



# Relief, Recovery and Resilient Reconstruction

## Supporting Ukraine's Immediate and Medium-Term Economic Needs

Informal approach paper by World Bank Group staff  
Presented as background to  
Ministerial Roundtable for Support to Ukraine  
at IMF-World Bank Spring Meetings 2022



## Abbreviations

|         |   |        |   |
|---------|---|--------|---|
| AQR     | Asset Quality Review                                  | MOF    | Ministry of Finance                                 |
| DGF     | Deposit Guarantee Fund of Ukraine                     | MOSP   | Ministry of Social Policy                           |
| ENTSO-E | European Network of Transmission System Operators     | NABU   | National Anti-corruption Bureau of Ukraine          |
| EU      | European Union  | NACP   | National Agency on Corruption Prevention of Ukraine |
| FDI     | Foreign direct investment                             | NBFI   | Non-banking financial institutions                  |
| FIT     | Feed-in tariffs                                       | NBU    | National Bank of Ukraine                            |
| FX      | Foreign exchange                                      | OHCHR  | Office of the High Commissioner for Human Rights    |
| GFDRR   | Global Facility for Disaster Reduction and Recovery   | PEFA   | Public Expenditure and Financial Accountability     |
| GMI     | Guaranteed Minimum Income                             | PPP    | Public-private partnership                          |
| GRADE   | Global Rapid Post Disaster Damage Estimation          | SAPO   | Specialized Anti-Corruption Prosecutor's Office     |
| HACC    | High anti-corruption court                            | SMEs   | Small and medium enterprises                        |
| HUS     | Household Utility Subsidy                             | SOB    | State-owned bank                                    |
| IBRD    | International Bank for Reconstruction and Development | SOE    | State-owned enterprise                              |
| IDA     | International Development Association                 | TSO    | Transmission System Operator                        |
| IFI     | International financial institution                   | UAH    | Ukrainian hryvna                                    |
| IOM     | International Organization for Migration              | UNHCR  | United Nations High Commission for Refugees         |
| IMF     | International Monetary Fund                           | UNOCHA | Office for the Coordination of Humanitarian Affairs |
| KSE     | Kyiv School of Economics                              | WHO    | World Health Organization                           |
| LNG     | Liquified natural gas                                 | WSS    | Water supply and sanitation                         |
| MAPF    | Ministry of Agrarian Policy and Food                  |        |   |
| MDTF    | Multi-Donor Trust Fund                                |        |   |

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## Relief, Recovery and Resilient Reconstruction: Supporting Ukraine’s Immediate and Medium-Term Economic Needs

### Overview

*Ukraine has experienced enormous economic and social damage from the war*

1. **As a result of Russia’s invasion of Ukraine, the people of Ukraine, especially the most vulnerable, are paying an enormous price, with the World Bank projecting GDP to decline by around 45.1 percent in 2022 through displacement, damage, and disruption.** Lives and livelihoods are being lost, with more than ten million people forced from their homes—and their country—in search of safety. So far, hostilities have taken place in 10 regions that accounted for approximately 50 percent of Ukraine’s GDP. The scale of the war and the devastation it has caused have jeopardized Ukraine’s hard-fought development gains, through destruction of production and property, disruption of trade, diminished investment, and erosion of human capital.

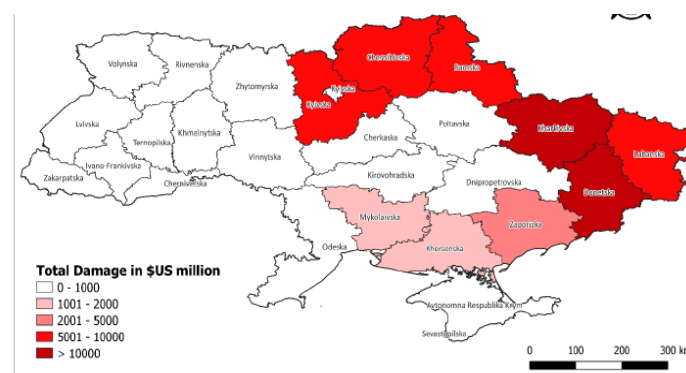
2. The war has unleashed catastrophic damage to the country’s economy and threatens lasting decreases in Ukrainians’ living standards. **Depending on the course of the war and of Ukraine’s economy, poverty could well rise to almost 60 percent of the population by 2023.** And the poverty could be unequally spread – certainly across Ukraine’s geography, where there are different impacts of the war in different regions – but also across different population groups. A striking dimension is in terms of gender, with nine out of ten refugees being women and children, with male family members remaining in Ukraine.

3. A rapid high-level physical damage assessment (not including economic costs) by the World Bank found that by March 31, 2022, **the war will have caused at least US\$59.2 billion of physical damage to buildings and infrastructure.** The costs, including economic needs, would be several magnitudes higher. Damages have been reported in 23 of the country’s 25 regions (oblasts and others), predominantly in Northern and Eastern Ukraine but also in other regions across the country. The oblasts of Kharkivska and Donetsk have sustained 42 percent of the total damage (see figure).

4. **This approach paper spans three phases for a flexible and focused approach to reviving Ukraine’s economy,** recommending critical immediate action areas to provide the foundation for regaining incomes and reducing poverty, while sketching out priorities to support resilient, inclusive recovery and reconstruction in the future (see Table at the end of the Overview):

- Prioritizing **Relief** during the war to maintain the operation of the economy and protecting the population.
- Implementing quick and coordinated actions to stimulate **Recovery** in the immediate aftermath of cessation of hostilities, effecting a timely exit from sub-optimal wartime policies.
- Designing and coordinating a **Resilient Reconstruction** strategy in the medium term, rebuilding both institutions and infrastructure.

*Map of estimated physical damage as of March 31, 2022*



*Source: World Bank/GFDRR (2022)*

*During the war (Relief Phase), the priority is to preserve as much of economic capability as possible*

5. During the war (the **Relief Phase**), the aim is to sustain the economy while attempting to reduce the most acute stress to the economy and the population. In the relief phase, the most critical areas of socio-economic action are: (1) Maintaining macro-financial management and the functioning of government; (2) Protecting the population under severe socio-economic stress; (3) Restoring essential infrastructure services; and (4) Preserving productive economic capacity (physical and human capital) as much as is feasible.
6. **Maintaining macro-financial management and the functioning of government:** The war has undermined growth prospects, exacerbated fiscal vulnerabilities, destabilized the balance of payments position, disrupted financial flows, and closed access to external capital markets remains. Nevertheless, managing Ukraine's macro-financial-fiscal framework is the key economic policy priority during the war to limit the negative impact on growth, mitigate inflation, and moderate the increase in extreme poverty.
7. Ukraine has taken key steps to ensure business continuity of key financial, monetary and fiscal institutions, including the National Bank of Ukraine's measures to safeguard the banking sector. There remains liquidity in the banking system as of early April, in part due to refinancing support from the NBU and the stabilization of deposit outflows. But banking asset quality and ultimately solvency will be affected by the damage caused by the war, and be affected by the pressure on the banking system to further increase its exposure to the government sector. This will further narrow the availability of liquidity for productive lending to the economy after the war. Ukraine is also attempting to continue to pay basic salaries for public workers and critical social transfers, even in an environment when the Government's ability to mobilize fiscal revenues is compromised. This is critical to ensure that government and human capacity is preserved to underpin the eventual recovery of the economy.
8. **Protecting the population under severe socio-economic stress.** While the war is ongoing, a top priority is saving civilian lives by getting emergency medical equipment and health staff to conflict-affected areas. Surge financing is needed for the procurement and distribution of emergency medical equipment to surgery departments, intensive care units, and mobile emergency services in conflict-affected areas. At the same time, the social protection system is continuing to provide protection to households facing new financial hardship, by enrolling new beneficiaries, in-person and through digital platforms. In addition, temporary cash assistance is needed for internally displaced persons (IDPs), and housing help will be needed for both those internally displaced and those living in units damaged during the war.
9. **Restoring essential infrastructure services:** While most backbone power and gas lines have so far not been impacted, the war has taken a significant toll on the energy sector. While households are being continuously reconnected to the power network following conflict-related damage, still, as of end-March, there were close to one million consumers without power connection. One bright spot, however, has been Ukraine's successful completion of the electricity system's synchronization with the European Network of Transmission System Operators (ENTSO-E) – even during a time of war. To maintain essential transport services to enable movement of critical supplies and preserve multiple routes for civilian evacuation, immediate repairs are being done to critical transport infrastructure damages, and temporary solutions used to restore mobility (such as the construction of portable prefabricated bridges). There is also an urgent need to address the working capital deficits of energy and transport SOEs in order to continue service provision and damage repair as they face a shortage of revenues.
10. **Preserving productive economic capacity:** Ukraine's critical human capital, a source of future growth, is at risk from the war's interruption of learning. The priority is to keep students connected to the educational system so that they can complete the school year. This also requires that educators remain accessible and available to students, including through online learning. While physical capital investment has also collapsed, parts of the private sector are also continuing to operate during the conflict, helped by the Government's new legislation to ease burdens on businesses and facilitate operations – in the areas of taxes, credit, regulations, as well as digital innovations. Finally, agriculture, the backbone of the economy, is still continuing – with the Government estimating that at least 70 percent of the area planted in 2021 will be planted in 2022. Still, the value of gross agricultural output in 2022 could

fall to half the 2021 value, due to the lack of liquidity and collateral for farmers to finance planting, significant increased input prices, and the severe unavailability of diesel and other fuel. The blockade in the Black Sea has also severely impacted agricultural exports.

