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# Inflation Report (April 2017)

**National Bank of Ukraine**
**Kyiv,** April 26, 2017

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# Summary

- **A trade ban with the non-government controlled area (NGCA) worsens the outlook for economy in 2017-2018.** Net negative effect on GDP is estimated at 1.3% in 2017 and 0.9% in 2018**.** Net negative effect on BoP (via trade channel) is estimated at $1.8 bn in 2017 and $1.1 bn  in 2018
- **Partially, negative effects on GDP and BoP are offset by more favorable external environment**
- **As a result, real GDP growth forecast is revised to +1.9% in 2017 and +3.2% in 2018**
- **Current account deficit is projected to exceed 4% of GDP**. Shock for BoP is accommodated by lower net FX purchases in 2017
- **Revision of interventions forecast leads to lower gross international reserves** at the end-2018 ($26.2 bn), but reserves remain almost unchanged in months of future imports (5.1)
- **Inflation outlook is left unchanged**: upside pressure from higher commodities/food prices is offset by changes in procedures for administrative tariffs adjustments and lower demand pressure
- **NBU resumed monetary policy easing cycle cutting its key policy rate by 1 pp to 13%**. Further monetary policy easing is conditional upon mitigation of risks for the achievement of inflation targets

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# Key macroeconomic indicators

| | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|
| Real GDP, % yoy | 2.3 | 1.9 (2.8) | 3.2 (3.0) | 4.0 |
| Nominal GDP, UAH bn | 2383 | 2 755 (2 739) | 3 106 (3 081) | 3 460 |
| CPI, % yoy | 12.4 | 9.1 (9.1) | 6.0 (6.0) | 5.0 |
| Core CPI, % yoy | 5.8 | 6.5 (6.3) | 4.3 (4.8) | 3.7 |
| Current account balance, USD bn | -3.8 | -4.3 (-3.5) | -4.3 (-3.4) | -4.3 |
| BOP (overall), USD bn | 1.3 | 0.7 (1.1) | 3.2 (4.0) | 0.5 |
| Gross reserves, USD bn | 15.5 | 21.1 (21.3) | 26.2 (27.1) | 25.1 |
| Base money, eop, % yoy | 13.6 | 6.3 (7.7) | 7.8 (8.2) | 6.5 |
| Broad money, eop, % yoy | 10.8 | 10.7 (11.5) | 12.8 (13.3) | 12.0 |

in ( ) – previous forecast (IR, January 2017)

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# Assumptions

| GDP growth, % | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|
| Euro area | 1.7 | 1.5 (1.3) | 1.4 (1.4) | 1.4 |
| Russia | -0.2 | 1.1 (1.1) | 1.3 (1.3) | 1.6 |
| China | 6.7 | 6.6 (6.6) | 6.5 (6.5) | 6.3 |
| Commodity prices | | | | |
| Oil (Brent), USD/bbl | 43.9 | 56.8 (54.1) | 62.1 (59.1) | 64.8 |
| Steel Billet Exp FOB Ukr, USD/MT | 328.6 | 378.1 (363.8) | 386.5 (376.0) | 396.5 |
| Wheat, USD/MT | 143.1 | 145.1 (134.9) | 158.1 (147.6) | 161.7 |
| Exchange rates (average) | | | | |
| USD/EUR | 1.11 | 1.05 (1.05) | 1.05 (1.05) | 1.05 |
| RUB/USD | 67.1 | 60.5 (62.7) | 61.3 (63.3) | 61.3 |
| Administrative prices, % changes | 34.6 | 16.0 (16.9) | 11.6 (9.5) | 9.7 |
| Electricity | 60.0 | 28.1 (27.0) | 18.0 (18.0) | 20.0 |
| Natural gas | 42.0 | 19.3 (29.0) | 17.5 (12.8) | 10.9 |
| Heating | 89.3 | 16.8 (24.5) | 14.8 (10.8) | 9.3 |
| Hot water | 82.9 | 14.5 (21.4) | 13.1 (9.5) | 8.2 |

in ( ) – previous forecast (IR, January 2017)

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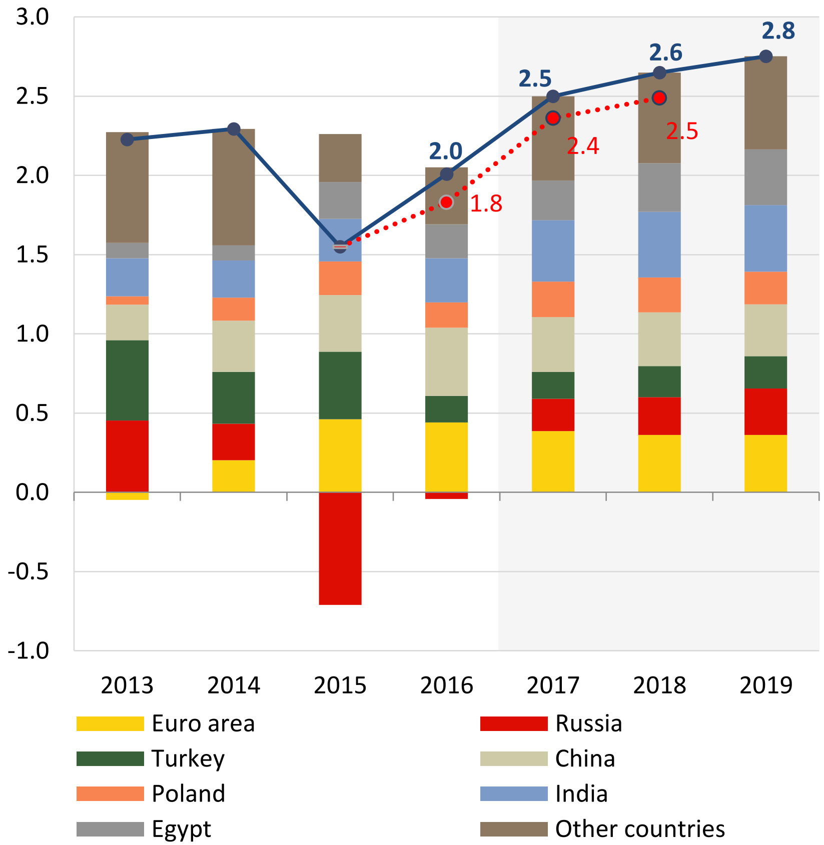
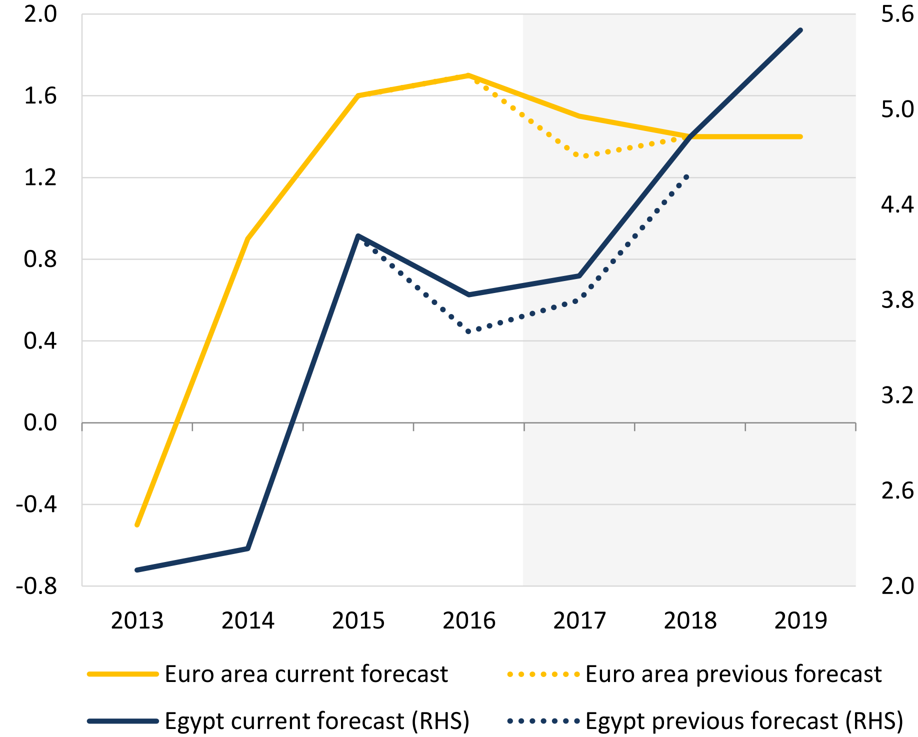
# Trade partners' economic activity improves. Revision of EU and Egypt economies outlook determines stronger UAwGDP

**Contributions of Countries - Main Trading Partners of Ukraine to the Annual Change of UAwGDP, % yoy**




Source: NBU estimate (preliminary data)

**Real GDP of Euro area and Egypt, % yoy**




Source: NBU estimate

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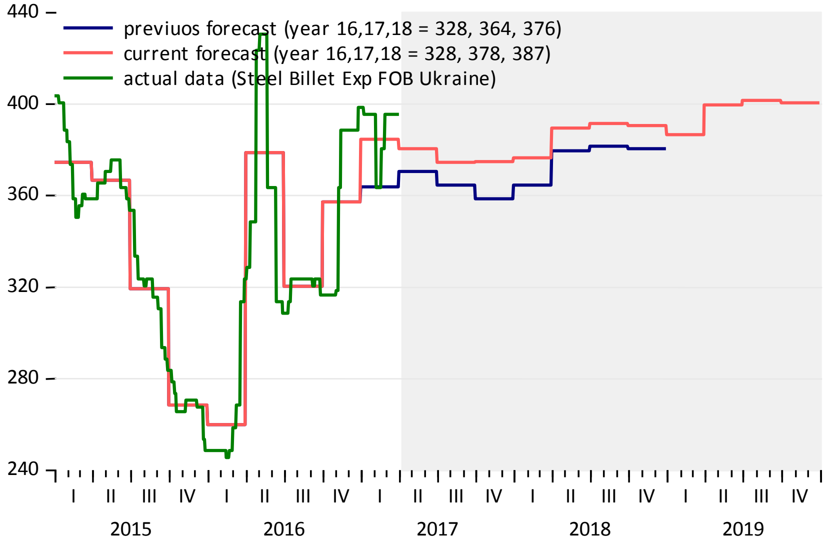
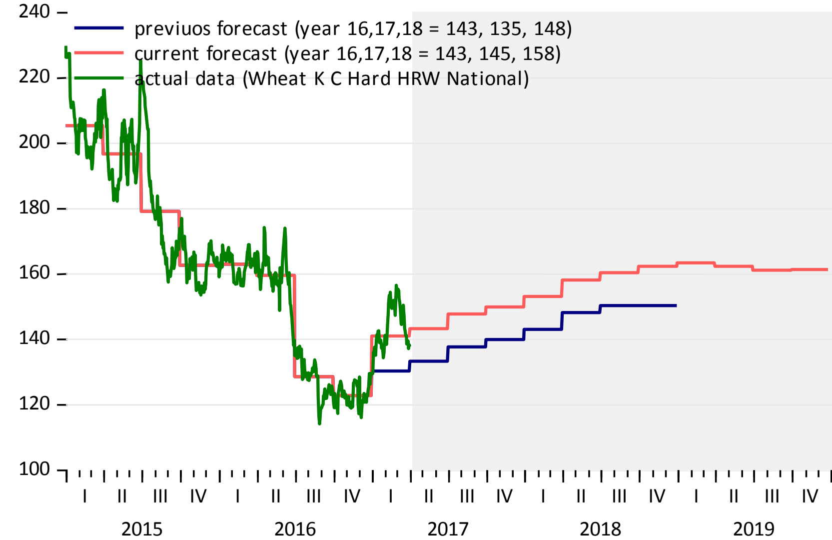
# World prices expected to be higher due to better global economy outlook

