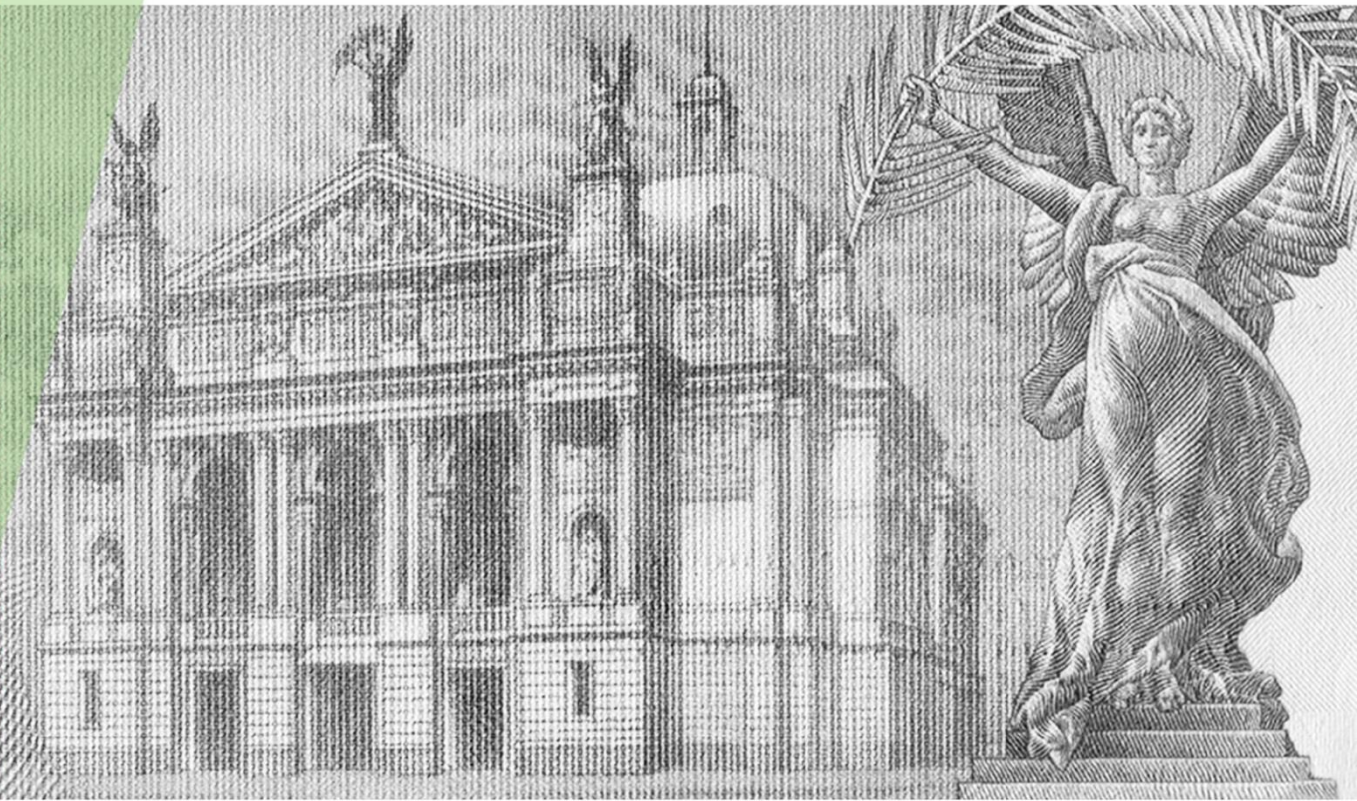




National Bank  
of Ukraine

# Inflation Report

April 2018



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## PREFACE

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

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

The Monetary Policy and Economic Analysis Department developed forecasts of inflation and other macroeconomic variables. The NBU Board approved the forecasts during a meeting devoted to monetary policy issues on 12 April 2018.<sup>1</sup> Macroeconomic projections, including inflation, comprise the principal input, but not the only one, the NBU Board considers in its decision-making. In addition to the projections of inflation and other macroeconomic variables, the NBU Board takes into account any new information appearing after the forecast has been developed. The assessment of risks to the outlook or relations between macroeconomic parameters may vary between members of the NBU Board.

The analysis in the Inflation Report is based on the macroeconomic data available at the date of its preparation; therefore, the time horizon of the analysis for some indicators may vary. This report used 11 April 2018 as the cut-off date for the data.

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

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<sup>1</sup> NBU Board Decision No. 205-D as of 12 April 2018 *On the Approval of the Inflation Report.*

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## TERMS AND ABBREVIATIONS

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

## 1. SUMMARY

### Early in 2018, inflation pressures remained elevated

Headline inflation slowed down to 13.2% yoy in March 2018. However, inflation remained above the targets set in the Monetary Policy Guidelines for 2018 and the Medium Term ( $7.5\% \pm 2$  pp for the end of Q1 2018). Core inflation also remained elevated (9.4% yoy).

The ongoing sharp increase in food prices was the primary reason for the high inflation recorded. This was due to the lower output of some agricultural products and robust food exports, which prompted price convergence with neighboring countries. Further increases in production costs, including due to higher labor costs, contributed to inflation pressures as well. The rapid recovery in consumer demand, on the back of the continued rise in household incomes, was also a major inflation driver. The increase in household incomes was in turn driven by a steady wages growth, due to both higher minimum wage and labor market tightening, attributed, among other things, to labor migration, as well as by a rise in other social standards, including pensions in Q4 2017.

Conversely, the tight monetary policy helped contain inflation pressures. The NBU continued the monetary tightening cycle in Q1 2018, raising its key policy rate twice by a total of 250 bp to 17% per annum. As expected, this made hryvnia-denominated financial instruments more appealing to investment, inter alia to foreigners, which encouraged capital inflows. External conditions also remained benign, with a strong growth momentum being maintained in Ukraine's main trading partners, and sustained high prices in global commodity markets. Consequently, the greater interest of foreign investors in the hryvnia securities, together with higher export proceeds, helped reverse the hryvnia depreciation trend since late January 2018. The strengthening of the hryvnia against the U.S. dollar and the currencies of Ukraine's main trading partners primarily affects fuel prices and the prices of imported goods and, looking ahead, should improve inflation expectations.

Other factors behind the slowdown of inflation were a more moderate increase in administered tariffs and prices, a deceleration of inflation in the country's main trading partners, and slower growth in the global prices of food and oil.

Following a strong fiscal impulse late last year, the fiscal budget traditionally switched to a surplus in early 2018 as expenditures increased modestly, even though social standards were raised further (albeit not as significantly as in 2017). Meanwhile, revenues grew moderately as well, mostly reflecting temporary factors, such as the implementation of changes to administering a number of major taxes.

### The NBU has left its headline inflation forecast unchanged – inflation is expected to slow and reach the target range in mid-2019

In 2018, headline inflation should gradually slow, reaching 8.9% by the end of the year. However, inflation will still exceed the targets ( $6\% \pm 2$  pp). The upward price pressure will be determined by a number of factors:

- Rapid growth in consumer demand, with higher household incomes spurred by increased social standards and higher wages amid ongoing intensive labor migration;
- The further rise in administered prices, driven by higher labor costs in the public utilities sector, a gradual rise in global fuel prices, which will pass through to domestic prices, and the harmonization of excise taxes on tobacco products with those in the EU;
- The convergence of Ukrainian food prices with those in its trading partners, as domestic prices are still mostly lower compared to prices for similar foods in neighboring countries. In addition, food exports are expected to increase further, since Ukrainian producers are actively expanding their presence on foreign markets.

Meanwhile, inflation pressure from global food prices is expected to weaken this year. In addition, the strengthening of the hryvnia relative to the currencies of Ukraine's trading partners in Q1 2018 will help reduce inflation pressure in the months ahead, primarily through subsiding growth in prices for non-food products. This will mainly affect core inflation, which is expected to slow somewhat more rapidly than forecasted in the January 2018 Inflation Report – down to 7.7% by the end of 2018.

In addition, the effect of past key policy rate increases will linger, as it has not yet been fully transmitted to market interest rates – in particular to bank deposit rates.

Looking ahead, the continued tight monetary policy, a more ample supply of food products, and weaker growth of imported goods' prices will contribute to the slowdown of inflation. As a result, inflation will return to its target range by mid-2019, to stand at 5.8% yoy by the end of the next year. In 2020, inflation will decelerate to 5.0% yoy, which will correspond to the central point of the target range ( $5.0\% \pm 1$  pp).

### Consumer demand was the key real GDP growth driver in 2017

In 2017, the Ukrainian economy maintained its growth momentum, with real GDP growth at 2.5% (compared to 2.4% in 2016). The pace of the economic recovery in Ukraine exceeded the expectations and preliminary estimates of the State Statistics Service of Ukraine, driven by stronger consumer demand and high investment activity.

Consumer demand was the main driver of the real GDP growth in 2017, propelled by robust household income growth. While early in the year this was due to the doubling of the minimum wage, later on, wage growth was bolstered by robust labor demand amid a continued pickup in labor migration. In addition, Q4 2017 saw a substantial rise in average pension payments due to pension reform.

However, the persisting mismatch between demand and supply in the labor market caused the unemployment rate to increase.

Robust investment activity across most economic sectors continued to strongly to economic growth, supported by a further improvement in business expectations and the financial performance of companies, as well as by larger budget expenditures on infrastructure projects.

Stronger domestic demand and an increase in foreign trade turnover determined improved performance in trade, transportation, and manufacturing sectors. Growth in construction and real estate business accelerated, reflecting the robust investment activity. The performance of the service sector improved as a whole, especially in the latter half of the year. This offset the decrease in gross value added in the agriculture sector (due to lower grain and oilseed crops compared to the record figures of 2016) and the energy sector, as well as the deeper decline in the mining industry.

In addition, exports of goods and services returned to growth in real terms in the latter half of 2017, owing to benign external environment (both in demand and in prices), an increase in exports to the EU, and Ukrainian companies have been recovering from the disruption of production and trade links with the NGCA. Meanwhile, the situation concerning the NGCA continued to contribute to a pickup in imports, specifically energy imports (primarily, coal), while a recovery in domestic demand drove up non-energy imports (both consumer and investment goods). That caused the foreign trade deficit to widen further.

A further increase in remittances led to a higher surplus on the primary and secondary income accounts. That said, the NBU revised its estimates of private remittances to Ukraine for 2015–2017. The substantial pickup in labor migration over the last three years was taken into account in the methodological adjustments. As a result, according to the updated estimates, the current account deficit increased from 1.4% of GDP in 2016 to 1.9% of GDP in 2017 (compared to a 3.7% of GDP deficit for both years under the previous methodology).

Real GDP increased 2.3% yoy in Q1 2018, according to the NBU's estimates. Domestic demand, both consumer and investment, remained the main growth driver. Further nominal wage growth and rising social standards, strong business expectations, and a favorable external environment helped bolster economic growth. To some extent, a lower comparison base, due to disruptions in production and logistic links with the NGCA, was another contributor. However, this effect will only be fully realized in the quarters ahead. Unfavorable weather conditions in late Q1 2018 slightly restrained economic activity.

Exports grew at a solid pace on the back of a benign global environment and strong demand from the EU for certain commodities in early 2018. However, the growth of imports outpaced exports, due to robust consumer demand amid the strengthening of the hryvnia. As a result, in January–February 2018, the merchandize trade deficit widened to USD 1.3 billion. The surplus in the primary and secondary income accounts rose, thanks to continued growth in remittances, thus leaving the current account deficit close to zero in January–February – the same as in the respective period last year.

### The NBU has left its economic growth projections for 2018-2020 unchanged

As before, the NBU forecasts that real GDP growth will accelerate to 3.4% in 2018. Private consumption will remain the main growth driver, as strong real wage growth will be maintained amid active labor migration. Consumption will also be bolstered by the easing of fiscal policy, as reflected through higher social standards. The investment activity of companies is expected to remain high.

In 2019–2020, real GDP growth will slow slightly (down to 2.9%). The deceleration will occur amid the fading effects of fiscal easing and the reasonably tight monetary policy that is required to bring headline inflation back to the target level. These projections are based on conservative assumptions regarding progress in structural reforms, implying slow growth in the long-term economic potential. The pace of growth could be faster if reforms are more vigorous.

Exports will rise on favorable terms of trade, high crop yields, and greater access to external markets for Ukrainian producers. The recovering production in certain industries, which had decreased their output earlier due to limited supplies from the NGCA, will be another factor behind export growth. In the meantime, imports will rise on the back of stronger consumer and investment demand, coupled with a gradual strengthening of the real exchange rate. Higher remittances from labor migrants, reflecting intensified labor migration – not least owing to the more liberal hiring rules for foreigners in neighboring countries – will partially offset the expansion of the trade deficit. As a result, the current account deficit will widen moderately – to 2.6% of GDP in 2020.

**Continued cooperation with the International Monetary Fund remains the key assumption underlying the macroeconomic outlook.** Over the forecast horizon, this will secure access to official financing from other donor organizations, as well as to the international capital markets.

This year, the NBU expects the IMF to disburse around USD 2 billion, and the government to be issued loans by the EU and the World Bank. This will enable the NBU to increase international reserves to USD 21.6 billion by the end of 2018. However, in 2019 and 2020, due to a peak of repayments on the external public debt, the overall balance of payments is expected to post a deficit and international reserves to decline.

In 2018, an increase in social spending (on higher pensions, increased salaries in the public sector, and announced further rise the social standards) will increase the budget deficit. Sizable social expenditures will limit the government's ability to spend on development, given the need to keep the general government deficit in line with Ukraine's commitments to the IMF. Capital expenditures will remain at about 3% of GDP.

The higher budget expenditures will largely be offset by increased tax receipts driven by fast nominal wage growth and robust domestic demand. The public sector fiscal deficit is expected in the range of 2.0–2.6% of GDP over the forecast horizon, with the primary balance remaining positive, although narrowing due to lower expenditures on debt servicing.

The public and publicly guaranteed debt as a percentage of GDP should decline over the entire forecast horizon. This will be fostered by rapid nominal GDP growth, relatively low exchange rate volatility, and a gradual decline in the external public debt on the back of large repayments by the public sector.

**The main downside risk to the NBU's forecast scenario is lack of progress in the implementation of the structural reforms** needed to maintain macrofinancial stability and continue cooperation with the IMF, amid large external debt repayments scheduled for the coming years. Postponing measures necessary to restore cooperation with the official lenders narrows Ukraine's ability to secure the financing needed for public debt repayments, which peak in 2018–2020. Therefore, the NBU deems taking immediate action to continue cooperation with the IMF as critical for maintaining macrofinancial stability.

Looser fiscal policy is another considerable risk to disinflation. In particular, if social spending continues to outpace the overall labor productivity growth in the economy, inflationary pressures may rise.

From a global perspective, the risk of large-scale trade wars has increased. Such wars could trigger sharp fluctuations in global commodity markets, affecting the access of Ukrainian exports to external markets, and reduce foreign exchange proceeds. With the Ukrainian economy highly vulnerable to changes in the global environment, the reversal of benign trends seen in the global economy and commodity markets since early 2016 may produce significant adverse consequences for economic activity and foreign exchange markets in Ukraine.

**Monetary policy is set to be moderately tight over the forecast horizon in order to bring inflation back to the target path**

Under the baseline scenario of the NBU's macroeconomic projections, monetary policy is sufficiently tight to reduce inflation in the medium term. Therefore, on 12 April 2018, the NBU Board decided to keep its key policy rate unchanged at 17% per annum.

However, if underlying inflationary risks continue to build up, the NBU may resort to raising the key policy rate further, in order to bring inflation to the medium-term target. At the same time, the NBU will continue to seek a balance between the need to bring inflation down, and minimizing the negative short-term consequences on economic growth and the resumption of lending.

## 2. CURRENT ECONOMIC SITUATION

### 2.1. EXTERNAL ENVIRONMENT

The external environment continued to be benign for the Ukrainian economy, due to the acceleration of economic growth in Ukraine's main trading partners and global commodity prices being largely favorable. More specifically, the weighted average annual rate of economic growth in Ukraine's main trading partners in Q4 2017 remained one of the highest in the last six years. This growth was spurred by stronger demand and investment amid a recovery in global trade. The moderate slowdown compared to the previous quarter was largely due to the waning of the positive effect of the comparison base for some countries, such as Turkey and a number of Central and Eastern European countries, as well as a modest rebound in the Russian economy. Data for Q1 2018 show that the global economy has maintained its growth momentum.

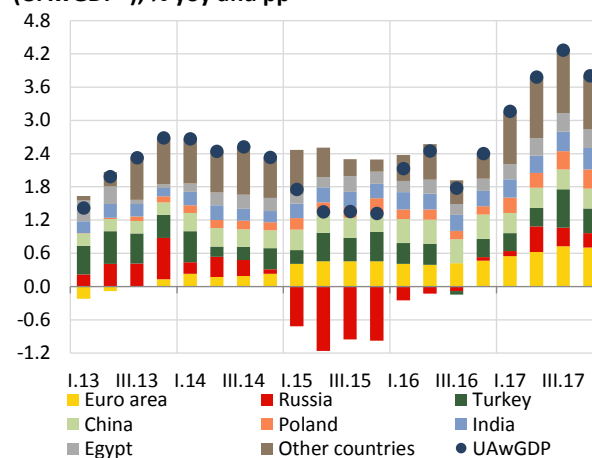
Robust global demand has kept commodity prices high. At the same time, market – specific factors had a significant influence. These included the unfavorable weather conditions for the grain harvest seen in early 2018 in some regions, the restrictions imposed on steel production by China, a high level of compliance to the OPEC+ agreement, and a reduction in US oil inventories. In Q1 2018, the ECPI Index,<sup>2</sup> which tracks changes in global prices for Ukrainian exports, accelerated.

In contrast, global financial market conditions tightened in Q1 on the back of the Fed's continued monetary tightening, and the global stock market turmoil. The latter resulted from rising tensions in international trade relations, and the sell-off of technology company stocks, driven by concerns over stricter regulation of this sector. In spite of that, emerging market assets showed some resilience. The sustained interest of investors in the assets of these countries helped most emerging market currencies strengthen as the US dollar depreciated and commodity prices rose.

Global economic growth has become stable, fueled by a pick-up in demand, growth in investment and an expansion of trade. Advanced and emerging market economies are growing in sync. Q4 2017 saw the fastest global economic growth since 2011, while PMI and global trade data suggest that this positive trend is likely to continue into early 2018. Indeed, in Q1 2018, the global business confidence index and the global manufacturing PMI were at historical highs for the last three years. The growth of the service sector outpaced that of the industrial sector, reflecting the significant influence on the global economy of stronger demand. The world trade outlook index (WTOI), a leading indicator, for Q1 2018 reflects the strong performance of air and container transportation, and large export orders.

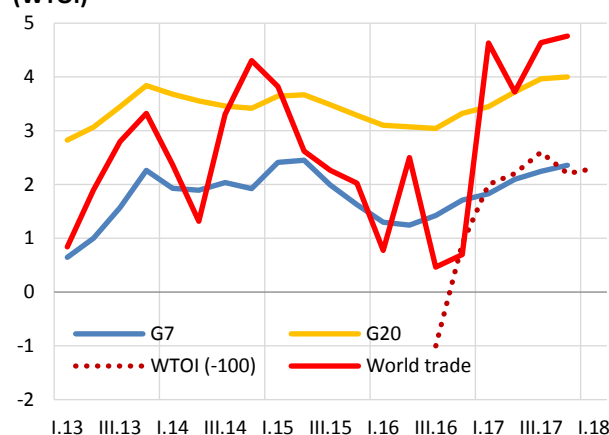
The US economy continued to experience the cyclical upturn, driven by increased consumer spending and investment, as well as broad improvement in consumer sentiment thanks to the new tax reform. The labor market continued to improve, with the number of vacancies increasing and the unemployment rate

Structure of Annual GDP Growth of Ukraine's MTP Countries (UAWGDP\*), % yoy and pp



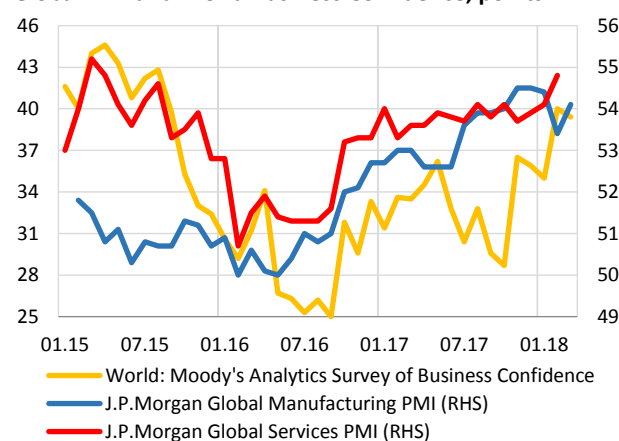
\*UAWGDP constructed using data for real GDP annual growth rates for Ukraine's MTP countries, weighted according to their shares in Ukrainian exports  
Source: NBU staff estimates (preliminary data).

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



Source: OECD, WTO.

Global PMI and World Business Confidence, points



Source: Markit, Moody's.

<sup>2</sup> Read more about the ECPI Index in the February 2016 Macroeconomic and Monetary Review.



remaining below its long-term average. Labor market tightening sped up the growth in wages. Against this backdrop, the Federal Reserve kept raising interest rates gradually. As a consequence, with the exception of some periods, US financial assets remained attractive to foreign investors, while the spreads between government and corporate securities gradually tightened.

Economic growth in the euro area accelerated in the latter half of 2017 and was higher than potential GDP growth by 1 pp.<sup>3</sup> The underlying factors underpinning this sustained growth were a strong cyclical impulse and an increase in capacity utilization. In early 2018, the production growth figures and the increase in new orders remained among the strongest in the last 18 years, as evidenced by the purchasing managers index. The growth was broad-based across sectors and euro area countries. A rise in employment propelled private consumption, while the still loose financial conditions stimulated business investment.

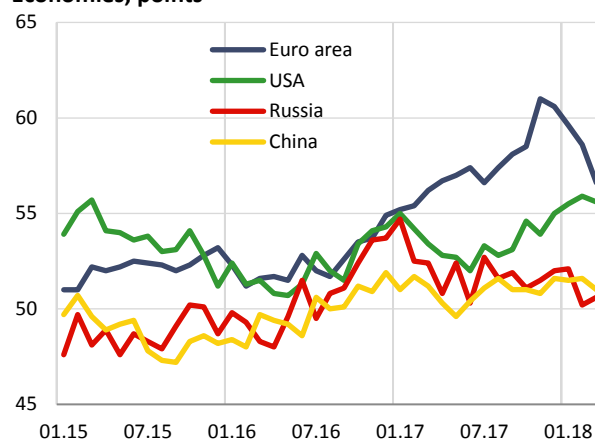
A rebound in global business activity spurred exports from the euro area, central and eastern European countries, and CIS and Asian countries, boosting economic growth in these countries. Additional factors included the improvement in the labor market, which bolstered consumer spending, and rising investment on the back of improved business sentiment. Russia remained an exception, due to a significant decline in the mining industry and weak investment growth.

In spite of steady economic growth, inflationary pressures from Ukraine's main trading partners continued to ebb in Q1 2018, as seen in changes in the UAwCPI.<sup>4</sup> Inflation dropped in all of Ukraine's major trading partners, apart from those in Asia. Moreover, inflation in the euro area and Russia remained well below its targets. Meanwhile, consumer prices accelerated in China, India and Japan, fueled by the strength in food prices.

Buoyant global demand has kept commodity prices high. The global price environment became more favorable for Ukrainian exporters in Q1 2018, mainly on the back of higher prices for ferrous metals, iron ore, and grain, despite some downward adjustment seen on some markets at the end of the quarter.

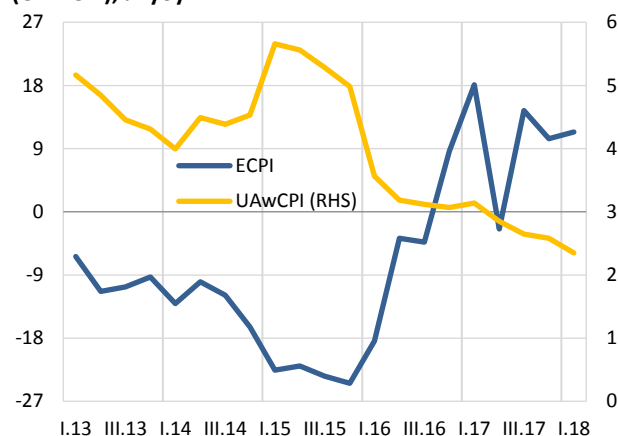
Global steel prices remained high, boosting iron ore prices as well, and were driven by the ongoing restrictions on steel production in China. In addition, a benign business environment, the strengthening euro, and effective antidumping policies in European countries have helped maintain robust demand for steel products (especially from Austria, Germany and Italy), while also pushing up the prices of these products. The prices of steel products edged down in the latter half of March, as China gradually stepped up its steel production. The introduction of import tariffs on steel and aluminum by the United States was an additional factor, and provoked a mixed response from the market.

**Manufacturing PMI in Selected Advanced and Emerging Economies, points**



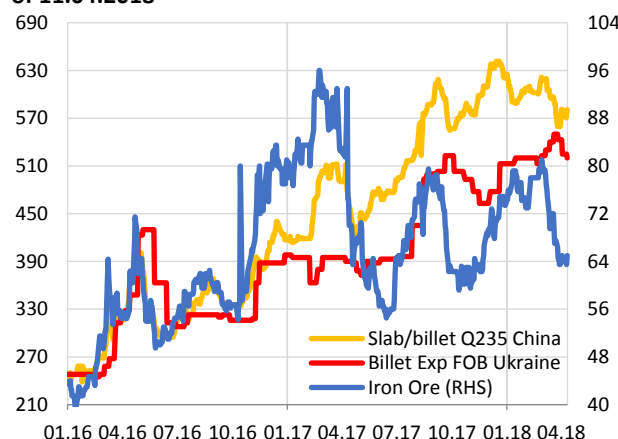
Source: IHS Markit.

**External Commodity Price Index (ECPI) and Weighted Average of the CPI Growth of Ukraine's MTP Countries (UAwCPI), % yoy**



Source: NBU staff estimates.

**Semi-Finished Steel Prices in China and Ukraine, USD/MT as of 11.04.2018**



Source: Thomson Reuters Datastream.

<sup>3</sup> [https://www.ecb.europa.eu/press/key/date/2018/html/ecb.sp180314\\_1.en.html](https://www.ecb.europa.eu/press/key/date/2018/html/ecb.sp180314_1.en.html).

<sup>4</sup> Read more about the UAwCPI in the April 2016 Inflation Report.

### Box: The specifics of the latest changes to US trade policy

On 23 March 2018, the United States imposed additional import tariffs<sup>5</sup> on steel (25%) and aluminum (10%) with a view to protecting its domestic market. Although these tariffs apply to all countries, a temporary exemption was granted to Canada and Mexico, which will apply until a new NAFTA deal is signed. Tariffs were also suspended for the EU, Australia, Argentina and Brazil until 1 May 2018, while talks continued. Other countries can negotiate exemptions by convincing the United States that their products are unique for the US market, and pose no threat to the country's national security.

This decision could have multiple effects on the US economy. On the one hand, this could step up metallurgical output, while on the other hand, this could lead to a spike in prices, among other things, by raising production costs in related sectors – construction, mechanical engineering, manufacturing of metal products and so on. Under such conditions, inflation pressure will rise, which will force the Federal Reserve System to adopt a tighter policy stance. This, in turn, will result in the strengthening of the US dollar and, consequently, a loss in the competitiveness of US exports. Moreover, similar measures were taken in 2002 without positive effect.<sup>6</sup> That is why investors expect that the introduction of import tariffs will negatively affect the US economy. As a result, the Dow Jones Industrial Average dropped by 5.6% in March.

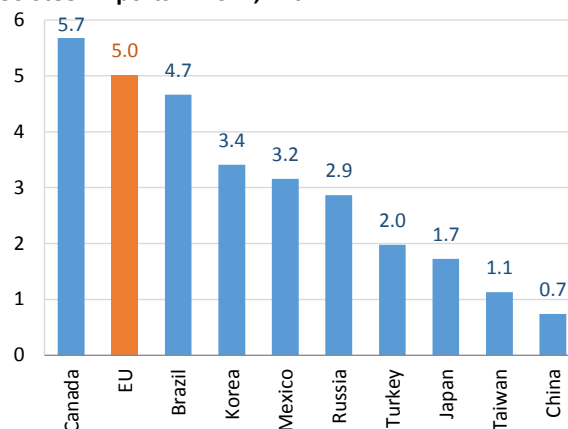
All countries that export steel to the United States responded negatively to the introduction of import tariffs. That said, the implications are expected to vary across countries. For China, steel tariffs will have less strong impact, since the country's exports have already declined over the past year. However, the EU could be hit rather hard, given the slow recovery seen in the steel industry. The European Steel Association (EUROFER) estimates that steel tariffs could bring an additional 13 million tons of steel to the EU market (about 8% of domestic demand), pushing domestic prices down. Therefore, steel-exporting countries said they would take retaliatory measures by imposing tariffs not only on US steel but also on other products that are important for the United States, such as agricultural products. More specifically, China imposed tariffs on 128 US products worth a total of USD 3 billion.

The tariffs are based on Section 232 of the 1962 Trade Expansion Act that allows safeguards based on national security. Since the WTO has only a marginal influence on the country's decision to introduce tariffs based on national security, other countries are poorly placed to use the organization's rules to justify their own claims to exemptions. In addition, since national security is a broad notion, which allows for multiple interpretations, Section 232 is seldom appealed to.

The United States also declared its intention to introduce additional import tariffs on China (totaling USD 50 billion) on the alleged violation of US intellectual property rights. China retaliated by announcing it would consider imposing tariffs on soybeans worth a total of USD 14 billion, and halting US Treasury purchases.

All this increased the risk of a full-scale trade war. WTO and IMF officials have already expressed their concerns over these developments. A global trade war usually has negative repercussions for the global economy by shrinking international trade and pushing down commodity prices. For instance, expected reduction in US imports of Chinese aluminum foil and steel will reduce Chinese demand for coal from Australia and some other countries. Bloomberg Economics estimates that a 10% rise in US import tariffs, coupled with countermeasures by other countries, will cut global GDP by 0.5% by 2020 compared to the baseline scenario, while reducing global trade by 3.7%. Moreover, the impact on the global economy will be felt as early as 2018.

US Steel Imports in 2017, m t



Source: U.S. Department of Commerce.

#### Assessment of Investors Biggest Risks for Markets According to the Survey Bank of America Merrill Lynch

What do investors consider to be the biggest risks to the markets?



- Trade war: 30%
- Inflation: 23%
- Slowdown in global growth: 16%

BofA Merrill Lynch Global Research  
March Fund Manager Survey

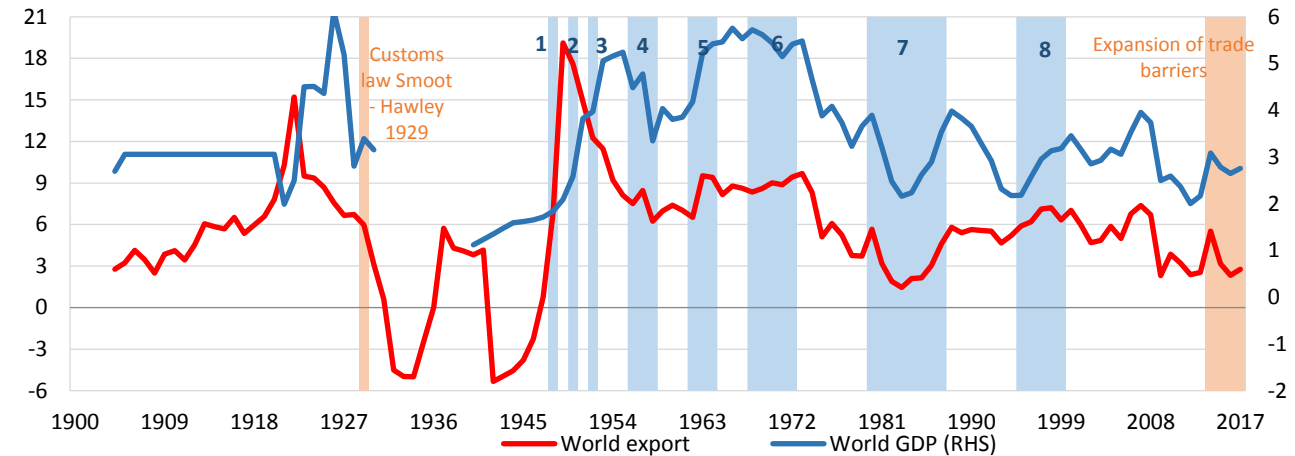
Bank of America  
Merrill Lynch

Source: <https://twitter.com/bofaml/oid/21.03.2018>.