*Immediately after the war (Recovery Phase), emergency measures have to be rolled back while the economy heals itself for a rebound*

11. In the months immediately following cease-fire or peace, Ukraine will need to quickly address some of the built-up pressures from the emergency actions during the war, while rolling back some severely constricting policies to prepare the economy for a rebound. This will need five critical areas of focused action: (1) Addressing inflation and macro-financial stability challenges; (2) Restoring the ability of private businesses to resume normal functioning, including through access to credit; (3) Strengthening fiduciary processes to manage large inflows of resources for optimal use; (4) Reconnecting citizens to public social services, including for education, health, housing and social protection; and (5) Restoring critical infrastructure and planning for physical infrastructure repair, restoration and reconstruction. It should be noted that before construction work starts, there will be a need for de-mining, the removal of unexploded ordnance, as well as removal of destroyed military equipment and war debris.
12. **Addressing inflation and macro-financial stability challenges.** During the Recovery Phase, the government needs to focus on implementing policies to reduce inflation, including through fiscal and monetary policies that foster currency stability while being expansionary enough to accommodate the high spending needed to underpin recovery. In addition, public expenditures during this Phase would have to continue to be strictly prioritized to cover the minimum needed to run basic government services, maintain a safety net, get children back in school, reconnect people to the healthcare system, and recover basic infrastructure. Additional measures will need to be taken to enhance the stability of the financial sector, especially given the war's impact on banks' asset quality and ultimately solvency.
13. **Restoring the ability of private businesses to resume normal functioning, including through access to credit** will continue to be a challenge, since the private sector would still be severely adversely affected. In terms of credit, during the war, the private sector has been essentially transferring resources to the public sector – as exemplified by the full rollover of government debt held by the banking system (a necessary measure to maintain macroeconomic stability during the wartime period). As the government continues to borrow internally, this will crowd out credit to the private sector. So special dedicated resources of credit will need to be found to enable private sector activity. On the other hand, in the period following the realization of peace, the agricultural sector is more likely to restore its pre-war growth than other economic sectors, while also playing an important socio-economic role through employment for millions of farmers. Financing, including for small farmers, is going to be a critical enabler for this sector.
14. **Strengthening fiduciary processes to manage large inflows of resources for optimal use.** With large amounts, including from external sources, flowing to finance reconstruction, the recovery phase is the time to bolster reliable public procurement and public financial management systems. Public procurement could also serve as a significant policy instrument to propel positive changes in public service delivery.
15. **Reconnecting citizens to public social services, including for education, health, housing and social protection.** Upon the resumption of peace – and given the substantial displacement of the population and the destruction of many health facilities – it will be critical to reconnect patients, particularly children, to primary health care providers. The priority in education will be to resume in-person schooling. Short-term assistance for IDPs should cease and active steps taken to ensure eligible vulnerable households are enrolled in other social safety net programs, especially the well-targeted guaranteed minimum income program. Finally, it will be urgent to move people living in damaged housing and internally displaced people into regular housing.
16. **Restoring critical infrastructure and planning for physical infrastructure repair, restoration and reconstruction.** The priority in the energy sector, while maintaining a longer-term focus on resilience, is repairing key infrastructure

for the re-establishment of energy services. Faster recovery of the energy sector will also be facilitated if the European Union facilitates commercial exchanges of electricity with ENTSO-E. Purchasing and stocking gas for the next heating season will also be critical. In transport, priorities in the Recovery Phase will be to continue to carry out essential repairs to provide connectivity for the mobility of both goods and people. A clear priority would continue to be ensuring that the railway SOE, which emerged as a critical lifeline during the war, has sufficient liquidity to continue to provide services – but this support has to be transitional. Preparation for reconstruction will require prioritizing two goals – planning for new transport patterns and “green,” less energy-intensive modes.

17. The resources and technology needed for infrastructure will not be possible to be furnished by the public sector alone. Therefore, the recovery period will need to be used to draw up systematic plans to pull in significant private investment, while designing a conducive regulatory framework that both protects the national interest and private investors.

### *Over the medium term, Ukraine will have to build a forward-looking and sustainable society during its Resilient Reconstruction Phase*

18. In the medium term, Ukraine will have an opportunity to finally shake off some of the legacies of the past and leapfrog to a more productive, sustainable and inclusive society. This will need a fundamental, forward-looking rebuild of not just housing and infrastructure, but also economic institutions that enable building a dynamic economy. This institutional rebuilding can be anchored in Ukraine’s strong commitment to become a member of the European Union, which will bring with it a well-developed blueprint in terms of the legal and institutional requirements of membership.
19. This paper will not attempt to lay out a detailed plan for this reconstruction, but indicate four critical directions: (1) Reviving macro-financial stability through fundamental reforms of the public finance system and the financial sector; (2) Stimulating growth of a dynamic, outward-oriented, technologically sophisticated private sector; (3) Rebuilding public social services to deepen human capital and provide dynamic protection to the most vulnerable; and (4) Building sustainable infrastructure to underpin the new economic model in a way that is financially, environmentally and socially responsible.
20. **Reviving macro-financial stability.** The reconstruction will need to be driven by judicious use of public finances balanced by a large inflow of private sector investment to critical economic activity. Therefore, public finances have to be rethought to ensure a much more level playing field for both public and private actors – towards a lower tax rate that is fairly applied to most economic actors. At the same time, budget financing has to move away from excessive dependence on domestic banks, which throttles credit to the private sector. Accelerating divestiture of unnecessary public sector assets would provide quick and ample revenue. Shoring up business confidence would require reinforcing macro-fiscal capacity to attract and channel capital needed for reconstruction, while shoring up Ukraine’s procurement institutions to transparently absorb reconstruction resources. The financial sector would require strong reforms, addressing remaining issues in the financial sector, including the resolution of NPLs and setting a framework for the resumption of insurance markets.
21. **Stimulating growth of the private sector.** Ukraine will need to resume the ambitious market-enabling reform agenda that was underway before the war. A key building block would be a strong and flexible competition policy framework, focused on enhancing the entry and growth of new firms to quickly attempt to take advantage of Ukraine’s new market realities, especially trading opportunities with the European Union. Reviving the paused agenda of judicial reform is also a prerequisite for attracting the sort of dynamic private sector actors that Ukraine will need for its economic revival. Agricultural growth will require an expansion of well-conceived sources of finance (including the Partial Credit Guarantee Fund) coupled with technical support to small farmers to help them engage in climate smart agriculture, and increase agricultural land productivity and incomes.
22. **Rebuilding public social services.** Ukraine’s medium term economic growth will require deep investments in human capital, with an immediate priority to rebuild the system to deliver high-quality education. In areas that have been



severely affected by the war, rebuilding educational institutions will need to take into consideration both long-term trends in population movement and recent displacement. To improve population health and well-being, Ukraine will also need to rebuild the health facility network in a way that is optimized for a new model of care and network efficiency. At the same time, reconstruction provides the opportunity to resume the health financing reforms that were initiated before the twin crises of the pandemic and the war, so as to promote much-needed sectoral efficiency. Given Ukraine's likely increase in poverty, social protection will have to play a strong role. The adequacy of social benefits (especially pensions) has to be maintained, even though fiscal constraints will put pressure on public spending. At the same time, there may be room for cost-savings through improving the efficiency of the social safety nets programs, such as through further digitalization of benefit payments and beneficiary enrollment systems. Finally, important political decisions will need to be made regarding the eligibility for and benefit size of the war veterans' benefit, to address potentially crippling fiscal burdens.

23. **Building sustainable infrastructure.** Ukraine has the opportunity to fully align its infrastructure and economy to the European Green Agenda and the EU markets – harmonizing its energy model to European standards, facilitated by the interconnection to the European electricity transmission network, and re-conceiving its transport infrastructure to make it greener and more geared towards western markets. Given the likely loss of gas transmission revenues, Ukraine will need to complete its gas sector reform and find new sources of gas through domestic exploration as well as diversified foreign sources. Ukraine's excellent gas transmission infrastructure will need to be redeployed for other uses, which may include green hydrogen. Ukraine will be well positioned to enhance its transport connectivity, through continuing to modernize its transport and logistics modernization and seeking alternative routes beyond the Black Sea for its international trade. This massive investment will require public-private partnerships (PPPs). A key prerequisite for PPPs will be streamlining legislation and simplifying the selection and approval procedures for those PPP projects which will become part of the reconstruction framework.

#### *Preserving Ukraine's Capacity for Relief, Recovery and Resilient Recovery*

24. To limit irrevocable damage to Ukrainians' living standards, Ukraine needs substantial resources not just in the future – but now – to maintain the Ukrainian state's capacity to govern and to provide services to the people, to preserve and protect Ukraine's national income through conserving the productive capacity (and to the extent possible, restoring the export capability) of the economy as far as possible, and to restore and rehabilitate Ukrainians' personal incomes and opportunities.
25. But this needed spending is hamstrung by very limited available fiscal resources. Currently, the non-military fiscal deficit is expected at around US\$17.4 billion for the Government in 2022, with up to an additional US\$5.5 billion needed to cover Naftogaz' liquidity needs. Thus far, disbursed and committed external pledges amount to about US\$7.2 billion, leaving an unidentified financing gap of US\$15.6 billion.
26. Given the size of the gap, Ukraine has only three options to meet urgent fiscal needs: financing from external partners, accelerated cash management or inflation financing – with the second and third options coming at great current costs to the population and compromising future recovery. In the absence of a significant flow of funds from partners, Ukraine will have to further squeeze its now bare-bones social expenditures and avail of monetization of the deficit from the central bank. All three options could be somewhat eased by the deferral of external debt payments of the government and public corporations, in a market-friendly way, with the consent of private sector creditors (if the Government so chooses).
27. Most combinations of cash management and inflation financing policies will have a deep impact on the poorest. The specific impact on the poor from austerity policies will depend on which budget items are actually slashed (or arrears built up). Inflationary policies will have a delayed effect, with the impact spread among more of the population in the early months, and then affecting the poor more, given the large share of consumables. If there is a significant transfer of external resources, while there would still be a sharp rise in poverty due to fewer income-earning opportunities, the rise would be moderated and will decline over time as output and incomes recover.

