in prices for key Ukrainian export commodities, etc.) and internal ones (growing uncertainty associated with the slow budget process and, consequently, the delay of official foreign financing). As a result, the NBU kept its key policy rate unchanged since October.

There was a firm decrease in headline inflation in Ukraine thanks to prudent monetary policy, reinforced by falling world commodity prices, a relatively tight fiscal policy, and stabilization of inflationary expectations. After peaking in April 2015 (at 61% y-o-y), annual inflation has been on a steady descending trend, slowing down **to 43.3% at the end of 2015**, which was close to the NBU forecast. The decline of core inflation (to 34.7% y-o-y at the end of 2015) was slower than expected, primarily due to delayed effects of hryvnia depreciation that occurred at the beginning of 2015. The heightened exchange rate volatility observed at the year's end had a relatively limited impact on the prices of goods and services.

According to the baseline scenario, headline inflation is projected at 12% y-o-y at the end of 2016, unchanged from the previous forecast, while the outlook for core inflation was revised slightly downwards to 9.2% y-o-y. Inflationary pressures will be dampened by low world food prices amid limited export ability due to new trade restrictions, declining inflation expectations, and the fading effects of depreciation. The difference between the headline and core inflation will largely reflect a further increase in administratively regulated tariffs, although not as significant as in 2015.

[2]Excluding banks in the process of liquidation and those deemed insolvent.

The diminishing effect of this factor will play a significant role in pushing headline inflation further downwards over the forecast period, in particular to 8% y-o-y by the end of 2017.

Subdued aggregate demand will continue weighing on domestic price pressures. Thus, **the forecast of real GDP growth for 2016 was revised downward to 1.1% y-o-y.** The revision primarily reflected the materialized risks of a deeper decline in world commodity prices, a weaker global growth outlook, and new trade restrictions imposed by Russia that will exert an additional drag on Ukraine's exports. In 2017, real GDP growth is expected to accelerate to 3% due to the further unwinding of earlier macroeconomic imbalances, a revamp of the banking system, improvements in the investment climate, and adaptation of business to new conditions.

The baseline scenario rests on the assumption that the situation in the east of the country won't deteriorate. Other key assumptions of the forecast are a gradual recovery of deposit inflow and credit activity, including thanks to the overhaul of the banking system. The commencement of the free trade agreement with the EU will have a favorable effect. However, further deterioration of trade relations with the Russian Federation and the ban on transit of Ukrainian goods to third countries through Russian territory will have a substantial adverse impact.

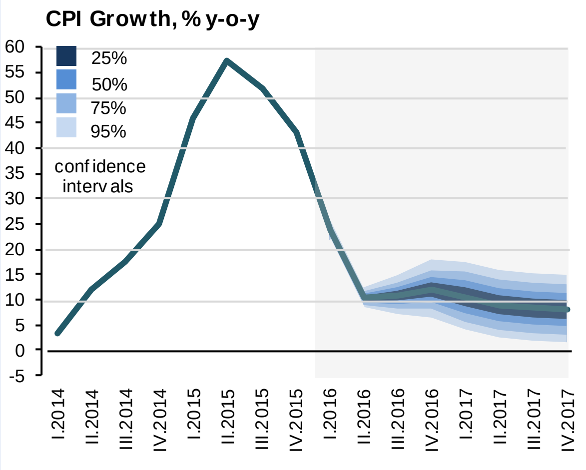
Other forecast assumptions include: continuing cooperation with the IMF and Ukraine's fulfillment of its commitments under the Extended Fund Facility Program (hereinafter - the IMF Program), and progress with reforms in financial, fiscal, energy, and other sectors that will help establish solid foundations for economic growth.

In 2015, fiscal policy was relatively tight. The consolidated budget had a high surplus over January–November. However, at year-end, a moderate deficit was recorded due to a surge in expenditures during December. At the same time, **a primary surplus of about 3% of GDP was achieved in 2015**. In **November, completion of debt restructuring operation,** namely a 20% haircut, was reflected in the **public and publicly guaranteed debt data**. As of the end of November 2015, public and publicly guaranteed debt amounted to UAH 1.556 trillion.

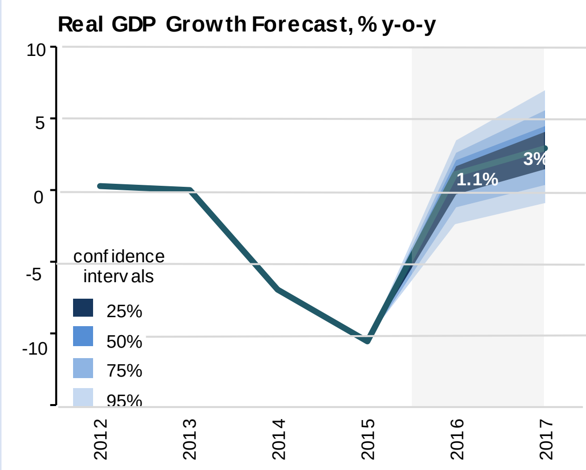
In 2016-2017, the general government fiscal deficit is forecast at around 4% of GDP, which will be mainly shaped by large social expenditures. Due to significant debt service payments, a primary surplus of about 1% of GDP is likely to be maintained in both years.

In 2015, the current account balance continued to improve – the deficit narrowed to almost zero and was better than projected. Adverse world price developments for steel and agricultural commodities and a reduction in Russia's demand were offset by lower energy prices and natural gas imports, as well as a high crop of some grains (e.g., wheat). **The outflow of private capital was moderate, and the disbursements of official loans ensured a Balance of Payments surplus for 2015 as a whole.** However, due to delays in IMF financing and other funding conditional upon it, international reserves grew slower than expected and stood at **USD 13.3 billion by the end of 2015.**

For 2016, the current account deficit forecast was revised upwards to USD 2.5 billion, or 3.0% of GDP, due to lower prices for ferrous metals, ores, grains, and Russia's restrictions on imports and transit of Ukrainian goods. In 2017, the current account deficit is forecast to narrow to USD 2.0 billion (or 2.0% of GDP), primarily thanks to a projected increase in export volumes. Assuming the official financing delayed in 2015 is disbursed in 2016 and FX cash outside banks continues to decrease, the forecast of **net borrowings in the financial account in 2016 was revised upwards.** Due to higher private sector borrowings, and the respective increase in the rollover rate for long-term debt to 100%, the net borrowings in the financial account will continue to grow in 2017. **Coupled with receipt of funds from the IMF, this will cause international reserves to rise to USD 19.6 billion at the end of 2016 and to USD 22.3 billion at the end of 2017, which will ensure over 5 months of future imports.**



Source: NBU



Source: NBU

Apart from the outlined baseline forecast scenario for 2016-2017, which is the most likely to occur, we also consider both optimistic and pessimistic scenarios. On one hand, **the recovery of global commodity prices**, as well as acceleration of privatization with the process **attracting foreign investors, may stimulate a more rapid economic recovery**.

On the other hand, a possible resumption of hostilities in the east of Ukraine, a further fall in world commodity prices, a decrease in external support in case of a protracted reform progress, and a complete suppression of Ukrainian exports through the territory of the Russian Federation **are among the main downside risks to the forecast**. **Should these risks materialize, there will be foreign exchange market developments and worsening inflation expectations that will put pressure on prices**.

Taking into consideration these adverse risks and the NBU commitment to price stability objective, during a planned NBU Board meeting on monetary policy issues on 28 January 2016, it was decided to keep the key policy rate at 22%.

In the future, provided that inflationary risks subside primarily due to stabilization of the global commodity markets and the disbursement of the next tranches of official financing, the NBU may resume the gradual easing of monetary policy. At the same time, should the aforementioned risks materialize, the NBU will be forced to keep monetary policy tight for a longer period to ensure a return of inflation to the target levels.

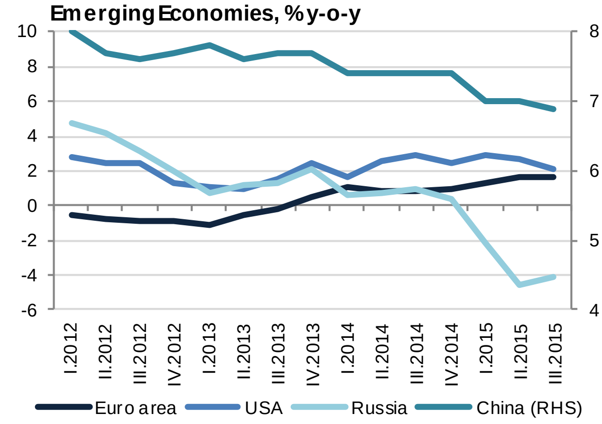
2. CURRENT ECONOMIC CONDITIONS

2.1. EXTERNAL ENVIRONMENT

In Q4 2015 global commodity prices continued to decline. In early 2016, commodities slump deepened amid excessive supply. In particular, already in early January 2016, oil prices tested a new psychological level of 30 dollars per barrel. A decline in global commodity prices was due to factors that determine both supply and demand, in particular, lower than expected, global economic growth and increased investor concern regarding the impact of China's economic slowdown on global economy.

Overall for 2015, emerging markets experienced a private capital outflows with risk premium on sovereign credit-default swaps rising. The above occurred amid the expected increase in the FED fund rate raised in December 2015, and deteriorating investors' attitude towards financial assets of these countries. During Q4 2015 and in early 2016, foreign commodity currencies remained under depreciation pressure.

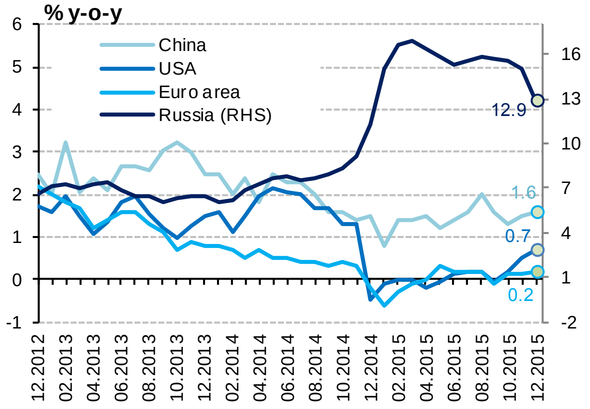
Real GDP in Selected Advanced and Emerging Economies, % y-o-y



Source: National Statistical Offices

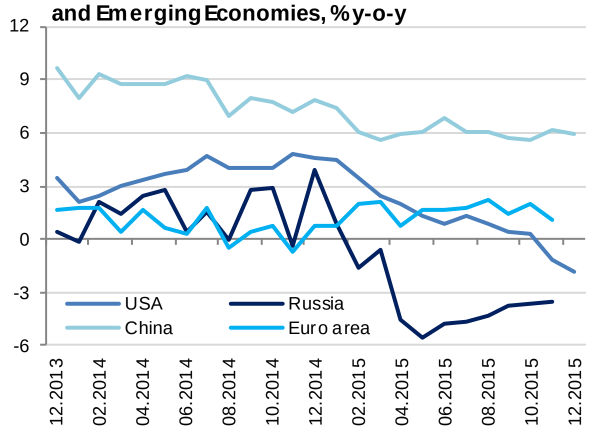
Growth in the U.S. economy slowed. However, owing to further improvement in labor market conditions and strengthening confidence that in the medium term inflation will return to the target value in 2%, the FED raised interest rates by 25 b. p. to 0.25-0.5% in December 2015 for the first time in the past eight years. In Q3 2015, real GDP growth in the U.S. declined to 2.1% y-o-y (from 2.7% y-o-y in Q2) due to a deceleration in the growth of gross private domestic investment (to 3.7% y-o-y from 5.7% y-o-y in the previous quarter). Investment activity was restrained by the energy sector. Due to a rapid decline in oil prices, oil companies not only stopped investing in exploration and development of new mineral resources, but also started to close the rigs. Further declines in global commodity prices significantly affected industry sectors; a moderation of growth that was observed during Q3 2015 turned into a manufacturing slump in November (by 1.2% y-o-y), deepening in December to 1.8% y-o-y. At the same time, consumption growth slightly moderated in Q3 (to 3.1% y-o-y compared with 3.3% y-o-y in Q2) remaining robust, however, due to low fuel prices and further improvements in the labor market. In particular, the unemployment rate dropped to 5.1% in September and continued to decrease in Q4 to 5.0% in December 2015. Due to declining energy prices during 11 months, the producer price index was decreasing (in December 2015 by 1% y-o-y). At the same time, headline inflation, although further impacted by low fuel prices at the end of the year, showed an upward trend (up 0.7% y-o-y in December) strengthening confidence regarding its return to the target value in the medium term.

Consumer Price Indeces in Selected Advanced and Emerging Economies, % y-o-y



Source: National Statistical Offices

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



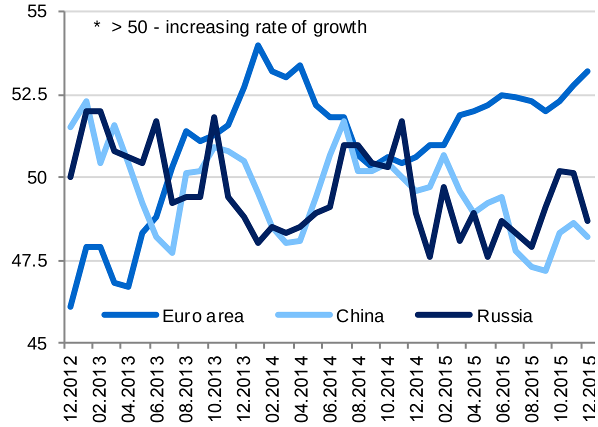
Source: Thomson Reuters Datastream

Economic growth in the Euro area continued, albeit at a moderate pace. In Q3 2015 growth of real GDP in the Euro area remained steady at the previous quarter's level of 1.6% y-o-y. After a slight acceleration in Q3 2015, industrial production growth slowed to 1.1% y-o-y in November, in particular due to lower energy output (by 2.8% y-o-y). Moreover, for the first time since 2014, in November 2015, German industrial production decreased (by 0.3% y-o-y). At the same time, the unemployment rate continued to decline - to 10.8% in September and 10.5% in November. Due to low energy prices and relatively sluggish domestic demand, inflation remained rather low, amounting to 0.2% y-o-y at the end of 2015. To stimulate economic activity in December, the ECB extended its quantitative easing program until March of 2017, lowered deposit rates by 10 b.p. to (-0.3%), and expanded the list of securities to be purchased under the program, particularly, bonds issued by regional authorities of Euro area countries[3].

China's economic growth is slowing. In particular, real GDP growth decreased to 6.8% y-o-y in Q4 2015 with the growth in industry value-added decelerating to 5.9% y-o-y in December. Deflation persisted for five months in a row (5.9% y-o-y in December). Low headline inflation (1.6% y-o-y) and a greater decrease in imports (by 14.1% y-o-y for 2015) than exports (by 2.8% y-o-y) pointed to a weak domestic demand. **While China's economic slowdown generally matched expectations amid low predictability of the Chinese financial sector policy** (stock market transactions, exchange rate liberalization etc.), **investors' concerns strengthened regarding deepening domestic imbalances.** This resulted in capital outflows from the country (USD 676 bn according to IIF data) and lower international reserves (by USD 513 bn) for the first time since 1992.

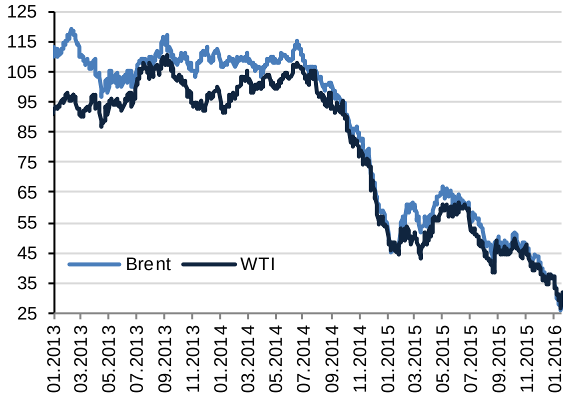
Lower oil prices, weak investment activity, and a decrease in consumer demand affected the Russian economy. Meanwhile, the decline of real GDP and industrial production slowed slightly (to 4.1% in Q3 2015 y-o-y and 3.5% in November y-o-y, respectively), which, in particular, could be attributed to increased output of fuels and agricultural crops. Simultaneously, in Q3 capital investments declined to 6.8% y-o-y while the share of budget funds in total structure increased. The decrease in real disposable household income accelerated to 5.4% y-o-y in November. The consumer confidence index that reflects overall consumer expectations dropped by 2.3 p.p. in Q4 compared with Q3, totaling 26.4%. In spite of the considerable depreciation of the Russian ruble, inflation slowed after a significant spike at the beginning of the year, influenced by a decline in domestic demand, falling global commodity prices as well as high crop yields. At year-end, CPI growth amounted to 12.9% y-o-y.

Manufacturing PMI*



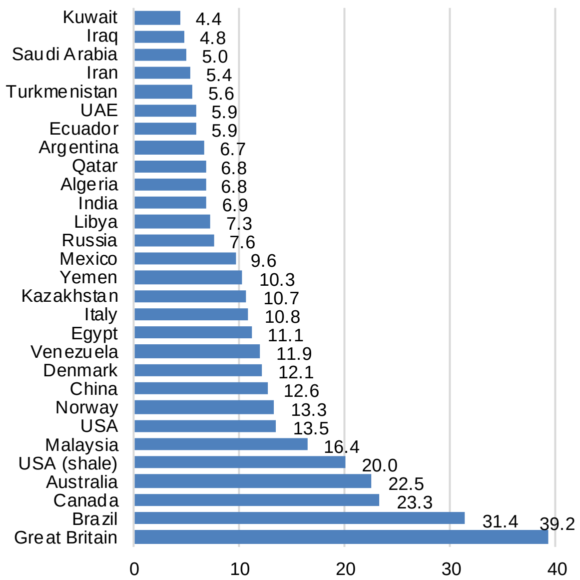
Source: Markit Economics

Brent and WTI Crude Oil Prices, USD/bbl, as of 22.01.2016



Source: Thomson Reuters Datastream

Cost of Oil Production by Country, USD/bbl

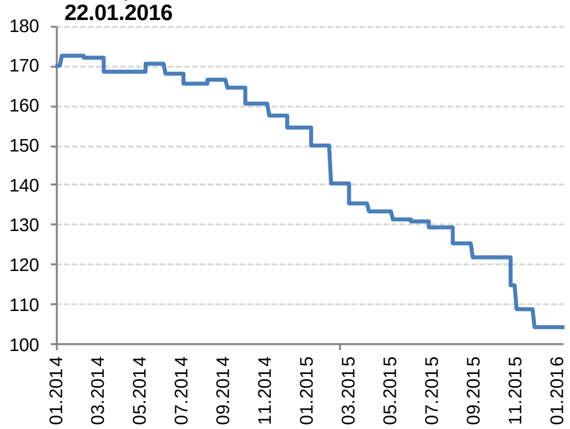


Source: Commodity Special Feature from WEO April 2015 IMF

[3]Lower deposit rates allowed an increase in the volume of securities available for purchase. According to the current rules of the ECB's quantitative easing program, it is prohibited to purchase government bonds with a yield lower than deposit rates. Bonds of the Euro area countries with a yield lower than (-0.2%) accounted for nearly 12% of the total amount of governmental bonds in time of the EBC decision.

Notwithstanding a temporary increase of tensions in the Middle East, oil prices continued to decline. Thus, in Q4, the average price of Brent oil decreased by 42.7% y-o-y with WTI oil down by 42.6%. The price drop was due to a further increase in supply in the global market amid greater output in the USA, Saudi Arabia, Canada, and OPEC countries[4], greater oil stocks in the USA[5], the lifting of the ban on oil exports from the USA, and increasing concerns regarding the consequences of lower business activity in China.[6] Along with that, China continues to build-up strategic oil stocks - in 2015 oil purchases grew by 8.8% y-o-y or 2.7 million barrels. Until the end of 2016, China additionally plans to open four new oil storage facilities with a total capacity of 94.5 million barrels.

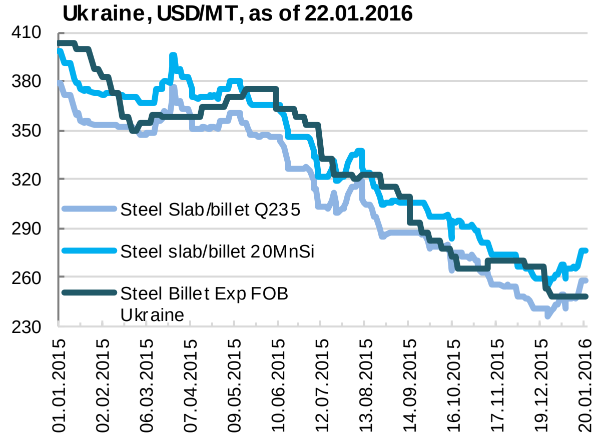
CRUspi Steel Global Indicator, as of 22.01.2016



Source: Thomson Reuters Datastream

Overall for 2015 Brent oil prices dropped by 34.7% to USD 36 per barrel, while WTI oil fell by 37.1% to USD 37.1 per barrel. Oil prices continued to plummet, falling at the beginning of 2016 below USD 30 per barrel in the first half of January. Brent crude oil prices dropped by 16.5% from the beginning of the month (as of 22 January 2016) to USD 30.3 per barrel with WTI oil down by 13.6% to USD 37.1 per barrel. One of the major reasons behind such a rapid decline since the beginning of the year was the lifting of international sanctions on Iran by the EU and the USA, as well as China's weak macroeconomic data.

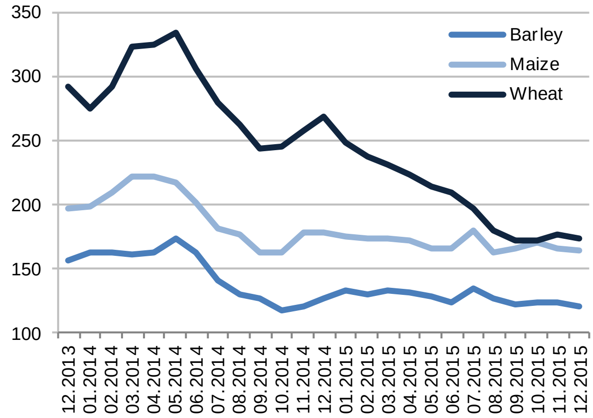
Semi-finished Steel Prices in China and Ukraine, USD/MT, as of 22.01.2016



Source: Thomson Reuters Datastream

Steel prices continued to decrease in the global markets (in Q4 CRUspi dropped on average by 28.6% y-o-y, overall for 2015 – by 32.4% y-o-y). At the same time, prices for selected semi-finished steel products produced in China reduced more significantly[7] - in dollar equivalent by 38.1% y-o-y and 36.5% y-o-y, respectively, similar to Ukrainian export prices for these items - by 39.1% y-o-y.[8] The main reasons for further price declines were significant mismatch between demand and supply in the global market, notwithstanding a reduction in steel output, slowdown of the global economy (particularly the economy of China)[9], and a rapid decrease in prices of energy and iron ore that lower production costs.[10]

World cereal prices, USD/MT



Source: world Bank, IMF

The decline in commodity prices continued into Q4. The FAO Food Price Index dropped on average for the quarter by 1.4% (17.9% y-o-y), mostly due to lower prices for meat and cereals by 8.9% and 2.9% (by 24% y-o-y and 15.2%, respectively). Prices fell mainly due to higher demand in the market and strong competition among

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[4]In November, the average daily volumes of oil production grew to their highest level in the previous 3 years - 31.7 million barrels per day.

[5]According to U.S. Energy Information Administration data, in Q4 increased by 5.3% to 482.3 million barrels as of 1 January 2016. In 2015 oil stocks in the USA increased by 25.1% or 97 million barrels.

[6]The China Manufacturing PMI is lower than 50 p. for ten months in a row (in December, the index decreased to 48.2 points).

[7] Slab/billet Q235 and Slab/billet 20MnSi CNY. Source: Thomson Reuters Datastream.

[8] Steel Billet ExpFOB Ukraine. Source: Thomson Reuters Datastream.

[9]In Q4 global steel output decreased (in particular in October-November by 3.9% y-o-y) mostly due to lower output in China (by 2.4% y-o-y or 3.1 million tons), the U.S. (by 13.5% or 2 million tons), Japan (by 4.2% or 0.9 million tons), and Taiwan (by 21.1% or 0.9 million tons).

[10] China is responsible for half of the world's steel consumption is in. At the same time, the narrowing of demand for steel in this country is quicker than decreasing output.

exporters, as well as weak demand in the international market. Among cereals, the decline was for wheat and maize, given the high harvest this year. Thus, in Q4 prices for wheat reduced on average by 32.4% y-o-y for the quarter and corn by 3.7% y-o-y. Prices for barley remained almost the same.

Major stock indices advanced in Q4 (S&P 500 by 6.5% q-o-q as of the end of December, Eurostoxx 50 by 5.4% q-o-q). That was due to adjustment after abrupt drops in indices at the end of September, the easing of monetary policy by the Bank of China and the ECB, and statements by FED management regarding a gradual pace of tightening monetary policy thereafter. At the same time, **stock indices showed considerable volatility during the quarter in view of:**

global selloff of financial risk assets (assets of emerging markets, high-yield assets in the corporate sector, particularly non-investment grade bonds of U.S. corporations, etc.) before the FED meeting on 16 December;

declining world commodity prices;

unfavorable economic developments in China and the volatile situation in the Chinese stock and FX markets (due to CNY depreciation and a rapid slump of stock indices);

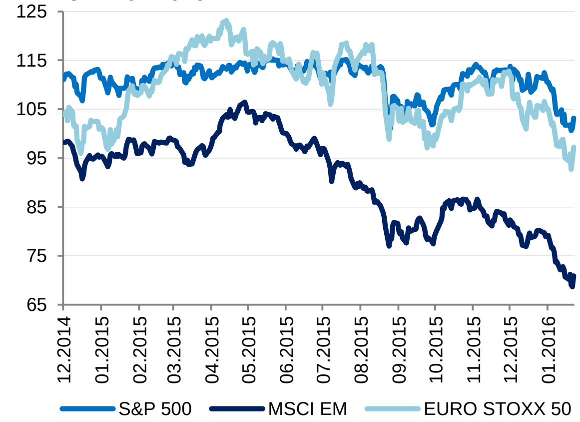
aggravating geopolitical tensions in the Middle East.

In 2015, the S&P 500 fell by 0.7% y-o-y as of the end of December after gains in the three previous years, its worst performance since the period of global financial crisis in 2008. Instead, in 2015 the Eurostoxx 50 posted gains for four months in a row– by 3.8%.

