ICU

Focus
Ukraine

Markets
Economics

Analyst
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Macro Update

Delivering the Impossible

WEDNESDAY, 16 NOVEMBER 2022

Similar to the Ukrainian army on the battlefield, the Ukrainian economy defied the worst expectations of collapse and has managed to rapidly adjust to new realities. After suffering a 45-50% decline in GDP during the first months of the war, it started to recover thanks to improved safety for the populace and improved logistics. However, destruction of energy infrastructure due to massive missile strikes may become the new normal for country for months to come. Disruptions of electricity supply will be the key economic challenge for the government in the near future. Inflation continues to accelerate, but we expect it to peak in February 2023 and then reverse trend. Ukraine's economy remains critically dependent on international financial assistance for both patching the gap in external accounts and the gap in public finance. The recent announcements of sizable financial aid packages from the EU and the US for 2023 are significantly above our earlier expectations and lead us to improve our projections for the current account and financial account. The inflow of foreign loans and grants will provide the NBU with sufficient resources to keep intervening in the FX market in sizable volumes while replenishing international reserves. We now expect the hryvnia exchange rate will weaken only moderately by 10% through end-2023, while the NBU will be able to rebuild reserves to above US$35bn next year. The state budget deficit of more than 20% of GDP (before grants) next year is likely to be fully covered by funding from Ukraine's allies. The economy will, thus, remain fragile, but, at the same time, fully viable and in a much better shape than could be imagined back in February when russia's full scale invasion of Ukraine started.

Key macroeconomic projections

	2022F	2023F
Real GDP, YoY, %	(35)	4
Nominal GDP, US$bn	142	150
Inflation, YoY, %, e.o.p.	30	24
UAH/USD, e.o.p.	36.6	40.2
C/A balance, % of GDP	9.3	8.5
Reserves, US$bn	27	35
Budget gap, % of GDP*	(31)	(23)
Public debt, % of GDP	88	89

* budget balance before official grants to government
Source: ICU

Real GDP to stay 35-40% lower vs pre-war level for coming quarters

Ukraine's GDP was gradually recovering over May–September before the missile strikes on energy infrastructure in October, which reversed the trend.

During March and April – the worst months for the Ukrainian economy – GDP contracted by 45–50%. In subsequent months, the GDP decline narrowed close to 35% as the russian army retreated from Ukraine's northern regions and the safety situation improved. Many internally displaced persons chose to return to their homes, which helped companies rebuild their work force. Bank lending to SMEs remained available thanks to government-sponsored programs, which was instrumental in securing continuity of operations in agriculture and related industries. The economy also benefited from improvements in logistics as the railway monopoly stepped up its efforts to increase cargo throughput, and, since August, delivery of Ukrainian grains and oilseeds became possible via Black Sea ports.

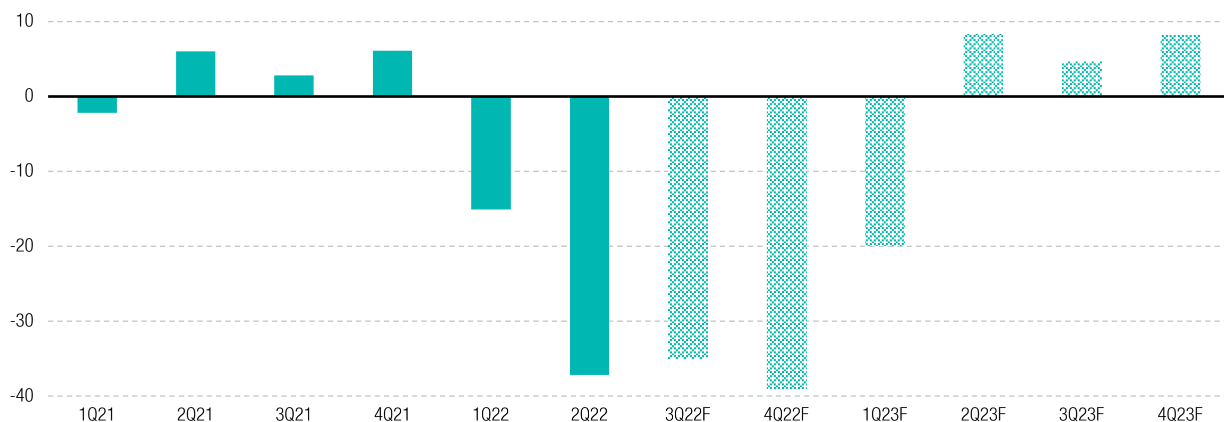
READ FIRST THE DISCLOSURES SECTION (ON LAST PAGE) FOR IMPORTANT DISCLOSURES AND ANALYST CERTIFICATION

