

## Inflation Review

December 2018

In 2018, consumer price inflation slowed to 9.8% from 13.7% in 2017. The central bank's tight monetary policy was instrumental in reversing the upward trend and reducing the yearly inflation rate to single-digit figures. The NBU started to gradually raise the key policy rate in October 2017 to respond to rising inflation risks. During this period, with a view to bringing inflation back to its target over the medium term, the NBU Board raised the key policy rate six times, by a total of 5.5 pp, to the current interest rate level of 18.0% per annum. This pushed up interest rates and, consequently, acted as a stimulus to an increase in savings. It also caused the exchange rate of the hryvnia to strengthen against the currencies of Ukraine's main partners. Additional factors included growth in the domestic supply of some foods, and lower global food prices.

Despite the expected drop, inflation, as predicted, exceeded the 2018 year-end target of  $6\% \pm 2$  pp set by the National Bank of Ukraine in its Monetary Policy Guidelines for 2018 and the Medium Term. It was largely due to factors over which monetary policy has only a limited effect. These were mainly administered price increases, higher production costs on the back of wage hikes, rising global oil prices seen throughout most of the year, and the narrowing supply of the vegetables that are used for cooking borshch on the back of unfavorable weather conditions.

Consumer demand fueled by higher wages was also an important inflation driver. January – November 2018 saw a 12.8% rise in real wages compared to the same period last year. Uncertainty as to whether cooperation with the IMF will be resumed and high external risks also weighed on economic sentiment throughout most of the year.

#### **Core Inflation**

Core inflation decelerated to 8.7% yoy in 2018, from 9.5% yoy in 2017.

The deceleration was paced by a 9.6% slowdown in prices for processed foods. Indeed, growth in prices for meat and dairy products slowed, to 11.2% yoy and 10.0% yoy, respectively, on the back of lower global prices for such products and the expansion of supply for selected types of these products. Furthermore, a bumper sunflower harvest along with lower global prices contributed to a slower growth in prices for sunflower oil (2.4% yoy). Meanwhile, higher flour prices and a rise in other production costs kept inflation of processed foods from decelerating further. As a result, prices for bread grew a solid 21.5% yoy. Confectionery prices rose a strong 11.8% yoy. Prices for pasta products kept accelerating as well (to 14.7% yoy).

Benign FX market conditions kept non-food inflation relatively tame at 4.1% yoy. In particular, prices for cars grew a slower 3.3% yoy, while prices for TV sets, mobile phones and computer equipment were actually cheaper compared to last year. Prices for clothes and footwear also continued to slow (to 2.0% yoy).

Meanwhile, the growth in prices for services included in core inflation accelerated (to 14.9% yoy), driven by higher production costs, including labor costs, and by stronger consumer demand. Among others, mobile telephone services, out-patient services, repair services, housing

maintenance services, car insurance services and housing rental services recorded strong price increases.

### **Raw Food Prices**

The growth in raw food prices slowed to 3.3% yoy in 2018, from 23.5% yoy last year.

Indeed, 2018 witnessed significantly lower fruit prices (by 17.0 % yoy), primarily due to the bountiful apple harvest and lower prices for imported bananas and citrus fruits, as well as lower egg prices (by 9.5% yoy).

At the same time, borshch vegetable prices grew at a faster pace (73.7% yoy). The acceleration reflected the scarce supply of these vegetables due to unfavorable weather conditions, the poor harvest of these vegetables in Europe, as well as the poor harvest of some domestically grown vegetables. More specifically, onion prices tripled, cabbage prices doubled, while beetroot and carrot prices surged by 74.6% and 79.1% yoy, respectively. Furthermore, flour prices also rose noticeably (by 20.0% yoy), fueled by higher global prices for wheat, as the supply of high-quality grains was slightly lower than last year.

#### **Administered Prices**

The growth in administered prices sped up to 18.0% yoy, compared to 16.1% yoy in 2017. Last year saw sizeable increases in gas prices for households, postal, telephone and transportation services, water supply and sewerage

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collection services. Moreover, tobacco prices grew a solid 24.5% yoy.

#### **Fuel Prices**

The growth in fuel prices decelerated to 9.1% in 2018 from 20.0% in 2017, thanks to a reversal in the uptrend in global oil prices - following the sharp rises seen throughout most of the year, prices slumped in the last months of the year dragged down also by a stronger hryvnia.

#### **Producer Price Inflation**

In 2018, producer price inflation also decelerated - to 14.2% yoy, compared to 16.5% yoy in 2017, however, remained high during the year.

The slowdown in annual producer price inflation was primarily driven by slower price growth in the mining industry and manufacturing in line with global trends. Indeed, the decline in global iron ore prices contributed to price slowdown in domestic metal ores production (to 8.2% yoy). This, along with a drop in global steel prices, affected prices in metallurgy, which decelerated to 7.7% yoy.