<sup>5</sup> By late 2017, the United States had already imposed various tariffs on 60% of steel imports: on 94% of Chinese steel imports, and on 54% of steel imports from other countries.

<sup>6</sup> United States International Trade Commission (September 2003). "Volume III: Executive Summaries and Investigation No. 332-452 (Report and Appendices)." Monitoring Developments in the Domestic Industry (Investigation No. TA-204-9) and Steel-Consuming Industries: Competitive Conditions with Respect to Steel Safeguard Measures (Investigation No. 332-452) / [https://www.usitc.gov/publications/332/3632/pub3632\\_vol3\\_all.pdf](https://www.usitc.gov/publications/332/3632/pub3632_vol3_all.pdf)

**World Exports and Global GDP Growth, % yoy (5-year moving average), and Main Periods of Changes in Trade Tariff Policies\***



Field blue colors reflect the weakening of tariff barriers, orange amplification

\*Simplified Representation of Tariff Reductions:

- |   |   |
|---|---|
| 1 – Geneva- 1948 – 23 countries         | 5 – Dillon Round – 1962 – 1964 – 26 countries   |
| 2 – Ancey – 1950 – 13 countries         | 6 – Kennedy Round – 1968 – 1972 – 62 countries  |
| 3 – Torquay – 1952 – 38 countries       | 7 – Tokyo Round – 1980 – 1987 – 102 countries   |
| 4 – Geneva – 1956 – 1958 – 23 countries | 8 – Uruguay Round – 1995 – 1999 – 123 countries |

Source: World Bank, WTO, Northridge State University of California.

There will be little direct impact on Ukraine from the US import tariffs imposed on steel and aluminum, since in 2017 the United States accounted for only about 2% of total Ukrainian exports, and about 6% of exports of ferrous metals and products made of them. However, secondary effects from any countermeasures taken by other countries could carry more profound adverse implications for Ukraine by decreasing global commodity prices and slowing global economic growth. This could be partly offset by an expansion of Ukraine’s share of the agricultural markets of the countries that take countermeasures, such as China and the EU states.

In Q1 2018, global wheat and maize prices surged. This mainly resulted from a worsening in weather conditions that decreased the second grain harvest in Latin America, as well as from expectations of a lower winter crop harvest in the US and the EU. An additional factor was a further increase in demand for grain, in particular from Middle Eastern countries and India. However, prices adjusted downward at the end of the quarter on the back of improved weather conditions and expectations of a higher grain harvest, in particular in Latin America.

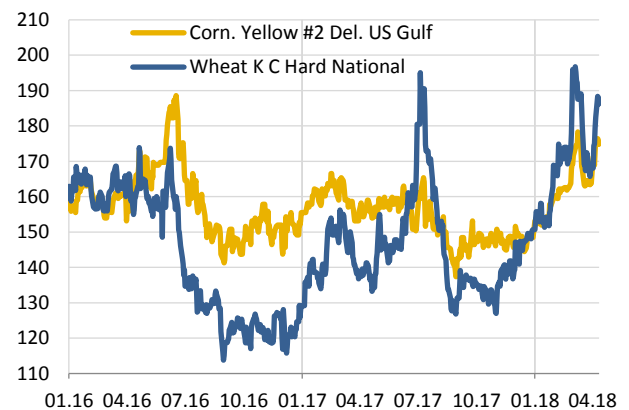
After reaching the psychological threshold of USD 70 per barrel at the beginning of the quarter, oil prices continued to hover around USD 65 per barrel. The prices were supported by:

- a slump in Cushing oil inventories owing to higher demand resulting from a worsening in weather conditions
- the high level of compliance to the OPEC+ agreement (on average 130% from the year start)
- and disruptions to oil supplies and production in some Middle Eastern countries in the wake of military conflicts.

However, stepped-up drilling operations in the United States, which pushed up the country’s oil production to a historical high, and increased oil production in Russia pushed down oil prices somewhat.

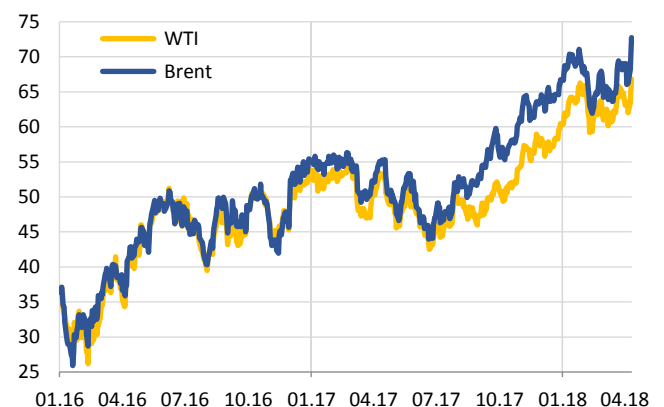
In Q1 2018, the global financial markets were very volatile. The yields of US long-term government bonds surged to around 3% for the first time in four years, affecting bonds of other countries – the yields of German long-term government bonds reached a high not seen since September 2015. This was due to:

**World Cereal Prices, USD/MT, as of 11.04.2018**



Source: Thomson Reuters Datastream.

**World Crude Oil Prices, USD/bbl, as of 11.04.2018**



Source: Thomson Reuters Datastream.

- the Fed’s comments, at the January meeting, that inflation might accelerate, reaching its 2% target, and signals that it might raise the policy rate in March, which strengthened the expectations that there would be four Fed rate rises in 2018
- labor market statistics, in particular the highest wage growth since 2009. This increased investors’ concerns that the Fed could tighten its policy at a faster pace (taking into account the potential overheating of the economy as a result of tax stimuli)
- the intention declared by the US Treasury to double bond issues to USD 1.25 trillion to finance the growing budget deficit, which experts believe exceeds the market’s needs
- expectations that the Fed will decrease its US Treasury purchases by USD 230 billion in the current year.

Market participants responded to the spike in government bond yields by the panic selling of stocks. This resulted in a massive slump in the prices of US stocks not seen since 1928 (dropping by over 10% from record highs in less than two weeks). In spite of there being positive macroeconomic data, the stock indices of leading countries dropped further, driven by rising tensions in international trade relations and sell-offs of technology stocks.

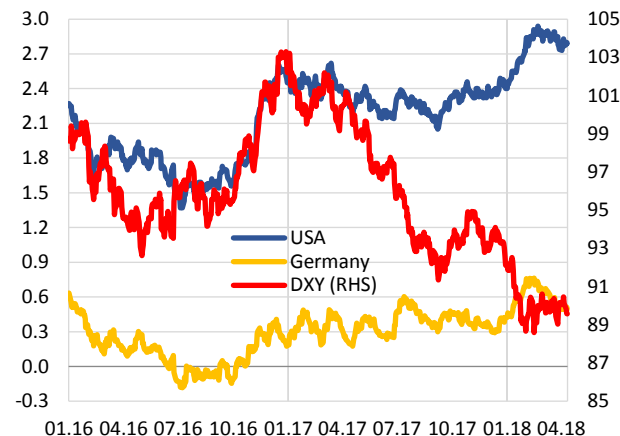
The plunge in the prices of these stocks reflected fears that the regulation of this sector might tighten after media reports began circulating that the personal data of social network users may have been breached.

In contrast, emerging market financial assets were relatively unaffected by the increased turbulence on the global financial markets. The following factors helped retain investors’ interest in these assets:

- a weakening of the US dollar on the global financial markets, driven by increased risks of a trade war, and the statement made by US Treasury Secretary Steven Mnuchin that a weaker dollar would benefit the US economy
- higher global demand and prices for commodities
- the attractiveness of emerging market economies to investors owing to the positive growth differential and the high return on assets of these countries
- the improvements seen in recent months in the sovereign ratings of some emerging market economies, such as India, Indonesia and the Philippines.

A weakening of the US dollar against the basket of major currencies, high global commodity prices, and the persisting interest of investors in emerging market assets helped strengthen most of the currencies of these economies against the US dollar.

**10-Year US and German Government Bonds Yields, as of 11.04.2018**



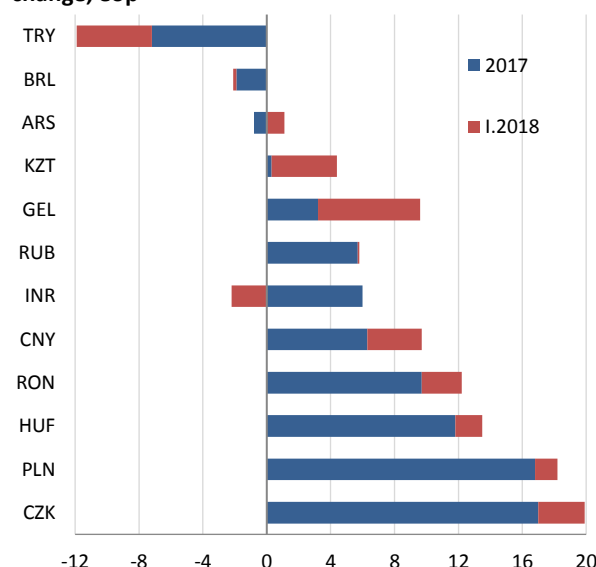
Source: Thomson Reuters Datastream.

**World Stock Indices, 01 Jan 2014=100, as of 11.04.2018**



Source: Thomson Reuters Datastream.

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



Source: Thomson Reuters Datastream.



## 2.2. DOMESTIC ECONOMY

### 2.2.1. INFLATION DEVELOPMENT

Inflationary pressures remained high in early 2018. Although slowing to 13.2% yoy in March, headline inflation was still higher than the target of  $7.5\% \pm 2$  pp set for the end of Q1 2018 in the Monetary Policy Guidelines for 2018 and the Medium Term.

The high inflation was driven by a range of factors:

- the narrowing domestic supply of some agricultural products on the back of both lower production and large exports. Although the influence of the latter factor was curbed in part by slower growth in global food prices, Ukrainian food prices keep converging with those in neighboring countries
- continued growth in production costs, particularly labor costs
- rapidly growing consumer demand, including on the back of a further rise in the minimum wage from the beginning of the year, and an increase in other social standards, such as pensions, by the government in Q4 2017.

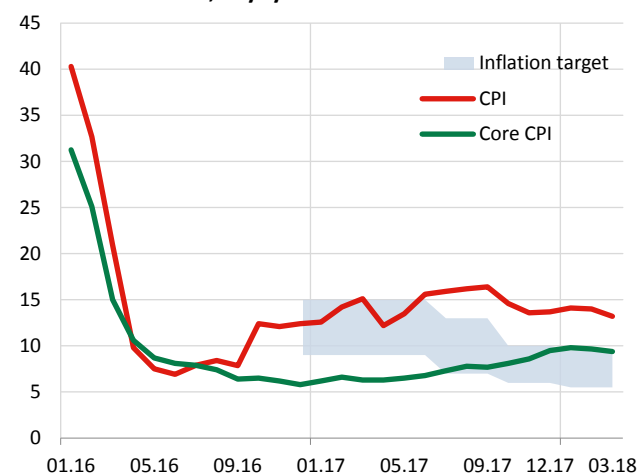
In the meantime, a tight monetary policy, the waning effect of administered price increases, the correction of oil prices, slower inflation in Ukraine's MTPs, and decelerating global food prices helped contain inflation pressure, including underlying pressure. So far, the effect of the tighter monetary policy has mostly been transmitted through the exchange rate channel, prompting the strengthening of the hryvnia since the end of January 2018.

#### Core Inflation

In March 2018, core inflation, at 9.4% yoy, remained almost at the level of December 2017 (9.5% yoy), which was broadly in line with the NBU's projections. Underlying inflation pressure remained significant, as evidenced, among other things, by alternative measures of core inflation.<sup>7</sup>

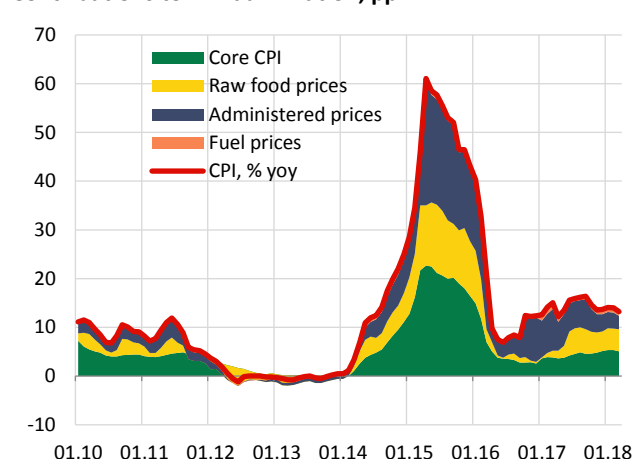
The high core inflation seen in Q1 2018 was largely driven by the rapidly rising cost of service prices (up by 14.9% yoy in March compared to 14.6% yoy in December 2017). Most types of services recorded high growth rates, with the largest contributions made by increases in dwelling maintenance fees, tuition fees, mobile phone tariffs, and prices for catering services. As in previous years, the high rates of growth for the service prices were largely attributed to rising consumer demand and increasing production costs. More specifically, in the latest business outlook survey, wholesale and retail companies, and companies in the postal and telecommunications sectors reported a substantially greater

Inflation Measures, % yoy



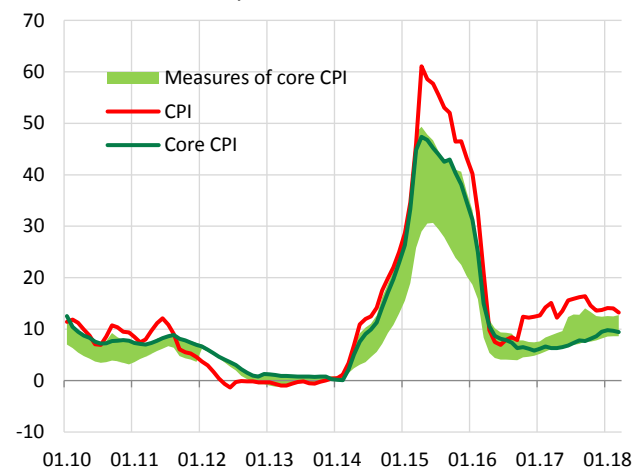
Source: SSSU.

Contributions to Annual Inflation, pp



Source: SSSU, NBU staff estimates.

Main Inflation Trends, %



\* Green field reflects a range of core inflation indicators

Source: NBU staff estimates.

<sup>7</sup> Read more in the January 2017 Inflation Report (pages 20-21).

influence of labor costs on the cost of their services. Indeed, 52% to 60% of respondents said in Q1 2018 that this factor was significant, compared to 42%–48% in the same period of 2017, and only 26% in 2016.

Rising prices for processed foods (by 11.8% yoy) were also a major contributor to core inflation in Q1. This also resulted from higher production costs, including through the secondary effects of growth in input prices, higher labor costs, and fuel price increases in the recent past. In addition, consumer demand was another important contributor with consumption of foods having one of the greatest income elasticity measures in developing economies (see, for instance, [Seale, 2003](#), [McEachern, 2009](#)). Specifically, a rise in the incomes prompts low-income households to increase mainly their consumption of foods in the short-term. A decline in animal husbandry output and large exports of animal products remained additional drivers of high meat and dairy product prices (20.8% yoy and 14.6% yoy respectively).

More robust consumer demand also drove non-food prices higher. Overall, however, the pace of growth in these prices remained moderate (4.0% yoy in March compared to 3.3% yoy in December 2017). Since these goods constitute mostly of imported items, the benign FX market conditions seen in February–March, and slower inflation in Ukraine’s MTPs helped contain the pace of growth in their prices. In particular, there was a noticeable slowdown in the prices for clothing and footwear (to 0.5%yoy).

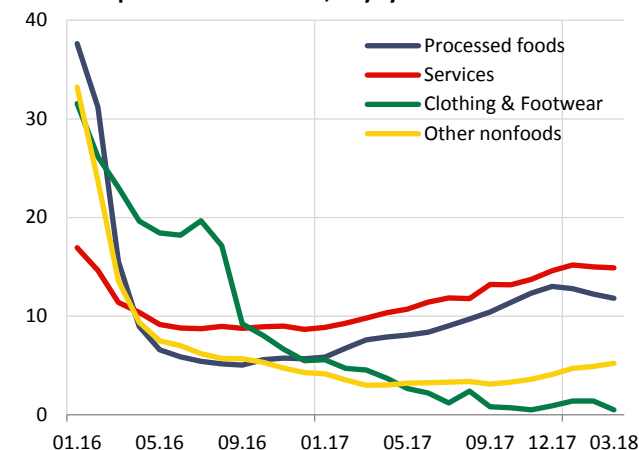
The worsening of inflation expectations that began in September 2017 continued into Q1 2018. Apart from the ongoing strong price growth, inflation expectations were also influenced by FX market fluctuations, the government’s plans to raise social standards further, and higher production costs. The business outlook survey conducted in Q1 2018 showed that businesses see labor costs, the hryvnia exchange rate, raw material and supply prices and energy prices having a greater impact on consumer inflation.

### Non-Core Inflation

Non-core inflation decelerated to 17.9% yoy from 19.4% yoy in December 2017, with all of its components contributing to the slowdown. However, inflation did not drop as quickly as the NBU projected, as raw food prices rose faster than expected.

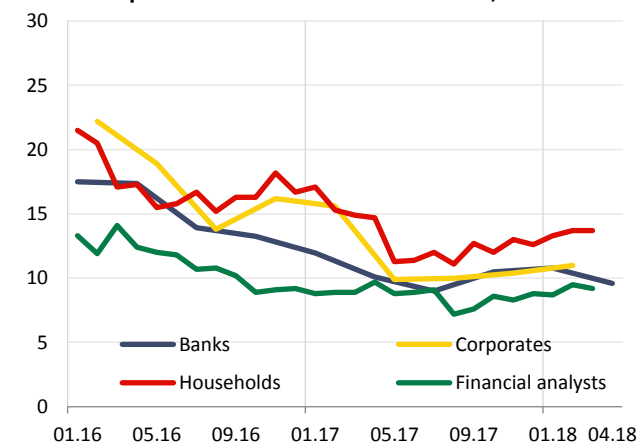
The contribution of the growth in administered prices decreased, as expected, with the price growth decelerating to 13.6% yoy, owing to, among other things, slower increases in utility prices, which were sharply raised in previous years to economically feasible levels. The growth in tobacco prices slowed to 33.7% yoy, as the excise tax on these products increased more slowly than early last year. This same factor contributed to slower growth in alcohol prices, down to 11.4% yoy, as in 2018 there was only a rise in the excise tax on grape alcohol, which is used in the production of cognac. The growth in bread prices and the price of transportation

### Main Components of Core CPI, % yoy



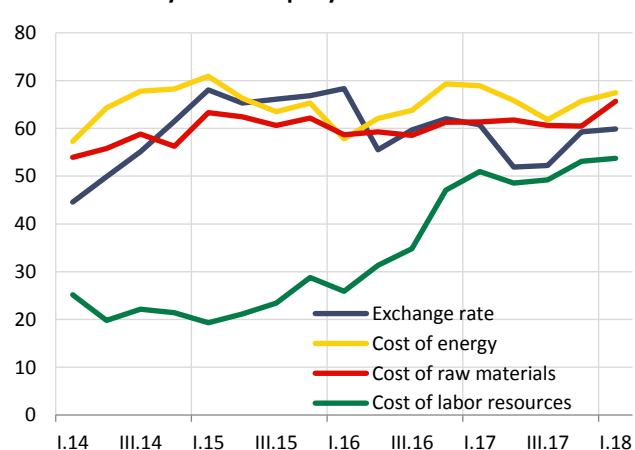
Source: SSSSU, NBU staff estimates.

### Inflation Expectations for the Next 12 Months, %



Source: NBU, GfK Ukraine.

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



Source: NBU, GfK Ukraine.

services also decelerated, to 17.7% yoy and 18.8% yoy respectively. In the meantime, the growth in the prices for postal services and landline phone service tariffs sped up to 78.0% yoy and 16.0% yoy respectively, driven, among other things, by further wage increases.

After accelerating in previous months, the growth in fuel prices slowed noticeably in March, to 18.9% yoy, lower than the NBU forecast. This was due to the downward adjustment in global oil prices in early 2018, and the favorable FX market conditions seen since late January.

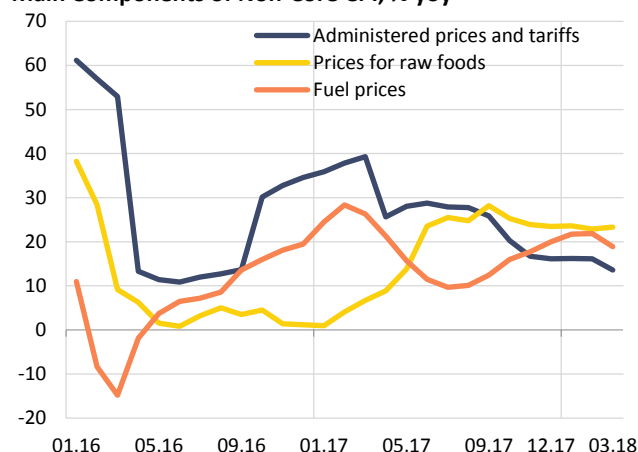
The growth in raw food prices slowed slightly, to 23.3% yoy, albeit less than anticipated. The persistently high prices of raw foods were significantly influenced by supply factors, specifically a decline in the output of some agricultural products, mainly meat (apart from poultry) and milk. Exports of some foods (in particular, butter, cheeses and eggs) continued to rise at a fast rate. Exports of vegetables, including borsch vegetables, and apples also showed robust growth. Additional factors included a drop in the global banana harvest, which pushed banana prices up by 34.4% yoy, and a low comparison base for some foods (eggs, in particular, as in the same period last year some countries had restrictions on exports of poultry products from certain Ukrainian regions, due to epizootic outbreaks). The growth in egg prices sped up to 61.7% yoy, while that in the prices for fruit, and borsch vegetables, accelerated to 40.6% yoy and 42.3% yoy respectively.

Meanwhile, the pressure from global prices on food prices eased, leaving the annual rate of growth in meat prices lower, at 22.3% yoy. The easing pressure, together with softer purchase prices seen in February–March, helped drive the deceleration in milk prices, to 17.7% yoy. Nevertheless, meat and milk prices continued to grow rapidly, being the main contributors to raw food inflation. A rapid recovery in consumer demand and the ongoing convergence of domestic food prices with those in neighboring countries (with overall Ukrainian food prices still lower than those in Ukraine’s trading partners), kept food prices from declining even more noticeably. Prices for some foods are also converging inside the country. Specifically, in regions where the average price of a product is lower than the national average, the price inflation for these products is usually higher.

In the meantime, high domestic prices for foods, on the back of weakening global trends and a strengthening of the hryvnia, boosted food imports. As a result, price growth slowed substantially for greenhouse vegetables, a large share of which are imported. The prices of sugar and buckwheat dropped further, driven by last year’s good harvest of sugar beets and buckwheat, and higher imports.

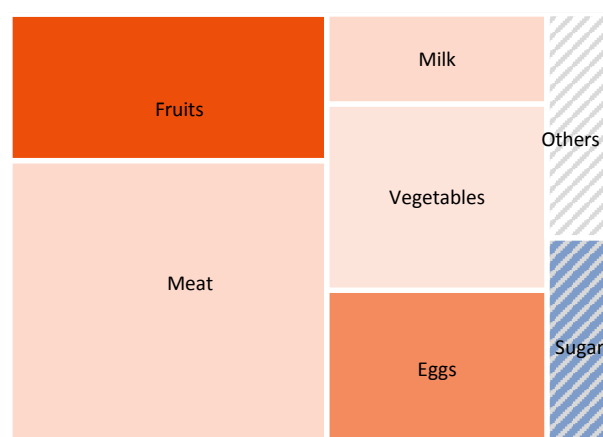
The pressure on food prices from producer prices also eased,<sup>8</sup> as the price growth in the production of foods, beverages and tobacco slowed to 10.3% yoy. This was also attributed to higher imports, a downward trend in global prices, and a drop

### Main Components of Non-Core CPI, % yoy



Source: SSSU, NBU staff estimates.

### Structure of Raw Food Price in March 2018



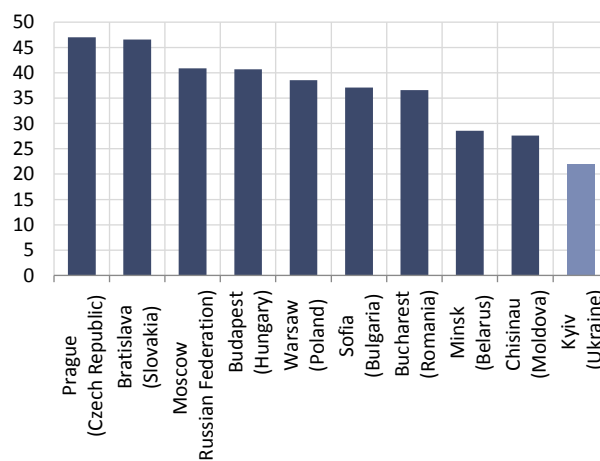
The size of tile represent contribution to annual change in raw food prices (shaded tiles represent components with a negative contribution)/

The color of tiles reflects the growth rates of export volumes (in USD) in January–March, % yoy



Source: SSSU, NBU staff estimates.

### Grocery Index\*, 2018



\* Groceries Index is an estimation of grocery prices in the city compared to New York City

Source: numbeo.com.

<sup>8</sup> Overall, the NBU estimates that price changes in the production of food, drinks, and tobacco products have a significant influence on the food product and non-alcoholic drink component of the Consumer Price Index (CPI). Read more in the July 2016 Inflation Report, pages 16-17.

in the selling prices for some agricultural products (the selling price index for agricultural products fell to 10.0% yoy in February). In particular, the growth in producer prices for meat products decelerated to 23.9% yoy, while those for dairy products and bread and farinaceous products slowed to 12.7% yoy and 13.2% yoy respectively. Conversely, the price growth in the production of beverages accelerated to 18.8% yoy, owing to, among other things, the cancellation of a discount on alcohol purchases for some vodka producers.

### Other measures of inflation

Following the spike in the producer price index seen in early 2018, pressure on prices eased in March. More specifically, price growth decelerated across most branches of the manufacturing and mining sectors, pushing down producer price inflation to 15.9% yoy, from 16.5% yoy in December 2017.

Easing pressure from external prices also helped contain producer price inflation. In particular, price growth in the mining industry slowed to 12.7% yoy. Accordingly, price growth in the metallurgy and in the production of coke and refined petroleum products decelerated. Price growth also continued to decelerate in the chemicals industry, to 9.6% yoy, on the back of lower global fertilizer prices compared to last year.

The high industrial inflation was mainly fueled by a hike in prices for electricity, gas, steam, and air conditioning, due to the National Commission for Energy and Utility Price Regulation raising electricity prices for non-household consumers by 5–11%. Another factor was a considerably lower share of cheaper nuclear power in total electricity production. This rise also impacted the production cost of goods that require high electricity consumption.

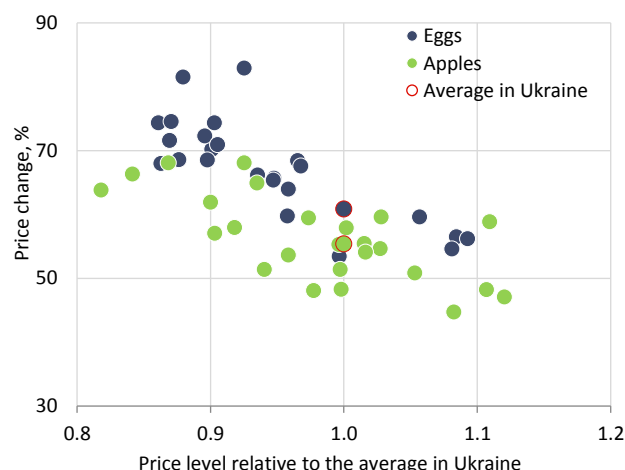
Strong investment demand propelled price growth in the machine-building industry, to 17.3% yoy, particularly prices in the production of motor vehicles, to 18.7% yoy. The price growth in the timber and printing industries also accelerated, to 12.2% yoy. The growth in the prices of construction work spiked, to 25.4% yoy in February, spurred by solid construction investment, FX market fluctuations, increased production costs, and poor weather conditions.

The 15% rise in prices for railway freight transportation seen in Q4 2017 put additional pressure on the price growth in the industrial sector.

In the business outlook survey conducted in Q1 2018 businesses said that production costs would continue to drive up producer prices. At 92.5%, the percentage of respondents who over the next 12 months expect an increase in prices for raw materials, supplies and services purchased to meet production needs, remained high.

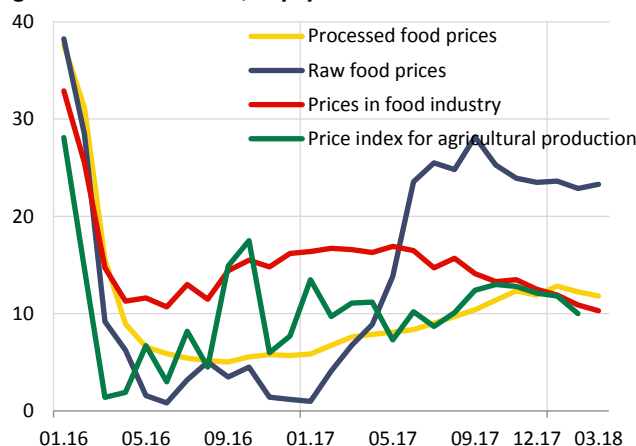
In Q4 2017, the GDP deflator remained virtually unchanged. Slower producer price inflation was offset by the faster growth in prices in construction and agriculture. Overall, the

**The Annual Change in Egg and Apples Prices in March 2018 and Their Price Level Relative to the Average in Ukraine in March 2017 by Regions of Ukraine**



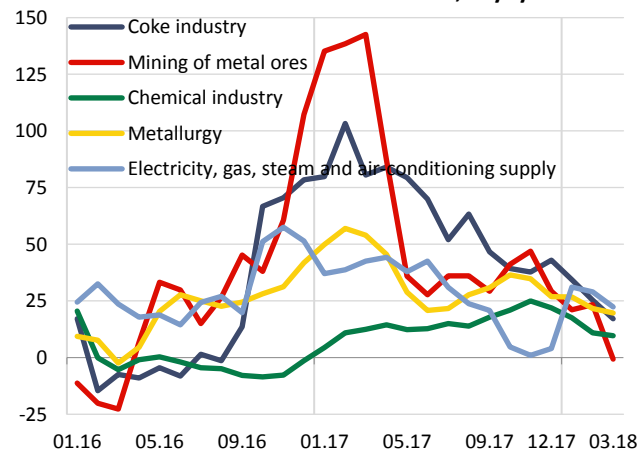
Source: SSSU, NBU staff estimates.