28. Therefore, the unique situation of Ukraine today provides a rationale for rapid and large-scale transfer of resources from abroad. There are three critical pathways for Ukraine's external partners to do so.
- a. To add least to Ukraine's future debt burden, the most effective way to help Ukraine is to provide the budget with **grant resources**. The Multi-Donor Trust Fund (MDTF) created at the World Bank that channels resources quickly, efficiently and with least cost to Ukraine's budget (supplementing the World Bank's support to Ukraine's budget) is one mechanism that can be further utilized, as is the new Administered Account set up at the IMF.
  - b. Second, **lending on concessional terms compared to market rates**, such as on normal multilateral (for example, IBRD) lending terms with extended payment periods and lower-than-market rates to help manage debt servicing costs. Lending rates can be further decreased if grants are used to effectively "buy down" interest costs of such lending. In terms of magnitude, at the minimum, IFIs and bilateral lenders would need to strive to have positive flows to Ukraine over the short run – covering, at prevailing rates, the debt services owed to them for the year, and then endeavoring to add to that to provide Ukraine with needed additional resources.
  - c. Given prudential limits, in order to extend the ability of IFIs to use their own balance sheets to offer loans in the necessary extraordinary volumes, useful instruments for donors to consider are **bilateral partner guarantees**, which can be used to significantly increase the volume of concessional loans. Such guarantees can help bring further resources to Ukraine, at terms more concessional than market rates, and at a much lower cost to external partners.
29. A critical need for Ukraine's external partners is to closely coordinate all their resources to help finance and augment Ukraine's own budget-financed programs, provide direct support through the budget mechanisms to well-designed programs – such as for social commitments like targeted cash transfers, pensions and payments to IDPs.
30. Given the high risk and uncertainty, external financing is also needed to de-risk and to scale-up domestic and foreign private investment. Such external financing will be critical for promoting trade finance, ensuring food security, improving agri-logistics and progressing the energy transition. Concessional funds will also be required for rebuilding Ukraine's infrastructure.

**Table: Critical actions needed for Ukraine's economic recovery**

|   | <b>During War (Relief Phase)</b>   | <b>First 6-8 Months after Peace (Recovery Phase)</b>  | <b>Medium Term (Resilient Reconstruction Phase)</b>  |
|---|--|---|--|
| <p><b>For improving stability and confidence:</b></p> <p><i>Reduce uncertainty</i></p>  | <p>Maintain confidence in Ukraine's financial, monetary, and fiscal institutions</p> <p>Continue payment of basic public salaries and critical transfers</p> <p>Use credit measures to prevent viable firms from becoming insolvent</p>  | <p>Rapidly address built-up problems in financial sector and macro stability</p> <p>Ensure strong fiduciary processes to use limited resources well, and ensure anticorruption architecture is not weakened</p> <p>Assess losses of the banking and insurance sectors and prepare plans on recapitalization to meet prudential requirements</p>   | <p>Reinforce macro-fiscal capacity to attract and channel capital needed for reconstruction. Strengthen the tax structure by broadening the tax base</p> <p>Address remaining issues in financial sector, including resolution of NPLs and setting framework for resumption of insurance markets</p> <p>Strengthen procurement institutions to transparently absorb resources</p>  |
| <p><b>For provision of critical public services:</b></p> <p><i>Accountable and transparent government</i></p>                       | <p>Do emergency works to repair and maintain basic infrastructure services for humanitarian purposes, adequate supply, and civilian evacuation</p> <p>Secure working capital for SOEs in energy and transport</p> <p>For IDPs, provide shelter and support that is temporary</p> <p>Maintain emergency health capacity and essential medical supplies</p> <p>Keep students in schools through online learning</p> <p>Start building up stock of fuel for next heating season</p> | <p>Prioritize infrastructure needs: ensure urgent reconstruction of essential connectivity (railways, roads, bridges, power/gas, heating, water, digital).</p> <p>Procure gas for next heating season</p> <p>Identify opportunities for PPPs for financing infrastructure</p> <p>Continue support to IDPs. Ensure all newly-poor households are enrolled in existing social safety nets programs</p> <p>Prioritize return to school to address learning losses</p> <p>Reconnect people to healthcare and catch-up on essential care foregone (immunization, screening)</p> <p>Strengthen government accountability to citizens, including through use of technology</p> | <p>Complete investments in infrastructure network for public services (energy, transport, water/sanitation), emphasizing energy efficiency and digitization</p> <p>Implement the new logistics strategy for trade, establishing key railway routes westwards</p> <p>Phase out of emergency social support to longer-term social protection and skills training programs targeting most vulnerable</p> <p>Complete housing stock and public building (schools, hospitals) reconstruction, building back in digitally enhanced and climate-responsive manner</p> <p>Resume implementation of reforms in the education and health systems</p> <p>Provide opportunities for repatriation to conflict affected areas, with housing sector strategy that addresses new urban reality</p> |
| <p><b>For growth and incomes:</b></p> <p><i>Preserve and enhance productive capacity, including for private sector activity</i></p> | <p>Reduce operating costs, provide working capital to firms</p> <p>Provide credit for sowing in agri. areas less affected by war</p> <p>Continue exports (especially grain) by rail as far as possible</p> <p>Scale up trade finance to maintain trade flows</p> <p>Preserve human capital through social protection, transfers to IDPs</p> <p>Ensure emergency delivery of basic services in areas hit hard by conflict</p>   | <p>Use time-limited directed credit access for firms to address operating expenses</p> <p>Create opportunities for longer-term credit for firms to undertake new investments</p> <p>Provide credit access for farmers for sowing and harvesting</p> <p>Develop plans for resilient and climate smart agriculture optimizing the use of irrigation schemes</p> <p>Prevent over-concentration of production due to distress sales</p>   | <p>Strengthen backbone transport and energy connectivity (nationally and internationally) continuing the reforms</p> <p>Enhance competition framework, making markets more contestable and facilitating entry of new firms</p> <p>Provide agricultural extension services and credit for farmers to buy/sell land and to restore farm productivity and use land for collateral</p> <p>Build stronger technology transfer through strategic alliances with foreign firms</p> <p>Welcome investment in the tech sector to build larger market presence</p>   |

# Relief, Recovery and Resilient Reconstruction: Supporting Ukraine's Immediate and Medium-Term Economic Needs

## I. Introduction

- As a result of Russia's invasion of Ukraine, the people of Ukraine, especially the most vulnerable, are paying an enormous price.** Lives and livelihoods are being lost, with more than ten million people forced from their homes—and their country—in search of safety. The war has unleashed catastrophic damage to the country's economy and threatens lasting increases in poverty and societal upheaval. The scale of the war and the devastation it has caused have jeopardized Ukraine's hard-fought development gains, through destruction of production and property, disruption of trade, diminished investment due to amplified uncertainty, and erosion of human capital.
- This approach paper spans three phases for a flexible and focused approach to reviving Ukraine's economy,**<sup>1</sup> recommending critical action areas that can provide the foundation for regaining incomes and reducing poverty (Table 1):
  - Prioritizing **Relief** during the war to maintain the operation of the economy and protecting the population.
  - Implementing quick and coordinated actions to stimulate **Recovery** in the immediate aftermath of cessation of hostilities, effecting a timely exit from sub-optimal wartime policies.
  - Designing and coordinating a **Resilient Reconstruction** strategy in the medium term, rebuilding both institutions and infrastructure.
- Given the urgency to preserve government capacity and institutional, human, and social capital, this approach paper focuses mainly on shorter-term needs,<sup>2</sup> while outlining a consistent longer-term development approach for addressing Ukraine's needs.<sup>3</sup>** A detailed assessment of recovery and reconstruction needs will be informed by additional analysis by the World Bank and the rest of the international community. Meanwhile, this approach paper also sketches out priorities to support resilient, inclusive recovery and reconstruction in the future. This includes reducing uncertainty through actions that support cessation of conflict and improve stability and confidence necessary for sustainable economic and social reconstruction; accountable and transparent government that can provide critical public services; and preserving and enhancing productive capacity (including of the private sector to increase productivity to deliver jobs, incomes and economic prosperity).
- The human cost of the war is already very high.<sup>4</sup>** Since the war began, some 4,335 civilian casualties have been officially recorded in the country by the Office of the High Commissioner for Human Rights (OHCHR): 1,842 killed and 2,493 injured, with unofficial numbers being more than five times higher.<sup>5</sup> Some 4.65 million people (about half of whom are children and 40 percent are women) have become refugees in other countries, making this the fastest growing refugee crisis since the Second World War.<sup>6</sup> About 7.14 million people have been displaced internally<sup>7</sup> and at least double that number are in need of life-saving humanitarian assistance, with food and essential services severely constrained in the areas affected by the fighting and a third of displaced households reporting no income last month.

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<sup>1</sup> The phases may not be necessarily fully sequential - relief may have to continue in some parts while recovery is underway in others.

<sup>2</sup> Several other papers and initiatives are already being prepared for the reconstruction phase. See, for instance, Becker et al (2022): "A Blueprint for the Reconstruction of Ukraine," CEPR

<sup>3</sup> With the war posing operational constraints, immediate relief will need to be primarily channeled through the central government's fiscal accounts.

