

Macro Update

Muddling Through the Labyrinth of War

FRIDAY, 9 SEPTEMBER 2022

Ukraine suffered huge losses in the first months of russia's full-scale invasion. The economy clearly survived, but it is set to be facing numerous headwinds in the years to come. The loss of physical assets and human capital against the backdrop of a tense safety situation implies the recovery of real GDP is going to be marginal. Inflation, expectedly, accelerated, but it did not spin out of control. The broad expectation is that it will start to slow in early 2023. External imbalances are huge, as Ukraine lost a significant part of its export capacity and capital flight continues in sizable volumes. July's one-time hryvnia depreciation had a quick positive impact on the FX market, but more rounds of depreciation may be needed through end-2023 to further slash excess demand for foreign currencies. The Ukrainian economy will remain heavily dependent on international financial assistance in the coming years. Foreign grants and loans will be critically needed to patch the fiscal deficit and replenish NBU reserves. External funding will reach nearly US\$30bn for 2022, but the inflow of aid is likely to decline next year. By our estimates, the economy will need at least US\$20bn in 2023 to keep running relatively smoothly. A significant part of this amount is likely to come from the IMF. We assume no major changes in the war situation through end-2023.

GDP trend to be L-shaped in 2022-23

The trend of Ukraine's economy is going to be nearly L-shaped for the foreseeable future. GDP saw a catastrophic decline of more than 45% in March and April due to russia's full-scale invasion. The hostilities froze nearly all business activities in about 40% of Ukrainian territories. As russia's army was pushed back from the northern regions and the safety situation improved, the economy started to recover gradually. We estimate the YoY GDP decline narrowed to 30-35% in recent months, but potential for further recovery is very limited. GDP may keep growing only in small increments of 1-2% QoQ driven by a number of factors:

- improved logistics as freight transportation stabilized and gasoline is now freely available across the country, albeit at a significantly higher price;
- return of refugees to Ukraine. The return migration is unlikely to be large-scale, but still will help rebuild the workforce across sectors;
- less uncertainty with regard to key macroeconomic indicators; they are predominantly discouraging, but forecasting them with a reasonable degree of certainty is fully possible now.

Key macroeconomic projections

	2022F	2023F
Real GDP, YoY, %	(32)	4
Nominal GDP, US\$bn	146	129
Inflation, YoY, %, e.o.p.	30	24
UAH/USD, e.o.p.	40	45
C/A balance, % of GDP	4	0
Reserves, US\$bn	23	19
Budget gap, % of GDP	(21)	(15)
Public debt, % of GDP	86	99

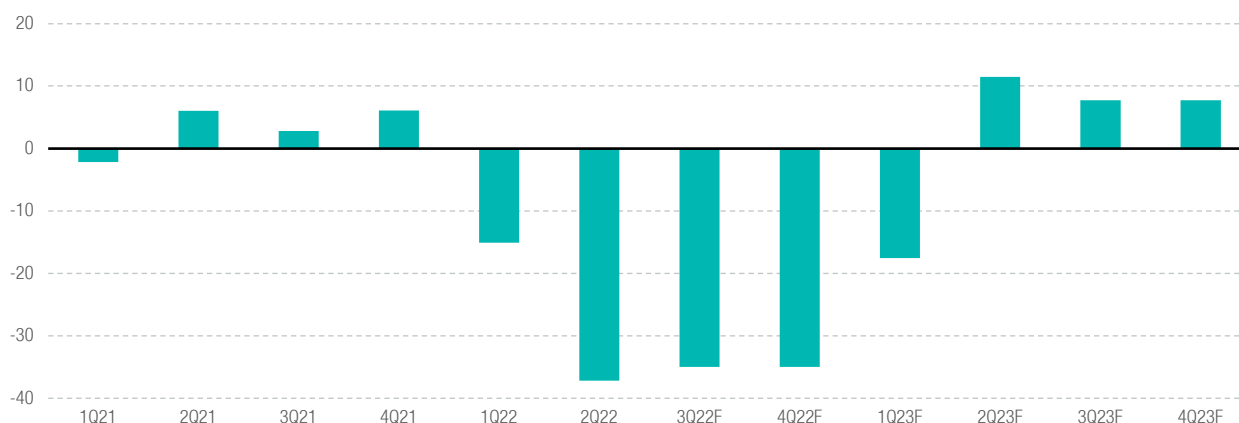
Source: ICU

GDP will recover in small increments through end-2023

Businesses in government-controlled territories may continue to gradually increase utilization of existing capacity to meet demand, but any capital expenditures to increase production potential is apparently not a baseline scenario. Capital formation likely fell 80–85%, and is not going to recover until there is an end in sight to the war. Companies will allocate only minimal maintenance capital expenditures to keep their production facilities running.