Blackouts may deal a new blow to economy

However, in October, a new negative factor emerged that threatens economic recovery considerably, and that was the massive missile strike on Ukrainian energy infrastructure by russia. Ukrainian officials estimate that about 40% of all infrastructure was damaged, likely referring to harm inflicted on both electricity generating and transmission capacity. Blackouts remain frequent and prolonged in eight Ukrainian regions that accounted for 55% of GDP before the war. While repairs are underway, the risk of repeated strikes is very high, and electricity supply disruptions may become the new normal for the months to come. The Ministry of Economy estimated that the GDP decline worsened to 39% YoY in October from 35% YoY in September. In view of this new development, we now expect GDP will decline 35% in 2022, a downgrade from our earlier projection of 32%.

We don't expect a quick or meaningful economic recovery in 2023 due to a combination of weak domestic demand and logistical constraints for exports. We forecast a moderate 4% GDP growth next year. Our 2023 projection assumes a significantly lower intensity of fighting, improvement in the safety situation, and a gradual return of Ukrainian refugees from abroad. Meanwhile, we do not factor in any sizable reparations or FDI in our forecasts.

Chart 1. Real GDP, change YoY, %



Source: Ukrstat, Ministry of Economy, ICU.

Inflation expectedly high but slowdown looks certain since March 2023

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

Inflation keeps accelerating and reached 26.6% YoY in October. We expect CPI to peak out close to 32% in February 2023, before starting to slow in March on the high base effect.

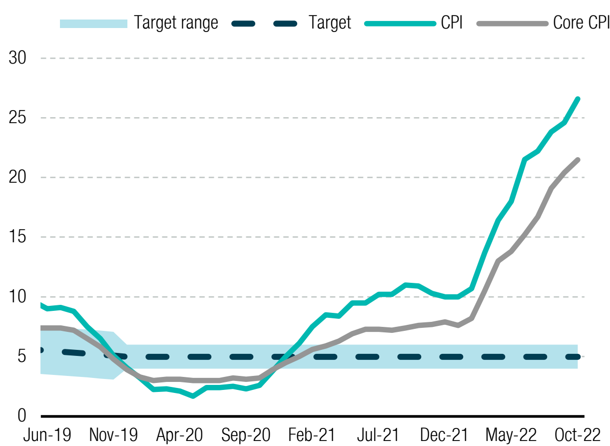
Demand-side inflationary factors are extremely weak as households' nominal incomes are little changed YoY, and real income fell by an estimated 20%+. In many segments, producers and importers struggle to maintain their normal pre-war sales. Household incomes are unlikely to meaningfully recover in 2023, as the government does not plan to revise salaries for public employees. Private-sector salaries will also remain depressed against the backdrop of a high unemployment rate.

Inflationary pressures remain primarily fueled by supply-side factors. Supply of many domestic goods has been reduced due to destruction or loss of control over production facilities as well as due to safety considerations. Several food staples are in deficit, which drives up their prices. At the same time, the supply of grains and vegetable oils in the domestic market is abundant due to bottlenecks in export logistics.