Lower global oil prices toward the end of the year caused the prices in manufacture of coke and refined products to fall (by 3.1% yoy), leading also to a price slowdown in the chemical industry (7.7% yoy). However, this factor has not affected yet the prices in crude oil and natural gas extraction sector, up by 24.9% yoy in 2018. This can be largely attributed to the continued rapid rise in natural gas prices globally. Apart from that, along with the hike in natural gas tariffs for the household consumers effective November 1, 2018, the price for gas extracted by public enterprises to be sold to Naftogaz of Ukraine NJSC was raised.

Price increases in food, beverage and tobacco production also decelerated (to 7.0% yoy). This primarily reflected, first of all, rapid slowdown in prices for dairy and meat products (to 9.8% yoy and 3.5% yoy, respectively) due to lower input prices and a drop in world prices for these food products. Prices in sugar production declined by 7.2% yoy on the back of a global fall in sugar prices, as well as due to a supply glut. Meanwhile, price growth in beverage production accelerated to 16.9% yoy.

The main factor, keeping producer price inflation from decelerating was a higher rate of growth in prices for electricity, gas, steam and air-conditioned air supply (29.8% yoy). Electricity price increases seen in 2018 were driven by a number of factors:

- the increase in electricity prices for non-household consumers announced by the NERC;
- the increase in tariffs for natural gas provision for industrial consumers by Naftogaz of Ukraine NJSC;
- a lower share of less expensive nuclear energy in total electricity production.

At the same time, the relatively cheaper cost of electricity generation by the TPP units due to slower growth in coal prices kept prices in the energy sector from growing even further.

In 2018, the slowdown in headline and core inflation was driven by tight monetary policy and lower global prices for selected raw food products. However, administered price increases and strong consumer demand kept inflation from decelerating further

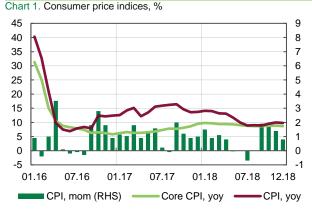
30

20

10

n

01.16



Processed foods

Clothing & Footwear

Chart 2. Main Core CPI Components, % yoy

Source: SSSU, NBU staff estimates.

07.16

01.17

07.17

01.18

Services

07.18

Other nonfoods

12.18

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Source: SSSU.

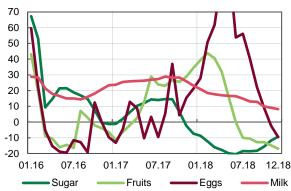
## Slowdown in non-core inflation was led primarily by a moderation in fuel and raw food prices

Chart 3. Main Components of Non-Core CPI, % yoy 70 60 50 40 30 20 10 0 -10 -20 01.16 07.16 01.17 07.17 01.18 07.18 12.18 Administered prices and tariffs Prices for raw foods Fuel prices

Source: SSSU, NBU staff estimates.

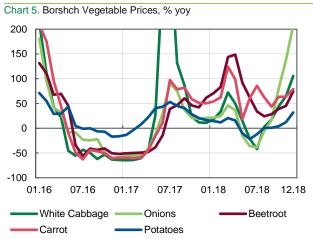
## Fruit prices dropped significantly, primarily due to a bountiful apple harvest, egg prices declined as well

Chart 4. Prices for Selected Raw Food, % yoy



Source: SSSU.

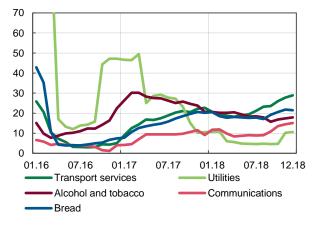
# Narrowing supply of borshch vegetables due to adverse weather conditions and poor vegetable crops caused vegetable prices to accelerate



Source: SSSU.

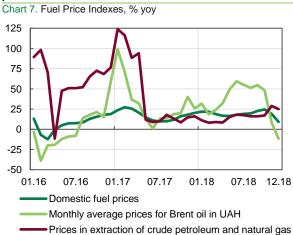
In 2018, tariffs for utilities and transport and communications services rose significantly, prices for bread and tobacco products grew rapidly as well

Chart 6. Administered Prices and Utility Tariffs, % yoy



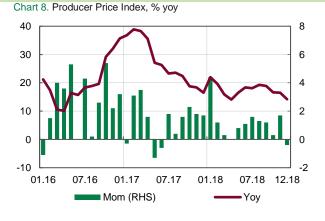
Source: SSSU.

# Sharp drop in global oil prices toward the end of the year coupled with the strengthening of the hryvnia contributed to a deceleration in fuel prices



Source: SSSU, Thomson Reuters Datastream.

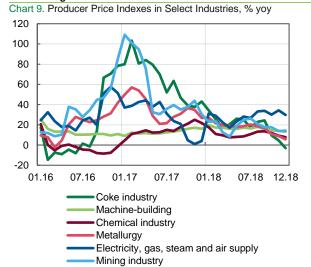
In 2018, annual producer price inflation slightly decelerated due to price slowdown in most sectors of the mining and manufacturing industry



Source: SSSU.

