

Inflation report (July 2020)

Kyiv

4 August 2020



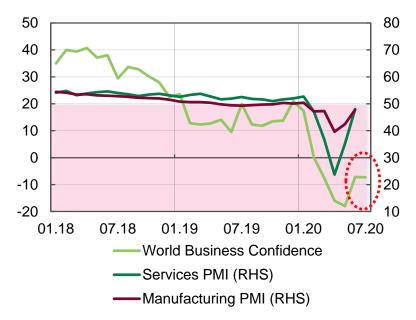
Summary

- In June, the inflation trend reversed. In H2 2020, inflation will accelerate, returning to the 5% ± 1 pp target range in Q4 2020
- Inflation expectations are mixed and may worsen amid deteriorating exchange rate expectations
- Risks to inflation forecast on policy horizon intensified and combined with high uncertainty
- The Board decided to keep key rate unchanged (6%). This restrains the growth of prices during economic recovery and will leave enough room for further reduction in the cost of credit
- The key rate is expected to remain at the current low level at least until the end of this year
- The gradual return of monetary conditions to the neutral level will help curb inflation. In 2021, the rate will rise in response to rising inflationary pressure due to the recovery of consumer and investment demand
- Monetary conditions will remain loose. Previous rate cuts have not yet been fully reflected in the cost of resources in financial markets

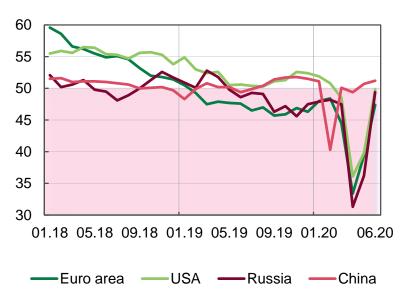


Global economic activity is gradually recovering ...

Global PMI and World Business Confidence



Manufacturing PMI in selected countries



Source: IHS Market, Moody's.

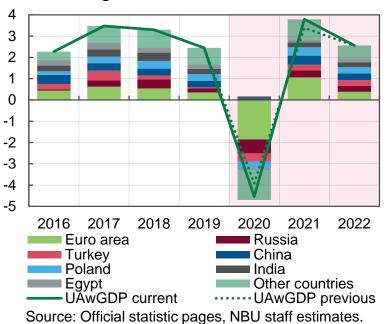
Source: IHS Market.

- Economic conditions firmed as lockdown restrictions to combat the spread of COVID-19 eased across most countries, businesses re-opened and confidence recovered
- The manufacturing and service sectors started to revive
- The gradual intensification of economic activity supported world commodity prices, with supply factors amplifying the increase



... however, recovery is likely to be protracted

Contributions of Countries – MTP of Ukraine to the Annual Change of UAwGDP, %



GDP, %	2020	2021	
UAwGDP	-4.5 (-0.6)	3.8 (+0.4)	
- Euro area	-6.2 (-0.7)	3.6 (+1.1)	
- USA	-4.2 (-0.7)	3.8 (+0.3)	
- China	1.7 (-1.8)	8.6 (+1.6)	
- Russia	-4.3 (-1.8)	2.1 (=)	
- Turkey	-7.0 (+1.0)	5.0 (=)	
- Poland	-3.9 (+0.1)	5.0 (=)	

In brackets - forecast revision

- The risk of a protracted global recovery stays elevated as the epidemiological situation deteriorated since the end of June
- In 2020, the fall in partner GDP will deepen slightly (from 3.9% to 4.5%) due to weaker recovery as a result of a protracted pandemic



Box. Global climate change: impact on Ukraine's economy

The impact is both direct (floods, droughts, desertification) and indirect (through a change in public policy like a transition to renewable energy, limiting greenhouse gas emissions)

Ukraine has a temperate continental climate and may even benefit compared to other countries - as a result of climate change, yields may increase and ripening time may decrease

However, climate change will bring the following challenges:

- Increasing volatility of yields and world agricultural prices
- Strengthening of competitors
- Falling demand from husbandry

Negative consequences can be minimized by developing financial markets, especially insurance and forward markets, improving infrastructure, etc.