Fuel prices had a major impact on CPI in 1H22, but they stabilized since then even though the government reintroduced an excise tax on diesel and gasoline. They no longer contribute to inflationary pressures at this point, but may re-emerge as a contributory inflationary factor should global oil prices increase.

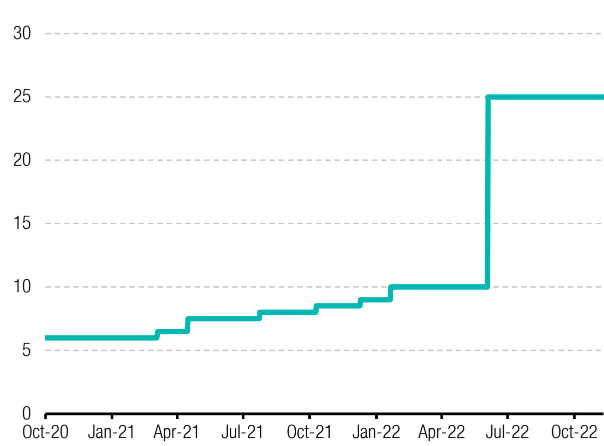
Overall, we believe that weak domestic demand and dissolving supply-side problems will result in eased inflationary pressures in 2023. Our projections of inflation embarking to a decelerating trend is additionally supported by new considerations. Firstly, we now believe the NBU will not be in a rush to devalue the local currency to the extent we expected earlier. We see the end-2023 exchange rate close USH40/US$ vs UAH45/US$ previously. Secondly, against the backdrop of stagnating household incomes, we now expect that the government will maintain utility tariffs at the current level or revise them up only marginally through end-2023. We project end-2023 inflation at 24% YoY.

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

The storyline of the NBU's response to inflation remains little changed. The appointment of a new governor, Andriy Pyshnyy, did not alter the central bank's intention to keep the key policy rate at 25% at least until 2Q24. The new governor said he believes NBU's tight stance on monetary policy serves well in supporting macroeconomic and financial stability.

There is still much room for commercial rates on bank deposits and rates on government bonds to move closer to the current key policy rate. This implies that any further increases in key policy rate are unlikely, as they would probably not produce any meaningful response in the commercial segment. Any sooner reduction (before 2Q24) of the key policy rate also seems unlikely, as the current inflation trend remains broadly in line with NBU expectations, and no major positive or negative surprise has materialized so far.

Balance-of-payments concerns eased on generous international financial support

The last couple of months brought a considerable amount of good news about the size of financial aid that Ukraine's allies are committing through end-2022 and in 2023. The recent announcement of the EUR18bn loan package from the EU and an expected US$18bn funding from the US, likely as grants, are a significant positive surprise. That changes the outlook for Ukraine's external accounts for the next 18 months and adds much-needed comfort for the NBU. Thus, we now significantly upgrade our end-2022 and end-2023 hryvnia exchange-rate projections. With new information on hand, we expect only a moderate 10% hryvnia depreciation vs the US dollar until the end of 2023.

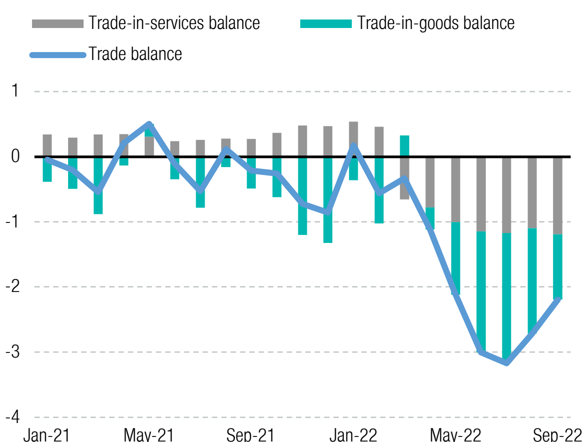
Trade-in-goods balance improved thanks to "grain corridor"

Net of foreign loans and grants, Ukraine's external accounts remain under significant pressure. The trade balance deteriorated remarkably since the start of the war. Trade in goods was primarily hit by catastrophic disruptions of exports due to impaired logistics. Imports recovered rapidly after an initial collapse, including imports of energy materials and military equipment. Imports of goods in 3Q22 was only 23% below the volume in the same period last year. The good news is that the situation with exports started to improve in recent

months. Ukraine took full advantage of the lifting the blockade of the Black Sea ports brokered by the UN, and boosted shipments of grains and oilseeds. The monthly trade-in-goods deficit thus narrowed to US$1.0bn in September from US$2.0bn in June and July.