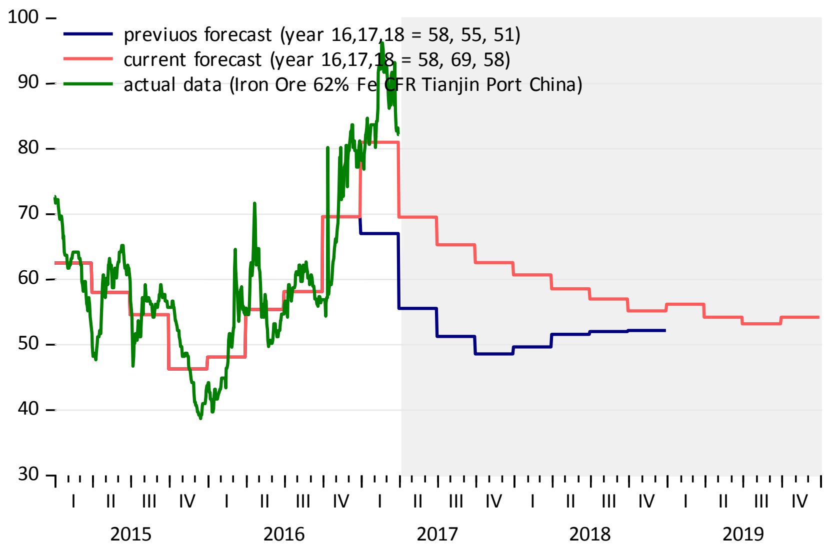
### Steel World Price, USD/MT



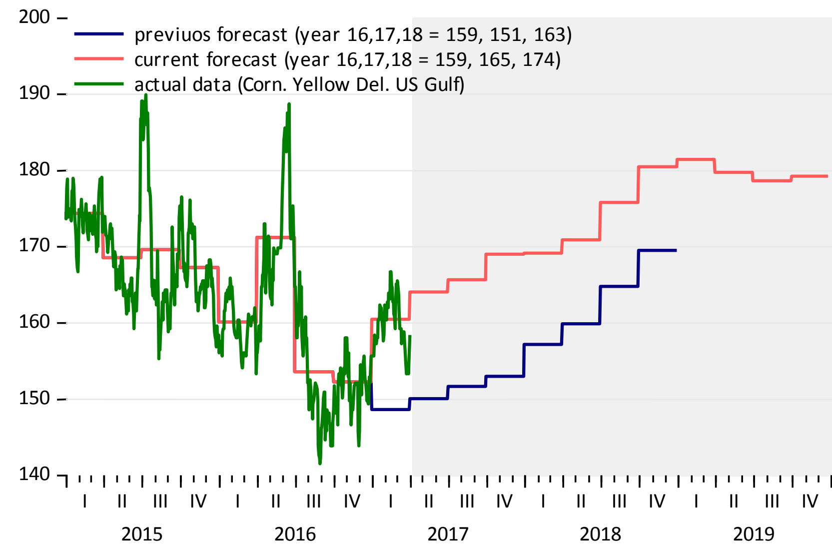

### Wheat World Price, USD/MT




### Iron Ore World Price, USD/MT




### Maize World Price, USD/MT



# Financial conditions for EMs have tightened but capital flows to these countries are expected to recover

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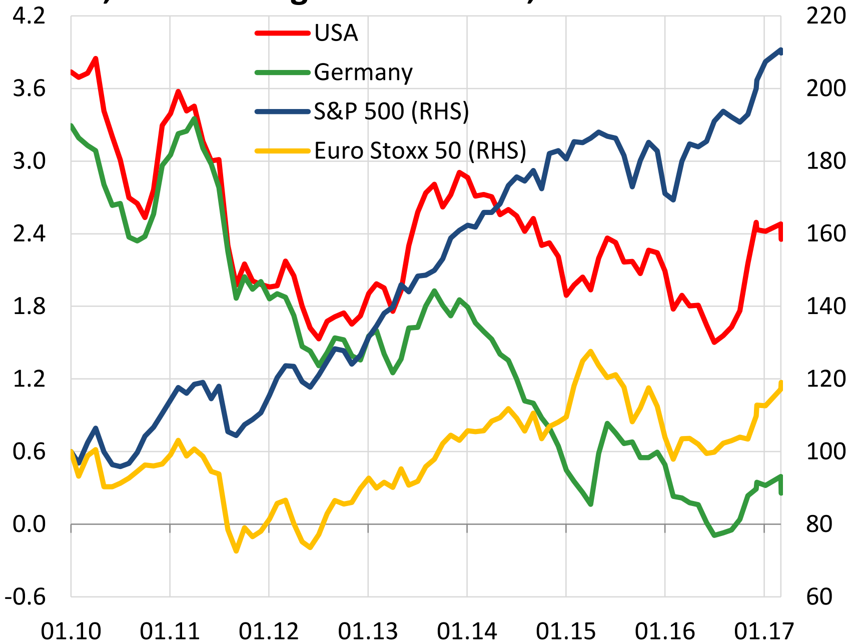
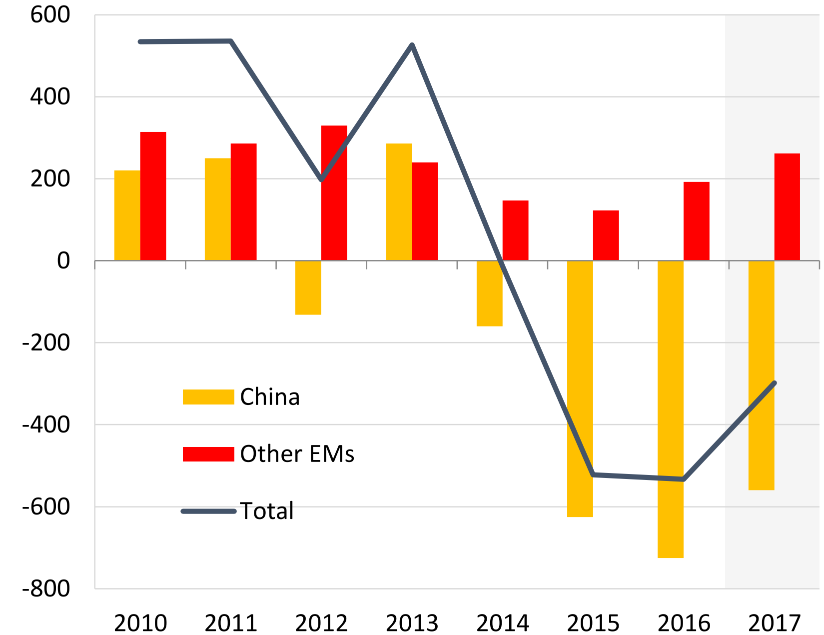
**Government Bonds Yields (10 year), monthly average, %, and Leading Stock Indexes, 01.2010=100**




Source: Thomson Reuters Datastream

**Net Capital Flows to EMs, USD bn**




Source: estimates based on IIF

- External financing conditions for EMs have tightened as
  - Fed normalizes its monetary policy
  - Inflation in AE is picking up, while economic activity in AE is gaining strength
  - The potential for USD strengthening and depreciation pressures on EM currencies
  - Investors may turn risk averse amid risks of trade wars between the US and China, Mexico, South Korea
- However, currently this tightening is accompanied by a number of favorable developments
  - Investors' search for yields - differential between EM and AE returns remains high, although narrowing
  - An improved EM growth outlook amid recovering commodity prices
  - Still accommodative monetary policy of ECB and Bank of Japan
  - Elevated political uncertainties in euro area due to elections, Brexit, banking sector weaknesses

# Trade ban effects on exchange rate would be compensated by better external environment

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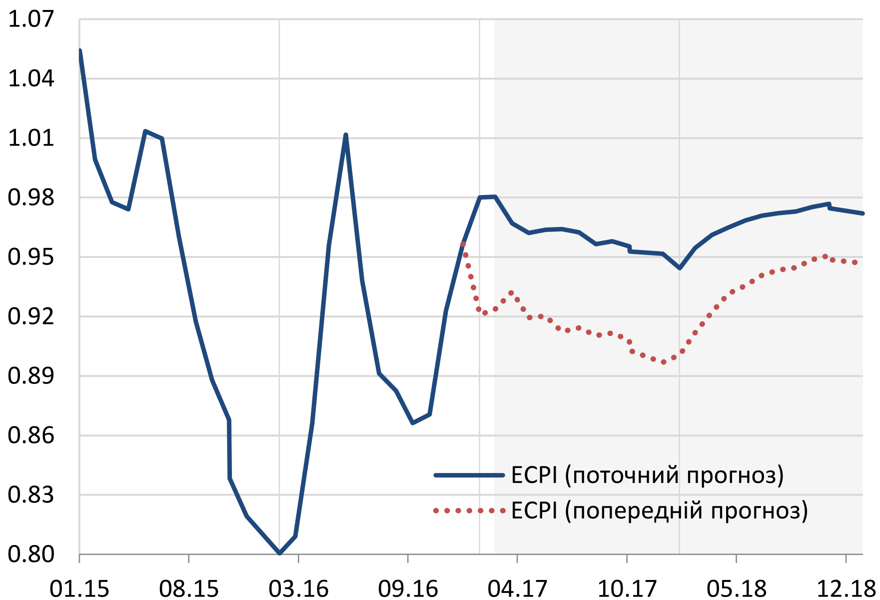
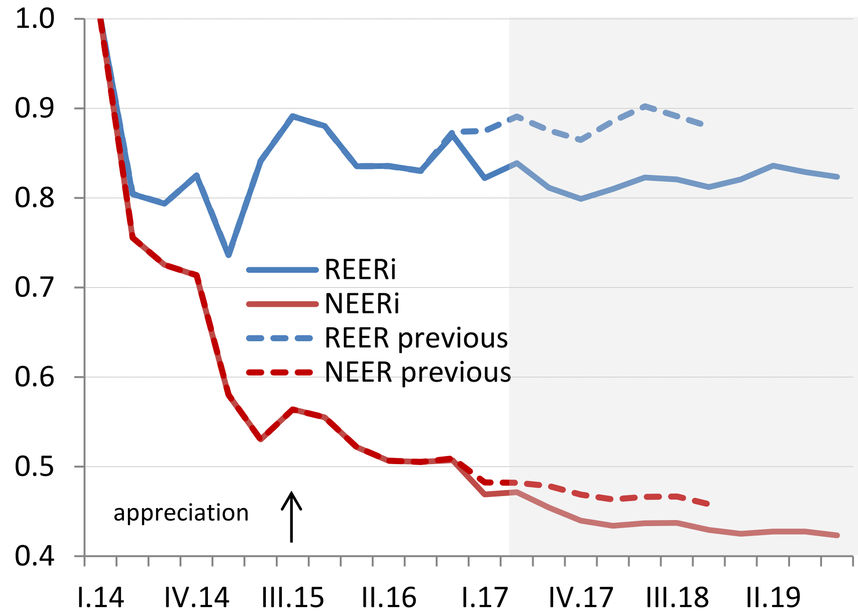
**Commodity Price Index for Ukrainian Exports (ECPI)*, 12.2004=1**