The NBU, like the growing number of other central banks, is also considering taking the impact of climate change into account in its work

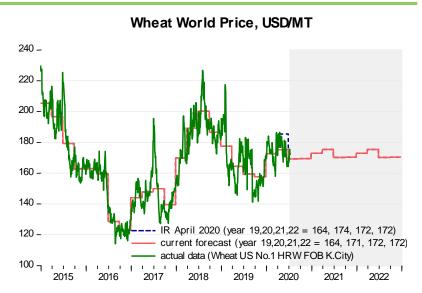
Table. Ukraine's ratings by the climate change indices

Index	Methodology	Ukraine's place
Climate Risk Index (CRI) (higher = worse)	Average annual losses due to climatic events	94 of 180
Climate Change Performance Index (higher = better)	Four categories: emission reductions, RES development, energy consumption reduction, and the country's climate policy	17 of 61
ND-GAIN Country Index (higher = better)	Consists of vulnerability and readiness indices (see below)	68 of 181 Adjusting for GDP - 19 of 181
ND-GAIN Vulnerability Index (higher = better)	Six sectors: food, water, health, ecosystem services, human habitat, infrastructure	39 of 181 Adjusting for GDP - 1 of 181
ND-GAIN Readiness Index (higher = better)	Country's ability to invest in adaptation actions in three components - economic, institutional and social readiness	92 of 181 Adjusting for GDP 58 of 181

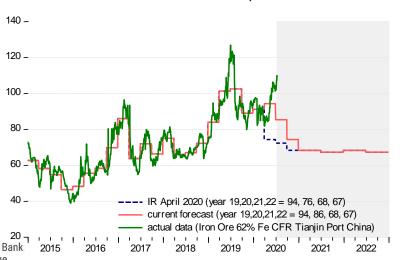


World commodity prices will remain at low levels despite a gradual recovery in economic activity

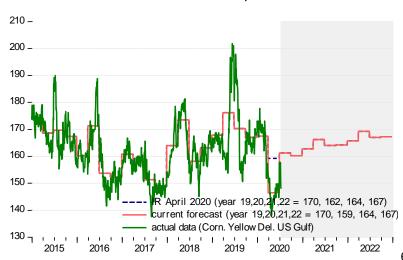




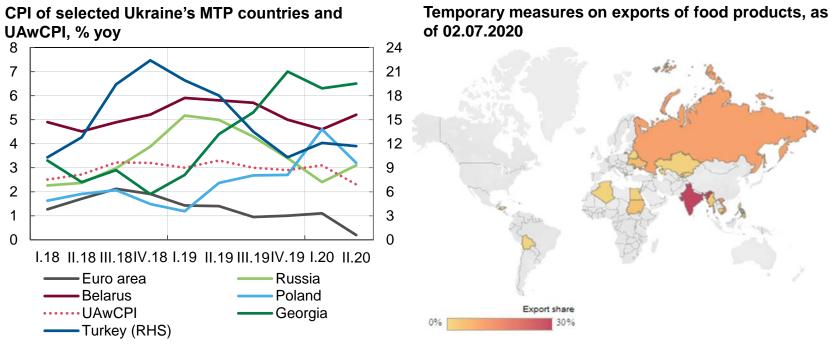
Iron Ore World Price, USD/MT



Maize World Price, USD/MT



Box. Due to the COVID-19 effects, foreign inflation pressure decreased for Ukraine despite a surge in inflation in some countries



Source: National statistical agencies, NBU staff estimates.

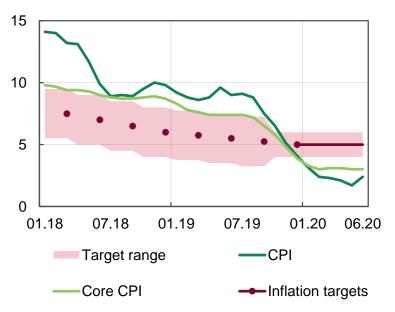
Source: World bank.

- A significant reduction in global demand amid low energy prices led to an overall decrease in inflation pressures from Ukraine's MTP countries
- However, in several countries, in particular Russia, Turkey, Georgia, the rise in prices for goods accelerated due to the devaluation of currencies and the rush demand for certain food products.
 This prompted some countries to introduce export restriction measures
- With a decrease in rush demand and in conditions of sluggish demand, inflationary pressure from Ukraine's MTP countries will remain weak. In the future, it will slowly increase in response to the revival of the global economy amid stimulating monetary and fiscal policies



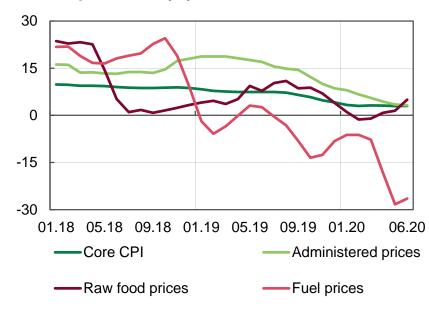
In June, the inflation trend reversed

Headline and core inflation, % yoy



Source: SSSU, NBU.