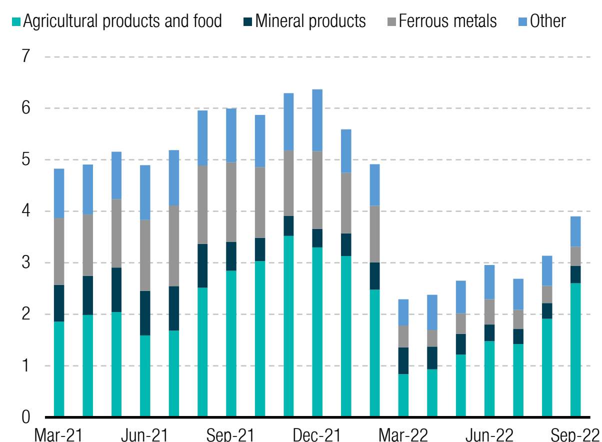
The trade-in-services deficit remains broadly stable, close to US$1.0bn per month due to the spending of Ukrainian refugees abroad. This contrasts with a stable surplus that Ukraine consistently had before the war. The total trade deficit is likely to be close to 15-17% of GDP in both 2022 and 2023.

Chart 4. Monthly trade balance, US$bn



Source: NBU, ICU.

Chart 5. Monthly export of goods, US$bn



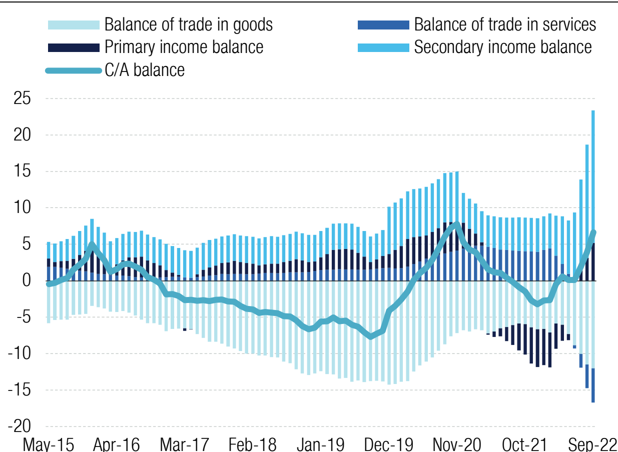
Source: NBU, ICU.

Meanwhile, Ukraine's current account is supported by robust inflow of migrant remittances. They remain broadly in line with last year's volume and may reach 10% of GDP in 2022. Remittances help to partly offset a significant share of the trade deficit.

C/A surplus ensured by foreign budgetary grants

Grants, that had been a minor component before the war, now play a decisive role in forming the C/A surplus. They surged to a whopping US$11.5bn in 9M22, largely because of a US$7.5bn facility provided by the US. Thanks to grants, the C/A surplus may reach 8-9% of GDP in 2022 and 2023. This is a significant upward revision of our earlier expectation of a moderate C/A surplus in 2023.

Chart 6. Current account, 12-month trailing, US$bn



Source: NBU, ICU.

Table 1. Current account components, US$bn

	3Q21	% of 2021 GDP	3Q22	% of 2022E GDP
Current account balance	-1.4	-0.9%	5.2	3.4%
Goods balance	-1.4	-1.0%	-4.6	-3.0%
Services balance	0.8	0.6%	-3.5	-2.3%
Primary income	-2.0	-1.4%	2.7	1.8%
incl. remittances	3.3	2.3%	3.7	2.4%
Secondary income	1.2	0.9%	10.5	6.9%
incl. transfers to gov't	0.2	0.2%	8.1	5.3%

Source: NBU, ICU.