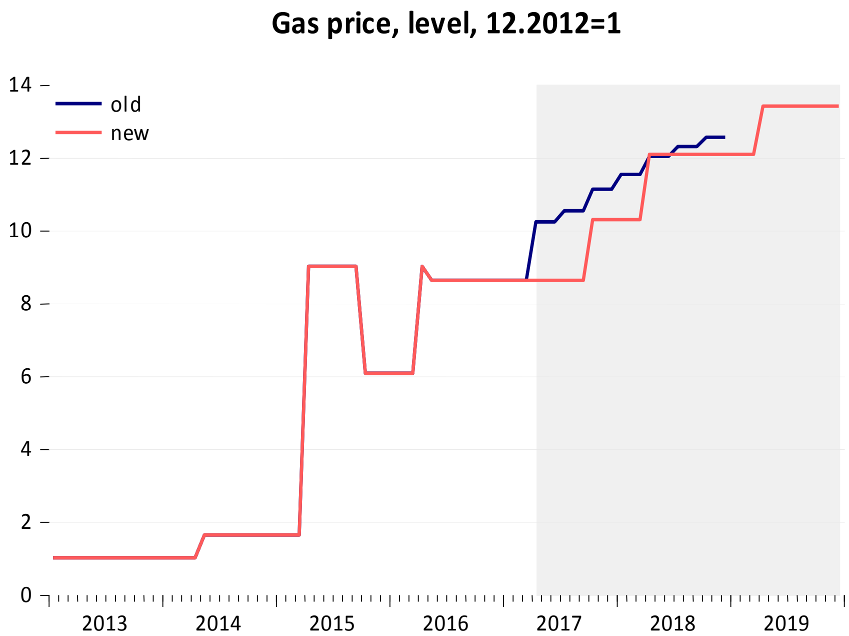

**REER and NEER index (1.2014=1)**

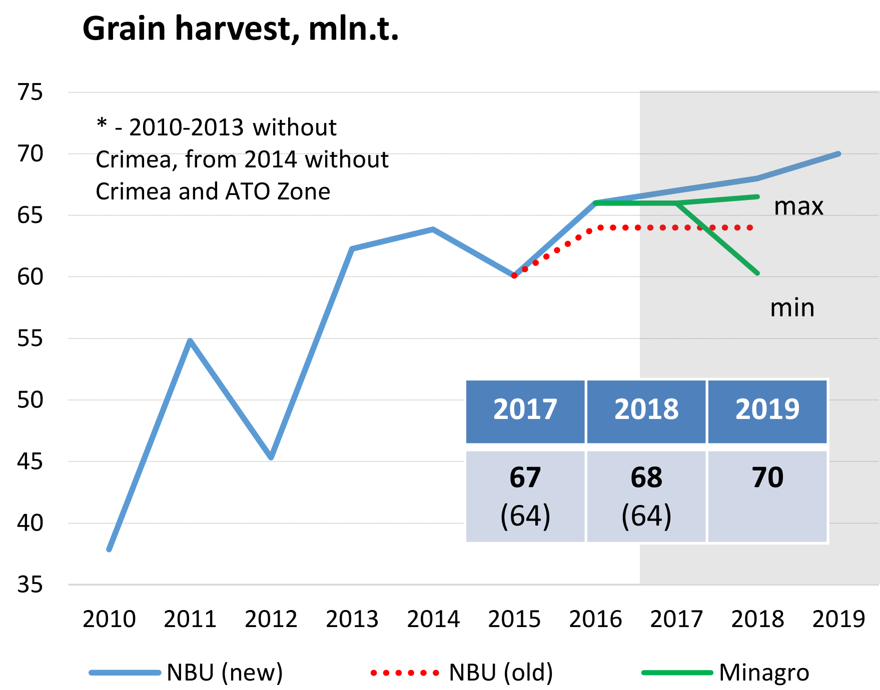



| | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|
| REER, average, % change | +0.7 | -2.9 (+3.9) | -0.2 (+1.5) | +1.3 |
| NEER, average, % change | -8.5 | -10.1 (-6.4) | -5.3 (-3.0) | -2.0 |

*REER depreciation took place in Q1 2017 due to lower then expected inflation in Ukraine, global reflation and USD weakening*

# Internal assumptions. KMU's new resolution changes profile of administrative prices. Harvest expected to be higher




**KMU adopted new methodology for households' gas price calculation:**

- Prices change dates: April 1, October 1
- Calculations & pre-announcement at least in 2 months in advance (February 1 or August 1)
- No price changes if import parity gap < 10%
- Import parity depends on:
    - Average German hub NCG prices for last 6 or 12 months (second option is used if the price was unchanged during previous revision date)
    - Average UAHUSD exchange rate during the last 2 months (eg, May-June for next review)

**Lag effects in new methodology is a key factor of forecast update**

# A trade ban will cost 1.3 pp of real GDP and $1.8 bn for 2017 CA, but negative impact will be partially offset by favorable ToT

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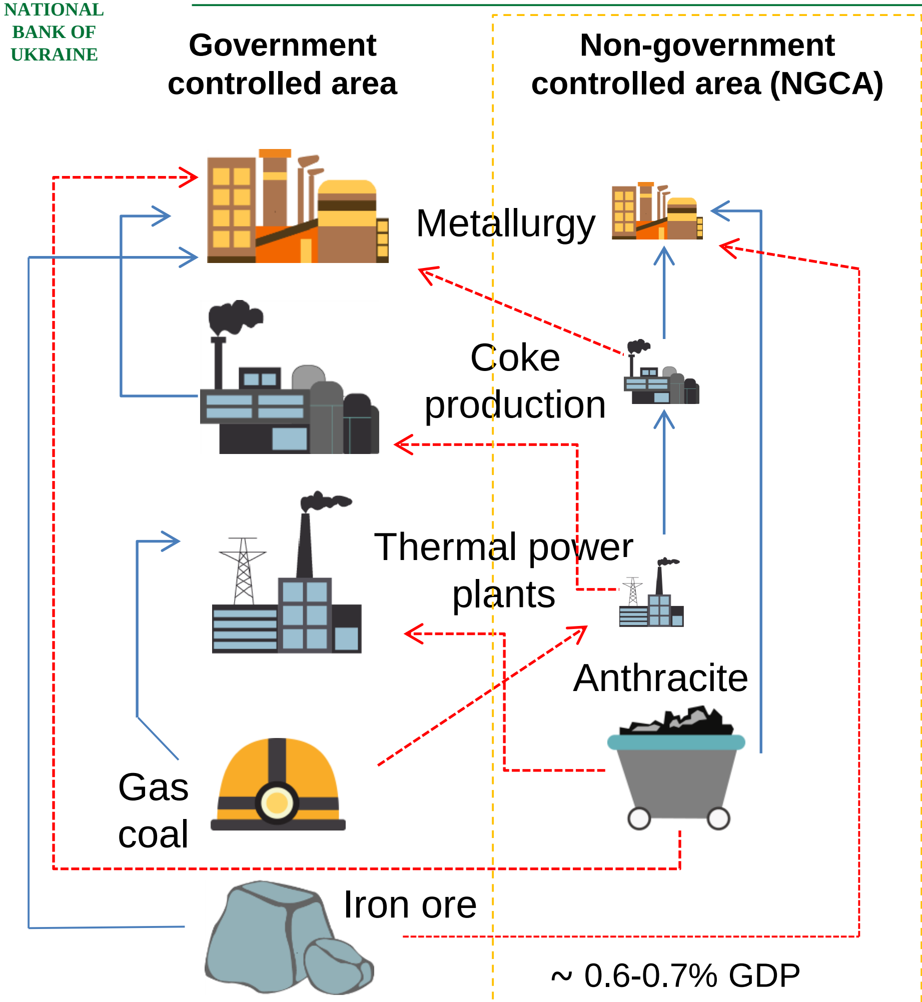



**Impact on Real GDP and Industrial Production Growth, pp**

| Contribution to indicator changes | 2017 | 2018 |
|---|---|---|
| ***Industrial production*** | -4.8 | 1.6 |
| Mining | -7.4 | 2.0 |
| Metallurgy | -20.4 | 8.4 |
| Coke | -17.2 | 7.1 |
| Electricity | -3.2 | 1.3 |
| ***Industrial production, contr. to GDP*** | -0.9 | 0.3 |
| Other sectors (cross-sector links), contr. to GDP | -0.4 | 0.1 |
| **Real GDP** | **-1.3** | **0.4** |

**Impact on CA Balance, USD bn**

| Contribution to indicator changes | 2017 | 2018 |
|---|---|---|
| Export of metallurgical products | -1.3 | 0.7 |
| Import of energy coal | -0.4 | -0.3 |
| Import of coke and/or coking coal | -0.5 | -0.3 |
| Export of extra iron ore | +0.4 | +0.2 |
| **CA balance** | **-1.8** | **-1.1** |

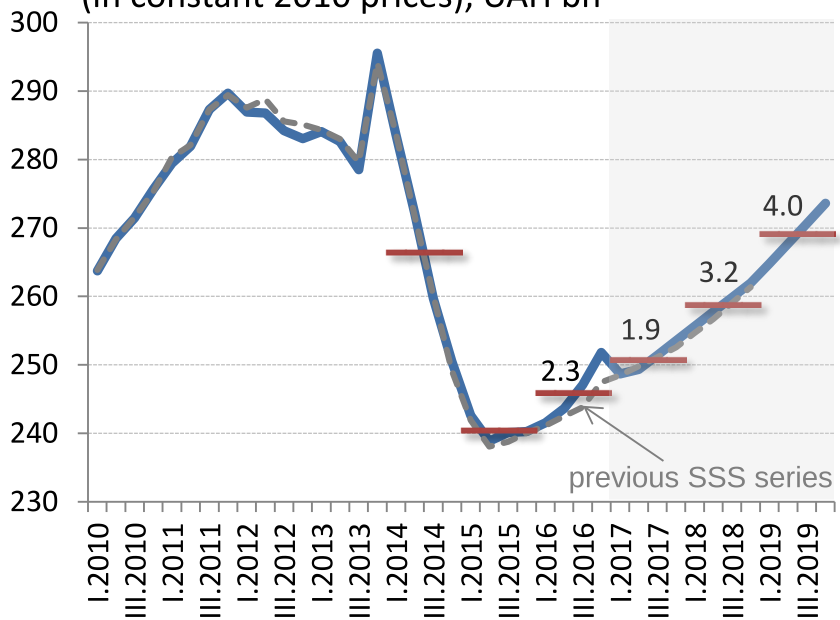
- Impact on inflation and exchange rate is expected to be limited
- If needed, the NBU will reduce its FX purchases on the interbank market to replenish international reserves

Assumptions:

- Seized enterprises were excluded from the official statistics
- Disrupted production links are gradually offset via imports and/or production on controlled territory
- Most metallurgical plants will be able to restore their production to 2016 levels by the end of 2017
- Partial reorientation of power generating companies into other types of fossil fuels

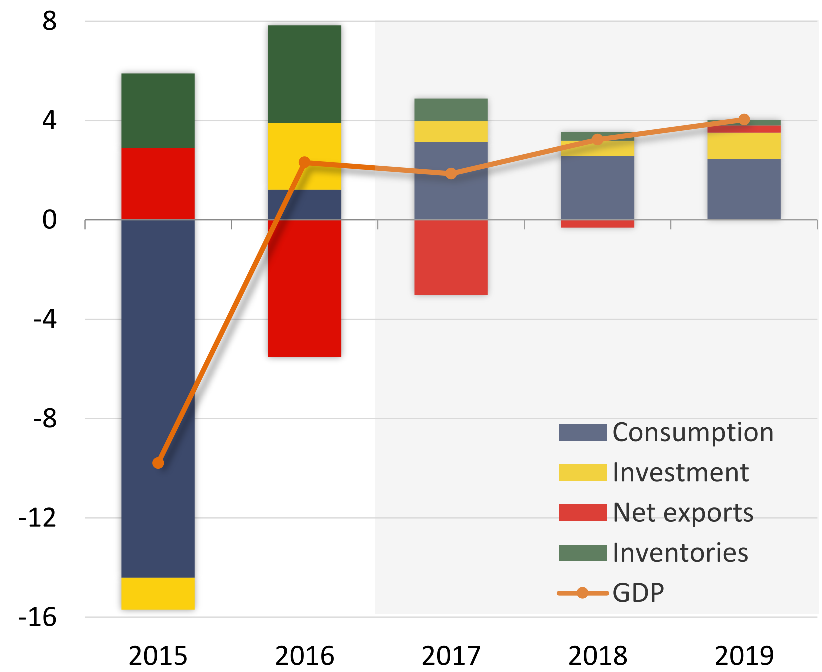
# Net exports has negative contribution to GDP growth in 2017 reflecting ban on the cargo movement along the delimitation line

**Seasonally Adjusted GDP**
(in constant 2010 prices), UAH bn




Source: NBU

**Contributions to Real GDP Growth, pp**




| change, % (in real terms) | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|
| **GDP** | **2.3** (1.8) | **1.9** (2.8) | **3.2** (3.0) | **4.0** |
| Consumption | 1.4 (2.6) | 3.6 (3.7) | 2.9 (2.8) | 2.8 |
| *Private consumption* | 1.8 (3.8) | 4.9 (4.9) | 3.4 (3.4) | 3.3 |
| Gross capital formation | 40.8 (16.2) | 5.7 (3.2) | 6.0 (5.6) | 7.5 |
| *Gross fixed capital formation* | 20.1 (17.7) | 5.7 (5.7) | 4.0 (4.0) | 6.8 |
| Export of goods and services | -1.6 (-4.3) | 2.9 (5.4) | 5.0 (3.5) | 4.0 |
| Import of goods and services | 8.4 (3.7) | 8.0 (7.0) | 6.0 (3.9) | 3.0 |