CPI components, % yoy



Source: SSSU, NBU staff estimates.

- In June 2020, inflation accelerated to 2.4% yoy and changed the trajectory in the direction of the target range
- Raw food price growth accelerated due to adverse weather conditions
- Due to quarantine restrictions, prices of some services remained at the level of March (which had a downward pressure on inflation), but the impact may change in the future.

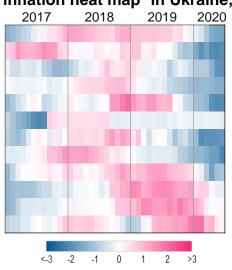


Box. Quarantine restrictions had a slight downward pressure on inflation

- A large number of missing prices for goods and services due to quarantine restrictions became a challenge for statistical agencies
- However, this problem is not new over time, some products disappear or change, and the supply of some goods is seasonal
- The <u>statistical methodology</u> provides several methods of accounting prices in cases when goods and services are absent:
 - changing ways of collecting information
 - fixing prices at the level registered in the previous period
 - imputation of prices by multiplying the price registered in the previous month by a price index of available products

Normalized services inflation heat map* in Ukraine, %

Market services
Chemical cleaning
Housing rentals
Dwelling maintenance
Hospital services
Education
Travel services
Restaurants & hotels
Personal care services
Recreation & sports
Telecommunications
Financial services



* A cool blue color indicates that prices for this type of service were rising at a slower pace than the normalized average, while warm red indicates faster growth. Data are normalized by subtracting the mean change and dividing by standard deviation, excluding data for 2015.

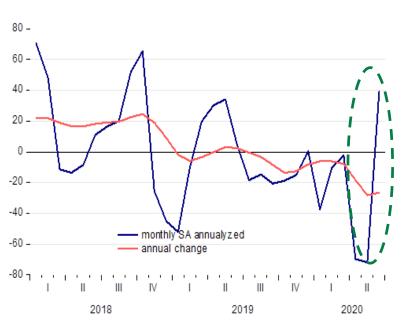
Source: SSSU, NBU staff estimates.

- NBU estimates show that prices for about 80 out of 328 representative goods were imputed.
 Their share in the total CPI was only 10-15% of goods and services in the consumer set. In other countries, the share reached 30%
- The use of imputed prices had a slight downward effect on the inflation rate, which did not exceed 0.1 pp in June and in general did not affect the inflationary trends



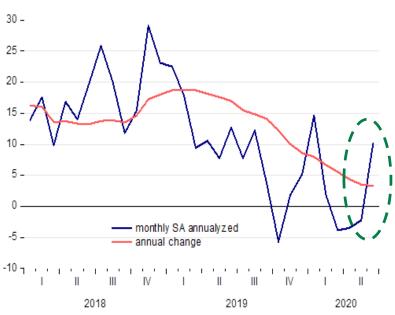
The main drivers of consumer disinflation have changed their impact to the opposite

Fuel price, % mom, sa, annualized



Source: SSSU, NBU staff estimates.

Administrative prices, % mom, sa, annualized



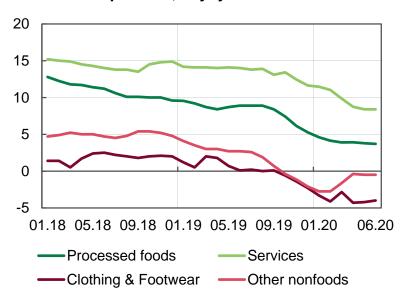
Source: SSSU, NBU staff estimates.

- In June, fuel prices rose, while previously they helped reduce consumer inflation
- Recovery of the world economy and demand for petroleum products will increase the cost of fuel in Ukraine in 2021-2022
- Administrative inflation has also started to accelerate and will reach 9-10% yoy in 2021-2022 due to a further increase in excise rates on tobacco products, rising gas prices due to the gradual recovery of global demand



Weak consumer demand and favorable FX conditions restrained price growth of core CPI components

Core CPI components, % yoy

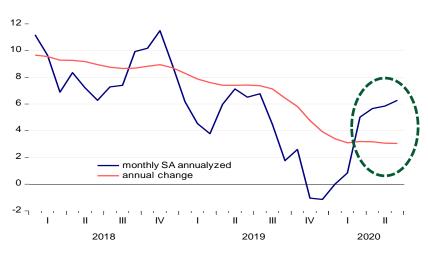


Source: SSSU, NBU staff estimates.

