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German Economic Team

Short-term estimation of Ukraine's public finance stance

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07|2022

POLICY PAPER UKRAINE

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Acknowledgements

The authors would like to thank the Institute for Economic Research and Policy Consulting (IER) in Kyiv, in particular Oleksandra Betliy and Vitaliy Kravchuk for commenting on assumptions based on their macroeconomic forecast

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Executive summary

The current state of public finances is probably the most important macroeconomic issue that Ukraine's war-torn economy is confronted with. Facing a 32% real GDP decline in 2022, revenues are declining while expenditures surge, e.g. on defence. The resulting deficit cannot be financed in the usual way, i.e. mainly via private external borrowings, as markets are closed. Instead, Ukraine was forced to resort to monetary financing to a substantial degree (above USD 10 bn) as well as to reach out to international partners for financial support.

In this critical situation, where uncertainty is particularly high, this paper tries to estimate the key fiscal parameters on a monthly basis until the end of 2022. Based on a set of our own macroeconomic assumptions, we model central budget revenues (without considering grants), expenditures and the resulting central budget deficit (again, not considering grants). While we use actual data for the period January – August 2022, our estimates cover the period September – December 2022. We try to address the above-mentioned uncertainty by considering two scenarios on the expenditure side. Scenario 1 is based on the current budget in place for 2022; scenario 2 includes expenditure cuts, comparable to those already made in May-August, in the estimation period that help to decrease the deficit. We also incorporate debt amortizations in our analysis in order to calculate the overall fiscal gap, taking into account the standstill agreed on commercial and G7 external debt service payments.

What are the results of this exercise? Under scenario 1, we estimate a fiscal gap between expenditures and revenues of **USD 63.1 bn (46.1% of GDP)** in 2022. During September – December, our estimation period, the gap will amount to USD 30.8 bn. If we compare the gap to all secured and pledged funding from all sources in 2022, also considering debt repayments during the year, we are faced with a **USD 12.0 bn** gap between funds needed and secured (at least via pledges).

In our second scenario 2, which we consider more likely, the gap shrinks to **USD 51.1 bn (37.4% of GDP)** in 2022. During September – December, our estimation period, the gap will amount to USD 18.8 bn, i.e. USD 12 bn less than under scenario 1. If we compare this to all secured and pledged funding from all sources in 2022, also considering debt repayments during the year, these funds should be **sufficient to cover the gap during 2022**.

While the more reasonable savings budget scenario 2 suggests that the amount of aid to be still disbursed over the last months of 2022 should be enough to fully cover the fiscal gap of the Ukrainian budget in 2022, this still assumes that pledges are turned into actual disbursements. For this positive scenario to become true, the disbursements of the total committed aid should take place this year. In the past, disbursements have been fluctuating, making it hard for the Ukrainian government to plan its expenditures. Moreover, the process of mobilisation of international support for 2023 should already begin; the recently revealed budget draft for 2023 is an important element in this regard. Setting up a regular and coordinated international budget support mechanism for Ukraine would be an important step forward in this regard.

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Content

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1. Introduction

While Ukraine's war-torn economy seems to have reached its bottom during the summer of 2022, the full-year decline of real GDP is projected at a whopping 32%, even though this number is highly uncertain, as the war continues. The state of public finances is decisive for the war economy. While revenues decreased due to the severe economic situation, expenditures have increased. This development created massive funding needs, in a moment where Ukraine is cut off from foreign private borrowings, which traditionally financed a substantial part of the deficit.

The topic of this study is to investigate in more detail the fiscal and funding implications of the ongoing war for Ukraine's central government budget. As the new budget draft for 2023 is already submitted, we concentrate in our analysis on the months September – December of this year under the current budget 2022 to get an idea of a comparison base for the budget 2023 and to estimate Ukraine's fiscal stance for the rest of the year.

The study is structured as follows: in chapter 2, we describe the current macroeconomic situation and the assumptions underlying our fiscal estimates. We then provide monthly revenue side estimates in the following chapter. Chapter 4 is devoted to the monthly estimation of the expenditure side. Here, we distinguish between two scenarios in order to account for the exceptionally high uncertainty. The next chapter then calculates the resulting fiscal gap. Chapter 6 concludes with recommendations on how the fiscal gap can be funded and an outlook.

2. Macroeconomic background and assumptions

Russia's ongoing invasion has been causing a sharp decline to Ukraine's economy in the first two quarters of this year. After a decline by 15% yoy in Q1 with just one full month of war, a decline by 37% yoy was recorded in Q2. Private consumption and labour supply fell as thousands were killed, 7 m forced to flee abroad and further 7 m internally displayed. Destruction of housing, infrastructure and business facilities amounting to USD 121 bn has been preventing people from returning home and at the same time affecting capital stock, labour demand and business activities. The resulting mismatch on the labour market led to an unemployment rate of 35% during the second quarter. Russian blockage of Ukraine' trade by sea accounting for 63% of exports, but just 20% of imports in 2021 has been causing a strong trade deficit. Exports fell by 28% in the first seven months. Tax and fee cuts on imports and a favourable exchange rate supported imports which fell by just 20% during the same period.