Unblocking of seaports may prove to be a boost for growth, but, realistically, Russia is not prepared to let Ukraine deliver by sea anything but grains and oilseeds. Other key export commodities like iron ore, metals, and chemicals need to be delivered to Ukraine's western borders by railway, the capacity of which will remain limited in the foreseeable future.

Chart 1. Real quarterly GDP, change YoY, %



Source: Ukrstat, ICU.

Overall, we expect GDP will decline 32% for full-year 2022, and that should be followed by a modest 4% recovery in 2023, providing the war situation doesn't change in a crucial way.

Economy to face long period of high inflation

Inflation will slow from 30% in 2022 to 24% next year

Inflation accelerated to 22.2% YoY in July, up from 10.0% at end-2021. Against the backdrop of depressed demand due to a major decline in real household incomes, inflationary pressures in Ukraine remain largely driven by supply-side factors. The authorities do their best to avoid their concurrent impact so that inflation does not spin out of control. The authorities are concentrating their efforts on a "flatten the curve" policy, whereas a scenario of prolonged and high inflation is preferred to a scenario of a shorter period of extremely high inflation. This seems to be a reasonable policy that to a certain extent helps keep inflationary expectations in check. Several major forces are now behind inflationary pressures:

- logistical problems that hampered timely delivery of goods and services in the first months of the full-scale war. Transportation bottlenecks have substantially eased over the past couple of months. The negative effect of this factor is fading, but is still there.

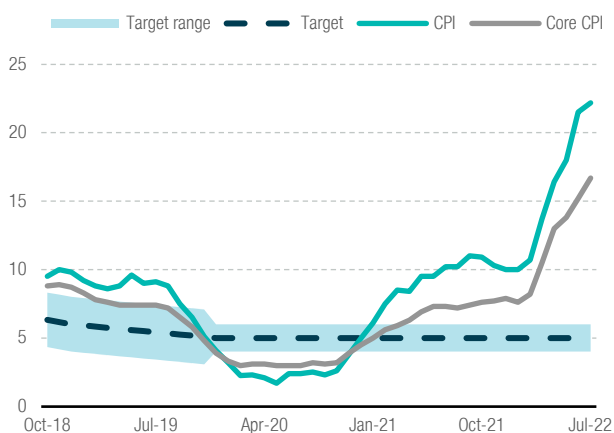
- surging cost of energy materials. The price of gasoline is up 78% YoY in July, which inflates delivery costs. The good news is that the motor fuel price is already past its peak. Meanwhile, the higher cost of gas and electricity has not been passed on to the final consumers. The government committed to keep prices flat until the end of the upcoming heating season so that utility tariffs do not reinforce inflation over the next 12 months. This is one of the ways to flatten the inflation curve.

- hryvnia depreciation, which is likely to continue over the next 12–18 months. July's reset of the official exchange rate of hryvnia vs. USD will have limited impact on inflation since it has been largely priced-in in many consumer segments. It will likely squeeze importers' margins,

first of all. However, depreciation pressures are likely to remain in place, and the NBU will have to take painful decisions to weaken the hryvnia further. By devaluing the hryvnia in steps, the NBU is attempting to flatten the inflation curve to keep the exchange rate, and, thus, inflationary expectations, under control.