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



Source: SSSU.

**Producer Price Indexes in Select Industries, % yoy**

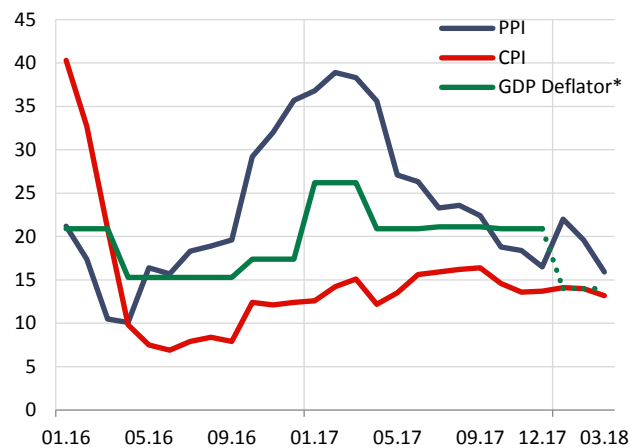


Source: SSSU.



GDP deflator remained high, mainly due to increased production costs, including labor costs, and faster growth in export prices amid robust external demand. The NBU expects a lower GDP deflator in Q1 2018, largely due to slower price increases in the manufacturing and mining industries, as well as in agriculture.

Select Inflation Indicators, % yoy



\* Data for the Q1 2018 – according to the NBU staff estimates

Source: SSSU.

## 2.2.2. DEMAND AND OUTPUT

Ukraine's economic growth accelerated in 2017 to 2.5% from 2.4% in 2016 despite the negative impact of the seizure of companies in the NGCA and the suspension of trade with companies located there, and also lower crop yields.<sup>9</sup> Notwithstanding the high comparison base owing to a record harvest of grains and oil crops in 2016, real GDP growth slowed moderately in Q4 2017, reaching 2.2% yoy. This was driven by further growth in consumer demand, fueled by rapid growth in real wages and higher average pension payments. In addition, investment grew at an accelerated pace in Q4, spurred by the optimistic business sentiment, improved financial results over the year, and a hike in capital expenditure from the budget late in the year.

Export volumes also grew faster. In particular, the decline in exports of ferrous metals slowed markedly, both due to the continued shift of metals companies to alternative raw material supplies, and the benign external environment. Growth rates increased for export volumes of certain foods (especially vegetables), timber, and timber products. However, volumes of imports also grew faster on the back of the rapid recovery of domestic demand and requirements for energy imports (particularly, coal imports) that exceeded the previous year's level. As a result, the negative contribution of net exports to the annual change in GDP grew to 6.5 pp.

In early 2018, economic activity in the real sector continued to pick up thanks to higher household incomes, adverse weather conditions, and positive business expectations. Along with that, the bad weather in late Q1 was a restraining factor. Nevertheless, the NBU estimates GDP growth at 2.3% yoy in Q1 2018.

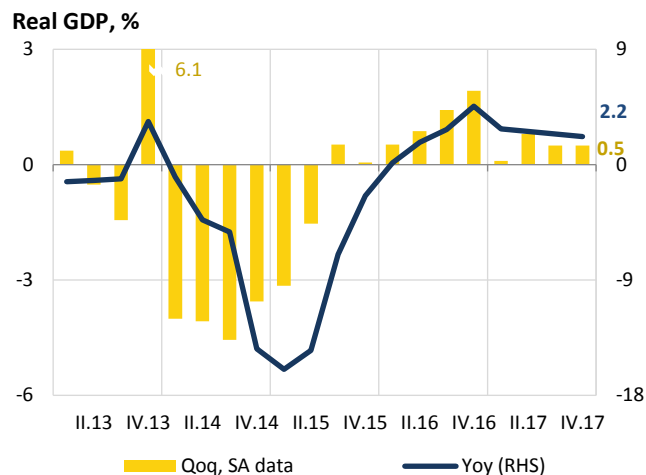
### Aggregate demand

In Q4 2017, real GDP increased by 2.2% yoy and 0.5% qoq sa.

At the end of the year, the effect of private consumption strengthened (the growth of household final consumption expenditure accelerated to 10.7% yoy), due both to rapid wage growth and an increase in average pension payments. Specifically, there was a surge in the growth of spending on food products (to 15.5% yoy), clothing and footwear (20.8% yoy). Spending on household goods and healthcare continued to grow at a high pace (to 12.8% yoy and to 13% yoy respectively).

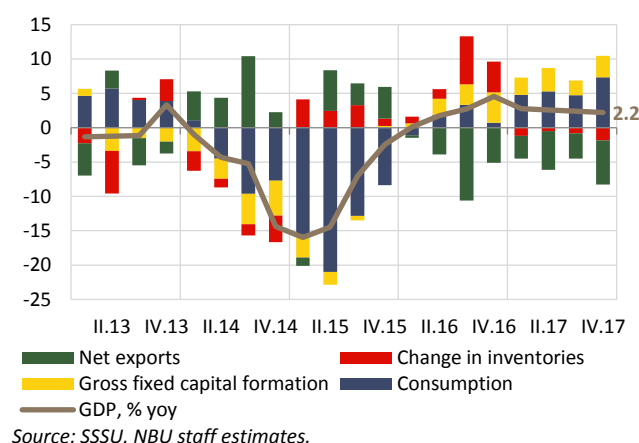
In contrast, the growth in public-sector social spending decelerated (to 3.2% yoy), in particular due to the healthcare, law enforcement, security and judicial sectors, which was mostly due to a higher comparison base. This also accelerated the decline in the gross value added of the public administration and defense sectors.

As in previous periods, investment remained one of the main contributors to economic growth. Gross fixed capital formation rose at a faster pace (16.7% yoy in Q4 2017). Investment



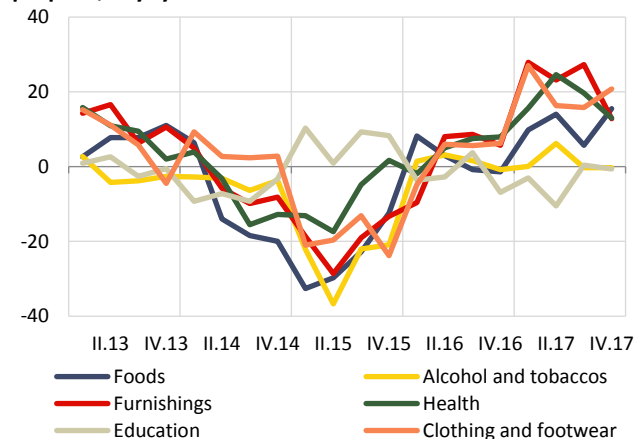
Source: SSSU.

### Contributions to Annual GDP Growth, pp



Source: SSSU, NBU staff estimates.

### Real Final Consumption Expenditure of Households by purpose, % yoy



Source: SSSU, NBU staff estimates.

<sup>9</sup> In March 2018, the SSSU revised the GDP data for 2016–2017. The revised data show that the economy of Ukraine was recovering faster than previously forecast due to a larger pickup in domestic consumer demand.

growth was supported by strong business expectations and the continued improvement of the financial performance of businesses, as well as higher budget capital expenditure and investments in some state-owned enterprises.

In contrast to previous years, in 2017 budget-funded investment grew markedly, led by increased local-budget spending (the share of funds of budgets of all levels among all sources of investment funding went up to 12.7% in 2017, whilst in 2014 it was about 3%). This reflected a major rise in capital budgetary spending on investment programs and regional development projects, primarily on road and transport infrastructure. However, as before, companies mainly used their own funds for investment (almost 70%). Bank loans and foreign investment remained a minor source of investment financing.

In Q4 2017, almost half of capital investment was allocated to the construction of non-residential buildings and engineering infrastructure, and another third to the re-equipment of factories (investment in machinery and equipment). Renewal investment in means of transport grew at a fast rate (by 50.4% yoy), which resulted in an increase in its share of overall investment to 12%. This was partly connected to [the upgrading of Ukrzaliznytsia's railcar fleet](#). Besides, investments continued to rise in intellectual property, specifically in computer software and databases.

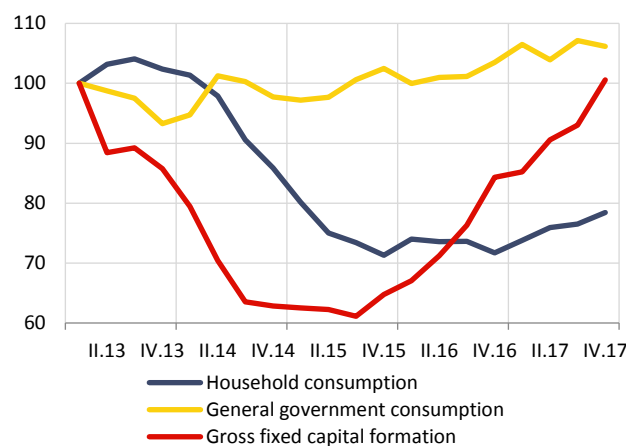
In Q4 2017, growth in capital investments was broad-based across sectors; the highest growth rate was seen in the service sector (healthcare, education, transport), owing to significant underinvestment in these sectors in previous years. Investment surged in postal and courier services (by 4.5 times yoy), in particular due to [Ukrposhta's issue of domestic bonds](#) to raise funding for its investment program. Also, investment growth sped up in the industrial sector, primarily driven by the mining and metallurgy, while high rates of investment were maintained in agriculture.

Moreover, export growth accelerated (to 8.8% yoy) amid favorable global market conditions, strong external demand, and a rise in Ukrainian goods exports to EU markets. In particular, export volumes of certain foods, such as vegetables, as well as timber and timber products surged. The decline in exports of ferrous metals slowed significantly (to 1.3% yoy), driven by high global prices for metals, and the further shift of Ukrainian businesses to other sources of raw material supplies following the disruption of production and trading ties with the NGCA. At the same time, the disruption of ties with the NGCA pushed up imports, both energy imports (primarily coal) and consumer imports. As a result, the negative contribution of net exports to GDP change grew compared to the previous quarter (to 6.5 pp).

### Output

Positive production trends were observed in almost all sectors in Q4.

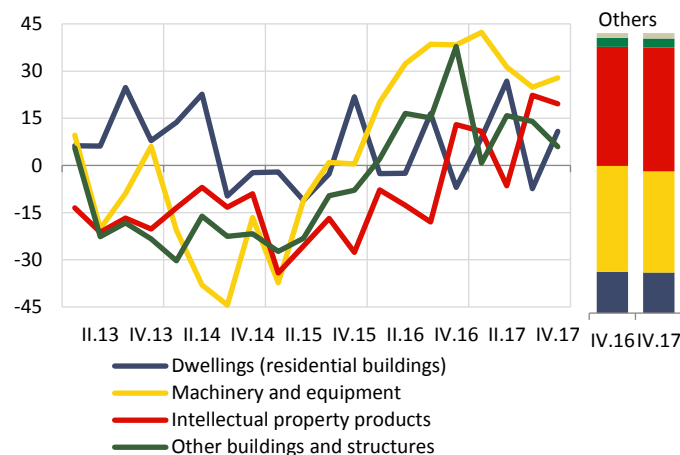
### Investment and Consumption (sa indices: I.2013=100)



Source: SSSU, NBU staff estimates.

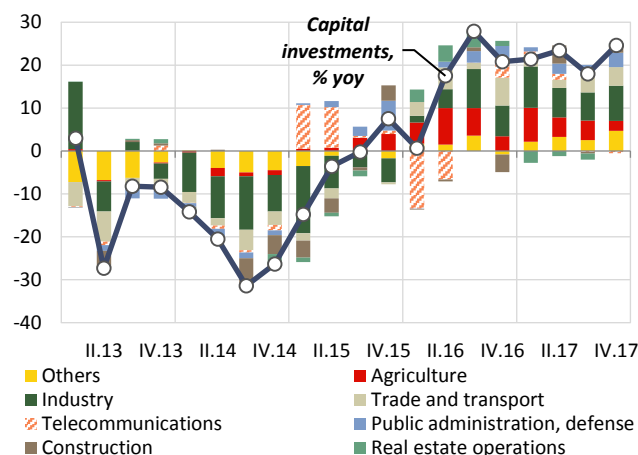
### Gross Fixed Capital Formation by Types of Non-financial Assets, % yoy

### Structure of Fixed Capital Formation, pp



Source: SSSU, NBU staff estimates.

### Contributions to Annual Capital Investments Growth, pp



Source: SSSU, NBU staff estimates.

The performance of the manufacturing sector improved: its growth accelerated to 6.1% yoy. In the metallurgy, the output of cast iron, steel and ferrous alloys declined more slowly (down to 3% yoy) as metals companies resumed operations or used more capacity,<sup>10</sup> primarily owing to a favorable external environment. Chemicals production continued to grow at a fast pace, particularly on account of larger output by the Karpatnaftokhim plant,<sup>11</sup> which resumed operations in the middle of the year after many years standing idle.

The performance of most other branches of the manufacturing sector also improved. Growth accelerated in the machine building industry, particularly thanks to a rise in the output of computers, electronics and optical products (especially military goods), wires, cables, electrical-installation equipment (including supplies for leading European car producers), and transport vehicles. Production of rubber and plastic goods strengthened, mainly due to increased output of plastic products. Moreover, the decline in the mining sector slowed, driven by increased production of gas coal.

Strong consumer demand, higher exports, and better industrial indicators improved the performance of the trade (up to 7.9% yoy) and transportation sectors (up to 3.3% yoy). Construction continued to grow at a fast pace (22.9% yoy), reflecting high investment activity.

On the other hand, the decline in the GVA of agriculture sped up to 6.4% yoy, owing to the lower harvest of corn and sunflower compared to the previous year. A further deterioration in animal breeding was also an additional negative factor for agriculture, mainly because of lower production of milk and meat, and decreased numbers of cattle and pigs.

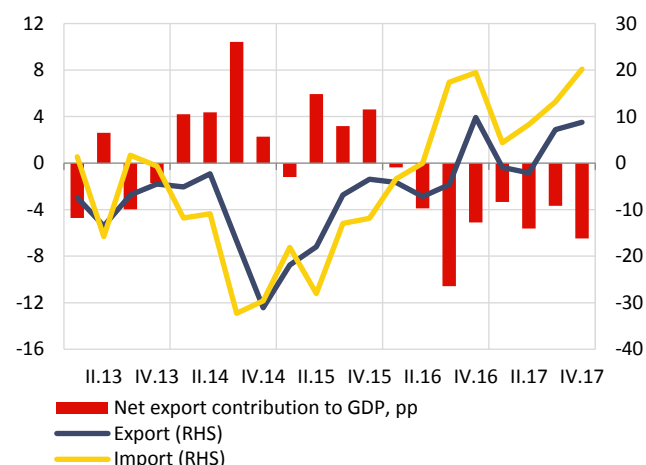
Supported by higher household incomes, the service sector showed growth across all activities, apart from the financial and insurance businesses, and public administration and defense. In particular, the GVA of education grew for the first time since Q2 2014 thanks to higher spending on education from budgets of various levels.

### Estimates for Q1 2018

The NBU estimates real GDP growth in Q1 at 2.3% yoy. Growth was primarily underpinned by the continued rise in household incomes and a sustained favorable external environment. The last year's lower base of comparison, driven by the trade blockade of the NGCA in 2017, was an additional factor that will be fully manifested starting in Q2. At the same time, temporary factors, namely worse weather conditions in late February and in March, somewhat restrained the economic revival, especially in transport and construction.

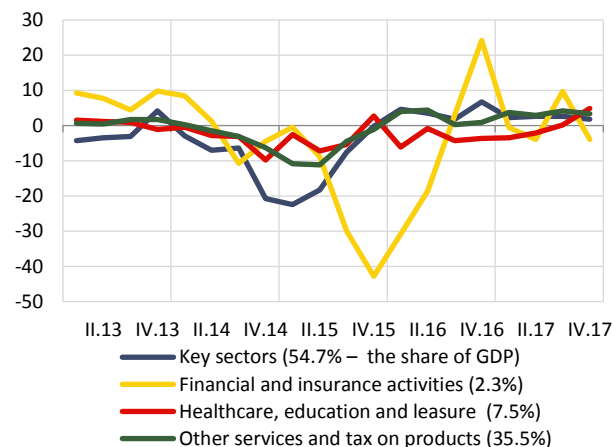
Domestic demand remained the main driver of economic growth. Private consumption was supported by further increases in wages and social standards, including the rise in pensions late last year and the minimum wage hike since the start of 2018, as well as by better consumer expectations of

### Exports and Imports of Goods and Services, % yoy



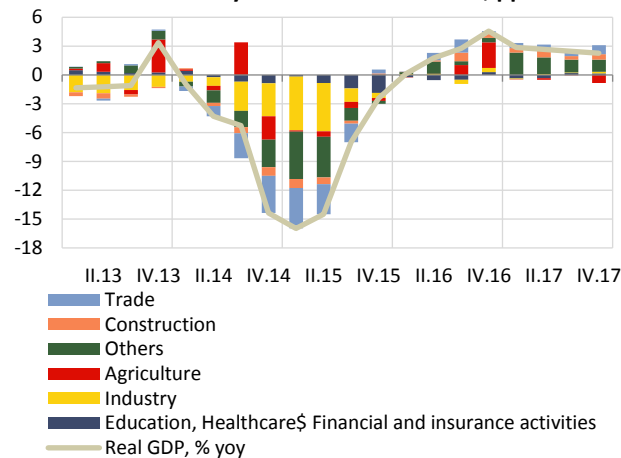
Source: SSSU, NBU staff estimates.

### GVA by the Groups of Sectors, % yoy



Source: SSSU, NBU staff estimates.

### Annual GDP Growth by Sectoral Contributions, pp



Source: SSSU, NBU staff estimates.

<sup>10</sup> In July, Dneprovskiy Metallurgical Plant returned to normal operations after cutting production and shutting down during 2017.

<sup>11</sup> The plant produces ethylene, polyethylene, and PVC for the domestic market and for export.



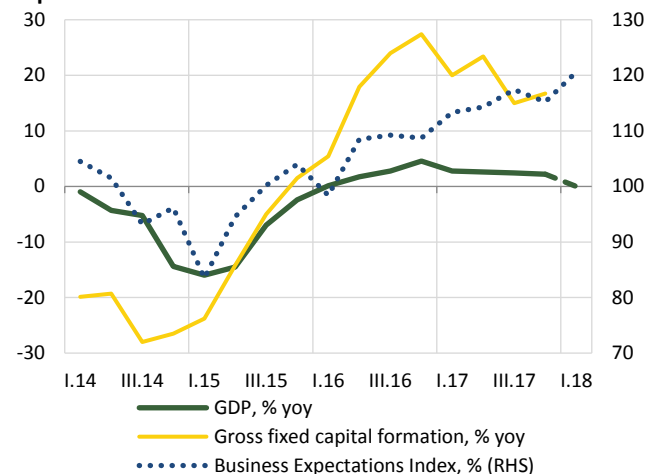
households<sup>12</sup> compared with the same period of 2017. The continued growth in investment was reflected in the faster increase in the output of the machine building industry, particularly the output of automobile and railway machinery.

In January–February 2018, exports continued to grow, largely driven by higher exports of some food products, timber, and timber products, as well as larger export volumes of ferrous metals. At the same time, consumer goods imports continued to grow rapidly, which resulted in a sustained negative contribution of net exports to the change in GDP.

In January–February 2018, the industrial output figures were slightly higher than last year, thanks to the continued production ramp-up by some chemical companies and higher output of the metallurgy and mining amid a favorable external environment and the lower comparison base of 2017, which was due to the trade blockade with the NGCA (since late January 2017). Food production growth continued to slow modestly due to the further decrease in the output of oils and animal fats, drinks, meat, bread and bakery goods, and tobacco products.

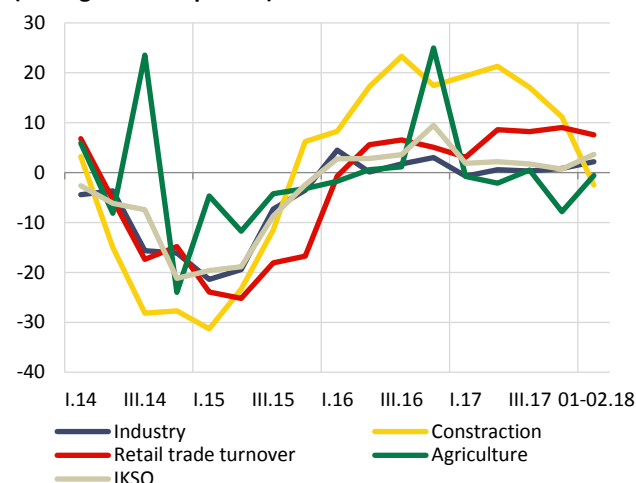
In January–February 2018, there was a minor decline in volumes of agricultural production,<sup>13</sup> driven by the continued decrease in milk output and a reduction in cattle numbers, as well as by slower growth in egg production.

**Real GDP\*, Gross Fixed Capital Formation and Business Expectations**



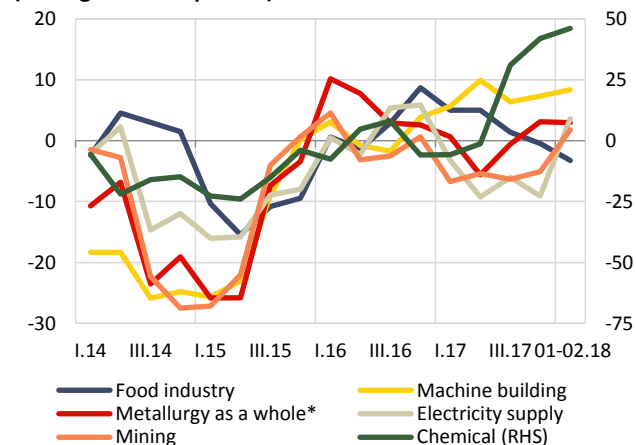
\* Q 1 2018 – NBU estimates  
Source: SSSU, NBU staff estimates and surveys.

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



Source: SSSU, NBU staff estimates.

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



\* - metallurgical production and production of finished metal  
Source: SSSU, NBU staff estimates.

<sup>12</sup> According to a survey by GfK Ukraine.

<sup>13</sup> Agricultural production volumes for January–May reflect the situation in animal breeding only.

## 2.2.3 LABOR MARKET AND HOUSEHOLD INCOME

Revived economic activity and improved business expectations (including with regard to employment) along with more intensive migration processes drove up demand for labor, both in 2017 and in early 2018. However, the unemployment rate (ILO methodology) slightly rose in 2017 (to 9.5%). The persistently high unemployment rate against a backdrop of rising labor demand reflected a significant mismatch between labor demand and supply, as well as a sharp decline in the number of part-time employees (which might be due to increased labor costs).

Rising wages were the main driver behind an acceleration in the growth of nominal household income (to 25.7% yoy in Q4 2017). Higher pension payments, raised as part of the reform of the pension system, were an additional significant stimulus (social benefits increased by 26.2% yoy in Q4). Coupled with a slowdown in headline inflation in Q4 2017, this contributed to the accelerated growth of real disposable household income (by 9.9% yoy) and stimulated consumption.

### Labor Market

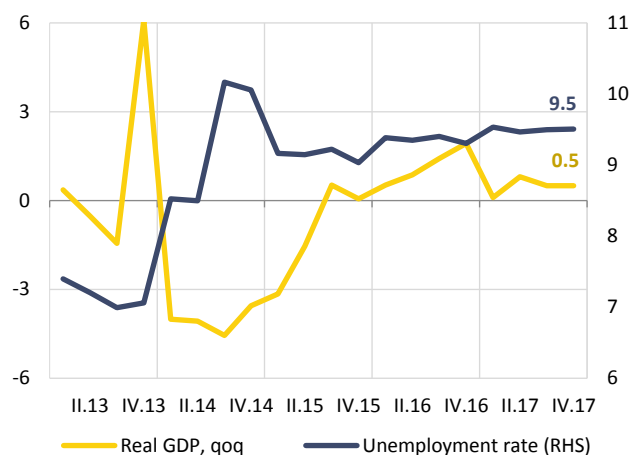
Demand for labor in the labor market has remained strong since the beginning of 2018, as seen in data from the SESU and job search websites. The number of vacancies in January-February 2018 rose by 8.6% yoy and 2.5% yoy, respectively. Also, the SESU reported that skilled manual workers and workers for the maintenance, operation and control of technological equipment were sought in every third vacancy. According to job search websites, an increase in the number of vacancies was observed in most sectors, especially in the financial and banking sectors (particularly as retail lending picked up), and also in accounting and auditing. Higher demand for blue-collar and manufacturing workers was also evident.

[Business outlook surveys](#) also pointed to increased demand for labor. In particular, in Q1 2018, business expectations for changes in staff quantity in for the next 12 months improved (mostly in construction, trade and manufacturing), and this contributed significantly to the growth in the number of vacancies in those economic sectors.

However, labor supply exceeded demand in several sectors due to the persistent regional and occupational mismatches. According to job search websites, the ratio between the number of CVs and the number of job vacancies in January-February 2018 remained the highest in the legal sector, secretaries and paperwork, education and academia, and financial and banking sector.

The improvement in business expectations, the sustained high demand for labor, as well as the reform of the pension system encouraged employees to enter official employment, and also influenced the trends for full-time employees,<sup>14</sup> which account for almost half of all those employed. In January 2018, for the first time in five years there was an annual increase in the number of full-time employees (by 0.3%), although in January-February that number remained virtually unchanged compared to the corresponding period in the previous year.

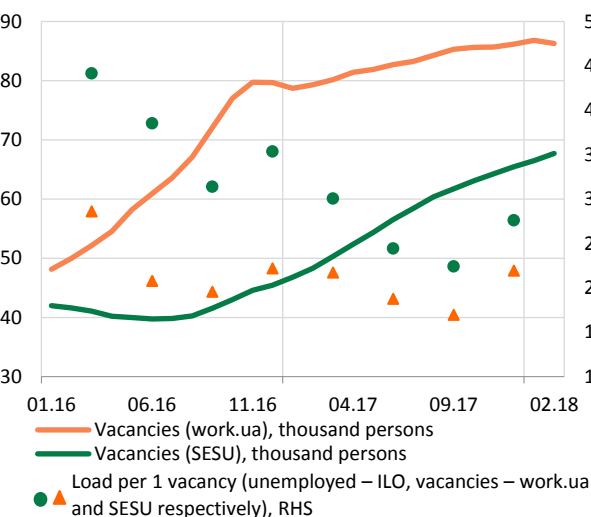
ILO Unemployment\* and Real GDP, sa, %



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

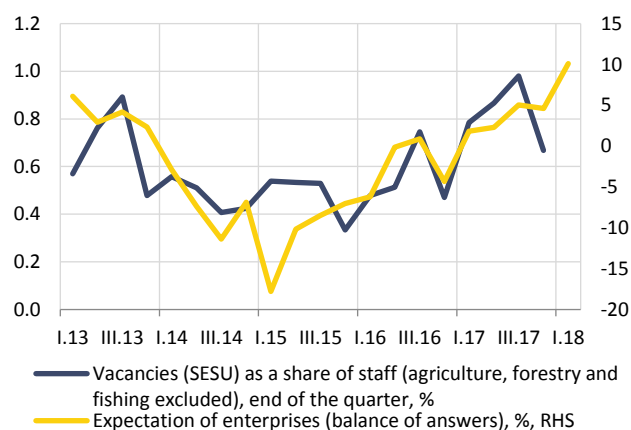
Source: SSSU, NBU staff estimates.

Vacancies SESU and on work.ua (average for moving year), Load per 1 Vacancy (for the quarter)



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

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



\* Agriculture, Forestry and Fishing excluded

Source: SSSU, SESU, NBU, NBU staff estimates.

<sup>14</sup> Full-time employees include employees of legal entities and their affiliates with 10 or more employees.

In Q4 2017, the number of the economically active population continued to decrease at a moderate pace (down by 0.6% yoy to 17.7 million people). The further decrease in the economically active population was largely attributed to demographic processes. This tendency could have also been reinforced by labor migration. Thus, the biggest decline in the economically active population in 2017 was recorded among young people (aged 15–29) – both women and men. Labor migration could also lead to the increase in the inactive population.<sup>15</sup>

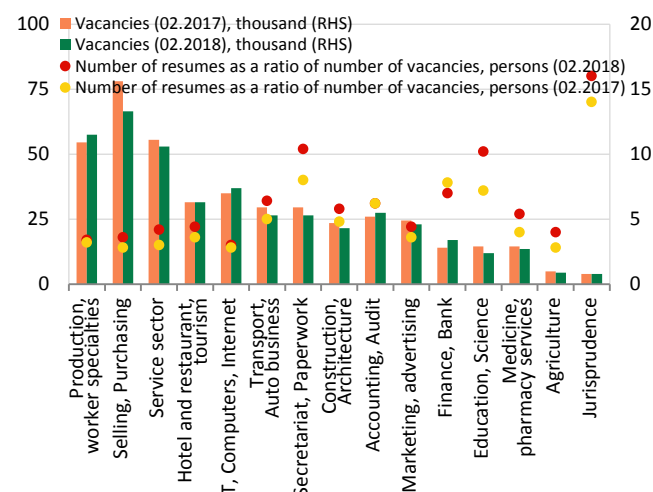
The number of employed people also declined (by 0.9% yoy in Q4 2017, to 16 million people). The decrease was recorded primarily among women (by 2% yoy), which could have been caused both by the intensified labor migration and a reduction in the number of staff working part-time (day or week). Thus, according to the SSSU, the number of workers moved to part-time workday (week) due to economic reasons decreased in Q4 2017 by 72.2% yoy (to 140,000 people or 1.8% of staff), while the reduction for the whole of 2017 stood at 63.1% yoy. Part-time employment peaked in 2014–2015, which could be explained by the fact that businesses strove to retain the most valuable employees in times of crisis. Simultaneously, with the increase in the minimum wage, businesses became more cost-burdened, which may have resulted in a reduction in part-time employment.

The unemployment rate, according to the ILO’s methodology (as a percentage of the economically active population aged 15–70), increased to 9.9% in Q4 2017. Such an increase was attributable to a seasonal drop in the labor demand, especially in transport and agriculture. The seasonally adjusted unemployment rate held steady, but remained high (9.5%). Overall, the unemployment rate in 2017 increased compared to the previous year by 0.2 pp, to 9.5%. The highest unemployment rate for the year was recorded among young people aged 15–24 (18.9%), experiencing substantial difficulty in finding a job after completing their education. By regions, Luhansk and Donetsk oblasts registered the highest unemployment rates (16.6% and 14.6% respectively). Rising unemployment rate, despite the revival of economic activity and high labor demand, shows that there are considerable mismatches between labor supply and demand.