<sup>4</sup> The numbers presented in this paper, including for all damages, are as of the end of March unless otherwise indicated

<sup>5</sup> Office of the High Commissioner for Human Rights, numbers as of April 11, 2022. Unofficial numbers include estimated casualties in areas where there is current or recent warfare, e.g., Mariupol

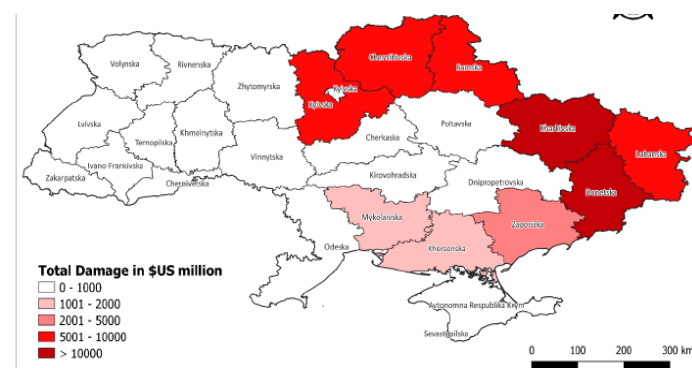
<sup>6</sup> UNHCR estimate April 12, 2022 (data2.unhcr.org/en/situations/ukraine)

<sup>7</sup> IOM estimate as of April 1, 2022 (displacement.iom.int/ukraine)

5. **A rapid high-level physical damage assessment (not including economic costs) by the World Bank found that by March 31, 2022, the war will have caused at least US\$59.2 billion of damage to buildings and infrastructure.**<sup>8</sup>

Damages have been reported in 23 of the country's 25 regions (oblasts and others), predominantly in Northern and Eastern Ukraine but also in other regions across the country, including the besieged cities of Kharkiv, Chernihiv, Mykolaiv, and in the suburbs of the capital city, Kyiv. Mariupol (Donetsk oblast) is reportedly 90 percent destroyed. Damage in affected areas has been reported to all types of buildings – including private houses and apartment buildings, schools and other educational buildings, hospitals and other health facilities, administrative, industrial as well as buildings of cultural significance (theaters, museums, etc.). Damage to roads, railways, power plants, refineries, oil depots, ports, airports and other infrastructure is also significant. The oblasts of Kharkivska and Donetsk have sustained the most damage (42% of total damage) (Figure 1 and Annex 1).

*Figure 1: Map of estimated physical damage as of March 31, 2022*



*Source: World Bank/GFDRR (2022)*

6. **Core infrastructure assets in energy and transport have been deeply affected by the war.** Conflict-related damage in power equipment and gas and district heating networks are estimated at US\$1.2 - US\$1.5 billion. For transport networks, estimated damages as of March 31, 2022 are US\$ 28 billion.<sup>9</sup>
7. **War-related damages to other building infrastructure are estimated to be in excess of US\$4 billion.** The Kyiv School of Economics (KSE) estimates war-related damage to industrial plants at about US\$3.7 billion, and those to commercial, cultural, religious, and administrative buildings at about US\$1.0 billion. Although there are no comprehensive assessments of conflict-related damage for water/wastewater utilities and networks, and telecom and digital infrastructure, preliminary estimates indicate they are in the hundreds of millions of US dollars.
8. **Access to food and essential services is becoming severely constrained in the areas affected by the fighting and in some large cities. With food insecurity increasing, the Government banned the export of grains, meat and other staples.**<sup>10</sup> Depending on the duration of the war, physical availability of food will deteriorate further, while rising inflation will severely affect the welfare of those already most vulnerable prior to the crisis (pensioners, people living on social assistance, and low-paid employees). In areas affected by active warfare, destruction of private property is widespread, causing people to lose housing, often their main asset. The rapid assessment by the World Bank estimated about US\$19 billion in conflict-related damages of residential buildings. These will require repair or reconstruction – and the destruction has already caused millions to be displaced.
9. **Critical public services are suffering considerable damage.** So far, 957 educational institutions have been damaged, of which 88 are completely destroyed (as of April 13); 328 health facilities have been damaged, of which 21 are hospitals that have been completely destroyed (as of April 9). Renewed school closures are likely to compound the learning losses which were already underway from COVID-19, disproportionately affecting children from lower-income households who have limited access to remote learning.

<sup>8</sup> World Bank/GFDRR (2022): “Ukraine Crisis: Physical Damage Assessment Report (As of 31st March 2022) through Adaptation of the Global Rapid Post Disaster Damage Estimation (GRADE) Approach.”

<sup>9</sup> World Bank/GFDRR (2022): “Ukraine Crisis: Physical Damage Assessment Report (As of 31st March 2022) through Adaptation of the Global Rapid Post Disaster Damage Estimation (GRADE) Approach.”

<sup>10</sup> Though some exports are possible with an export license granted by the government

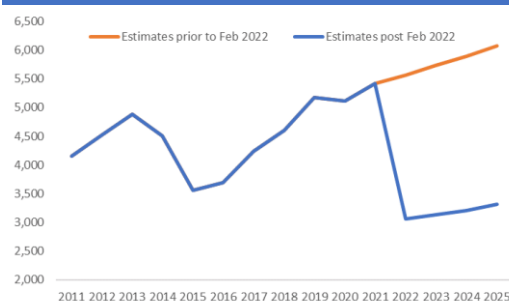
10. **The private sector is deeply distressed, with disruption of and damage to supply chains, trade routes, and domestic business operations.** Actual impacts are very difficult to measure during the conflict, but a limited survey of 254 large firms found that only 17 percent are still fully operational, one percent closed their businesses, while 29 percent are not operational. Of these large firms, only 43 percent have sufficient financial resources for a few months, while six percent have already exhausted their financial resources. An additional survey of 155 small and medium enterprises (SMEs) and individual entrepreneurs' firms showed 42 percent of these are not operational and only 13 percent are fully operational. A quarter of SMEs and individual entrepreneurs have already exhausted their financial resources.
11. **Beyond the human tragedy, the invasion has affected Ukraine's actual and potential growth through multiple channels.** First, significant amounts of Ukraine's endowment of physical and human capital is destroyed. Second, worsened confidence and increased uncertainty from security concerns have undermined private investment, compounded by banks being unable to allocate capital. Third, the fiscal shock from the war has complicated delivery of critical public services, by destroying the tax base while raising military expenditures.
12. Therefore, the economic impact of the war has been colossal. So far, hostilities have taken place in 10 regions that accounted for approximately 50 percent of Ukraine's GDP. With the war still ongoing, projections are subject to great uncertainty and downside risks. But considering the scope and scale of the conflict, and assuming military activities continue for several more months (albeit contained to the current geographical areas), **the World Bank projects GDP to decline by around 45.1 percent in 2022 through displacement, damage, and disruption.**<sup>11</sup>

Figure 2: Ukraine's GDP, current prices, US\$ billion



Source: World Bank Staff estimates, NBU, Ukrstat

Figure 3: Median household monthly income/adult, UAH real 2020



Source: World Bank Staff estimates based on Household Budget Survey

13. **The war will have longer-lasting repercussions on growth and exports.** In the coming years, a major reconstruction effort is expected to support growth. Nevertheless, by 2025, GDP is expected to be just two-thirds of its 2021 pre-war level, as will be household income (Figure 3), spending and exports. This points to major underlying shifts in the structure of the economy. In particular, reconstruction and rebound will significantly raise the share of investment in GDP,<sup>12</sup> initially led by the public sector and later by the private sector. But because of massive supply constraints, most investment needs will be met through higher imports. Agricultural exports have the potential to recover relatively quickly; however, non-agricultural exports will likely struggle. These longer term "scarring" effects should manifest in a slow restoration of productive and export capacity and weak household consumption due to higher poverty (Figure 2).
14. Estimating the poverty impacts of the war is impossible at this point, but **poverty could well rise to almost 60 percent of the population.** As a benchmark, the previous conflict in 2014/15 (while significantly more confined) led to a six-fold increase in poverty. Simulations examining the poverty effects of likely effects of the short-term fiscal stresses (see Table 4, Section V) show that poverty levels at the international poverty line of US\$5.50/day could rise from 2.1 percent in 2021 to as high as 58 percent in 2023.

<sup>11</sup> The National Bank of Ukraine has estimated a contraction of a similar magnitude (50 percent).

<sup>12</sup> The share of gross capital formation in GDP was 18 percent in 2018—this is expected to increase to 35 percent in 2025.

## II. Critical Economic Actions During the Relief Phase

15. This section will concentrate on key economic actions needed during the war (the **Relief Phase**) where the aim is to sustain the economy while attempting to reduce the most acute stress to the economy and the population. While the war continues, there are four areas of urgent action:<sup>13</sup>

- Maintaining macro-financial management and the functioning of government.
- **Protecting the population** under severe socio-economic stress.
- Restoring essential infrastructure services.
- **Preserving productive economic capacity** (physical and human capital) as much as is feasible.

### *Maintain macro-management and confidence in financial, monetary, and fiscal institutions*

16. The war has undermined growth prospects, exacerbated fiscal vulnerabilities, destabilized the balance of payments position, and disrupted financial flows. Implementing an appropriate policy response under the current circumstances is daunting: Access to external capital markets remains closed; Eurobond spreads are peaking at over 50 percent; and a large fiscal financing gap has opened amid a rapidly widening fiscal deficit and large debt repayments. **Nevertheless, managing Ukraine’s macro-financial-fiscal framework is the key economic policy priority during the war to limit the negative impact on growth, mitigate inflation, and moderate the increase in extreme poverty.**
17. **Ukrainian authorities acted swiftly to protect foreign exchange reserves** by introducing capital and administrative foreign exchange controls,<sup>14</sup> maintaining the payment system and sustaining the operations of the banking system under martial law and taking legislative steps to ensure the operational continuity of government agencies.
18. **An urgent step was ensuring business continuity of key financial, monetary and fiscal institutions.** The Government has already adopted a framework that allows government agencies and SOEs to use cloud computing and data services located outside of Ukraine.<sup>15</sup> It also facilitates the use of foreign cloud services by banks and the Deposit Guarantee Fund (DGF). Banking transactions continue, with depositors being able to withdraw money and make payments. However, banks face a series of operational issues on the ground. According to the National Bank of Ukraine (NBU) only around two thirds of bank branches were operational as of March 22.
19. **The NBU’s measures to safeguard the banking sector have helped the financial sector function, but the banking sector faces significant risks.** There remains ample liquidity in the system, as of early April, in part due to refinancing support from the NBU and the stabilization of deposit outflows. But banking asset quality and, ultimately, solvency will be affected by the damage caused by the war – resulting in destruction of collateral and potential further loss of assets in occupied regions – as well as loss of revenues impacting the repayment capacity of borrowers. In addition, about a third of the loan portfolio and deposit liabilities are denominated in foreign currencies, another key source of vulnerability for banks’ balance sheets in case of sustained currency depreciation and/or economic contraction.