The large trade deficit, cash withdrawals of Ukrainians abroad and only slowly arriving international financial aid forced the National Bank (NBU) to devalue the exchange rate from UAH/USD 29.25 which was fixed in the first day of war to UAH/USD 36.57 in the third week of July. Inflation has accelerated during the first eight months to 23.8% yoy both due to war-caused supply chain disruption and NBU's bond purchases (monetary financing) amounting of USD 9.3 bn between March and August (=37% of NBU's current international reserves). One element to reduce pressure on the exchange rate was a key policy rate hike to 25% p.a. from 10% p.a. in beginning of June. Given this macroeconomic development, we use the following assumptions for our estimates of the fiscal indicators for the total year 2022:

- A gradual decline in active fighting in the third and fourth quarter

- Sea ports remain blocked by Russia not allowing for exports, except from agricultural goods ("Istanbul Agreement")
- The financial and banking sector will remain stable
- The government will keep energy prices for households fixed this winter
- No further exchange rate adjustment is conducted (year average UAH/USD 32.42) and capital controls remain in place this year
- No further key policy rate hikes this year

We use data available until September 2022 for our estimations. We estimate GDP to decline by 38% yoy and 32% yoy in the third and fourth quarter which makes up a decline by 32% yoy for the total year in real terms. In nominal terms, GDP is estimated to fall to UAH 4,433 bn (-19% yoy) or USD 137 bn (-32% yoy) given inflation will accelerate further to reach 31.6% at the end of the 2022 (see Annex 1 for further information).

3. Estimation of the revenue side[1]

March, the first full month after Russian invasion, saw a sharp decline of imports VAT and excises, which together constituted over 40% of annual pre-war tax revenues. This was offset by significant advance payments of the state-owned enterprises' (SOE) profits (USD 1.2 bn), which are usually distributed in April-May, and by the revenues from the corporate profit tax, paid in advance.

Since April the domestic consumption taxes – value added tax and excises - started to recover and continued the recovery through the May and June in line with GDP and domestic consumption forecasts.

The cancellation of all customs duties, car imports excises and the cancellation of VAT for imports, conducted via entities on a simplified taxation system, starting from April 1, had decreased the respective revenue sources for Apr-Jun. Tax-free imports also decreased the competitiveness of domestically produced goods, which affected the revenues from domestic VAT. VAT refunds were halted in March-May, accumulating payables to the business of up to USD 800 m. We expect 50% of this amount to be refunded by the end of the year due to limitations of refund calculation and approval procedure. The customs duties and VAT for imports were reinstated starting from July 1. Also, the state renewed making VAT refunds to businesses at close to normal rate starting from June.

To estimate the revenues for the rest of 2022 for Ukraine's central government budget[2] we used the data on tax revenues from 2021, adjusted for the actuals of 1H2022, GDP and domestic consumption forecasts, projected Ukrainian hryvnia devaluation effects and consumer inflation.

We have also applied the set of relatively conservative assumptions, which address the changes in taxation and structural changes in the economy, caused by human capital outflow, occupation of part of Ukrainian territory, destruction of major industrial assets and oil processing plants. We also assume that no further changes to tax policy, not announced as of the date of this paper, will be made till the end of the year.

[1] We exclude foreign aid in the form of grants from the revenue analysis, as it cannot be forecasted and does not correlate with the state of the economy or policy decisions.

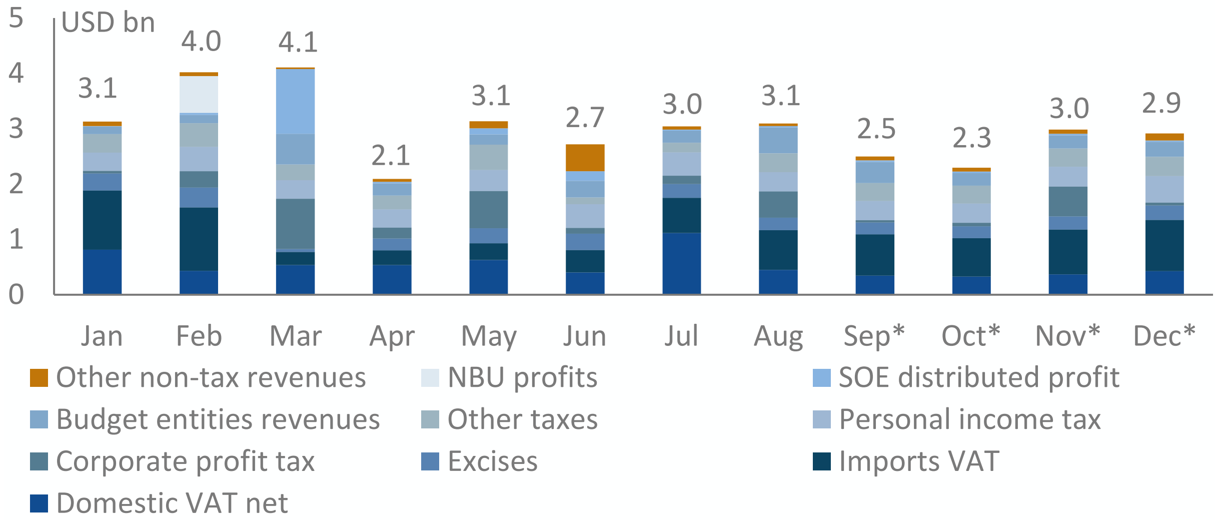
[2] We exclude local budget from our analysis.