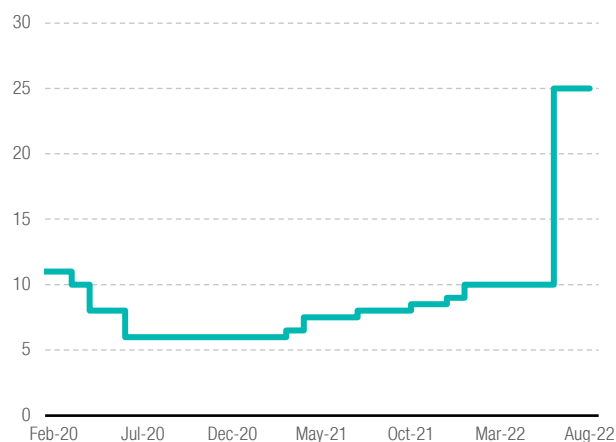
The key factors that help to soften inflationary pressure are weak domestic demand and a generous supply of grains and oilseeds in the domestic market, as their delivery to external markets is complicated.

Chart 2. CPI, core CPI and inflation target, YoY, %



Source: NBU, ICU.

Chart 3. NBU key policy rate, %



Source: NBU, ICU.

NBU's soft commitment to keep key policy rate at 25% is credible

We project consumer prices will grow close to 30% in 2022, and will decelerate very gradually thereafter. We see end-2023 inflation at 24% since we believe that the negative effects of high energy prices (that will need at least partially to be passed onto consumers in 2023) and hryvnia weakening will have long-lasting and significant impact on the cost of goods sold and eventually on consumer prices.

Against the backdrop of high inflation and exchange rate pressures, the NBU's soft commitment to keep the key policy rate at 25% at least until 2Q24 is totally credible. A reduction any sooner would add risks to macroeconomic stability while any further increases can hardly be justified as the current inflationary trend is broadly in line with NBU's projections.

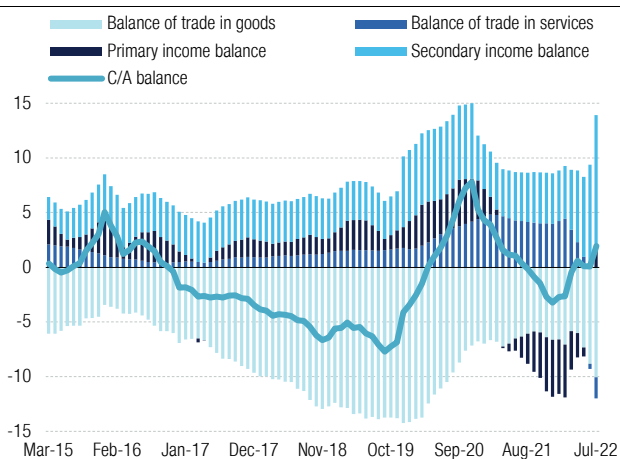
External imbalances widened substantially in 1H22

Significant FX market pressures to persist into 2023

The imbalances of Ukraine's external accounts have been widening through June. This prompted the NBU to carry out a one-time hryvnia devaluation, which led to the US dollar being 25% more expensive. This move was intended to lower the deficit of hard currency in the interbank market and decelerate the pace of reserves meltdown. While this was a bold decision that addressed a fundamental problem, time has shown it was not enough to reduce the FX market gap to comfortable and sustainable levels. We, thus, expect further weakening of the hryvnia this year and next.

Ukraine has been running a current account (C/A) surplus in each of the months since the start of the war, but the positive balance of the C/A largely came on the back of a one-off factor – a huge amount of transfers and humanitarian aid (BoP secondary income component). The trade-in-goods deficit has been widening in recent months, as imports recovered significantly faster than exports. July's import of goods was only 20% below the volume in July last year, while export is lagging behind with an almost 50% YoY decline. The trade-in-service balance turned deeply negative driven by expenditures of Ukrainian refugees

living abroad. The overall trade deficit stood at US\$6.3bn in 2Q22 (c. 4.3% of 2022E GDP). The gap was partly covered with migrant remittances, which held up impressively well and exceeded last year's volumes. Yet, it is thanks to one-off factors that the C/A balance remains positive. Ukraine's allies provide a part of their financial assistance to the government in the form of grants that are reflected as the secondary income component of the C/A.

Chart 4. Current account, 12-month trailing, US\$bn


Source: NBU, ICU.