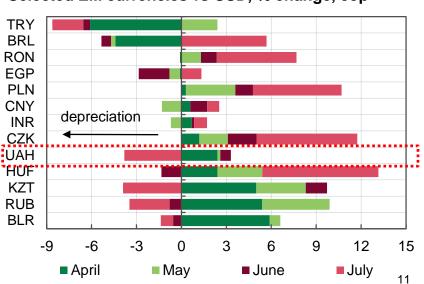
- In June, despite a flat annual trajectory, core inflation accelerated in monthly terms (mom, CZK SA, annualized), with further growth prospects UAH
- Core inflation will accelerate along with the resumption of economic activity and will hoover around 4% for the entire forecast period

In July, depreciation pressure intensified

Core CPI, % mom, sa, annualized



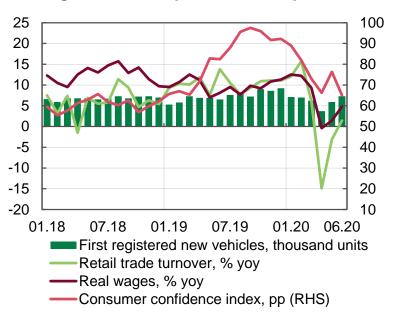
Selected EM currencies vs USD, % change, eop





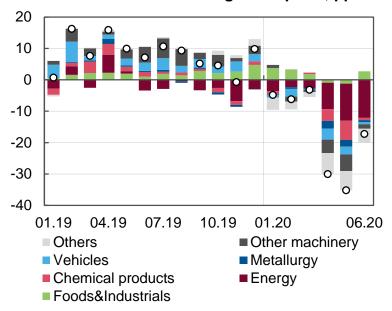
Disinflationary pressure caused by depressed demand is gradually running out

Leading indicators of private consumption*



Source: SSSU, Ukravtoprom, NBU staff estimates.

Contribution to annual change in imports, pp



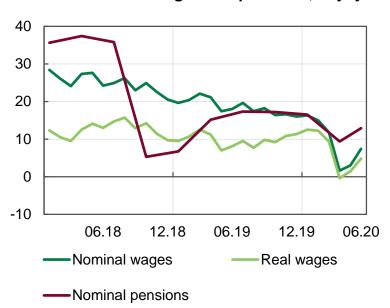
Source: NBU staff estimates.

- In June retail sector activity was picking up gradually (+1.4% p/p)
- The pace of decline in the consumer import (including food, clothing, and footwear) slowed in June
- In Q2 private consumption turned out to be more stable than expected

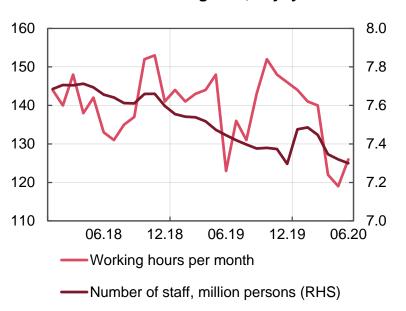


Private consumption is supported by government programs. Companies stayed reluctant to layoffs

Nominal and real wages and pensions, % yoy



Staff number and working time, % yoy



Source: SSSU, PFU.

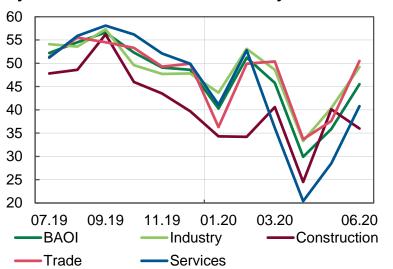
Source: SSSU.

- The growth of real and nominal wages recovered in May and continued in June (by 4.8% and 7.4% yoy)
- Pension benefits, which are the main source of income for about 1/4 of population, grew fast due to lump-sum payments in Apr and indexation in May
- The recovery in consumer loans is an additional source for demand financing
- Businesses preferred to decrease the number of working hours rather than the number of staff employees, which was in line with previous survey results carried out by the NBU during the
 most acute phase of the crisis

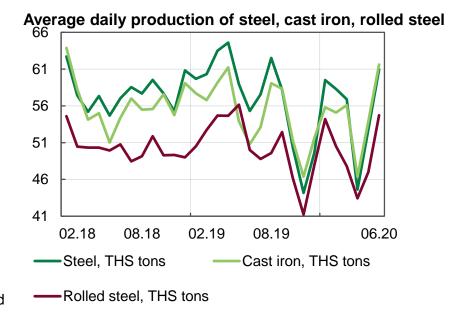


High-frequency indicators reflect the gradual recovery of the Ukrainian economy

Dynamics of NBU's business activity outlook index*



^{*} A level above 50 indicates an expansion or growth compared to the previous month; values below 50 represent a contraction; the level of 50 indicates no change. Source: NBU.