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<sup>13</sup> While this paper focuses on needed actions by the government, it is important to recognize that many of the actions are also being undertaken by other actors – including development partners (including UN agencies) and other non-governmental agencies such as the Red Cross and NGOs, as well as private organizations that are providing dangerous and life-saving services during the relief phase

<sup>14</sup> The foreign exchange rate has been temporary fixed as of February 24 while allowing limited interbank trading in a narrow band around the official rate to facilitate the availability of foreign exchange for critical important purchases.

<sup>15</sup> Data security of government agencies and banks through enactment of Law of Ukraine # 2075-IX on February 17, 2022 “On Cloud Services as well as NBU resolution # 42 from March 8, 2022. On the use of cloud services by banks under martial law. Similarly, NSSMC by decision #175 from March 16, 2022 have allowed depositary institutions to which the Central Securities Depository has opened aggregate accounts to copy data of the accounting systems to cloud services.



20. **One of the financial vulnerabilities relates to negative feedback loops between Ukraine’s fiscal accounts and the banking system, reducing private sector credit.** The shock to the fiscal position of the government has put pressure on the banking system to further increase its exposure to the government sector, which was already significant before the war. By early 2022, state bonds accounted for 28.6 percent of banking assets, with state-owned banks holding 51.4 percent of outstanding bonds held by banks.<sup>16</sup> In the absence of alternative forms of financing, the government will need to increasingly rely on the banking system, thus further narrowing the availability of liquidity for productive lending to the economy after the war.
21. **The banking sector’s access to international trade finance facilities has significantly deteriorated.** Most of the imports are done on a prepayment basis. At the same time, a number of international banks, which were active in the country prior to the conflict, are still open to continue operations with Ukrainian banks on trade finance. However, this would require risk enhancement options to allow them to operate in the high-risk wartime environment.<sup>17</sup>
22. **The insurance sector will be deeply impacted, further challenging the private sector, especially trade.** There is great uncertainty about how insurance markets will respond to the situation in Ukraine in the immediate future. Insurance cover for Ukrainian enterprises will likely be expensive and hard to find on international markets. Four areas that are particularly affected and are important for economic recovery are aviation insurance, marine insurance, trade credit insurance and political risk insurance.

***Maintain functionality of government through payment of basic salaries and critical transfers***

23. **To ensure the continuity of administration and service delivery during the war and the extremely fragile post-war period, payment of basic salaries and critical transfers to public workers has to be continued,** even in an environment when the Government’s ability to mobilize fiscal revenues is compromised. Following the invasion, public wages, defense spending, social spending and other critical needs have been prioritized given immediate liquidity constraints.
24. **However, despite cuts in non-priority areas (especially capital expenditures), large social and wage bill spending needs amid sharply declining revenues have opened a large non-military fiscal deficit estimated at around US\$17 billion in 2022.** Including military expenditures, the deficit is considerably larger. Tax revenues, in particular, are being affected by lower economic activity, inability to collect taxes in some parts of the country, tax deferrals announced for key business, suspension of land and municipal taxes for the period of the war, and the shift to a two percent turnover tax.

***Priority measures for macro-financial management during Relief Phase***

- *Continue budget payment of basic salaries and transfers*
- *Maintain integrity of electronic payment system to continue to utilize direct payment mechanisms for humanitarian/social benefit transfers.*
- *Continue close monitoring of the sector and ensure solvency and minimum operational levels.*
- *Carry out timebound policy and regulatory responses to ensure proper functioning of and confidence in the financial sector.*
- *Prevent viable firms from being prematurely forced into insolvency (e.g., bridge financing through credit enhancement facilities/lines of credit for viable borrowers).*
- *Maintain integrity of ownership of state-owned banks (SOBs) by limiting interference in the management and maintaining the integrity of corporate governance frameworks.*
- *Preserve foreign exchange reserves by temporarily maintaining capital controls.*

***Priority measures for government functionality, Relief Phase***

- *Take measures to cut capital expenditures that are not critical and can be postponed.*
- *Introduce extraordinary tax measures that are simple to administer and to comply with, but can be reversed after the war.*
- *Collect a final excise only at the import stage. This may be a temporary measure to reduce the overall burden of taxes, especially on fuels.*

<sup>16</sup> Foreign banks held 22.5 percent and private banks 26.1 percent

<sup>17</sup> Such as the 100% risk enhancement from programs like IFC’s Global Trade Finance Program



### *Protect the population: Maintain emergency health capacity and essential medical supplies*

25. **While the war is ongoing, a top priority is saving civilian lives by getting emergency medical equipment and health staff to conflict-affected areas.** Surge financing is needed for the procurement and distribution of emergency medical equipment to surgery departments, intensive care units, and mobile emergency services in conflict-affected areas. Due to domestic economic disruptions, much of this equipment will need to be procured on international markets and transported to (and within) Ukraine at considerable cost. The need for extra equipment arises not only from the increase in trauma cases, but also from the destruction of existing facilities and equipment in the areas where it is most needed. Rapid training of existing medical staff – remotely if necessary (even by trainers based abroad) – in trauma surgery and trauma care is a critical complement to equipment.

#### **Priority measures for maintaining population health, Relief Phase**

- Procure and distribute equipment for trauma care to conflict-affected areas.
- Train existing medical staff in trauma care
- Ensure continued availability of medicines for chronic and life-threatening conditions, like heart disease, diabetes, HIV, and TB.
- Continue to administer COVID-19 vaccinations.

26. **A related priority is preventing loss of life due to lack of healthcare and medicines for chronic conditions and essential preventive care** (including COVID-19 vaccination). Maintaining essential health services is challenging due to the combination of conflict and internal displacement: facilities face capacity constraints due to destruction and damage, or due to increased patient loads. By the end of March, the number of people accessing medicines through the government’s Affordable Medicines Program had fallen by 53 percent. It is critical to restore access to medicine for patients with chronic and life-threatening conditions, including non-communicable diseases (such as heart disease and diabetes) and infectious diseases (such as HIV, TB) and to continue COVID-19 vaccinations. Indeed, although the vaccination rate has fallen, more than 350,000 shots were administered during March 2022 – though Ukraine’s relatively low national vaccination rate is a remaining source of vulnerability.

27. **Hospital funding and health worker capacity constraints are being addressed by emergency policy measures.**<sup>18</sup> These include advancing budgets to hospitals equivalent to the average monthly payment of 2022; subsequently, adapting the hospital funding formula to address the regional imbalances in the patient load created by internal displacement; and incentivizing health worker availability through salary increases.<sup>19</sup>

### *Protect the population: Provide social protection, including transfers and housing to internally displaced persons*

28. **The war is pushing more households into poverty, straining the resources of the country’s social protection programs.** In Ukraine, any household falling below the national poverty line is eligible for enrolment in the Guaranteed Minimum Income (GMI) program. The system is already providing protection to households facing new financial hardship due to the economic disruptions caused by the war. The Ministry of Social Policy (MOSP) continues to enroll new beneficiaries, in-person and through digital platforms. However, with the war likely to push many more households into poverty, substantial additional fiscal resources will be needed.

29. **In addition, there is a need for temporary cash assistance for internally displaced persons (IDPs), though this needs to be done in a coordinated manner through the government rather than through fragmented donor-driven programs.** As of April 5, 2022, the number of IDPs was estimated at 7.1 million, according to IOM, and temporary cash assistance to them is critical to help with short-term living expenses.<sup>20</sup> Cash assistance also has the advantage of giving households flexibility and autonomy in meeting their own specific needs. The Government recently approved a cash

<sup>18</sup> Health worker shortages are also being addressed by employer incentives for employment of IDPs in the west, (under CabMin resolution #331, March 20) equivalent to UAH6,500 per new employee.

<sup>19</sup> Such that doctors and nurses receive minimum salaries of at least US\$660 for doctors and US\$430 for nurses

<sup>20</sup> Unlike in many other armed conflict situations where in-kind assistance (like food) is provided, essential supplies are currently largely available in Ukraine and the country’s banking and telecommunications systems are operable. So cash assistance provided through banking accounts (or, alternatively, e-wallets like the Diya app) is feasible.

assistance program for IDPs.<sup>21</sup> Parallel income support programs are also being proposed and implemented by non-government agencies using external financing; while welcome, this affects the overall efficiency of the social safety nets for IDPs and may mean some households get duplicate payments. For greatest efficacy and sustainability, these programs need to be aligned with the government program and, preferably, their resources should be channeled to the government program.

**30. While the war is ongoing, housing help will be needed for both those internally displaced and those living in units damaged during the war.**

Among displaced people, many would be living with friends or relatives, some in private rentals, and a third group in irregular shelters of different types ranging from collective centers (schools, sports halls) to unfinished buildings or even sheds or tents. **During the Relief Phase, there is a need to provide small grants to people to ensure that they have suitable housing, and to municipalities whose finances are stretched due to the cost of hosting refugees.** This can be done, for example, by providing small amounts of cash support to families hosting refugees as an incentive to continue hosting, and to families renting on the private market (with an income test to target these resources to the neediest). Similarly, for families living in damaged dwellings, small grants to needy families would be useful for simple emergency repairs (such as glass or plastic to replace broken windows). Emergency supplies could potentially also include solar lanterns or similar solutions for households without power. An important target of emergency housing support would be to municipalities to identify and convert additional collective centers as preferable to tents, sheds and other such irregular solutions without access to basic public services.