Chart 5. Current account components, US\$bn

	2021	% of 2021 GDP	2022	% of 2022E GDP
Current account balance	0.3	0.2%	1.4	1.0%
Goods balance	-0.3	-0.1%	-3.2	-2.2%
Services balance	0.9	0.4%	-3.0	-2.1%
Primary income	-1.4	-0.7%	2.7	1.8%
incl. remittances	3.4	1.7%	3.7	2.5%
Secondary income	1.1	0.5%	5.0	3.4%
incl. transfers to gov't	0.3	0.1%	2.9	2.0%

Source: NBU, ICU.

The positive C/A balance is a bright part of the story; the financial account part is less so. Capital outflows from Ukraine remain high despite tough capital controls imposed by the NBU since February. The two most significant channels are:

Capital outflows remain huge despite tough administrative restrictions

- build-up of trade credits of US\$5.2bn in 2Q22. That reflects payments for imports that have not been delivered to Ukraine and delayed payments for exports. While real trade credits make up a significant part of that amount, we hypothesize that an equally significant part may be represented by shadow deals to leak FX out of the country.

- increase in FX cash out of banks of US\$3.2bn in 2Q22. This channel of hard currency outflows is driven by withdrawal of FX cash from hryvnia accounts by Ukrainians abroad. Since the start of the war, this has been the way to convert hryvnia into FX at the most favorable exchange rate. Once clients withdraw FX cash, banks replenish their holdings of FX from NBU reserves. Since March, the NBU has introduced numerous restrictions on FX cash withdrawal abroad, including weekly limits, but the outflows still remain significant.

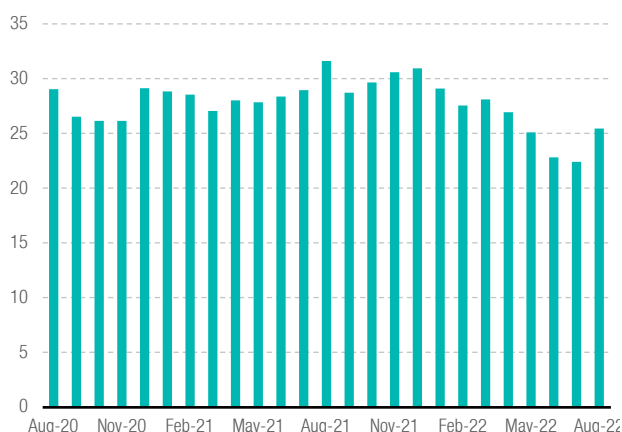
Bilateral loans and loans from IFIs to government fell short of offsetting outflows via the two above-mentioned channels.

NBU was forced to weaken hryvnia in July to slow meltdown of reserves

The combined current account and financial account balance, thus, was deeply negative since the start of the war, and that was a significant drag on NBU reserves. So far, NBU's policy has been to cover any excess demand in the interbank market by selling its reserves at a fixed exchange rate. Over March–July, the NBU sold net US\$12bn, and its gross reserves were down 19% to US\$22.4bn.

To slow the pace of reserve meltdown, the NBU was forced to weaken the hryvnia vs US dollar by 20% in late July (US dollar became more expensive by 25%). The central bank opted not to switch to a managed float regime, saying that a fixed exchange rate offers many advantages by providing a nominal anchor in times when all other economic variables are highly volatile.

Chart 6. NBU gross international reserves, US\$bn



Source: NBU, ICU.

NBU reserves to stay at relatively safe level thanks to international financial assistance

The NBU's decision to carry out hryvnia depreciation brought about quick positive results as the volume of FX interventions fell more than twice in subsequent weeks. In August, the NBU on average sold an estimated US\$0.4-0.5bn per week, vs US\$0.9bn over June and the first half of July. The NBU, thus, got some relief for the time being, but has not solved the problem in a sustainable manner. The current interventions are still uncomfortably high. We, thus, believe the NBU will need to carry out one more round of hryvnia depreciation vs the US dollar, supposedly by 10% by the end of the year. Thanks to the substantial inflow of international financial assistance, we expect NBU reserves to be at a relatively comfortable level of US\$23bn at end-2022.