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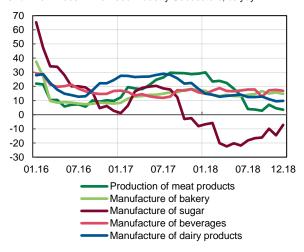
## Instead, price growth in electricity supply kept producer price



Source: SSSU.

## Within the food industry, price growth slowed in the manufacture of meat and dairy products, while sugar prices declined

Chart 10. Prices in the Food Industry Subsectors, % yoy



Source: SSSU.

CPI and PPI growth by components in 2016 - 2018							
	Observative ODI	% yoy					
	Share in CPI for 2018, %	2016	2017 -	2018			- %mom - Dec
				Oct	Nov	Dec	
	CPI (NBU cl	assificat	ion)				
Consumer Price Index	100.0	12.4	13.7	9.5	10.0	9.8	0.8
Core inflation	58.9	5.8	9.5	8.8	8.9	8.7	0.6
Non-core inflation*	41.1	17.5	19.4	9.8	10.9	10.7	1.1
Raw foods	18.6	1.2	23.5	1.6	2.4	3.3	2.7
Administered prices and tariffs	18.5	34.6	16.1	14.6	17.3	18.0	1.2
Fuels	4.0	19.5	20.0	24.5	19.0	9.1	-6.0
CPI (State Statistics Service of Ukraine classification)							
Food and non-alcohol	42.6	3.3	17.7	7.0	7.5	7.8	1.8
Alcohol, tobacco	8.3	22.5	20.7	16.9	17.4	17.9	1.0
Clothing and footwear	5.6	5.5	0.9	2.0	2.1	2.0	-2.5
Housing, water, electricity, gas and other fuels incl.	6.1	47.2	10.6	4.7	10.2	10.6	0.7
Dwelling maintenance	0.3	11.5	47.5	23.4	23.1	23.7	0.6
Water supply	0.2	42.1	20.2	15.7	17.9	19.9	0.6
Hot water	0.2	82.9	0.9	0.9	2.3	3.2	0.8
Natural gas	1.7	42.0	1.2	0.0	22.9	22.9	0.0
Central heating	1.1	89.3	3.8	4.0	3.8	5.2	2.2
Electricity	1.0	60.0	28.1	0.0	0.0	0.0	0.0
Transport	11.8	11.4	16.7	18.5	16.8	12.9	-1.6
Communication	3.1	4.0	9.1	13.6	14.5	15.1	1.1
Education	1.5	13.7	14.9	13.2	13.3	13.4	0.1

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	Share in PPI	% yoy					
	for 2018, %**	2016	2017 -	2018			%mom Dec
				Oct	Nov	Dec	
Producer Price Index	100.0	35.7	16.5	16.6	16.5	14.2	-0.4
Mining and quarrying	14.7	85.1	30.4	17.5	13.7	14.3	3.4
Manufacturing of coal	2.5	40.4	47.8	14.6	5.3	5.4	0.1
Extraction of crude petroleum and natural gas	5.1	76.5	16.1	17.0	28.9	24.9	-0.2
Mining of metal ores	6.0	107.2	29.3	17.0	4.6	8.2	8.2
Manufacturing	65.7	22.6	18.5	11.3	9.8	7.4	-1.1
Manufacture of foods, beverages and tobacco products	21.2	16.2	12.5	9.6	8.6	7.0	-0.5
Manufacture of coke, and refined petroleum products	3.9	61.7	43.0	9.5	4.6	-3.1	-5.1
Manufacture of chemicals and chemical products	2.8	-1.4	21.9	11.8	9.3	7.7	1.8
Manufacture of basic pharmaceutical products and pharmaceutical preparation	1.4	8.5	11.0	14.2	14.1	16.7	3.3
Manufacture of rubber and plastics products, and other non-metallic mineral products	5.1	9.5	12.5	13.0	13.1	12.6	0.3
Manufacture of basic metals and fabricated metal products, except machinery and equipment	18.4	41.8	26.9	10.8	8.9	5.6	-2.6
Manufacture of transport equipment	2.8	11.4	17.9	19.0	18.1	17.3	0.3
Electricity, gas, steam and air-conditioning supply	19.6	51.5	4.0	30.1	34.4	29.8	-0.9

<sup>\*</sup> 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 due to the use of dynamic weights according to the methodology of the SSSU and rounding.

\*\* The shares of PPI components are NBU staff estimates based on the SSSU data on volume of industrial production by type of activity for 2017.

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.

## **Terms and abbreviations**

CPI	Consumer Price Index	SSSU	State Statistics Service of Ukraine
IMF	International Monetary Fund	TPP	Thermal Power Plants, respectively
NBU	National Bank of Ukraine	yoy	in annual terms; year-on-year
NERC	The National Commission for State		change
	Regulation in the Energy and Utilities	mom	in monthly terms; month-on-month
PPI	Producer Price Index		change
RHS	Right hand scale		

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