**Priority measures to protect households from financial hardship, Relief Phase**

- Continue to enroll newly-eligible households in the existing GMI program, while continuing to pay other entitlements like pensions.
- Implement cash assistance programs for IDPs that are temporary and have a clear exit plan.
- Avoid parallel externally-financed income transfer programs for IDPs, and preferably channel those resources to the government program.
- Provide cash support to municipalities for O&M for collective centers and for small, related investments (building cooking facilities, additional sanitation, etc.), as well as to identify and convert additional collective centers.

**Repair and restore essential infrastructure and services: Energy, transport, water/sanitation and telecommunications**

**31. While most backbone power and gas lines have so far not been impacted, the war has taken a significant toll on the energy sector.**

The Ministry of Energy, Ukrenergo (the country’s electricity transmission system operator) and distribution companies successfully completed the electricity system’s synchronization with the European Network of Transmission System Operators (ENTSO-E) – even during a time of war.<sup>22</sup> They have also worked to reconnect households to the power network following conflict-related damage: still, as of end-March, there were close to one million consumers (representing 2 to 2.5 million people in about 1,500 communities) without power connection.

**32. Beyond the damage, energy enterprises face a significant financial burden, and fuel shortages also bring large financial needs.**

The estimated 30-35 percent reduction in electricity consumption, coupled with a reduction in collection rates for electricity and gas of up to 65-70 percent, is making it exceedingly difficult for power companies and electric utilities to operate. The liquidity gap for the power generation of SOEs to cover operating expenses and public service obligations has been estimated at about US\$250 million per month. In addition, Ukraine now faces substantial needs to replenish its nearly depleted gas supplies for the next heating season in a context of unprecedented high gas prices and limited supply in Europe. The needs have been conservatively estimated at about

<sup>21</sup> The program provides monthly grants of UAH2,000 per adult and UAH3,000 per child or disabled person, to be paid to individuals displaced from 14 oblasts with active conflict, until one month after the end of armed conflict. For 6 million IDPs, the program was expected to cost US\$600 million (UAH 13 billion) per month – but monthly costs will increase as the number of oblasts with active conflict and/or number of displaced people rises. A complementary program that provides a UAH450 grant to households that take in IDPs (without charging rent) is also being implemented.

<sup>22</sup> There is strong support from the synchronization from the Ministers of Energy of the European Union and ENTSO-E. Though some work still needs to be done before commercial exchanges are possible, Ukraine can already benefit from the automatic reserves of the European system.

US\$1.0 billion but could be as high at US\$4.0 billion, depending on prevailing market prices for gas. Coal supplies for thermal power plants are now mostly from domestic sources, but need to be built up to guard against the likelihood that local coal production will be disrupted.

33. **Disrupted transport networks are impeding logistics operations, complicating civilian evacuation and contributing to shortages in the worst-affected areas**—which also negatively impacts key industries. Approximately 70 percent of the damage estimates in transport relates to road infrastructure, 15 percent to airports, and another 15 percent to railways, bridges, and other transport infrastructure. The blockade of Ukraine’s ports on the Black Sea, through which 50 percent of Ukraine’s exports (90 percent of grain exports) is transported, necessitates the consideration of costly road and rail transport logistics alternatives towards the west. Access to fuel for transport is constrained throughout Ukraine, especially in places where active hostilities are ongoing.
34. **Essential transport services need to be maintained during the war period to enable movement of critical supplies and preserving multiple routes for civilian evacuation.** This will require immediate repairs to critical transport infrastructure damages, and temporary solutions to restore mobility such as the construction of portable prefabricated bridges when feasible. There is also an urgent need to address the working capital deficits of transport SOEs in order to continue service provision and damage repair as they face a shortage of revenues due to the loss of fare, revenue from the road fund, and port charges. Ukrzaliznytsia, the largest transport SOE and largest employer in the country (260,000 workers) has received budgetary support to address its working capital needs that can sustain it for a few months.
35. **The water supply and sanitation sector faces difficult challenges, with significant disruptions due to the war.** According to the Government of Ukraine, 10 cities suffer serious water supply and sanitation disruption, leaving hundreds of thousands without service and requiring repairs. Continuing service delivery in the face of a substantial reduction in revenues is also challenging. Financial liquidity is needed for essential supplies such as chemicals for water purification and wastewater treatment, critical maintenance to patch networks and pumping stations, as well as salaries, electricity and other operating essential costs. The huge internal displacement of people adds to the pressure on the water supply and sanitation system.
36. **There will be a heightened need for continued collection and disposal of solid waste**, including because rubble from the war will add to the trash streams. Uncollected trash left on street corners and around buildings, creating public health risks and impeding the use of public spaces for other purposes. Even in areas not directly affected by conflict, an influx of IDPs may rapidly outstrip solid waste collection capacities.
37. **Telecommunications and digital networks are being targeted and damaged daily at an increasing rate.** Despite tremendous efforts, there are several settlements, including a number in the Kyiv region, that remain without communication. The likely damage will be significantly larger once damages to IT hardware, software, installations, private businesses and residences, and buildings belonging to the public sector (such as registries and data centers) are eventually fully tallied.

**Priority Measures to repair and restore infrastructure, Relief Phase**

- *Ensure emergency repairs of equipment and networks in electricity and gas, and urgent emergency repairs for district heating focused on safety.*
- *Find resources for working capital for SOEs in energy and transport.*
- *Build up inventory of coal reserves for thermal power plants.*
- *Remove rubble from high priority areas to allow continued use.*
- *Make emergency repairs to restore essential transport connectivity - including by portable prefabricated (Bailey) bridges.*
- *Ensure sufficient emergency spare parts and equipment for railway infrastructure.*
- *Undertake emergency repairs to reconnect people back to the water network.*
- *Provide liquidity to ensure the procurement of essential chemicals, parts and other critical operation expenses to continue water service delivery.*
- *Ensure essential equipment and parts to repair critical telecommunications network damages and keep Ukraine connected.*

### *Preserve productive economic capacity: Keep students in schools through online learning*

38. **Ukraine’s critical human capital, a source of future growth, is at risk from the war’s interruption of learning.** With extensive damage to education facilities and internal displacement, many children are out of school, risking dropout and further learning losses on top of those inflicted by the COVID-19 pandemic. Five percent of all educational institutions, both schools and higher education institutions, have been destroyed or damaged. In the weeks immediately following the outbreak of the war, all schools were completely closed and, currently, 25 percent of schools remain closed with the rest operating online or on blended status. Some schools provide their own online learning options, while remaining students can attend the All-Ukrainian Online School (grades 5-11), provided they have access to internet and devices. As a result, by March 30, over 3.3 million school students had resumed their studies in-person or online. However, this still means that 28 percent of students that registered for this academic year remain out of school.
39. **With only a few months remaining in the 2021-2022 academic year, the priority is to keep students connected to the educational system so that they can complete the school year.** This also requires that educators, who continue to be paid (with salaries being a protected budgetary expenditure), remain accessible and available to students – but there is growing evidence of teacher shortages in many locations. Socioeconomically vulnerable students are at particular risk of dropout and learning loss, and some may need targeted tutoring (online or by phone) to mitigate against dropout against this. Ukraine has to also start planning for the next academic year (both for basic and higher education), under various scenarios of war trajectory, facility damage, and population displacement.

#### ***Priority measures for education, Relief Phase***

- *Keep students connected to the educational system so that can complete the school year.*
- *Ensure a fair higher education admissions process that does not disadvantage students adversely affected by online learning.*

### *Preserve productive economic capacity: Keep private businesses afloat and running*

40. **The Government has already identified the importance of facilitating business continuity and operation during the conflict** – though these welcome measures should be considered as temporary – and should be re-examined after the emergency is over to ensure affordability and effective targeting to the firms that still need them. To that end, the Government has announced or passed legislation to ease burdens on businesses and facilitate operations – in the areas of taxes, credit, regulations, as well as digital innovations.
41. **For the time of war, there was tax relief offered to firms.** Law No. 2120-IX introduced 40 changes to the tax code and other legislative acts to provide relief to firms. Changes include increasing the revenue ceiling for a lower tax rate (2%) and the use of a simplified tax procedure from 10 million to 10 billion UAH, reducing VAT, and abolishing excise duties on petrol and diesel.
42. **Access to credit was also improved to support firms.** President Zelensky announced on March 17, 2022 the expansion of the “5-7-9” lending program to a wide range of businesses, allowing for businesses to get loans up to 60 million hryvnias at zero percent during martial law, plus one month after the war (and at five percent after that).
43. **The Government has also announced a large-scale and welcome reduction to regulations,** reducing the number of business permits/licenses from 600 to about 20. The Government also passed a Cabinet resolution to stop all planned and unplanned inspection visits to firms during martial law. Additional efforts to help businesses should continue – for example the Ministry of Digitalization is negotiating with the online market platform, Etsy, to allow Ukrainians to sell goods through their platform.<sup>23</sup>

#### ***Priority measures for private businesses, Relief Phase***

- *Expand credit for operating costs.*
- *Facilitate business operations, including tax relief, easing regulations and restrictions on supply/delivery models.*

<sup>23</sup> Ukraine Ministry of Digital Transformation. <https://www.kmu.gov.ua/en/news/mincifri-stvorili-peticiyu-shchob-ukrayinskij-biznes-mig-koristuvatisya-etsy>

44. **During the Relief Phase, there is a continuing need for trade finance** to ensure flows of critically needed commodities, including fuel and agribusiness inputs. Regulatory capital support for international banks could also help continue the provision of essential financial services.