The next year looks not less challenging in terms of raising funds to cover the BoP gap. It's almost certain that significant imbalances of external accounts (net of international financial assistance) will persist into 2023, even though their size is going to be smaller than in 2022. Four months before the country enters 2023, there is no clarity about which sources of financial assistance Ukraine is going to use. A new IMF program for up to US\$20bn combined for 2023–24 is a likely scenario at the moment. That amount will need to be topped with at least another US\$10bn in bilateral loans each year, by our estimates.

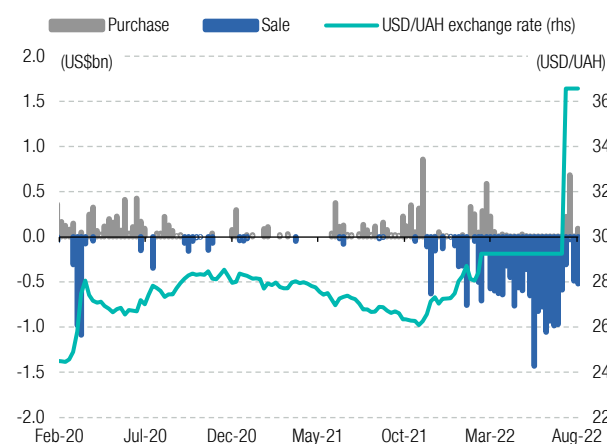
Budget to remain hugely reliant on international financial assistance

Budget will continue to rely on foreign financial aid and financing from NBU

The war and related economic crisis led to a dramatic fall in budget tax revenues. In 1H22, they were down 12% YoY despite surging inflation. However, there are convincing signals that the situation improved notably since July, as some significant tax concessions introduced at the start of the war were withdrawn. Even so, the monthly budget deficit is very unlikely to narrow in the coming quarters. Since more than 50% of total budget expenditures have been war-related in recent months, many areas remain hugely underfinanced. That means that for the next couple of years, the government will aim to spend everything that it collects via tax (without a major hike in tax rates) and non-tax revenues and everything that it manages to receive as international financial assistance. Budget needs will dramatically exceed what government can realistically receive from all sources.

For 2H22, we expect government will be able to receive US\$20bn (on top of net USD7.5bn in 1H22) in external financial assistance, of which about US\$8bn will be in the form of grants that are treated as revenue in budget accounting. The total gross international financial assistance is, thus, going to reach nearly US\$ 28bn in 2022. It's reasonable to assume that the supply of new aid will decline in the following years, as it is going to become more difficult

Chart 7. FX market indicators, 3-year history*



* purchase interventions in recent weeks largely represent purchases of FX from MinFin's account at Ukreximbank.

Source: NBU, Bloomberg, ICU.

for Ukraine's allies to justify sizable loans and grants due to their internal political constraints. Yet, the new aid package is still going to be significant, probably up to US\$20bn, with a significant part of it coming from the IMF and other IFIs. Other good news is that the recent Eurobond restructuring and concessions granted by the creditors of the Paris Club imply that Ukraine will face no significant redemptions of external debt next year. So net external borrowings will be roughly equal to gross borrowings.

Table 1. Sources of state budget financing, US\$bn

	1H22	2H22E	2022E	2023E
Budget deficit (before grants)	14.3	26.5	40.8	24.5
External grants*	2.2	8.0	10.2	5.0
Borrowings	12.2	18.5	30.7	19.5
Net external borrowings	6.8	11.0	17.8	13.0
Net sale of gov't bonds (excl. NBU)	-2.4	0.0	-2.4	0.5
Net sale of gov't bonds to NBU	7.8	7.5	15.3	6.0
GDP, US\$bn			146	129
Budget deficit (before grants) / GDP			28% / 31**	19%
Budget deficit / GDP			21% / 24**	15%
Public debt, US\$ bn			112	128
Public debt / GDP			77% / 86%**	99%

* grants are treated as revenues in budget accounting and technically reduce budget deficit

** second number is the ratio if the US dollar equivalent of GDP is based on the current rate of UAH36.6/US\$.

Source: MinFin, ICU.