The monthly figures through the year are volatile due to one-off revenues and the schedule for corporate profit tax payment, but the trend in hryvnia terms is upwards fuelled by the continued recovery of domestic consumption, inflation, and devaluation.

The main growth driver for **tax revenues** is the VAT on import goods, which is currently small, but is expected to increase significantly after the import VAT reinstatement from July. Average monthly tax revenues of USD 2.3 bn are expected in 2H2022, reaching USD 2.8 bn monthly in November-December.

The July net domestic VAT in excess of USD 1 bn is an outlier due to: 1) absence of VAT refund to exporters in July, which would otherwise decrease the net domestic VAT; 2) accumulated VAT payables by Ukrainian businesses due to extended deadlines for submission of the VAT invoices since the beginning of the war. We assume that the revenues from this source will decrease in forthcoming months as the one-off factors will not repeat.

Figure 1. Central budget revenues by source



Sources: NBU, MoF, Parliament, CES/GET estimates, GET/CES estimates for September-December

We have also projected non-tax revenues based on the applicable set of assumptions and projections, described above, considering that one-off sources of non-tax revenues, such as NBU revenues and state-owned enterprise profit distribution were mostly depleted due to advances in 1H2022. The main remaining source of non-tax revenues for 2H2022 are revenues of budget entities (cumulatively USD 1.8 bn), with all other non-tax sources, such as administrative fees, rent of state properties and SOE profits are expected to generate up to USD 1.1 bn in July-December.

Although growing in hryvnia terms, due to effect of the changed FX rate, the total budget revenues except foreign grants in USD terms will remain on par with May-June figures, reaching up to USD 3.3 bn in November, mainly collected from consumption taxes and corporate profit tax.

Overall, our estimates indicate **total revenues of USD 36.0 bn in 2022**.

Conclusion: The state budget will be collecting USD 10.3 bn in September-December from tax and non-tax sources; over half of it from VAT and excises, with import VAT remaining a major growth driver. This depends on whether the domestic consumption will retain the improvement seen in previous months and on how excessive were the CPT advances paid during the first months of the war. Overall,

the total revenues will be USD 36.0 bn in 2022. The lawmakers appear to be reluctant to introduce any further significant changes to the tax system before the war ends.

4. Estimation of the expenditure side

After Russia's invasion began, the share of defence expenditures in Ukraine's budget has skyrocketed from 6-8% in Jan-Feb to 35%-45% in Apr-August and from USD 250 m in February to USD 3.3 bn in May-August in US-dollar terms. While most other expenditures were severely restricted, the boost in military expenditure still brought the total budget expenditures way too high, from USD 4.0 bn in February to USD 8.6 bn in June 2022. There was no way that the government would be able to finance that level of expenditures from the internal sources given the war and the heavy GDP contraction. So, the budget deficit was financed through foreign loans and in a large part – by extensive money printing by the NBU, which endangered macro-financial instability.

In July, the NBU started actively arguing against the monetary emission as a source of a deficit funding as it started to seriously undermine the macro-financial stability and let to FX reserves depletion at a rate of USD 1 bn per week (the latest data on total amount of FX reserves are USD 25 bn as of September 01, 2022). The government faced not only severe opposition to printing more money from the NBU. Simultaneously, there was a temporary lack of available foreign funding as donors' aid policies were poorly coordinated, and the timing of aid disbursement was (and remains) unpredictable. As a combined result of these events, the total expenditures in US-dollar terms declined to USD 5.7 bn in July, partly fuelled by the devaluation, but in hryvnia terms, the expenditures were also cut dramatically: -68% mom for economic affairs, -25% for health, -42% for education. Even the salaries of military personnel were partly delayed.

However, they repaid only in August when sufficient inflows of the donors' aid arrived, and the government allowed itself to compensate at least partly for July's heavy underfunding of the defence. However, many other expenditures remained cut – education, economic affairs, health, cultural expenditures.

The war still looks far from over as of end-September, with Russia's mobilisation campaign and nuclear threats and a heavy anti-West rhetoric. So is the economic crisis. Meanwhile, humanitarian and military needs are growing, and even more so with every liberated village in the North and the South. Damaged and destroyed infrastructure and housing must be repaired or reconstructed till winter. Therefore, the budget needs remain elevated and will likely be growing.