The financial account also remains deeply negative if concessional loans to government are excluded. Inflows of FDI and portfolio investments collapsed due to unprecedented sovereign risks. Meanwhile, capital outflows via FDI and portfolio investments is nearly impossible due

to tough capital controls imposed by the NBU. Nonetheless, capital flight has been significant via two other major channels:

Capital flight remains significant despite tough capital controls

- build-up of trade credits that reached US$2.6bn in 3Q22. This 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$3.1bn in 3Q22. This reflects 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.

Concessional lending to the government will not be sufficient to offset private capital flight in 2022 and 2023.

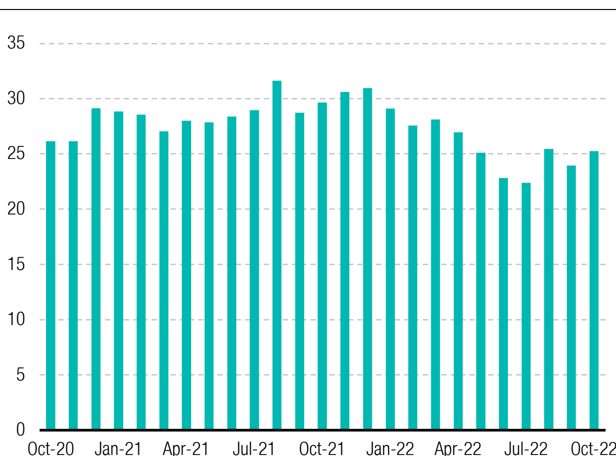
NBU may opt for less significant hryvnia depreciation than previously expected

NBU reserves started to grow thanks to financial aid

The better trade balance helped stabilize the deficit in the interbank FX market since September. The NBU's current policy is to provide as much hard currency to the market as needed to close the gap that exists at the current fixed exchange rate of UAH36.6/US$. The net FX sales by the NBU declined to US$2.0bn in October from US$2.8bn in September. This improvement coupled with growing inflows of international financial aid helped reverse the decline in the NBU reserves. By the end of October, they increased by 13% to US$25.2bn from July's minimum.

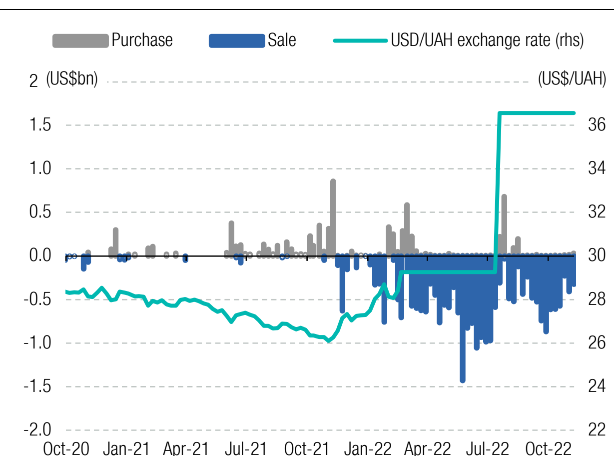
We earlier expected that persisting deficit in the FX market of US$2.0-2.5bn per month will force the central bank to devalue the hryvnia further close to UAH40/US$ by the end of 2022, and to UAH45/US$ by the end of 2023. Our thinking was that the inflows of international financial aid may not be enough to offset ongoing interventions and that would inevitably heighten pressures in the FX market. We now take a more optimistic view given that net inflows of grants and concessional loans may exceed US$35bn in 2023. Theoretically, this should be more than enough for the NBU to keep the FX market balanced at the current exchange rate without tapping into the existing stock of reserves. This, in turn, would help contain inflationary pressures.