The MSCI Emerging Markets Index lagged behind the benchmarks of advanced countries (up by merely 0.3% q-o-q as of the end of December, down by 17% y-o-y from the beginning of the year) due to higher vulnerability to the above mentioned volatility factors. **Reduction in portfolio inflows to the countries of this group continued for six months in a row** with the highest biggest outflow of capital withdrawn from equities[11]. Portfolio inflows to the emerging markets in 2015 were the lowest since 2008 – less than USD 41 billion (USD 291 billion in 2014).

In the first half of January, a massive plunge of leading stock indices took place (with the S&P 500 down by 6.7% from the beginning of the year, Eurostoxx 50 by 7.5%, and emerging markets' MSCI by 10.5%). The slump was prompted by unfavorable information regarding a slowdown in China's manufacturing sector, a drop of Chinese stock indices, depreciation of the renminbi, as well as a slump in oil prices in global markets. At the same time, as demand for safe haven assets increased (U.S. Treasury bonds, JPY) the relative attractiveness of emerging market financial assets to investors declined.

World Stock Indices, Jan 1, 2014=100, as of 22.01.2016

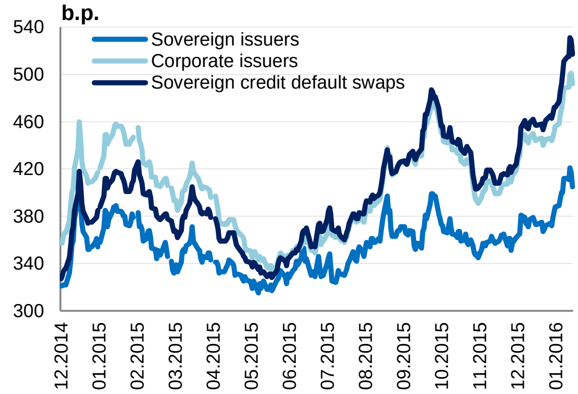


Source: Thomson Reuters Datastream

Shanghai SE Composite Stock Index, as of 22.01.2016

Source: Thomson Reuters Datastream

Yield Spreads on External Bonds and Sovereign Credit Default Swaps for Emerging Economies, b.p.



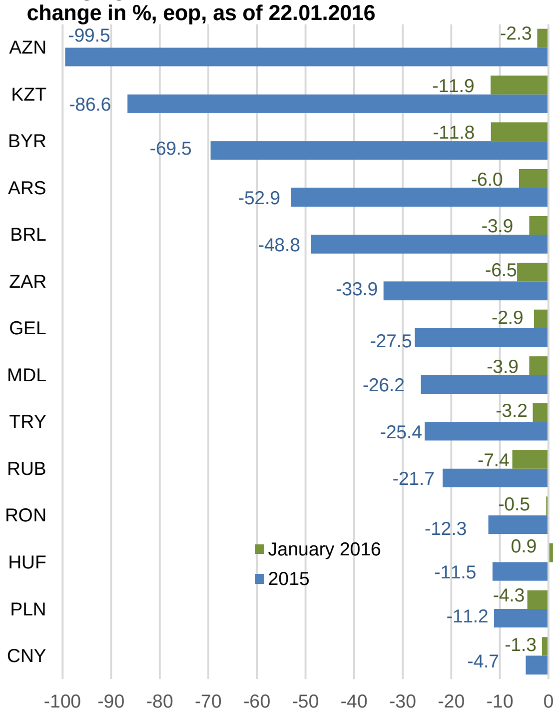
Source: BofA Merrill Lynch

[11]Only in December - by USD 3.1 bn according to the Institute of International Finance.

Reflecting the divergent monetary policy of the FED and the ECB, the **euro depreciated against the dollar** by 2.7% q-o-q in Q4 to 1.086 dollar/euro as of the end of December and by 10.2% from the beginning of 2015. However, in December the euro went up by 2.9% m-o-m in view of the ECB's smaller than expected stimulus measures announced at the December policy meeting and a rise in long-term rates in the euro area.

In 2015, amid a slump in commodity prices in 2015, the depreciation pressure on emerging market currencies intensified. The worst performing were the currencies of CIS countries, Turkey, SAR, Brazil, and Argentina. **At the beginning of 2016, the weakness in commodity currencies persisted .** In particular, from the beginning of January (as of 22 January 2016) the Russian ruble depreciated by 7.4% to RUB 78.4 per USD (by 21.7% in 2015). The key event in 2015 became a change of FX policy by the People's Bank of China resulting in a depreciation of the renminbi exchange rate to its lowest level since 2011. Early in 2016, the People's Bank of China continued to devalue the renminbi against the US dollar - by 1.3% to CNY 6.58 per USD (as of 22 January 2016).

Emerging Market Currencies versus US Dollar, change in %, eop, as of 22.01.2016



Source: Thomson Reuters Datastream

2.2. DOMESTIC ECONOMY
2.2.1. INFLATION DEVELOPMENT

Headline inflation has demonstrated a steady downward trend. After peaking in April 2015, at about 61% y-o-y, due to a fall in the hryvnia exchange rate and a sharp rise in administrated prices, annual inflation has demonstrated a virtually steady downward trend since then. At the end of the year, CPI growth amounted to 43.3% y-o-y and was in line with the NBU forecast. The major increase in prices occurred in the first half of the year, while in Q4 2015 the CPI growth amounted to only 1.4% q-o-q[12].

Core inflation slowed down to 34.7% y-o-y in December. Its moderation in the second half of the year reflected:

calmed foreign exchange market. The heightened exchange rate volatility observed at the year's end had a relatively limited impact on prices of goods and services and was compensated for by other factors;

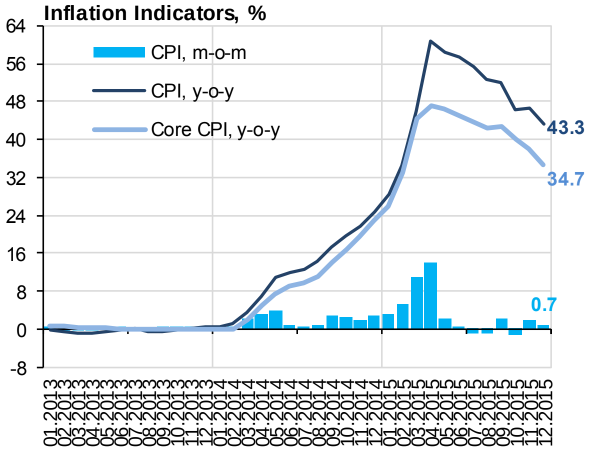
a price fall in world commodity markets;

subdued consumer demand;

tight fiscal and monetary policies;

and stabilization of inflation expectations.

A firm disinflation trend was also observed in industry. In Q4 2015, the PPI fell by 2.0% q-o-q, having been impacted by the continuing decline of world commodity prices. Industrial inflation slowed down to 25.4% y-o-y as of the end of the year.

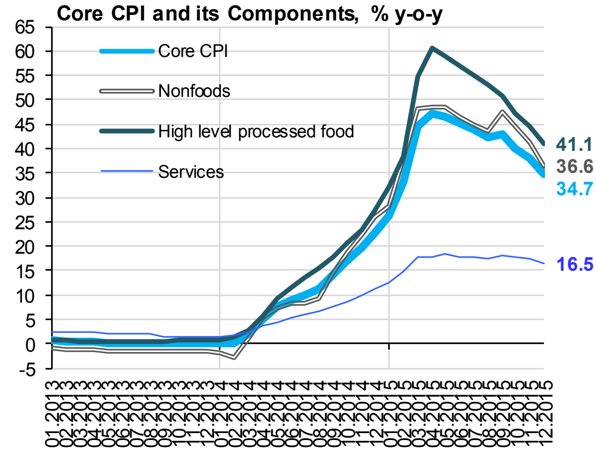


Source: State Statistics Service of Ukraine

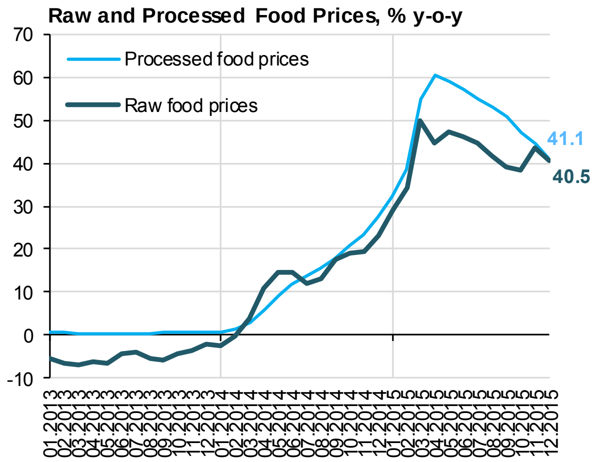
Core inflation

After peaking in April 2015, core inflation has been gradually slowing down and reached 34.7% y-o-y in December 2015. The descending trend of annual core inflation primarily reflected calmed FX market, subdued consumer demand, and improving market expectations.

Although in the last months of 2015 the volatility of the hryvnia exchange rate heightened, its impact on prices was weaker than that recorded in early 2015. As a result, during H2 2015 (except for September), the overall increase in prices for non-food commodities that are mostly represented by imports (in particular, clothing and footwear, household appliances, pharmaceutical products, audio, photographic, and data processing equipment) was relatively moderate. In annual terms, the price growth for these goods reached 36.6% at the end of the year. September's lull in the disinflation trend of this commodity group was caused by an unanticipated acceleration in the price growth for clothing and footwear (up to 44.6% y-o-y), which share within the core CPI accounted to 15.2%. The acceleration was attributed to the methodological specifics of registering prices of seasonal goods, as a result of which the deferred effect of hryvnia depreciation that occurred in early 2015 was reflected in September's clothing and footwear prices[13].



Source: State Statistics Service of Ukraine; NBU staff estimates



Source: NBU staff estimates

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[12]Comparison as of the end of the quarter.

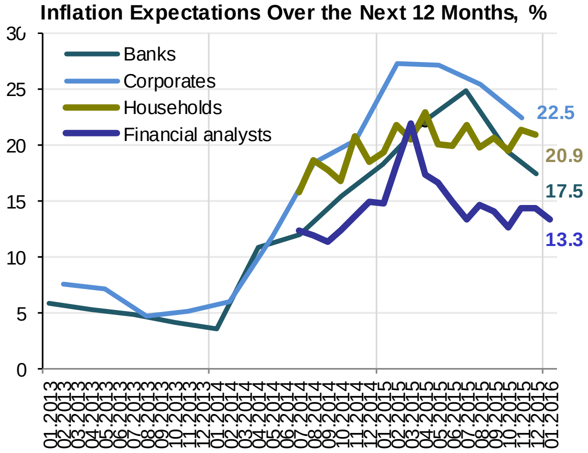
[13]Thus, according to SSSU methodology, during March - August, actual prices for warm clothing and footwear are not registered; "input prices" are used instead [for greater details, see the Methodological provisions for arranging statistical surveys of changes in prices (tariffs) for consumer goods (services) and calculating the CPI at the SSSU website (http://www.ukrstat.gov.ua/) under *Methodology and Classifiers/Statistical Methodology*]. Therefore, the pass-through of hryvnia depreciation on clothing and footwear prices was largely delayed until the beginning of sales of goods for the new season.

The rise in prices for foods that are included in the core CPI (primarily, processed ones) has been slowing down since May 2015 to 41.1% y-o-y in December. In addition to fading depreciation effects, secondary effects from falling prices for non-core CPI components (in particular, fuels and some raw foods), falling world commodity prices and weak consumer demand also contributed to the downward trend.

Weak consumer demand restrained a rise in prices for core CPI services[14] (the ones are primarily dependent on domestic demand factors); by the end of 2015, the annual rate of their price growth declined to 16.5%.

In the second half of the year, stabilization of inflationary expectations became an additional factor for slowing down core inflation. Thus, according to business surveys, inflation expectations of corporate enterprises, banks, and financial analysts for the next 12 months decreased markedly, although households' expectations remained volatile.

Inflation Expectations Over the Next 12 Months, %

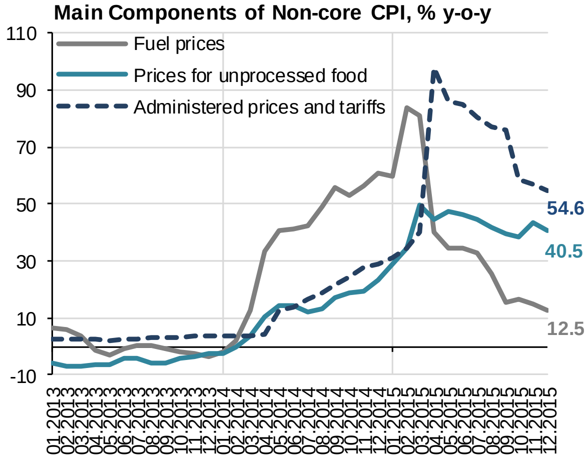


Source: NBU; GfK Ukraine surveys; NBU staff estimates

Non-core inflation

The rise in prices for non-core CPI components slowed down significantly - overall, to 45.3%[15] y-o-y in December 2015. In addition to causes mentioned above, such trend was attributed to a sharp reduction in domestic fuel prices that mirrored crude oil price developments on external markets following stabilization of the Ukrainian FX market. Domestic fuel prices were decreasing in monthly terms since August 2015. As a result, their growth in annual terms slowed down to 12.5%. This facilitated a respective slowdown in the price growth for transportation services to 27.0% y-o-y in December, including in the prices for the road passenger transportation services to 30.6% y-o-y.

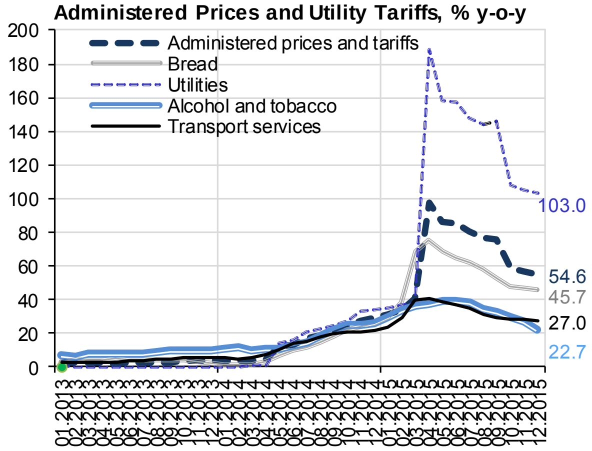
Main Components of Non-core CPI, % y-o-y



Source: State Statistics Service of Ukraine; NBU staff estimates

The growth of administered prices and tariffs also decelerated (to 54.6% y-o-y at the end of 2015). In particular, in December, the rise in prices and tariffs for utility services decreased to 103.0% y-o-y. The deceleration was attributed to the completion of the main phase of utility tariff adjustments in the first half of the year. Although utility prices kept increasing in the second half of 2015 (in particular, those for electricity and heating), their rise was relatively moderate, whereas natural gas tariffs even declined in October 2015. The latter reflected a price discount for those households that use gas for independent heating and complex purposes and consume less than 200 cubic meters per month, with the discount effective during the period from 1 October 2015 to 30 April 2016. Prices and tariffs for other housing and utility services saw moderate changes over the period.

Administered Prices and Utility Tariffs, % y-o-y



Source: State Statistics Service; NBU staff estimates

As to other administered prices for goods and services, price growth for bread eased to 45.7% y-o-y in December 2015, underpinned by a fall in fuel prices, high wheat harvest, and a favorable basis of comparison as well.

Despite a scheduled increase in minimum wholesale and retail prices for alcoholic beverages in September 2015, the annual rate of increase in prices for alcoholic beverages and tobacco products has been trending downwards since July (to

[14] Net of services whose prices are administered.
[15] Estimated data for the changes in non-core CPI, administered prices and tariffs, and raw foods in the previous periods were revised.

22.7% y-o-y in December), inter alia due to price decreases by separate tobacco goods producers.

In contrast to other CPI components, prices for raw foods decelerated at a rather moderate pace. By the end of the year, prices for theses goods grew by 40.5% y-o-y. Within the group, prices for some raw foods showed opposite developments, being caused by supply factors.

Thus, due to a reduction in the milk and eggs supply, price growth for these products sped up to 27.4% y-o-y and 59.4% y-o-y in December, respectively. Owing to lower sugar beet harvest, the growth in sugar prices accelerated in the second half-year to 69.8% y-o-y in December. Lower crops of select vegetables and increased costs of their production caused the growth in vegetable prices to accelerate since May 2015 up to 66.7% y-o-y in December (including the price growth for "borshch vegetables"[16] up to 114.3% y-o-y).

Differences in FX market trends in 2015 as compared to those in the previous year can be used to explain a decrease in annual growth rates of prices for imported foods. An increase in supply of some fruit (in particular, citrus fruit) and the downward price dynamics in external markets also contributed. Thus, the December rise in prices for fish and fish products (including sea foods) slowed down to 42.4% y-o-y, while the y-o-y growth rates of fruit prices fluctuated at a level close to 49% since August.

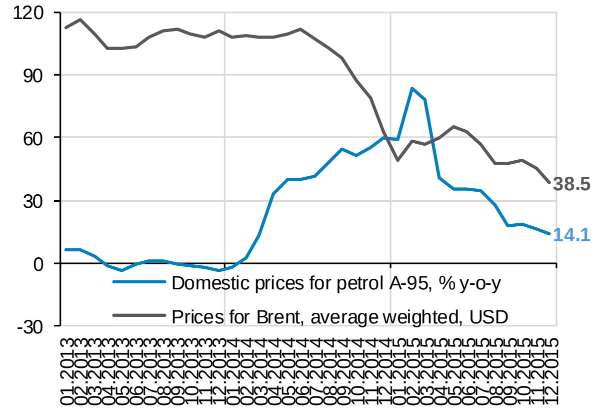
Since the beginning of autumn, the price growth for meat and products thereof was slowing down (to 22.5% y-o-y in December), which was primarily attributed to an increase in the meat supply (mainly beef, veal, and pork) and weak consumer demand. The decline in world meat prices also contributed to domestic price developments.

Producer price index

Since April, there was observed a sustained slowdown of producer inflation to 25.4% y-o-y in December, mainly underpinned by a decrease in world commodity prices amid a relatively calm Ukrainian FX market.

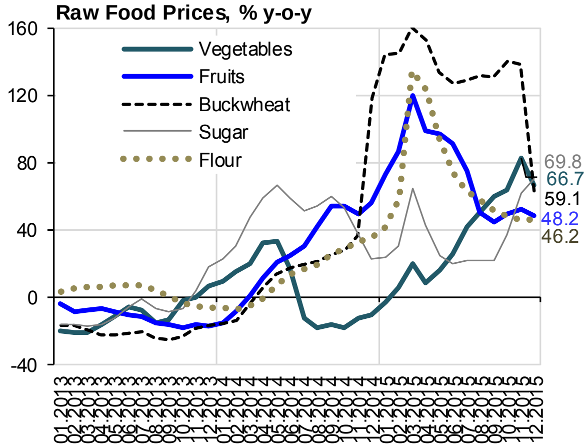
A fall in world prices for oil, steel, and iron ores led to a formation of similar price trends in the domestic mining and manufacturing industries (to 17.6% y-o-y and 23.8% y-o-y at year-end, respectively). In particular, since March 2015, annual price growth in production of refined petroleum products reported a fairly rapid decline, with producer prices in this industry decreasing in annual terms since August (in December, by 1.7% y-o-y). In metallurgy, the increase in prices slowed down to 12.4% y-o-y in December. Although during the first half of the year, the annual rates of increase in prices in production of metal ores showed sizable fluctuations, they demonstrated a downward trend during the most of H2 and turned negative in December (priced were down by 8.9% y-o-y that month). Price developments in this industry were associated with falling world iron ore prices on one hand, and with gradual but feeble recovery in metallurgy and favorable base effect on the other hand.

Fuel and Oil Prices



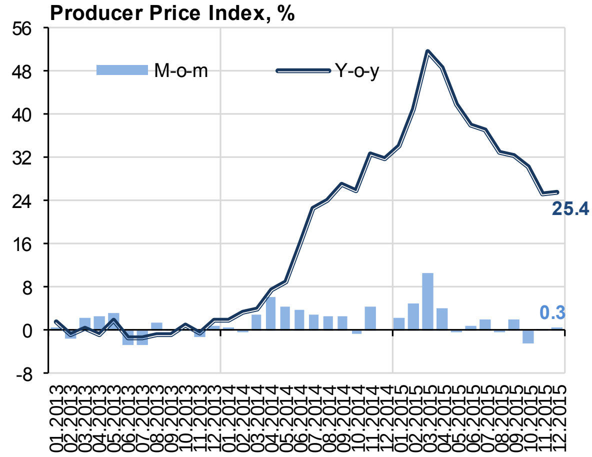
Source: State Statistics Service of Ukraine; Reuters Datastream; NBU staff estimates

Raw Food Prices, % y-o-y



Source: State Statistics Service of Ukraine

Producer Price Index, %



Source: State Statistics Service of Ukraine

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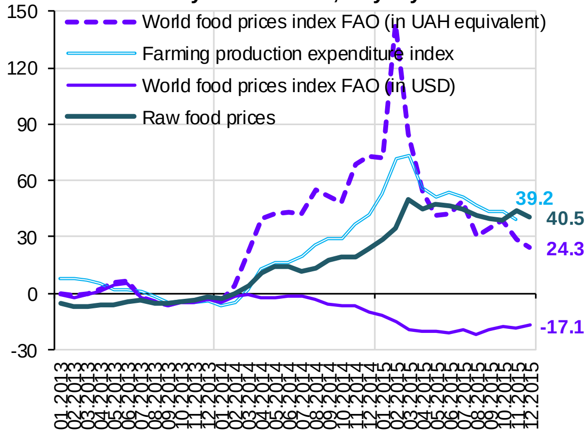
[16] Borshch is a traditional soup in Ukrainian cuisine. While recipes for borshch vary, vegetables are the main ingredients: beet, potato, carrot, cabbage, and onion.

Since July 2015, the growth in producer prices in the chemical industry moderated to 24.2% y-o-y in December, supported by a decrease in world fertilizer prices, in particular, for ammonia.

The price increase in the food industry has been decelerating since April 2015 with deceleration reflecting the impact of both external factors and weak domestic demand. In particular, the annual rates of price increase in production of meat and meat products, beverages, bread, bakery, and pastries gradually declined. However, during Q4, the price reduction in the food industry was restrained by the accelerating price increases in some food processing branches. In particular, producer prices in manufacturing of sugar surged up to 69.7% y-o-y in December due to increased production costs amid a considerable decline in the sugar beet harvest. Prices increase in production of dairy products also sped up (to 30% y-o-y in December), primarily due to a rise in prices of milk as a raw product. This can be explained by increasing costs of its production, fiercer competition for raw milk amid its decreasing production[17], and widening export opportunities[18].

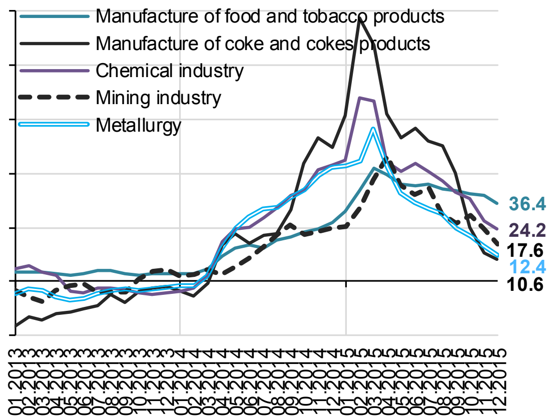
A trend towards a reduction in growth rates of electric power, gas, steam, and conditioned air supply began in May 2015 and was unstable (in December, the growth rates came to 33.2% y-o-y). This can be attributed by uneven supplies of domestic raw materials and their imported substitutes (with the latter being relatively more expensive compared with domestic inputs) for electric power production.

Food Prices by Main Drivers, % y-o-y



Source: State Statistics Service of Ukraine; FAO; NBU staff estimates

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



Source: State Statistics Service of Ukraine; NBU staff estimates

[17] In 2015, milk production volumes declined by 11.3%.
[18] In September, a number of producers of dairy products gained the right to export their products to China, and at the end of December - the right to export their products to the EU.

2.2.2. DEMAND AND OUTPUT

Real GDP in Q3 2015 increased by 0.5% compared to the previous quarter (adjusted for seasonal effects). This data confirmed NBU view that the economy bottomed out in the first half of the year. In annual terms, real GDP decline slowed to 7.2%. As expected, in addition to the low base of comparison, moderation of real GDP decline was driven by the revival in agriculture as a result of a shift in the start of harvesting works from Q2 to Q3[19].

Improvements in real sector performance were also due to the following factors:

improving business confidence[20];

de-escalation of military conflict. This led to the restoration of raw materials supply chain and of finished product sales by select industrial enterprises in the east. As a result, production at these enterprises increased;

slowing decline in real household income and improved consumer confidence, which somewhat supported domestic consumer demand.

As a result, recovery of production was observed in certain types of activity. At the same time, due to continuing banking system clean-up, the financial and insurance sector reported worse results.

By expenditure components, the decline in domestic consumption significantly slowed in Q3, but it remained the main negative contributor to the annual change of real GDP.

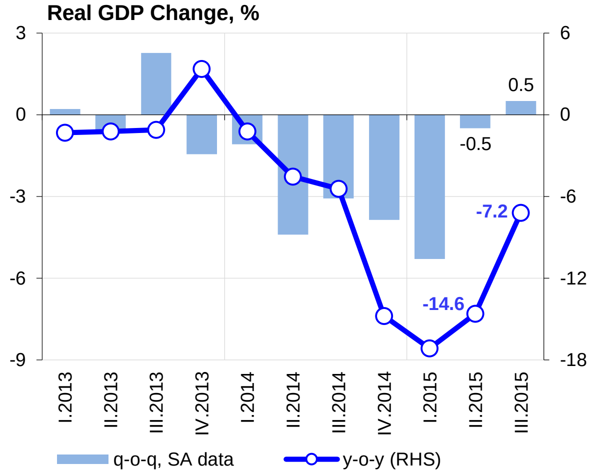
A significant growth of inventories primarily reflected the developments in agriculture, in particular high crop harvest. Positive contribution of net exports declined slightly, while investment activity remained weak.

Output indicators in key economic sectors pointed to a further reduction in the annual rate of economic decline in Q4. In particular, the fall of IKSO, which is the composite indicator for output changes in key sectors of the economy, slowed to 2.7% y-o-y in December. Thereby, according to NBU estimates, real GDP continued to grow in seasonally adjusted quarterly terms in Q4 2015. For the whole 2015, the decline in real GDP was estimated at 10.5% y-o-y.