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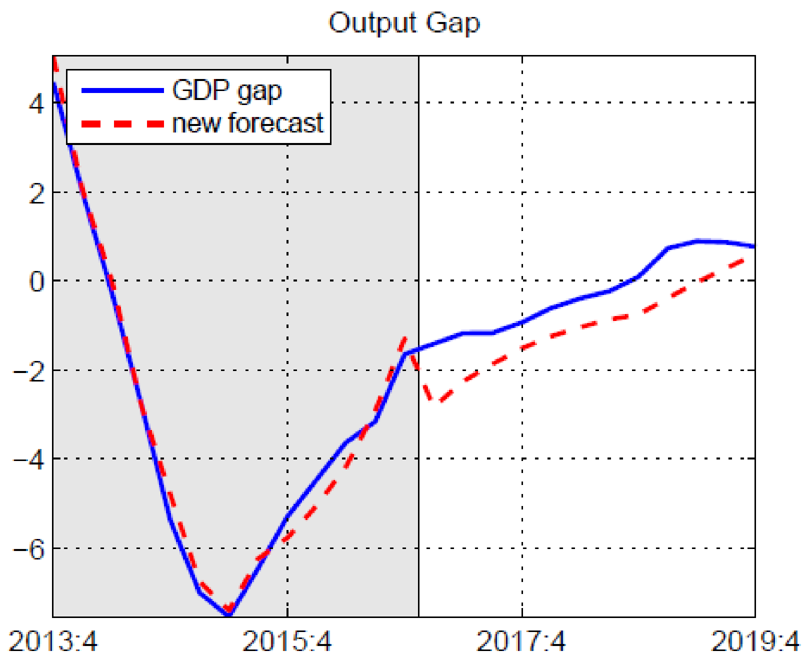
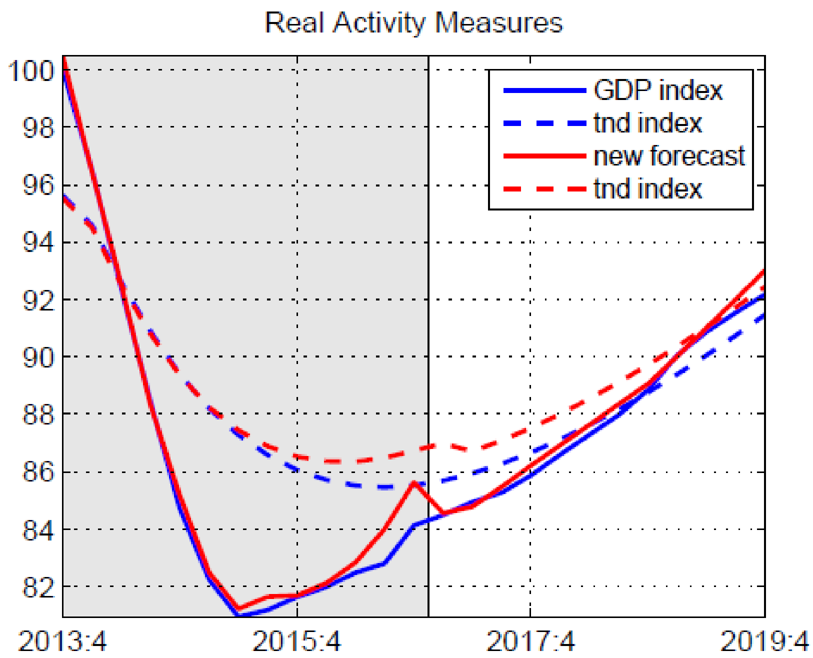
# A trade ban with worsens GDP gap outlook and determines persistent loss of Potential GDP




**Widening negative output gap**
reflects temporary underloading of production capacities due to supply-chains disruptions and loss of sales market

**Potential GDP drop**
due to loss of enterprises on the uncontrolled territory (their share is 0.7% in 2016 GDP)

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# In 2016, SSC reduction contributed to wage increase but raised Pension Fund sustainability concerns (Business Outlook Survey)

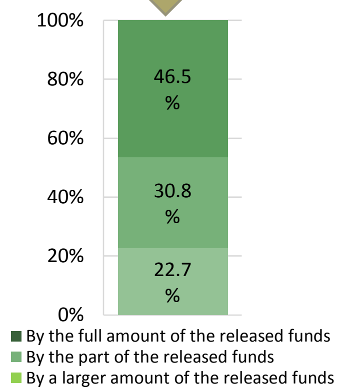
## Allocation of Funds Released from the Reduced SSC, % of the respondents

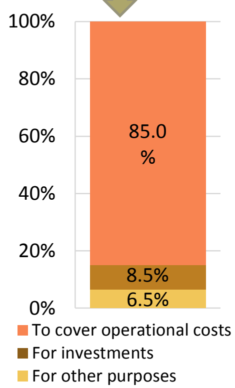
**Was there an increase in wages in your company (Q1 2017)?**

**65.2%** **Yes** +8.6 pp from previous survey

**24%** -8.4 pp **No, the released funds were allocated to:**

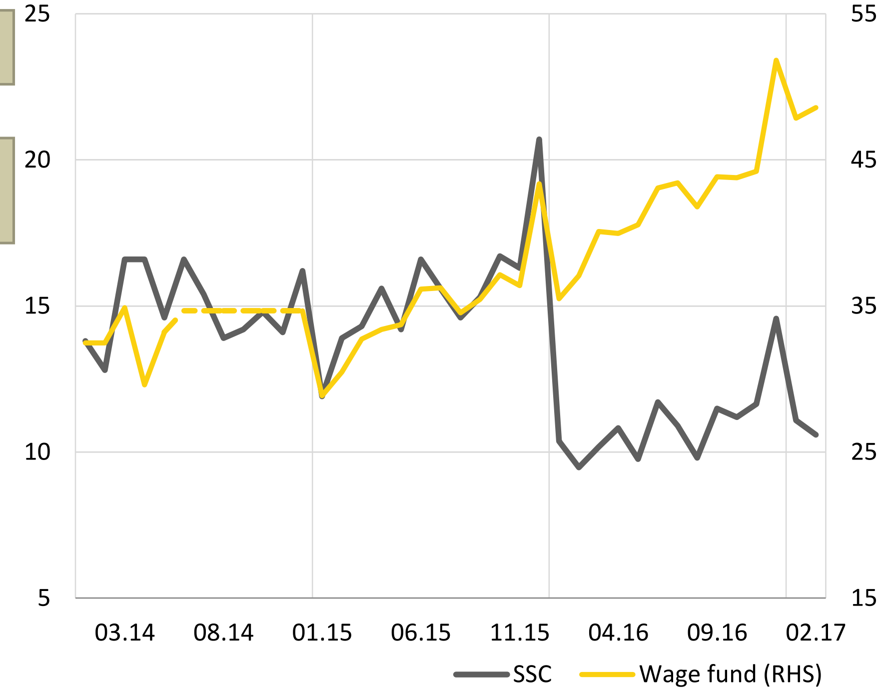
**10.8%** **No, there was no release of funds**




Source: Business Outlook Survey of Ukraine (NBU)

## Social Security Contributions (SSC) and Wage Fund, UAH bn




Source: Treasury, SFS, SSSU, NBU staff estimates

- The share of enterprises that raised wages following the reduction of SSC was almost 9 pp higher than according to their plans in early 2016
- About 14% of all enterprises increased wages by larger amount than the released funds. However, that may reflect improved overall macroeconomic situation and profitability of enterprises
- Those who did not increase wages allocated the released funds to payment of other taxes, finance operational costs and investment
- A SSC reduction contributed to the improvement of corporate financial results and a respective surge in proceeds from corporate income tax
- But it also made the sustainability of Pension Fund a very hot issue as its budget support (transfers to pay budget-sponsored pensions and cover PFU deficit) reached almost 6% of GDP in 2016

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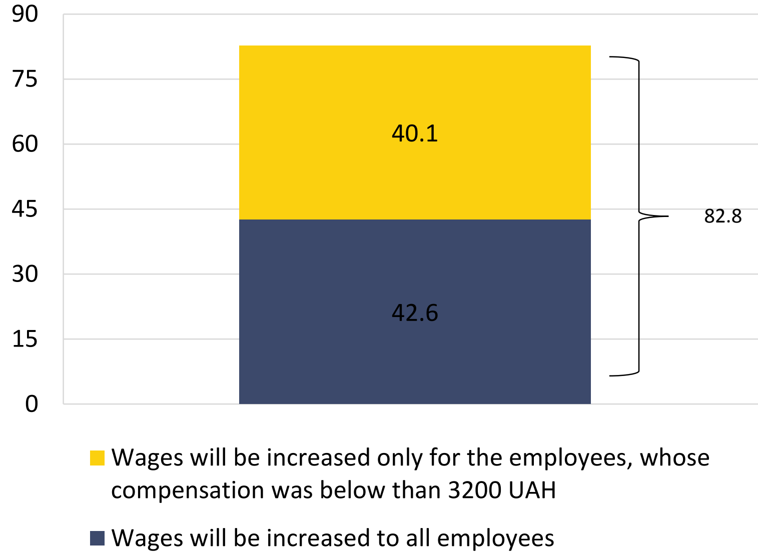
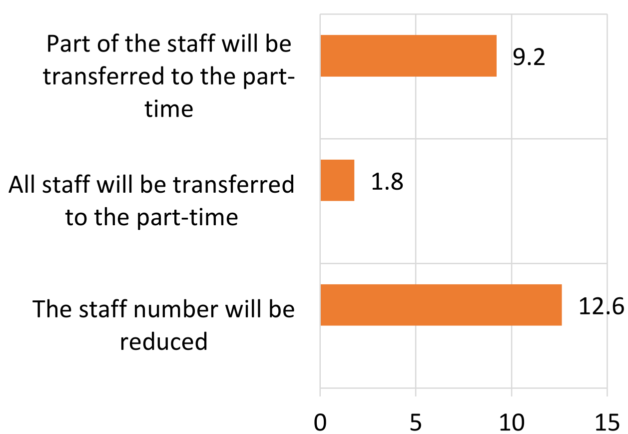
# 3200 effects: an increase in labor costs will be offset through prices and profit margin adjustment (*Business Outlook Survey*)

## The Share of Enterprises that will Increase Wages due to Rising Minimum Wage, % of responses

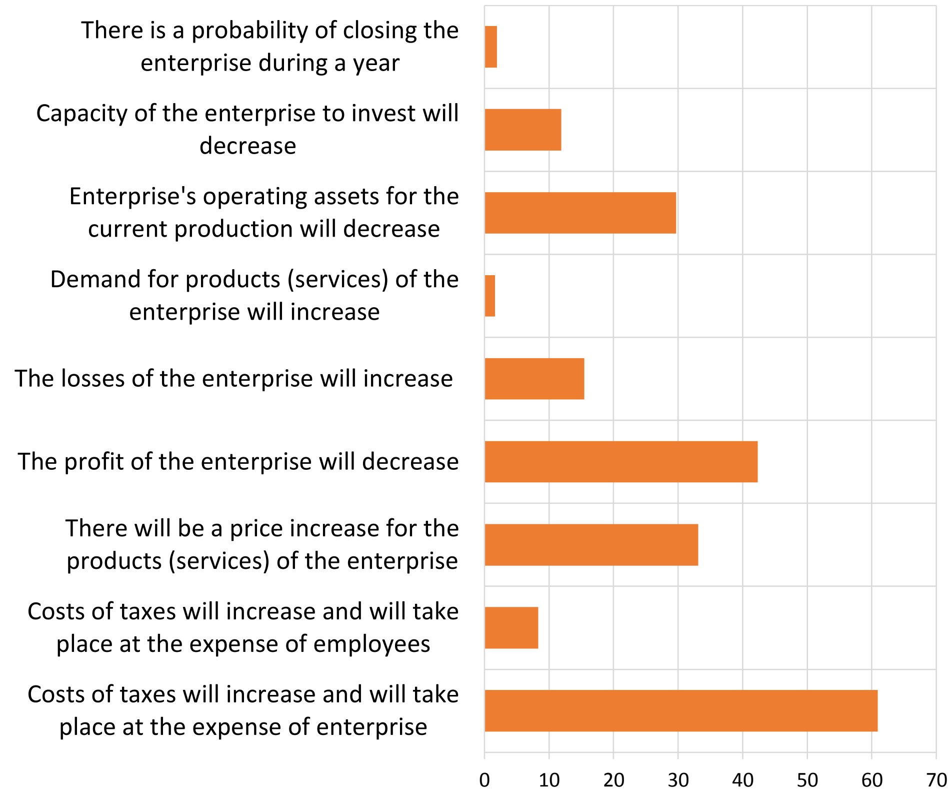



## Changes in the Number of Staff, % of responses



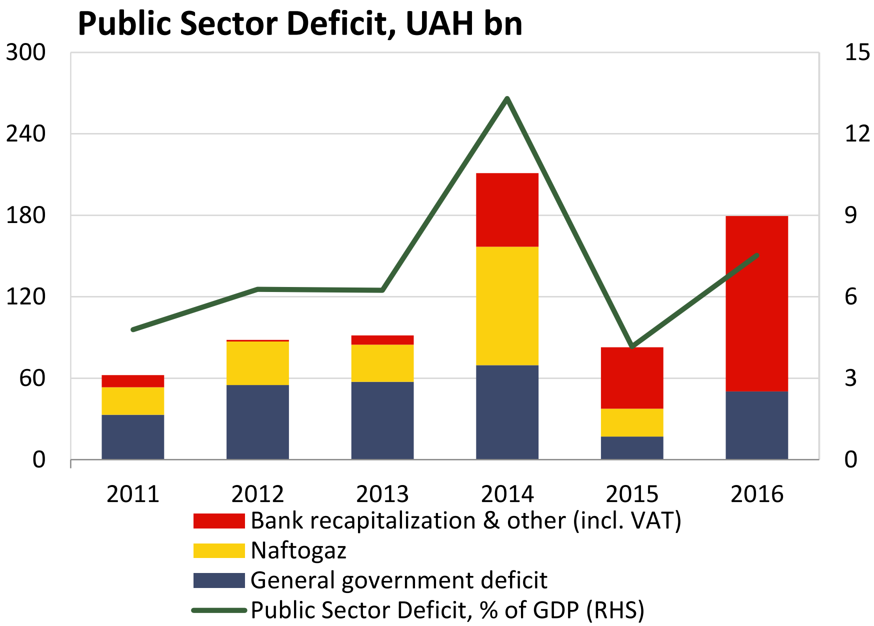

Source: Business Outlook Survey of Ukraine (NBU)