Chart 7. NBU gross international reserves, US$bn



Source: NBU, ICU.

Chart 8. FX market weekly indicators (UAH exchange rate and NBU interventions)



Source: NBU, Bloomberg, ICU.

New data on international assistance warrant upgrade of our ER projection

With ample international aid on the table there is no more need for the NBU to be in a hurry to weaken the hryvnia again following a 25% devaluation in late July. We still expect a moderate weakening for two reasons:

- the IMF may insist on hryvnia depreciation since the current exchange rate produces huge misbalances in the market.

- the 2023 state budget is based on an average exchange rate of UAH42.2/US$. If the hryvnia remains at the current level, budget revenues and deficit financing may fall significantly short of plan.

All in, we expect the end-2022 UAH/US$ exchange rate to be at the current level of 36.6 and a moderate weakening to UAH40/US$ by the end of 2023.

The NBU reserves will continue to grow through end-2023 and may exceed US$35bn if all the international financial assistance arrives according to plan.

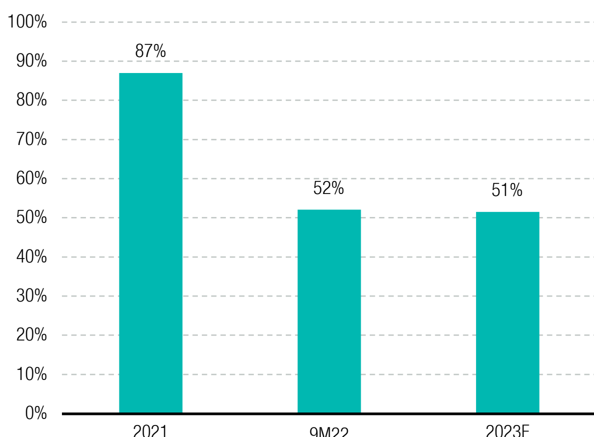
Budget to remain hugely reliant on international financial assistance

Budget expenditures surged while revenues remained little changed

Ukraine's public finances carry a heavy toll from the war. Tax revenues of the state budget are likely to stay in the range of 20-22% of GDP in 2022 and 2023, broadly in line with the pre-war levels. Non-tax revenues, excluding external grants, will bring in another 3-4% of GDP. Meanwhile, state budget expenditures continue to balloon. They will exceed 55% of GDP in 2022, before rolling back close to 45% in 2023. This implies budget revenues will cover less than half of all budget expenditures in 2022, and roughly 50% next year.

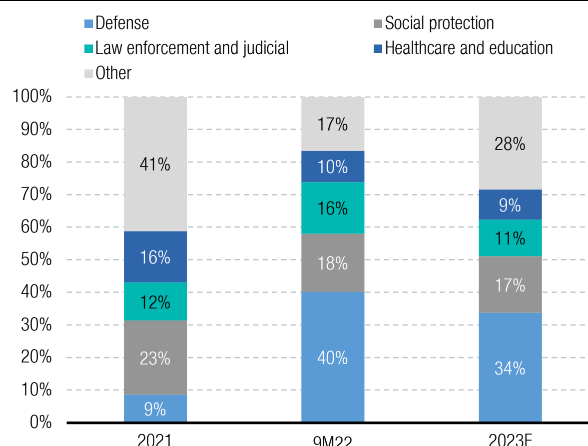
The increase in state budget expenditures is driven by surging needs to finance defense. Defense outlays may reach 20% of GDP in 2022, and decline to 15% in 2023, which is in striking contrast with 2-3% of GDP before the war. The cost of law enforcement is also up by 2-3% of GDP since a large share of it is directly related to the war. Social expenditures increased by 1-2% of GDP from pre-war level driven by substantial financial assistance to temporary displaced individuals. Spending of other budget components has been somewhat reduced (relative to GDP), including funding of education and healthcare.

Chart 9. Ratio of state budget revenues to expenditures*



* Revenues before grants
Source: MinFin, ICU.