Output

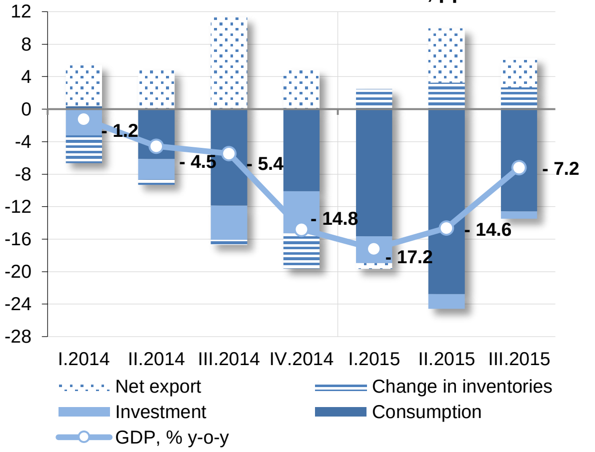
A relative truce holding was the main prerequisite for restoring the activity in the mining industry and metallurgy. As a result, **the rate of decrease in gross value added**

Real GDP Change, %



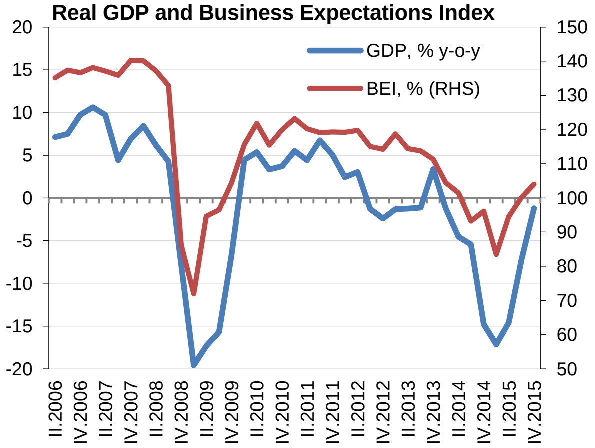
Source: SSSU

Contributions to Annual GDP Growth, ppts



Source: SSSU; NBU staff estimates

Real GDP and Business Expectations Index



Source: SSSU; NBU

[19] At the beginning of Q3 2015 harvested area of grain and leguminous was 72% lower than at the beginning of the respective quarter of the previous year. However, at the beginning of Q4, harvested area of these crops exceeded the respective numbers of the last year by 1.3%.

[20] The Business Confidence Index – aggregate indicator of the expected business development in the next 12 months, calculated by the National Bank of Ukraine based on the business outlook survey results. The index rose to 100.2% in Q3 (compared with 94.5% in Q2) and continued to rise to 104.0% in Q4.

created in the industrial sector[21] **declined sharply** (to 8.2% y-o-y versus 21.2% y-o-y in Q2).

The fall of gross value added in the mining industry slowed the most significantly (to 5.0% y-o-y compared with 22.2% y-o-y in Q2). The industry reported output growth for the second quarter in a row in quarterly seasonally adjusted terms (by 2.1% q-o-q in Q3). In particular, production of minerals and brown coal, which was hardest hit by the military conflict in the east, showed a sharp deceleration in output decline to 9.0% y-o-y[22] (from 53.9% y-o-y in Q2) including due to restored routes of raw materials supplies to metallurgical and power plants. In the mining of metal ores, where the decline was less significant due to exports growth, there was an increase in output production by 1.4% y-o-y in Q3 (after falling by 8.9% y-o-y in Q2).

The decline in gross value added in the manufacturing industry slowed down to 9.9% y-o-y (compared to 21.8% y-o-y in Q2). These developments reflected some increase in capacity utilization and restored raw materials supply in metallurgy. Coupled with low comparison base, these factors underpinned **a moderation in the paces of production decline in metallurgy** (to 7.4% y-o-y compared with 25.8% y-o-y in Q2). In particular, over the period domestic supply of coke to metallurgical enterprises increased, which was also evident from a decrease in the volumes of its imports. Thus, Ukraine's coke production rose by 18.1% y-o-y (after a decrease by 33.8% y-o-y in Q2).

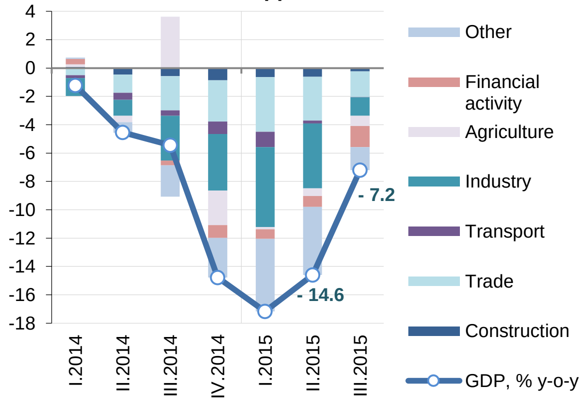
The decline in the machine-building industry decelerated significantly (to 9.0% y-o-y versus 23.1% y-o-y in Q2), which, in addition to favorable base effect, was attributed to execution of state defense orders.

In contrast, production in some other industries continued to report strong declines. Thus, output production in the chemical industry fell by 15.1% y-o-y in Q3, adversely affected by the suspension of work of some biggest chemical plants[23], which lasted from the end of Q2 throughout Q3 2015.

Also, food production decreased significantly (by 13.2% y-o-y) due to a decline in exports to the Russian Federation, as well as weakening domestic consumption. In addition, the decline in sunflower oil production (by 26.7% y-o-y[24]) had a significant negative impact.

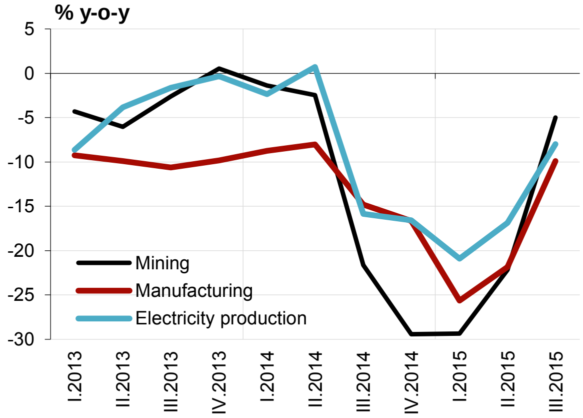
Because of a shift of the harvesting start, the grain harvest volumes in Q3 increased by 3.3% y-o-y, which was a significant factor for slowing the decline in agriculture. At the same time, due to lower yields of some vegetables and industrial crops, as well as a difficult situation with livestock,

Contributions of Certain Activities to Annual Growth of Real GDP, ppts



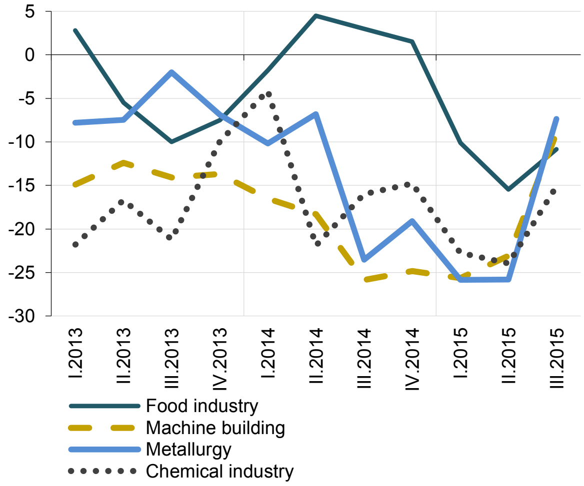
Source: SSSU; NBU staff estimates

Change in GVA by Industries, % y-o-y



Source: SSSU

Output in Select Manufacturing Industries, % y-o-y



Source: SSSU; NBU staff estimates

[21] According to NBU estimates based on GVA by industries.
[22] For industries and domestic trade, average quarterly changes in output are provided.
[23] Two chemical plants that are part of Ostchem Holding company (PJSC 'Azot' (Cherkasy) and PJSC 'Rivneazot') suspended their works from late May to the end of September 2015.
[24] Vegetable oil producers felt the shortage of sunflower seeds supplies during August-September (the stocks of sunflower seeds were 34% and 46% lower than at the beginning of August and September 2014, respectively) due to low harvest of sunflower seeds last year.

gross value added in agriculture in Q3 dropped by 3.8% y-o-y.

The fall in gross value added in domestic trade also slowed in Q3 – from 20.4% y-o-y to 15.1% y-o-y. Developments in wholesale trade (turnover decline slowed to 11.9% y-o-y) were closely related to performance in the industrial and agricultural sectors[25]. The slow paces of activity recovery in wholesale trade were related to falling sales of durable consumer goods (household appliances, vehicles, etc.), fuels and lubricants amid increased costs and weaker demand.

The decline in retail trade, after acceleration in the first two quarters of 2015, slowed sharply in Q3 (to 18.1% y-o-y), being in line with the dynamics of real disposable income (the decline slowed to 26.6% compared to 34.0% in Q2). Further gradual improvement of consumer confidence[26] also had a positive impact on retail sales.

The decline in gross value added of construction slowed significantly (to 12.1% y-o-y versus 25.6% y-o-y in Q2). The slowdown was primarily due to growth in capital expenditures of the consolidated budget (by 37.3% y-o-y in real terms in Q3[27]), which inter alia were used to finance the reconstruction of social and transport infrastructure in the east. Subdues bank lending activity and decreasing purchasing power of households were important factors constraining the revival in construction too.

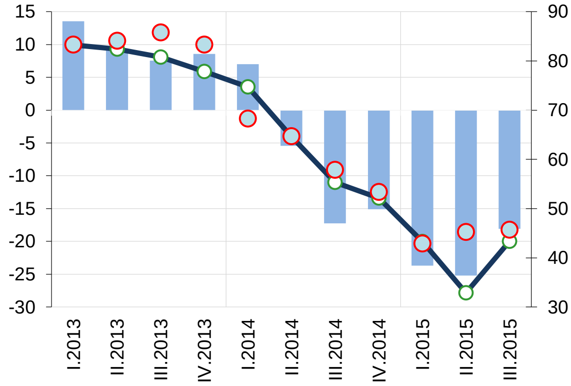
Financial and insurance activities were the main sectors, which significantly increased the negative contribution to the annual change in real GDP in Q3: the decline of gross value added accelerated to 29.3% y-o-y (compared to 14.4% y-o-y in Q2). It was largely due to continuing NBU efforts to clean-up the banking system. Also, the decline deepened in education and health care sectors, which was associated with lower budget expenditures.

Performance in key sectors of the economy in October – December 2015 indicated that the decline in economic activity kept moderating in Q4. In particular, the decline of industrial production and construction works slowed significantly (to around 4.0% y-o-y and 3.8% y-o-y, respectively). The rate of decline in domestic trade also decreased, particularly in wholesale trade (to 5.2% y-o-y) and retail sales (to 16.8% y-o-y).

However, the decline in agricultural production accelerated slightly as expected (to 5.7% y-o-y) primarily due to lower harvest of most grains and industrial crops (corn, sugar beets, potatoes).

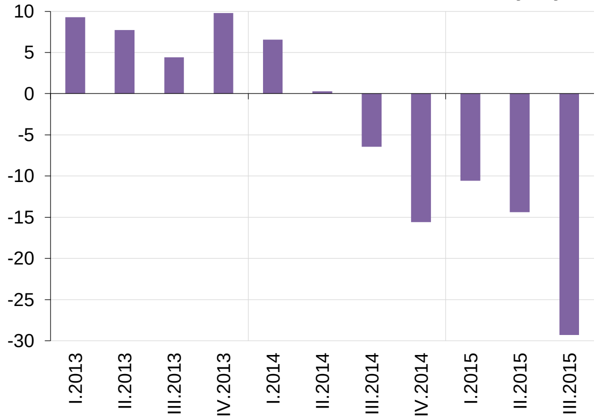
According to NBU estimates, considering the current trends in the main sectors of the economy, real GDP continued to grow in seasonally adjusted quarterly terms in Q4 2015. For 2015 as a whole, the decline in real GDP was estimated at around 10.5%.

Real Retail Trade Turnover, Real Wages and Consumer Sentiment Index



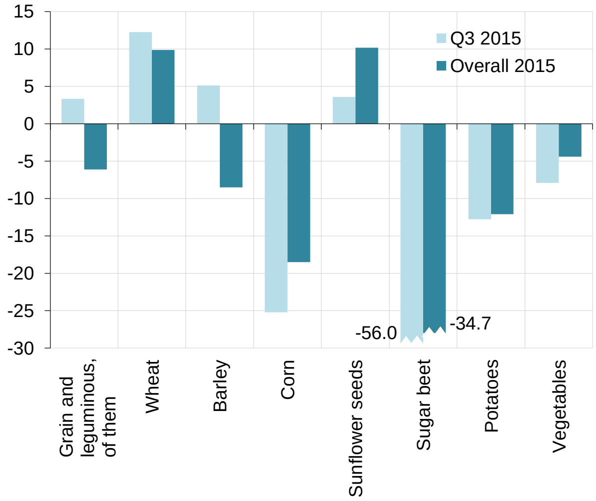
Source: SSSU; GfK Ukraine; NBU staff estimates

GVA of Financial and Insurance Activities, % y-o-y



Source: SSSU

Harvest of Main Agricultural Crops, % y-o-y



Source: SSSU; NBU staff estimates

[25] Sales volumes of sunflower seeds, soybeans and cereals rose by 14.7% y-o-y, 23.1% y-o-y and 1.0% y-o-y, respectively.
[26] Consumer confidence index calculated by GfK Ukraine rose to 45.7 points on average in Q3 from 45.3 points on average in Q2.
[27] The NBU estimates are based on changes in capital expenditures of the consolidated budget deflated using producer price index.

Domestic demand

The fall in domestic consumption remained the major factor of GDP contraction in Q3 (negative contribution amounted to 12.6 ppts) and was primarily due to significant reduction in private consumption (although the paces of decline slowed to 17.8% y-o-y from 27.6% y-o-y in Q2) amid a strong decline in real disposable income, high unemployment, and the credit squeeze.

Softening of consumer demand was observed for all goods and services, primarily on foodstuffs (by 21.1% y-o-y) and housing, water, electricity, gas, and other fuels (by 26.9% y-o-y). Spending on recreation and culture was the most vulnerable to the reduction in household income (fell by 30.7% y-o-y).

Consumer spending of general government sector was still characterized by relatively moderate dynamics: in Q3 its decline slowed to 2.5% (compared to 6.7% in Q2).

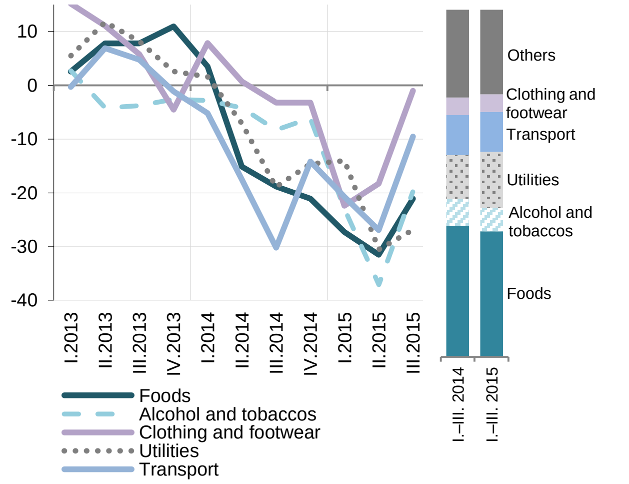
Contraction in investment demand continued to moderate at a fast pace: a decrease in gross fixed capital formation has slowed to 7.4% y-o-y (compared with 13.8% y-o-y in Q2).

In particular, after a long decline there was growth of investment in machinery and equipment in Q3 by 1.2% y-o-y. The decline of investments in buildings and construction, both residential and non-residential, slowed significantly (to 4.6% y-o-y and 16.6% y-o-y, respectively). Among the products of intellectual property, the growth of investment in computer software and databases has resumed in the reporting quarter (by 12.4% y-o-y).

Subdued bank lending activity, as well as limited access to external financial resources amid significant external debt repayments by the private sector were among the main factors, restraining investment.

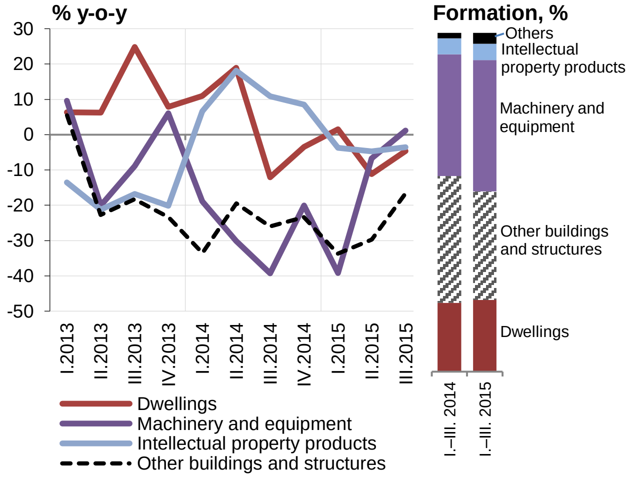
High agricultural harvest, the gradual stabilization of production, and improved economic expectations contributed to a significant accumulation of inventories, resulting in a significant positive contribution to the change in real GDP in Q3 (2.7 ppts).

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



Source: SSSU

Gross Fixed Capital Formation by Kinds of Non-financial Assets, % y-o-y **Structure of Gross Fixed Capital Formation, %**



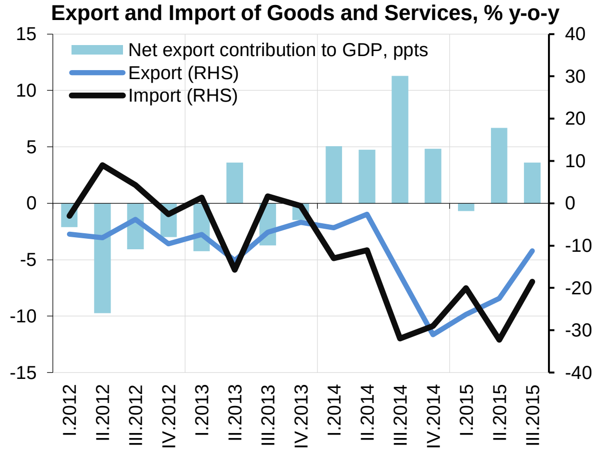
Source: SSSU

External demand[28]

As expected, in Q3 imports continued to decline more significantly than exports. This led to a significant positive contribution of net export to real GDP change (3.6 ppts). At the same time, its contribution was somewhat smaller compared to that in the previous quarter. It is explained by a moderation of paces of decrease in imports (to 18.5% y-o-y compared to 32.2% y-o-y in Q2) more substantially than that of exports. In particular, the decline in imports of machinery slowed considerably.

The decrease in physical volumes of exports slowed significantly (to 11.3% y-o-y versus 22.5% y-o-y in Q2), which was due to the gradual recovery of steel production, increase in exports of inorganic chemicals, and a slowing decline in exports of machinery and equipment and food products (including grains and oilseeds). At the same time, the recovery of exports was restrained by a further drop in world commodity prices.

Export and Import of Goods and Services, % y-o-y



Source: SSSU; NBU

[28] Estimates of changes in exports and imports volumes by group of products were calculated using the NBU trade data.

Using business survey results for GDP nowcasting

It is a universally accepted practice to use business survey data to predict main macroeconomic variables, such as economic activity, consumption, industrial output, and employment, over a forecast horizon from one quarter to one year (the forecast horizon depends on whether questions are asked about expectations for the next quarter or the next year).

Like all central banks, the NBU conducts quarterly business surveys since 2006. Survey results are the subjective assessments and expectations of enterprises regarding their current conditions, prospects for development, macroeconomic trends, and cooperation with Ukraine's banking system. The NBU also calculates the Business Expectations Index (BEI), which is an aggregate index of survey data results constructed based on the expectations enterprises have regarding their prospects for development in the next 12 months, including their financial and economic conditions, sales, investment, and employment.

Major survey features.[29] *Respondents are the top managers of enterprises or staff members responsible for economic analysis and planning; questionnaires are sent to enterprises and returned via all available sources of communication. Participation in the survey is voluntary; the NBU guarantees that all identifiable data will be treated as strictly confidential. About 900 non-financial enterprises from 22 regions participate in the survey (excluding the temporarily occupied territories - Crimea and parts of Donetsk and Luhansk oblasts). The NBU uses quota samples that are formed in proportion to the contribution of a region and a specific economic activity to Ukraine's gross value added. Within the quota, enterprises are selected randomly. Small enterprises represent about one third of the sample, with the rest covered by medium and large enterprises.*

Our calculations indicate that although the index is based on expectations for the next 12 months, the BEI reflects mostly current economic conditions. There is a strong direct link between the BEI development and annual rate of change in real GDP in the current quarter (the correlation coefficient stands at 0.89 and declines as the number of lags increases). Our studies have also shown that there is a close relationship between survey results and select expenditure components of GDP, in particular between the BEI and the annual change in consumption (the correlation coefficient is 0.83). However, for the gross fixed capital formation, its correlation with the annual change in the balance of answers[30] on question about investments into construction of buildings over the next 12 months (correlation coefficient 0.87) was higher than that with the BEI.

Therefore, the expectations of enterprises reflect their current situation changes in the past rather than future prospects. In other words, business expectations are adaptive. However, surveys results, in particular the BEI, can be used for nowcasting purposes as preliminary GDP data is officially released on the 45th day after the quarter has ended and detailed GDP numbers, including GDP components, are released on the 90th day. Using the survey results, an estimate of the real GDP growth is made yet at the end of the current quarter.

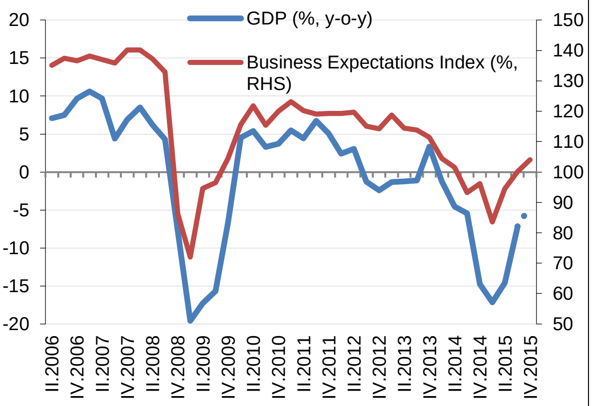
Given a strong relationship between annual change in real GDP, its select components and the BEI and the balance of answers to questions regarding investments into construction of buildings, survey results can be used to make a short-term assessment of economic development. To that end, the NBU staff re-estimates the following linear regression equations, using data for the period from Q2 2006 through Q3 2015[31]

$$\mathrm{GDP_t} = \alpha_1 + \beta_1 * \mathrm{GDP_{t-1}} + \gamma_1 * \mathrm{BEI_t},$$
$$\mathrm{Cons_t} = \alpha_2 + \beta_2 * \mathrm{Cons_{t-1}} + \gamma_2 * \mathrm{BEI_t},$$
$$\mathrm{Inv_t} = \alpha_3 + \beta_3 * \mathrm{Inv_{t-1}} + \gamma_3 * \mathrm{BA\ Inv_t},$$

where $\mathrm{GDP_t}$, $\mathrm{Cons_t}$, and $\mathrm{Inv_t}$ are the annual change in real GDP, consumption, and gross fixed capital formation during quarter t, respectively, and $\mathrm{BEI_t}$ is the value of BEI, BA $\mathrm{Inv_t}$ is the value of balance of answers about investments for buildings over the next 12 months in quarter t (%) respectively, and $\alpha_{1,2,3}$, $\beta_{1,2,3}$, $\gamma_{1,2,3}$ are equation coefficients.

Adjusted R^2 is about 0.9 in these equations, and the equation parameters are statistically significant.

GDP and the Business Expectations Index



Source: SSSU, NBU

The results have confirmed that there is a statistically significant relationship between enterprises' expectations and business activity in the current quarter. This gives the NBU the possibility to use business survey results, in particular the BEI and expectations about investments into construction of buildings, to make nowcasting of real GDP and its components.

[29] You can find more details about the survey's methodological framework in the NBU's Methodological Framework for Conducting Business Surveys at http://www.bank.gov.ua/doccatalog/document?id=76819.

[30] The balance of answers is the difference between the percentage of respondents who replied "the figure will increase" and those who said "the figure will decrease."

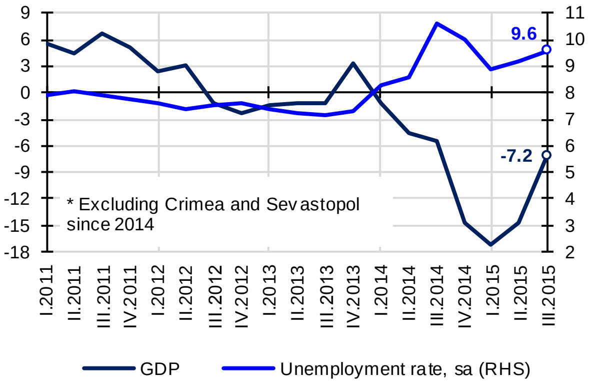
[31] Questions regarding enterprises' prospects for development in the next 12 months have not changed since Q2 2006.

2.2.3. LABOR MARKET AND HOUSEHOLD INCOME[32]

Labor market continued to be under strain despite a gradual revival in economic activity and some improvement in select economic indicators. The number of vacancies decreased further in Q3 and at the beginning of Q4 2015. Seasonally adjusted ILO unemployment rate rose to 9.6% in Q3 2015.

Meanwhile, the average nominal wage (per one permanent staff member) increased by 24.5% y-o-y in Q3 and by 28.2% y-o-y in October-November. At the same time, real wages decreased to 20% y-o-y in Q3 with the decline moderating to 14% y-o-y in November 2015 amid easing inflation pressures.

ILO Unemployment*, % of economically active population aged 15-70, and Real GDP Growth, % yoy



Source: SSSU; NBU staff estimates

Labor Market[33]

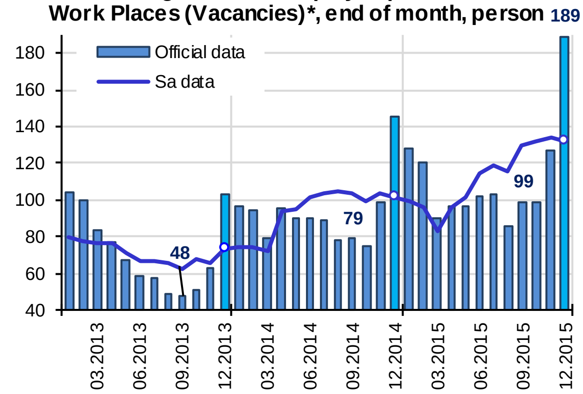
The number of permanent staff members decreased very gradually in 2015: by 1% q-o-q to about 8.0 million persons in Q3 2015, being practically unchanged in October-November 2015 (since the start of the year, this number has dropped by 2.4%). However, there were considerable differences across business activities. Indeed, the number of people employed in Finance and Insurance sector has fallen by 17.8% y-t-d, in Information and Communications - by 10% y-t-d, and in Construction - by 9.5% y-t-d, while the number of people employed in Agriculture has risen by 13.1% y-t-d.