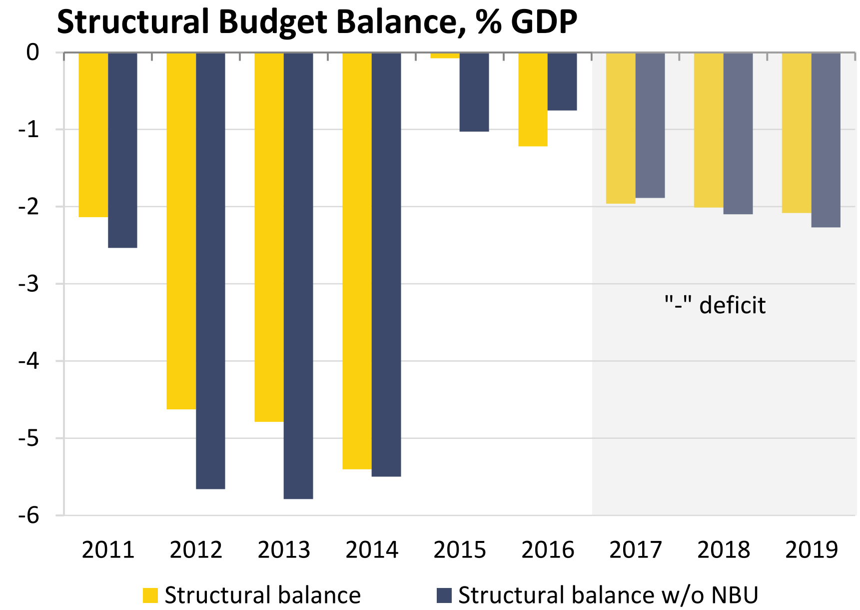
## Expected Effects of Minimum Wage Increase for the Enterprise, % of responses

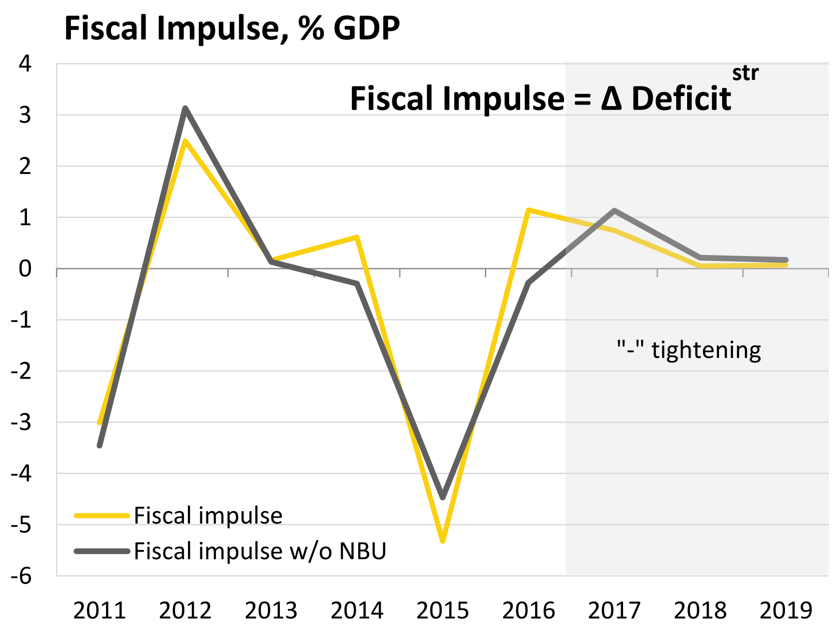



- Rising production costs and tax expenditures will be offset through price increase and/or profit margin adjustment
- Changes in the number of employees reported approximately 24% of the respondents
- About 10% of the companies do not plan any changes
- The survey covered mainly medium and large companies

# Fiscal policy is more accommodative on the forecast horizon

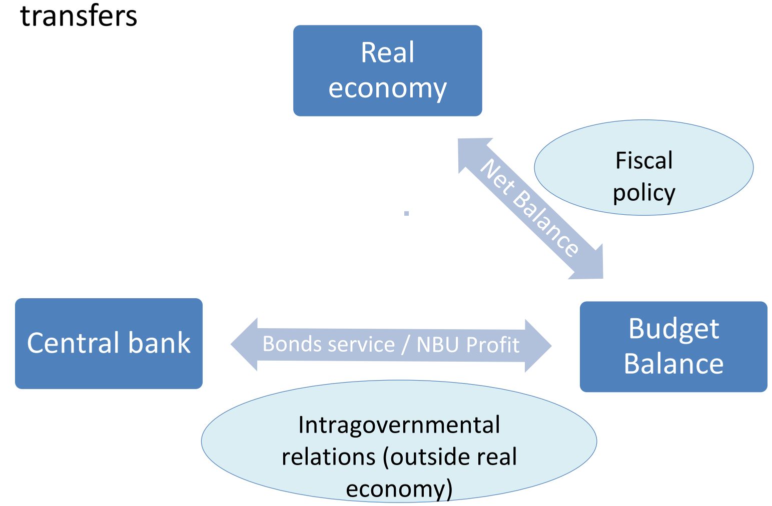



Source: NBU estimates

Structural balance calculations, excluding NBU <-> MFU transfers



# In 2017, we expect marginal widening of CA deficit due to the trade ban effect, FA inflows to remain flat

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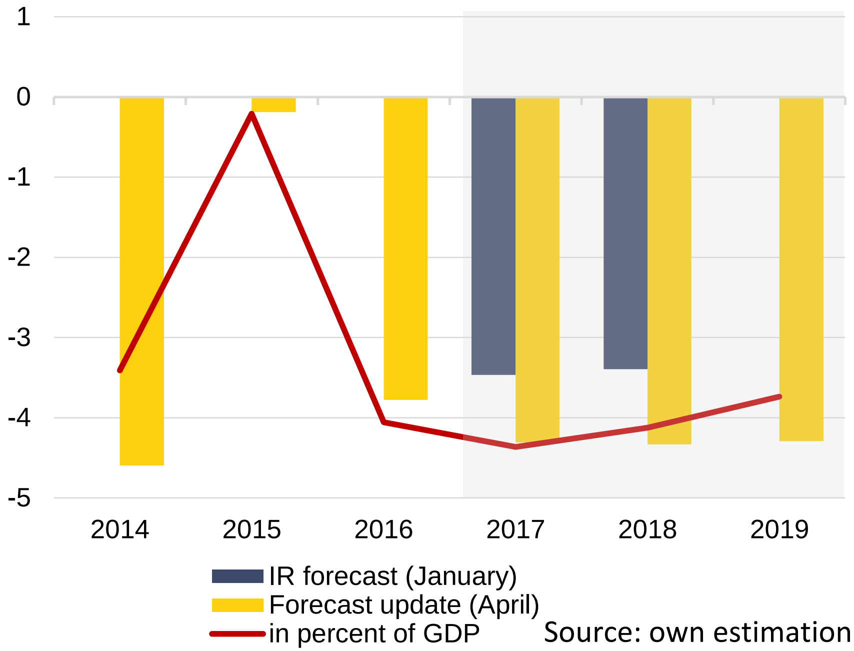
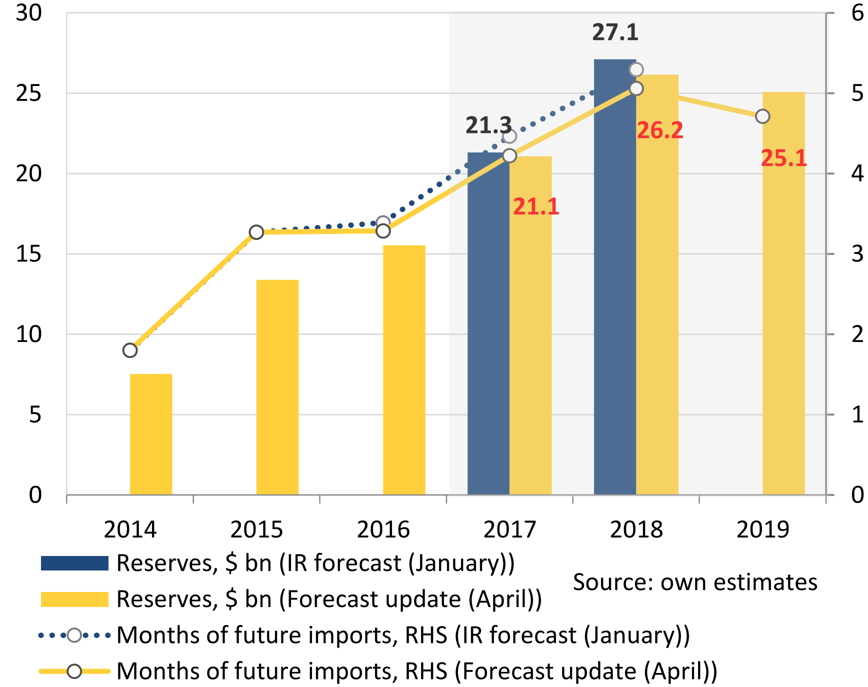
**Current Account Balance, $ bn**




**International Reserves**




| Main factors of CA changes in 2017-2018 | |
|---|---|
| Balance of goods ↓ | ↓ A trade ban with NGCA, machinery imports |
| | ↑ ToT, harvest (sunflower & grain) |
| Primary income↓ | Dividends repatriation ↓ |