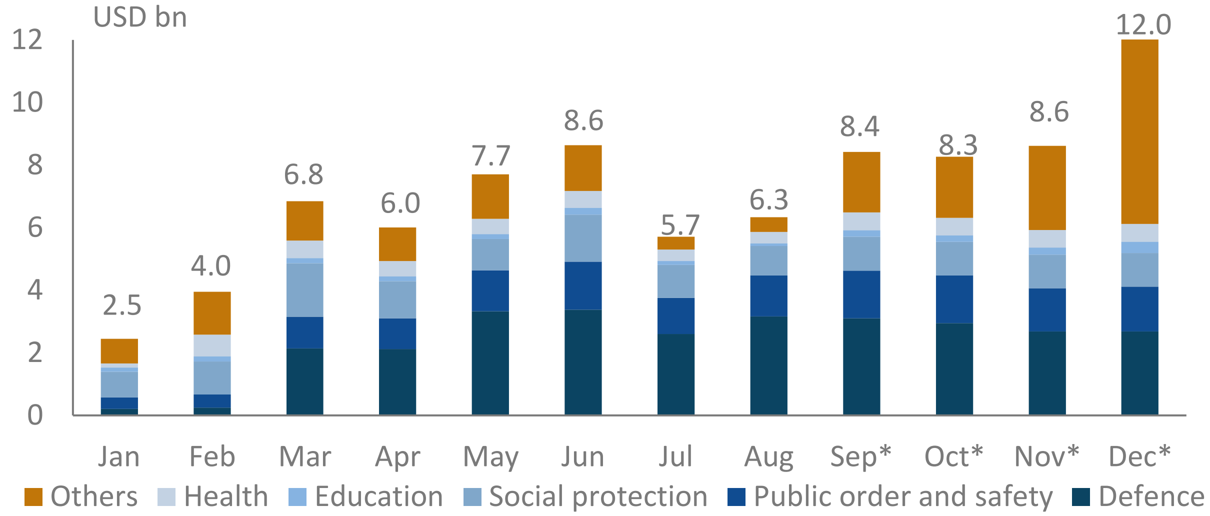
To estimate the possible level of the monthly central budget expenditures till the end of the year, we use two scenarios:

Scenario 1: Based on the current Law on the State budget.

It could be used to see how much Ukraine would expect to spend on daily life if the war wouldn't force the country to the harsh savings mode. We use the expenditures in the budget law as the baseline and then adjust for the elevated military and public order expenditure, keeping them at May August average level with the fighting intensity coefficient somewhat elevated for September and October. We also account for the standstill on commercial and G7 foreign debt service payments.

The monthly breakdown of other expenditures is assumed to be proportional to the 5Y average shares of each month, depending on a functional category of the expenditures for the rest of the funds remaining (not yet spent) in the budget (see Annex 2 for details). No inflation adjustment was applied.

Figure 2. Central budget expenditures under scenario 1

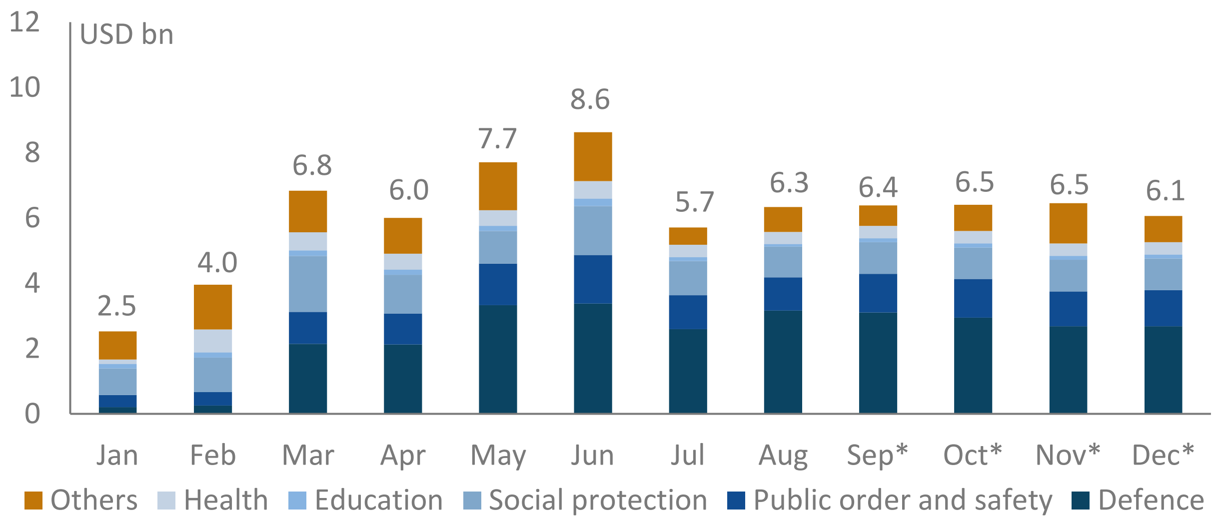


Sources: NBU, MoF, Parliament, GET/CES estimates, GET/CES estimates for September-December

Conclusion: The estimation shows that Ukraine will have to spend during Sep-Dec approx. USD 8.4 bn on average monthly except in December, where the traditional end-year expenditures peak elevates expenditure to USD 12 bn, bringing the total annual expenditures to USD 85 bn in 2022.

Scenario 2: Integration of possible expenditure cuts. This scenario, where budget savings are crucial, is much more probable in our view. Since there is not enough financial aid from abroad to cover the funding gap, and the NBU would not put unduly risks on financial stability by turning to excessive money printing, the government would face the need to cut the expenditures severely, as the government did in July. To calculate the potential size of the expenditures we assume they will be kept at an average of the May-August level for all the categories, except for debt servicing and military and public order expenditures, for which the assumptions of the previous scenario hold. Total savings FY 2022 under this scenario would reach USD 12 bn and the total expenditures would be lower at USD 73 bn.