The **number of applicants per 10 vacancies has also increased markedly** as a result of a noticeable decline in the number of vacancies. In particular, the seasonally adjusted number of applicants increased on average by 15.9% q-o-q to 121 persons in Q3 and by 10.1% q-o-q to 133 persons in Q4.

Seasonally adjusted ILO unemployment rate (as a percent of economically active people aged 15 to 70) **rose to 9.6% in Q3 2015.** However, it was somewhat lower than the respective indicator in the same period of the last year mainly due to favorable base of comparison - in Q3 2014 there was an unusually high increase in the unemployment rate (for more details, see Inflation Report for September 2015). Unadjusted for seasonal factors, unemployment rate decreased to 8.6%[3] in Q3, due to seasonal increase in employment, mainly in agriculture.

Registered unemployment rate stood at 1.5%[34] at the end of Q3 2015 and in seasonally adjusted terms remained virtually flat during the whole year (1.7%-1.8%). The number of unemployed people that were registered at the State Employment Service of Ukraine even decreased by 4.2% y-o-y in December to 490.8 thousand people. A relatively small number of registered unemployed persons can be explained by the requirements people have to meet in order to get registered/retain the unemployment status, as well as unwillingness of some people to contact public

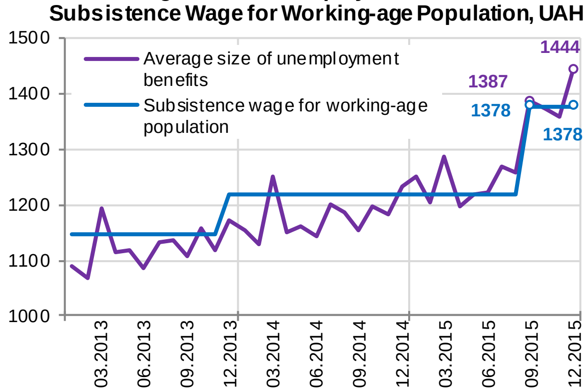
Load of Registered Unemployed per 10 Vacant Work Places (Vacancies)*, end of month, person



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

Source: SSSU; NBU staff estimates

The Average Size of Unemployment Benefits and a Subsistence Wage for Working-age Population, UAH



Source: SSSU; The Law of Ukraine "On State Budget of Ukraine for 2015"

[32] Unemployment data was last revised according to the ILO methodology on 23 December 2015.
[33] Some labor market figures may be inaccurate, due to there being no data for the areas in Donetsk and Luhansk regions where the anti-terrorist operation is running.
[34] Official unemployment is a measure of the number of people who have reached out to employment agencies.

employment offices because they offer low-paid jobs and a low level of unemployment benefits.

Indeed, the State Employment Service of Ukraine reported that one third of all vacancies that existed as of 1 October 2015 had been for jobs paying less than UAH 1,500, or 35% of the average wage for September 2015. Only 3% of vacancies were for jobs paying over UAH 5,000. Apart from that, although the average level of unemployment benefits rose over the last year by 17.2% y-o-y to UAH 1,444 in December, it almost equaled the subsistence wage for working-age persons.

Wages

The average nominal wage (per permanent staff member) **rose further in Q3 and in October-November 2015 (by 24.5% y-o-y and 28.2% y-o-y, respectively) to UAH 4,498 in November 2015.** The increase was largely due to wage indexation to monthly inflation reported in previous periods, and a rise in minimum wages by 13% to UAH 1,378 from 1 September 2015. In Q3 2015, the highest wage growth rates were recorded in Air transportation (46.3% y-o-y), Domestic trade (45.4% y-o-y), and Information and telecommunications (42.5% y-o-y).

The decline in real wages slowed down significantly to 20% y-o-y in Q3 and 14% y-o-y in November 2015 because of easing inflationary pressure and rising nominal wages.

In spite of increasing to UAH 1.9 billion as of end-September, the stock of wage arrears decreased by 0.4% q-o-q in Q3 2015. Wage arrears rose further in October-November 2015, to UAH 2 billion as of 1 December 2015. As of 1 December 2015, Donetsk and Luhansk oblasts accounted for the largest share of the total stock of wage arrears (about 45%); across economic activities, the largest wage arrears were reported in the manufacturing and mining industries (35% and 29%, respectively). Arrears on salaries paid-off from the consolidated budget continued to decline and amounted to UAH 9.4 million as of 1 December 2015.

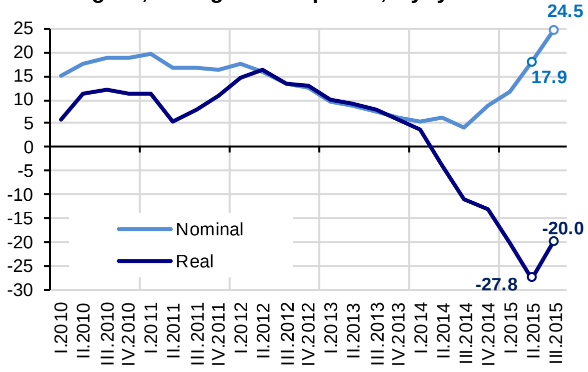
Household Income and Savings

The growth of nominal household income accelerated to 12.6% y-o-y in Q3 2015, reflecting mainly an increase in nominal wages, which accounted for 38% of total nominal household income. This, together with easing inflationary pressures, caused the rate of decrease in **real household income to decline to 26.6% y-o-y**.

Propensity to save[35] (both adjusted and unadjusted for seasonal effects) remained low, despite a slight increase in Q3 compared with previous periods, primarily due to low confidence in the banking system. In particular, the increase in savings (by UAH 15.3 billion in Q3 2015) was largely attributed to a rise in non-financial assets.

[35] Defined as a ratio of household savings to real household income.

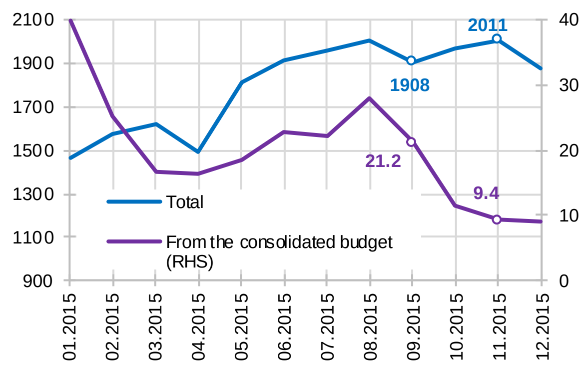
Wages*, average for the period, % yoy



Source: SSSU; NBU calculations

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

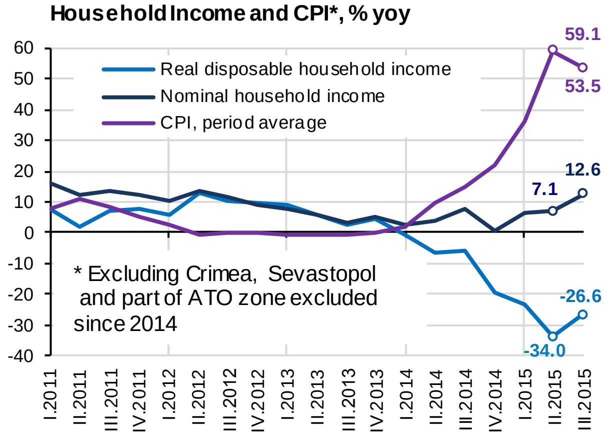
Wage Arrears*, UAH million



Source: SSSU

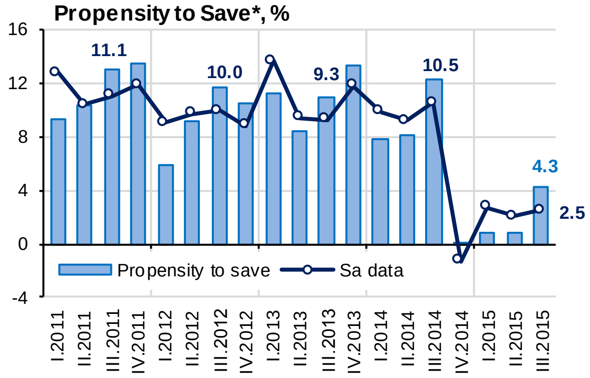
* Excluding Crimea, Sevastopol and part of ATO zone

Household Income and CPI*, % yoy



Source: SSSU; NBU

Propensity to Save*, %



* Saving to disposable household income ratio

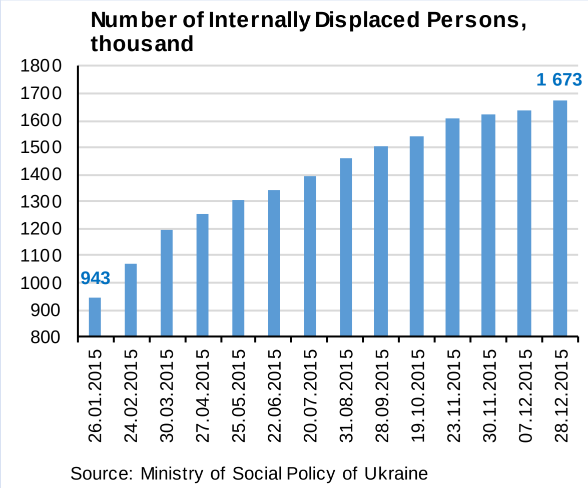
Source: SSSU; NBU staff estimates

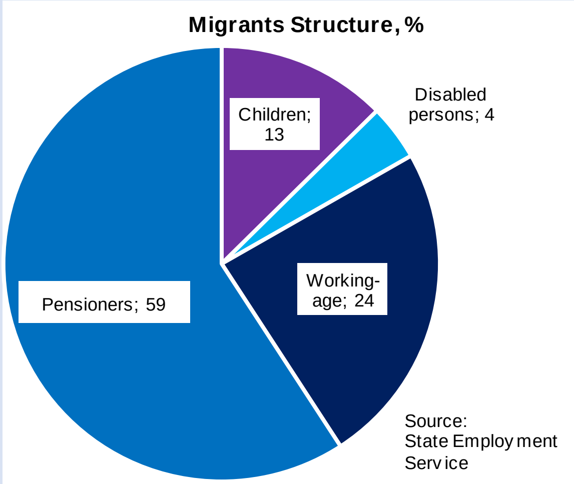
* Excluding Crimea and Sevastopol and also part of ATO zone since 2014

The Implications of Internal Migration for Ukraine's Labor Market and GDP[36]

The occupation of Crimea and the military conflict in Donetsk and Luhansk oblasts have forced people to migrate. As of 28 December 2015, **some 1,673,000 internally displaced persons (IDP)** [37] **from Donbas region and Crimea** were registered by the Labor and Social Protection Office. In addition, according to the UN estimates, about 1 million persons immigrated to other countries.[38]

Refugees were mostly based in Donetsk, Luhansk, Kharkiv, Kyiv, Zaporizhzhia, and Dnipropetrovsk oblasts. Moreover, retired people accounted for about 60% of total.





IDPs did not significantly affect the labor market. Only 129,000 persons (7.7% of all IDPs or 32.1% of working-age IDPs) of the total 402,000 working-age persons that were registered as IDPs as of 6 January 2016 **reported that they were seeking employment**. Over 50% of all working-age IDPs said they were not ready to work for various reasons.

Since the beginning of the occupation of Crimea and the ATO (from 1 March 2014 and as of 6 January 2016) a total of 62,900 residents from Crimea, Donetsk and Luhansk oblasts, or 15.6% of all working-age IDPs, reached out the State Employment Service for employment opportunities. Out of this number, 47,400 persons were registered as unemployed persons, out of which 36,300 persons received unemployment benefits. The State Employment Service found employment for 17,200 IDPs. As of 6 January 2016, the State Employment Service continued to service a total of 10,700 IDPs.

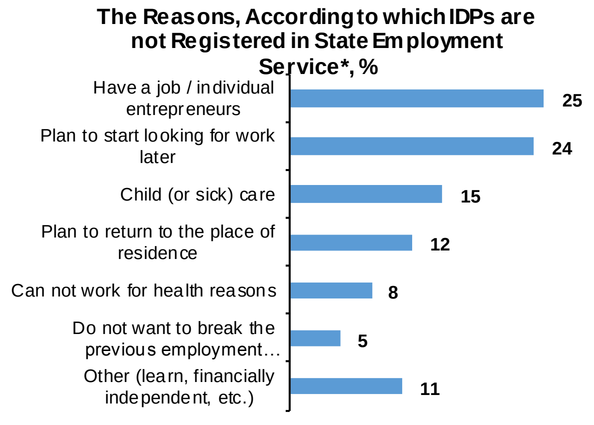
There structure of registered unemployed IDPs differed from that of total unemployed persons in Ukraine, **indicating some increase in the supply of relatively less expensive skilled labor force.**

- Women held the lion share of registered unemployed IDPs (about 70% compared to 54% of all registered unemployed persons).
- The percentage of young people under age 35 among all registered IDPs exceeded 48%.
- Out of all IDPs, the share of those that have high education exceeded 70%, 19% had professional training, and 11% had primary and secondary school education.
  - Experts, specialists, and public servants comprised 64% of all IDPs; 28% were blue-collar workers, and 8% were unskilled workers.

[36] The data was last revised by the Ministry of Social Policy on 28 December 2015, and by the State Employment Service on 6 January 2016.

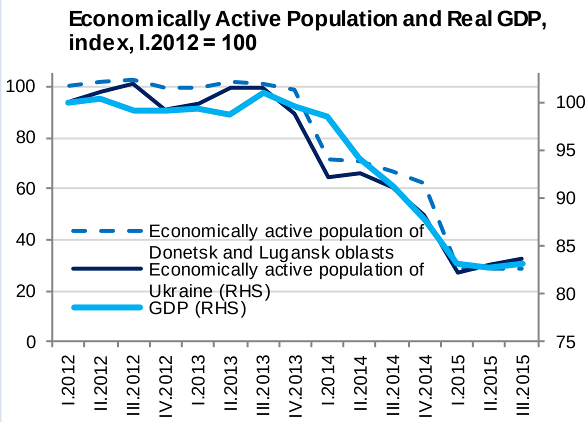
[37] Ukraine's Law No. 1706-VII *On the Rights and Freedoms of Internally Displaced Persons* as of 20 October 2014 defines an *internally displaced person* as a Ukrainian citizen who is permanently resided in Ukraine and who has been forced or decided to leave their place of domicile, due to or in order to avoid an armed conflict, temporary occupation, wide-spread violence, large-scale violations of human rights, and natural or industrial disasters;
internal displacement is confirmed by a special certificate. Certificates are valid for six months from the date of issue but can be extended for another six months. In order to obtain or extend the certificate, an IDP has to submit an application to the division responsible for social protection at the local state administration body located where the IDP newly resides.

[38] The United Nations Office of the High Commissioner for Refugees (UN OHCR) estimated that about 900,000 Ukrainians had left the territories of the military conflict in eastern Ukraine to neighboring countries by 19 June 2015, with Russia accounting for the largest number of refugees (http://www.bbc.com/ukrainian/politics/2015/06/150619_un_refugees_ukraine_az).



* Public Employment Service survey

Source: State Employment Service

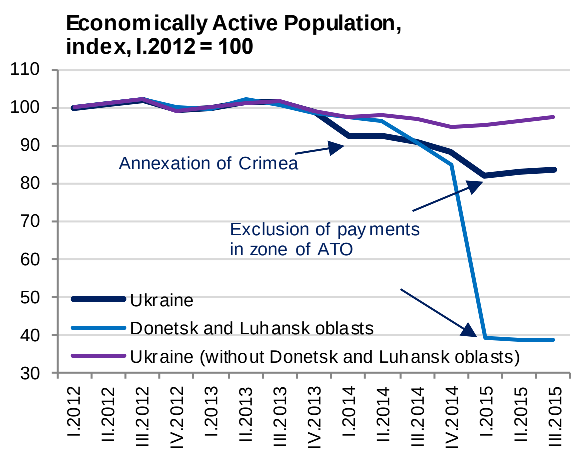


* without Crimea from 2014, without part of ATO zone from 2015

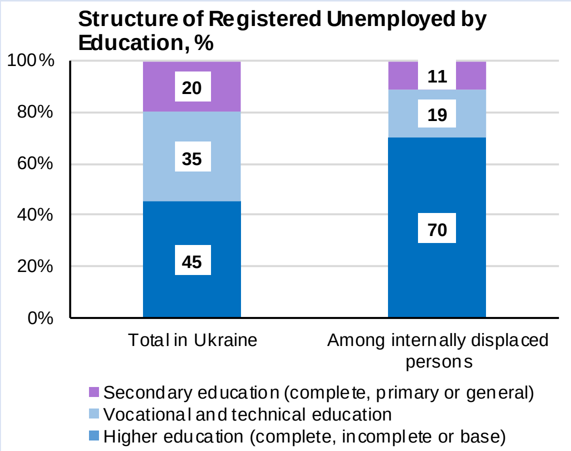
Source: SSSU; NBU calculations.

The annexation of Crimea and fighting in the ATO zone have resulted in the exclusion of these regions from the official statistics. Since 2014, the State Statistics Service of Ukraine has not included in its official numbers data for Crimea, and since 2015, data for the ATO zone. As a result, **the economically active population of Ukraine decreased by 14%, or about 3 million persons, to 18.3 million persons** (for the period of 2014 and the first 9 months of 2015, the decrease being practically equally distributed across both periods).

It is well known from economic literature that an economically active population is an important input to the production function, and hence a contributor to real GDP growth. According to expert estimates, about one-third of changes in Ukraine's real GDP was due to changes in the economically active population.[39] Therefore, we estimate that the reduction in the economically active population contributed about 2 ppts to real GDP contraction in both 2014 and 2015.



Source: SSSU; NBU calculations



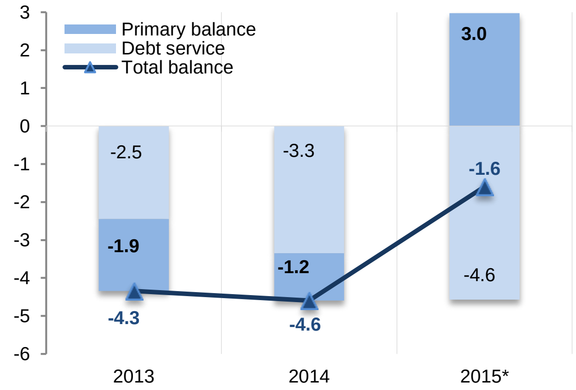
Source: State Employment Service

[39]Fedotova, T.A. "The Dependence of Ukraine's GDP on the Percentage of the Economically Active Population" / Fedotova, T.A.; Frolov, O.V. // Young Scientist. 2014. No. 6(9) .

2.2.4. FISCAL SECTOR[40]

The 2015 fiscal policy was characterized as relatively tight despite its traditional easing at the end of the year. In 2015, growth rates of the consolidated budget revenues sizably exceeded those of the expenditures despite a sharp acceleration expenditure growth at the end of the year. In the first half of the year, the increase in the budget revenues was mainly to the impact of inflation and depreciation effects. In contrast, in the second half of the year, a fast increase in revenues was underpinned by improvements in tax administration and stabilization of the economic situation. As a result, the 2015 consolidated budget deficit was moderate, totaling UAH 30.9 billion (in 2014, UAH 72 billion). In addition, there was a surplus in the primary balance.

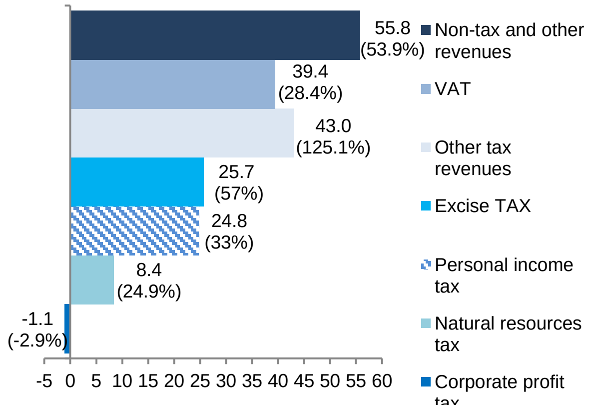
Despite a sizable consolidated budget surplus in January-November 2015, the government borrowed for quasi-fiscal needs. In addition, Ukraine received funds as a part of a broad package of financial assistance from international partners. Due to hryvnia depreciation at the beginning of 2015, public and government-guaranteed debt grew by 41.4% year-to-date, up to UAH 1,556 billion (USD 65.1 billion) as of 30 November 2015. In November, a debt restructuring deal was reflected in public debt statistics.



* GDP - NBU staff estimates.
Source: Treasury; SSSU; NBU staff estimates

Revenues

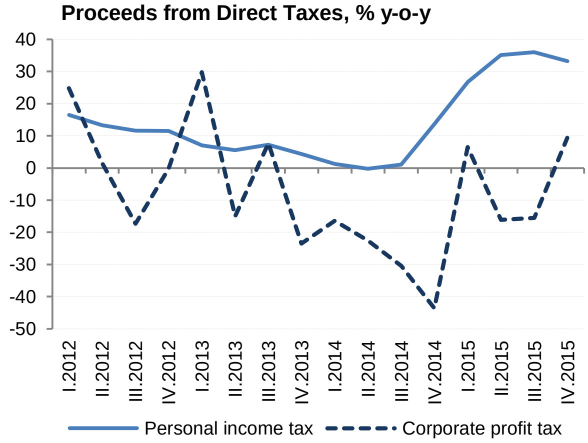
Throughout 2015, the consolidated budget revenues were growing at a fast pace. However, in the first half of the year, the increase in revenues was mainly attributed to the impact of inflation and depreciation effects, as well as to the changes in tax legislation enforced at the beginning of the year. In the second half of the year, it was underpinned by improvement in tax administration and certain stabilization in the economic situation. **In general, in 2015, consolidated budget revenues grew by 43.2% y-o-y** (in 2014, by 3% y-o-y).



Source: Treasury; NBU staff estimates

Tax revenues, which account for 77.9% of total revenues, **continued to grow at a fast pace in the second half of the year as** well (for the whole year, they grew by 38.1% y-o-y), though the dynamics varied across taxes.

In particular, **the growth in receipts from personal income tax remained substantial** despite a less favorable base of comparison due to the introduction of tax changes in August 2014 (when the military duty and deposit tax were imposed). This was supported by the further growth of the nominal wages and a gradual recovery of inflows of domestic currency deposits in the banking system. **In Q4 2015 receipts from corporate income tax increased by 9.4% y-o-y,** whereas in Q2 and Q3, they were as low as in 2014. This was attributed to gradual improvements in economic performance, in particular, financial results of enterprises. For 2015 as a whole, proceeds from this tax fell by 2.9% y-o-y.

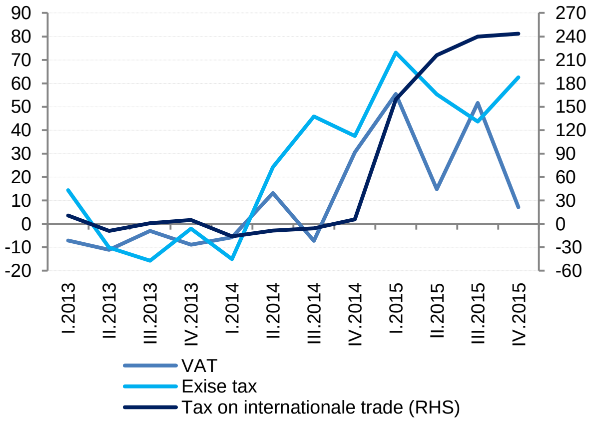


Source: Treasury; NBU staff estimates

[40]Data is updated through 25 January 2016.

After peaking in February – April 2015, proceeds from indirect taxes were rather volatile in the second half of the year, with VAT receipts reporting the highest fluctuations. This was mainly attributed to the statistical base effects (in July – August 2014, the government issued domestic sovereign bonds to reduce VAT refund arrears) and uneven amounts of VAT refund in 2015. From September to October, and especially in December, VAT refund payments grew sizably, having caused a decrease in the outstanding amount of VAT arrears, down to UAH 12.9 billion at the end of 2015[41]. **Overall, in 2015, the receipts from VAT grew by 28.4% y-o-y.** A sizable increase in the receipts from VAT for both domestically produced and imported goods reflected the impact of economic factors as well as **implementation of the improved tax electronic administration system from 1 August 2015.**

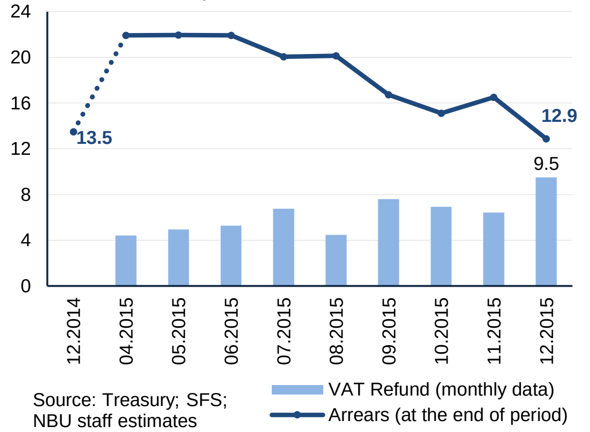
Proceeds from Non-Direct Taxes, % y-o-y



Source: Treasury; NBU staff estimates

The growth of proceeds from excise taxes accelerated since September, bring the cumulative increase to 57% y-o-y in 2015. This was caused by a rise in minimum wholesale and retail prices of alcoholic beverages and energy costs,[42] as well as by increased imports. **In 2015, the proceeds from taxes on international trade** more than doubled. In addition to an increase in the value of imports in hryvnia equivalents, this was also attributed to the imposition of an import surcharge at the end of February 2015.

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



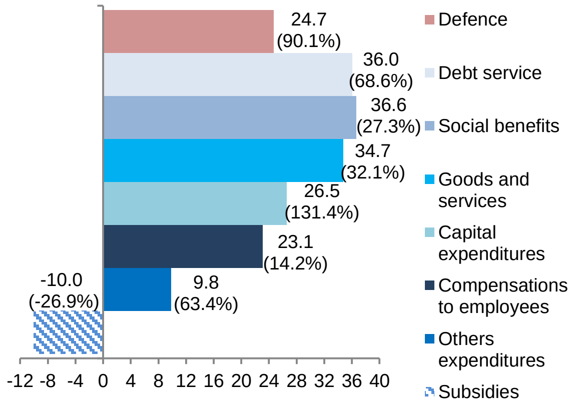
Source: Treasury; SFS; NBU staff estimates

Sizable NBU profit transfers in the second half of the year against the absence of the respective transfers since August 2014 caused **high growth rates in non-tax revenues during the second half of the year, resulting in a 73.8% y-o-y increase in 2015 as a whole.**

Expenditures

During the year, the y-o-y increase in consolidated budget expenditures accelerated. Thus, a pick-up in expenditure growth in Q4 was anticipated; however, December's growth (82.6% y-o-y) notably exceeded expectations. In 2015, expenditures went up by 29.9% y-o-y (in 2014, by 3.4% y-o-y).