### Household Income and Savings

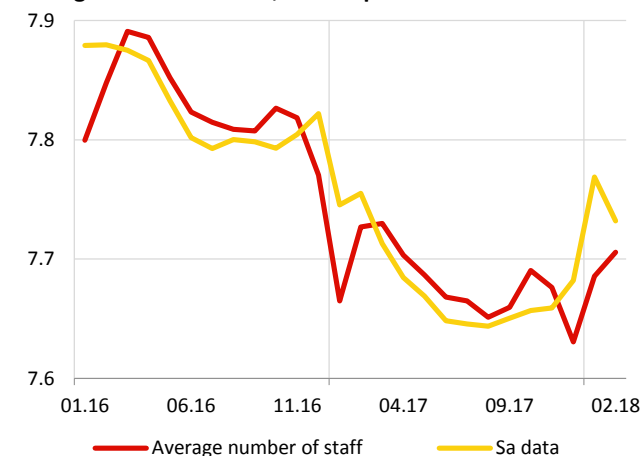
In Q4 2017, the growth of household nominal income continued to accelerate (to 25.7% yoy). This was mainly due to the largest income component – wages,<sup>16</sup> the share of which increased by 3 pp compared to the corresponding period last year, to 42.1%. At the same time, in Q4 2017, the growth of social benefits (to 26.2% yoy amid higher average pension payments as part of the reform of the pension system) and other current transfers (to 19.5% yoy, including due to a rise in private remittances from abroad) accelerated. The growth rates of nominal income from other sources remained moderate (income from business – profit and mixed income increased by 14.9% yoy, and property

### Vacancies on www.work.ua, the Number of Resumes as a Ratio of the Number of Vacancies by Types of Activities (February 2018)



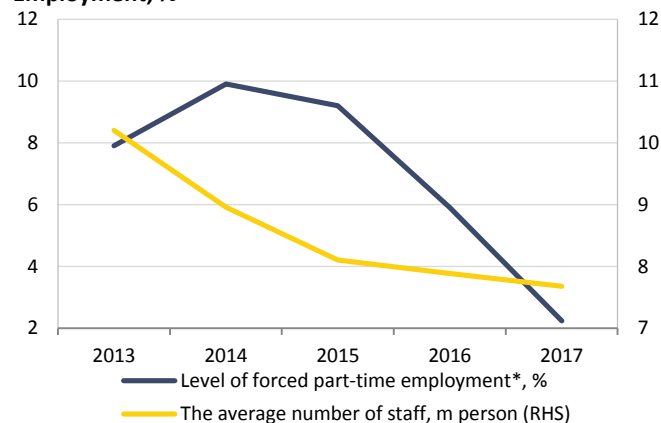
Source: www.work.ua, NBU estimates.

### Average Number of Staff, million persons



Source: SSSU, NBU staff estimates.

### Average Number of Staff and Level of Forced Part-Time Employment, %



\* Workers moved to the part-time workday (week) due to economic reasons, % of average number of staff  
Excluding Crimea and Sevastopol since 2014 and also temporarily occupied territories on Donetska and Luhanska oblast since 2015  
Source: SSSU, NBU staff estimates.

<sup>15</sup> This category includes individuals with no desire and no need to work (pensioners, students, and homemakers), people discouraged from the job search, those who do not see a suitable job available, and those who do not know how and where to search for a job. Read more about the structure of the population in the *Unemployment Level by ILO Methodology* box in the September 2015 Inflation Report, pages 24–25.

<sup>16</sup> The growth rates of wages within the structure of income and the average nominal wage (per one employee) differ due to the different calculation methodologies used. Wages as part of household income are calculated based on a larger sample, which includes, among other things, armed forces pay and allowances, temporary disability payments, and self-employment income, as well as other payments that are not included in the calculation of the average nominal wage per employee.

income was up by 6.1% yoy). All of this supported consumer demand in late 2017.

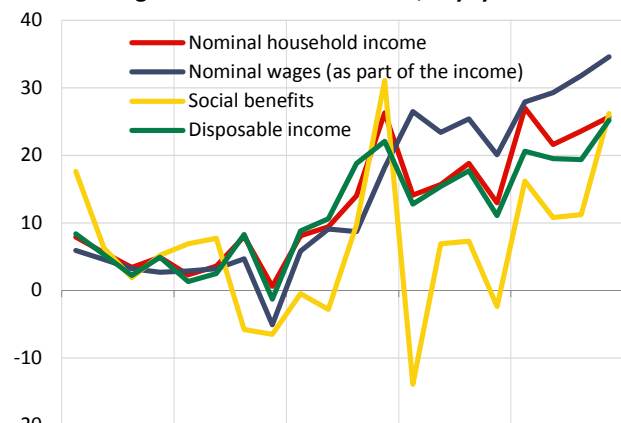
Overall in 2017, household nominal income grew by 24.4% compared to the previous year, primarily driven by rising wages.

In Q4 2017, the growth of disposable household income at a higher pace than in previous quarters (by 25.2% yoy), and a slowdown in headline inflation caused real disposable household incomes to accelerate (by 9.9% yoy). Overall in 2017, real disposable household income grew by 6% yoy.

At the same time, household savings continued to decrease. Sales of foreign currency by households continued (in 2017, household FX savings declined by UAH 56.6 billion) despite a pickup in deposits and household borrowing. Thus, households' propensity to save in seasonally adjusted terms remained negative.

In Q1 2018, household incomes continued to grow. The increase in the minimum wage (by 16.3% since the beginning of 2018) and the continuing labor migration bolstered high growth rates of wages. In turn, the rising pension payments due to the reform of the pension system in Q4 2017 supported persistently high growth rates in one of the largest components of household income – social benefits (the average monthly pension as of 1 April 2018 was 37.4% higher compared to the previous year).

### Nominal Wages and Household Income, % yoy

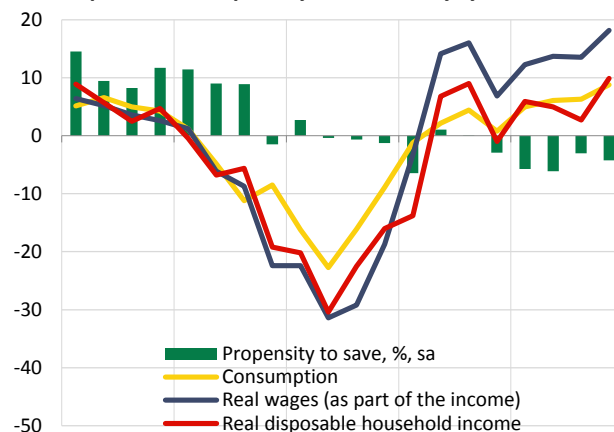


II.13 IV.13 II.14 IV.14 II.15 IV.15 II.16 IV.16 II.17 IV.17

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

Source: SSSU.

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

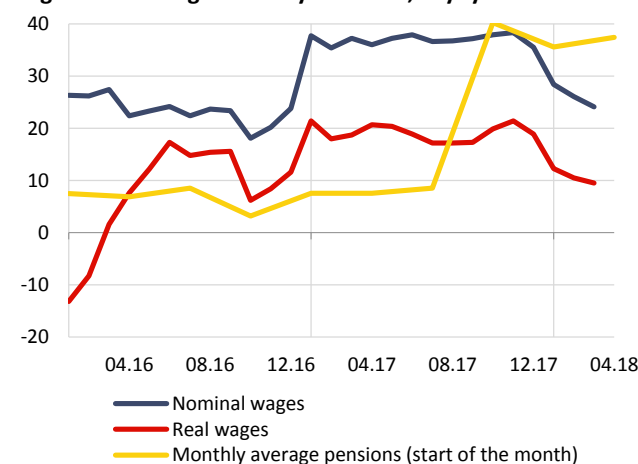


II.13 IV.13 II.14 IV.14 II.15 IV.15 II.16 IV.16 II.17 IV.17

\* Savings to disposable household income ratio

Source: SSSU, NBU staff estimates.

### Wages and Average Monthly Pensions, % yoy



Source: SSSU, PFU.



## 2.2.4. FISCAL SECTOR

Following a strong fiscal impulse late last year, the fiscal policy was tighter in early 2018, as is typically the case. The consolidated budget recorded both an overall (UAH 15.3 billion) and a primary surplus (UAH 27 billion), as expenditures increased modestly, even though social standards were raised further (albeit not as dramatically as in 2017).

In the meantime, budget revenues grew at a rather moderate pace, primarily due to temporary factors, such as the finalizing of changes to the administration of a number of major taxes, such as the value added tax and the corporate income tax.

Public and publicly guaranteed debt fell by 3.4% ytd, to UAH 2,069 billion as of late February 2018, mainly owing to large repayments.

### Revenues

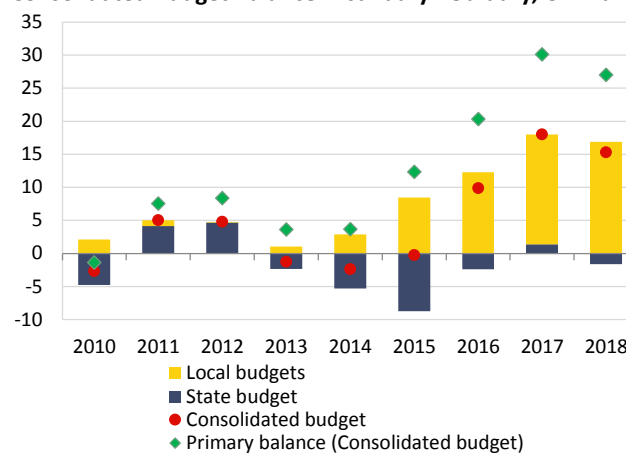
Despite a favorable macroeconomic backdrop, consolidated budget revenues increased moderately in January–February 2018. This was due to the effect of temporary factors – legislative changes to taxation that required the finalization of certain procedures. The weak performance of some economic sectors was an additional factor.

Modest growth in VAT receipts resulted from an increase in VAT refunds (by 38.5% yoy), and changes in the legislation that governs the mechanism for managing VAT risks.<sup>17</sup> Growth in receipts was fueled by a further expansion in retail trade, fairly high imports, and the weakening of the hryvnia seen in January. Those same factors contributed to the rise in revenues from international trade duties, which kept growing rapidly. Personal income tax proceeds grew at a fast pace, spurred by the sustained growth in nominal wages.

In the meantime, corporate income tax receipts declined, due to changes in the administration of the tax. These changes slightly altered the deadlines for submitting corporate income tax reports by large taxpayers and, consequently, the dates on which the tax is due.<sup>18</sup>

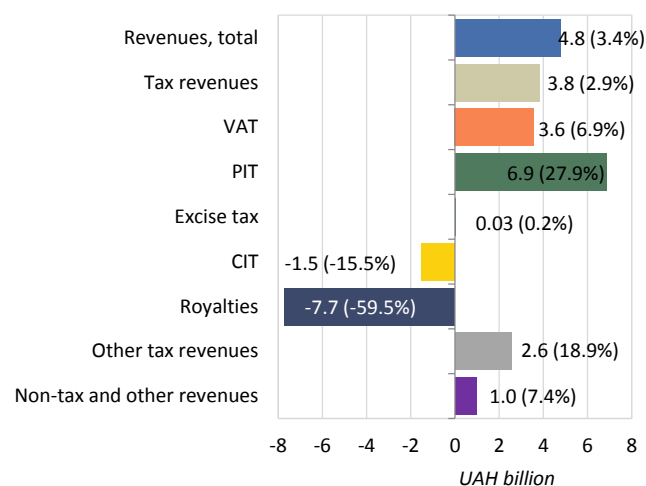
In annual terms, the consolidated budget's excise tax proceeds in January–February 2018 remained virtually at the previous year's level. This was mainly due to a drop in excise tax proceeds from manufactured goods (by 10.5% yoy), resulting from a cut in the output of tobacco products (by 27.4% yoy in January–February). Despite there being an increase in the

Consolidated Budget Balance in January–February, UAH bn



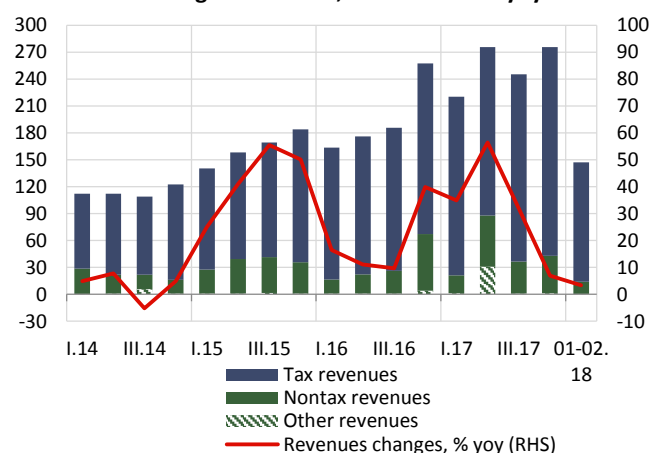
Source: STSU, NBU staff estimates.

Absolute and Relative Annual Change in Consolidated Budget Revenues, January–February 2018, UAH bn and % yoy



Source: STSU, NBU staff estimates.

Consolidated Budget Revenues, UAH bn and % yoy



Source: STSU, NBU staff estimates.

<sup>17</sup> In December 2017, the mechanism was suspended in order to make a consensus decision that would not pose significant risks to all business segments. On 21 February 2018, Ukraine's Cabinet of Ministers approved Resolution No. 117, which resumed the mechanism's operation.

<sup>18</sup> The submission deadline for the declaration of the income tax for enterprises that pay a tax on a quarterly basis has been changed (from the previous 40 days after the reporting (tax) period to the current 60 days), but the declaration is given on a cumulative basis. That is, the submission deadline for the declaration was changed to March 1 from February 9 in 2017. This mainly concerned large taxpayers whose number is relatively small, but they provide sizable receipts from this tax.

domestic production of gas and oil, royalty revenues declined, driven by changes in the administration of the tax.

Non-tax revenues in January–February 2018 rose, driven by growth in own receipts of budget institutions. However, growth in non-tax revenues was moderate, due to state-owned companies transferring a slightly smaller portion of their profit to the state budget.

### Expenditures

Unlike last year, expenditures increased moderately in January–February 2018. This was due to, among other things, low transfers to the Pension Fund, substantially slower growth in current transfers to enterprises, and a drop in expenditures on debt servicing.

The reduction in transfers to the Pension Fund was mainly attributed to the advance payment of pensions made in December 2017, as well as the rapid growth in revenues from the social security contribution. In addition, expenditures on utility benefits and subsidies for households were significantly smaller than last year. An increase in nominal household incomes against the backdrop of a moderate rise in utility tariffs in 2017 was primarily responsible for this trend. Another contributor was last year's high comparison base – in early 2017 there was a surge in expenditures on household subsidies, resulting from the hike in utility tariffs seen in the latter half of 2016.

Debt servicing expenditures decreased as expected, driven by lower spending on domestic debt servicing. This is primarily attributable to the reprofiling of NBU-held domestic government bonds that took place in late 2017.

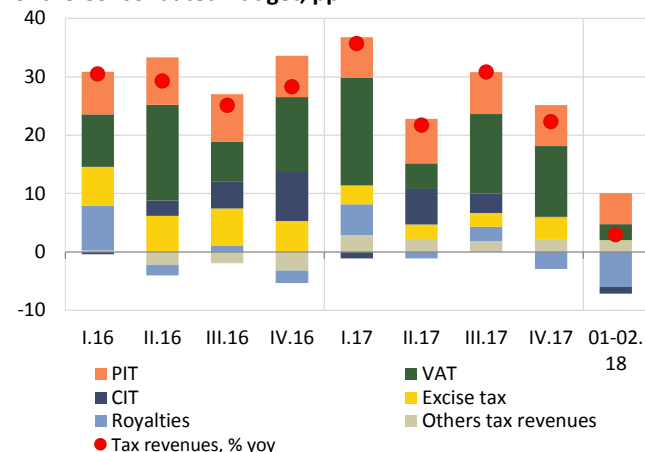
Conversely, wage expenditures increased at a relatively fast pace, spurred by a 16.3% rise, to UAH 3,723, in the minimum wage from the beginning of 2018. Spending on the consumption of goods and services, and on capital expenditures, continued to grow rapidly, although the share of the latter of total expenditures remained small. As is typically the case, capital expenditures were made primarily from local budgets.

### Balance

The consolidated budget ran a surplus of UAH 15.3 billion in January–February 2018. The positive balance was generated by local budgets, which recorded a surplus of UAH 16.9 billion, with the state budget running a deficit of UAH 1.6 billion.

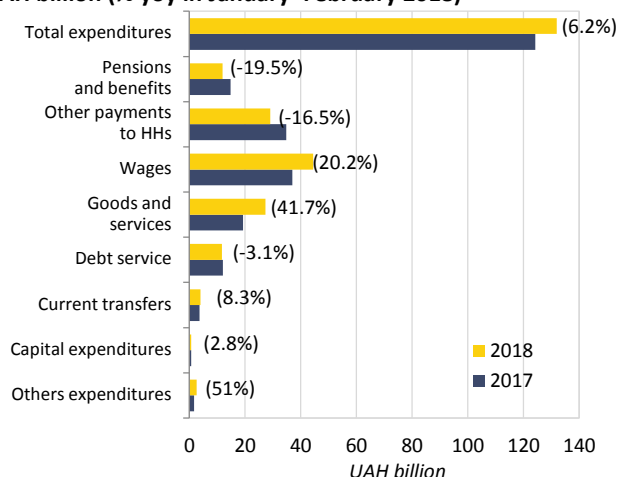
In early 2018, the government continued to issue short- and medium-term domestic government bonds, including foreign currency bonds. The funds raised through the emission of these bonds were used to finance the state budget deficit, and to redeem previously issued securities. Over that period, external borrowing was low, and was less than debt repayments.

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



Source: STSU, NBU staff estimates.

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

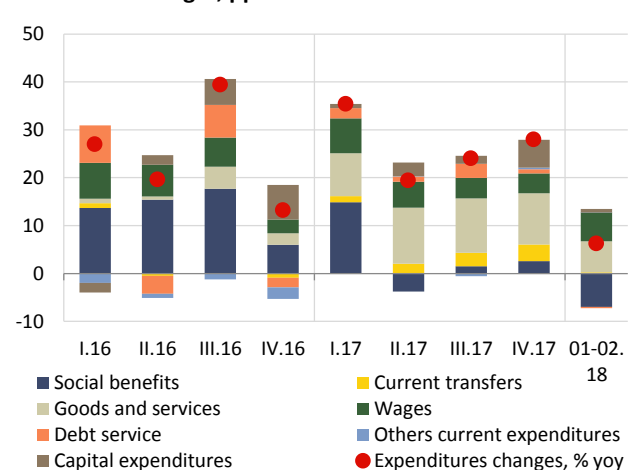


\* Other payments to the population include benefits and subsidies to households for utility payments, scholarships, etc.

\*\* Compensations to employees include wages, allowances for the Ukrainian military personnel, and SSC

Source: STSU, NBU staff estimates.

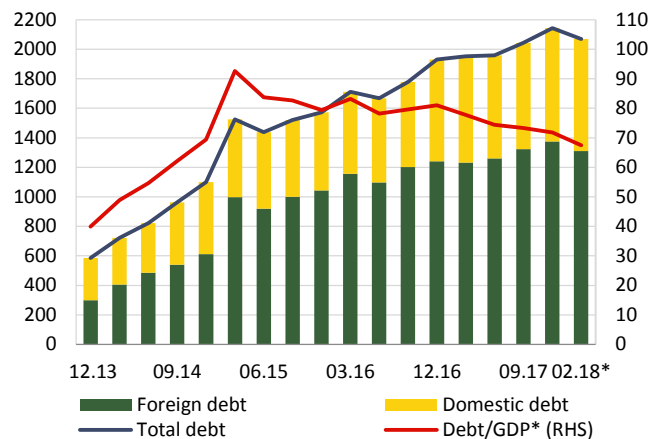
### Contributions to the Expenditures Changes of the Consolidated Budget, pp



Source: STSU, NBU staff estimates.

The debt operations carried out at the beginning of the year had pushed public and publicly guaranteed debt down by 3.4% in the year to late February 2018. Accordingly, the debt-to-GDP ratio continued to decrease, owing to, among other things, a pick-up in economic activity and a strengthening of the hryvnia exchange rate.

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



\* GDP for January–February 2018 - the National Bank's estimate

Source: MFU, SSSU, NBU staff estimates.

## 2.2.5. BALANCE OF PAYMENTS

Favorable global commodity prices and strong external demand, especially from European countries, were responsible for the robust growth in Ukrainian exports seen in early 2018. However, the deficit of merchandise trade widened gradually (to USD 1.3 billion in January–February 2018, compared to USD 0.9 billion in the same period of the previous year), due to a rapid recovery in domestic demand (which is mainly met through imports). At the same time, the widening in the trade deficit was offset by a further increase in remittances (for more details see Box “Revisions of statistics for private remittances to Ukraine and its impact on the balance of payments on pages 32–34). As a result, the current account remained broadly balanced in January–February.

Similar to last year, and especially in the latter half of the year, government operations were the largest contributors to financial account flows. More specifically, the repayment of foreign currency domestic government bonds by the government pushed up the banks’ net external assets, which is reflected as a capital outflow in the financial account. However, net financial account outflows, at USD 0.3 billion, were insignificant in January–February 2018, due to the increased foreign investment in Hryvnia bonds, a renewed decline in FX cash outside the banking system, and a moderate inflow of foreign direct investment, mainly to the real sector.

Consequently, the balance of payments recorded a small deficit in January–February 2018, pushing down international reserves slightly, to USD 18.4 billion in late February. External repayments made by the government and the NBU in March decreased international reserves further, to USD 18.2 billion.

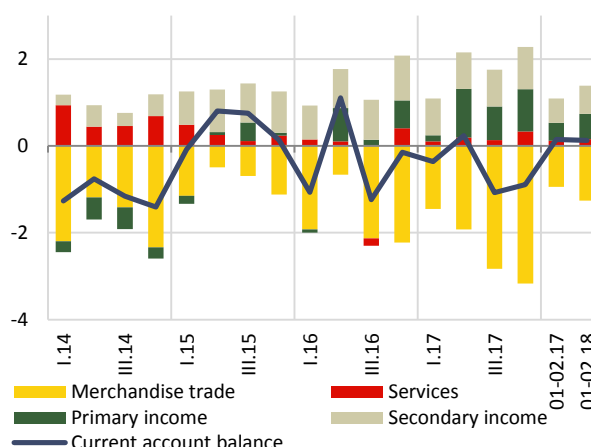
### Current account

In early 2018, the growth in exports of goods sped up to 16.6% yoy, driven largely by a rebound in food exports (3.4% yoy compared to a drop in exports in Q4 2017). In particular, a rise in global grain prices partly counterbalanced a further fall in the volume of these exports, resulting from a lower grain yield in 2017 compared to the previous year. In addition, the bumper harvest of some oil-bearing crops (soy and rape) helped maintain robust growth in exports of oilseeds. This, together with European countries’ strong demand for biofuel, pushed up exports of food waste, such as oil-cake residues and beet pulp. The latter factor also contributed to a surge in exports of wood industry products, with exports of fuel wood up by 1.8 times yoy. Exports of other foods (meat and dairy products) also continued to grow, propelled mainly by buoyant demand from EU countries.

A rise in global metal prices and steady external demand spurred further growth in metallurgical output and the volumes of metal exports. Meanwhile, the growth in the value of metallurgical exports slowed to 29.5%, due to an increase in the share of cheaper metals in Ukrainian exports. Exports of iron ore continued to grow rapidly (15.3% yoy), as the output of these products rose, thanks to some iron ore mines recommencing operations in November 2017.

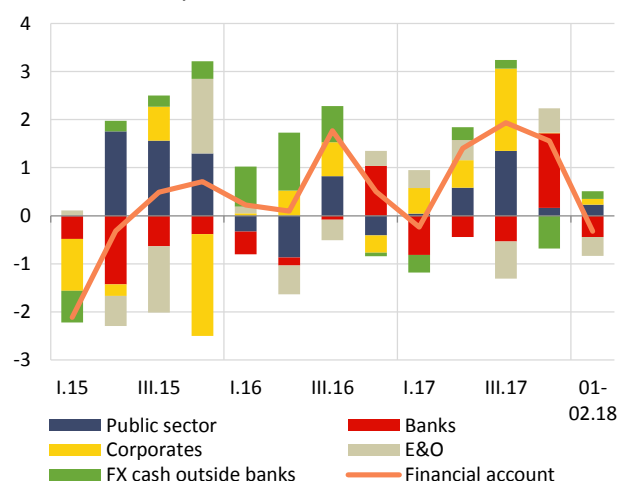
The growth in chemical exports accelerated further (to 49% yoy in January–February 2018), driven by a surge in chemical output

Current Account Balance, USD bn



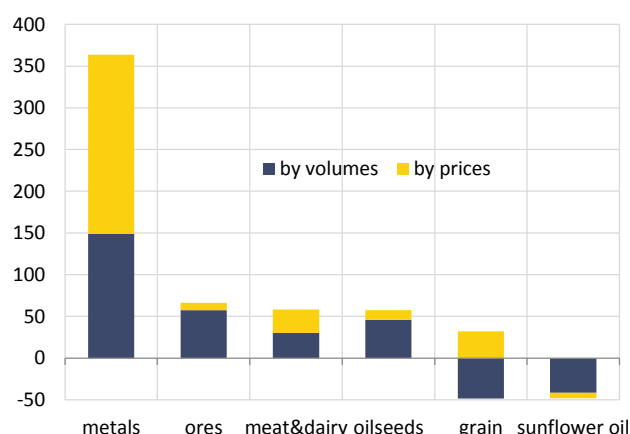
Source: NBU.

Financial Account, USD bn



Source: NBU.

Export of Selected Goods in January–February 2018, USD m



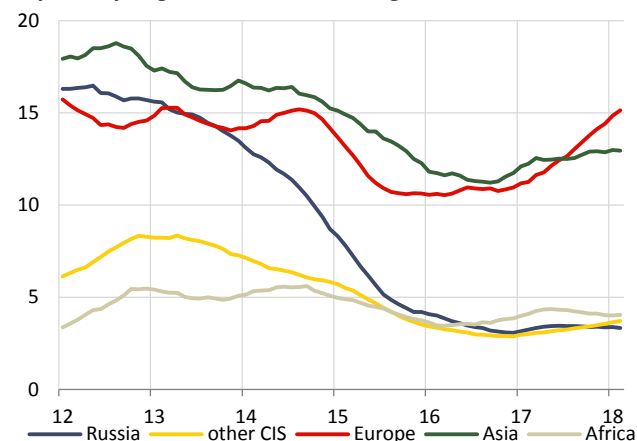
Source: NBU calculations.

starting in mid-2017, due to, among other things, Karpatnaftokhim, a chemical plant in western Ukraine, resuming operations after a nearly 5-year hiatus.

Machinery exports were up by 19.1% yoy, driven by growth in exports of electrical automotive equipment to European countries, and railway car components – to Russia and Bulgaria in particular.

Overall, the growth in exports continued to reflect the rise in the presence of Ukrainian exporters on European markets seen since in 2014. In particular, these countries accounted for about 80% of the export growth recorded in January–February 2018, with their share in total exports of goods rising to 41%. Exports to CIS countries, apart from to Russia, also grew moderately. Lower grain and sunflower yields restrained the growth of exports to Asian and African countries.

Exports by Regions, 12-month rolling, USD bn



Source: NBU calculations.

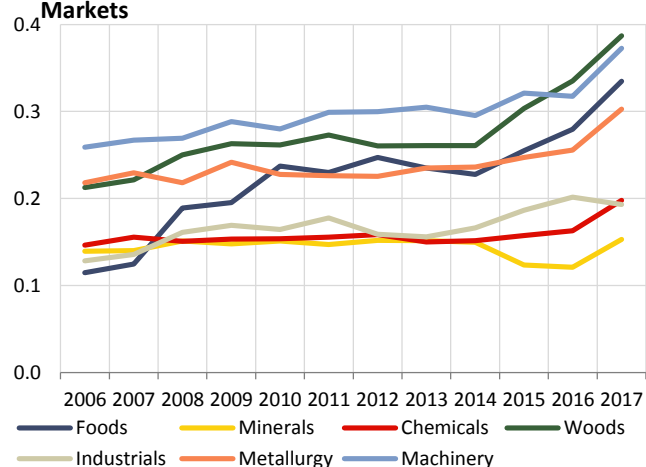
### For reference: Ukraine’s Trade with European Countries in 2017<sup>19</sup>

In 2017, economic relations with Europe strengthened further. In 2017, after a 13-year break, Europe became Ukraine’s main trading partner again. In contrast to previous years, exports of goods was an important contributor to the growth in goods turnover. The growth in exports was attributed to both higher volumes and prices: exports increased by 31.5%, to USD 14.4 billion, with their volumes reaching the level of 2012. Exports to the EU of all main commodity groups were on the rise, with the largest increases generated by exports of metallurgical products, ores, grain and oilseeds. Although the growth was attributed to traditional goods, exporters continued to enter new markets, as evidenced by a rise in the penetration indices<sup>20</sup> for almost all commodities (apart from industrial goods, the index of which had risen significantly in previous years).

Imports from European countries also grew (by 24.9% to USD 20.2 billion), although more slowly than exports. The growth in imports was largely attributed to the need to buy energy products, mainly gas. A rapid increase in domestic demand, including investment demand, fueled machinery imports (agricultural machinery and vehicles).

In spite of there being positive trends in the merchandise trade with European countries, Ukraine has recorded a persistent deficit versus these countries, which widened slightly in 2017, to USD 5.8 billion, while progress in entering new markets was hampered by the long and capital-intensive process of bringing Ukrainian products into line with European standards.

Index of Export Penetration into European Markets



Source: WITS, NBU calculations.

<sup>19</sup> A detailed overview of trends in Ukraine’s external trade with EU countries will be published in the NBU’s unscheduled research paper.

<sup>20</sup> The export penetration index measures the extent to which the goods of a given country are present on foreign markets. It is calculated as a ratio of the number of the countries to which a commodity is exported (each identified by a four-digit number in the Ukrainian Classification of Internationally-Traded Goods) to the total number of countries that imported that commodity over a year. The values of the ratio range between 0 and 1, with 1 indicating that a country exports a commodity to every country that imports that commodity.



Broadened cooperation with European countries pushed up exports of services (accelerated to 10.5% yoy in January–February). These were mainly exports of air transport, IT and raw material processing services. As in Q4 2017, the growth in exports of services was restrained by a further decrease in gas transit to European countries (by 27.1% yoy), due to Russia reorienting to alternative gas transport routes. As a result, exports of pipeline transport services dropped by 24.1% yoy.

A faster rebound in domestic demand stimulated import growth, which sped up to 19% yoy in January–February 2018. The growth has mainly been driven by non-energy imports since mid-2017.

More specifically, consumer imports (food and industrial goods) were up by 26% yoy in January–February 2018. Imports of fish and seafood, vegetables and citrus fruits, and some industrial goods also grew at a fast pace. Imports of pharmaceuticals grew to 29.4%, due to the government stepping up its procurement efforts.

Machinery imports increased faster still, to 30.4% yoy. In particular, the pace of growth in imports of agricultural machinery held steady at the previous year’s level. Imports of motor cars, especially used ones, also increased at a fast rate. Indeed, the number of imported used motor cars more than doubled in January–February compared to the same period of the previous year, as people tried to take advantage of a reduced excise tax rate on used motor cars that will cease to be applied next year. However, it was precisely this factor that slowed the growth in the value of motor car imports, to 29.9% yoy.

The growth in imports of fertilizers slowed to 24.9% yoy, driven by a fall in global fertilizer prices and fears that the sowing campaign might be delayed due to unfavorable weather conditions. Nevertheless, chemical imports remained significant, generating almost a fourth of the total growth in imports of goods.

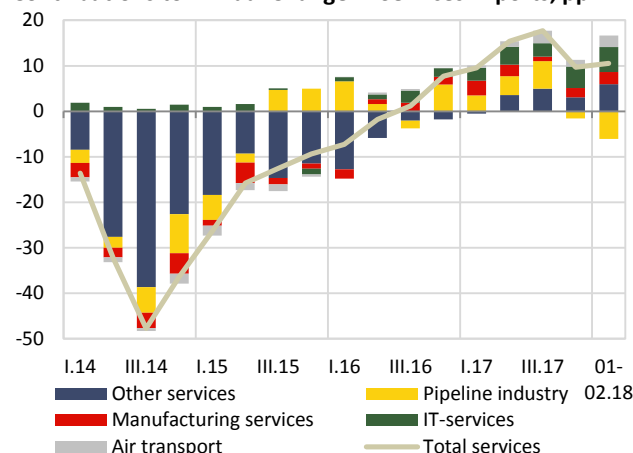
Gas import volumes slumped by 2.4 times yoy, due to the moderately cold weather conditions seen throughout most of the winter months, and large available gas inventories. The growth in coal and oil product imports also decelerated. Overall, energy imports declined by 1.2% yoy.