Source: NBU, GfK Ukraine, GfK Ukraine, Info Sapiens.

- Business expectations, trade, and industry have almost recovered to its pre-crisis levels
- Growth in foreign demand led to the metallurgical production recovery



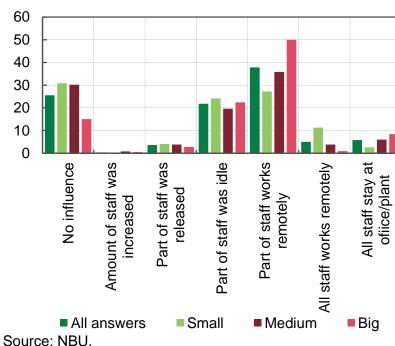
Box. Survey results* confirmed a significant decrease in revenues, increased costs and retain staff





Other

The quarantine impact on staff, % of answers



Source: NBU.

 The quarantine restrictions led to a significant decrease in production/sales and revenues: almost 70% of business noted. Additional costs, in particular for epidemiological measures, grew substantionally

20 30 40 50 60 70

However, companies stayed reluctant to layoffs

5.2

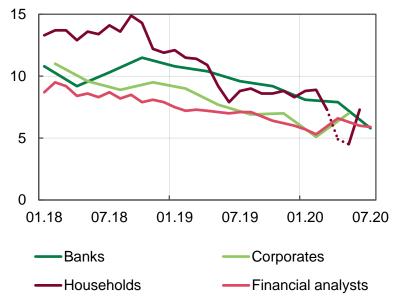
76% will restore activity using own or friendly business funds, 10% will use loans, and 6% – government aid. Since the quarantine starts, 13% of business have used government supporting programs



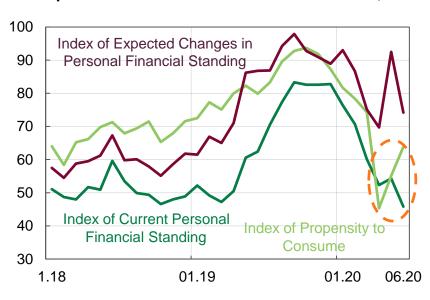
Based on additional questions to regular Business Expectations Survey in Q2 2020.

Inflation expectations show mixed trends

Inflation expectations for the next 12 months, %



Components of HH Consumer Sentiment Index, %



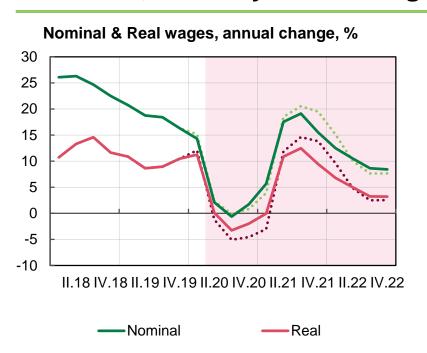
Source: NBU, GfK Ukraine, Info Sapiens surveys.

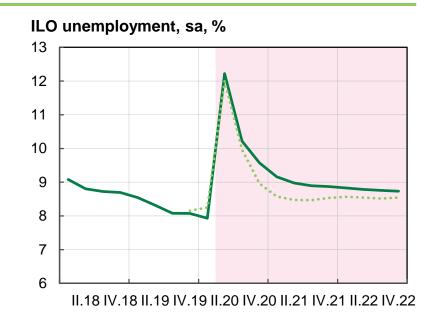
Source: НБУ, GfK Ukraine, Info Sapiens.