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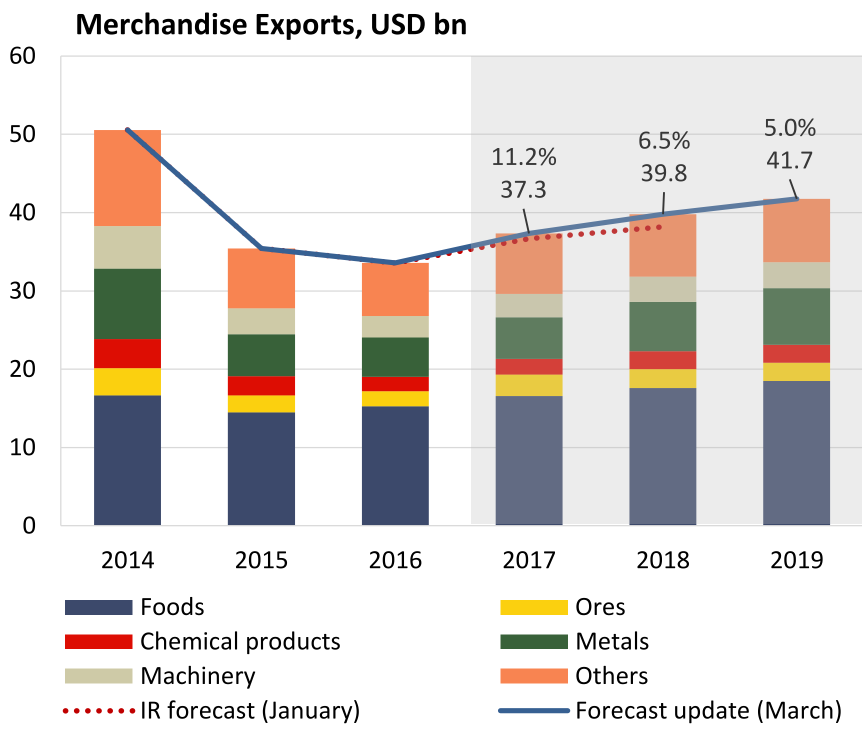
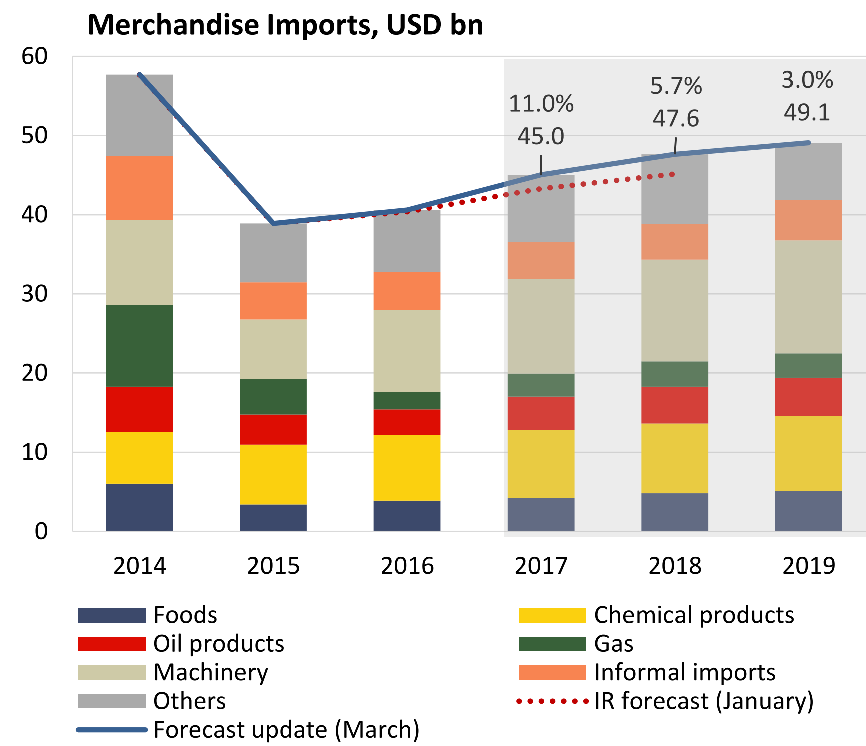
# Favorable external environment leads to higher exports despite trade ban, simultaneously stimulating energy imports




- Despite a trade ban effect, we expect increase in all main exports' groups due to the favorable conditions on commodities markets and high grain and sunflower harvest
- Energy imports should go up due to the both: price effect and increase in volumes of gas (replenishment of stocks) and coal (due to a trade ban with NGCA)
- Import of machinery remains the main driver for non-energy imports

# Ukraine's exports by regions changed dramatically: exports to CIS countries fell, while those to Europe showed resilience

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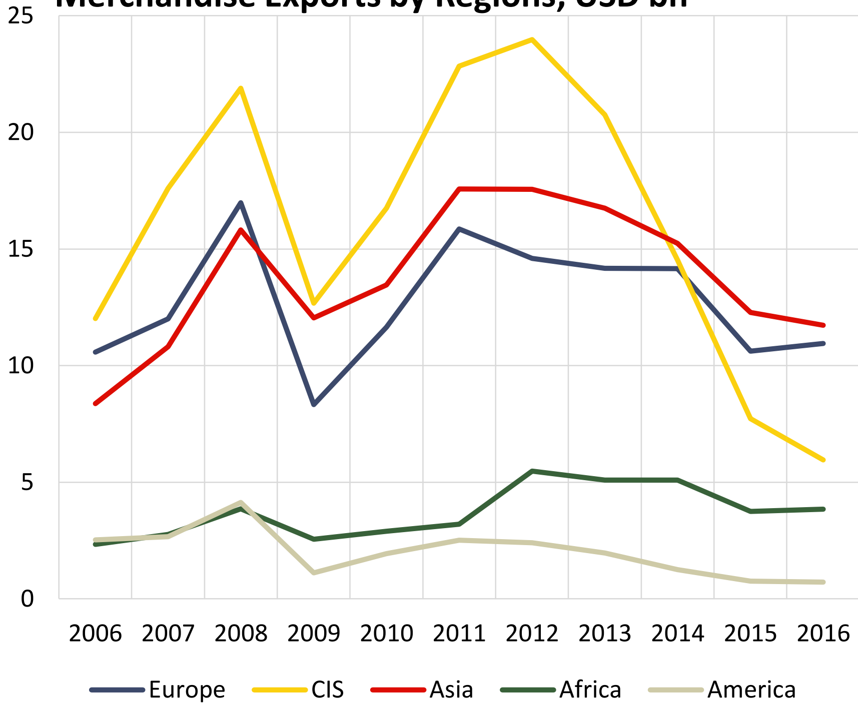
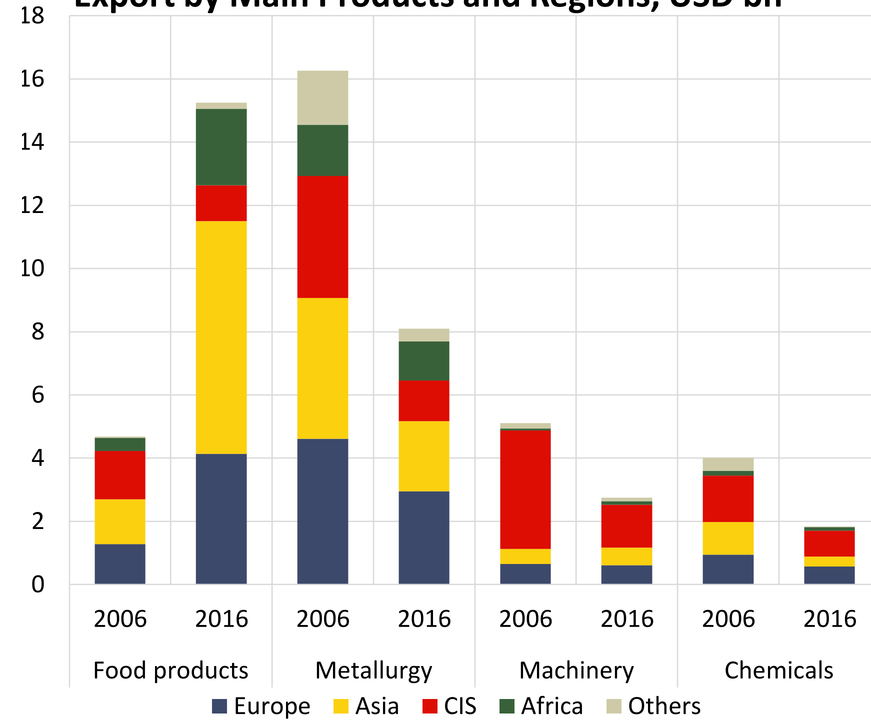
**Merchandise Exports by Regions, USD bn**




Source: NBU

**Export by Main Products and Regions, USD bn**




Source: NBU

- Until 2013, the share Ukrainian exports to the EU were declining, despite declared pro-EU policy. Instead, the share of exports to Russia had been growing by 2012
- While domestic developments and adverse ToTs affected all Ukrainian exports in 2014-2016, exports to Europe showed resilience, inter alia thanks to the Association Agreement
- In addition to traditional food products (grains, edible oil), Ukraine was able to find some small but promising export niches (honey, dairy products, selected industrial goods)
- Over the last three years, Asian countries became the largest consumers of Ukrainian goods, mainly on account of food products
- Exports to CIS countries decreased sharply since 2012, mainly on account of trade wars with Russia, trade and transit restrictions, etc.

# Since 2012 imports fell due to lower energy imports and then economic crisis. Investment demand pushes recovery from 2016

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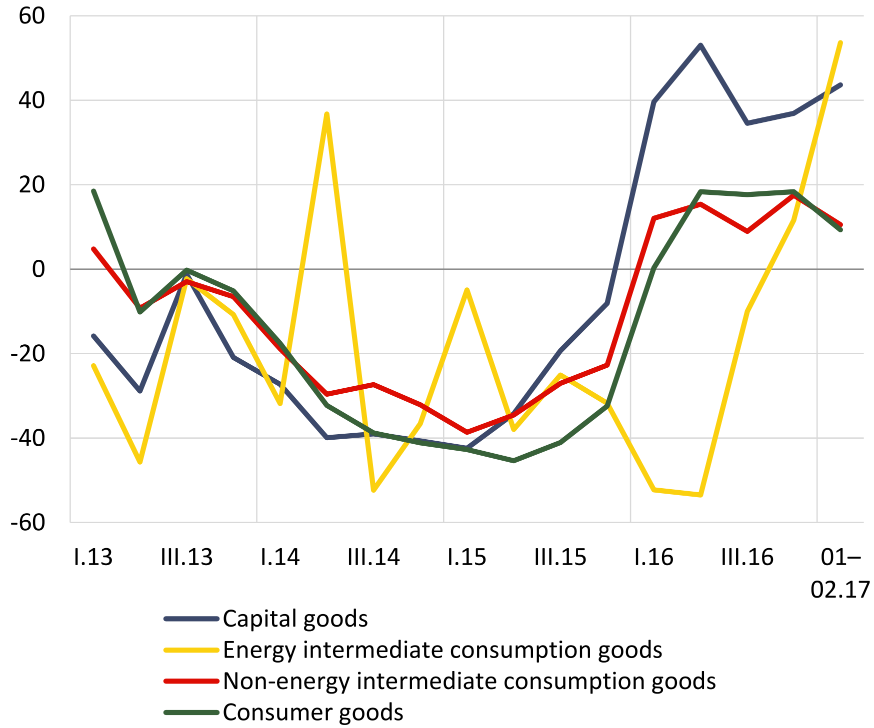
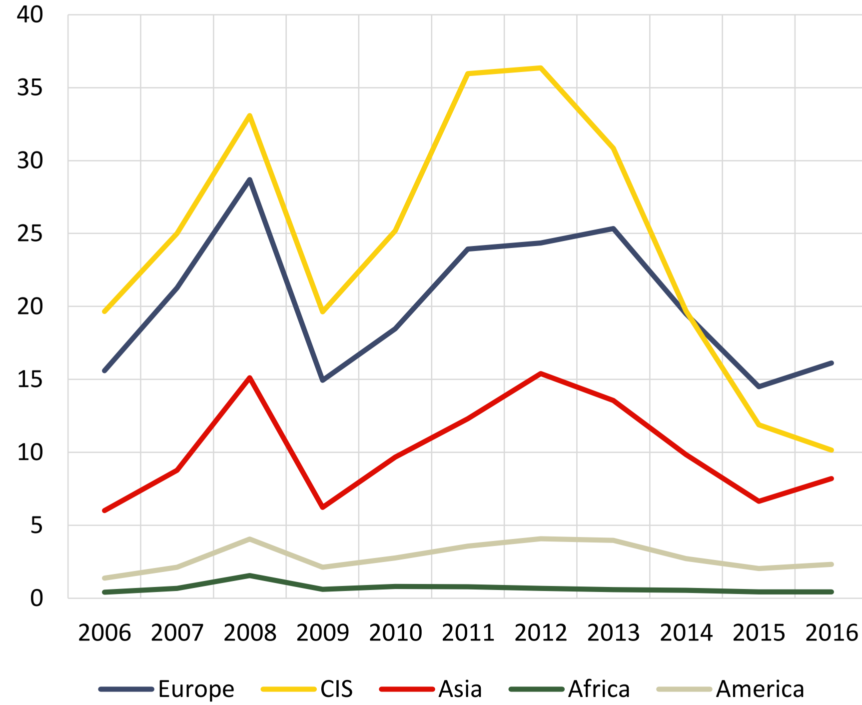
**Imports of Goods by Broad Economic Categories, % yoy**




Source: NBU, SSSU

**Merchandise Imports by Regions, USD bn**




Source: NBU

- Unlike in 2010, the recovery of imports in 2016 was mainly investment driven
- Russia's share in Ukrainian imports declined substantially, in particular due to diversification of energy supplies. But Ukraine remains dependent on imports of oil products and coal from Russia
- Imports from European countries were on a rise mainly due to gas supplies. At the same time, Ukraine imports high-tech machinery products and pharmacy mostly from Europe
- Consumer goods (including home appliances, car parts, clothes and footwear, etc.) account for the largest share of imports from Asia