Permission granted from November 2017 to repatriate dividends for 2013 increased primary income account payables in early 2018 (by 19.9% yoy). However, this was more than offset by a further rise in remittances (by 31.4% yoy). This growth was generated by migration, higher wages, as well as by the strengthening against the US dollar of the currencies of countries that take in Ukrainian labor migrants.

### Financial account

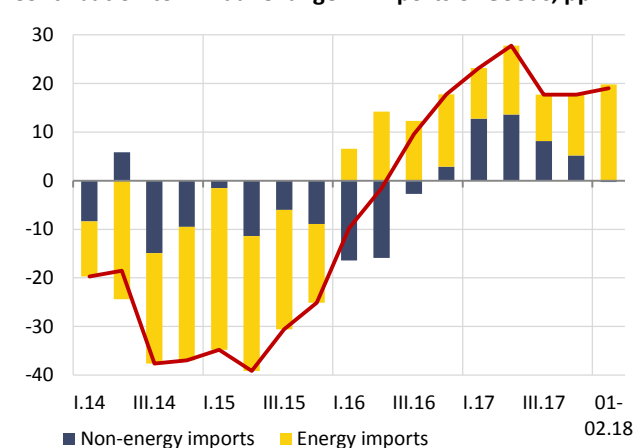
In early 2018, the financial account recorded net outflows of USD 0.3 billion. The government sector’s transactions with both foreign and domestic currency government bonds were primarily responsible for the outflows. The government’s repayment of foreign currency government bonds was the main contributor to the increase in the net external assets of the banks by USD 0.4 billion, while growth in foreign investment in hryvnia government bonds pushed up net public sector borrowing (for

Contributions to Annual Change in Services Exports, pp



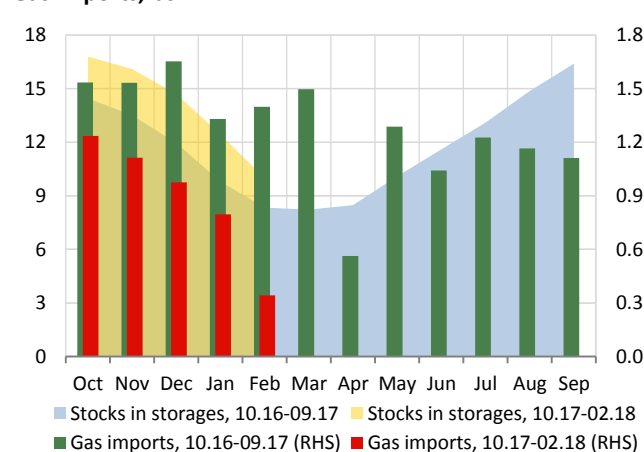
Source: NBU.

Contribution to Annual Change in Imports of Goods, pp



Source: NBU calculations.

Gas Imports, bcm



Source: SSSU, Ukrtransgaz, Naftogaz.

more details see Box “Role of Foreign Investors in the Domestic Market of Government Securities” on pages 40-41).

In addition, FX cash outside the banking system decreased again in January–February 2018 (by USD 0.2 billion), driven by an increase in net foreign currency sales by the public. In contrast, foreign direct investment, at USD 0.2 billion, was modest, and was directed to the real sector, mainly in the form of equity.

In early 2018 there continued to be moderate debt outflows from the private sector (USD 0.3 billion), reflecting largely an increase in the real sector’s repayments of long-term loans. Rollover in the real sector went up to 69% in January–February 2018. Meanwhile, rollover in the banking sector dropped, due to there being little new borrowing. Overall, rollover in the private sector, at 66%, remained at the level of 2017.

### Rollover of long-term private external debt,<sup>21</sup> %

	Q1 2017	Q2 2017	Q3 2017	Q4 2017	2017	Jan.–Feb. 2018
Banks	21	43	64	132	54	42
Real sector	45	91	96	50	68	69
Total	39	85	89	59	66	66

### Reserve assets

In January–March 2018, the NBU purchased excess foreign currency to replenish international reserves amid foreign capital inflows, and an increase in exporters’ foreign exchange proceeds. Nevertheless, international reserves decreased to USD 18.2 billion by the end of March, or 3.3 months of future imports, due to the government and the NBU repaying external debt.

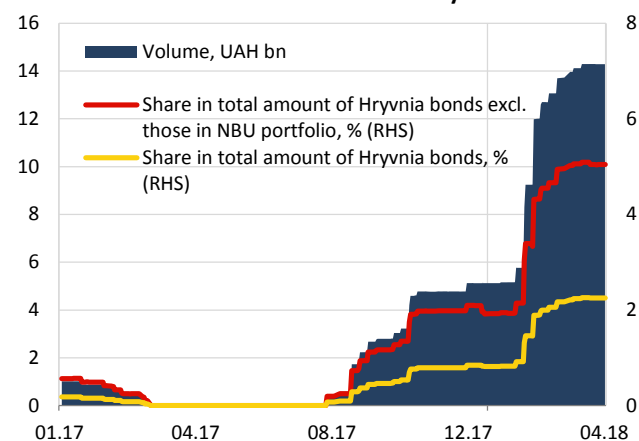
### External sustainability

Ukraine’s indicators of external sustainability and international reserve adequacy improved further, due to a gradual recovery of the Ukrainian economy and a stable exchange rate. In particular, a moderate rise (by 2.6%) in gross external debt in 2017 was accompanied by rapid growth in nominal GDP in the dollar equivalent (by 17.6%). Consequently, the ratio of external debt to GDP dropped by 15.5 pp, to 106.4%.

Both gross debt and debt that matures within the next 12 months grew, driven by borrowing by the government and the central bank. In the meantime, private-sector debt declined, owing to a decrease in the banks’ external liabilities. The total debt of the general government sector was up by USD 2.4 billion in 2017, driven by both the government’s transactions (USD 1.5 billion) and exchange rate differences (USD 0.9 billion), resulting from the US dollar’s depreciation against the euro and the SDR. In terms of transactions, the growth reflected the disbursement of the official financing from the IMF and the EU and the issue of Eurobonds that took place in September 2017.

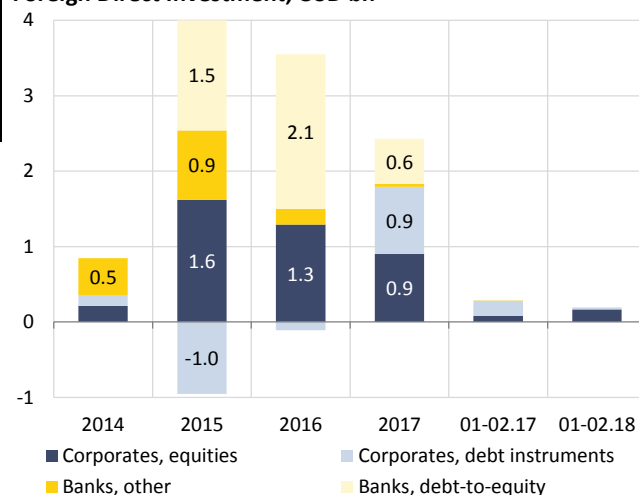
The external debt of the banking sector fell by 30%, to USD 6.2 billion in 2017, while over the last three years it has declined by three times. This rapid drop was mainly attributed to a fall in interbank loan indebtedness, including through USD 4.1 billion

### Volume and Share of Non-Residents in Hryvnia Bonds



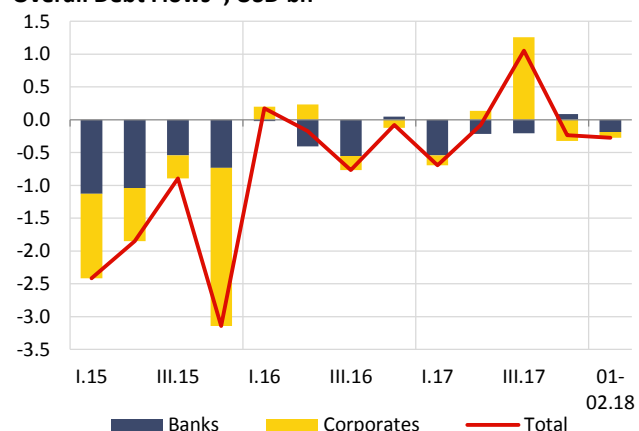
Source: NBU.

### Foreign Direct Investment, USD bn



Source: NBU.

### Overall Debt Flows\*, USD bn



\* Positive value – capital inflows

Source: NBU.

<sup>21</sup> Excluding debt-to-equity operations.

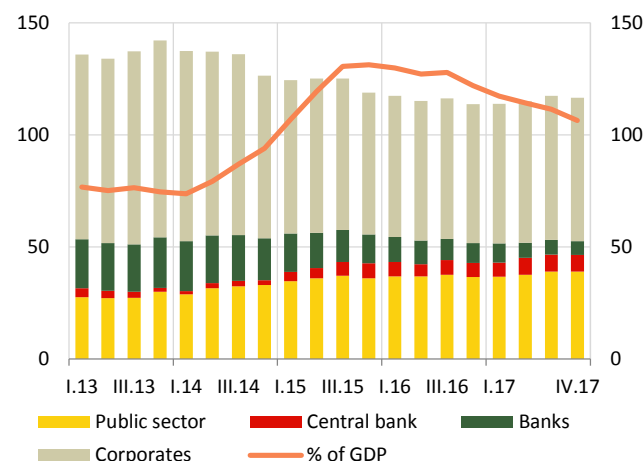
worth of debt-to-equity operations in 2015–2017. Although declining by USD 0.3 billion in Q4, the external debt of the real sector grew by 3.4% year to date, to USD 64 billion, fueled by an increase in trade credit indebtedness, the issue of Eurobonds, and a rise in outstanding guaranteed loans.

The banking sector was responsible for a drop in short-term external debt by remaining maturity, to USD 46.7 billion, or 87% of exports of goods and services. In the meantime, the debt of the government and the central bank maturing within the next 12 months was up, from USD 1.7 billion in late 2016 to USD 2.9 billion in late 2017 (of which USD 2.1 billion was debt to the IMF). The growth mainly reflected an increase in payments related to the IMF’s previous stand-by arrangement.

Despite seeing an improvement in practically all external sustainability indicators, Ukraine remains very vulnerable to external shocks, due to, among other things, the economy’s significant openness and a large public debt burden over the mid-term.

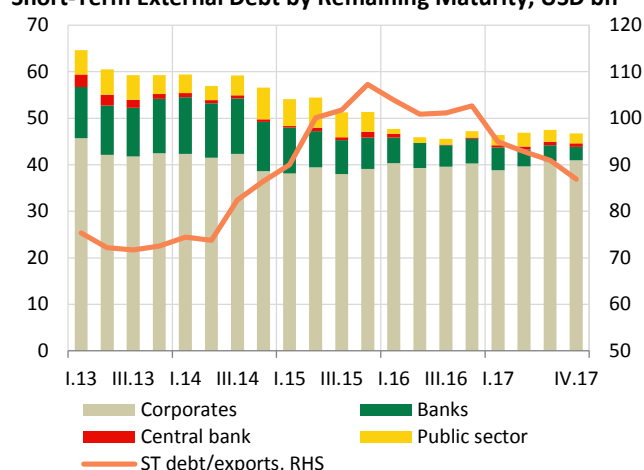
A further increase in international reserves, to USD 18.8 billion in late 2017, or by 21%, improved the reserve adequacy measures. More specifically, reserves in months of future imports increased to 3.4 months. The ratio of reserves to the IMF composite measure (ARA metrics) rose by 9.3 pp ytd, to 65.1%. The ratio of reserves to short-term debt (the Guidotti-Greenspan criterion) rose by 7.3 pp, to 40.2%. In spite of the drops seen in the last two quarters, reserves as a 20% share of broad money, increased by 18.4 pp ytd, to 210%, being more than double the threshold for this measure of international reserve adequacy.

**Gross External Debt, USD bn**



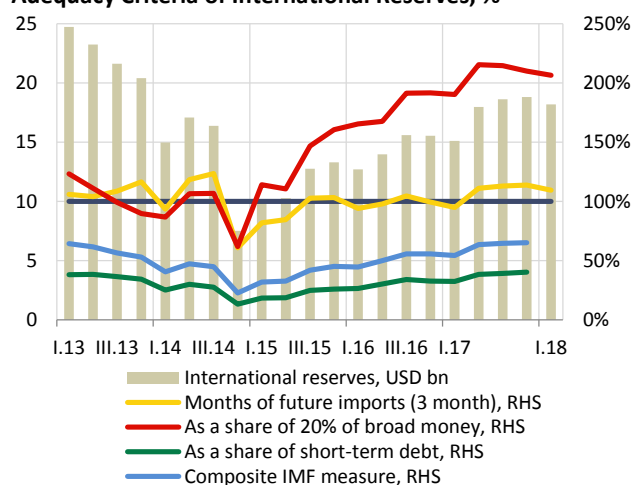
Source: NBU.

**Short-Term External Debt by Remaining Maturity, USD bn**



Source: NBU.

**Adequacy Criteria of International Reserves, %**



Source: NBU.

**External Sustainability and International Reserve Adequacy Indicators**

%	IV.2015	I.2016	II.2016	III.2016	IV.2016	I.2017	II.2017	III.2017	IV.2017*
External debt/GDP	131.3	129.7	127.0	127.8	121.9	117.2	114.2	110.7	105.7
External debt/exports of goods and services	248.1	255.8	252.9	257.8	247.0	233.0	227.7	224.5	216.8
Short-term debt/gross debt	43.3	40.6	39.9	39.2	41.6	40.8	40.8	40.5	40.1
Short-term debt/GDP	56.8	52.7	50.7	50.1	50.7	47.8	46.6	44.8	42.4
Short-term debt/exports of goods and services	107.3	103.9	100.9	101.1	102.7	95.0	92.8	90.9	86.9
Openness of the economy <sup>22</sup>	108.4	105.3	104.7	105.2	105.6	106.8	107.4	105.7	105.3
Reserves/short-term debt	25.9	26.7	30.5	34.2	32.9	32.6	38.3	39.2	40.2
Reserves, composite IMF measure	45.2	44.8	50.1	55.8	55.8	54.3	63.6	64.6	65.1
Reserves in months of future imports (3 months)	103.3	94.2	97.9	104.7	99.6	94.9	111.1	113.0	114.0
Broad money coverage of reserves	32.1	33.1	33.5	38.3	38.3	38.1	43.1	42.9	42.0
Current account/GDP, 12-month cumulative	1.8	0.7	1.0	-1.2	-1.4	-0.6	-1.5	-1.3	-1.9
Net international investment position/GDP	-42.0	-41.2	-39.8	-41.3	-37.1	-35.3	-32.9	-33.6	-31.3

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

**Box: Revisions of Statistics for Private Remittances to Ukraine and their Influence on the Balance of Payments**

In March 2018, the NBU revised its [methodology for calculating private remittances](#). This was prompted by the appearance of a range of new domestic and foreign data about private remittances and migration.<sup>23</sup> The new data provided confirmation of significant structural changes in Ukraine’s migration processes that started in 2014,<sup>24</sup> which were previously evident from open-source data, such as Internet data.

Most notably, labor migration to Poland has picked up substantially in recent years. That pushed up the remittances made from Poland via official channels by 40% in 2015, by 76% in 2016, and by 74% in the first nine months of 2017. In part, this increase reflected a strengthening of the zloty against the US dollar and the euro, with the percentage of remittances made from Poland via official channels in 2015–2017 being unchanged, at about 3% of total remittances. This mismatch between the percentage of official transfers from Poland and the percentage of labor migrants in that country suggests that a significant volume of remittances are made through informal channels. This was confirmed by [the study carried out by the National Bank of Poland](#) (the “NBP”) that said that only 17% of all the remittances of Ukrainian labor migrants from Poland were made through official channels. A ban imposed by Ukraine on the use of Russian payment systems, and a ban imposed by Russia on the use of all payment systems apart from Russian ones, has increased the percentage of remittances made from Russia via unofficial channels since 2016. In this light, the NBU revised its estimates of the volumes of unofficial remittances – not only from Poland and Russia, but also from some other countries.<sup>25</sup> In addition, the NBU updated data for the remittances that came via official channels in 2015–2017.



<sup>22</sup> Calculated as a ratio of the 12-month moving sum of exports and imports to GDP over the corresponding period.

<sup>23</sup> In 2017, the National Bank of Poland released the results of [a study on Ukrainians working in Poland](#), the Central Bank of Russia made public expanded lists of remittances data, and Ukraine’s State Statistics Service published the findings of [a sampling module study of households regarding external labor migration](#).

<sup>24</sup> For more details, see Box “Migration Impact on the Ukrainian Labor Market” published in the January 2018 Inflation Report on page 26.

<sup>25</sup> Under the previous methodology, the NBU separately calculated remittances through informal channels for two groups of countries (CIS countries and the rest of the world), while under the current methodology it calculates them separately for 18 countries.

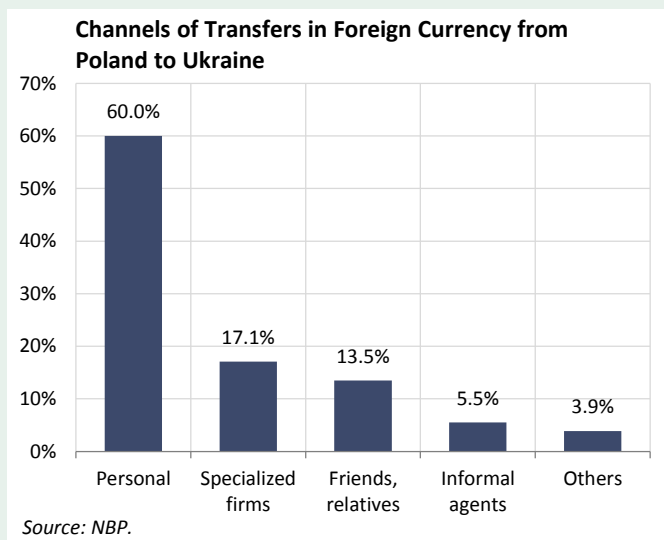
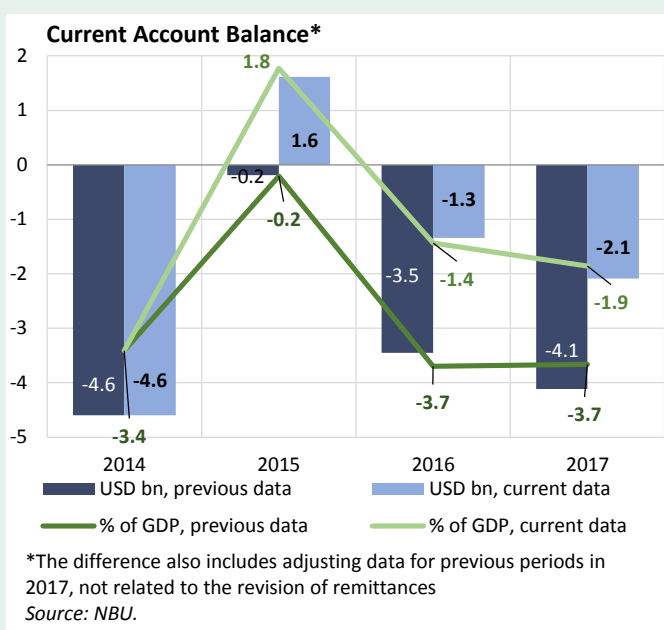
Consequently, in 2015–2017, the amount of remittances grew on average by USD 2 billion every year, and reached USD 9.2 billion in 2017. The data for all countries were adjusted, with the largest adjustments made for remittances from Poland and Russia. The current account balance was adjusted by the respective amounts. As a result of the adjustment, the balance turned positive in 2015, while the deficits in 2016 and 2017 were significantly reduced. In addition, the composition of the current account underwent some changes. In particular, on the basis of the study conducted by the NBP, the NBU revised upward labor migrant expenses in their host countries, which pushed up imports of goods by USD 0.7 billion in 2015, by USD 1 billion in 2016, and by USD 1.5 billion in 2017. Conversely, the growth in gross remittances (including taxes paid and expenses incurred abroad) noticeably improved the figures for the primary and secondary income accounts.

However, the current account adjustments had no influence on the overall balance of payments, due to double-entry accounting.<sup>26</sup> The revisions of the current account data led to adjustments to the counterbalancing items “FX cash outside the banking system in the financial account”, and, to a lesser extent, to “Errors and omissions”.

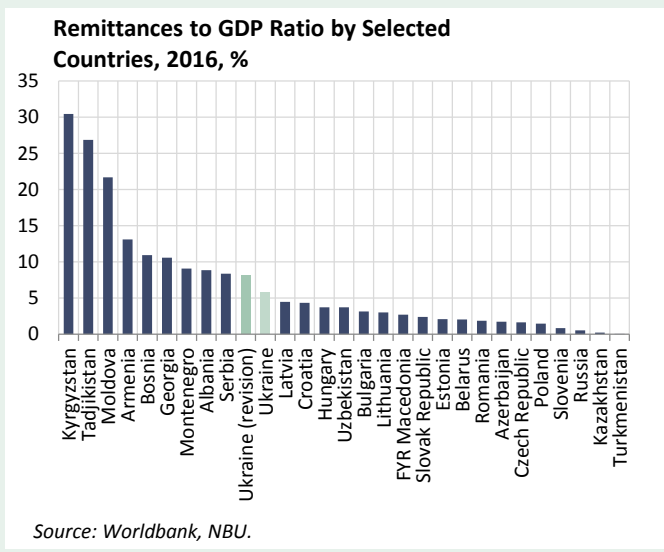
After the revision, Ukraine again became one of the Top-15 countries in terms of the absolute value of remittances, according to World Bank data on other countries (before the revision, Ukraine ranked 25th, compared to 13th in 2013). The revision also revealed the increased importance of private remittances as a source of Ukraine’s foreign currency revenues, which have mitigated the adverse impact of the drops in export proceeds and foreign direct investment during the financial crisis.

The importance of remittances for the economies of many countries is also evidenced by various economic studies. In case studies of Central American and Caribbean countries, remittances as a major economic stabilizer. Remittances are an important source of external financing for developing economies, as they smooth out private consumption, help maintain a stable financial sector, and expand the government’s fiscal space. By using a quantitative multi-sector model of the world economy, [Di Giovanni et al \(2014\)](#) provided empirical evidence that in the long-run, remittances are the only channel through which migration positively impacts growth.

However, remittances could have an adverse impact on small economies. A study by [Chami, Fullenkamp, Jahjah \(2003\)](#) shows that remittances decrease the motivation and labor productivity of remittance-receiving households, which in turn reduces the supply of labor on the domestic market. [Yaseen \(2012\)](#) also believes that remittances can overheat some economic sectors, such as the real estate market, and drive domestic prices up.



[IMF experts \(2017\)](#) highlighted the importance of workers’

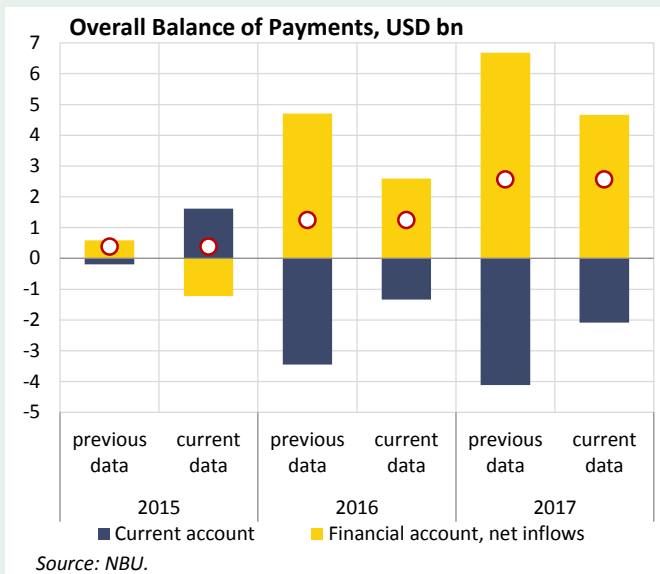


<sup>26</sup> Every transaction recorded in the balance of payments is represented by two entries. For instance, exports of goods are recorded as a credit entry in the current account, and as a debit entry with an equal value in the financial account, i.e., in the currency and deposits or trade credit items. Read more in [The Methodological Commentary on External Sector of Ukraine Statistics](#).



The negative impact of remittances can be significantly reduced, and the positive effect amplified, by creating the appropriate incentives for a more productive use of remittances, among other things, by making investments. More specifically, by using a sample of 67 countries, [World Bank experts \(2008\)](#) concluded that domestic investment growth is one of the channels through which remittances fuel the economic growth of recipient countries. From 1991 through 2005, remittances to Latin America pushed up the percentage of investment in GDP by over 2 pp.

[Catrinescu, Leon-Ledesma, Piracha Quillin \(2009\)](#) also prove that there is a strong relationship between remittances and gross fixed capital formation. However, [a study carried out by the International Organization for Migration \(2016\)](#) reveals that in Ukraine remittances are seldom used to finance investment, with about 30% of remittances used on consumption and over 40% on savings. A study conducted by [UNCTAD \(2013\)](#) shows that some countries enacted public policies in order to channel remittances into productive sectors. Such policies include facilitating the use of remittances as collateral for loans to small businesses, developing financial tools to stimulate households to take part in government infrastructure projects, encouraging banks to promote an increase in remittances by expanding services for migrants, and examining the possibility of providing additional benefits to migrants that return to their home countries and invest the money they earned abroad into their own business.



However, macroeconomic stability, a benign business environment and a favorable investment climate remain the main prerequisites for channeling private remittances into investment.

## 2.2.6. MONETARY SECTOR AND FINANCIAL MARKETS

In Q1 2018, the NBU continued to tighten its monetary policy, by raising the key policy rate twice. This was necessitated by the need to prevent a further deterioration of household and business inflation expectations and bring headline inflation back to the target range in mid-2019.

Since the beginning of the monetary policy tightening cycle (late October 2017), the key policy rate hikes were effectively transmitted to hryvnia interest rates, which fostered stronger demand for domestic currency instruments, including among non-residents. Alongside, the effect of the past key policy increases has not yet fully passed through to market interest rates, in particular to bank deposit rates.

The above, combined with a sustained benign external environment and the diminishing effect of some temporary factors (especially the marked rise in budgetary spending late in the year), caused the depreciation trend on the FX market to reverse since late January 2018, with the hryvnia strengthening materially against both the U. S. dollar and the currencies of Ukraine's MTPs.

The hryvnia's appreciation and a marginal rise in interest rates have raised the attractiveness of hryvnia deposits, primarily for households, whose nominal incomes continued to grow at a fast pace. This supported hryvnia deposit inflows to the banking system. In turn, the continued deposit inflows amid banking liquidity surplus determined a generally moderate response from deposit interest rates to the hike of the key policy rate, whereas the response of interest rates on hryvnia loans was more pronounced. However, the increase in loan rates was largely compensated for by looser lending standards, which led to increased lending volumes.

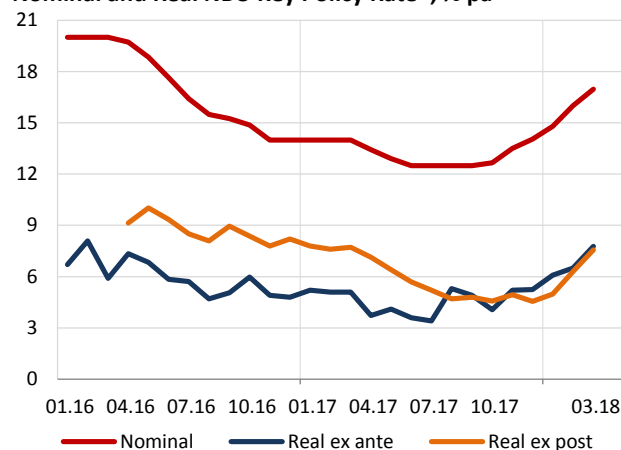
### Interest Rates<sup>27</sup>

In Q1 2018, the NBU Board raised the key policy rate twice, by a total of 250 bp, to 17.0% per annum. Despite a slight deterioration in inflation expectations in recent months, the real key policy rate also increased, to stand at approximately 6–7%.

Following the hike in the key policy rate, the weighted average rate on hryvnia resources on the interbank market rose as well in Q1 2018: by 1.8 pp to 15.5% per annum, according to CredInfo data. The overnight Ukrainian Index of Interbank Rates (UIIR) gained 2.2 pp.

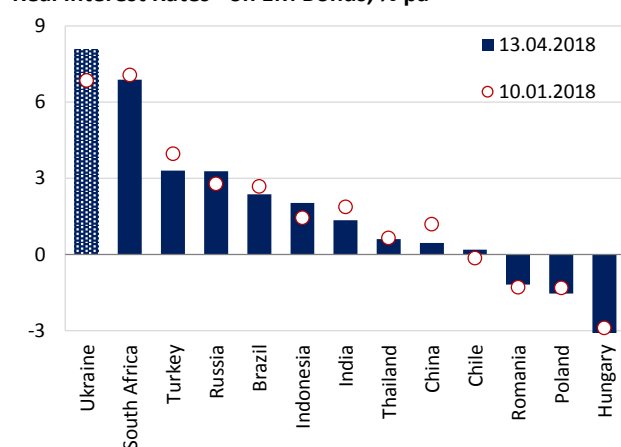
Responding to the monetary policy tightening conducted by the NBU since last October, yields on hryvnia domestic government bonds have risen across all maturities. In real terms, yields on hryvnia domestic government bonds remained some of the highest among emerging markets, while a number of countries eased their monetary conditions. Higher yields on hryvnia-denominated bonds boosted capital inflows into government securities, including foreign capital inflow. Accordingly, a rise in portfolio investment by non-residents has enhanced the transmission of monetary policy tightening via the FX market channel. Moreover, the increased presence of foreign investors on the domestic securities market may contribute to further

Nominal and Real NBU Key Policy Rate\*, % pa



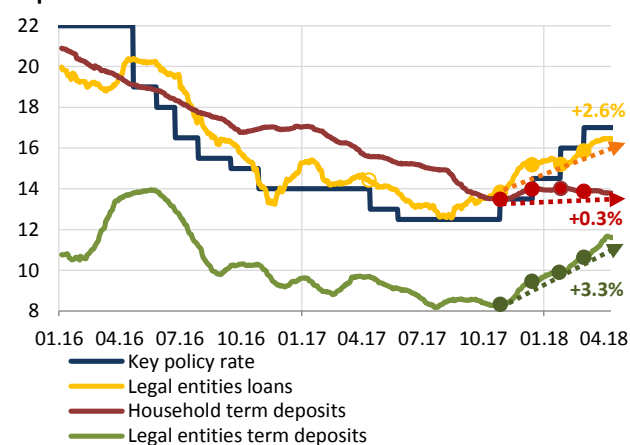
\*Nominal rate is NBU's average rate on 14-days CDs, real ex ante is nominal rate deflated by inflation expectations of financial analysts, real ex post is nominal rate deflated by current core CPI  
Source: NBU's estimates.

Real Interest Rates\* on EM Bonds, % pa



\*Real interest rate is calculated as a difference between 1-year bond yield on the primary market and the inflation forecast from IMF by the end of 2018 (World Economic Outlook, April 2018), for Ukraine – based on NBU's forecast  
Source: Thomson Reuters, NBU's estimates.

Key Policy Rate and Hryvnia Rates (monthly moving average), % pa



Note: arrows indicate an increase in rate after 26 October 2017 (the beginning of the NBU policy rate hike cycle)  
Source: NBU.

<sup>27</sup> Preliminary data.

development and deepening of the local capital market, although the regulator will have to pay close attention to this due to the volatile nature of short-term capital flows (read more in the box “The Role of Foreign Investors in the Domestic Market of Government Securities” on pages 40–41).