Consolidated Budget Expenditure by Economic Classification in 2015, UAH bn and % y-o-y



Source: Treasury; NBU staff estimates

During the year, the growth in current expenditures gradually accelerated – and amounted to 25.9% y-o-y for 2015 as a whole. Expenditures on goods and services grew more substantially - by 32.1% y-o-y (their share in total expenditures amounted to 21%) in 2015, which was due to a rise in prices for goods and services, a rise in administered prices as well as higher military needs.

In contrast to the first half of the year, when external debt service expenditures showed significant increase, during August-December, they decreased noticeably due to public debt restructuring. At the same time, sizable volumes of

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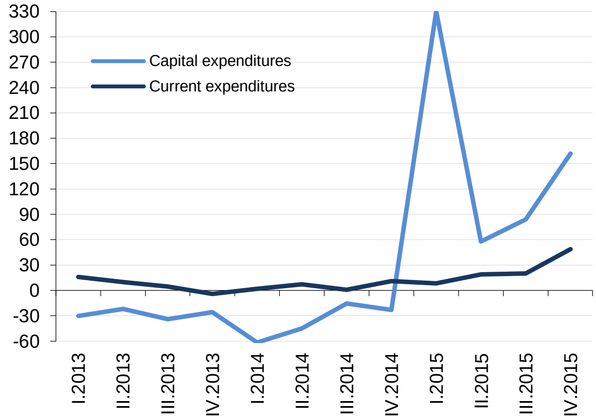
[41] The largest amount of refunds claimed was seen at the beginning of June (UAH 21.9 billion). Source: Reference the State Fiscal Service (SFS) *Information About Value Added Tax Refunds from the State Budget* (http://sfs.gov.ua/diyalnist-/vidshkoduvannya-pdchv/).
[42] From 1 September 2015, energy prices were raised. From 1 January 2015, electricity was included in the list of excisable goods, owing to which a duty in the form of a surcharge to the current price for electric and heat energy was cancelled.

domestic sovereign bond issuances for quasi-fiscal needs kept domestic debt service expenditures high. In 2015, total debt service expenditures grew by 68.6% y-o-y, while their share in total expenditures rose to 13%.

In Q4, the growth in expenditures on social programs (their share exceeded 52%) **accelerated but nevertheless remained moderate.** This was attributed to a growth in expenditures on utility subsidies to households and a rise in the subsistence wage, minimum wage, and pensions[43]. Thus, in December, due to reallocations between items on the expenditure side of the state budget additional resources were transferred to the Pension Fund for advance payments of pensions due for January 2016. Therefore, during the 12 months of 2015, expenditures on social security and compensation of employees grew by 27.3% y-o-y and 14.2% y-o-y, respectively (in 2014, reductions amounted to 4.1% and 3.1%, respectively).

Consolidated Budget Expenditures, % y-o-y

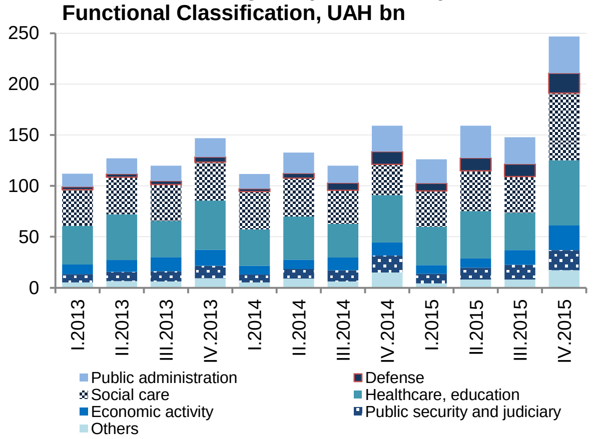


Source: Treasury; NBU staff estimates

In the second half of 2015, the growth in capital expenditures, which share stood at 6.9% in total expenditures, **slightly decelerated; however, amounted to 131.4% y-o-y in 2015.** Such an increase was attributed to a low base of comparison (due to the 2014 fiscal consolidation, capital expenditures were the lowest over the last few years) and also the realization of infrastructural projects and military contracts.

Overall, in 2015, expenditures on defense grew almost twofold, and their share in total consolidated budget expenditures went up to 7.7% – the highest level for the last 10 years.

Consolidated Budget Expenditures by Functional Classification, UAH bn

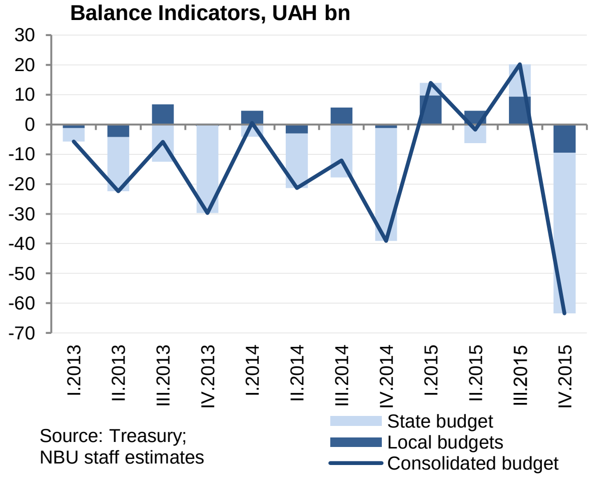


Source: Treasury; NBU staff estimates

Balance and Financing

A sizable cumulative consolidated budget surplus was observed until November 2015. However, **in December, a considerable deficit of UAH 50.9 billion was formed. Despite such development, in 2015 as a whole, the consolidated deficit was moderate - UAH 30.9 billion.** A moderate deficit was achieved mainly thanks to a sizeable surplus of local budgets, accumulated during January-November 2015. In contrast to local budgets, the state budget reported a UAH 45.6 billion deficit, however, it was lower than in 2014 and below the target[44] (UAH 78.1 billion and UAH 76 billion, respectively). The primary consolidated budget showed a surplus estimated at about 3% of GDP.

Balance Indicators, UAH bn



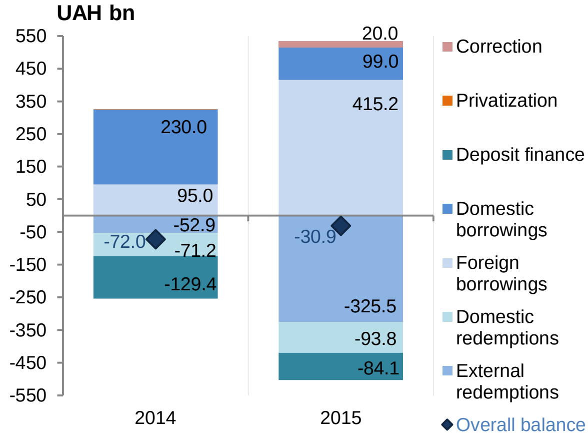
Source: Treasury; NBU staff estimates

However, substantial quasi-fiscal needs, principally for banks and the DGF recapitalization purposes, prompted the government to continue borrowing. In addition, Ukraine received funds as a part of a broad package of financial assistance from international partners. Taking into account the impact of hryvnia depreciation that occurred at the beginning of the year, the public and publicly guaranteed debt rose by 41.4% year-to-date to UAH 1,556 billion (USD 65.1

[43]The official minimum pension and minimum wage were raised from 1 September 2015, but major payments based on the raised amounts began in October.
[44] The Law of Ukraine *On the State Budget of Ukraine for 2015.*

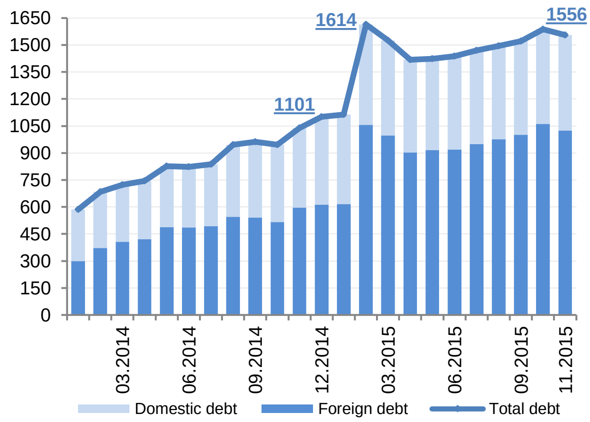
billion) as of 30 November 2015. At the same time, **debt statistics reflected a completion of a debt restructuring deal.** In particular, the government issued new external government bonds in 2015 in the amount of USD 11.9 billion[45], i.e. hair-cutting about USD 3 billion.

Financing of the Consolidated Budget Balance, UAH bn



Source: Treasury

Public and Publicly Guaranteed Debt, UAH bn



Source: MFU; NBU staff estimates

The Planned State Budget Balance and Its Impact on the Economic Development in 2016

The State Budget Law for 2016 (adopted on 25 December 2015) **was developed based on a new tax base** (amendments to the Tax Code as of 24 December 2015) **and the following macroeconomic forecast:**

- real GDP growth - 2%;
- nominal GDP - UAH 2,262 billion;
- consumer price index (December to December of previous year) - 112%;
- producer price index (December to December of the previous year) - 110.4%.

Main State Budget Indicators

UAH billion	2013	2014	2015	2016
		Fact		Low
Revenues	**339.2**	**357.1**	**534.6**	**595.2**
% y-o-y	*-2.0*	*5.3*	*49.7*	*11.3*
Expenditures	**403.5**	**430.2**	**576.8**	**667.8**
% y-o-y	*2.0*	*6.6*	*34.1*	*15.8*
Net lending	**0.5**	**4.9**	**3.0**	**11.0**
Balance ("-" deficit)	**-64.7**	**-78.1**	**-45.2**	**-83.7**
Primary balance	-33.0	-30.1	39.4	15.4

Key tax changes include:

- decrease in the payroll tax – down to 22%;
- introduction of a flat personal income tax - 18%;
- narrowing of the special taxation regime in the areas of agriculture, forestry, and fishery;
- increase in rates and widening of the taxation base for excise taxes; and
- abolition of the import surcharge.

According to NBU estimates, the **tax burden**[46] **on the economy** will decrease to 33% in 2016 from 36% in 2015 due to tax changes, in particular, payroll tax rate decrease.

[45]The issue was made pursuant to CMU Resolution No. 912 On Performance in 2015 of Transactions with Respect to Public and Publicly guaranteed Debt With the View of Its Restructuring and Partial Write-Off of 11 November 2015.
[46]The tax burden is estimated as a ratio of tax revenues of the consolidated budget and revenues from the UST to nominal GDP according to NBU estimates and forecast for the relevant year.

State budget revenues will grow at a moderate pace, by 11.3% y-o-y (in 2015, by 49.7% y-o-y), primarily on account of tax revenues. **In 2016, budget revenues to GDP ratio[47] will decline** to 27.5%, however, will be higher than the average value for 2012 - 2014 (23.5%).

State Budget Revenues by Main Components, UAH bn

	2015	2016	% y-o-y
Tax Revenues, of which	**409.4**	**494.7**	***20.8***
Personal income tax	45.1	55.8	*23.7*
Corporate profit tax	34.8	46.9	*34.9*
Natural resources tax	47.0	58.8	*24.9*
Exise tax	63.1	81.9	*29.8*
VAT	178.5	230.5	*29.2*
Tax on internationale trade	40.3	19.6	*-51.3*
Surcharge on imports	25.2	-	-
Tax on internationale trade excluding surcharge on imports	15.1	19.6	*30.1*
Non-Tax Revenues, of which	**120.0**	**82.7**	***-31.0***
National Bank Transfer	61.8	38.0	*-38.5*
Own proceeds of budgetary institutions	26.4	19.0	*-27.8*

An expected moderate economy recovery **will contribute to a growth in tax revenues forecast at 20.8% y-o-y.** In particular, the growth in collections of personal income tax and corporate profit tax will be underpinned by broadening of the taxation base thanks to the abolition of payroll tax by employees and a decrease in gross expenses of enterprises due to payroll tax rate reduction. Receipts from VAT and the excise tax are expected to grow not only due to changes in rates and broadening of the taxation base but also due to improvement of tax administration. Thus, the system for electronic administration of fuel sales and invoice of excise are planned to be implemented. **Non-tax revenues are expected to decrease,** in particular owning to smaller NBU transfers.

State Budget Expenditures by Main Components, UAH bn

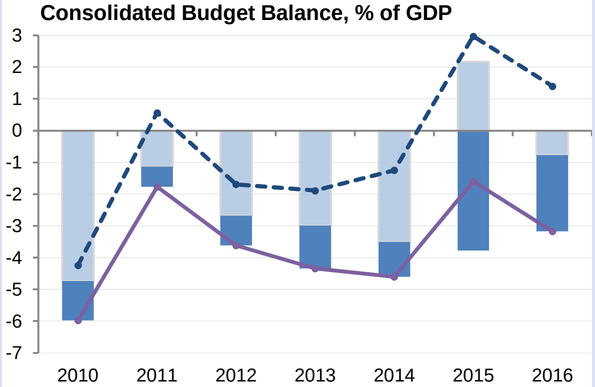
	2015	2016	% y-o-y
Ministry of Internal Affairs	36.4	41.1	*12.8*
Ministry of Energy and Coal Mining	2.4	2.0	*-17.7*
Ministry of Defense	49.1	55.5	*13.1*
Ministry of Education and Science	74.4	70.7	*-4.9*
Ministry of Healthcare	57.3	56.8	*-1.0*
Ministry of Social Policy	105.7	154.2	*45.9*
Pension fund	94.8	144.9	*52.8*
Ukravtodor	22.9	18.8	*-18.1*
Ministry of Finance	164.6	202.3	*22.9*
Subvention from the state budget to local budgets for privileges and utility subsidies to households	18.0	35.0	*94.5*
Subvention from the state budget to local budgets for assistance to families with children, low-income families	41.9	45.3	*8.2*
Debt service	84.5	99.1	*17.2*

The state budget expenditures will grew at a moderate pace as well. However, the expenditures in relation to GDP will remain at a high level (29.5% of GDP) primarily due to the Pension Fund's need for funds to cover losses from the reduction in payroll tax (the expenditures will grow by 52.8% y-o-y). At the same time, without taking into account the funds that will be additionally channeled to the Pension Fund, **the state budget expenditures will decline (by 8.5% compared with 2015).**

The consolidated budget deficit will also widen to 3.2% of GDP, according to NBU estimates, primarily due to an increase in the state budget deficit in 2016 (estimated at 3.7% of GDP). However, such a deficit will comply with the IMF requirements. Furthermore, **the primary balance will remain positive, though its surplus is forecast to narrow to 1.4% of GDP amid** a moderate increase in debt service expenditures.

Taking into account that this year the economy will function below its potential level, the cyclical deficit will persist (nearly 2.4% of GDP); however, it will be smaller than in 2015. Consequently, the structural balance of the consolidated budget will turn slightly negative - to less than 1% of GDP. **This signals that fiscal policy will somewhat ease in 2016 compared with 2015.**

Consolidated Budget Balance, % of GDP



Source: Treasury; SSSU; NBU staff estimates

[47]The 2015, GDP is estimated by the NBU, the 2016 GDP is included in an explanatory note to the Draft Law of Ukraine *On the State Budget of Ukraine for 2016*.

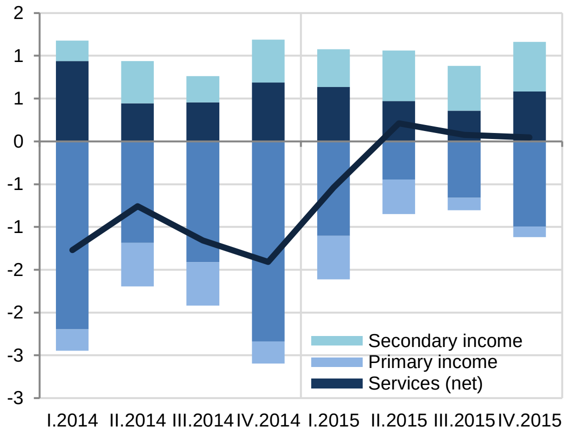
2.2.5. BALANCE OF PAYMENTS[48]

In Q4, the current account balance was close to zero. Such results were better than projected in the previous Report despite deeper than it was expected decline in prices for Ukraine's key exporting commodities. First, this could be explained by the higher rates of decline of imports due to a sharper fall in energy prices and lower volumes of natural gas imports. Payments under the *Primary Income* item also showed a decrease as Ukraine agreed with creditors a public and publicly guaranteed debt restructuring deal.

Net inflows on the financial account were primarily ensured by external official financing. Private debt inflows remained low and were smaller than expected due to high geopolitical and economic risks. This was partially compensated for by a decline in cash outside banks and a growth in arrears.

The balance of payments showed USD 0.9 billion surplus in Q4. This made it possible to increase international reserves to USD 13.3 billion by the end of 2015. However, the reserves were lower in comparison with the previous NBU forecast due to delayed financing from the IMF and other donors.

Current Account Balance, USD bn



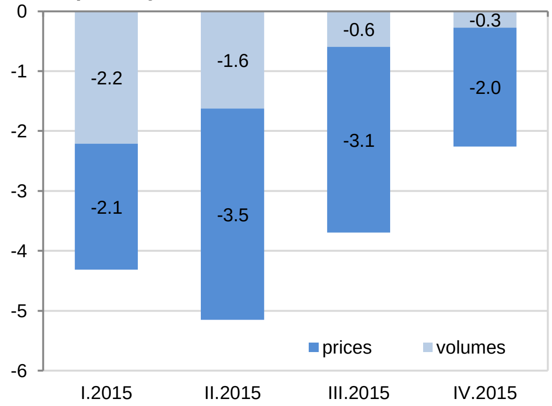
Source: NBU

Current account

In Q4 2015, the current account balance was close to zero. Overall in 2015, the current account showed a deficit of USD 0.2 billion.

In Q4, exports in USD terms practically did not change compared to the previous quarter as the fall in prices for Ukraine's key exporting commodities was offset by a growth in export volumes of agricultural and food products. At the same time, a decrease in exports of goods slowed down to 20% y-o-y[49] mainly on account of a low basis for comparison. Like in the previous periods, intermediate consumption goods represented the lion's share in Ukraine's exports (nearly 80%).

Contributions to Annual Absolute Change in Imports by Volumes and Prices, USD bn

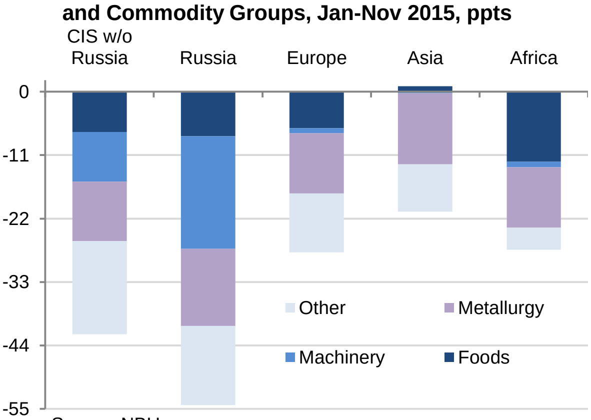


Source: SSSU; NBU staff estimates

In Q4, exports of metallurgical products fell by 36% y-o-y or by 19% q-o-q in seasonally adjusted terms; the decline was mainly the result of a sharp fall in world prices for ferrous metals. A decrease in prices and production in the metallurgy industry in 2015 led to a reduction in nominal volumes of exports of this commodity group to the level of 2002.

In contrast, exports of agricultural products grew by almost 20% q-o-q in Q4 primarily owing to a seasonal increase in export volumes of grains and vegetable oil. The y-o-y decrease in exports of these goods slowed down to 6.5%, in particular, annual rates of decline of grain exports decreased to 2.7%, whereas exports of edible oils and fats grew by 13.8%. In Q4, agricultural products accounted for almost a half of total merchandise exports.

Contributions to Annual Change in Exports of Gooods by Select Countries and Regions and Commodity Groups, Jan-Nov 2015, ppts



Source: NBU

Low export volumes of machinery and equipment during the year should be mainly attributed to trade tensions with Russia. However, in Q4, their rates of decline slowed to 21% y-o-y, whereas in seasonally adjusted terms their exports

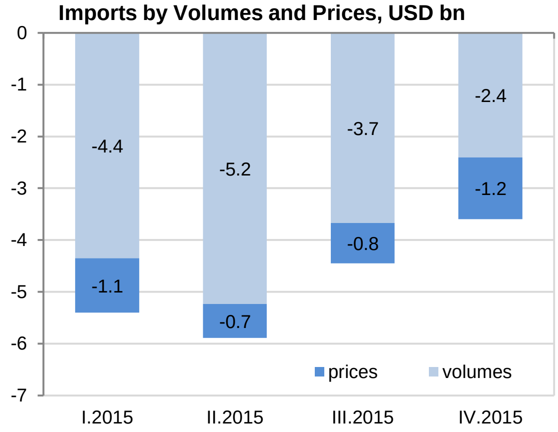
[48] To analyze the balance of payments, statistical information compiled in accordance with the BPM6 is used. Q4 2015 - preliminary data.

[49] In the *Balance of Payments* section, the change of USD values is used, unless otherwise stated.

grew by 6% q-o-q amid increased deliveries of heavy machinery and equipment to Middle East countries.

During 2015, the shares of merchandise exports to Europe and Asia increased (to 29.8% and 34.8%, respectively), whereas the share to Russia dropped to 11.8% (from 17.2% in 2014). In 2015[50], within exports to European and Asian countries, agricultural and food products accounted for the largest share (37% and 55.3%, respectively), followed by metallurgical products (28% and 23.1%, respectively). At the same time, the share of machinery and equipment in total exports to these regions remained small, about 5% and 4.7%, respectively. However, within the exports of goods to the RF, the shares of machinery and equipment as well as metallurgical products were the largest, making 32% and 28.1%, respectively. As trade restrictions were imposed, the share of exports of agricultural and food products to the RF fell to 6.6%.

Contributions to Annual Absolute Change in Imports by Volumes and Prices, USD bn

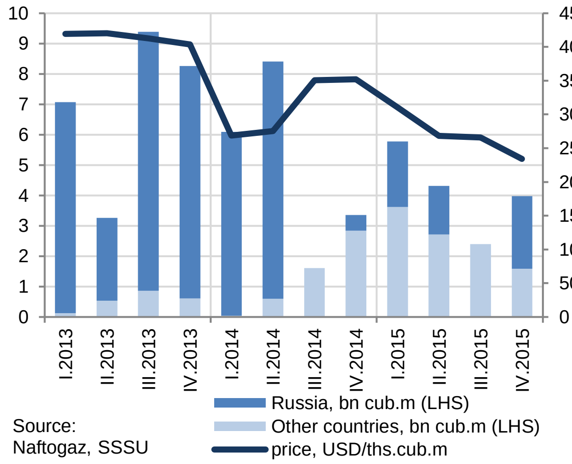


Source: SSSU; NBU staff estimates

In Q4 2015, the decline of merchandise imports slightly moderated to 26.4% y-o-y (from 31.8% y-o-y in Q3) mainly on account of a low base for comparison and a gradual economic recovery. In particular, non-energy imports slightly rebounded, advancing by 1.5% q-o-q seasonally adjusted, while in annual terms the decline decelerated to 24% y-o-y (from 33.4% y-o-y in Q3).

The fall in energy imports sped up to 32.7% y-o-y, having exceeded the indices forecasted by the NBU due to a more sizable fall in prices for energy and lower than expected physical volumes of natural gas imports due to a warm December.

Select Indicators of Gas Imports to Ukraine



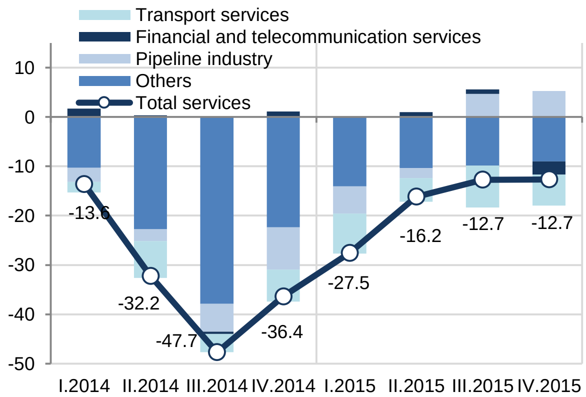
Source: Naftogaz, SSSU

In 2015, within the merchandise imports by main destinations, the share of Europe grew to 37.2% and that of Asia remained unchanged (17.2%), whereas imports from the RF amounted to only 19.3% of total. The reduction in the RF share was primarily attributed decrease in natural gas imports by 2.2 times (within its imports, the share of the RF dropped to 22.3%); as a result, total imports from the RF fell by 40.3% y-o-y. Within imports from Europe, imports of mineral products accounted for the largest share (29.1%), followed by chemical products (25.0%), and machinery and equipment (20%). Within the imports from Asia, the shares of machinery and equipment, chemical industry products, and industrial goods were the largest (35%, 22.4%, and 15.6%, respectively).

In Q4 2015, the trade in services reported a surplus of USD 0.6 billion.

In Q4, the paces of decline in exports of services remained flat at 12.7% y-o-y; however, development across particular items diverged. In particular, the decline in exports of financial and telecommunication services gained pace. At the same time, the decrease in exports of transportation services slowed down. This was primarily caused by an increase in exports of pipeline transportation services because the RF lifted the limits for gas transit through the territory of Ukraine. Exports of travel services continued falling as the number of visitors to Ukraine declined as well as their

Contributions to Annual Change in Exports of Services by Main Types, ppts



Source: NBU staff estimates

[50]Data for the first 11 months of 2015.

expenses in the US dollar equivalent.

Weak economic activity and falling real household income caused a decrease in imports of services in Q4 (by 12% y-o-y). In particular, imports of travel services dropped by 9.2% y-o-y, while those of transportation services – by 17.8% mirroring a decrease in the merchandise foreign trade turnover.

In Q4 2015, payments under the *Primary Income* item also showed a decrease in comparison with the expected values as Ukraine agreed with creditors a public and publicly guaranteed debt restructuring deal. Additionally, a temporary prohibition of the repatriation of dividends to foreign investors explained low payments on investment income during 2015. As a result, the primary income deficit narrowed to USD 120 million.

In Q4 2015, the secondary income balance remained almost unchanged compared with the Q3 level – USD 581 million. For 2015 as a whole, private transfers decreased notably (by three times) due to worsening financial and economic situation in the RF and due to a number of administrative restrictions.