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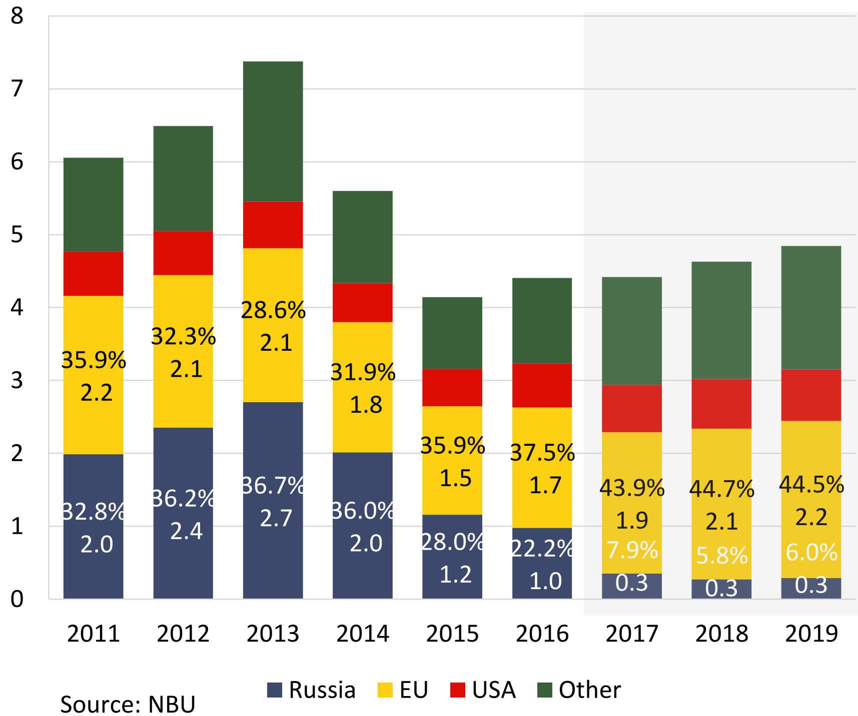
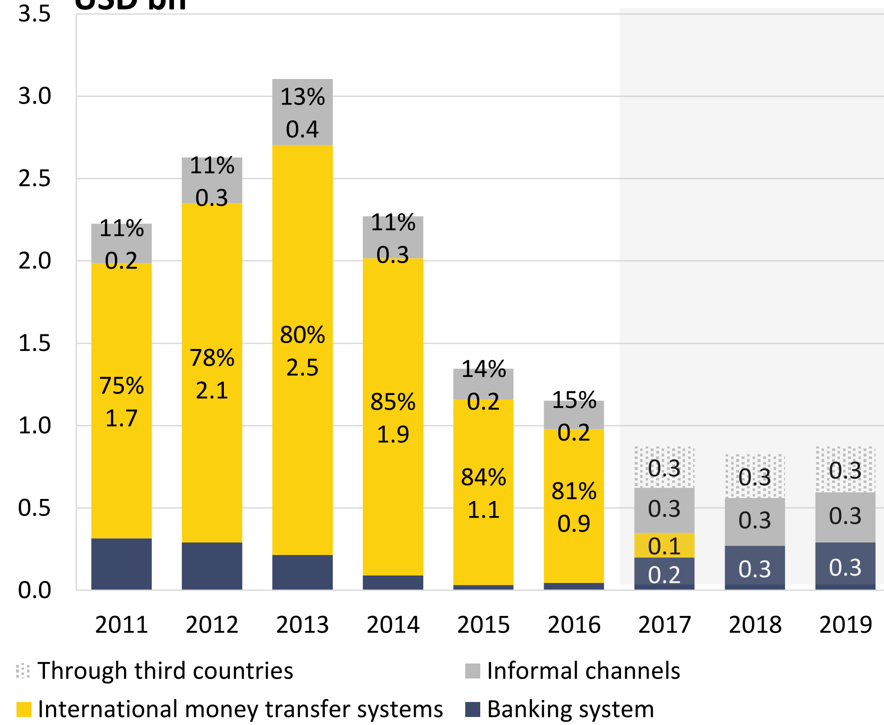
# Due to the money transfer systems ban remittances from Russia should be partially reoriented through the alternative channels

### Private Remittances by Countries via Formal Channels, USD bn




Source: NBU

### Private Remittances from Russia by Channels, USD bn




Source: NBU

- Russia used to be the top remitting country to Ukraine, but since 2015 its share has fallen below the share of EU countries
- Dramatic decrease during last two years was due to both geopolitical factors and the deterioration of the economic situation in Russia
- The lion’s share of remittances from Russia was channeled through the international money transfer systems owing to low charges; the share of informal channels was lower, than for other regions (15% vs 20% in 2016)
- Ban on money transfer systems should significantly affect the remittances from Russia: in 2017 we assume them to shrink by 30%, simultaneously we expect increase of the transfers via the banking system and informal channels, as well as reorientation through payment systems of the third countries

# Food reflation is projected due to higher world prices and dairy products export despite higher expected harvest

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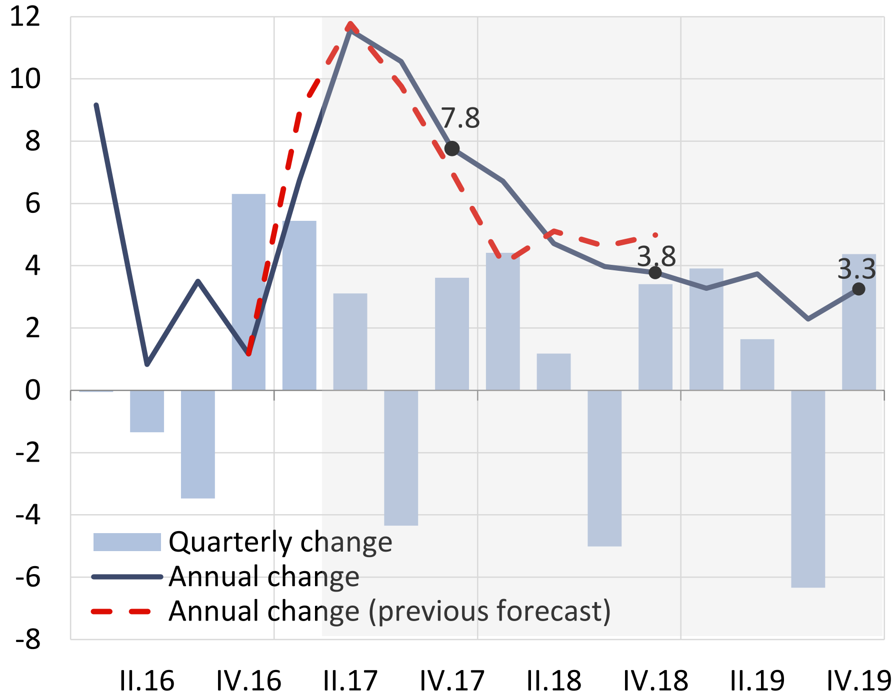
## Raw food prices, %




| Price change, % | *weight , %* | 2016 | 2017 |
|---|---|---|---|
| Cereals | *1.8* | 9.5 | 9.8 (13.1) |
| Meat | *7.4* | 5.1 | 1.8 (1.8) |
| Milk | *2.2* | 23.3 | 8.2 (2.4) |
| Eggs | *1.2* | -9.6 | 1.3 (9.3) |
| Fruits | *2.7* | -6.6 | 15.9 (19.2) |
| Vegetables | *2.3* | -28.6 | 12.4 (21.9) |
| Sugar | *1.5* | -1.3 | 5.5 (8.4) |

## Adjustment of administered prices

| | *weight, %* | 2017 | 2018 | 2019 |
|---|---|---|---|---|
| **Admins** | ***18.6*** | **16.0** (16.9) | **11.6** (9.5) | **9.7** |
| Natural gas | *2.0* | 19.3 (29) | 17.5 (12.8) | 10.9 |
| Heating | *1.2* | 16.8 (24.5) | 14.8 (10.8) | 9.3 |
| Hot water | *0.2* | 14.5 (21.4) | 13.1 (9.5) | 8.2 |
| Cold water | *0.3* | 10.0 (10.0) | 9.0 (9.0) | 9.0 |
| Electricity | *1.0* | 28.1 (27.0) | 18.0 (18.0) | 20.0 |
| Alcohol | *4.9* | 13.0 (13.0) | 10.0 (10.0) | 10.0 |
| Tobacco | *3.0* | 20.0 (20.0) | 13.0 (13.0) | 13.0 |

**KMU's new resolution to revise households gas price twice per year changes profile of administrative prices**

# Weaker demand and lower administrative inflation offset food reflation, thus inflation outlook remains unchanged

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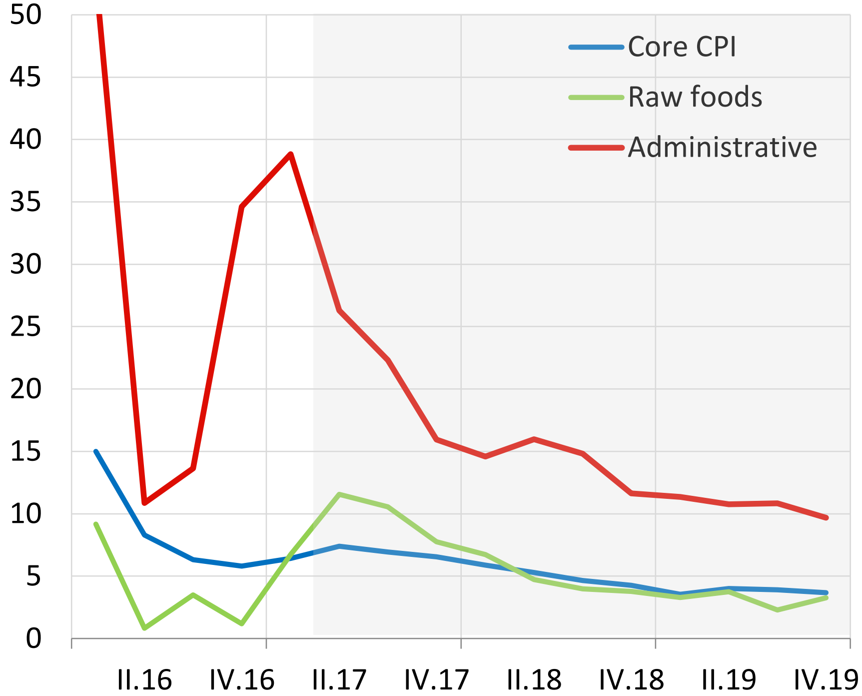
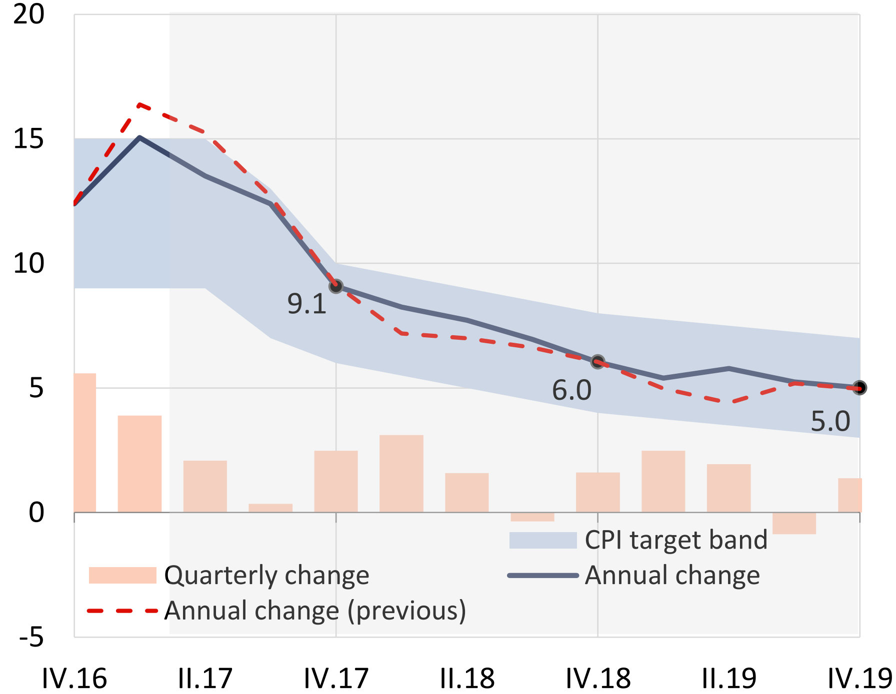
**CPI components, annual change%**