Figure 3. Central budget expenditures under scenario 2



Sources: NBU, MoF, Parliament, GET/CES estimates, GET/CES estimates for September-December

The military expenditures estimations, used for both scenarios, are based on the assumption that the May-June figures will be relevant for the rest of the year, with adjustment for FX depreciation for military procurements and no intensification in field actions. The salaries arrears, accumulated in July and paid

in August were also accounted for. This gives the average monthly estimate of defence expenditure at USD 2.9 bn for September-December 2022. Currently there are not enough funds in the budget to sustain this level through December. The same logic applies to the public order and safety expenditures (average estimation of USD 1.1 bn in September-December), which among other include the police and the border guard. The funds envisaged in the budget are also insufficient to keep up with this level, therefore, further amendments are likely in September.
The rest of the expenditures under the savings scenario will neither be adjusted for the increasing inflation (+19.5% YTD in August), nor for the much-needed recovery and reconstruction expenditures. If the procurements were adjusted for inflation and exchange rate changes, and only 4-5% of damaged assets in controlled and de-occupied territories4 would be reconstructed in 2022, Ukraine would need an additional USD 19 bn compared to the savings scenario and USD 7 bn compared to the current budget scenario.

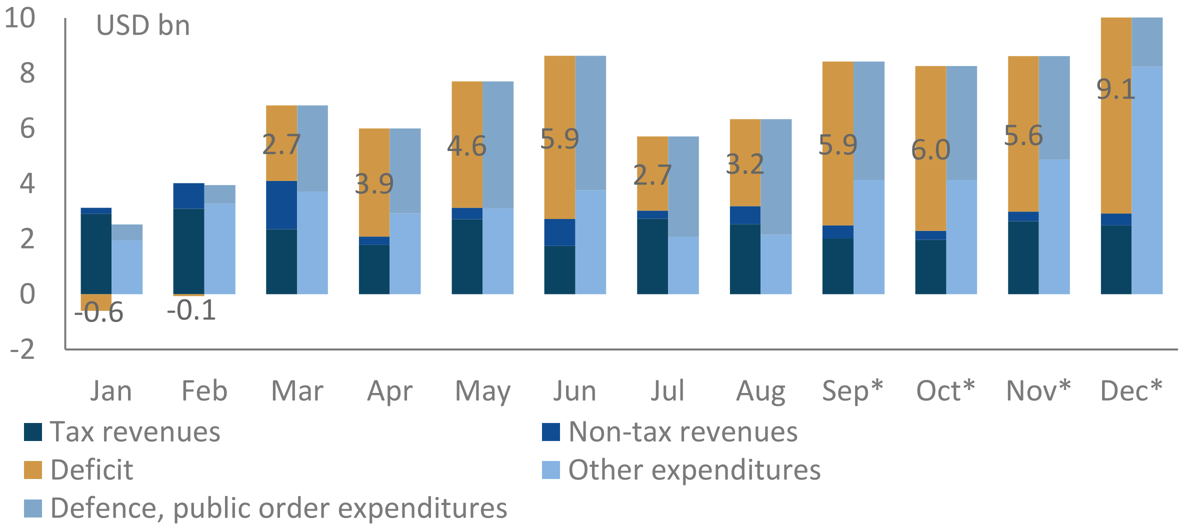
Conclusion: Ukraine would have to spend at least USD 6.3 bn per month through September-December 2022 in the 'savings mode' bringing the total annual expenditure to USD 73 bn in 2022. We do not expect central budget expenditures to contract more significantly until the war is over. And there are pressing issues of rapidly rising inflation and devaluation. That might need additional budget adjustments in future, as well as needs for the reconstruction and repair of at least a basic infrastructure and housing before the winter comes.

5. Estimation of the fiscal gap

As written before, we estimate the fiscal deficit for the rest of 2022 under two different approaches, which differ in their expenditure scenarios: the current budget with elevated military expenditure and commercial debt standstill (scenario 1), and the savings scenario (scenario 2). On the revenue side, we used total revenues except for grants. While grants are usually included in the total budget revenues and therefore not counted into the deficit, it is essential to single them out as they make up a significant share of foreign financial assistance (up to one-third of it currently).

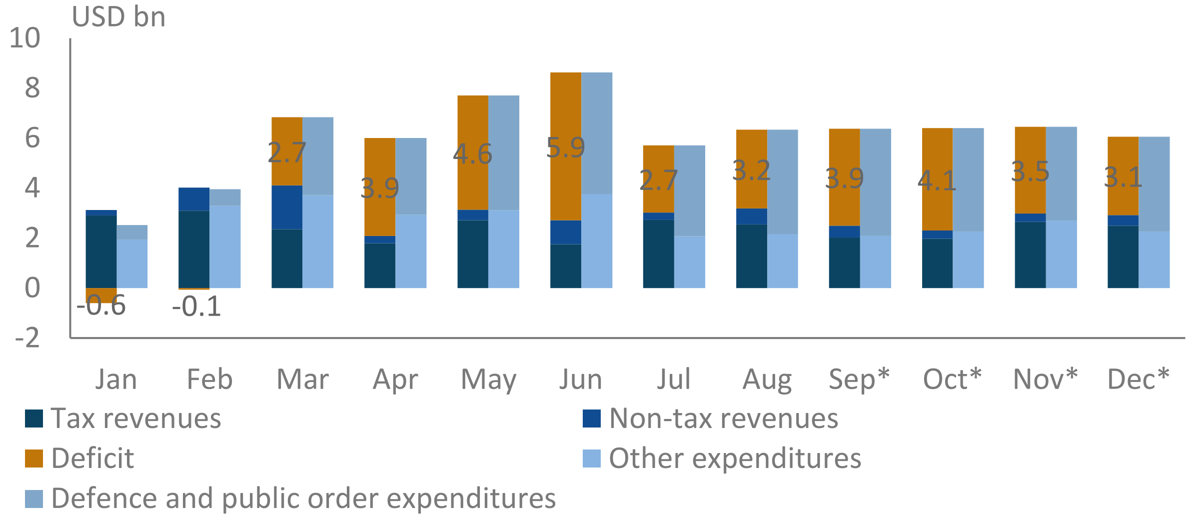
In the current budget scenario (scenario 1), we estimate the Ukrainian budget deficit to amount to USD 49.0 bn in 2022 (35.8% of GDP). The savings budget scenario (scenario 2) would translate into a USD 37.0 bn deficit in 2022 (27.1% of GDP).

