



NATIONAL BANK OF UKRAINE

December 2017 Inflation Review

In 2017, headline inflation reached 13.7% yoy, exceeding the National Bank of Ukraine's target of $8\% \pm 2$ pp for the end of the year set in the [Monetary Policy Guidelines for 2017 and Medium Term](#).

Inflation accelerated in 2017 compared to 2016 (12.4% yoy) primarily due to the unexpected factors beyond control through monetary policy tools. This particularly refers to a reduction in the supply of some products caused by unfavorable weather conditions in the first half of the year, unstable situation in animal breeding, and rising global prices and external demand for domestic food products (particularly, meat and dairy products). Higher production costs, especially labor costs, and a fast recovery of consumer demand also contributed to price increases.

High inflation readings in the last months of the year were caused by the deteriorated conditions in the foreign exchange market, more significant loosening of fiscal policy, with higher pension payments as one of the reasons. This has led to an increase in the underlying inflationary pressure, which was reflected in the core inflation measure.

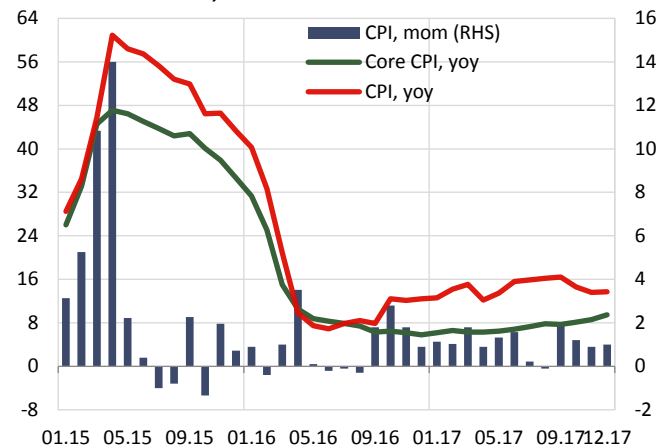
Core inflation accelerated to 9.5% yoy in 2017, from 5.8% yoy in 2016. Prices for services included in core inflation increased markedly (to 14.6% yoy) driven by rising production costs and a buoyant consumer demand, among other things, due to the increase in the minimum wage and pensions. In particular, growth in prices for fast food, higher education, and maintenance and repair of dwellings had the largest impact on inflation.

Prices for processed foods also grew at a faster pace (13.0% yoy). In particular, prices for dairy and meat products rose rapidly (22.1% yoy and 22.0% yoy, respectively), reflecting secondary effects of higher prices for the corresponding raw foods as well as large external demand for some food products (particularly, butter).

At the same time, growth in non-food prices, which are predominantly imported goods, slowed to 3.3% yoy from 4.8% yoy last year driven by benign foreign exchange markets throughout most of the year and moderate inflation in trading partner countries. In addition, prices for clothing and footwear slowed their pace of increase significantly (to 0.9% yoy), with the exchange rate movements feeding into prices more slowly (as most clothing and footwear retailers make purchases a few months ahead of the start of the season).

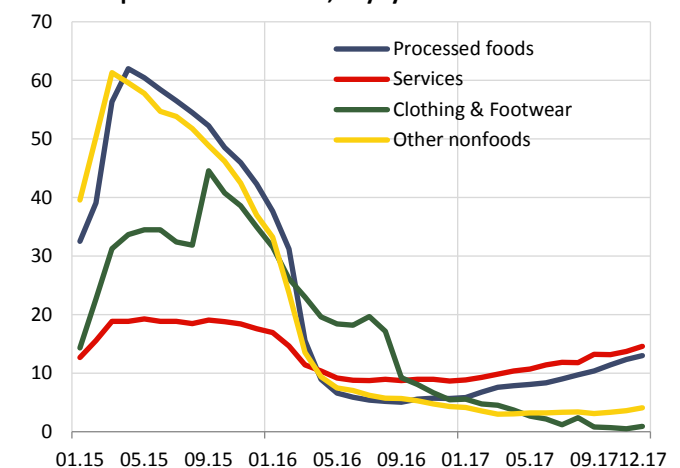
Growth in raw food prices accelerated substantially in 2017 compared to the previous year – to 23.5% yoy. In particular, prices for meat and raw milk grew at a fast pace (30.3% yoy and 23.1% yoy, respectively) and egg prices resumed growth (by 21.2% yoy). These developments were a reflection of considerably higher global prices for these goods and a pickup in exports, as well as a limited domestic supply amid decreasing livestock (except poultry) and unstable epizootic situation.