- Inflation expectations of corporates and households deteriorated. The expectations of financial analysts did not fundamentally change
- The deterioration in household inflation expectations can be partially explained by a return to the method of personal surveys
- On the back of deteriorating consumer sentiment, the propensity to make large purchases increased. This may be due to an increase in propensity to consume amid deteriorating inflation expectations



Sharp fall in wages growth in 2020 due to quarantine measures and recession, recovery boosts wages in 2021





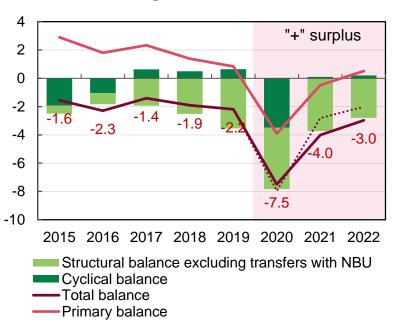
change, %	2019	2020	2021	2022
Real wages	9.8	1.3	8.1	4.5
- previous forecast		0.0	9.1	4.7
Nominal wages	18.5	4.1	14.4	9.9
- previous forecast		4.9	15.6	9.9

	2019	2020	2021	2022
Minimum wage, UAH	4173	4723	5003	5290
- previous forecast		4723	5003	5290
change, %	12.1	13.2	5.9	5.7

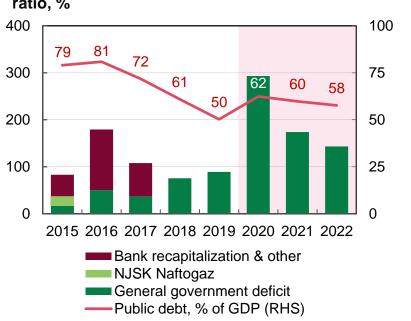


Fiscal policy is expected to be looser on forecast horizon (compared to April forecast)

Consolidated Budget Balance, % of GDP



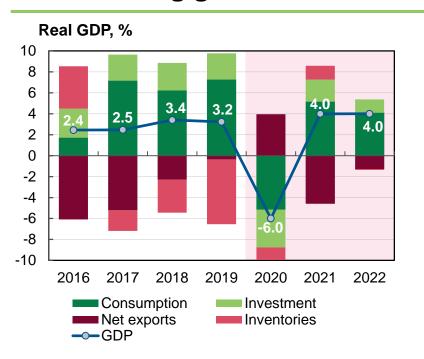
Public sector deficit, UAH bn, and public debt-to-GDP ratio, %

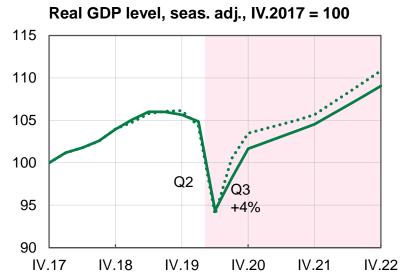


The public debt-to-GDP hikes up to 62% in 2020 due to widening of budget deficit but will decrease afterward



GDP drop by 6% due to quarantine measures (Q2 + partly in Q3) and shrinking global demand

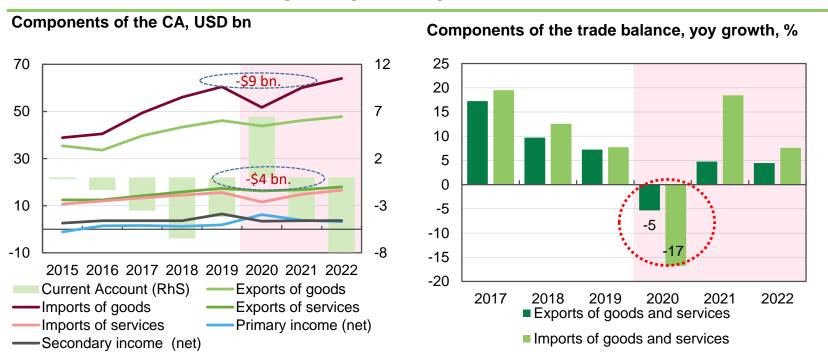




	W,%	2019	2020	2021	2022
GDP	100	3.2	-6.0 (-5.0)	4.0 (4.3)	4.0 (4.0)
Consumption	87	8.1	-5.4 (-4.4)	5.3 (5.7)	4.3 (4.6)
Private consumption	66	11.3	-6.0 (-4.9)	6.0 (6.5)	5.0 (5.3)
Gross fixed capital formation	16	14.2	-20 (-13.9)	14.5 (15.0)	8.1 (8.1)
Exports of G&S	48	6.7	-4.7 (-9.3)	4.5 (7.4)	3.9 (4.4)
Imports of G&S	56	6.3	-12 (-12.1)	14.6 (14.4)	6.1 (7.3)