***Preserve productive economic capacity: Ensuring agricultural production***

45. **The war has disrupted Ukrainian agriculture**, a centerpiece of the economy, and threatens national as well as global food security. Agriculture accounts for 10 percent of GDP and food processing adds another 4 percent. Together with input supply and agricultural trade, the agrifood sector generates 20 percent of GDP. In 2021, agrifood products amounted to US\$28 billion or 41 percent of total exports. Primary agriculture alone employed 22 percent of the labor force.
46. **The ongoing fallout from the COVID-19 pandemic and other factors have already driven up global food prices, exacerbating an already dire global food security situation.**<sup>24</sup> Though Ukraine has a sufficient stock of some food items, especially grains and oilseeds, which have not been exported due to the war, many food stocks cannot be stored for long and need to be replaced. Most stored vegetables are in Kherson and other southern regions, which have been directly affected by warfare.
47. **The Ministry of Agrarian Policy and Food (MAPF) estimates that at least 70 percent of the area planted in 2021 will be planted in 2022.** The 2022 spring planting campaign has already started in the western parts of the country and will need to be completed at latest by the end of May. The war has directly affected nine oblasts,<sup>25</sup> which have 47 percent of the total planted area.
48. **Under current estimates, the value of gross agricultural output in 2022 could fall to half the 2021 value.** This is due to major challenges including: the lack of liquidity and collateral for farmers to finance planting, as they are not able to sell/export their commodity stocks; significant increases in input prices, amplified by difficult logistics in securing some of these inputs; the severe unavailability of diesel and other fuel; and a reduction in the number of workers due to their conscription to the army or territorial defense units or due to internal migration away from active war areas.
49. **A major challenge for agricultural producers is that the blockade in the Black Sea has severely impacted agricultural exports.** While there are large stocks of grain and oilseeds in storage in Ukraine (and loaded on some ships still in port) the inability to use maritime transport for exports has meant lower revenues for farmers (and thus lower availability of resources for future agricultural operations).
50. **The Government has developed measures to support the 2022 spring planting and management of winter crops.** On March 12, 2022, the Cabinet of Ministers adopted Resolution No. 274 to enhance access to credit for farmers, input suppliers, and other businesses. It subsidizes interest rates for six-month loans, up to 60 million UAH (equivalent to US\$4 million) from commercial and state banks to all farmers and other businesses, irrespective of their size. In addition, the Government guarantees up to 80 percent of loans (up to 50 million UAH) for farms up to 10,000 ha. About 25 billion UAH (equivalent to about US\$1 billion) has been allocated to the Partial Credit Guarantee Fund to cover this

***Priority measures for agriculture, Relief Phase***

- *Ensure necessary credit is available to farmers for the spring and winter plantings.*
- *Monitor availability and price of inputs, especially fuel, to ensure that farmers can obtain and afford them.*
- *Make essential market information available to farmers<sup>1</sup>.*

<sup>24</sup> The most recent UN FAO assessment published in March 2022 showed that 44 countries, including 33 in Africa, nine in Asia and two in Latin America and the Caribbean, are in need of external assistance for food. And this assessment is from before the war in Ukraine began. Conditions are projected to worsen significantly in West Africa, due to conflicts, high food prices and reduced harvests, while the situation is equally alarming in East Africa. Humanitarian needs are foreseen to also increase in Southern Africa in late 2022 due to the impact of adverse weather. See Glauber, J. and D. Laborde (2022): How will Russia's invasion of Ukraine affect global food security? IFPRI blog, February 24, 2022.

<sup>25</sup> These oblasts include Mykolaiv, Kherson, Zaporizhzhya (south), Kharkiv, Donetsk, Luhansk (east), Chernihiv, Kyiv, Zhytomyr (center).



cost. Several banks, including state-owned Oschadbank, with the largest number of rural branches, have already announced that credit is available to farmers for spring planting.

51. **The Government has taken several other measures to reduce the cost of inputs.** They simplified seed certification procedures and rules for transportation of agricultural chemicals by car; extended the licenses for transporting, storing, and selling agrochemicals by 90 days; and permitted the use of agricultural machinery and equipment without their registration. The Law of Ukraine No. 7137 dated March 20, 2022, cancelled the excise tax and reduced the VAT for fuel from 20 percent to 7 percent during the war. The MAPF engages with diesel suppliers from western countries to secure diesel supply for the spring planting campaign. The Government has temporarily permitted use of gasoline and diesel of Euro 3 and Euro 4 ecological classes, which should increase the availability of fuel.
52. **MAPF has also identified urgent needs for the sector.** MAPF estimates the urgent needs to cost about US\$ 400 million and is seeking financing for these needs. These include financial support for farmers who own up to 100 hectares (ha) at a rate of 200 Euros per ha for the purchase of seeds, fuel, plant protection products and fertilizers. The vast majority of these products are available in sufficient quantities in producers' and distributors' warehouses). MAPF's urgent needs also include support for farmers who own 3-50 cattle at a rate of 500 Euros per cattle. The urgent needs also include securing seeds of vegetable plants and soybeans for the spring as well as veterinary medicines.

### III. Critical Economic Actions During Recovery Phase

53. **In the months immediately following cease-fire or peace, Ukraine will need to quickly address some of the built-up pressures from the emergency actions during the war, while rolling back some severely constricting policies and preparing the economy for rebound.** This will need five critical areas of focused action:

- Addressing inflation and macro-financial stability challenges.
- Restoring the ability of private businesses to resume normal functioning, including through access to credit.
- **Strengthening fiduciary processes** to manage large inflows of resources for optimal use.
- **Reconnecting citizens to public social services**, including for education, health, housing and social protection.
- **Restoring critical infrastructure and planning** for physical infrastructure repair, restoration and reconstruction to ensure building back better.

54. **It should be noted that before construction work starts, there will be a need for de-mining, the removal of unexploded ordnance as well as removal of destroyed military equipment and war debris.** Initial reports indicate high prevalence of unexploded ordnance and mines in some areas of the country. Ukraine's current de-mining capacity will need to be bolstered to keep up with the proliferation of unexploded ordnance, anti-tank mines, anti-personnel mines and other explosive objects. De-mining and removal of unexploded ordnance is a slow and expensive process requiring trained personnel, specialized equipment, and a systematic approach. Understanding where mines are, educating local populations on mine risks, and clearing mines will all be key elements to enable people to return safely home, and to enable key connective infrastructure such as roads to be rebuilt or to enable housing reconstruction to begin. In areas that have been mined (or where there is unexploded ordnance), the de-mining process will determine the pace and location of any other kind of construction activities.

### *Rapidly address built-up problems in macro-financial stability*

55. **During the Recovery Phase the government needs to focus on implementing policies to reduce inflation, and introducing measures to jump-start the economy, while selectively starting to eliminate controls introduced during the war.** Public expenditures during this phase would have to continue to be strictly prioritized to cover the minimum needed to run basic government services, maintain a safety net, get children back in school, reconnect people to the healthcare system, and recover basic infrastructure (electricity, water, transportation). Fiscal and monetary policies that foster currency stability will be needed to promote lower inflation, price stability, growth and investment.

56. **During this phase, fiscal policy will need to be expansionary to accommodate the high spending needed to underpin recovery.** The pace of distortionary emergency measures, such as currency controls, will need to be calibrated carefully but with an eye to both restoring economic agility and still containing adverse side effects on the population, banks and the private sector.

57. **Additional measures need to be taken to enhance the stability of the financial sector.** Damages caused by the war resulting in loss of collateral and potential further loss of assets in occupied regions<sup>26</sup> as well as loss of revenues impacting repayment capacity will affect banks' asset quality and ultimately solvency. The exact scale of these losses remains hard to predict. Banks have launched "credit holidays" for almost all borrowers, and have decreased fees and commissions, but continue paying interests on deposits. These measures, together with credit losses, are expected to have an adverse impact on capital adequacy. At the same time, several significant forbearance measures have been introduced, including deferral of sanctions on banks that breach regulatory minimum requirements during martial law. Audits of banks' statements for 2021 and regular annual stress-tests/AQR have been postponed.

58. **In addition, measures need to be taken to enhance coverage of deposit insurance.** Ukraine will need to strengthen the resilience of the deposit guarantee and bank resolution system by passing the Law "On ensuring stability of the deposit guarantee system" to introduce improved provisions on, inter alia: (a) increasing the insured deposit coverage; (b) restructuring the Deposit Guarantee Fund (DGF) legacy debt obligation to the Ministry of Finance (MOF) by canceling the outstanding DGF debt and replacing it with a contingent liability linked to the recoveries from related parties of failed banks and reaching the target fund ratio of the DGF; (c) bringing the second largest Oshchadbank, owned by the state, into the deposit guarantee systems on common terms with other banks; and (d) introducing a new funding mechanism for DGF based on a forward-looking methodology using stress-testing and the target fund ratio. The law will (most likely) introduce full coverage for household depositors for the period of martial law. A sunset clause is foreseen (date of termination or abolition of martial law) which is positive. However, past experience has shown that it is not easy to transition out of fully guaranteed deposits back to limited coverage, as it requires a stabilization of the economic and financial environment.

#### ***Priority measures for macro-financial stability, Recovery Phase***

- *Resume production and publication of reliable macroeconomic statistics.*
- *Reactivate productive financing, including access to trade credit.*
- *Increase access to financing for small and medium enterprises; through development of financing schemes including credit lines and guarantees.*
- *Address built-up problems in financial sector and around macro stability.*
- *Ensure strong fiduciary processes for effective use of limited resources.*
- *Phase out special measures put in place during the war in a carefully calibrated process and replace with standard measures.*
- *Assess losses of the banking and insurance sector and prepare plans on recapitalization to meet prudential requirements.*

<sup>26</sup> As a result of the 2014/15 crisis, the banking system has lost up to 5% of its assets in the uncontrolled and annexed territories.