Inflation Indicators, %



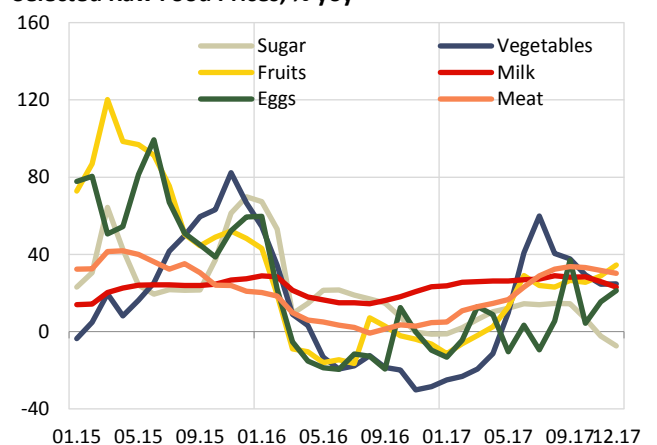
Source: SSSU

Main Components of Core CPI, % yoy



Source: SSSU; NBU staff estimates

Selected Raw Food Prices, % yoy



Source: State Statistics Service of Ukraine

Moreover, prices for fruit and vegetables resumed growth in 2017 (24.7% yoy and 34.5% yoy, respectively), which was due to several reasons. First, unfavorable weather in the first half of the year affected supply of some fruit and vegetables. For example, prices for berries and apples, as well as for some borshch vegetables (carrot and beetroot), grew almost 1.5 times. Second, the effect of supply factors that curbed prices for certain fruit and vegetables in 2016 had waned. In particular, as Russia lifted the ban on imports for Turkish food products, their supplies to the Ukrainian market were reduced.

On the other hand, sugar prices continued to decline (7.4% yoy) amid low global prices and ample supply in the domestic market. Simultaneously, a good harvest has driven buckwheat prices down (by 28.9% yoy).

Growth of administered prices expectedly decelerated to 16.1% yoy. This resulted, among other things, from the favorable comparison base, as utility tariffs were raised at a significantly slower rate than in the previous year. At the same time, in 2017, prices for tobacco products, postal and transportation services accelerated on the back of higher costs.

In 2017, fuel prices grew at a fast pace (20.0% yoy), roughly in line with the previous year, due to higher oil prices and the depreciation of the hryvnia against the euro (fuel excise taxes are set in euro).

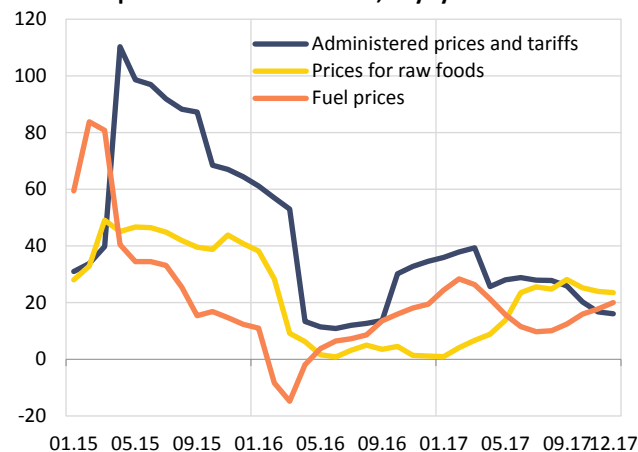
The producer price index grew at a significantly slower rate in 2017, down to 16.5% yoy from 35.7% yoy in 2016. Thus, annual price growth in the mining industry markedly decreased in 2017 driven by trends on global markets. In particular, a slower growth in world oil prices contributed to the price slowdown in crude oil and natural gas extraction (to 16.1% yoy), while prices in metal ore mining moderated (to 29.3% yoy) amid lower world prices for iron ore. At the same time, rising external prices prompted an acceleration in prices for coal mining (to 47.8% yoy).

These developments shaped prices in the next stages of production. Particularly, price growth in production of coke and refined products decelerated (to 43.0% yoy), same as in metallurgy (to 26.9% yoy).