Fiscal consolidation will not be fast

The second most important source of funding is NBU's direct purchases of government debt. This is a stumbling block issue between the central bank and the Ministry of Finance. The NBU would like to keep the 2022 purchases at below UAH400bn that were budgeted back in February. However, it increasingly looks like the cap will be lifted to at least UAH500bn. The Ministry of Finance clearly has an upper hand in these discussions, and, unfortunately, the NBU is not in a position to decline requests for debt purchases. Whatever the course of discussions between the NBU and MinFin is, such a huge amount of budget monetization is not sustainable as it amplifies inflation and exchange rate risks. We, thus, expect the volume will be more than halved in 2023.

The placement of government bonds to investors (banks) is unlikely to be a source of budget financing any time soon. The Ministry of Finance has faced huge headwinds in the market so far with debt redemptions to investors significantly exceeding new borrowings. The MinFin's reluctance to raise yields following the hike of the NBU's key policy rate is the key impediment. Local banks have ample liquidity that they prefer to keep intact in NBU's accounts rather than invest it into longer maturities at lower yields. We see no other choice for MinFin but to change its stance and move on with higher yields if it is serious about raising funds from the market. Yet, at this point, we have little hope this will happen and expect the net financing of the budget through this channel to be negative in 2022, and close to zero in 2023.

Debt-to-GDP ratio will approach 100% by end-2023

With the above assumptions in mind, we expect the budget deficit before grants is going to stand close to 28% of GDP in 2022, of which grants may cover about one fourth. The 2023 deficit is going to be lower at 19%, of which about one fourth is going to be covered with grants.

Heavy borrowings will push the public debt-to-GDP ratio close to 77% by the end of 2022, based on the actual average-of-the-year exchange rate. However, applying a more relevant

current rate of US\$36.6/UAH yields a debt-to-GDP ratio close to 86%. The ratio will go further close to 100% in 2023. This level can hardly be treated as sustainable, which may prompt the government to seek partial debt write-offs from both private and official creditors in the future. Noteworthy, about 15-20% of total debt will be owned to the NBU at end-2023.

Yearly forecast 2022–23

	Historical data for 2012–21										Forecast by ICU	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022F	2023F
Activity												
Real GDP (% YoY)	0.2	(0.0)	(6.6)	(9.8)	2.4	2.5	3.4	3.2	(4.0)	3.4	(32.0)	4.0
Nominal GDP (UAHbn)	1,405	1,465	1,587	1,989	2,385	2,984	3,561	3,978	4,194	5,460	4,752	5,535
Nominal GDP (US\$bn)	174	180	133	90	93	112	131	155	155	200	146	129
Unemployment (%)	7.6	7.3	9.3	9.1	9.3	9.5	8.8	8.2	9.5	9.8	25.0	20.0
Inflation												
Headline inflation (% YoY, e.o.p)	(0.2)	0.5	24.9	43.3	12.4	13.7	9.8	4.1	5.0	10.0	29.5	24.3
Headline inflation (% YoY, avg.)	0.6	(0.3)	12.1	48.7	13.9	14.4	10.9	7.9	2.7	9.4	20.4	26.8
GDP deflator (% YoY)	7.8	4.3	15.9	38.9	17.1	22.1	15.4	8.3	9.8	25.1	28.0	12.0
Exchange rates												
UAH/USD (e.o.p.)	8.1	8.2	15.8	24.0	27.3	28.1	27.7	23.8	28.3	27.3	40.3	45.3
UAH/USD (avg.)	8.1	8.2	12.0	21.9	25.6	26.6	27.2	25.8	27.0	27.3	32.5	42.8
External balance												
Current account balance (US\$bn)	(14.3)	(16.5)	(4.6)	5.0	(1.9)	(3.5)	(6.4)	(4.1)	5.3	(3.2)	6.2	0.1
Current account balance (% of GDP)	(8.3)	(9.2)	(3.5)	5.6	(2.0)	(3.1)	(4.9)	(2.7)	3.4	(1.1)	4.3	0.1
Trade balance (US\$bn)	(14.3)	(15.6)	(4.6)	(2.4)	(6.5)	(8.7)	(11.4)	(12.5)	(2.4)	(2.7)	(19.1)	(18.6)
Trade balance (% of GDP)	(8.3)	(8.7)	(3.5)	(2.6)	(6.9)	(7.8)	(8.7)	(8.1)	(1.5)	(1.5)	(13.1)	(14.3)
Capital flows (F/A) (US\$bn)	10.1	18.6	(9.1)	(4.6)	3.1	6.0	9.3	10.1	(3.3)	3.7	(13.9)	(4.0)
FDI (US\$bn)	7.2	4.1	0.3	(0.4)	3.8	3.7	4.5	5.2	0.1	6.9	0.0	0.0
FDI (% of GDP)	4.1	2.3	0.2	(0.5)	4.1	3.3	3.4	3.4	0.1	3.4	0.0	0.0
Reserves (US\$bn)	24.5	20.4	7.5	13.3	15.5	18.8	20.8	25.3	29.1	30.9	23.3	19.4
Interest rates												
NBU's key policy rate (% e.o.p.)	7.50	6.50	14.00	22.00	14.00	14.50	18.00	13.50	6.0	9.0	25.0	25.0
Fiscal balance												
Budget balance (% of GDP)	(3.8)	(4.4)	(5.0)	(2.3)	(2.9)	(1.5)	(2.4)	(2.1)	(5.1)	(2.4)	(21.0)	(15.1)
Public debt (% of GDP)	36.7	39.9	69.4	79.0	80.9	71.8	60.9	50.6	60.8	49.7	86.0	99.0