Chart 10. Structure of state budget expenditures



Source: MinFin, ICU.

The fiscal gap, before grants, will thus reach the unprecedented size of more than 30% of GDP in 2022, but may decline close to 22% next year. Funding needs are huge, and the bulk of funding expectedly comes as international financial assistance.

In 2022, the total amount of external funding will exceed US$30bn, dominated by grants from the US and concessional loans from the EU. In 2023, the inflows are likely to be even more

significant and reach US$40bn. The key providers will be the EU with EUR18bn in concessional long-term loans and the US with US$18bn in grants.

Budget deficit financing looks secured for 2023

The funding from the EU and the US, combined with smaller loans from other governments and IFIs, seem to be fully sufficient to cover Ukraine's fiscal needs in 2023. However, there is still significant room for the IMF in this story. The fund recently launched a monitoring program with Ukraine. The IMF staff will provide assessment of Ukraine's macroeconomic developments and external financing needs so that the US and EU can rely on an external viewpoint. The IMF hinted that the current monitoring program may be complemented or replaced with a lending program. Additional funding from the IMF may be critically needed if grants / loans from the EU/US arrive irregularly or with a significant delay. Another risk that could be mitigated by an IMF program is underestimation of budget expenditure. The government assumes that budget expenditures for defense will significantly decline relative to GDP next year. However, if there is a new major escalation of the war, Ukraine may be unable to decrease expenditures and may, thus, need additional funding. In any case, we believe the IMF will provide at least US$3bn next year to ensure the full rollover of Ukraine's scheduled redemptions and maintain its current exposure to the country.

Government hopes funding from NBU will not be needed in 2023

Government hopes that funding from the NBU will not be needed in 2023, if external financial assistance comes in as promised. Since the start of the war, the NBU provided UAH355bn (US$9.7bn), and we expect in total it can monetize up to UAH500bn (US$13.7bn) for the full year. While the government's intention to abandon the NBU tap is welcome, we believe it can still be too early to say the NBU funding story is over. Government may still need to ask for NBU help should there be significant temporary liquidity shortages in 2023.

Government also does not plan to rely on the domestic market for funding. Over 10M22, investors reduced their holdings of UAH-denominated government debt by UAH86bn (US$2.3bn) of which UAH47bn was by banks. The share of government bonds in banks' net assets declined by 4.4pp to 23%. This is a striking fact given that Ukraine's banking sector boasts record-high liquidity as more than UAH340bn are parked into the NBU's certificates of deposits (CDs).

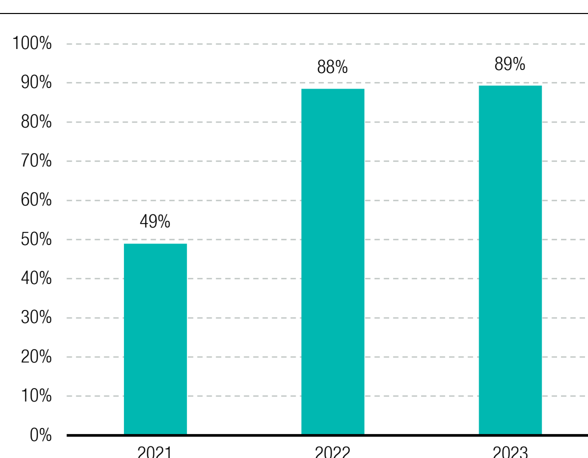
Table 2. Sources of state budget financing, US$bn

	2022E	2023E
Budget deficit (before grants)	**40.5**	**33.5**
External grants*	17.1	18.0
Net borrowings	23.4	15.5
Net external borrowings	14.1	21.4
Net domestic borrowings	9.3	-5.9
Budget deficit (before grants) / GDP	31%	23%
Budget deficit / GDP	19%	11%

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

Source: MinFin, ICU.

Chart 11. Public debt-to-GDP ratio



Source: MinFin, ICU.