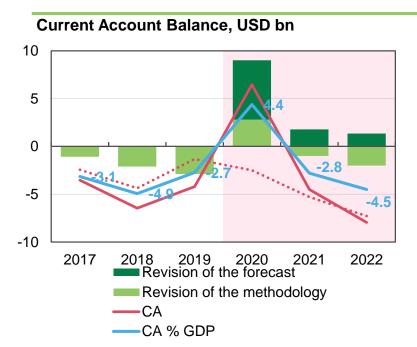
The CA shows a surplus in 2020 due to steady exports despite coronacrisis and sharp drop in imports

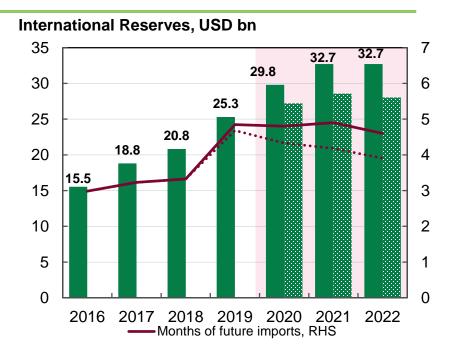


In the second quarter of 2020, the trade deficit in goods narrowed significantly due to a sharp decline in imports of goods in the context of narrowing domestic demand and a further fall in energy prices



The CA turns to a deficit in 2021-2022 due to accumulated deferred demand





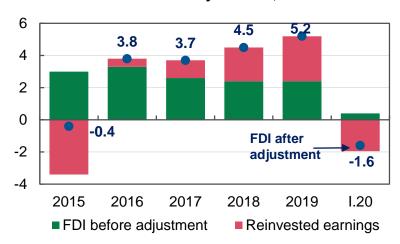
International reserves will achieve 100% reserve adequacy by the end of 2020

Main changes in CAB forecast in 2020-2022 compared with IR April					
Trade in goods	Terms of Trade (↑): ↓gas (in 2020)				
	↑Volumes of exports: ↑agro(2020-2021), ↑iron ore, ↑metals				
Income	↑ Remittances				
Revision of methodology	↓ Reinvested income in 2021-2022				

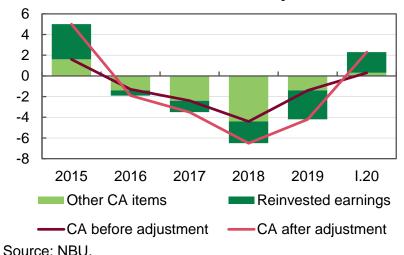


Box. Incorporation of reinvested earnings of enterprises changed selected BoP items, but the overall balance remained unchanged

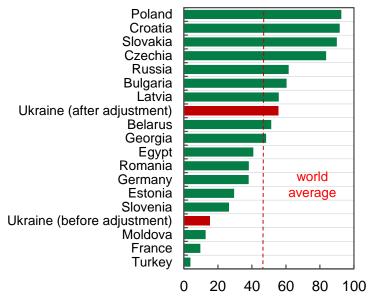
Net FDI before and after adjustment, USD bn



Current account before and after adjustment, USD bn



Reinvested income share in FDI inflows, 2019, %

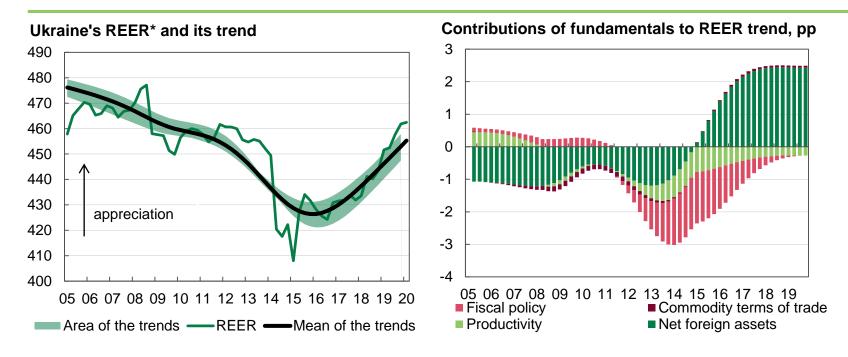


Source: IMF, UNCTAD, NBU.

- The <u>revision</u> was reflected in FDI data and the equivalent changes in the CA balance
- The share of reinvested earnings in total FDI inflows in 2019 reached almost 50%, which is in line with a global average



Box. Estimating REER trend for Ukraine: BEER approach



^{*}Natural logarithm of REER index multiplied by 100, base period 2Q 2012, s.a.