Source: Ukrstat, NBU, MoF, ICU.

Disclosures

ANALYST CERTIFICATION

This research publication has been prepared by the analyst(s), whose name(s) appear on the front page of this publication. The analyst(s) hereby certifies that the views expressed within this publication accurately reflect her/his own views about the subject financial instruments or issuers and no part of her/his compensation was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views within this research publication.

EQUITY RATING DEFINITIONS

Buy: Forecast 12-month total return greater than 20%

Hold: Forecast 12-month total return 0% to 20%

Sell: Forecast 12-month total return less than 0%

Note: total return is share price appreciation to a target price in relative terms plus forecasted dividend yield.

DEBT RATING DEFINITIONS

Buy: Forecast 12-month total return significantly greater than that of relevant benchmark

Hold: Forecast 12-month total return is in line with or modestly deviates from relevant benchmark

Sell: Forecast 12-month total return significantly less than that of relevant benchmark



11th floor, LEONARDO Business Centre
19-21 Bogdan Khmelnytsky Street
Kyiv, 01030 Ukraine
Phone/Fax +38 044 3777040

WEB www.icu.ua



RESEARCH

Vitaliy Vavryshchuk

Head of macro research
vitaliy.vavryshchuk@icu.ua

Taras Kotovych

Senior financial analyst (Sovereign debt)
taras.kotovych@icu.ua

Dmitriy Dyachenko, CFA

Financial analyst
dmitriy.dyachenko@icu.ua

Alexander Martynenko

Head of corporate research
alexander.martynenko@icu.ua

Mykhaylo Demkiv

Financial analyst (Banks)
mykhaylo.demkiv@icu.ua

Investment Capital Ukraine LLC is regulated by Securities and Stock Market State Commission of Ukraine (license numbers: dealer activity AE 263019, broker activity AE 263018, underwriting activity AE 263020 dated 11 April 2013).

DISCLAIMER

This research publication has been prepared by Investment Capital Ukraine LLC solely for information purposes for its clients. It does not constitute an investment advice or an offer or solicitation for the purchase or sale of any financial instrument. While reasonable care has been taken to ensure that the information contained herein is not untrue or misleading at the time of publication, Investment Capital Ukraine makes no representation that it is accurate or complete. The information contained herein is subject to change without notice. Copyright and database rights protection exists in this report and it may not be reproduced, distributed or published by any person for any purpose without the prior express consent of Investment Capital Ukraine LLC. All rights are reserved. Any investments referred to herein may involve significant risk, are not necessarily available in all jurisdictions, may be illiquid and may not be suitable for all investors. The value of, or income from, any investments referred to herein may fluctuate and/or be affected by changes in exchange rates. Past performance is not indicative of future results. Investors should make their own investigations and investment decisions without relying on this report. Only investors with sufficient knowledge and experience in financial matters to evaluate the merits and risks should consider an investment in any issuer or market discussed herein and other persons should not take any action on the basis of this report.

Additional information is available upon request.