Interest rates on hryvnia bank operations also increased in Q1 2018 in response to the key policy rate hike. At the same time, the pass-through to deposit rates was more moderate compared to loan rates. For example, yields on hryvnia term deposits of NFCs and households grew only slightly. Conversely, the yields on demand deposits of NFCs remained flat at the level of the previous quarter, and even declined slightly for households. The moderate response of deposit interest rates may be attributed to the banking system’s high surplus liquidity and the rising attractiveness of domestic currency deposits amid hryvnia appreciation.

On the other hand, apart from the transmission effect of the key policy rate hikes, loan rates were driven higher by stronger demand for loans, particularly medium-term consumer loans and working capital loans. Therefore, the rise in interest rates was the most significant for household loans with maturities of one to five years, while rates on loans to NFC rose across virtually all maturities.

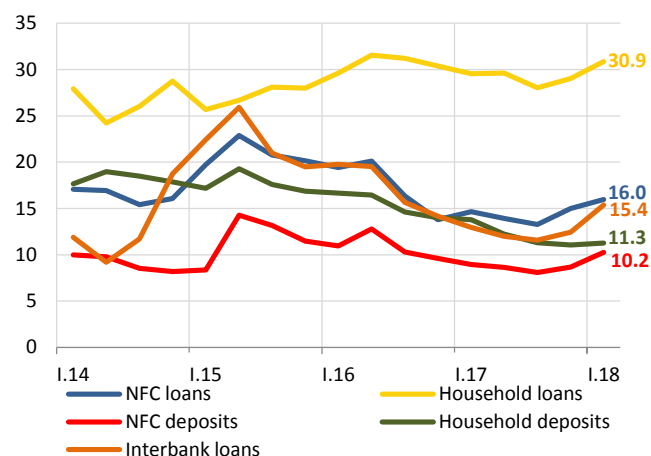
### FX Market

The inflow of foreign portfolio investment in the wake of the key policy rate hikes, a favorable external environment, and the diminished effect of temporary factors existing in early January (including a significant fiscal expansion at the end of 2017 and a seasonal drop in the FX supply) contributed to the pickup in FX inflows and the appreciation of the hryvnia since late January 2018. The supply of FX cash from households also exceeded demand, inter alia due to improved exchange rate expectations.

The prevailing appreciation trend allowed the NBU to purchase FX to replenish international reserves. In Q1 2018, the NBU’s net FX operations were positive and totaled USD 757 million (versus USD 131 million in Q1 2017). The NBU’s interventions did not counteract the appreciation trend, which was determined by fundamental factors. As of the end of March 2018, the official UAH/USD exchange rate had appreciated by 5.4% year-to-date.

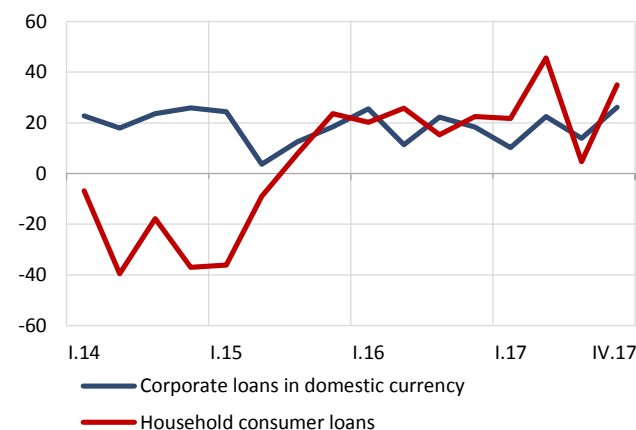
Moreover, the appreciation of the hryvnia against the U. S. dollar was the strongest among the currencies of most of Ukraine’s MTPs. This resulted in a significant strengthening of the hryvnia NEER in February–March 2018, although it remained weaker than a year ago (by 4.7% yoy in March 2018). However, taking into account the fact that inflation was considerably higher in Ukraine than in partner countries, the REER strengthened both year-to-date and year-on-year (by 4.8% yoy in March 2018).

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



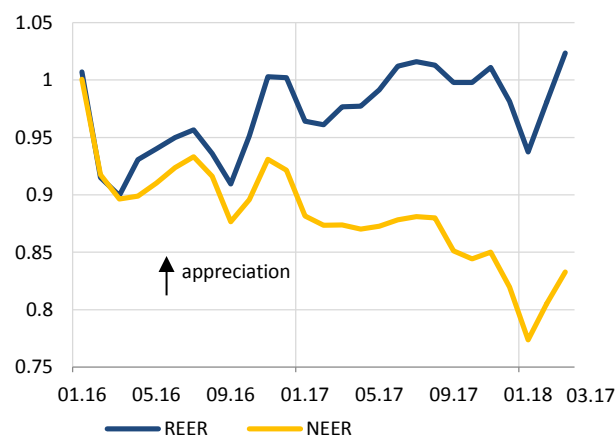
Source: NBU.

### Banks’ Evaluation of Changes in Demand for Loans, % respondents



Source: Lending Survey (January 2018).

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



Source: NBU.

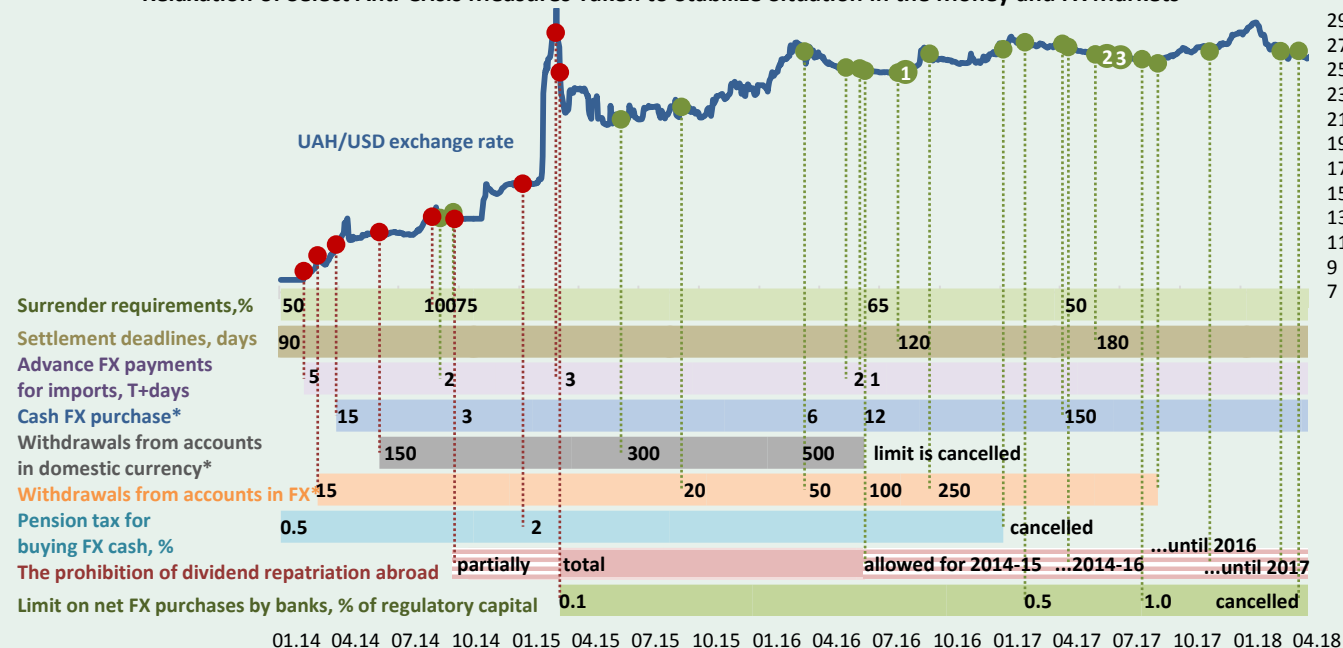
### Box: The NBU's Measures to Liberalize the FX Market and Conduct Interventions

Taking into account the favorable situation on the FX market since late January 2018, the NBU continued to relax the administrative restrictions, the loosening of which would not undermine price and financial stability, but would improve the business and investment climate in Ukraine. In particular, the NBU:

- [authorized foreign investors to repatriate dividends on equity rights and shares accrued in 2017](#);
- expanded options for banks to perform their own interbank FX operations by cancelling the limit for the net FX purchases and investment metals; raised the limit on the banks' total long open FX position; eased restrictions on the early repayment of foreign debt and FX loans, and on transferring FX abroad for the purpose of making payments associated with legal proceedings; expanded the list of business operations that are not subject to surrender requirements ([Resolution of the NBU Board](#));
- [allowed clients to apply to sell FX to any authorized bank](#) (regardless of whether or not the client has an FX current account in this bank);<sup>28</sup>
- [expanded the opportunities for authorized banks to borrow from non-residents through so-called "synthetic loans" in domestic currency.](#)

The NBU also [upgraded its approach to performing interventions on the interbank FX market](#). It envisages the use of Matching, a new platform for making deals in trading information systems (Bloomberg, Thomson Reuters etc.), which will allow the purchase and sale of FX instantly and anonymously. This will offset the impact that information about the NBU's interventions on the formation of the exchange rate on the interbank FX market. The ability to use different forms and platforms for conducting FX interventions will expand options for the NBU to accumulate international reserves with minimal impact on the exchange rate and to bring the interbank FX market into equilibrium if necessary.

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



① Cancellation of ID request for FX transactions (up to 150 000 UAH)  
 ② Lift of select restrictions on: (i) repatriation of funds invested in Ukraine and (ii) transfers abroad by individuals related to non-commercial operations. (iii) Increase of annual limit for investing abroad from 0.6 to 2.0 bn USD.  
 ③ Launching E-licenses for FX transfers abroad by individuals  
 \* measured in thousand UAH

<sup>28</sup> English version of the attached document is not available (please refer to the Ukrainian version).

## Base Money and Liquidity<sup>29</sup>

The banking system maintained a large liquidity surplus. Moreover, the average daily stocks on NBU certificates of deposit, as well as on banks' correspondent accounts, grew in Q1 2018 compared to Q4 2017.

Liquidity in the banking system in Q1 2018 was predominantly channelled via decreasing volumes of cash (net decline by UAH 12.2 billion, mostly in January) and the NBU's FX purchase (net UAH 20.0 billion, mostly in February–March). On the other hand, traditionally for this period, liquidity was absorbed by government operations, the net impact of which was estimated at UAH 27.6 billion in Q1 2018.<sup>30</sup> Moreover, the banks' repayments of previously received refinancing loans (UAH 4.5 billion) and transactions by bank liquidators and the Deposit Guarantee Fund (DGF) (UAH 3.3 billion in total) also absorbed liquidity.

The decrease in cash volumes as of the end of March 2018 far exceeded the growth of the banks' correspondent accounts, which led to a 1.5% contraction in the monetary base in Q1 2018 versus December last year. As a result, the annual growth of the monetary base slowed to 10.2% yoy.

Overall, since 2012 demand for cash has been declining, except in the crisis years, which is indicated by the drop in the cash-to-GDP ratio. This is primarily due to the development of cashless payments. In particular, the share of cashless payments in consumer transactions grew from about 7% in 2012 to 43% in 2017.

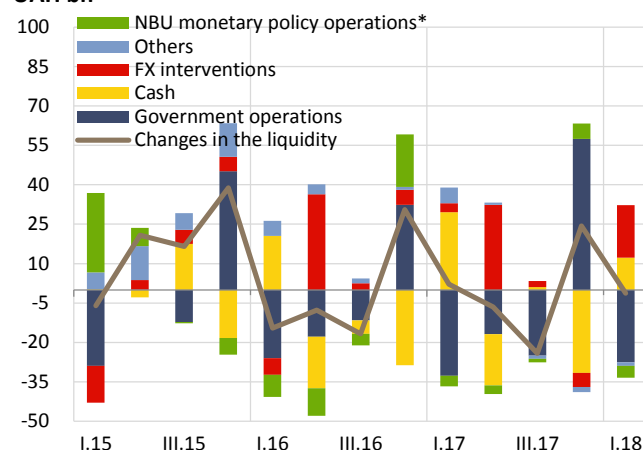
## Money Supply and Its Components

In early 2018, the growth of hryvnia deposits in the banking system continued to accelerate moderately (to 17.2% yoy in February). Retail deposit balances picked up the most. Demand deposits continued to be very popular among households, although the stock of deposits with maturity up to one year also grew markedly, and deposits for over two years showed moderate growth. Increased nominal household income and improved attractiveness of hryvnia deposits on the back of the hryvnia appreciation and higher term deposit rates contributed to the expansion of the stock of the retail deposit. NFC deposits grew as well, albeit more slowly, which can be attributed inter alia to high investment activity in recent years.

The growth in the stock of the FX deposit also accelerated slightly (in USD equivalent) among other things due to a lower comparison base.

Due to the increase in deposit balances, the annual growth in the money supply accelerated to 10.4% yoy in February. According to [Lending Survey \(January 2018\)](#), most banks expect further deposit inflows in the following 12 months.

## Factors Influencing a Change<sup>#</sup> in the Banking System Liquidity<sup>##</sup>, UAH bn



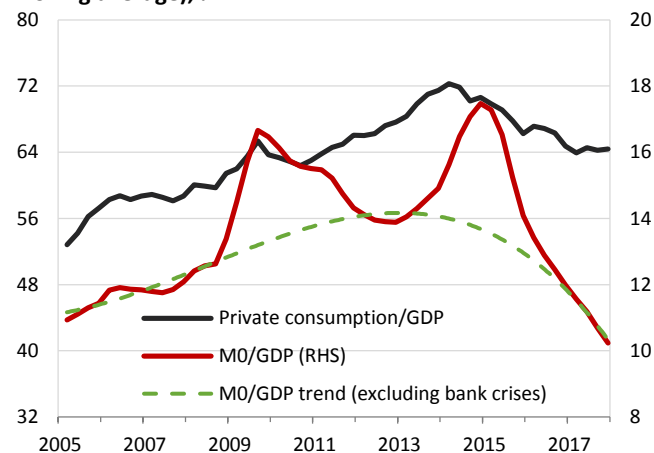
\*Excludes operations with CDs

#Quarter to previous quarter

##Banking Liquidity includes CDs and correspondent accounts

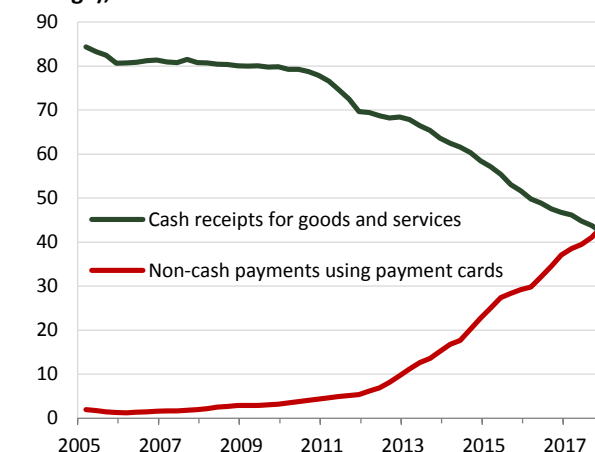
Source: NBU.

## Cash-to-GDP and Private-Consumption-to-GDP Ratios (4-quarter moving average), %



Source: SSSU, NBU's estimates.

## Ratios of Payments to Private Consumption (4-quarter moving average), %



Source: SSSU, NBU's estimates.

<sup>29</sup> Preliminary data.

<sup>30</sup> The influence of fiscal factors on the growth in banking system liquidity was based on the following key factors: the growth in single treasury account balances (up by UAH 3.2 billion), government payments to the NBU on its liabilities (UAH 16.0 billion), and the government's net FX purchase from the NBU (about UAH 8.0 billion).



## Loans

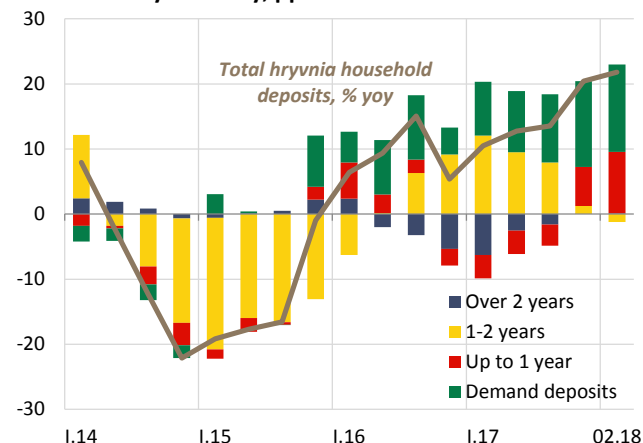
Bank lending in hryvnia continued to increase gradually in January–February 2018: the stock of loans grew 15.5% yoy. Hryvnia lending to households grew the fastest, driven largely by consumer lending. In particular, car loans and loans for other consumer needs grew rapidly. Among other factors, rising household incomes and improved solvency encouraged demand for retail loans.

NFCs also showed stronger demand for loans, which can be explained by their increased needs for working capital and investment. The greatest demand for loans in early 2018 came from companies in the manufacturing, agriculture, and construction sectors.

The stock of FX loans picked up substantially as well (in the U. S. dollar equivalent). This was primarily due to changes in the methodology for calculating this indicator under the process of shift to IFRS 9, specifically owing to adjustments in the accounting of interest income for depreciated financial assets related to operations performed in 2017.

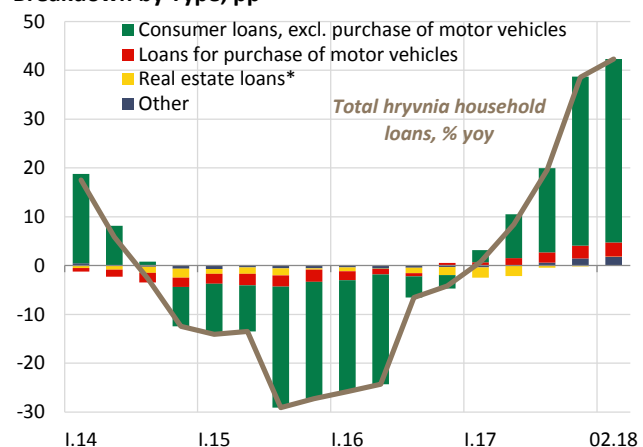
Despite a rise in interest rates on loans, banks expect further moderate progress in the resumption of lending. A reduction in credit risks due to the [establishment of the national credit register](#) will contribute to the lending revival.

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



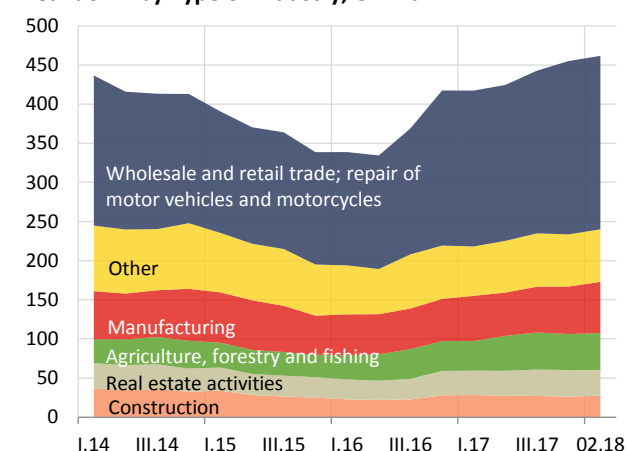
Source: NBU.

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



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

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



Source: NBU.

### Box: Role of Foreign Investors in the Domestic Market of Government Securities

Foreign investors' demand for hryvnia-denominated domestic government bonds started to grow since autumn 2017. The total principal amount of outstanding hryvnia bonds held by non-residents increased from zero in August 2017 to more than UAH 14 billion as of 1 April 2018. Foreign investors were most interested in securities with maturities of three-, six-, and nine-months. Demand for five-year domestic government bonds was slightly lower.

The higher demand from foreign investors for Ukrainian government securities was propelled by higher yields on government bonds and tax changes. In response to NBU's monetary policy tightening (since October 2017 the key policy rate has been raised by a total of 450 bp, to 17% per annum) yields on hryvnia-denominated domestic government bonds increased, both on the primary and on the secondary markets. In particular, on the primary market the weighted average yield on hryvnia government bonds with maturities of up to one year grew by 3 pp since October 2017 to reach 17.2% per annum in March 2018. [Changes to the Tax Code](#)<sup>31</sup> introduced from September 2017 regarding taxation of foreign investors' income from operations with domestic government bonds and municipal bonds also contributed to a stronger demand for domestic government bonds from non-residents. Amid continued mild global financial conditions - despite the rate hike by the Fed, low interest rates prevail on the global financial markets, especially in the advanced countries - foreign investors retained appetite in the securities of emerging markets, including Ukraine.

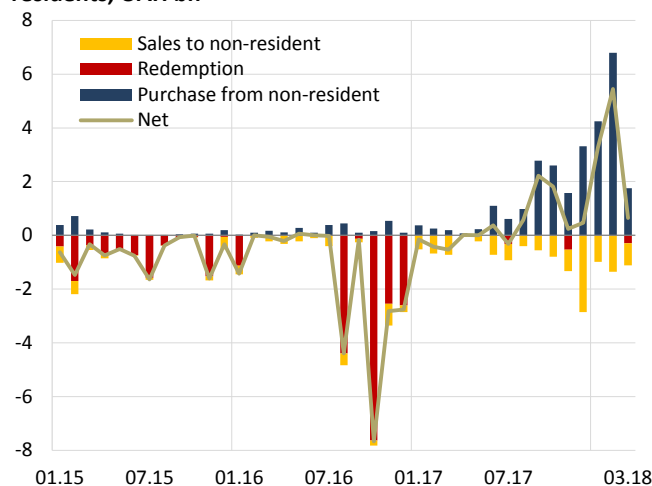
In addition, the upgrading of Ukraine's credit rating also spurred demand for Ukrainian domestic government bonds. In August 2017, Moody's Investors Service upgraded Ukraine's debt instrument rating to Caa2 from Caa3, and changed its outlook from stable to positive, while Standard and Poor's and Fitch Ratings confirmed their ratings at the level of B- for long-term and B for short-term liabilities, with an outlook stable. Economic research ([Park et al., 2018](#)) also points to evidence of a positive relationship between the improvement of sovereign ratings and a pickup in non-residents' activity on the domestic public debt market.

The role of foreign investors in the domestic market of government securities can be quite important, and depends on the market's depth and stage of development. First, the presence of non-residents on local debt markets puts downward pressure on government bond yields. According to [Peiris \(2010\)](#), a 1% increase in the share of foreign investors on the public debt markets of emerging countries reduces yields on domestic currency long-term government bonds by 6 bp on average. In advanced countries, this effect is weaker (usually ranging from 3.2 to 4.3 bp, according to [Andritzky \(2012\)](#)).

Second, higher demand for domestic currency securities encourages the development of the local bond market and gives them the status of a debt market benchmark, serving as a reference for pricing and making their yield curve a signal indicator for all investors in hryvnia instruments.<sup>32</sup> Increased participation (both domestic and foreign) on the local debt markets raises market liquidity ([BIS, 2007](#)), while the development of local debt markets reduces currency mismatch risks of public debt, longer maturities, and thereby reinforces financial stability ([Park et al., 2017](#)).

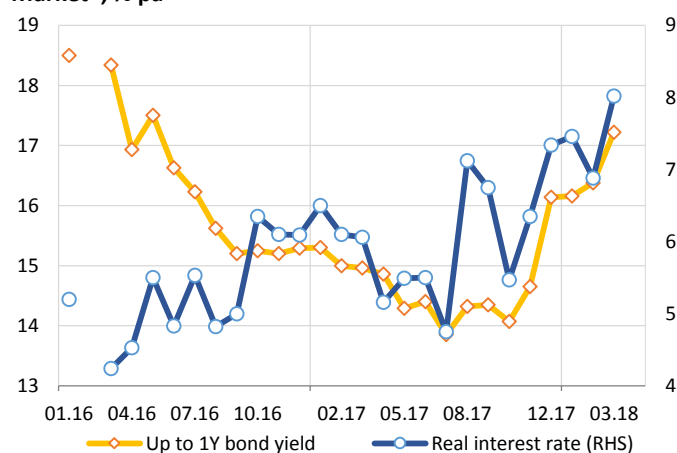
At the same time, if the role of foreign investors in the domestic market is too dominant, especially taking into account the volatility of short-term capital flows, the country may become more vulnerable to external shocks, and the probability of crises may rise ([Furceri et al., 2011](#)).

Transactions involving hryvnia government bonds made by non-residents, UAH bn



Source: NBU.

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



\*Real interest rate is calculated as a difference between up to 1 year bond yield on the primary market and the 12-month ahead inflation expectations of financial analysts

Source: NBU's estimates.

<sup>31</sup> English version of the attached document is not available (please refer to the Ukrainian version).

<sup>32</sup> For more, see the box *Analysis of Ukraine's Government Bond Yield Curve* in the October 2017 Inflation Report, page 49.

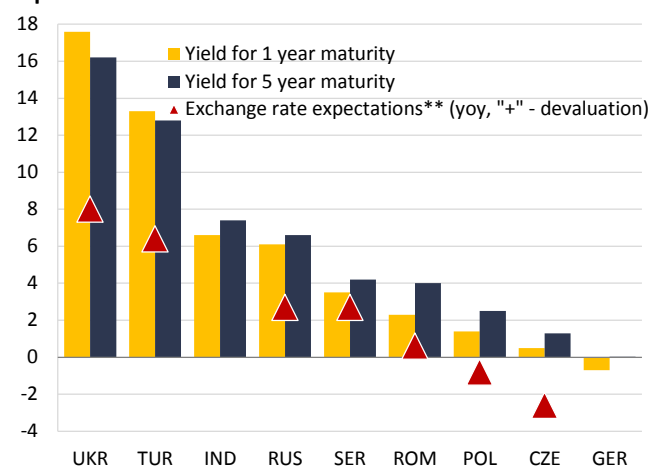
Currently, the NBU assesses the risks posed by inflows of foreign portfolio investment to be low, as non-residents hold only around 2% of the total amount of hryvnia domestic government bonds in circulation, while the ratio of non-resident investments to gross international reserves is only 3%. For reference, according to the BIS, the share of non-residents on the local bond markets of emerging countries ranges from 30% to 50% ([Mohanty, 2014](#)).

Apart from that, the purchase of FX from foreign investors will serve as a safety cushion in the case of potential short-term capital outflows. In addition, the NBU's adherence to a floating exchange rate regime restrains inflows of speculative capital to Ukraine. This stands in contrast to the situation with a fixed exchange rate, such as when, in 2010, amid high interest in government's VAT-refund bonds, the portfolio of hryvnia domestic government bonds held by non-residents was worth almost UAH 11 billion and was sold out by the end of the year.

Moreover, the government limited the placement volume of domestic government bonds with maturities of three and six months to UAH 500 million, which encouraged competition and lowered bid rates. This restrained the rise in yields on short-term securities and a more severe yield curve inversion. It also boosted the supply of long-term government securities and somewhat strengthened the effectiveness of the key policy rate pass-through on long-term rates.

The cycle of interest rate hikes by the Fed, rising yields of US treasury bills, and the expected wind-down of the quantitative easing program by the ECB are the external risks that could lower the presence of foreign investors on the domestic public debt market. The materialization of these risks may reduce foreign investors appetite in local currency bonds, including hryvnia bonds.

**Local Currency Government Bond Yields and Exchange Rate Expectations\***



\* As of March 2018  
 \*\*UAH, TRY, RUB against USD; RSD, RON, PLN, CZK against EUR  
 Source: NBU, Reuters, Consensus forecast.

Owing to the implementation of global depository accounting for domestic government bonds in 2018, operational expenses are expected to decrease, which could contribute to retaining foreign investors' demand and maintaining foreign capital inflows. Establishing the "link" (a global depository accounts in the depository of the central bank) will facilitate foreign investors' access to Ukrainian government bonds. Using an account with the international depository, non-residents will be able to buy Ukrainian securities directly, without the need to open a bank account. This should provide a simple and transparent way to attract foreign investment to the local market and could provide the impetus for the development of the capital market in Ukraine. At the same time, notwithstanding the significant influence of lower operational expenses and improved domestic market infrastructure, stable macroeconomic fundamentals will remain the decisive factor for foreign investors as they choose their investment strategies and define their investment horizons ([Andritzky 2012](#)).

### 3. ECONOMIC OUTLOOK FOR UKRAINE

#### 3.1. FORECAST ASSUMPTIONS

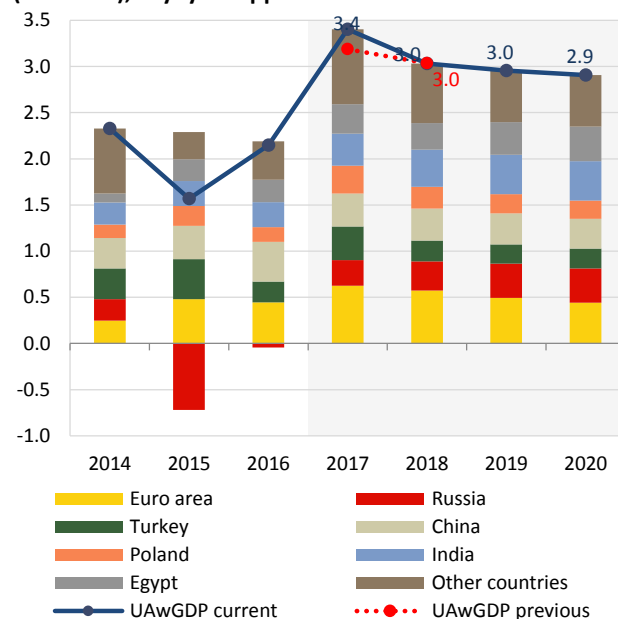
The global economy will continue to grow steadily in 2018–2020. Developed and emerging market economies are expected to continue growing in sync. Economic activity will be supported by relatively loose global financial conditions, despite monetary policy tightening by leading central banks and positive business sentiment. However, geopolitical developments, particularly rising tensions in the Middle East, and the high probability of trade wars will weigh on economic prospects. In 2017 alone, nearly 500 new protectionist measures were applied to trade, of which 20% were enacted by the United States.<sup>33</sup> That said, while European countries, particularly the United Kingdom, Germany, and Switzerland, use trade finance policies for promoting domestic producers, the United States uses them to eliminate competition from foreign companies.

US tax reform will provide an additional financial stimulus to the economy over the next few years, spurring domestic demand and boosting real GDP. The reform is estimated to add 0.5–1.3 pp to US real GDP growth over the next three years. Inflationary pressure will rise under these conditions, which will lead to further monetary policy tightening by the Fed. Moreover, a higher fiscal deficit may lead to an increase in long-term interest rates and the cost of capital, while partially offsetting positive effects on economic growth.

The euro area’s economy will continue growing at approximately 2% per annum. Real GDP growth will be underpinned by higher private consumption and investment, primarily in construction, as well as by exports, which are being propelled by the global recovery. The growth of investment in construction, including residential real estate, accelerated in 2017 and is expected to continue recovering in 2018. On the other hand, given the cyclical position, the level of investment in residential real estate remains low. This relatively weak recovery reflects the excessive pre-crisis investment in some countries of the euro area and slower growth in volumes of mortgage lending to households. As before, unconventional monetary policy measures will contribute to better direct financing conditions on the market and a pickup in lending. The monetary measures taken over the past three years are estimated to have impacted both the euro area’s economic growth and inflation rate by around 1.9 pp in total for the period from 2016 to 2019.<sup>34</sup>

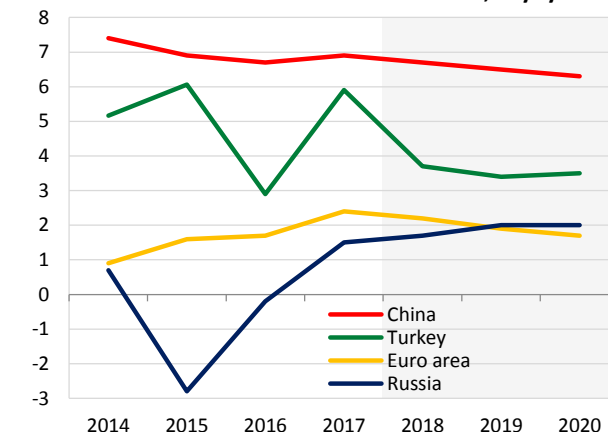
The economies of a number of emerging market countries, particularly the CEE, Asia, and the CIS, will grow steadily, thanks to further growth in domestic demand on the back of increased real household income, higher demand for these countries’ financial assets (owing to a sizable interest rate differential), and exports driven by the relatively stable global demand.