**Headline CPI, %**

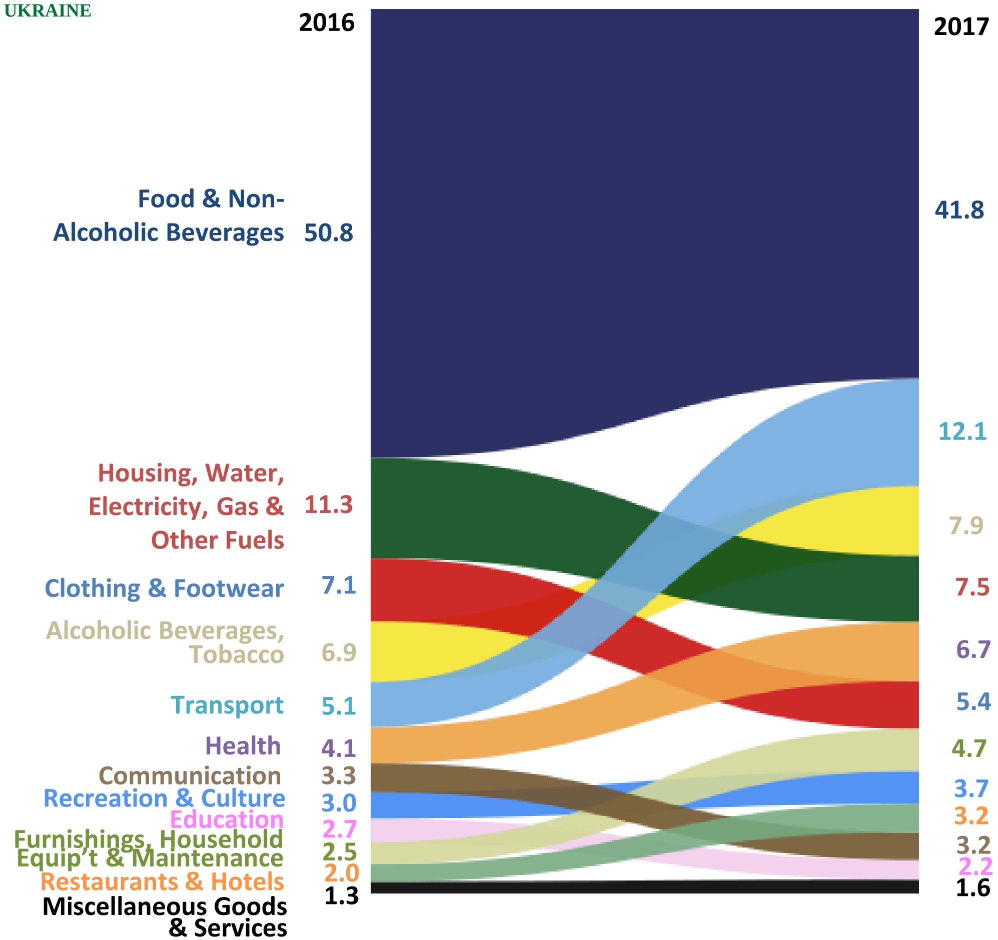


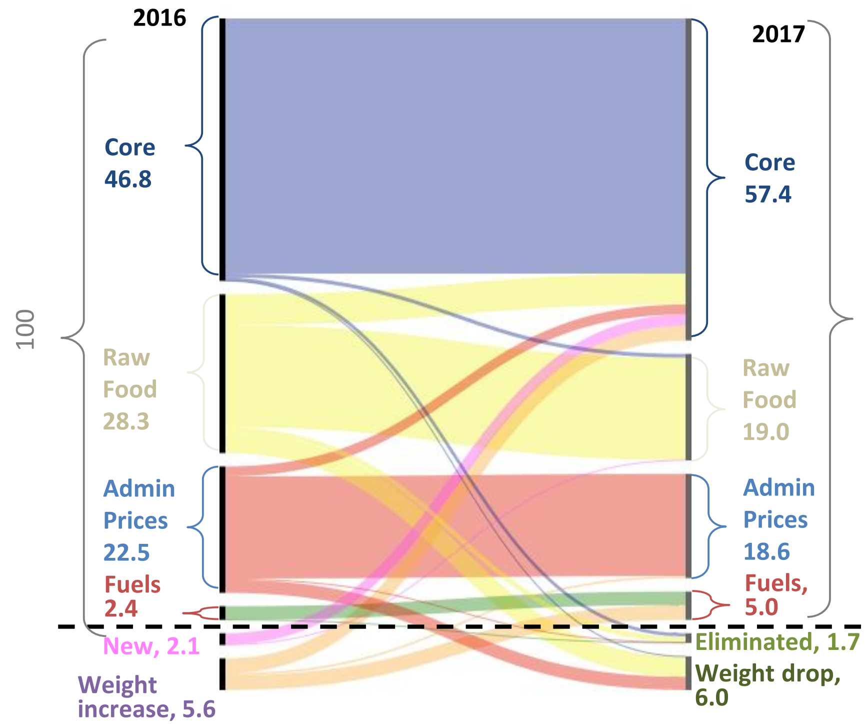

**Inflation factors in 2017:**

- ↓ Administrative prices would rise more conservatively
- ↓ Wider GDP gap due to fall of economic activity
- ↑ Food prices reflation due to higher world commodity prices

| change, % | *weight, %* | 2017 | 2018 | 2019 |
|---|---|---|---|---|
| CPI | *100.0* | 9.1 (9.1) | 6.0 (6.0) | 5.0 |
| Core CPI | *57.4* | 6.5 (6.3) | 4.3 (4.8) | 3.7 |
| Raw food | *19.0* | 7.8 (7.0) | 3.8 (5.0) | 3.3 |
| Admin | *18.6* | 16.0 (16.9) | 11.6 (9.5) | 9.7 |
| Fuel | *5.0* | 17.2 (16.0) | 8.0 (8.0) | 7.0 |

# In 2017, the weights of the Ukrainian CPI basket were realigned with the SNA consumption structure

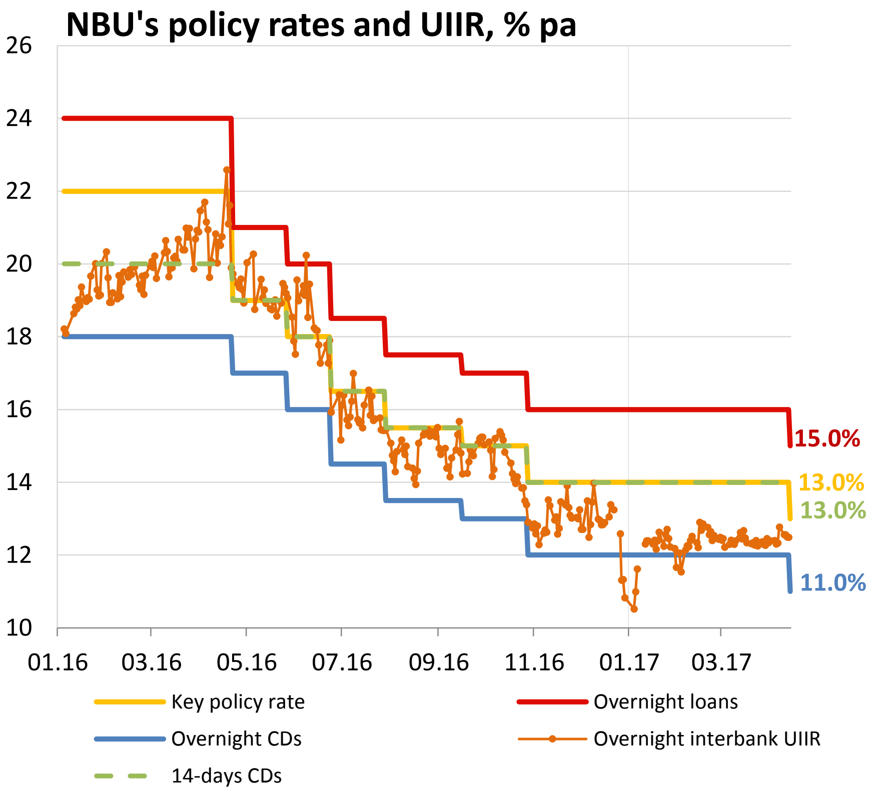


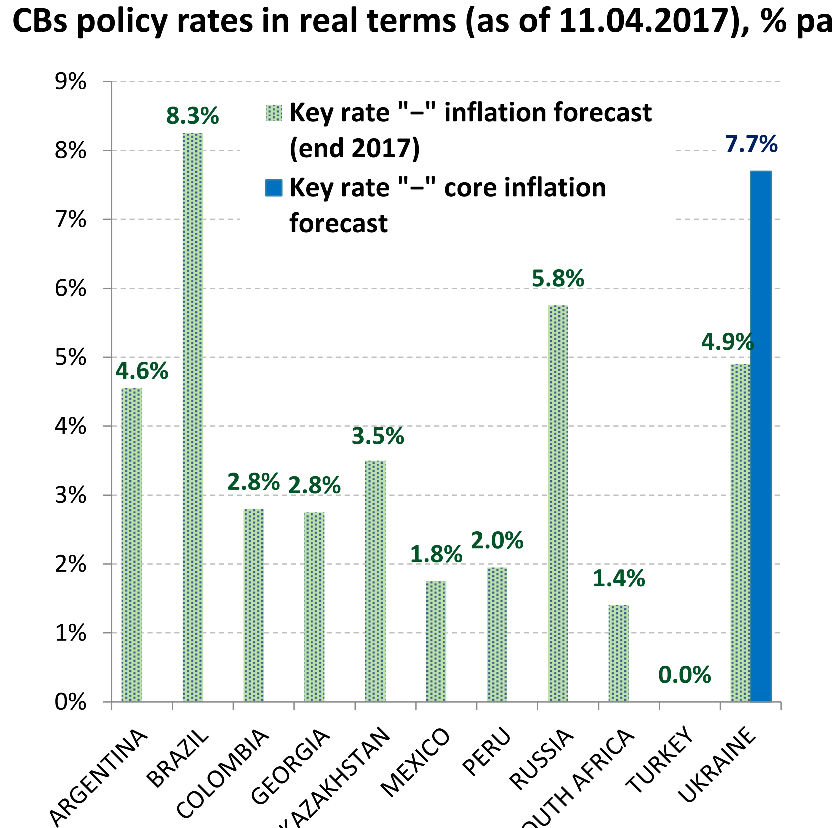

Source: State Statistic Service of Ukraine; NBU staff estimates

- The share of foods and non-alcoholic beverages declined the most by 9 percentage points. Lower weight of utilities can be attributed to growing number of HHs receiving government subsidies and switching to general population rather than sample
- After the adjustment of CPI structure and composition of core CPI basket, core CPI now covers more than 57% of the total basket (during 2011-16, it was below 50%)
- The changes in CPI weight methodology did not affect the NBU inflation forecast

# NBU resumed monetary policy easing cycle cutting its key policy rate by 1 pp to 13%




Source: NBU




**Arguments:**

- Inflation forecast is in line with targets
- Rate cut is consistent with the projected policy path
- Main factors of inflation are supply driven (minimum salary, world prices) rather than demand
- Economy facing negative shock (a trade ban with NGCA) needs to be supported by MP easing
- Favorable development of FX market, ER is stronger than projected
- MP easing is consistent with previous forward guidance - continuation of IMF program is one of the main precondition for easing

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# NBU policy under different scenarios

| Scenario | Results (2017-2018) | NBU policy |
|---|---|---|
| **Baseline**<br>- status-quo on the east<br>- structural reforms<br>- further cooperation with IFIs | GDP +1.9% +3.2%<br>CPI 9.1% 6% | Admin. restrictions ↓<br>Interest rate ↓ |
| **Pressure on EM currencies**<br>- commodities prices fall<br>- escalation of military conflicts (Middle East, Korea) and political instability in EU<br>- trade protectionism | GDP ↓<br>UAH/USD ↑<br>CPI ↑ | Admin. restrictions =<br>Interest rate =↑ |
| **Domestic risks**<br>- reforms slowdown and unsustainable social standards growth<br>- stronger trade ban effects<br>- escalation of military conflict | GDP ↓<br>UAH/USD ↑<br>CPI ↑ | Admin. restrictions =<br>Interest rate =↑ |
| **Optimistic**<br>- faster rebound of world economy<br>- better terms of trade<br>- foreign capital inflows | GDP ↑<br>UAH/USD ↓<br>CPI ↓ | Admin. restrictions ↓↓<br>Interest rate ↓↓ |