Figure 4. Government revenues and expenditures under current budget approach (scenario 1)



Sources: NBU, MoF, Parliament, GET/CES estimates, GET/CES estimates for September-December

Figure 5. Government revenues and expenditure under savings budget scenario (scenario 2)



Sources: NBU, MoF, Parliament, GET/CES estimates, GET/CES estimates for September-December

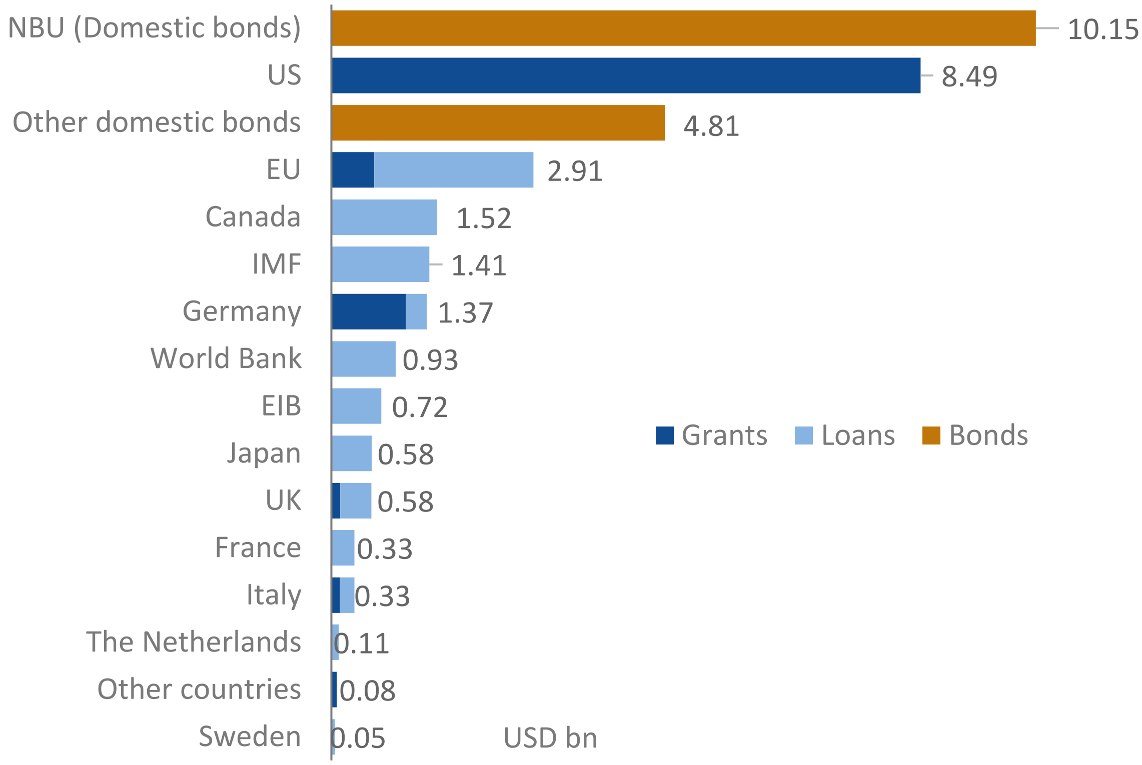
The state budget would also need to spend a total of USD 14.1 bn on debt amortization in 2022. Most of the debt that needs to be repaid is internal and amounts to USD 12.6 bn. The other USD 1.5 bn is the amortization of external debt. However, the Ukrainian government successfully restructured part of its debt. As a result, foreign debt repayments have declined by 40% in 2022-2024, from USD 16 bn to USD 10 bn. In this paper, the most up-to-date data on debt amortization published by the Ministry of Finance is used and accounts for the debt suspension agreement.

Then, taking debt amortization into account, the fiscal gap amounts to USD 63.1 bn (46.1% of GDP) under scenario 1 and USD 51.1 bn (37.4% of GDP) under scenario 2.

Only a part of the deficit is currently covered by foreign financial aid, pledged amounts of which amount to USD 36.1 bn in 2022[3] of which USD 19.9 bn was already disbursed to the general fund of the budget and USD 16.2 bn of pledged loans, loan guarantees and grants not yet disbursed by foreign partners.

[3] Ministry of Finance, 2022, Link.