Banks and the MinFin remain in disagreement over fair yields on government debt. Banks believe the MinFin should offer coupons with a maturity premium on top of the current rate on CDs of 23% (that the NBU promised to keep intact at least until 2Q24). Meanwhile, the MinFin keeps offering yields of 14-19% depending on the term. MinFin's arguments against further rate increases center on the fact that debt servicing expense may become extremely

high. At this point, it is unclear whether any further concessions from the MinFin are likely over the next 12-18 months. However, looking mid-term, the banking sector may become a significant source of funding for the budget.

Public debt still not critically high

A combination of new borrowings and the 25% hryvnia depreciation in late July will drive the end-2022 debt-to-GDP ratio to above 85%, a significant increase from 49% at the end of 2021. However, this ratio is unlikely to go significantly higher next year due to the fact that almost half of all international financial aid is likely to be in the form of grants.

Public debt-to-GDP ratio likely to be in the range of 85-90% in 2022 and 2023

The projected end-2023 debt-to-GDP ratio in the range of 85-90% does not signal an inevitable debt crisis. Ukraine will have a very benign FX debt repayment schedule that is unlikely to be a significant drag on the liquidity of public finances. Yet, a new round of Eurobond restructuring (19.8% of end-September public debt) with some haircuts seems inevitable at this point for two major reasons. Firstly, Ukraine will need a significant space for post-war fiscal stimulus. Secondly, a haircut on private debt is likely to be required by foreign governments that provided financial assistance in the form of grants or via concessional loans with interest rates below the market or even 0%. The MinFin is unlikely to come up with a restructure proposal much sooner than before the two-year grace period on Ukraine's Eurobond payments is over.

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	(35.0)	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	4,578	5,761
Nominal GDP (US$bn)	174	180	133	90	93	112	131	155	155	200	142	150
Unemployment (%)	7.6	7.3	9.3	9.1	9.3	9.5	8.8	8.2	9.5	9.8	28.0	24.0
Inflation												
Headline inflation (%, YoY, e.o.p)	(0.2)	0.5	24.9	43.3	12.4	13.7	9.8	4.1	5.0	10.0	29.5	24.3
Headline inflation (%, YoY, avg.)	0.6	(0.3)	12.1	48.7	13.9	14.4	10.9	7.9	2.7	9.4	20.4	26.8
GDP deflator (%, YoY)	7.8	4.3	15.9	38.9	17.1	22.1	15.4	8.3	9.8	25.1	29.0	21.0
Exchange rates												
UAH/USD (e.o.p.)	8.1	8.2	15.8	24.0	27.3	28.1	27.7	23.8	28.3	27.3	36.6	40.2
UAH/USD (avg.)	8.1	8.2	12.0	21.9	25.6	26.6	27.2	25.8	27.0	27.3	32.3	38.4
External balance												
Current account balance (US$bn)	(14.3)	(16.5)	(4.6)	5.0	(1.9)	(3.5)	(6.4)	(4.1)	5.3	(3.2)	13.2	12.7
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)	9.3	8.5
Trade balance (US$bn)	(14.3)	(15.6)	(4.6)	(2.4)	(6.5)	(8.7)	(11.4)	(12.5)	(2.4)	(2.7)	(21.4)	(25.1)
Trade balance (% of GDP)	(8.3)	(8.7)	(3.5)	(2.6)	(6.9)	(7.8)	(8.7)	(8.1)	(1.5)	(1.5)	(15.1)	(16.7)
Capital flows (F/A) (US$bn)	10.1	18.6	(9.1)	(4.6)	3.1	6.0	9.3	10.1	(3.3)	3.7	(17.6)	(3.8)
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	26.5	35.4
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)	(31.0)*	(23.0)*
Public debt (% of GDP)	36.7	39.9	69.4	79.0	80.9	71.8	60.9	50.6	60.8	49.7	88.0	89.0

* budget balance before official budgetary grants

Source: Ukrstat, NBU, MoF, ICU.

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