Financial account

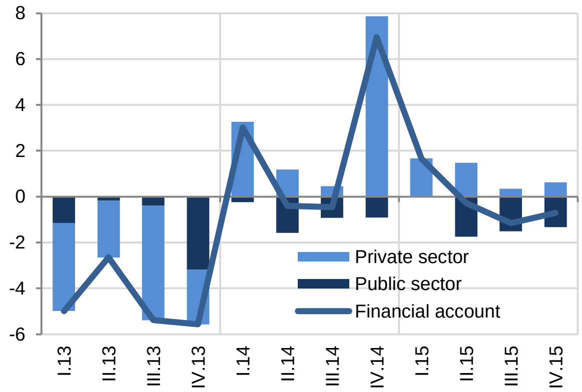
In Q4, net inflows in the financial account (USD 0.7 billion) were lower than in Q3; they were primarily backed by the following external official financing: EUR 0.2 billion was obtained from the German government-owned bank KfW, USD 0.1 billion was obtained in the context of project financing, and USD 0.7 billion was received under swap transactions. Other planned official financing was delayed for 2016 as IMF program was put on hold.

In Q4, parent banks continued to inject capitalization to their subsidiaries in Ukraine. The banking sector attracted USD 716 million of foreign direct investment, the largest share of which was in the form of debt-to-equity operations.

Private sector rollover on long-term debt[51] fell to 19% and was lower than expected. At the same time, actual payments by the real sector were smaller due to accumulation of arrears (up by USD 1.8 billion in Q4 versus USD 2.6 billion over the first three quarters). Low banking sector rollover in Q4 could be explained by sizable repayments of parent institutions' loans by Ukrainian banks in exchange for equity (these transactions are not included in the rollover calculation according to the methodology).

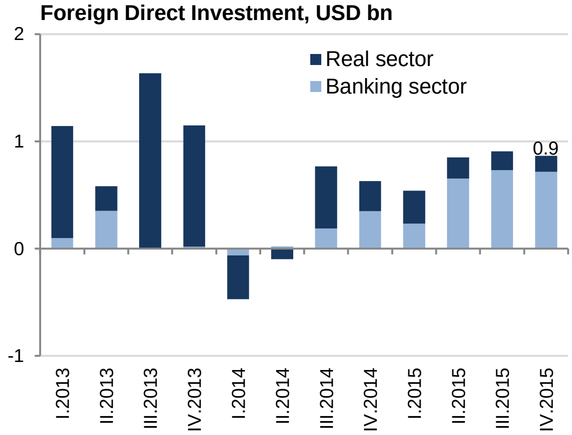
The reduction in FX cash outside banks in Q4 (USD 704 million) continued at a pace similar to that in the previous quarters and was attributed calmed FX market. At the same time, in contrast to the third quarter, a net outflow under trade credit item amounted to USD 1.0 billion in Q4 (in Q3, the net trade credit inflows stood at USD 1.0 billion).

Financial Account: Net External Assets, USD bn



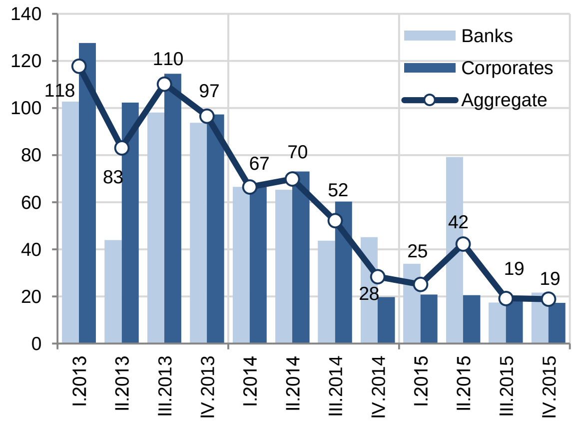
Source: NBU

Foreign Direct Investment, USD bn



Source: NBU

Rollover Rates of LT Private External Debt, %



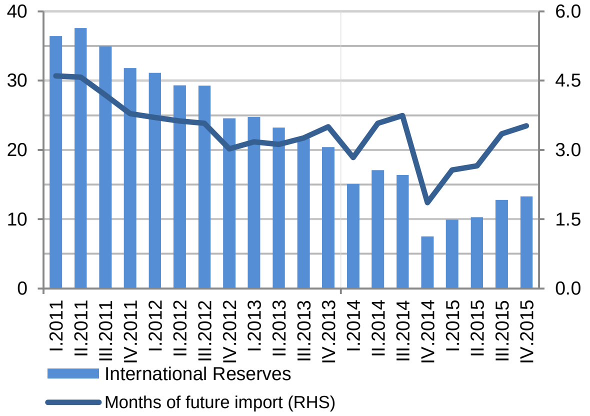
Source: NBU

[51] According to the methodology BMP5.

Rollover of Long-Term External Debt of the Private Sector

	2014	Q1 2015	Q2 2015	Q3 2015	Q4 2014	2015
Banks	54%	34%	79%	17%	22%	36%
Corporates	47%	21%	21%	20%	17%	20%
Aggregate	50%	25%	42%	19%	19%	25%

Gross International Reserves, USD bn

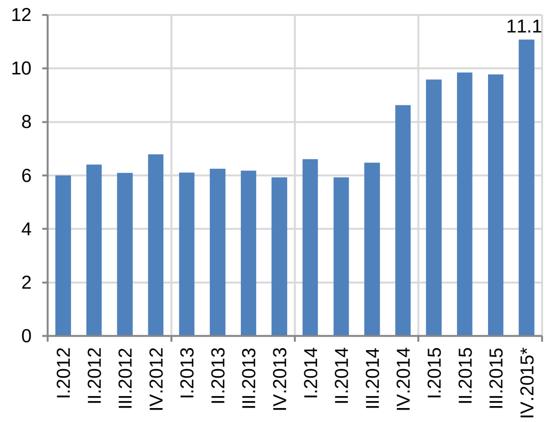


Source: NBU

Reserve assets

The zero current account balance and net inflows under the financial account made it possible to increase international reserves to USD 13.3 billion as of the end of 2015 (sufficient to cover 3.5 months of future imports). However, due to the delay of the official IMF financing planned for Q4 and a worse than expected financial account balance, international reserves were lower than forecast.

Corporate Sector Arrears, USD bn



Source: NBU * NBU staff estimates

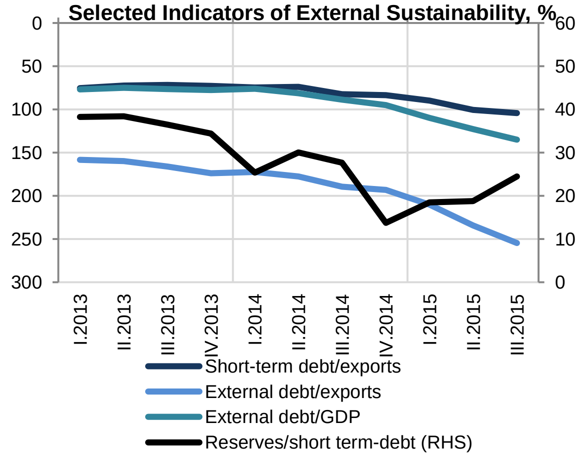
External sustainability

A decrease in nominal GDP[52] in the US dollar equivalent due to hryvnia depreciation and a reduction in economic activity led to worsening of external sustainability indicators of Ukraine despite almost unchanged outstanding amount of the gross external debt.

Given realization of most risks in H1 2015, a further deterioration in external sustainability indicators did not signaled about continuing increase in external vulnerability but rather reflected statistical effects of the shocks of the previous periods.

In 2015, arrears of the corporate sector increased given the limited access to external borrowing resources. The only external sustainability indicator that improved in Q4 was reserves to short-term debt ratio – it rose to 24.5% (from 13.8% at the beginning of the year); however, it remained considerably lower than the threshold (100%).

Selected Indicators of External Sustainability, %



Source: NBU, SSSU

In 2015, external debt to exports of goods and services ratio, which reflects the country's capability to service debts at the expense of export proceeds, exceeded the threshold (100% – 200%), amounting to 255%. The worsening of this indicator was primarily the result of adverse world commodity price developments.

In Q3 2015, the short-term external debt (by remaining maturity) decreased by USD 2.4 billion to USD 52.2 billion on account of a reduction in the debt payments of the general government on eurobonds and a decrease in the debts of the corporate sector on the inter-company lending.

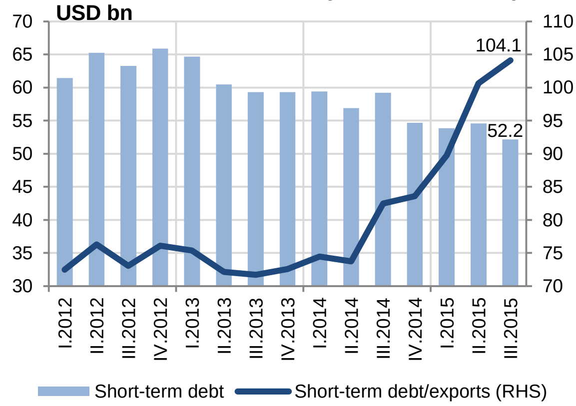
External Sustainability Indicators

%	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015
External debt/GDP	76.0	81.3	88.7	95.1	109.8	122.7	135.1
External debt/exports of goods and services	172.2	177.6	189.3	193.0	209.9	233.9	254.6
Short-term debt/gross debt	43.2	41.5	43.6	43.3	42.8	43.0	40.9
Reserves/short-term debt	25.4	30.0	27.7	13.8	18.5	18.8	24.5
Short-term debt/GDP	32.9	33.8	38.6	41.2	46.9	52.8	55.2
Short-term debt/exports of goods and services	74.5	73.7	82.5	83.6	89.8	100.6	104.1

[52]Data with respect to floating GDP for a year are calculated in US dollars at average quarterly exchange rates.

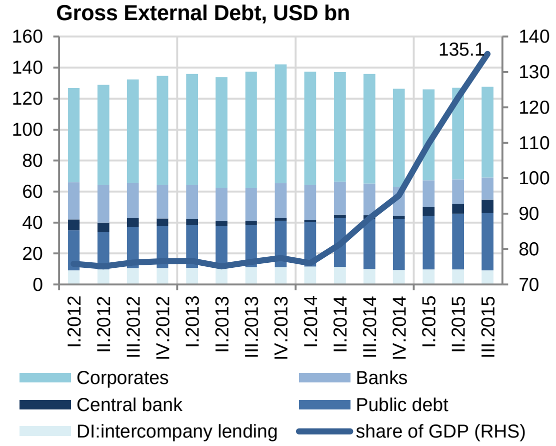
In Q3, Ukraine's gross external debt increased by USD 0.6 billion, and totaled USD 127.5 billion. Its growth was primarily caused by an increase in the public debt (by USD 3.2 billion), whereas the outstanding debt amounts of the banking and corporate sectors decreased by USD 1.5 billion and USD 0.5 billion, respectively.

Short-term External Debt by Residual Maturity, USD bn



Source: NBU.

Gross External Debt, USD bn



Source: NBU

Impact of the RF trade restrictions on the current account balance of Ukraine in 2016

From 1 January 2016, the RF imposed a number of measures restricting exports of Ukrainian goods, in particular:

1. It prohibited imports of agricultural products, raw products, and foodstuffs of Ukrainian origin on its territory.
2. It suspended the Free Trade Agreement (hereinafter, the FTA) with Ukraine within the respective CIS countries agreement.
3. It prohibited transit of Ukrainian goods through its territory regardless of its final destination.

Even not taking into account the above mentioned restrictions, the NBU projected a reduction in Ukrainian exports to the RF due to weak demand in the RF amid worsening financial and economic there. According to the official forecast by the RF's Ministry of Economic Development and Trade as of 26 October 2015, in case the average oil price falls to USD 40 per barrel, the real GDP is expected to drop by 1% and nominal imports – by 11.4% in 2016. Assuming partial re-orientation of Russian consumers towards goods produced in other countries as well as a more sizable fall in the forecasted oil price (USD 30 per barrel), the NBU forecasts[53] a greater reduction in demand from the RF for Ukrainian goods in 2016 – on average by 15% or by USD 0.6 billion.

New trade restrictions imposed by the RF are estimated to have the following impact on the current account balance of Ukraine:

1. Resolution of the RF government No. 1397 of 21 December 2015 specified the list of Ukrainian goods prohibited for imports to the RF and included meat and meat products, fish, milk and dairy products, vegetables, fruit and nuts. Due to imposition of a partial foodstuff embargo, Ukrainian exports is estimated to decrease by

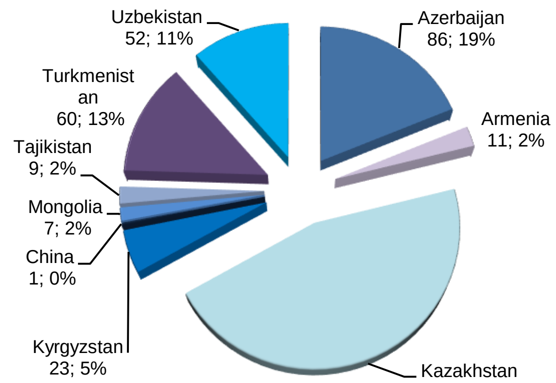
[53] All the calculations were based on statistics consistent with the BPM6 methodology, according to which supplies of raw materials are deducted from the total exports and imports.

about USD 0.15 billion. At the same time, the possibility of imposition of a complete foodstuff embargo remains strong, which would result in exports of goods to drop by an estimated USD 0.25 billion.

2. Cancellation by the RF of the FTA with Ukraine will lead to implementation of the rates of the Common Customs Tariff of the Eurasian Economic Union on Ukrainian goods. As a result, the weighted average rate will come to 9.1% under a partial foodstuff embargo and 7.7% under a complete foodstuff embargo instead of the current 0%. Furthermore, the imposition of quotas, bans, and other non-tariff barriers may have an additional effect. A minimum reduction in the exports at the expense of the rise in tariffs is estimated at USD 0.4 billion.

At the same time, total losses for Ukrainian exports due to the above restrictions and weakening demand from the RF will be smaller owing to reorientation towards other markets (by NBU estimates, by 30%), amounting to USD 0.8 billion.

Losses for Ukraine's Exports from Transit Ban by Countries, USD mn and % of total



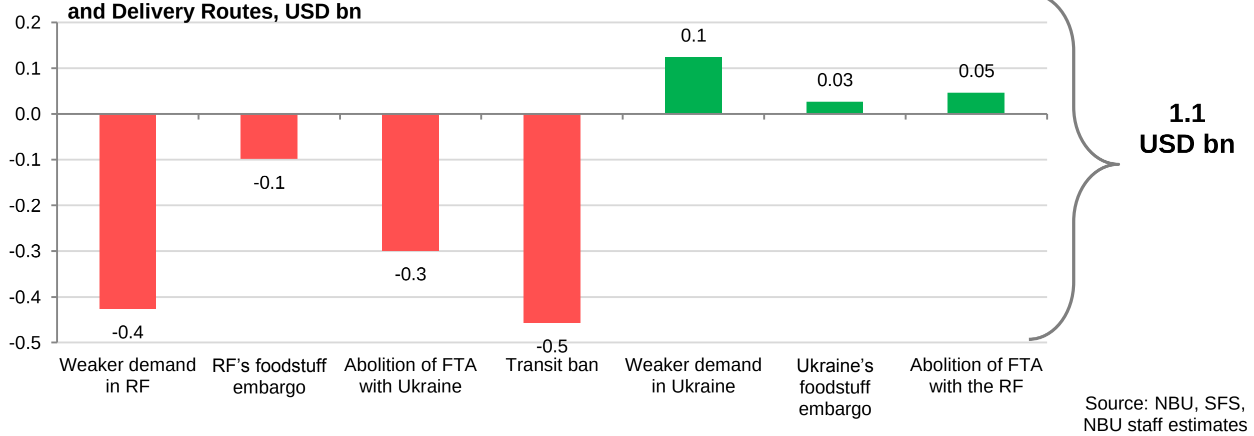
Source: SFS, NBU staff estimations

3. In 2015, Ukrainian transit of goods through the territory of the RF amounted to nearly USD 1.6 billion (4.5% of the total exports). Exports to some countries (in particular, to Belarus, the Baltics and Europe) may be redirected via other land routes without a sizable rise in transportation costs. Losses of exports to other countries are estimated to USD 0.46 billion under partial rejection of Ukrainian goods in the case of a rise in costs of transportation by different routes.

At the same time, in order to ensure national economic security, economic interests of Ukraine, or legitimate interests of subjects of external economic activity, the Verkhovna Rada of Ukraine has approved the Law *On Amendments to the Law of Ukraine On External Economic Activity* (empowering the government to take adequate economic measures against an aggressor state). As a result of reciprocal measures taken by Ukraine, in particular, the imposition of a foodstuff embargo and a rise in customs duties, as well as a further weakening of demand for the goods produced in the RF, imports of goods are expected to decrease by USD 3.4 billion in 2016 (including by USD 2.5 billion at the expense of energy imports and by USD 0.9 billion at the expense of non-energy imports). Assuming that a 70-80% reduction in non-energy imports from the RF will be compensated for by redirection of deliveries from the other countries, and that energy imports will be fully substituted, a decrease in imports is additionally estimated to USD 0.2 billion.

Therefore, the total effect on the trade balance of Ukraine from further deterioration of trade relations with the RF, taking into account redirection to other markets and other routes for goods delivering, are estimated at about USD 1.1 billion.

Impact of Restrictive Measures Imposed by Russia and Reciprocal Measures of Ukraine on Current Account Balance of Ukraine, Assuming Some Redirection of Ukraine's Exports to Other Markets and Delivery Routes, USD bn



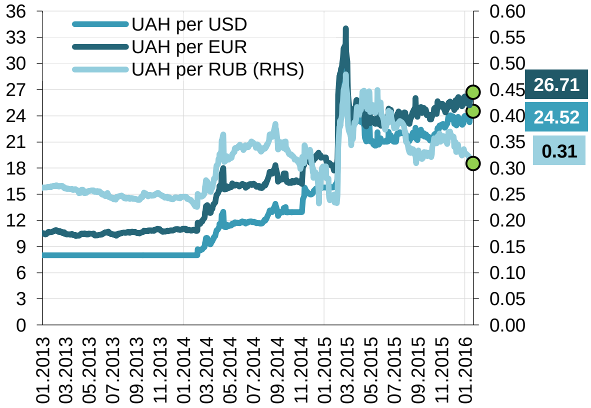
Source: NBU, SFS, NBU staff estimates

2.2.6. MONETARY SECTOR AND FINANCIAL MARKETS

The turbulence on the FX market intensified in Q4 2015. This was caused both by external factors (heightened depreciation pressures on currencies of countries that are main trade partners with Ukraine, a further decline in prices for key Ukrainian export commodities, etc.) and the internal ones (growing uncertainty due to the slow budget process and, consequently, the delay of official financing). As a result, there was a moderate depreciation of the UAH/USD exchange rate. While adhering to a floating exchange rate regime, under such conditions the NBU took measures aimed at smoothing excessive exchange rate fluctuations. At the same time, aimed at mitigating price stability risks, the monetary policy remained tight (starting from October it was decided to keep the key policy rate unchanged).

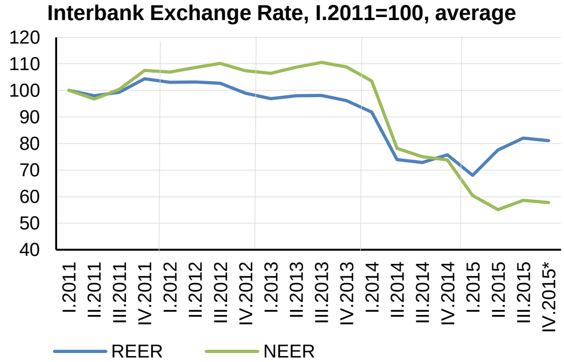
De-escalation of the military conflict in the east, the banking system clean-up entering its final stage, and improved economic expectations contributed to further inflow of domestic currency deposits in the banking system in Q4 2015.

Exchange Rate of Hryvnia, as of 22.01.2016



Source: NBU

Hryvnia REER and NEER Indexes, Based on Interbank Exchange Rate, I.2011=100, average



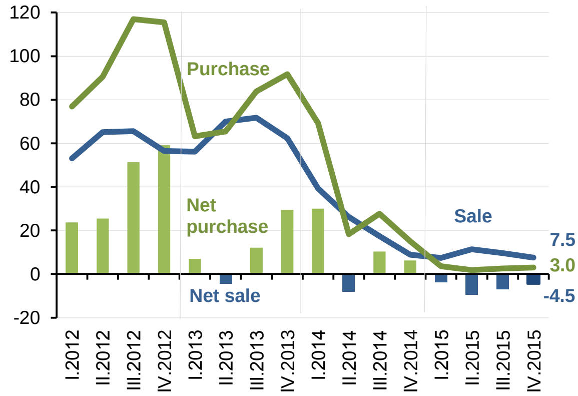
* preliminary data
Source: IFS, staff estimates

FX market

Increased turbulence was recorded in the inter-bank FX market since mid-October after nearly six months of stability. At the same time, the NBU **maintained a flexible exchange rate regime, and its actions were aimed just at smoothing excessive fluctuations in the FX market.** As a result, the NBU purchased (in October and December) and sold foreign currency (mainly in November) depending on the market conditions. The balance of NBU interventions on the interbank market in Q4 was positive and amounted to the equivalent of USD 212 million.

In Q4, the official hryvnia exchange rate depreciated by 11.5% to UAH 24.0 per U.S. dollar at the end of the year (by 52.2% in 2015). However, due to intensified depreciation pressures on the currencies of main trade partner countries, the hryvnia NEER weakening in Q4 2015 was more moderate. At the same time, amid a steady disinflation trend, inflation in Ukraine in Q4 was commensurate with price growth in the main trade partner countries, causing the hryvnia REER to depreciate.

Daily Average Amount of Cash FX Purchased/Sold by Individuals, USD mn



Source: NBU

The cash segment of the foreign exchange market in Q4 2015 continued to show a further decline in the average daily volumes of FX purchases by households (to USD 2.6 million in December from USD 3.3 million in October), which can be explained by a reduction in their real income and the influence of administrative measures. At the same time, intensification of interbank market turbulence led to a slight decrease in FX sales (to USD 7.8 million from USD 8.3 million).

Base Money and Liquidity

A liquidity surplus has been building up in the banking system with a further significant increase in Q4 2015, primarily resulting from Government operations. The growth of the monetary base resumed but the annual rate of increase remained very low.

Average daily balances on correspondent accounts of banks and NBU CDs in Q4 2015 increased by 7.3% q-o-q and 38.3% q-o-q, respectively. The stock of CDs was UAH 89.3

billion as of the end of 2015, having increased by UAH 69.7 billion.

The causes of the liquidity surplus in the banking system during Q4 2015 were Government operations (the net positive impact of which was estimated at UAH 45.0 billion[54]), DGF operations[55] and net FX purchase by the NBU (a total amount of UAH 5.5 billion).

In addition to mobilization operations, excess liquidity was partially absorbed by the seasonal increase in demand for cash (by UAH 18.3 billion) and redemption of refinancing loans by select banks (a total amount of UAH 5.5 billion).

The seasonal increase of currency outside banks resulted in growth of the monetary base by 4.6% in Q4 2015. At year-end, the monetary base reported a 0.8% y-o-y increase, which was due to an increase of cash in domestic currency in cash desks and a moderate growth of correspondent accounts of banks.

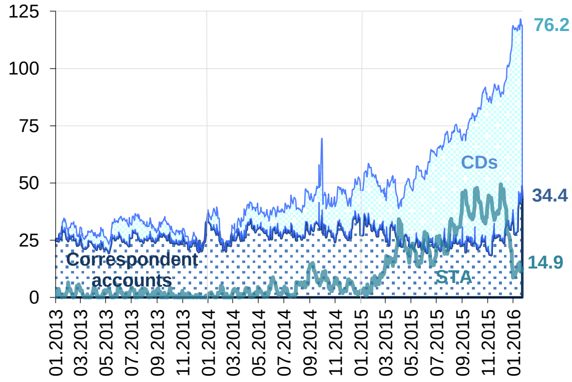
Given the completion of the banking system clean-up and its significant level of liquidity, in December 2015 the NBU has decided to reverse some measures introduced at the beginning of the year to support the banking system. In particular, starting 10 January 2016 banks will not be allowed to include their balances in cash desks in the calculation of reserve requirements[56].

In addition, **the NBU continued to streamline the standard tools and mechanisms for liquidity regulation, which is a prerequisite for the transition to inflation targeting regime.** Thus, in December 2015 auctions for the sale of domestic government bonds from the NBU portfolio were introduced (after three auctions securities were sold in the amount of UAH 136 million with an average yield of 19.1% - 19.5% per annum). Starting from 1 December 2015, the regulator reduced refinancing loan maturities for loans provided through tenders[57]. In addition, the NBU has opted to allow banks to submit multiple bids to participate in tenders (both CD placement tenders and refinancing tenders)[58]. At the same time, new types of operations with deposit certificates in the secondary market were introduced – stock repo transactions with the transition of ownership and over the counter transactions with “delivery against payment” settlements[59].

Money Supply and its Components

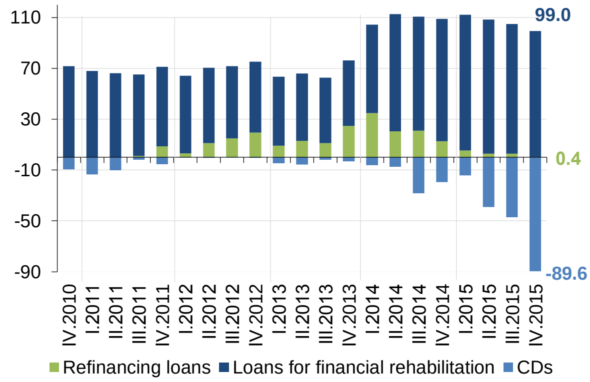
Despite a further decline in interest rates in Q4, the banking system continued to enjoy inflows of hryvnia deposits[60] that reflected a gradual restoration of confidence in the banking system.

Select Indicators of Banking System Liquidity, UAH billion, as of 22.01.2016



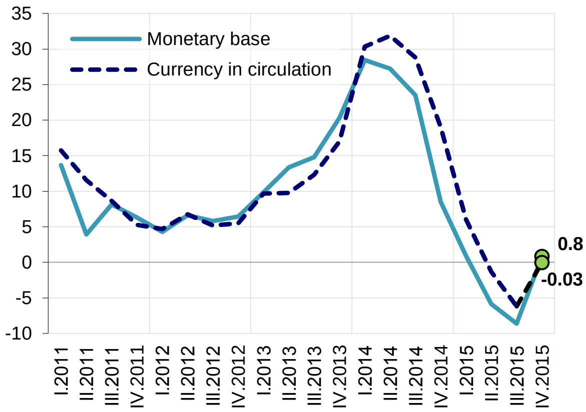
Source: NBU

Changes in Banking System Liquidity by Type of Operation, UAH bn



Source: NBU

Select Monetary Indicators, y-o-y, %



Source: NBU

[54] Calculations of the impact of fiscal factors on liquidity of banking system are based on changes in balances on the Single Treasury Account (down by UAH 38.1 billion), including Government debt service payments for bonds owned by the National bank (in the amount of UAH 20.6 billion), the profit transfer of the National Bank to the budget (UAH 14.7 billion), , and a conversion of part of Government’s FX holdings into domestic currency (equivalent of UAH 12.8 billion)

[55] In Q4 2015 DGF transferred UAH 13.7 billion to banks-counterparties for further payments to depositors of banks in liquidation.