Structure of Annual GDP Growth of Ukraine’s MTP Countries (UAwGDP), % yoy and pp



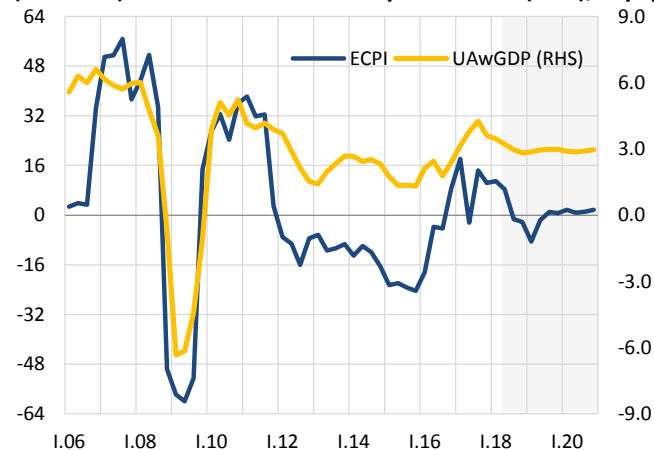
Source: NBU staff estimates (preliminary data) based on IMF.

Real GDP of several Ukraine’s MTP Countries, % yoy



Source: NBU staff estimates.

Weighted Average GDP of Ukraine’s MTP Countries (UAwGDP) and External Commodity Price Index (ECPI), % yoy



Source: NBU staff estimates.

<sup>33</sup> <http://www.eulerhermes.com/economic-research/blog/EconomicPublications/protectionism-may-not-be-surg-ing-overall-but-new-barriers-are-rising.pdf>.

<sup>34</sup> [https://www.ecb.europa.eu/press/key/date/2018/html/ecb.sp180314\\_1.en.html](https://www.ecb.europa.eu/press/key/date/2018/html/ecb.sp180314_1.en.html).

After some corrections in Q2 2018, global prices for Ukrainian exports will stabilize, followed by a weak upward trend in 2018–2020.

Prices for ferrous metals will remain high despite a correction triggered by the rise in Chinese production after the expiry of current restrictions, and excess inventories in some markets caused by trade wars. Prices will mainly grow on a further expansion of demand for ferrous metals driven by global economic growth, especially in the construction and engineering industries, as well as by a continued decrease in excess capacity in China. Over 2016–2017, a Chinese government program resulted in the elimination of more than 200 million tons of excess steel production capacity, and another 30–50 million is to be cut by in 2018. Consequently, steel production in China will grow by only 0.6% yoy in 2018,<sup>35</sup> whereas demand growth will accelerate to 2.1%. Demand from the United States, India, and Europe is expected to rise as well.

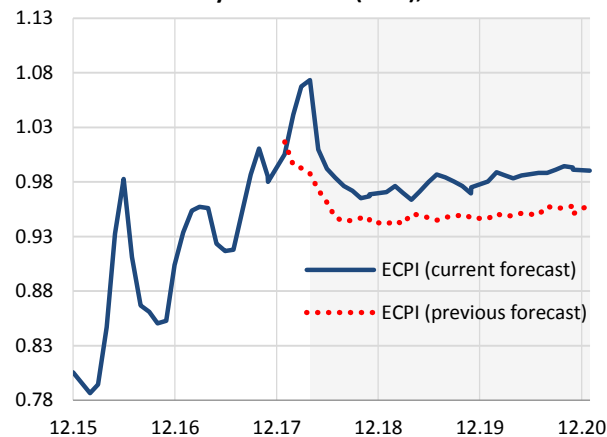
Despite steady demand for ferrous metals, iron ore prices will decline on robust market supply. This will be primarily due to the global leaders – Australia and Brazil – increasing their production amid lower production costs. At the same time, China’s demand for iron ore will be flat in 2018, held back by record-high inventories. As in 2017, high-quality iron ore will be especially in demand.

Global grain prices will increase gradually, primarily due to lower grain production volumes in the United States. The US Department of Agriculture (USDA) sees global production of corn decreasing by 3.1% in the 2017/2018 marketing year (MY) and production in the United States declining by 3.6%. Consumption volumes will increase by 3% and 1.9% respectively, exceeding growth in the volumes of production. Moreover, corn consumption will rise in China (by 3.6% yoy) amid lower domestic output in the country, which will boost imports.

The USDA forecasts that the global production growth will roughly match the pace of growth in consumption of wheat, driven by an increase in carry-over inventories in 2017/2018 MY (up by 6.5% yoy). That said, exports will be propelled by Pakistan (owing to a government policy to subsidize exports), Russia, Ukraine (due to a good harvest), and Argentina (thanks to competitive advantages created by the weakening of the Argentinian peso). In turn, the countries of Southeastern Asia (particularly Vietnam and Bangladesh) and Africa will increase their imports.

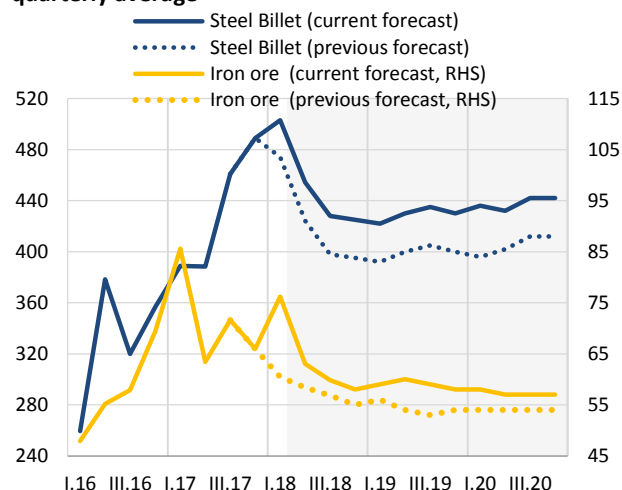
Global oil prices are expected to grow moderately as global demand rises and major oil producers adhere to the OPEC+ agreement to cut production. Moreover, the postponement of the IPO of Saudi Aramco, the world’s largest oil producer until 2019 is a positive signal of the further extension of the OPEC+ agreement. According to the US Energy Information Administration, the steady overfulfilment under the OPEC+ agreement could lead to a deficit in supplies of energy resources as early as in Q2 2018. However, sustained growth in oil production in the United States will restrain prices: production will grow by 15% yoy on average in 2018, plus by

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



Source: NBU staff estimates.

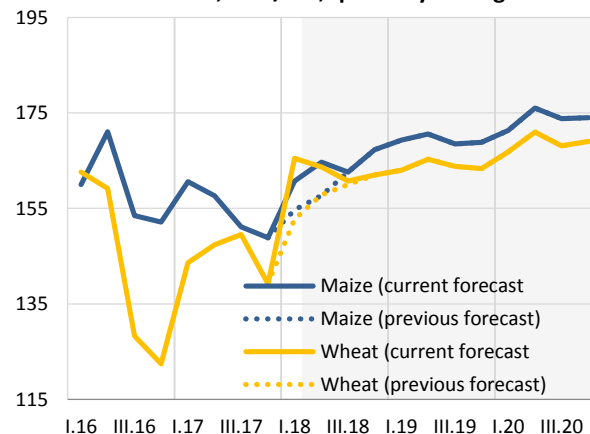
World price of ferrous metals and Iron Ore Prices\*, USD/MT, quarterly average



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

Source: NBU staff estimates.

World Cereal Prices, USD/MT, quarterly average



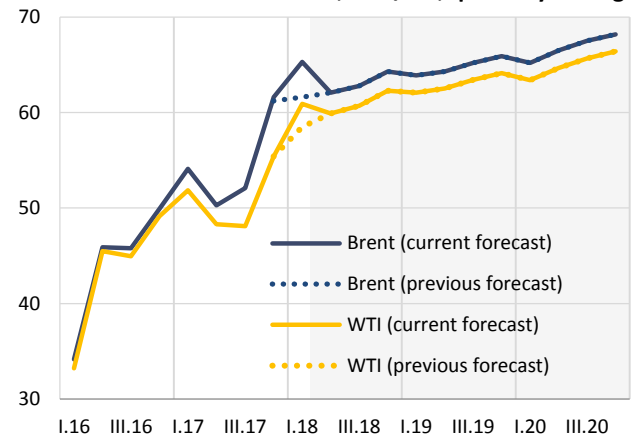
Source: NBU staff estimates.

<sup>35</sup> According to a poll of 15 analysts conducted by the Financial Times and China Metallurgical Industry Planning and Research Institute.



over 5% yoy in 2019. Global demand will increase by 1.5% yoy on the back of steady global economic growth, increased lending to the industrial and construction sectors in both advanced and emerging market countries, and growth in the transportation sector. United States, Japan, Poland, and Turkey will see the biggest increases in demand for oil and oil products.

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



Source: NBU staff estimates.

	CPI, change as of the end of period, %			GDP, annual change, %			Exchange rates*		Commodity Prices**, USD			
	Euro area	Russia	USA	Euro area	Russia	USA	USD/EUR	RUB/USD	Imported gas, per 1m <sup>3</sup>	Brent crude oil, per bbl	Ferrous metals export, per ton	Grain export, per ton
<b>2014</b>	-0.2	11.4	0.8	1.3	0.7	2.4	1.33	38.3	292.5	99.1	481.5	201.2
<b>2015</b>	0.2	12.9	0.7	2.1	-2.8	2.6	1.11	61.0	274.0	52.5	336.1	166.9
<b>2016</b>	1.1	5.4	2.1	1.8	-0.2	1.6	1.11	67.1	200.9	43.9	299.4	153.4
<b>2017</b>	1.4	2.5	2.1	2.4	1.5	2.3	1.13	58.3	231.5	54.5	411.0	155.3
<b>2018</b>	1.5	3.7	2.0	2.2	1.7	2.4	1.23	56.6	258.6	63.6	427.3	164.3
<b>2019</b>	1.6	4.0	2.0	1.9	2.0	2.2	1.23	56.6	262.4	64.8	419.4	167.9
<b>2020</b>	2.0	4.0	2.0	1.7	2.0	2.2	1.23	56.6	279.6	66.9	436.1	172.3
annual change, %												
<b>2015</b>							-16.5	59.3	-6.3	-47.0	-30.2	-17.0
<b>2016</b>							0.0	10.0	-26.7	-16.4	-10.9	-8.2
<b>2017</b>							1.8	-13.1	15.2	24.1	37.3	1.4
<b>2018</b>							8.8	-2.9	11.7	16.7	4.0	5.7
<b>2019</b>							0.0	0.0	1.5	1.9	-1.8	2.2
<b>2020</b>							0.0	0.0	6.6	3.2	4.0	2.6

\*Average for the year.

\*\* Average weighted by volume, excluding oil.

### 3.2. INFLATION DEVELOPMENTS

Headline inflation will continue to decelerate due to the NBU's tight monetary policy and diminished effects from food supply, and will return to the target range in 2019.

In 2018, inflation will stay high at 8.9% on the back of a pick-up in consumer demand, driven by rising household incomes against the background of higher social standards and wage increases. These factors will keep underlying inflationary pressures at a high level this year: core CPI will increase by 7.7%. Administered prices will also continue to grow rapidly, fueled by a wage rise for utilities sector workers, higher energy prices, and an increase in the excise tax on tobacco goods.

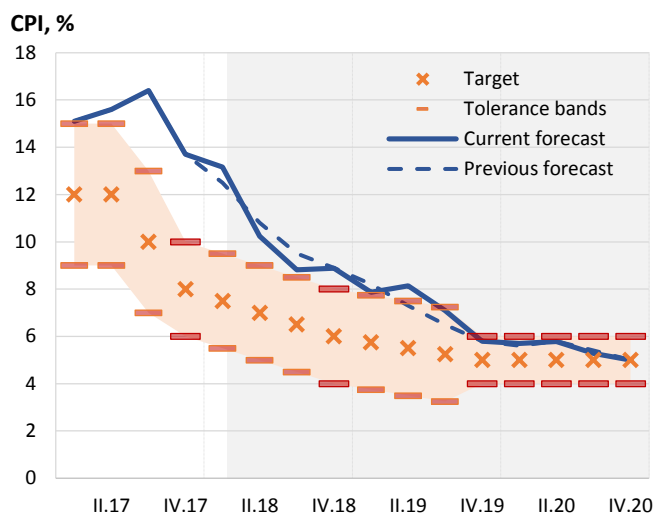
Further on, inflation will decline owing to reasonably tight monetary policies, a sustained deceleration of imported inflation amid relatively low exchange rate volatility, and higher crop yields. Therefore, growth in both raw food prices and core inflation (which is itself partially influenced by food prices) will slow. Consequently, inflation will return to its target range, dropping to a projected 5.8% yoy as of the end of 2019. In 2020, it will decelerate to 5.0%, the midpoint of the target range.

Core inflation will slow to 7.7% in 2018. The underlying inflationary pressure will remain substantial, mainly due to a rapid growth in household incomes. These will be driven by higher pensions and rising production costs owing to the continued increase in wages. As last year, the prices of services will show the highest growth among the components of core inflation. Processed food prices will continue to grow at a fast pace in 2018 due to secondary effects from the increase in raw food prices in 2017. The central bank's tight monetary policy will be the main factor restraining core inflation. A decline in imported inflation amid low exchange rate volatility, as well as persistently high unemployment will also help contain inflation.

Over the medium term, core inflation will decelerate to 4.8% in 2019, and to 3.3% in 2020. The continued rise in household incomes, driven, inter alia, by higher social standards, will be the the major factor behind the higher core inflation. Imported inflation is projected to slow over the forecast horizon thanks to the low inflation environment in Ukraine's MTPs and moderate exchange rate volatility.

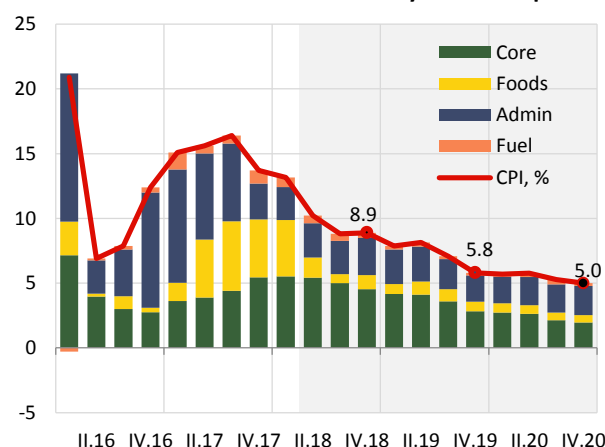
Raw food inflation is projected to drop noticeably by the end of 2018 (to 5.9%), with the fading of the effect of supply factors on the food products market, which had a decisive influence on headline inflation last year. At the same time, the expanding export potential of Ukrainian food producers will continue to put upward pressure on prices by decreasing the supply of food products on the domestic market. The convergence of domestic food prices with global prices as foreign trade turnover increases will put additional upward pressure on inflation over the entire forecast horizon. However, the correction of global food prices after a marked increase (especially, for meat and dairy products) will curb raw food inflation in Ukraine.

Raw food prices are expected to grow moderately (3%–4%) in 2019–2020, provided there are no significant supply shocks, including those arising in the global markets. The expected higher crop yields and agricultural output, driven by past investments and improved productivity, will rein in food



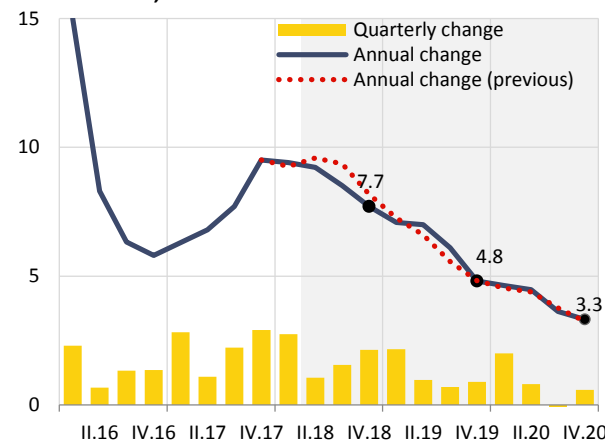
Source: SSSU, NBU staff estimates.

#### Contributions to Annual CPI Growth by Main Components, pp



Source: SSSU, NBU staff estimates.

#### Core Inflation, %



Source: SSSU, NBU staff estimates.

inflation. However, rising nominal and real household incomes will contribute to the upward pressure on food inflation.

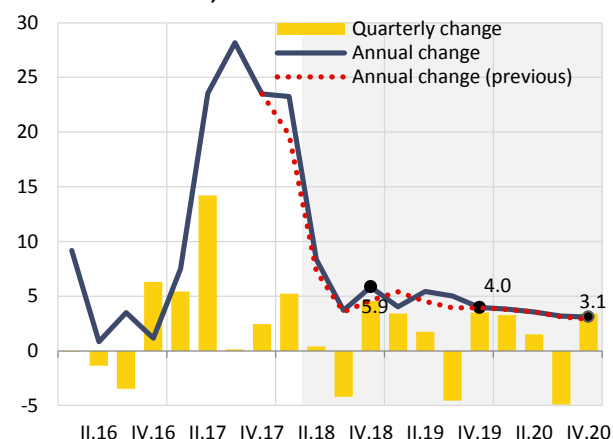
Administered prices are expected to rise by 14.6% in 2018. The costs of utility providers will continue to rise due to increases in staff wages and the growth in imported energy prices – specifically for natural gas, which is the main component of household rates for gas, central heating, and hot water.

Higher prices for tobacco and alcohol products will contribute substantially to administered price inflation – they are expected to grow by 18% and 11% respectively in 2018. In 2019–2020, prices for these products will increase by 9%–13%, largely due to further growth in excise taxes in the coming budget periods.

Looking ahead, administered price inflation is expected to remain rather high, albeit decelerating to around 10% in 2019–2020.

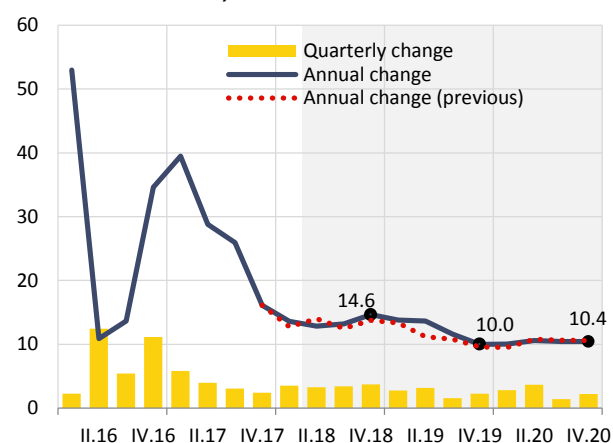
Fuel price increases will continue to reflect changes in global oil price movements in the hryvnia equivalent: fuel prices will grow by 9.6% in 2018 but decelerate to 5.0%–5.5% annually in the following years.

### Raw Food Inflation, %



Source: SSSU, NBU staff estimates.

### Administered Prices, %



Source: SSSU, NBU staff estimates.

### 3.3. DEMAND AND OUTPUT

Ukraine's GDP will grow by 3.4% in 2018. Private consumption will be the main driver of economic growth, increasing by 5% thanks to sustained high growth in real wages and other household incomes, particularly pensions. The easing of fiscal policy and active investment by businesses will also contribute to economic growth. The negative input of net exports will decrease substantially, thanks to favorable terms of trade and greater access of Ukrainian exporters to foreign markets, along with a recovery in those industrial sectors that cut production because of limits on their access to goods produced by companies located in the NGCA.

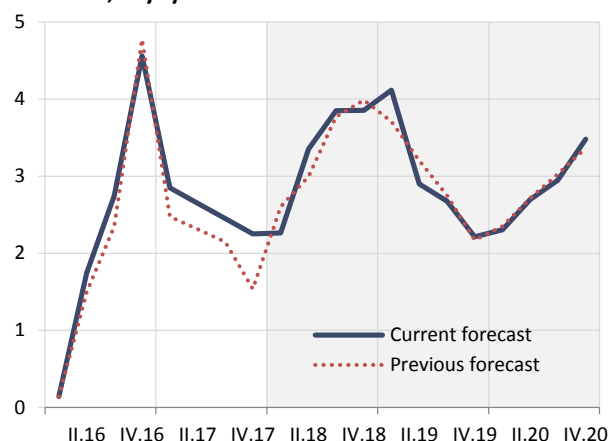
In 2019–2020, the NBU expects economic growth to slow to 2.9% due to the diminishing effect of the fiscal easing in 2018 and a tight monetary policy aimed at bringing headline inflation back to its target level. Private consumption will remain a major driver of economic growth. Meanwhile, investment growth will slow slightly due to production costs rising through higher wages and the gradual accumulation of fixed capital. Exports will continue to grow thanks to better terms of trade, high crop production, and further recovery in the metals industry. However, the contribution of net exports will remain negative over the forecast horizon, as imports will satisfy a significant portion of domestic demand and capital investment needs.

Private consumption will continue to be the main driver of economic growth over the entire forecast period. It is projected to grow by 5% in 2018, largely on the back of further increases in real wages and pensions made by the government as it strives to raise living standards (this forecast is based on an assumption that the minimum wage will rise to UAH 4,200 in Q3 2018). Further on, private consumption will grow at a slower pace (3.5% in 2019 and 3.0% in 2020), not least due to the economy cooling due to the tight monetary policy in 2018 and the lack of significant fiscal impulse in 2019–2020. The continuation of the policy of gradually cutting utility subsidies will be a restraining factor.

Investment activity will also be an important factor driving economic growth. Despite a significant slowdown (primarily due to last year's high base of comparison), investment will be the fastest growing (around 7% annually) of all GDP components. As before, high investment activity will be supported primarily by export-oriented enterprises (especially the agriculture and processing sectors). Investment in construction will rise, driven by increased capital expenditures from the budget, particularly on renovating the road network. This investment trend will mean that capital investments will remain at a high level of around 17% of GDP.

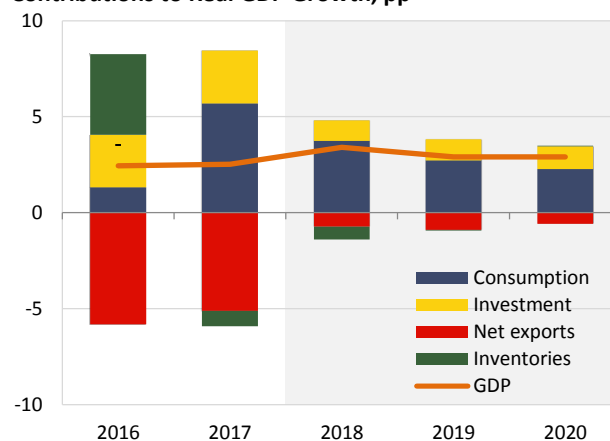
The capital investment growth will continue to drive up investment imports, in particular machinery and equipment. The increase in real household income will create additional demand for imported goods. The share of energy imports will decline (in particular, in 2018 gas import volumes are expected to decrease year-on-year) as a result of energy efficiency measures and gradual growth in the domestic production of energy resources. Meanwhile, imports are expected to continue growing, albeit at a slower pace of approximately 4%–5% in 2018–2020.

Real GDP, % yoy



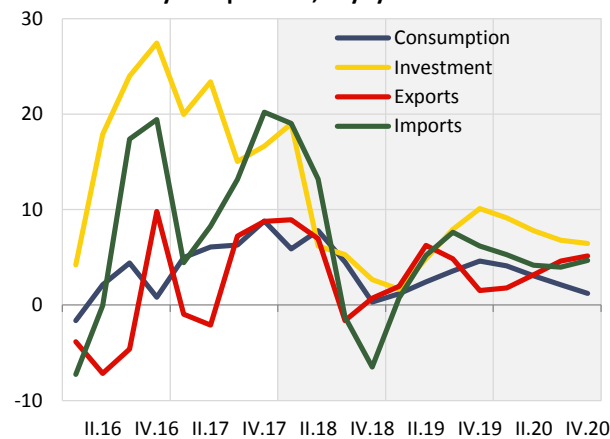
Source: SSSU, NBU staff estimates.

Contributions to Real GDP Growth, pp



Source: SSSU, NBU staff estimates.

GDP Growth by Components, % yoy



Source: SSSU, NBU staff estimates.

Growth in export volumes will remain at the level of 3%–4% over the entire forecast period. This will be driven by the sustained growth of agricultural exports, as exporters enter new markets, and because of higher global demand for food products. The recovery of metals production following the suspension of trade with the NGCA will also be a major driver of the growth in exports.

### Potential GDP and the Cyclical Position of Ukraine's Economy

The growth of potential GDP will continue to accelerate, to the level of 3.5% in 2018–2020. The convergence of Ukraine's economy with advanced economies will cause an overall growth in total factor productivity, and this will be the main driver of potential GDP growth. Moreover, the short-term effects of the suspension of trade with the NGCA will almost wear off in 2018.

Migration trends, which will lead to a decline in the number of the economically active population, will remain the main inhibitor of the growth of potential GDP. At the same time, the natural rate of unemployment will continue to be high due to structural imbalances in the labor market. In early 2018, the negative contribution of capital to GDP will drop to zero owing to the growth in the share of capital investment in GDP in previous years. In 2018–2020, the positive contribution of capital to potential GDP growth will gradually increase, as fixed capital formation will outpace depreciation, leading to capital growth in real terms.

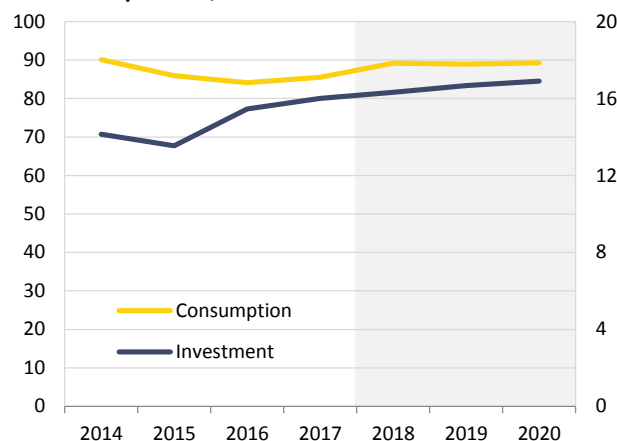
The negative GDP gap is expected to close in Q2 2018 thanks to favorable terms of trade and a revival of consumer and investment demand. Moreover, the positive fiscal impulse generated by higher social spending by the Ukrainian government will make the GDP gap become positive in 2018. However, in 2019–2020, the GDP gap will return to being negative against the backdrop of tight monetary policies and the waning effect of fiscal stimuli. However, the negative gap will not exceed 1%.

Fiscal policy will be pro-inflationary in 2018. Planned government initiatives to raise social spending (an increase in pensions as part of pension reform, higher public-sector wages, and further growth in social standards) will significantly increase the budget deficit this year.

The high growth rates (around 20%) of social spending by the government in 2018 will boost domestic demand. The robust social spending will constrain the government's ability to finance development, as it will be necessary to keep the general government deficit in line with Ukraine's obligations to the IMF. Capital expenditures will continue to account for approximately 3% of GDP on the back of the active implementation of the government's policy to reconstruct road infrastructure.

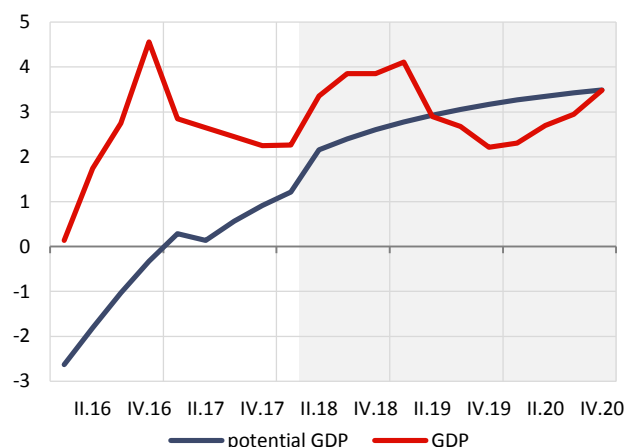
The higher social spending will largely be offset by higher revenues from the single social security contribution and taxes, amid high growth in nominal wages and strong domestic demand. The growth rates of general government revenues will

GDP Components, % share in GDP



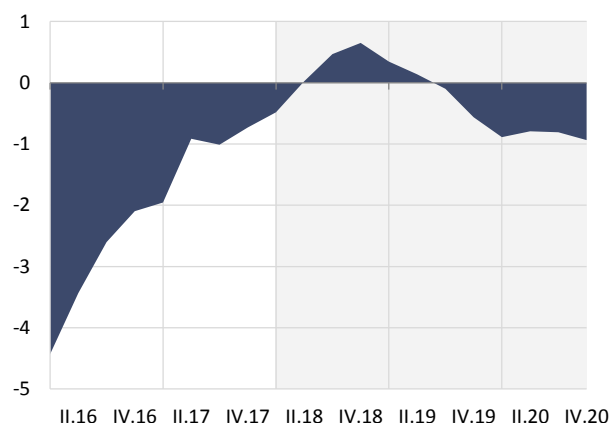
Source: SSSU, NBU staff estimates.

Actual and Potential GDP, % yoy



Source: SSSU, NBU staff estimates.

GDP Gap, % of Potential GDP



Source: NBU staff estimates.



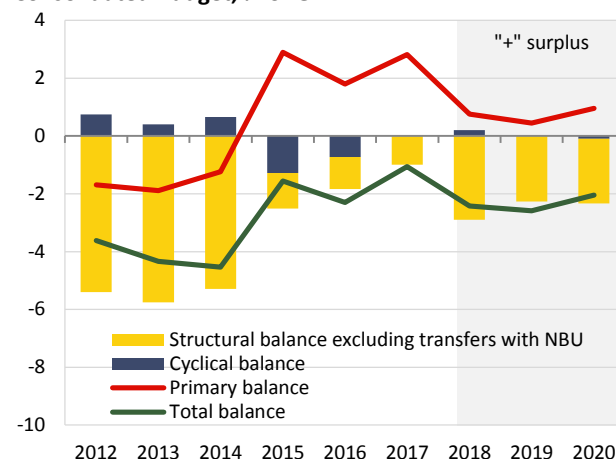
exceed overall inflation this year. The NBU expects revenues from the individual income tax to grow the fastest.

Over the forecast horizon, the deficit of the general government's budget is projected at 2.0%–2.6% of GDP. The primary balance will remain positive, at the level of 0.5%–1% of GDP.