Figure 6. Ukraine's state budget financing since the beginning of the full-scale war



Sources: Ministry of Finance of Ukraine as of 28 September 2022

Foreign assistance has been critical in financing the Ukrainian budget, covering 56% of Ukraine's budget needs since February 24, 2022. Financial aid pledged by different countries and institutions consists of grants, loans, and loan guarantees. Grants are the most desirable as they do not negatively influence the debt burden; however, grants only amount to 32% of all aid.

Besides international aid, the sources of closing the funding gap for the first two months of the war included domestic debt (military bonds), and the NBU's monetary emission (direct coverage of the budget deficit).

The Ministry of Finance of Ukraine first started issuing war bonds on February 25, 2022, the second day of the full-scale war. According to a decree issued by the government, it was initially planning to attract UAH 400 bn, or USD 13.7 bn at the time, by issuing these bonds. As of September 28, UAH 460.3 bn (USD 15 bn) has been attracted. However, only UAH 145.3 bn (USD 4.8 bn) of these bonds were bought not by the National Bank of Ukraine but by other commercial buyers. The reason is that the yield of these bonds was too low — only 11%, while the policy rate was 25%. On July 19, the Ministry raised the yield of newly issued bonds to 14%, and there was a temporary increase in attracted funds; nevertheless, attracted amounts remain low.

Over the last six months, the NBU has bought UAH 315 bn, or USD 10.2 bn, of government war bonds. Such monetary debt financing accelerates inflation and devaluation and is not sustainable. Other bond purchases amounting to USD 5 bn are included in the calculation. Therefore, total bond purchases are estimated to be at USD 15.0 bn in 2022.

As result, the disbursement of the total committed aid this year **would not** be enough to cover the fiscal gap **and would leave further need of USD 12.0 bn this year in scenario 1.**

This amount would however fully cover the projected deficit and debt amortization in the savings budget scenario (scenario 2).

Conclusion: We expect the Ukrainian fiscal gap to be historically highest in 2022, amounting to USD 63.1 bn (46.1% of GDP) in the current budget scenario. This would imply further funding needs of USD 12 bn. Only in the savings budget scenario, where the gap is estimated at USD 51.1 bn (37.4% of GDP), the disbursement of committed international aid would be sufficient. Most of the deficit is caused by increased defence expenditure. When the war is over, Ukraine will be able to gradually return to a balanced budget, although it will have to deal with a huge amount of debt and post-war economic devastation, which will require additional funds.

6. Financing the fiscal gap: Recommendations and outlook

A key result of our estimations is Ukraine's fiscal gap, which will amount to between USD 51.1 bn and USD 63.1 bn (37.4% and 46.1% of GDP, respectively) in 2022, depending on the modelled scenario.

The key question is how to finance this gap under the current circumstances. The traditional way of approaching **private external capital markets** is out of the question for the moment, and most probably for the foreseeable future. The **local debt market**[4] was in comparison rather small, even though it played a growing role in the years before the war. Right now, its capacity to fund significant additional parts of the deficit seem very limited, even though more flexibility from the side of the Ministry of Finance in terms of offering higher (i.e. more market-oriented) yields might help. The possible introduction of new debt instruments should also be considered, as countries during war usually did. Such instruments might have certain features that make them more attractive for both borrower and lender (e.g. regarding tax treatment) under the current circumstances. The ongoing **debt monetisation** by the NBU (at the time of writing to the tune of more than USD 10 bn) carries the above-described severe macro-financial risks and should be clearly curtailed.

This leaves **official financial assistance** from multilateral or bilateral sources as the last resort. As was written before, USD 36.1 bn have been currently pledged. If we add other forms of financing already secured (NBU and local markets in the beginning of the war, as well as for local debt amortization, see Figure 6), we see that the **overall pledged and secured amount of financing from all sources is not enough in case of scenario 1 – with a USD 12.0 bn gap, but is roughly equal to our gap estimation in the scenario 2, which is in general good news.**

However, as was written before, there are two caveats on official financial assistance: Firstly, a large part of the promised funding has not arrived, most probably due to time-consuming procedures or other constraints on the donor side. As fiscal support for Ukraine is critical in times of war, this issue must be solved, i.e. **disbursement must be sped-up**.

Secondly, the issue of **public-debt sustainability** becomes more urgent, as we have a severely distressed economy dealing with an ever-increasing debt load (without considering reconstruction and recovery costs, which might blur the picture further). Ukraine made great progress in terms of securing a more sustainable stance of its public finances before the war; a sudden jump in new (even concessional) debt might throw the country back for many years, also in terms of eventually (re-)engaging with private creditors (market access). From Ukraine's perspective, the **preference of grants over loans** is therefore fully justified and should be met by the international partners of the country.

[4] The local debt market might play a role for internal debt amortization though in terms of rolling over existing instruments.

As a protracted war scenario seems increasingly likely, it is obvious that the state of public finances must react to it. The recently revealed budget draft for 2023 points into that direction, with a clear priority given to military expenditure and basic public services and limited non-essential expenditure, and funding needs planned at a somewhat lower level than during this year. If the fiscal situation can be improved in a sustainable manner without raising additional tax revenue remains to be seen. Still, **Ukraine will remain dependent on international financial support** for the foreseeable future, a fact which should be recognized by all parties. Overall, financial support to Ukraine should be **closely coordinated among the partner countries**, possibly via a special fund that collects contributions and sends them to Ukraine in a regular and predictable manner. In this way, the issue of lagging disbursements of already pledged might be improved. Part of this support could be also covered by using frozen Russian sovereign assets in their jurisdictions, if the legal conditions for such a transfer are in place.