[56] For more detailed information please refer to: http://www.bank.gov.ua/control/en/publish/article?art_id=25023321&cat_id=92517.

[57] Term of granting of tenders reduced from one year to 90 days, Ukraine government bonds, certificates of deposit of National Bank and foreign currency (US dollar, Euro, Pound Sterling, Swiss francs, Japanese yen) approves as collateral.

[5]For more detailed information about operations with certificates of deposit please refer to: http://www.bank.gov.ua/control/en/publish/article?art_id=21989673&cat_id=92517.

[59] For more detailed information please refer to: http://www.bank.gov.ua/control/en/publish/article?art_id=24757216&cat_id=92517.

[60] Excluding insolvent banks, if nothing else mentioned.

The total stock of households' deposits in domestic currency during October – December 2015 increased by 16.6% q-o-q (1.6% q-o-q in Q3), legal entities' deposits – by 12.8% q-o-q (11.3% q-o-q). At the same time, the decline in legal entities' FX deposits (denominated in USD) in Q4 gathered pace to 7.1% q-o-q, due tight access to bank lending. Instead, there was a significant growth of stock of households' FX deposits (by 0.3% q-o-q).

The stock of deposits in domestic currency also showed positive dynamics according to statistics that includes insolvent banks too. At the end of 2015, it grew by 6.2% y-o-y (compared with a decline of 9.0% y-o-y at the end of September). The total stock of FX deposits (in US dollar equivalent) decreased by 32.1% y-o-y in December, compared to 40.4% y-o-y in September 2015.

Given the gradual recovery of the inflow of deposits in domestic currency and a seasonal increase in cash outside banks at the end of the year, in October – December money supply increased by 5.6% q-o-q (by 3.4% over the year).

Loans

The demand for bank loans remained weak amid subdued economic activity, high interest rates, and tightened credit standards.

The quality of bank assets deteriorated over the last year (the share of overdue loans to total loans, excluding insolvent banks, increased from 13.5% as at the beginning of the year to 21.2% as of 1 December 2015), as well as the solvency of borrowers. This prompted banks to strengthen requirements for borrowers for all types of loans. Although in Q4 2015 the balance of assessments of the tightness of the lending conditions fell by 8.8 ppts to 41.4%, it was still 5.1 ppts higher than in the corresponding period in 2014[61].

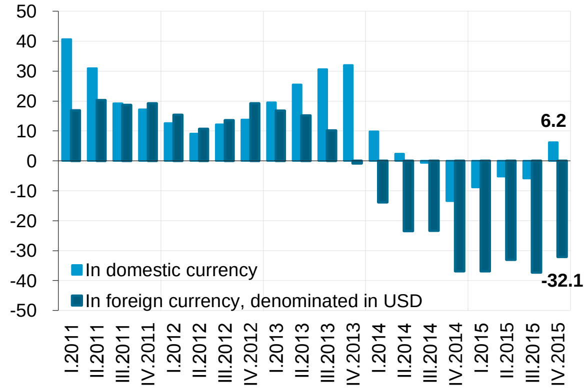
However, the statistical effect of the liquidation of a number of banks had a significant contribution to the decrease in the stock of bank loans, particularly at the end of 2015.

Thus, the decline in the stock of domestic currency loans accelerated at the end of 2015 to 26.0% y-o-y for households and 17.4% y-o-y for legal entities. The total stock of FX loans (denominated in USD) continued to decrease – by 20.3% y-o-y.

In order to promote lending, in October 2015 the NBU changed the approach to calculation of credit risk ratios, allowing banks to direct the released funds for lending and expanding the possibilities for using guarantees/letters of credit by banks provided there are sufficient provisions.

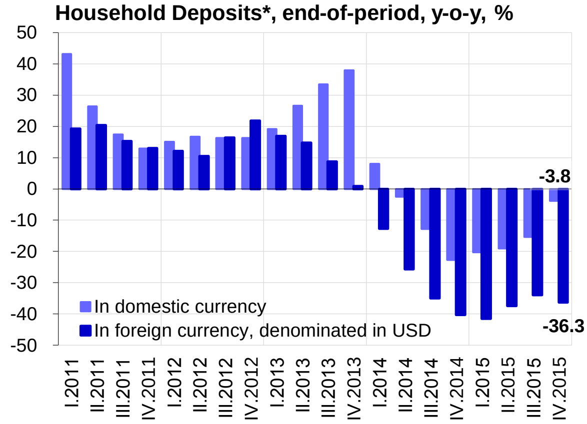
According to a recent bank survey[62] conducted by the NBU, for the first time in two years there was an increase in the general level of approval of credit applications of economic entities and an increase in expectations of restoring lending activity, improvement in portfolio quality, and an increase in the loan granted to economic entities. In particular, the share of banks expecting an increase in their corporate loans portfolio grew to 57% over the next 12 months (45% in Q3) and 54% of respondents expect their quality to improve

Total Deposits*, end-of-period, y-o-y, %



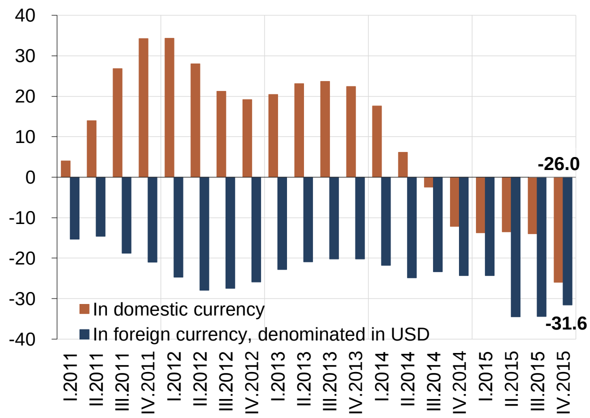
Source: NBU
* Including insolvent banks

Household Deposits*, end-of-period, y-o-y, %



Source: NBU
* Including insolvent banks

Household Loans, end-of-period, y-o-y, %



Source: NBU

61 For more detailed information about leading borrowings constrains please refer to "Business Outlook Survey" (pages 36-37): http://www.bank.gov.ua/doccatalog/document?id=27525422.

62 For more detailed information about lending survey please refer to: http://www.bank.gov.ua/doccatalog/document?id=27033377.

(compared to 39% in Q3). The improvement in loan quality to individuals was expected by 58% of respondents (40% in Q3).

Interest Rates

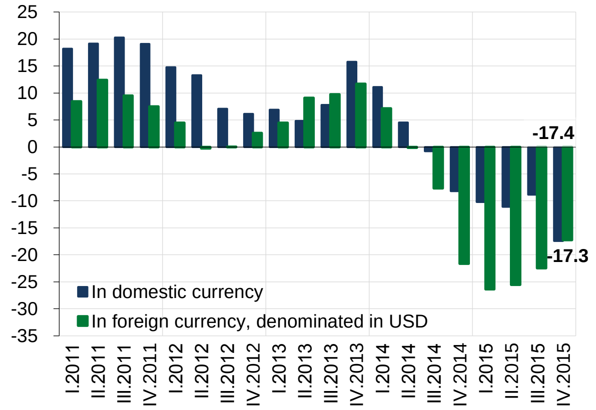
Taking into consideration risks and the NBU commitment to price stability objective, the NBU maintained a tight stance of its monetary policy and kept its key policy rate unchanged in Q4 2015.

At the same time, policy rate reductions in the previous periods on the background of liquidity surplus in the banking system continued to transmit into the market interest rates.

Thus, the average cost of domestic currency resources in the interbank credit market decreased to 19.5% in Q4 compared to 21.0% in Q3. Banks' retail interest rates also decreased, particularly on loans (excluding overdraft) and deposits of non-financial corporations by 0.6 ppts to 20.1% pa and by 1.7 ppts – to 11.5% pa, respectively, as well as on loans (excluding overdraft) and deposits of households by 0.1 ppts – to 28.0% pa and 0.7 ppts – to 16.9% pa, respectively.

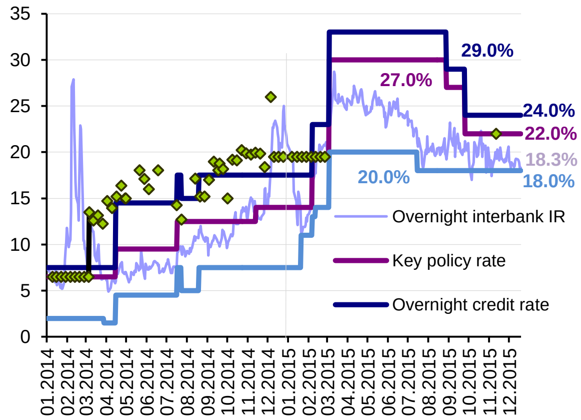
With the purpose of providing market participants with reliable reference points for domestic currency interbank rates, the NBU started calculating and publishing the Ukrainian Index of Interbank Rates (hereinafter – UIIR index)[63] on its official website since 28 December 2015.

Legal Entities` Loans, end-of-period, y-o-y, %



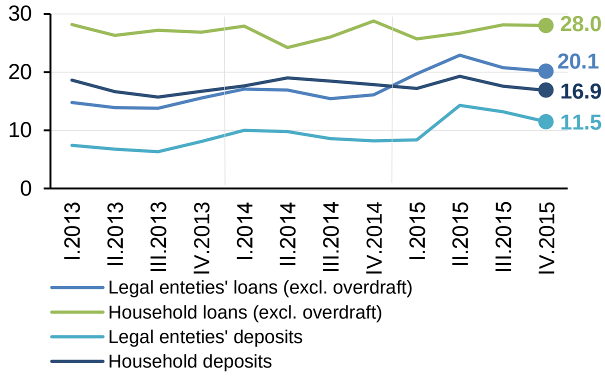
Source: NBU

Overnight Interbank IR and NBU Key Policy Rate, % pa, as of 22.01.2016



Source: CredInfo, NBU

Average Weighted IR on Hryvnia Loans and Deposits, % pa



Source: NBU

[63] For more detailed information about UIIR calculations please refer to: http://www.bank.gov.ua/doccatalog/document?id=25630414.

3. FORECAST

3.1. EXTERNAL ENVIRONMENT

The global economy will grow at slower pace than it was expected in the previous Report – by about 3.1 % in 2016 and 3.2% in 2017[64]. The growth of the global economy will be affected by spillovers of geopolitical conflicts, in particular in the Middle East, increased volatility on the world financial markets triggered by instability on the Chinese market.

Economic growth in the U.S. is projected at 2.6% in 2016 and 2.8% in 2017. Domestic consumption, low oil prices, and labor market improvement will remain the main growth drivers. At the same time, structural changes triggered by financial imbalances will lead to further slowdown of China's economy – to 6.5% in 2016 and 6.3% in 2017. The paces of slowdown there will be an important factor affecting commodity price developments.

Real GDP growth in the euro area will amount to 1.7% in 2016 and 1.8% in 2017 due to the activity acceleration in the manufacturing and the service sectors through further monetary policy easing of the ECB and low oil prices. Due to monetary stimulus, inflation will amount to 1.1% in 2016 and 1.7% in 2017.

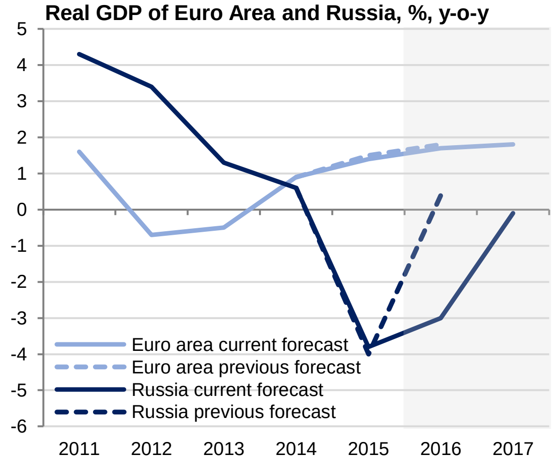
The rapid decline in oil prices and a significant devaluation of the Russian ruble to U.S. dollar on a background of continuing sanctions and limited access to international financial resources will lead to **the further economic contraction in Russia** in 2016 (real GDP is forecast to decline by 3%). At the same time, due to import substitution and competitive advantages received by the manufacturing industry due to exchange rate depreciation, the decline in real GDP is expected to slow down to 0.1% in 2017. Assuming further Russian ruble stabilization, headline inflation is projected at 10.9% in 2016 and at single-digits in 2017.

Under such macroeconomic conditions, in 2016-2017 **it is expected a slight strengthening of the U.S. dollar against the basket of currencies in world FX markets** on the background of a gradual rise of interest rates by the Federal Reserve System. **The exchange rate of the U.S. dollar against euro** will fluctuate at EUR1.1 per USD due to favorable macroeconomic developments in the euro area. At the same time, the exchange rate of the Russian ruble against the U.S. dollar will fluctuate at around RUB 80 per USD.

World commodity prices are projected to remain low in 2016-2017 due to a relatively weak external demand and persisted imbalances between supply and demand.

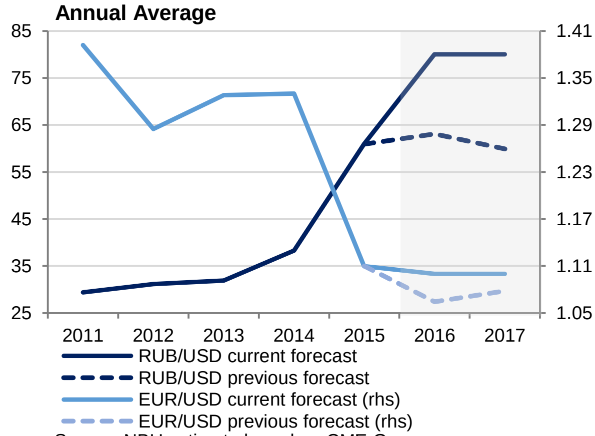
The oil supply is expected to remain high. The drivers of high supply will be: the reluctance of major oil producing countries to reduce production, which is currently at record levels (particularly, Saudi Arabia); significant oil stocks (in particular, in the U.S.), the lifting of the embargo on U.S. oil exports; and the entry of Iran to the market. Therewith, a more significant slowdown in China and other emerging markets will lead to global demand reduction on the oil

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



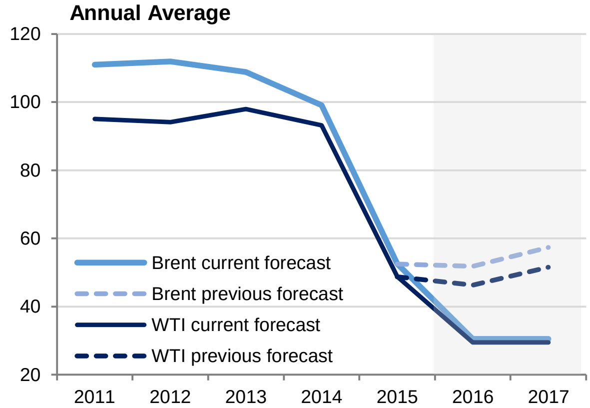
Source: NBU estimate based on IMF, Consensus Economics

EUR/USD and RUB/USD Exchange Rates, Annual Average



Source: NBU estimate based on CME Group

Crude Oil Brent and WTI Prices, USD/bbl, Annual Average



Source: NBU estimate based on Consensus Economics, IMF, EIA, futures contracts

[64] According to Consensus Economics estimates, January 2016.

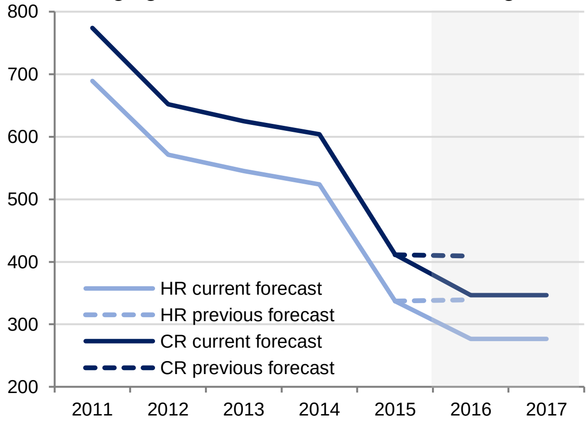
market. As a result, it is expected that the average price of oil in 2016 and 2017 will fluctuate at around USD 30 per barrel.

Steel prices, under the pressure of a significant decline in oil prices and weak economic activity in 2016, will drop more than it was expected earlier – by about 20% on average. In 2017, considering significant volatility in world commodity markets, we assume that steel prices will remain at the level of the previous year.

Toward the end of the 2015/2016 marketing year, **downward pressure on world food prices will continue owing to large stocks and good harvest.** World production of wheat in the 2015/2016 marketing year may reach a new record[65] – 735 million tons (an increase by 1.3% y-o-y). Despite a lower wheat harvest in Canada (due to drought in western prairies), Argentina and the US, the EU, Turkey, Russia, and Ukraine had good harvests. **The volume of ending stocks will increase by 9% – to 232 million tons compared to the previous year.** A significant change of weather conditions due to the El Niño may lead to a **decrease in wheat production volumes in the 2016/2017 marketing year.** However, due to high volumes of ending stocks, prices will remain relatively low. As a result, the decline in average annual wheat prices on global markets in 2016 will be around 8.3%. In 2017, wheat prices will remain relatively stable.

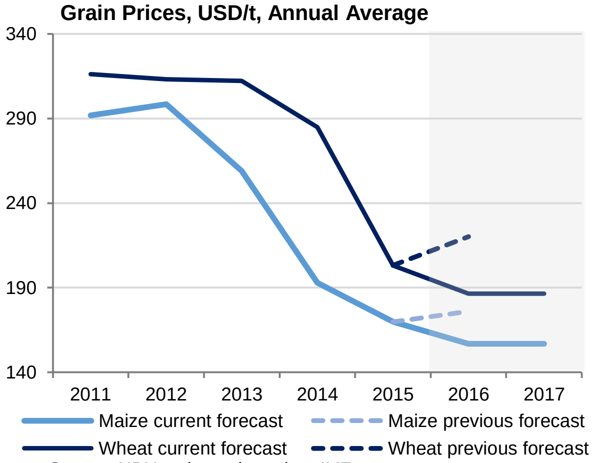
At the same time, corn production in the 2015/2016 marketing year is expected to reach 968 million tons, which is about 4% lower than in the previous year because of an expected production decline in China, the EU and Serbia. This will be partly offset by the growth of corn production in Brazil, Ukraine, and Russia. Simultaneously, global stocks will rise by 0.8% to 208.9 million tons. As a result, the decline in average annual prices for corn in 2016 will be around 7.6%. In 2017, corn prices will remain at the level of the previous year.

Emerging Steel Prices, USD/t, Annual Average



Source: NBU estimate based on Steel Insight

Grain Prices, USD/t, Annual Average



Source: NBU estimate based on IMF

	Exchange rates*		CPI, change as of the end of period, %		GDP, annual change, %			Commodity Prices*, USD			
	USD/ EUR	RUB/ USD	Euro area	Russia	Euro area	Russia	USA	imported gas, per 1m³	Brent crude, per barrel	ferrous metals export, per ton	grain export, per ton
2014	1.33	38.3	-0.2	11.4	0.9	0.6	2.4	292.5	99.1	518.1	200.9
2015	1.11	60.9	0.2	12.9	1.4	-3.8	2.4	273.6	52.5	368.9	161.6
2016	1.10	80.0	1.1	10.9	1.7	-3.0	2.6	189.6	30.5	285.7	154.1
2017	1.10	80.0	1.7	7.6	1.8	-0.1	2.8	181.4	30.5	285.7	154.1
annual change, %											
2015	*-16.6*	*59.1*						*-6.5*	*-47.0*	*-28.8*	*-19.5*
2016	*-0.9*	*31.3*						*-30.7*	*-41.9*	*-22.5*	*-4.7*
2017	*0.0*	*0.0*						*-4.3*	*0.0*	*0.0*	*0.0*

** annual average*

65 According to United States Department of Agriculture estimates, January 2016.

3.2. FORECAST OF MAIN MACROECONOMIC INDICATORS

The baseline scenario rests on the assumptions that the situation in the east of the country will not deteriorate, cooperation with the IMF will continue, the obligations under the EFF program will be fulfilled, and the financial, budget, energy, and economic areas will be reformed, spurring economic recovery.

Other key assumptions of the forecast include a further growth in production output, and a gradual recovery of deposit inflows and credit activity. The full enforcement of the FTA with the EU will also contribute positively. However, further deterioration of trade relations with the Russian Federation and its ban of Ukrainian exports transit to the third countries will have a noticeable adverse effect.

Inflation

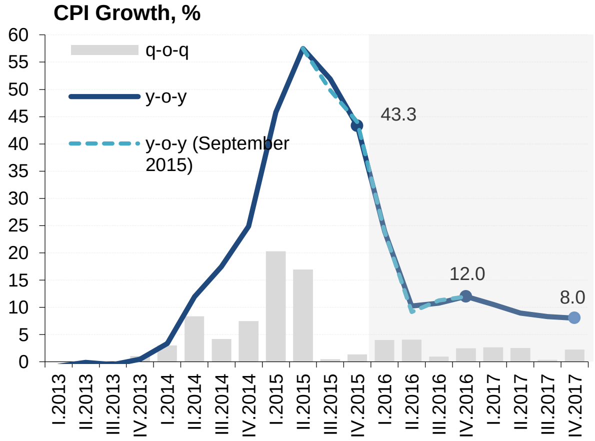
Overall, the impact of factors that have driven high inflation last year will continue to vanish over the forecast period. In 2016, adjustments in housing and utility tariffs will be much less substantial than in 2015 and the impact of the hryvnia depreciation of early 2015 on prices will diminish noticeably. Most of the hryvnia exchange rate changes at the beginning of 2015 were already passed through to domestic consumer prices - core CPI increased by 28% in H1 2015, while in H2 2015 the increase stood at only 5%. At the same time, the headline annual inflation moderated even more sharply - from about 41% in H1 2015 to 2% in H2 2015, partly reflecting the natural gas price discount for households, which became effective following the start of the new heating season.

The inflation forecast for 2016 (12%) remains at the target level (12%±3), as the effects of some hryvnia depreciation and further administered price adjustments will be offset by the decline in world commodity prices and demand weakness.

On one hand, sub-index of administered prices will increase more significantly than it was projected in the previous Report and will be among the main contributors to headline inflation (about 6 ppts). An upward revision of the administered prices growth was primarily attributed to the higher excise taxes on alcohol and tobacco. Meanwhile, a more moderate increase in tariffs for heating and hot water is expected, in part due to a sharper decline in world energy prices. In addition, the weakening of the exchange rate in Q4 and the corresponding revision of its developments over the forecast horizon will provide an additional contribution to inflation.

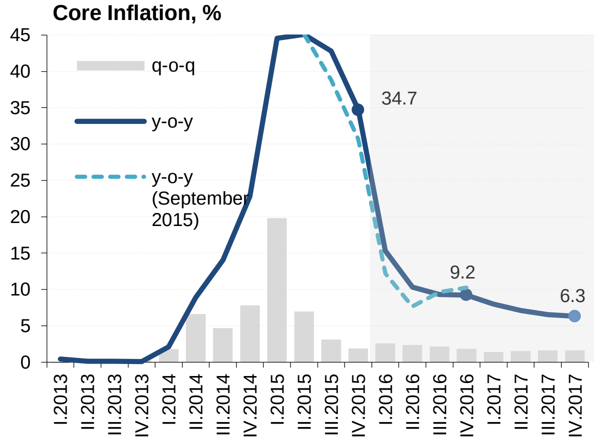
On the other hand, a dramatic decrease in world food and energy prices will restrain inflation in Ukraine. The increase in raw food prices will be relatively moderate (about 7%) in 2016, including due to increased supply of foodstuffs amid narrowed export opportunities. In addition, the expiration of the temporary import surcharge (10% for foods) effective from 1 January 2016 will contribute to lowering food price pressures. Considering the significant share of food products in the consumer basket, moderate food price growth will restrain overall inflation in Ukraine.

CPI Growth, %



Source: NBU staff estimates

Core Inflation, %



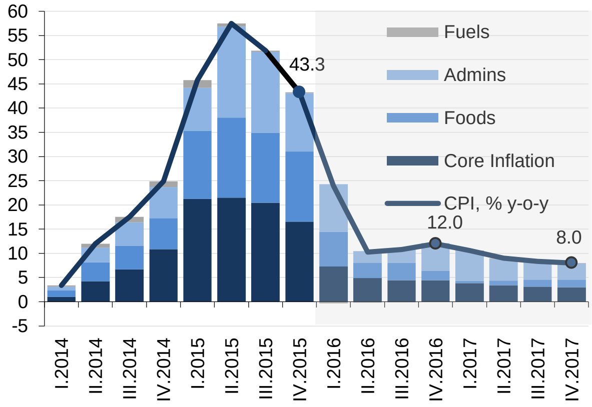
Source: NBU staff estimates

The sharp fall in world oil prices will have a restraining effect on inflation via both direct channel (through fuel prices) and spillover effect on other prices (through transportation cost).

Weak consumer demand will be the factor curbing inflation over the forecast horizon. As a result, core inflation will drop to 9.2% in 2016. Over the short-term, due to a gradual approach of the economy to its potential level, the restraining influence of this factor on inflation will decrease.

Declining contribution of increases in administrated prices will be a major factor for the moderation of headline inflation to 8% in 2017. Lower inflation and devaluation expectations and a continuing drag from low world prices for oil, metals and foods will also play an important role in deceleration of core inflation.

Contributions to Annual Growth of CPI, ppts



Source: SSSU, NBU staff estimates

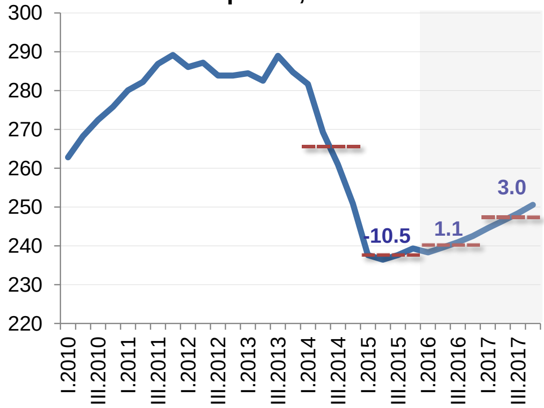
Economic Activity

The forecast of real GDP growth in 2016 was revised downwards to 1.1% (compared with 2.4% in the previous Report). The revision primarily reflected the realization of risks of deeper falls in world commodity prices, slower global economic growth and worsened prospects for the global economy, and to new trade restrictions with the Russian Federation. All these will lead to further weakness in exports, a seasonally adjusted decline in real GDP in Q1 2016 compared to the previous quarter. However, thanks to favorable base effect and economic recovery in H2 2015, real GDP is expected to resume growth in annual terms already in Q1 2016 (the respective growth will be reported for the first time since the end of 2013). In the subsequent quarters, economic growth is expected to resume also in seasonally adjusted quarterly terms, with gradual acceleration through the forecast horizon.