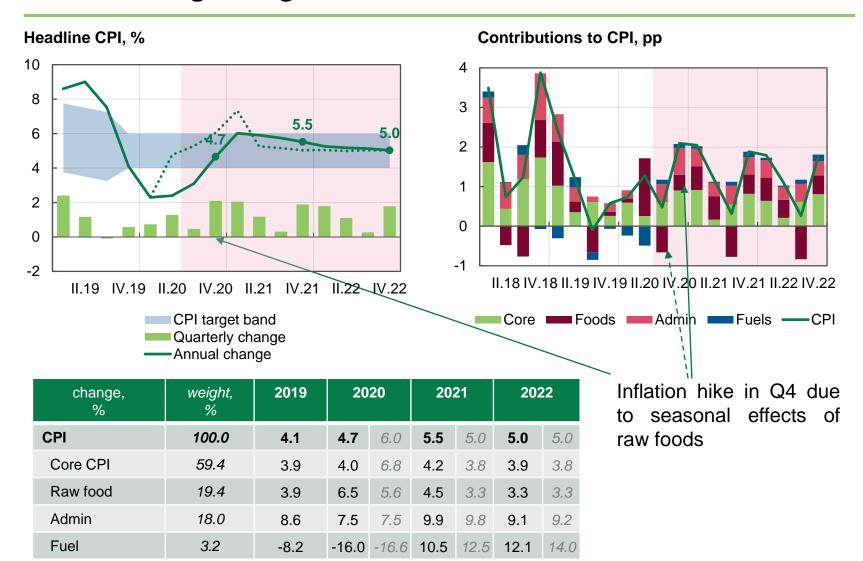
Source: NBU staff estimates.

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- During the period of maintaining a fixed exchange rate, REER was characterized by significant deviations from the trend
 - This was a reflection of the accumulation of imbalances in the economy
 - These imbalances were realized during the crises of 2008-2009 and 2014 when REER became undervalued
- After the shift to a floating exchange rate and the stabilization of the economy, the REER

 National Bankfluctuated around the trend

Inflation accelerates on the back of demand recovery but remains within the target range



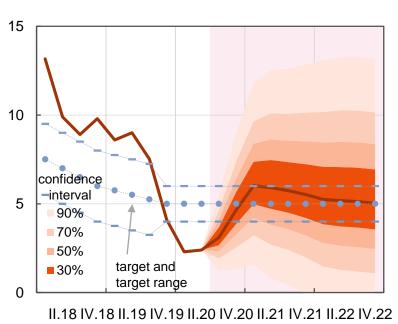


The key policy rate is expected to remain at the current low level at least until the end of this year



18 16 previous 14 forecast 12 10 8 confidence 6 interval 30% 50% 70% 90% IV.17 IV.18 IV.19 IV.20 IV.21 IV.22

CPI uncertainty, %



- The key assumption underlying the macroeconomic forecast is that Ukraine's cooperation with the IMF will continue
- The main downside risk to the forecast is a longer-lasting coronavirus pandemic and the potential return to stricter quarantine measures



Risks

			Risk probability	
		Low <15%	Middle 15%–25%	High 25%–50%
	Weak	Higher volatility of global food prices		
Influence on baseline	Moderate	Lower harvest due to weather conditions		
	Strong	Escalation of the military conflict in eastern Ukraine	Suspension of the cooperation with IMF Judicial decisions on the financial system	Longer-lasting coronavirus pandemic The deeper recession of the world economy A sharp increase of social standards





Macroeconomic forecast

	2019	2020 forecast	2021 forecast	2022 forecast
Real GDP, change, %	3.2	-6.0 (-5.0)	4.0 (4.3)	4.0 (4.0)
Nominal GDP, UAH bn	3 975	3 910 (3 970)	4 300 (4 360)	4 710 (4 760)
CPI, y-o-y, %	4.1	4.7 (6.0)	5.5 (5.0)	5.0 (5.0)
Core CPI, y-o-y, %	3.9	4.0 (6.8)	4.2 (3.8)	3.9 (3.8)
Current account balance, USD bn	-4.2 [-1.3*]	6.5 [4.0*] (-2.5)	-4.5 [-3.5*] (-5.3)	-7.9 [-5.9*] (-7.3)
% GDP	-2.7 [-0.9*]	4.4 [2.7*] (-1.7)	-2.8 [-2.2*] (-3.1)	-4.5 [-3.5*] (-4.0)
BOP (overall), USD bn	6.0	1.5 (-1.1)	2.4 (0.6)	1.8 (1.3)
Gross reserves, USD bn	25.3	29.8 (27.2)	32.7 (28.6)	32.7 (28.0)

^{* [}estimates based on old FDI methodology]