Comprehensive and substantial financial and military support to Ukraine will help to win the war more quickly instead of dragging it out into a prolonged conflict. This will decrease the medium-term need for further financial assistance to cover the budget deficit, as the budget will eventually begin to return to a balanced state. It won't be easy, however, given the elevated public debt levels, incurred during the war, and the general poor conditions of the economy, which experiences devastation and deliberate destruction as well as future **recovery and reconstruction costs**.

Annex 1. Macroeconomic assumptions

Table 1. Macroeconomic indicators 2021 and estimates for 2022

		2021	2022 – Estimate*
Nominal GDP	UAH bn	*5,460*	*4,433*
	USD bn	*200*	*137*
Real GDP	% yoy	*3.4*	*-32.0*
CPI aop	% yoy	*9.4*	*21.8*
CPI eop	% yoy	*10*	*31.6*
Exchange rate aop	UAH/USD	*27.26*	*32.42*
Exchange rate eop	UAH/USD	*27.27*	*36.57*
Exports	USD bn	*68.1*	*39.7*
Imports	USD bn	*72.8*	*-49.8*
Policy rate, aop	% p.a.	*7.5*	*18.6*
Policy rate, eop	% p.a.	*9.0*	*25.0*
Unemployment	%	10.3	28.0

*Sources: NBU, Ministry of Finance, Ukrstat, GET/IER, *GET/IER estimates*

Annex 2. Monthly budget revenues, expenditures and debt amortization

We developed the layered estimation methodology, which is based on the current level of annual expenditures, envisaged by the Law on State Budget for 2022 (with amendments as of July 9, 2022), which we regard as the 1st layer. Then we gradually build it up with estimated adjustments, which we deem necessary according to military and economic development assumptions.

Table 2. Fiscal estimates for 2022, current budget scenario, USD bn (scenario 1)

Items	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	**Sep***	**Oct***	**Nov***	**Dec***	2022 total
Defense and public order expenditure	0.6	0.7	3.1	3.1	4.6	4.9	3.6	4.2	4.3	4.1	3.8	3.8	40.7
Other expenditure	1.9	3.3	3.7	2.9	3.1	3.8	2.1	2.2	4.1	4.1	4.9	8.2	44.3
Tax revenues	2.9	3.1	2.4	1.8	2.7	1.8	2.7	2.6	2.0	2.0	2.6	2.5	29.0
Non-tax revenues	0.2	0.9	1.8	0.3	0.4	1.0	0.3	0.5	0.5	0.3	0.3	0.4	7.0
Deficit	-0.6	-0.1	2.7	3.9	4.6	5.9	2.7	3.2	5.9	6.0	5.6	9.1	49.0
Internal debt amortization	0.6	1.8	0.6	1.0	1.1	1.5	1.4	1.0	0.0	1.0	1.4	1.2	12.6
External debt amortization	0.0	0.2	0.0	0.3	0.1	0.1	0.0	0.1	0.3	0.1	0.1	0.1	1.5
Fiscal gap	0.1	1.9	3.4	5.3	5.7	7.5	4.1	4.2	6.3	7.0	7.1	10.4	63.1
Domestic bond purchases													15.0
Committed international financial aid													36.1
Financial needs													12.0

* Actual data for January – August, estimates for September – December

Table 3. Fiscal estimates for 2022, savings scenario, USD bn (scenario 2)

Items	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep*	Oct*	Nov*	Dec*	2022 total
Defense and public order expenditure	0.6	0.7	3.1	3.1	4.6	4.9	3.6	4.2	4.3	4.1	3.8	3.8	40.7
Other expenditure	1.9	3.3	3.7	2.9	3.1	3.8	2.1	2.2	2.1	2.3	2.7	2.3	32.3
Tax revenues	2.9	3.1	2.4	1.8	2.7	1.8	2.7	2.6	2.0	2.0	2.6	2.5	29.0
Non-tax revenues	0.2	0.9	1.8	0.3	0.4	1.0	0.3	0.5	0.5	0.3	0.3	0.4	7.0
Deficit	**-0.6**	**-0.1**	**2.7**	**3.9**	**4.6**	**5.9**	**2.7**	**3.2**	**3.9**	**4.1**	**3.5**	**3.1**	**37.0**
Internal debt amortization	0.6	1.8	0.6	1.0	1.1	1.5	1.4	1.0	0.0	1.0	1.4	1.2	12.6
External debt amortization	0.0	0.2	0.0	0.3	0.1	0.1	0.0	0.1	0.3	0.1	0.1	0.1	1.5
Fiscal gap	**0.1**	**1.9**	**3.4**	**5.3**	**5.7**	**7.5**	**4.1**	**4.2**	**4.2**	**5.1**	**4.9**	**4.5**	**51.1**
Domestic bond purchases													15.0
Committed international financial aid													36.1
Financial needs													0.0

* Actual data for January – August, estimates for September – December