Prices in the food industry grew at a slower pace (12.5% yoy). In particular, in 2017, prices in sugar production declined (by 8.1% yoy). Also, price growth in production of dairy products and beverages slowed slightly (to 18.3% yoy and 15.8% yoy, respectively). However, price growth for meat products, as well as bakery and farinaceous products accelerated significantly (to 29.0% yoy and 17.5% yoy) on the back of increased production costs and high external prices.

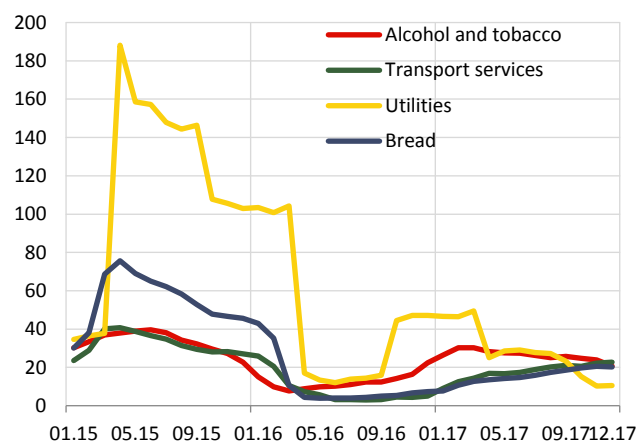
Also, growth in prices in the supply of electric power, natural gas, steam, and conditioned air slowed considerably (to 4.0% yoy). This, primarily, can be explained by the high share of nuclear power in the generation of electricity compared to the previous year. In addition, the slow growth in electricity prices for industrial producers can be attributed to the phasing out of cross-subsidization in electricity tariffs for households and other consumers. Average electricity prices produced by hydroelectric power stations were an additional factor behind

Main Components of Non-Core CPI, % yoy



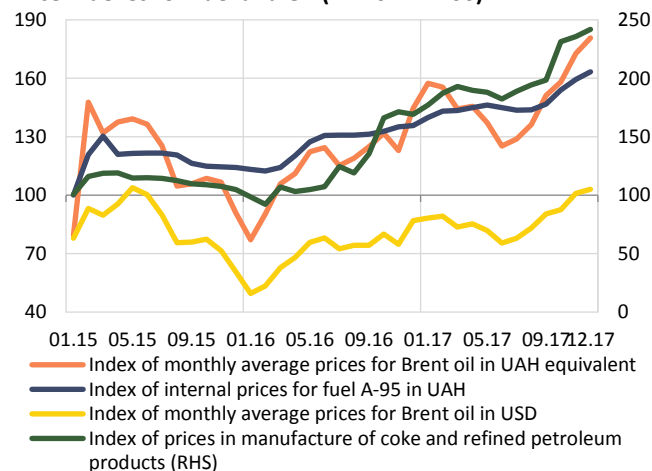
Source: State Statistics Service of Ukraine; NBU staff estimates

Administered Prices and Utility Tariffs, % yoy



Source: State Statistics Service of Ukraine

Price Indexes for Fuel and Oil (12.2014 = 100)



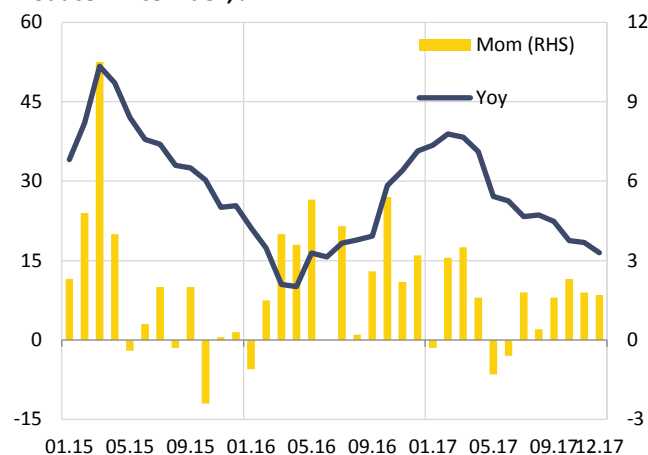
Source: State Statistics Service of Ukraine, Thomson Reuters Datastream

the price slowdown amid higher water levels in the rivers and the inflow to the reservoirs than in the previous year.

At the same time, price growth in the chemical industry accelerated significantly (21.9% yoy) amid rising world prices, high agricultural sector demand and a renewal of anti-dumping duties on nitrogen-release fertilizers from the Russian Federation.