Consumption will remain weak in 2016 - it is projected to increase by only 0.2%. Partly a modest recovery is explained by high comparison base for Q1 2015, but largely by the slow increase in household income. In particular, budget expenditures on social safety net are expected to increase by only 5-6% on average in 2016, while those on health care and education will be squeezed. An almost twofold reduction in the payroll tax rate will allow companies in the private sector to raise salaries. However, its impact on consumption will be restrained by a rather high unemployment level. Therefore, average salary growth in the private sector is projected at a moderate 15% in nominal terms, virtually the same rate as average inflation.

Investment activity will grow faster than consumer demand: gross fixed capital formation will be up by 4.8%; in addition, a change in inventories will positively contribute to real GDP growth in 2016. The stabilization of the business sentiments and improvement of financial stance of enterprises will underpin the strengthening of investment demand growth. The reduction of the payroll tax rate will also allow enterprises to redirect part of the freed funds into investment. The growth recovery will be also promoted by intensified import substitution on a background of past hryvnia depreciation and improved investment climate due to stabilization of the situation in the east,

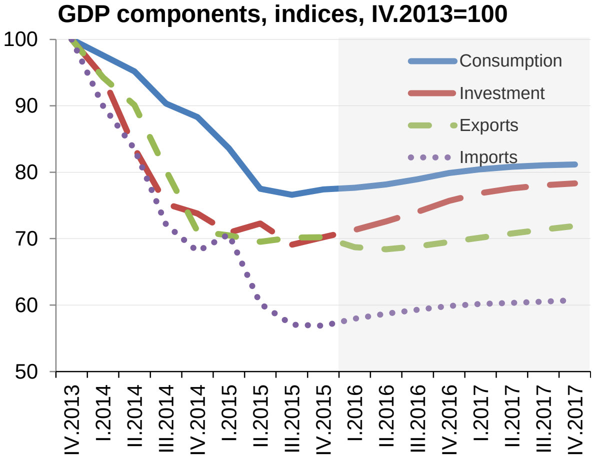
Seasonally Adjusted GDP, constant 2010 prices, UAH bn



Source: SSSU, NBU staff estimates

% y-o-y	2015 estimate	2016	2017
GDP	**-10.5**	**1.1**	**3.0**
Consumption	-15.8	0.2	2.7
Investment	-11.9	4.8	5.5
Exports	-16.3	-1.7	3.2
Imports	-21.8	-2.7	2.4

GDP components, indices, IV.2013=100



Source: SSSU, NBU

completion of external debt restructuring, and the full enforcement of the FTA with the EU. The latter will prompt the reorientation of domestic manufacturers towards the EU market, which will require investment into quality in order to comply with the EU standards.

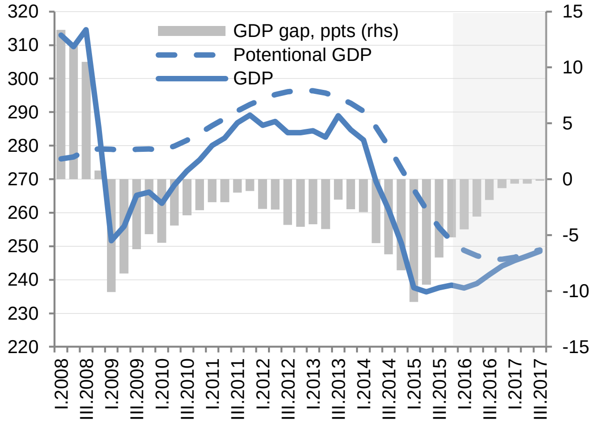
Exports will decline by 1.7% in 2016 mainly due to new trade restrictions imposed by Russia, including a ban on Ukraine's export transit to third countries through its territory. The decline in metal prices during 2015 will also restrain Ukraine's metallurgical exports. These factors will have the most significant impact in H1 2016. In the longer term, we can expect exports to resume growth as other channels of transit develop and export flows reorientation proceeds.

Imports is forecast to decline by 2.7% in 2016, reflecting the still high base of comparison of H1 2015, a slow recovery in consumption, investment activity, and a further reduction in gas imports.

In 2017, real GDP growth is expected to slightly accelerate benefiting from macro-financial stabilization, completion of banking system clean-up, improving investment climate, adaptation of business to new conditions, and reduced imbalances (including adjustment of utilities tariffs to their cost-covering level).

In 2016–2017, the economy will start gradually approaching its potential level (which will reduce downward pressure on prices). On one hand, this will be driven by actual GDP growth as a result of the mentioned above factors. On the other hand, during H1 2016 the potential output will continue to decline due to narrowing export opportunities in the Russian market and a sharp reduction in capital investment in previous years.

GDP, constant 2010 prices, UAH bn

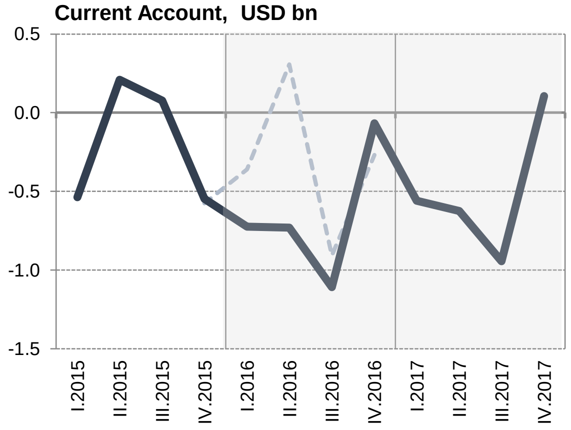


Source: NBU staff estimates

Balance of payments

After an almost balanced current account in 2015, the deficit is expected to increase to USD 2.5 billion, or 3.0% of GDP in 2016 (compared with USD 1.2 billion, or 1.3% of GDP in the previous forecast). The deterioration of the current account will be a result of lower prices for ferrous metals, ores, grains, restrictions on the sale and transit of the Ukrainian goods imposed by the RF, and the abolition of the additional import surcharge. Adjustment of domestic producers to new conditions and appropriate recovery in physical volumes of exports will contribute to the reduction of the deficit in 2017 to USD 2.0 billion or 2.0% of GDP.

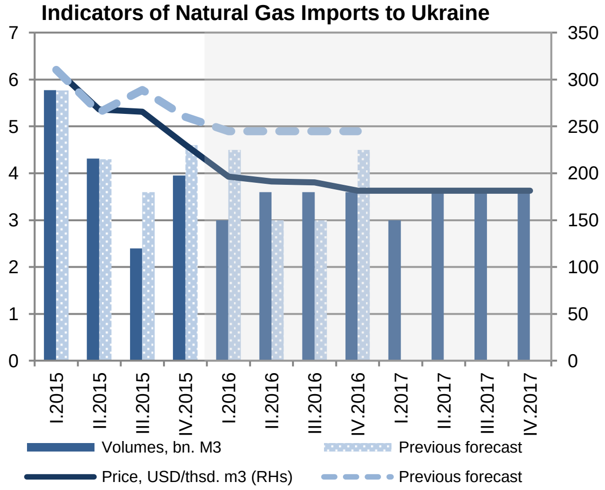
Current Account, USD bn



Source: NBU

In 2016, the 11.8% decline in exports of goods is expected (compared with growth by 4.3% in the previous forecast) due to low prices for ferrous metals (down by 22.6% y-o-y), ores (15.9%), grains (4.3%) and oil and oil products (5.3%) maintained during the year. In addition, the total losses for exports resulting from trade restrictions imposed by RF and blocking of transit of goods through the territory of RF was estimated at USD 1.3 billion (including the reorientation).

Indicators of Natural Gas Imports to Ukraine



Source: NBU, Naftogaz.

In 2016, imports of goods will decline by 7.3% (compared with growth of 2.5% in the previous forecast), due to:

- a further drop of energy prices (gas – by 30.8%, oil products – by 27.4%);

- a decrease in natural gas imports (13.8 billion m^3 compared to 17 billion m^3 in the previous forecast);
- reciprocal measures imposed by Ukraine in response to the restrictions from the RF – the net effect estimated at USD 0.2 billion (including the reorientation); and
- low domestic demand.

Instead, the abolition of import surcharge and tariffs reduction following the full enforcement of the FTA with the EU will stimulate some increase in imports – cumulative effect is estimated at USD 0.7 billion.

In 2017, a gradual recovery by 3.6% in exports of goods and services, and by 2.8% in imports of goods and services– is forecast. An increase in exports of goods is expected due to the growth in physical volumes while maintaining low prices. Imports of goods will recover due to the growth of non-energy imports (by 3.8%) resulting from an increase of consumer purchasing power and better financial performance of enterprises.

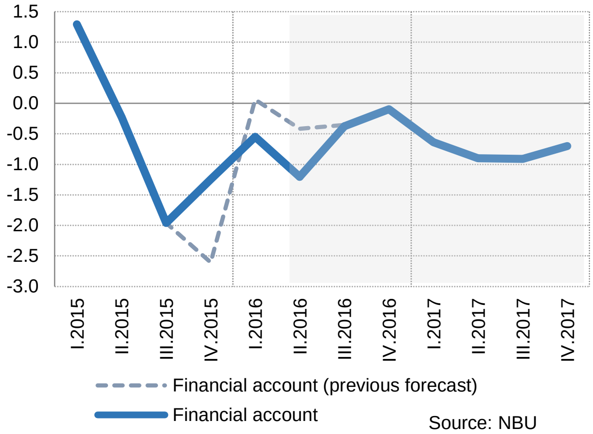
In 2016, expected growth of net borrowings in the financial account will increase to USD 2.9 billion (compared with USD 0.8 billion in the previous forecast) mainly due to disbursement of official and guaranteed loans delayed in 2015 and a continuing reduction of cash outside banks (by USD 1.2 billion). Inflows of foreign direct investments are expected at USD 2.4 billion, most of which will be directed towards the capitalization of the banking system. Financing of the public sector will amount to USD 3.4 billion (excluding loans from the IMF) including: a USD 1.3 billion loan from the EU, USD 1 billion of the US-guaranteed Eurobonds, and USD 0.6 billion of project financing. The private sector will continue to repay external debt, but the rollover rate for long-term liabilities is expected to increase to 67% (from 25% in 2015) due to lower systemic risks and a gradual restoration of confidence of foreign investors.

In 2017, the net borrowings under the financial account is expected to increase to USD 3.2 billion, primarily due to increase in private borrowings and the respective private sector rollover increase to 100%. Inflows of foreign direct investment will amount to USD 2.5 billion, and the reduction of cash outside banks will decelerate to USD 0.3 billion. Except for project financing (USD 0.6 billion) and IMF tranches, there will be no other scheduled disbursements to the public sector in 2017.

In 2016, the overall balance of payments is expected to show a surplus in the amount of USD 0.6 billion, which, along with the IMF injection (USD 5.7 billion), will drive reserves up to USD 19.6 billion, sufficient to cover 5 months of future imports.

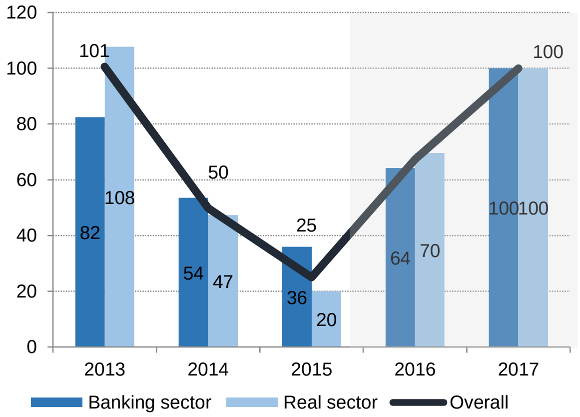
In 2017, the international reserves are expected to grow to USD 22.3 billion, or 5.3 months of future imports, **due to a surplus of the overall balance of payments (USD 1.1 billion) and loans from the IMF (USD 2.4 billion).**

Financial Account: Net External Assets, USD bn



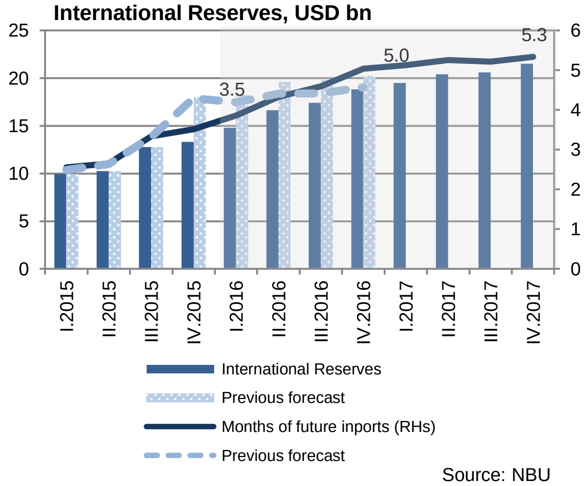
Source: NBU

Rollover Rates of LT Private External Debt, %



Source: NBU

International Reserves, USD bn



Source: NBU

Monetary and financial markets

Domestic currency deposits are expected to keep growing in 2016. The inflow of FX deposits is also projected to recover. The growth of deposits (13.4%) will outpace the growth of cash component in the money supply (3.5%). The moderate rate of cash growth is assumed in view of the continued development of cashless payments. As a whole in 2016, the money supply is expected to grow by 10.5%.

With moderate Hryvnia demand, the monetary base growth will be mainly driven by the growth of correspondent accounts of banks. The need for banks to increase balances on correspondent accounts (up to UAH 46 billion at the end of 2016) is defined by a decision taken in December 2015 to exclude cash desk balances in domestic currency from the calculation of reserve requirements[66] starting from 10 January 2016. In such conditions, the monetary base in 2016 will increase by 8.3% (or about UAH 28 billion).

The NBU FX purchase auctions to replenish international reserves will largely ensure the liquidity of the banking system. It is expected to show further structural surplus.

Considering the above-mentioned estimates, demand from banks for refinancing loans will be situational and will not be constant.

In addition, the impact of fiscal factors on the money supply is expected to be minimal in the forecast horizon.

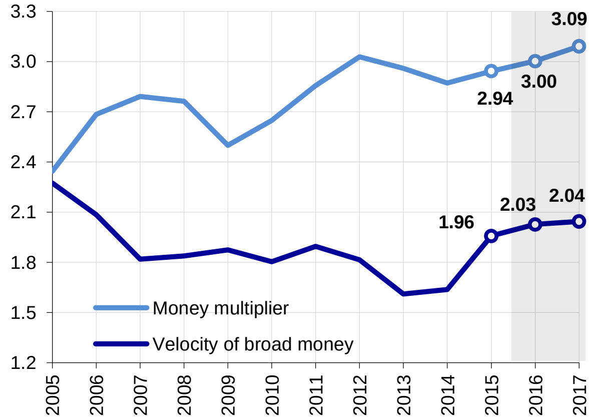
That said, the NBU will continue to use monetary tools to absorb the banking system's surplus liquidity in order to maintain interest rates on the interbank loan market at a level corresponding to the inflation targets.

In the second half of the year, a gradual revival of bank lending activity is expected. Following gradual reduction in the cost of funds due to lower inflation risks is also assumed.

In 2017, the monetary stance is expected to normalize. Further disinflation and acceleration of economic growth will boost demand for money.

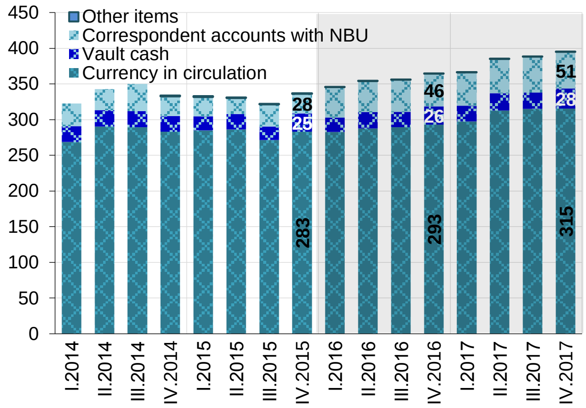
Money supply will grow mainly due to its deposit component (11.5% y-o-y). The development of the banking system and the subsequent replacement of cash payments with cashless will have an impact on, in particular, the further upward trend of money multiplication. Under such conditions, the monetary base is projected to grow at a somewhat slower pace (by 8.3%) compared to the money supply.

Money Multiplier and Velocity of Broad Money



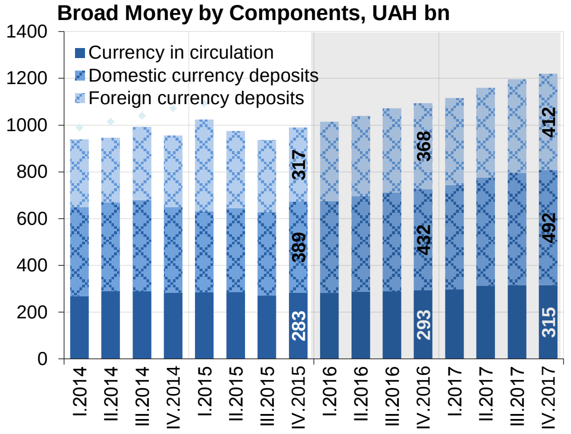
Source: NBU

Monetary Base by Components, UAH bn



Source: NBU

Broad Money by Components, UAH bn



Source: NBU

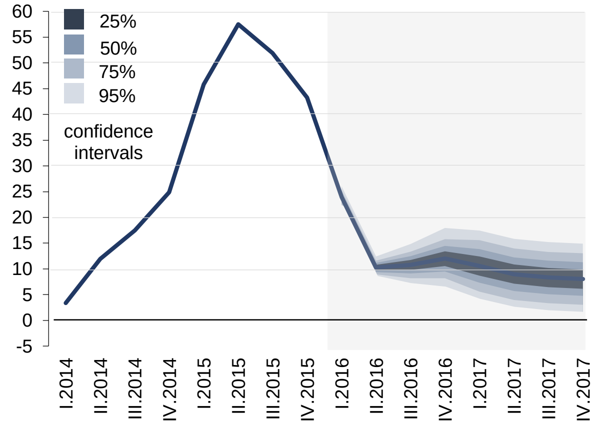
[66] For more detailed information please refer to: http://www.bank.gov.ua/control/en/publish/article?art_id=25023321&cat_id=92517.

3.3. RISKS TO FORECAST

Escalation of the military conflict in the east of Ukraine remains the major risk to the forecast.

Among the external stressors, there can be a further fall in world commodity prices, increasing depreciation pressures on the currencies of commodity exporting countries and the corresponding reduction in demand from these countries. Given Ukraine's high dependency on commodity exports (steel and grains), a further fall in commodity prices will cause a reduction in export proceeds and the heightened pressure on the hryvnia exchange rate. However, the impact on inflation will be multidirectional. On one hand, the worsening of global conditions will cause a slowdown in economic activity and a decline in world commodities prices will be passed through to domestic inflation through the respective price changes in imported prices. On the other hand, the weakening of the national currency will pressure inflation upwards. At the same time, should the aforementioned risks materialize, the NBU will be forced to keep tight monetary policy for a longer period than in the baseline scenario to ensure inflation target is met.

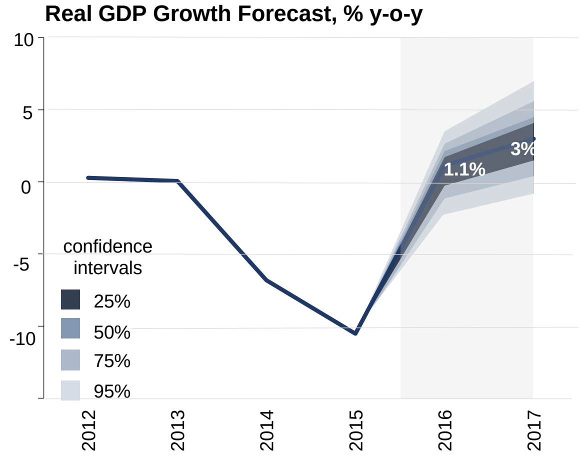
CPI Growth, % y-o-y



Source: NBU

The main assumption of the optimistic scenario is a rebound of world commodity prices. The main consequence of higher prices for key Ukrainian export commodities will be the increase in export proceeds and a corresponding hryvnia appreciation pressures (similar to the respective developments in Q3 2015, when the exchange rate strengthened to UAH 21 per USD). A revival of exports will stimulate economic activity, which to some extent will affect core inflation. However, the impact of hryvnia strengthening is likely to be more significant. In case this scenario materializes, the NBU will proceed with a more rapid decrease in its key policy rate and a relaxation of FX market administrative restrictions. On one hand, it will contribute to the achievement of inflation target, and, on the other hand, it will raise the investment attractiveness and stimulate the economic recovery.

Real GDP Growth Forecast, % y-o-y



Source: NBU

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 (January 2016)

Indicators	2013	2014	2015						2016						2017
			I	II	III	IV*	fact/* estimate	forecast 09.2015	I	II	III	IV	current forecast	forecast 09.2015	current forecast
REAL ECONOMY, % y-o-y, unless otherwise stated															
Nominal GDP (UAH bn) SNA'2008	**1465**	**1567**	368	450	555	565	**1937**	1901	436	514	641	626	**2216**	2227	**2493**
Real GDP growth	**0.0**	**-6.8**	-17.2	-14.6	-7.2	-4.0	**-10.5**	-11.6	0.3	1.4	1.4	1.3	**1.1**	2.4	**3.0**
GDP Deflator	**4.2**	**14.8**	41.5	40.1	37.8	33.2	**38.2**	37.3	18.3	12.8	12.2	9.4	**13.2**	14.4	**9.2**
Consumer prices (period average)	-0.3	12.1					48.7	49.3					13.9	13.7	8.9
Producer prices (period average)	-0.1	17.1					36.0	37.5					6.8	16.0	6.9
Consumer prices (end of period)	**0.5**	**24.9**	20.3	16.9	0.5	1.4	**43.3**	44.0	4.0	4.0	1.0	2.5	**12.0**	12.0	**8.0**
Core inflation (end of period)	0.1	22.8	19.8	7.0	3.1	1.9	34.7	30.7	2.6	2.3	2.1	1.8	9.2	10.2	6.3
Non-core inflation (end of period)	0.9	26.8	20.8	26.1	-1.8	1.0	50.9	56.3	5.2	5.6	-0.1	3.1	14.4	13.6	9.6
administered prices (end of period)	3.7	30.4	10.1	45.6	2.8	-6.2	54.6	87.7	3.3	11.2	4.9	4.7	26.2	23.4	15.3
Producer prices (end of period)	**1.7**	**31.8**	18.5	4.2	3.7	-2.0	**25.4**	32.1	2.4	3.0	0.9	0.4	**6.9**	13.6	**7.3**
FISCAL SECTOR															
Consolidated budget, balance	**-63.6**	**-72.0**	-	-	-	-	**-30.9**	-55.2	-	-	-	-	**-70.1**	-71.3	**-65.6**
% of GDP	-4.3	-4.6	-	-	-	-	-1.6	-2.9	-	-	-	-	-3.2	-3.2	-2.6
General government fiscal balance (IMF method)	**-57.5**	**-70.3**	-	-	-	-	**-34.1**	-58.2	-	-	-	-	**-97.6**	-71.2	**-90.7**
% of GDP	-3.9	-4.5	-	-	-	-	-1.8	-3.1	-	-	-	-	-4.4	-3.2	-3.6
Revenues,UAH bn	639.9	640.1	-	-	-	-	837.6	789.3	-	-	-	-	854.4	864.3	922.9
Expenditures, UAH bn	697.4	710.4	-	-	-	-	871.7	847.4	-	-	-	-	952.0	935.4	1013.6
Naftogaz financing, UAH bn	*27.5*	87.3	-	-	-	-	31.5	61.9	-	-	-	-	4.0	7.9	0.0
General government and Naftogaz financing, UAH bn	-85.0	-157.6	-	-	-	-	-65.5	-120.1	-	-	-	-	-101.6	-79.1	-90.7
General government and Naftogaz financing, % of GDP	-5.8	-10.1	-	-	-	-	-3.4	-6.3	-	-	-	-	-4.6	-3.5	-3.6
BALANCE OF PAYMENTS (NBU methodology)															
Current account balance, USD bn	-16.5	-4.6	-0.5	0.2	0.1	0.0	-0.2	-0.7	-0.7	-0.7	-1.1	0.0	-2.5	-1.2	-2.0
Financial account balance, USD bn	-18.6	9.1	1.7	-0.3	-1.2	-0.7	-0.5	-2.2	-0.8	-1.3	-0.6	-0.2	-2.9	-0.8	-3.2
BOP overall balance, USD bn	**2.0**	**-13.3**	-1.9	0.6	1.3	0.9	**0.8**	2.0	0.1	0.6	-0.4	0.2	**0.6**	-0.2	**1.1**
Gross reserves, USD bn	**20.4**	**7.5**	10.0	10.3	12.8	13.3	**13.3**	18.0	15.0	17.0	18.0	19.6	**19.6**	20.2	**22.3**
Months of future imports	**3.5**	**1.9**	2.6	2.6	3.3	3.5	**3.5**	4.3	3.9	4.3	4.6	5.0	**5.0**	4.6	**5.3**
Export of goods, % y-o-y	-7.5	-15.0	-33.0	-37.8	-29.4	-20.0	-30.5	-29.9	-18.2	-15.5	-11.7	-2.4	-11.8	4.3	3.6
Import of goods, % y-o-y	-5.3	-27.8	-35.4	-39.8	-31.8	-26.4	-33.5	-33.3	-18.0	-2.1	-3.5	-4.9	-7.3	2.5	2.8
MONETARY ACCOUNTS															
Base money, % y-o-y for the period	**20.3**	**8.5**	-0.4	-0.8	-3.6	0.8	**0.8**	0.3	2.7	5.2	5.9	8.3	**8.3**	17.2	**8.3**
Broad money, % y-o-y for the period	**17.6**	**5.3**	7.1	1.9	-2.1	3.4	**3.4**	5.4	2.5	5.1	8.4	10.5	**10.5**	16.8	**11.5**
Velocity of broad money (end of year)	**1.59**	**1.64**	-	-	-	-	**2.0**	1.9	-	-	-	-	**2.0**	1.9	**2.0**

** data for GDP, GDP deflator, BOP and Naftogaz are NBU estimates*