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

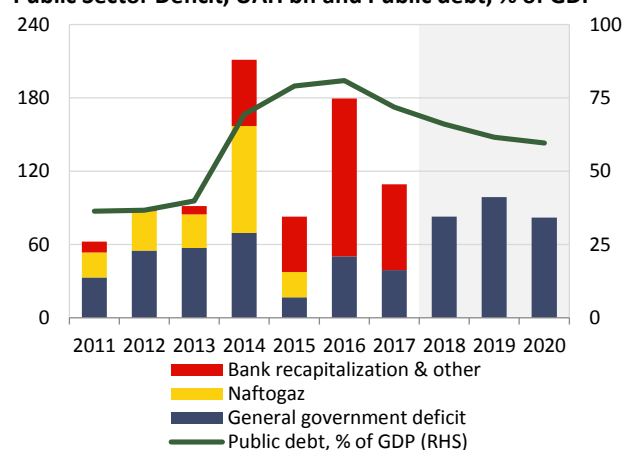
Economic growth will improve the situation on the labor market. In particular, the unemployment rate is expected to start declining this year. The decrease in unemployment will also be partially due to the continued migration of labor to neighboring countries (especially to Poland). This will encourage competition for labor among employers in Ukraine, which will lead to further growth in wages. The growth in nominal wages (by 20% in 2018) will outpace inflation, while real wage growth is projected at 8% in 2018, 5% in 2019, and 4% in 2020. The government policy to continue raising the minimum wage will also contribute to wage growth.

### Consolidated Budget, % of GDP



Source: NBU staff estimates.

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



Source: MFU, SSSU, NBU staff estimates.

### 3.4. BALANCE OF PAYMENTS

Over the forecast horizon, the current account deficit will gradually widen to 2.6% of GDP in 2020. Imports will continue to grow, driven by the pick up of consumer confidence, bolstered by an expansionary fiscal policy, and deferred demand from previous periods. The need to continue upgrading fixed assets will create additional investment demand in the agricultural and metals sectors. Exports will grow thanks to favorable terms of trade, primarily in 2018, and faster economic growth in Ukraine's MTPs. In 2019–2020, the growth of imports of goods and services will slightly outpace the growth in exports. However, stronger migration processes, driven by looser employment rules in neighboring countries and other factors, will result in larger remittances from migrant workers, which will partially offset the increase in the trade deficit.

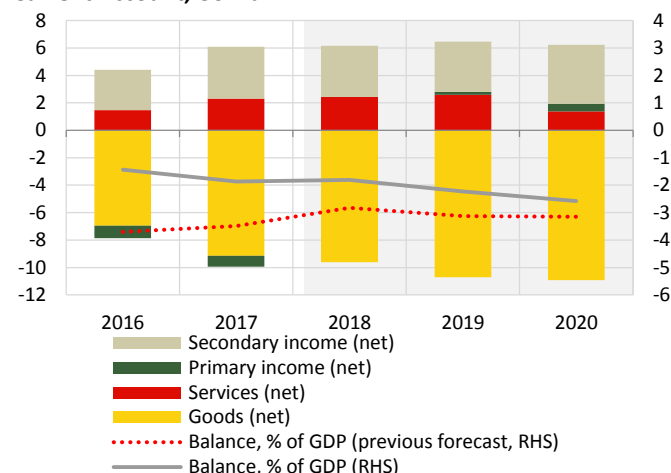
In 2018–2020, debt capital inflows to the private sector will recover and foreign direct investment will rise as the investment climate gradually improves. The placement of external government bonds slated for 2018–2020 will help refinance part of Ukraine's external debt, repayments of which will peak in 2019–2020.

As a result, the surplus of the overall balance of payments in 2018, coupled with IMF financing, will raise international reserves to USD 21.6 billion or 3.7 months of future imports by the end of 2018. However, in 2019 and 2020, the overall balance of payments is expected to be in deficit, which will reduce international reserves to USD 20.0 billion (3.2 months of future imports) by the end of 2020. A key assumption of this forecast is that Ukraine will continue to cooperate with the IMF under the EFF program in 2018 and sign a new program in 2020. This will secure access to international capital markets over the forecast horizon.

The current account deficit will widen to 2.6% of GDP in 2020 as a result of a larger trade deficit. However, the sustained growth in remittances from migrant workers will somewhat compensate for the increased trade deficit. In 2018, exports and imports of goods and services will grow at the same pace: better terms of trade will boost exports, while imports will be supported by improved consumer confidence and a pickup in international travel to Ukraine. In 2019–2020, imports of goods and services will grow faster than exports owing to strong consumer confidence and high investment demand, particularly from the agriculture sector.

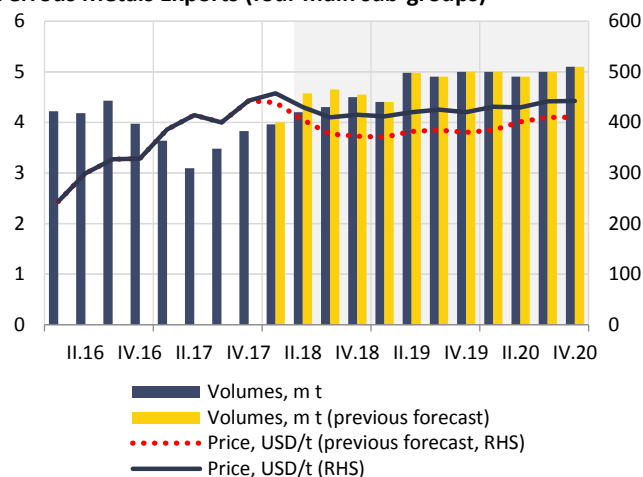
Goods exports are projected to grow by 6% in 2018 thanks to sustained favorable terms of trade - primarily high prices for metals amid growing global demand. The growth in exports by the metals industry (up by 25.6%) will also be driven by larger volumes of steel exports - mainly to the Asian markets due to the cut in production capacities in China - and due to accelerated economic growth in Ukraine's MTPs. Grain exports will rise by approximately 7%, driven mostly by higher prices (up by 5.7%). Volumes of grain exports are expected to be 39.7 million tons in 2017/2018 MY (compared to the bumper crop of 43.9 million tons in 2016/2017 MY). Further growth in exports in 2019–2020 will be propped up by improved

Current Account, USD bn



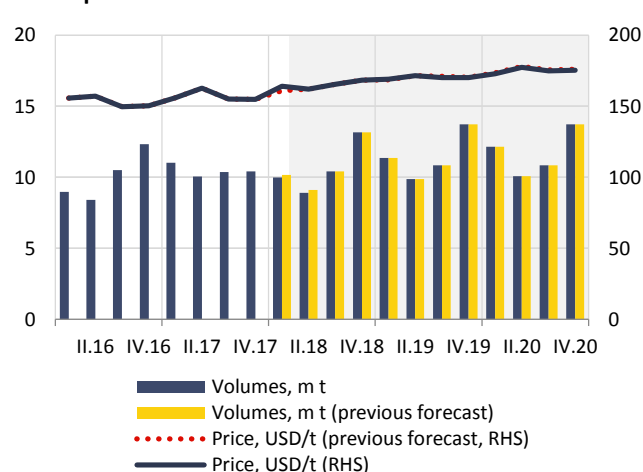
Source: NBU.

Ferrous Metals Exports (four main sub-groups)



Source: NBU.

Grain Exports



Source: NBU.

productivity in agriculture and the continued increase in metals exports. Machinery exports will also continue to grow, particularly exports of spare parts for the automobile industry, thanks to opening of foreign-owned plants in Ukraine, as well as exports of aviation products under agreements concluded at the air shows in 2017. Exports of chemicals will also increase as major fertilizer producers increase their production with the introduction of protectionist measures by the government.

Imports of goods are projected to grow by 5% in 2018–2020 due to non-energy imports, which are expected to increase by 9% in 2018 and then decelerate to 6% in 2019–2020. Consumer imports will grow, particularly food and industrial imports, as well as imports of cars, supported by social expenditure being raised by the Ukrainian government in 2018. The need to upgrade fixed assets in the metals and agricultural sectors will continue to bolster the growth in machinery imports. Fertilizer imports growth is expected to decelerate after restrictions are imposed on imports of certain types of mineral fertilizers from Russia.

In 2018, gas imports will decline by almost 4 bcm (to 10 bcm) owing to the large inventories of stored gas at the start of the year. At the same time, energy imports will decrease by only 3% due to higher prices for gas and oil products. In 2019–2020, the value of energy imports, particularly imports of oil products and coal, will increase slightly due to higher prices for energy resources.

The surplus in the trade in services in 2018–2019 will be maintained at the level of previous years. Further growth in the number of international travelers from Ukraine, and thus in service imports, will be offset by increased exports of transportation and IT services. The trade in services is expected to post a deficit in 2020 due to lower gas transit volumes following the expiry of the current contract with PJSC Gazprom.

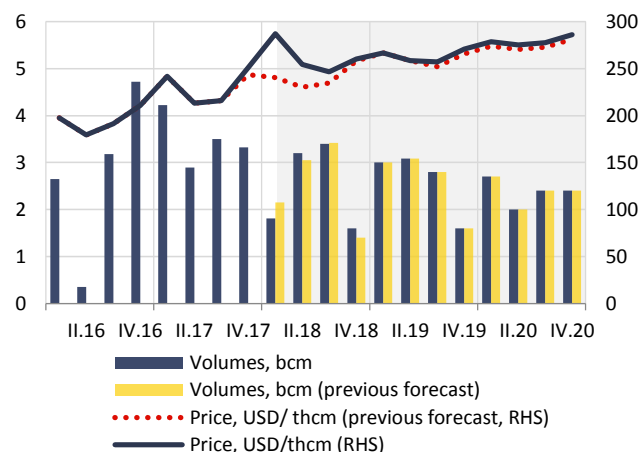
The number of labor migrants to the EU will continue growing in 2018–2020 as Poland and the Czech Republic have eased employment requirements due to a shortage of blue-collar workers in these countries. This will support further growth in remittances from migrant workers.

The payment of accrued dividends will increase in the coming years as capital flows are gradually liberalized and foreign-owned companies show good financial results.

Net inflows to the financial account are estimated at USD 5.0 billion in 2018, primarily driven by the public sector. The inflow of foreign direct investment and decrease in FX cash outside banks will be partially offset by net debt repayments by state-owned enterprises and increased bank assets. In 2019–2020, a gradual growth in foreign direct investment and a recovery of debt capital inflows to the private sector will be offset as the decline in FX cash outside banks comes to a halt. Net financial account inflows will decrease on the back of a peak in repayments of external debt by the government.

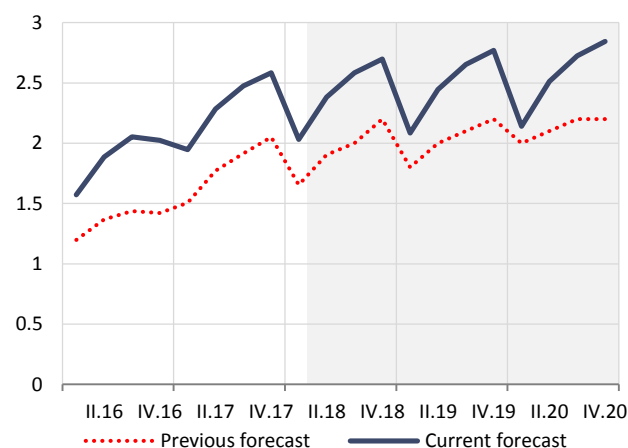
These debt repayments will create the need for official borrowing in order to maintain international reserves at the appropriate levels. In 2018, Ukraine expects to secure one IMF tranche of USD 2.0 billion and loans from the EU and the World

### Gas Imports



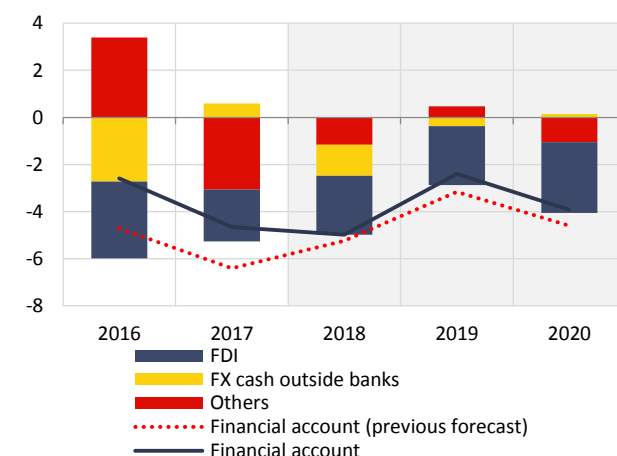
Source: NBU.

### Remittances to Ukraine, USD bn



Source: NBU.

### Financial Account, USD bn

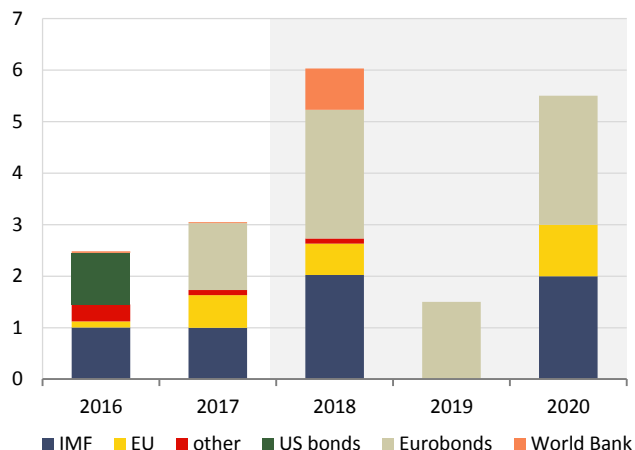


Source: NBU.

Bank (USD 0.6 billion and USD 0.8 billion respectively). Following its successful return to the Eurobond market in 2017, we expect the government to continue issuing sovereign Eurobonds in 2018–2020 (USD 2.5 billion in 2018, USD 1.5 billion in 2019, and USD 2.5 billion in 2020). Moreover, the forecast for 2020 envisages the government obtaining more credit under new lending programs with the IMF and the EU.

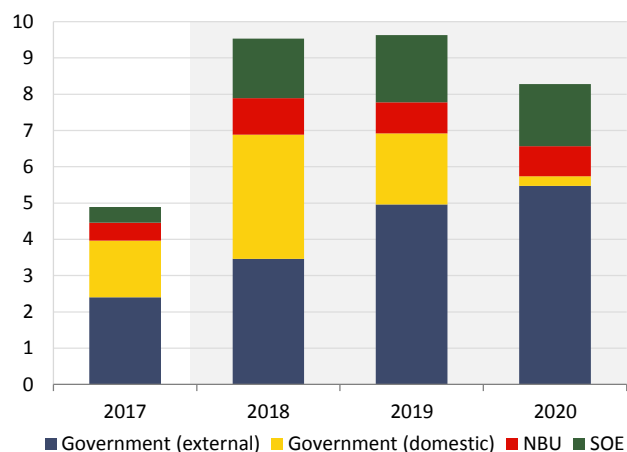
The surplus of the overall balance of payments and net inflows of EFF financing from the IMF will raise international reserves to USD 21.6 billion, or 3.7 months of future imports, by the end of 2018. That amount corresponds to 74% of the IMF’s composite measure for reserve adequacy. At the same time, international reserves will decrease to USD 20.0 billion, or 3.2 months of future imports, by the end of 2020.

Official Financing and Eurobond Placement, USD bn



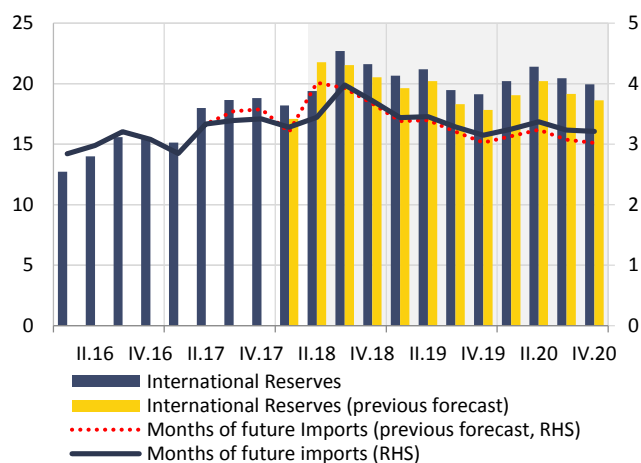
Source: NBU.

FX Public Debt Repayments, USD bn



Source: NBU.

International Reserves, USD bn



Source: NBU.

### 3.5. MONETARY SECTOR AND FINANCIAL MARKETS

The central bank expects to pursue a tight monetary policy over the forecast horizon. Persisting inflation risks and the need to bring inflation down to the target level will be the key factors keeping the key policy rate high. High real interest rates will dampen demand for cash, amid the further development of cashless payments. This level of real interest rates will also encourage further inflows of hryvnia deposits at a relatively fast pace, while limiting demand for loans. High institutional risks will remain the major drag on the resumption of lending over the forecast horizon.

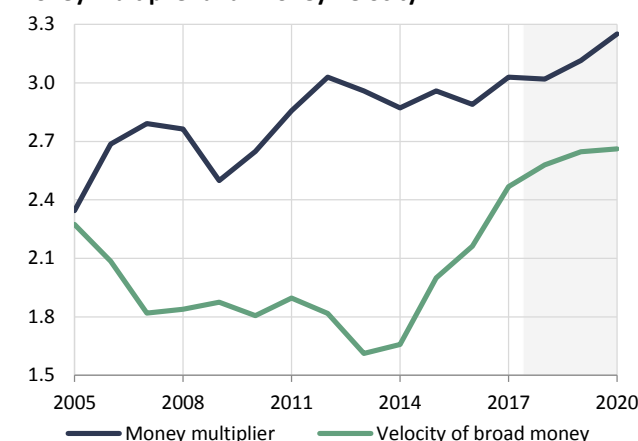
With a tight monetary policy, the money supply will grow more slowly than nominal GDP. In particular, the high opportunity cost of holding cash and the continued development of cashless payments will restrain the increase in cash in circulation. Along with a gradual growth in the banks' correspondent accounts, this will cause the monetary base to increase by around 11% this year and 4%–5% in the coming two years.

Simultaneously, high real interest rates will prompt a gradual increase in households' propensity to save, which will spur growth in deposits. As a result, growth in the money supply (8%–11%) over the forecast horizon will outpace the growth in monetary base and cash outside banks. At the same time, although borrower solvency is improving, the revival in lending activity will be held back by high institutional risks. High real interest rates will also restrain the demand for loans.

Given a surplus of liquidity in 2018, the NBU's issuing of certificates of deposit will remain the main instrument for managing interbank interest rates. The structural liquidity of the banking system may decrease in the second half of the year due to the seasonal accumulation of funds on the government's accounts, which may lead some banks to seek refinancing loans. Demand from banks for the NBU's certificates of deposit and refinancing loans in 2019–2020 will depend on the banking system's structural liquidity position: in case of a structural deficit, refinancing loans will be the main instrument for managing interest rates.

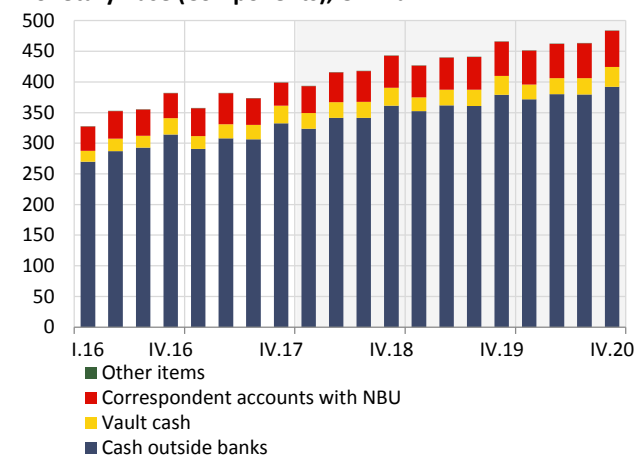
Keeping the key policy rate high will ensure tight monetary conditions to drive disinflation and bring inflation back to its target range in the second half of 2019, in turn allowing it reach the target range midpoint – the medium-term inflation target of 5% – in 2020. Further on, monetary policy will be sufficiently tight to maintain inflation at the target level. The realization of this scenario will depend on risks to macrofinancial stability, success in continuing cooperation with the IMF, a well-balanced fiscal policy, and the speed of the decrease in inflation expectations.

Money Multiplier and Money Velocity



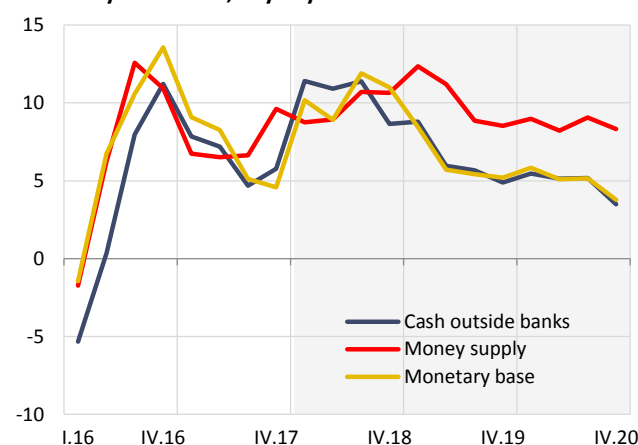
Source: NBU.

Monetary Base (Components), UAH bn



Source: NBU.

Monetary Indicators, % y-o-y



Source: NBU.



### 3.6. RISKS TO THE FORECAST

The NBU sees the main risk to its baseline forecast scenario to be the slow progress in the country's structural reforms. These reforms are needed to maintain macrofinancial stability and extend the IMF program, as Ukraine will face large external debt repayments in 2019–2020. Any delays in taking the required steps to renew cooperation with Ukraine's official lenders narrow the country's opportunities to receive the financing it requires. An early termination of cooperation with the IMF would entail a substantial rise in the risk premium, impede Ukraine's access to international financial markets, affect depreciation and inflation expectations, and complicate planned budgetary spending.

In the fiscal sector, social spending outpacing overall labor productivity, especially in the pre-election period, poses the greatest risk to prices. This fiscal policy stance might not only accelerate inflation, but also curb government investment and raise debt levels, which would affect economic growth prospects over the medium term. In this case, the NBU would have to tighten its monetary policy more than envisaged in the baseline scenario.

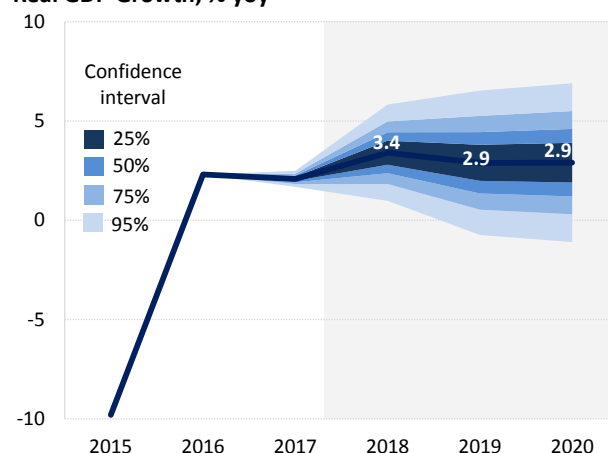
The situation in eastern Ukraine also remains a significant source of uncertainty. If the situation improves, Ukraine would become more attractive for investors as the risk premium declines, which would foster capital inflows, spur economic growth, and strengthen the hryvnia. On the other hand, any escalation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

The main source of uncertainty for inflation is related to the size and speed of changes in administered prices (primarily for gas, heating, and electricity), which could cause inflation to deviate from the baseline trajectory in either direction. Inflation will remain susceptible to food supply factors related to crop yields, prices, and Ukraine's access to international food markets, although these risks are symmetric.

At the global scale, uncertainty is rising for both price trends and access to the main markets as the world's largest economies (the United States and China) engage in trade wars. Any mounting global confrontation would cause an excess supply of commodities and a corresponding downward pressure on prices. In this case, or if access is lost to some markets, foreign currency proceeds from exports would decline, which would put pressure on the trade balance and the hryvnia exchange rate. This would translate into additional inflationary pressure. Under these conditions, there would be an elevated risk of inflation deviating from the target range, and GDP growth would be slow. In that event, the NBU would have to tighten its monetary conditions beyond the level built into the baseline scenario in order to eliminate the adverse effect of external shocks.

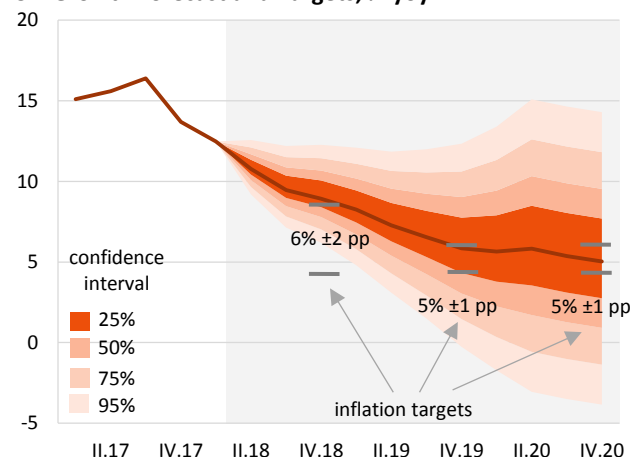
However, an increase in external demand and global prices for Ukrainian exports would boost economic growth, strengthen the hryvnia, and quickly decelerate inflation. Under those conditions the NBU would be able to shift to easing monetary policy more quickly than envisaged in the baseline scenario.

Real GDP Growth, % yoy



Source: NBU.

CPI Growth Forecast and Targets, % yoy



Source: NBU.

The forecast is given in a fan chart. This chart type is used to illustrate uncertainty with regard to predicted future values. For instance, the probability that the inflation rate will be in the range of the darkest shaded area in the chart (around the central line) is 25%. The same applies to other chart areas, implying the 95% probability that the inflation rate will be in the range of the lightest shaded area.

**Macroeconomic forecast (April 2018)**

Indicators	2015				2016				2017				2018				2019				2020				
	2015		2016		2017		2018		2019		2020		2018		2019		2020		2018		2019		2020		
	2015	2016	2017	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	
<b>REAL ECONOMY, % yoy, unless otherwise stated</b>																									
Nominal GDP, UAH bn	1989	2385	2983	689	773	967	1021	3451	3394	778	861	1075	1127	3842	3779	852	937	1171	1225	4186	4117				
Real GDP	-9.8	2.4	2.5	2.3	3.4	3.9	3.9	3.4	3.4	4.1	2.9	2.7	2.2	2.9	2.9	2.3	2.7	3.0	3.5	2.9	2.9				
GDP Deflator	38.9	17.1	22.0	14.0	12.5	11.0	10.0	11.9	12.0	8.5	8.2	8.1	8.0	8.2	8.2	7.0	6.0	5.5	5.0	5.9	5.9				
Consumer prices (period average)	48.7	13.9	14.5	-	-	-	-	10.9	11.0	-	-	-	-	7.4	7.3	-	-	-	-	5.5	5.7				
Producer prices (period average)	36.0	20.5	26.3	-	-	-	-	13.5	15.2	-	-	-	-	8.1	8.6	-	-	-	-	7.8	8.1				
Consumer prices (end of period)	43.3	12.4	13.7	13.2	10.2	8.8	8.9	8.9	8.9	7.9	8.1	7.1	5.8	5.8	5.8	5.7	5.8	5.3	5.0	5.0	5.0				
Core inflation (end of period)	34.7	5.8	9.5	9.4	9.2	8.5	7.7	7.7	8.2	7.1	7.0	6.1	4.8	4.8	4.8	4.6	4.5	3.6	3.3	3.3	3.2				
Non-core inflation (end of period)	50.9	18.3	19.4	18.2	11.6	9.2	10.5	10.5	9.9	8.9	9.7	8.4	7.1	7.1	7.2	7.1	7.5	7.5	7.2	7.2	7.4				
raw foods (end of period)	40.7	1.2	23.5	23.3	8.4	3.7	5.9	5.9	4.6	4.0	5.4	5.0	4.0	4.0	4.0	3.8	3.6	3.2	3.1	3.1	2.9				
administrative prices (end of period)	64.4	34.6	16.1	13.6	12.8	13.2	14.6	14.6	13.8	13.8	13.7	11.6	10.0	10.0	9.6	10.0	10.6	10.4	10.4	10.4	10.6				
Producer prices (end of period)	25.4	35.7	16.6	15.9	14.0	11.5	8.8	8.8	9.8	7.0	8.9	9.2	8.4	8.4	9.0	6.0	8.7	8.1	8.1	8.1	8.4				
<b>FISCAL SECTOR</b>																									
Consolidated budget balance, UAH bn	-30.9	-54.8	-42.1	-	-	-	-	-81.9	-82.2	-	-	-	-	-100.3	-98.6	-	-	-	-	-84.1	-83.2				
% of GDP	-1.6	-2.3	-1.4	-	-	-	-	-2.4	-2.4	-	-	-	-	-2.6	-2.6	-	-	-	-	-2.0	-2.0				
Public sector fiscal balance (IMF methodology), UAH bn	-17.0	-50.3	-39.2	-	-	-	-	-82.8	-82.8	-	-	-	-	-98.9	-96.9	-	-	-	-	-82.1	-81.0				
% of GDP	-0.9	-2.1	-1.3	-	-	-	-	-2.4	-2.4	-	-	-	-	-2.6	-2.6	-	-	-	-	-2.0	-2.0				
General government and Naftogaz financing, UAH bn	-37.5	-50.3	-39.2	-	-	-	-	-82.8	-82.8	-	-	-	-	-98.9	-96.9	-	-	-	-	-82.1	-81.0				
General government and Naftogaz financing, % of GDP	-1.9	-2.1	-1.3	-	-	-	-	-2.4	-2.4	-	-	-	-	-2.6	-2.6	-	-	-	-	-2.0	-2.0				
<b>BALANCE OF PAYMENTS (NBU methodology)</b>																									
Current account balance, USD bn	1.6	-1.3	-2.1	-1.0	0.1	-1.5	0.0	-2.4	-3.5	-1.4	-0.1	-1.3	-0.3	-3.2	-4.2	-1.7	-0.2	-1.3	-0.8	-3.9	-4.7				
Financial account, USD bn	1.2	-2.6	-4.7	-0.6	-1.7	-3.2	0.6	-5.0	-5.2	-1.0	-1.2	-0.2	0.0	-2.4	-3.2	-2.3	-1.4	0.1	-0.3	-3.9	-4.6				
BOP overall balance, USD bn	0.8	1.3	2.6	-0.3	1.7	1.8	-0.6	2.6	1.8	-0.4	1.1	-1.1	-0.4	-0.8	-1.1	0.7	1.2	-1.4	-0.5	0.0	-0.1				
Gross reserves, USD bn	13.3	15.5	18.8	18.2	19.4	22.7	21.6	21.6	20.5	20.6	21.2	19.5	19.1	19.1	17.8	20.2	21.4	20.4	20.0	20.0	18.6				
Months of future imports	3.1	3.2	3.4	3.3	3.4	4.0	3.7	3.7	3.7	3.4	3.5	3.3	3.1	3.1	3.0	3.2	3.4	3.2	3.2	3.2	3.0				
Export of goods, % yoy	-29.9	-5.3	18.3	8.0	6.5	5.3	5.7	6.3	3.3	-2.3	6.9	7.5	5.7	4.5	5.1	8.0	3.8	5.4	5.8	5.7	6.2				
Import of goods, % yoy	-32.6	4.2	21.1	11.9	6.8	7.8	-1.2	5.9	3.6	2.7	6.9	4.9	7.8	5.6	6.3	6.4	2.7	3.5	6.3	4.7	5.4				
<b>MONETARY ACCOUNTS (Cumulative since the beginning of the year)</b>																									
Monetary base, %	0.8	13.6	4.6	-1.5	4.2	4.7	11.0	11.0	9.3	-3.7	-0.7	-0.5	5.2	5.2	5.3	-3.1	-0.8	-0.6	3.8	3.8	3.8				
Broad money, %	3.9	10.9	9.6	-3.3	-0.5	3.0	10.6	10.6	10.6	-1.8	0.0	1.3	8.5	8.5	9.6	-1.4	-0.3	1.8	8.3	8.3	8.4				
Velocity of broad money (end of year)	2.0	2.2	2.4	-	-	-	-	2.6	2.6	-	-	-	-	2.6	2.6	-	-	-	-	2.7	2.6				