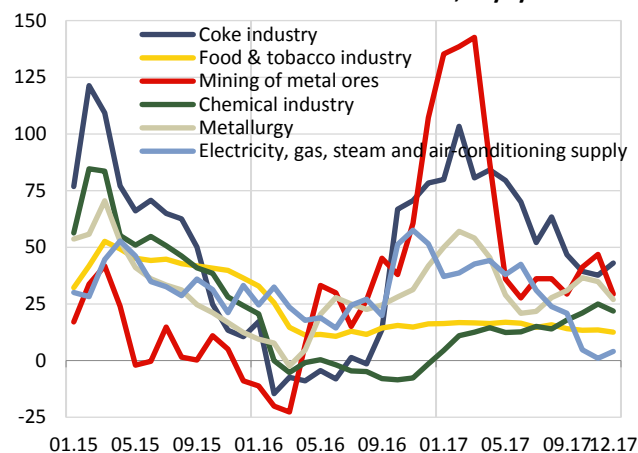
The Review is a translation of the original text in Ukrainian. In case of any discrepancies between the original document and its English translation, readers should consider the Ukrainian version of the Review as correct.

Producer Price Index, %



Source: State Statistics Service of Ukraine

Producer Price Indexes in Select Industries, % yoy



Source: State Statistics Service of Ukraine

CPI and PPI growth by components in 2015 - 2017																
CPI (NBU classification)																
	Share in CPI for 2017, %	yoy, %														December, mom %
		2015	2016	2017** †												
				January	February	March	April	May	June	July	August	September	October	November	December	
Consumer Price Index	100.0	43.3	12.4	12.6	14.2	15.1	12.2	13.5	15.6	15.9	16.2	16.4	14.6	13.6	13.7	1.0
Core inflation	57.4	34.7	5.8	6.2	6.6	6.3	6.3	6.5	6.8	7.3	7.8	7.7	8.1	8.6	9.5	0.8
Non-core inflation *	42.6	49.7	17.5	17.9	20.8	22.8	17.7	20.7	25.0	25.2	25.0	25.7	21.9	19.7	19.4	1.3
Raw foods	19.0	40.7	1.2	1.0	4.1	6.7	8.9	13.8	23.6	25.5	24.8	28.2	25.3	23.9	23.5	1.8
Administered prices and tariffs	18.6	64.4	34.6	35.9	37.8	39.3	25.6	28.1	28.8	27.9	27.8	25.9	20.3	16.7	16.1	0.6
Fuels	5.0	12.5	19.5	24.5	28.4	26.3	21.3	15.7	11.5	9.7	10.1	12.4	16.0	17.7	20.0	2.5
CPI (State Statistics Service of Ukraine classification)																
Food and non-alcohol	41.8	41.5	3.3	3.0	5.3	7.2	8.3	10.6	15.0	16.3	16.8	18.8	18.0	13.6	17.7	1.5
Alcohol, tobacco	7.9	22.7	22.5	26.3	30.2	30.2	28.3	27.5	27.4	26.3	25.1	25.8	24.7	23.8	20.7	0.6
Clothing and footwear	5.4	35.0	5.5	5.6	4.7	4.5	3.7	2.7	2.1	1.2	2.1	0.8	0.7	0.5	0.9	-2.4
Housing, water, electricity, gas and other fuels incl.:	7.5	103.0	47.2	46.6	46.5	49.5	25.1	28.6	29.2	27.8	27.3	23.2	15.2	10.3	10.6	0.3
Imputed rentals for housing	0.5	5.4	11.5	14.1	16.8	21.7	25.3	29.3	39.9	48.7	49.3	46.5	46.7	47.9	47.5	0.2
Water supply	0.3	23.0	42.1	26.7	24.7	24.1	27.3	37.1	40.0	41.2	32.1	30.1	25.6	22.3	20.2	-1.2
Hot water	0.2	55.8	82.9	82.9	83.2	83.3	83.3	83.0	82.9	15.3	14.4	14.5	8.5	2.1	0.9	-0.1
Natural gas	2.1	273.0	42.0	42.0	42.0	42.0	-4.3	0.9	1.0	1.0	1.1	1.2	1.2	1.2	1.2	0.0
Central heating	1.2	78.7	89.3	89.7	90.1	90.2	90.2	90.2	90.2	90.0	90.0	90.0	25.0	2.8	3.8	0.9
Electricity	1.0	66.9	60.0	60.0	60.0	63.7	63.7	63.7	63.7	63.7	63.7	28.1	28.1	28.1	28.1	0.0
Transport	12.1	20.4	11.4	14.9	17.2	16.8	15.7	13.1	11.5	11.1	11.8	12.6	14.4	15.4	16.7	1.8
Communication	3.2	7.0	4.0	4.1	4.6	7.1	9.4	9.4	9.4	9.4	9.4	9.7	10.6	11.5	9.1	0.6
Education	1.6	24.2	13.7	12.1	11.5	10.7	10.3	9.7	8.9	8.5	8.8	15.7	15.4	15.1	14.9	0.0
PPI																
	Share in PPI for 2017, %***	yoy, %														December, mom %
		2015	2016	2017												
				January	February	March	April	May	June	July	August	September	October	November	December	
Producer Price Index	100.0	25.4	35.7	36.8	38.9	38.3	35.6	27.1	26.3	23.3	23.6	22.4	18.8	18.4	16.5	1.7
Mining and quarrying	13.2	17.6	85.1	109.1	101.0	94.7	75.7	32.4	30.5	35.7	39.6	35.1	37.8	43.8	30.4	2.9
Manufacturing of coal	2.4	-0.8	40.4	43.5	21.0	20.5	35.4	37.1	49.8	51.9	63.8	70.5	61.2	75.3	47.8	0.1
Extraction of crude petroleum and natural gas	4.7	120.3	76.5	123.8	116.2	88.3	94.1	12.0	8.9	10.0	17.9	13.3	8.6	14.6	16.1	2.8
Mining of metal ores	5.1	-8.9	107.2	135.2	138.5	142.6	87.0	35.9	27.7	36.1	36.1	29.3	41.2	46.9	29.3	4.6
Manufacturing	65.1	23.8	22.6	25.6	28.9	27.5	25.4	21.1	18.7	17.8	20.1	19.9	20.7	20.7	18.5	1.2
Manufacture of food products, beverages and tobacco products	21.8	36.4	16.2	16.4	16.7	16.6	16.3	16.9	16.5	14.7	15.7	14.1	13.3	13.5	12.5	1.0
Manufacture of coke, and refined petroleum products	3.4	4.7	61.7	79.9	103.3	80.6	84.1	79.5	70.0	52.0	63.4	46.7	39.3	37.5	43.0	2.6
Manufacture of chemicals and chemical products	3.2	24.2	-1.4	4.5	10.9	12.5	14.5	12.4	12.7	15.0	13.9	17.9	21.0	25.0	21.9	3.3
Manufacture of basic pharmaceutical products and pharmaceutical preparations	1.4	31.5	8.5	8.3	9.2	9.0	9.0	9.0	8.7	8.9	9.3	9.8	10.3	10.4	11.0	0.9
Manufacture of rubber and plastics products, and other non-metallic mineral products	5.2	29.6	9.5	10.6	11.7	12.2	11.2	11.7	11.5	11.6	11.7	11.3	11.7	12.1	12.5	0.7
Manufacture of basic metals and fabricated metal products, except machinery and equipment	17.3	12.4	41.8	49.9	57.0	54.0	45.5	28.9	20.8	21.7	27.8	30.9	36.5	34.8	26.9	0.5
Manufacture of transport equipment	2.2	15.5	11.4	9.1	15.4	14.5	16.1	14.2	14.2	16.4	18.4	17.9	18.9	20.6	17.9	1.2
Electricity, gas, steam and air-conditioning supply	21.8	33.2	51.5	37.1	38.7	42.6	44.2	37.9	42.5	31.0	23.8	20.8	4.7	1.0	4.0	2.6

* Revised NBU staff estimates based on the State Statistics Service of Ukraine data. The sum of contributions of CPI components may deviate from the total CPI through the use of dynamic weights according to the methodology of the SSSU and rounding.

** Since January 2017, the methodology for calculating the CPI was modified. For more information, see the official web-page of the State Statistics Service of Ukraine.

*** The shares of PPI components are NBU staff estimates based on the SSSU data on volume of industrial production by type of activity for 2016.

† Changes in prices for the selected components of the consumer basket according to NBU classification based on SSSU data were revised due to review of the weights calculation methodology.