### *Restore the ability of the private sector to resume its normal functioning: access to credit*

59. **The private sector is severely affected through disruptions in trade**, which are exacerbated by the large fiscal financing needs of the Government, a destabilized BOP position, and disrupted financial flows. In fact, the private sector has been hit by a double blow: first, on the external side, disruptions in trade and exports rare widening of Ukraine’s current account deficit. Second, on the domestic side, the private sector is forced to be a net saver by cutting investment, and laying off workers to offset some of large domestic imbalances triggered by an excessive fiscal deficit.
60. **During the war, the private sector has been essentially transferring resources to the public sector** – as exemplified by the full rollover of government debt held by the banking system (a necessary measure to maintain macroeconomic stability during the wartime period). However, in the foreseeable future the government’s revenue will continue to lag its expenditure. And in the absence of alternative forms of financing the government will continue to borrow internally thereby crowding out the private sector.

#### ***Priority measures for restoring credit to the private sector, Recovery Phase***

- *Recognize that domestic credit availability to the private sector, especially SMEs, will be reduced by the need for financing to the public sector.*
- *Create opportunities for longer-term credit for firms to undertake new investments.*
- *Create mechanisms for facilitating FDI or lower-cost credit from abroad, especially directed at SMEs.*
- *Provide structures for Ukrainian private sector SMEs to participate in public works during reconstruction.*
- *Prevent over-concentration of production capacity due to distress sales.*

61. It is thus very important to design mechanisms in the recovery period that would support the private sector to access external resources for productive investment and trade finance, including non-debt resource transfers from abroad in the form of Foreign Direct Investment or credits on favorable terms. It is expected that Ukraine’s large exporters would be able to quickly gain access to external savings once economic recovery resumes. But the biggest challenge would be for Ukraine’s small and medium enterprises (SMEs), which should form a backbone of Ukraine’s new post-war economic landscape. There could be scope to design incentives for donor resources to be directly channeled to the private sector SMEs via credit lines, or providing structures for Ukrainian private sector companies, especially SMEs, to preferentially participate in reconstruction works.

### *Restore the ability of the private sector to resume its normal functioning: Agriculture*

62. **In the period following the realization of peace, the agricultural sector is more likely to restore its pre-war growth than other economic sectors.** It will play an important socio-economic role through employment for millions of farmers.
63. **For this to happen, the Government will need to ensure the availability of inputs for the ensuing planting season.** This includes financing, including for small farmers, seeds, fertilizers, and fuel, as well as logistics for securing inputs and for exporting grains and other agricultural outputs. In addition, Ukraine can start preparing for a different agricultural model for the Resilient Reconstruction Phase, by taking the measures to adapt agricultural production to the impact of climate change, including planning for irrigation schemes that prioritize lower energy use.

#### ***Priority measures for reviving agriculture, Recovery Phase***

- *Continue policies of the Relief Phase to ensure that credit is available to farmers.*
- *Continue to monitor price of inputs (including fuel) to ensure that farmers have access*
- *Make essential market information available to farmers.*
- *Provide financial support to small farmers.*
- *Develop plans for resilient and climate smart agriculture optimizing the use of irrigation schemes.*

64. **Ensuring that Ukraine can export its agricultural products, including grain, will be critical for the sector’s financial health** – so land options for exports need to be prepared to diversify export options. A short-term measure would be to establish grain terminals on the borders with Poland, Romania, Slovakia, Hungary and Moldova to unblock the flow of grain out of Ukraine via Europe. This will reduce the currently very long waiting times at borders, by allowing grain to be unloaded from the wide-gauge Ukrainian rail cars into grain terminals, and then reloaded into narrow-gauge European rail cars for onward export. Over the Recovery Phase, the capacity of grain terminals on the Danube River



can be further increased. For the ports of Reni and Izmail, for instance, capacity can potentially be increased from the current 1.3 million tonnes to 10 million tonnes per year.

### *Ensure strong fiduciary processes to use limited resources well*

65. **Accountability, especially internal accountability to citizens, is a critical pillar of reconstruction efforts and sustainability.**<sup>27</sup> Ukraine, prior to the war, already had functional institutions across all the government functions. But vested interests, widespread corruption and the political cycle resulted in many institutions being considered not fully effective and lacking longer-term reform vision.

66. **With large amounts, including from external sources, flowing to finance reconstruction, the recovery phase is the time to bolster reliable public procurement and public financial management (PFM) systems. These are fundamental components of the government’s accountability mechanism and essential to maintain and strengthen confidence.** This is particularly important when large resources are expected to be transferred by donors to Ukraine’s government accounts. Public procurement could also serve as a significant policy instrument to propel positive changes in public service delivery, create fiscal space, and stimulate private sector growth.

67. **Prior to the war, Ukraine’s PFM and public procurement system was generally rated as good** (see PEFA 2019). This reputation needs to be maintained to ensure that all funds are productively used for Ukraine’s recovery and reconstruction. The success of the ProZorro electronic procurement system and transparency of budget reporting was also a notable achievement by Ukraine. At the same time, Ukraine has continued to struggle with public investment management, which has lacked strategic planning and, in many cases, transparent allocation of resources (for example for road construction). Investing time and planning in systematic and strategic public investment management would be a necessary prerequisite for a strong reconstruction phase.

#### **Priority measures for fiduciary probity, Recovery Phase**

- *Strengthen and increase use of ProZorro electronic procurement system.*
- *Strengthen strategic replanning of public investment management focusing on boosting transparency, efficiency and accountability.*
- *Ensure that anticorruption architecture is not weakened. Continue to provide technical support to further strengthen NACP, NABU, SAPO and HACC.*

### *Reconnecting citizens to public social services: Healthcare and education*

68. Upon the resumption of peace – and given the substantial displacement of the population and the destruction of many health facilities – **it will be critical to reconnect patients, particularly children, to primary health care providers.** One of Ukraine’s recent landmark reforms was to enroll every person with a local primary health care provider; before the war, 80 percent of the population was linked to a doctor, thus ensuring regular health screening and follow-up care. As a result of destruction and displacement, this connection has been lost for many people. Others remain connected but have not been able to go for check-ups, including for high-risk non-communicable diseases, risking increased morbidity and premature mortality. Outreach activities to re-connect patients to their existing, or new health care providers will be imperative. Critically, this will also reconnect children to immunization services, enabling them to catch-up on vaccinations missed during wartime, helping to prevent the plunge in childhood immunization rates that was observed following the invasion of Crimea in 2014<sup>28</sup>. The healthcare system will also need to quickly strengthen mental health services to provide the psychological support people need to deal with short- and long-term impacts of the war.

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<sup>27</sup> The experience of reconstruction from the wars and major conflicts starting from post-World War II to South Korea, former Yugoslavia countries and more recently Iraq, suggest that success of reconstruction depends on strong national institutions. A U.S. audit report (<https://www.globalsecurity.org/military/library/report/sigir/index.html>) states that donor-funded physical infrastructure put in place since 2003 was already breaking down by 2005 since Iraqi institutions were not fully engaged, and the roles of institutions in operating and maintaining infrastructure were not sufficiently considered.

<sup>28</sup> In 2014, following the invasion of Crimea, BCG and measles vaccination fell below 40 percent, while DPT fell below 20 percent.

69. **Another activity to be undertaken in the immediate post-war phase is to develop and finalize health facility reconstruction plans.** This will involve identifying and ordering in terms of priority facilities that will need to be (re)built over the medium-term. This planning will need to entail a needs assessment that focuses on the future model of the health care system and not the past (see Resilient Reconstruction Phase).
70. **As peace returns to Ukraine, the priority in education will be to resume in-person schooling.** After months of war and displacement, which also follows a long COVID-related period of online learning, parents and teachers will be eager to resume “normal” in-person schooling (where school facilities are available). At the same time, with the post-war financial pressures that many families will face, some Ukrainian students will be at risk of dropping out. For these reasons, in the first months after peace returns, the priority should be to get children back into school.
71. **This will also require a process of matching teachers to the (new) distribution of students and facilities.** For this (including for communities with significant numbers of new IDPs), the administrative processes of updating student rosters and registering educators in their current localities will need to be urgently undertaken; some school communities will have expanded in size while other communities will have shrunk. It may also be necessary to consolidate the curriculum of the 2022-23 academic year to focus on the most essential materials. Long-term planning for (re)construction should also commence.

### *Reconnecting citizens to public social services: Social protection and housing*

72. **When peace is restored, short-term assistance for IDPs should cease and active steps taken to ensure that eligible vulnerable households are enrolled in other social safety net programs.** The social protection system allows for the enrollment of any household that falls below the national poverty line. IDPs and other households that are eligible should enroll in the GMI. Active outreach would help to ensure that newly poor households know of the benefits for which they are eligible and enroll. At the same time, clean-up of social safety net registries may be needed to remove households that may have left the country and decided not to return<sup>29</sup>. Estimating the budgetary needs of the social safety nets system immediately post-war is challenging – and will depend on the duration of the war and increase in the poverty incidence, but it is reasonable to assume a higher poverty incidence (see section V) and corresponding increase in budgetary need. Another consideration is the impact of the increase in gas prices on energy poverty, especially during the cold season, which may require an appropriate corresponding increase in the budget of the Household Utility Subsidy (HUS) program and the GMI.
73. **At the conclusion of the war, it will be urgent to move people living in damaged housing and internally displaced people into regular housing.** Damaged housing, especially damaged apartment buildings, will need to be evaluated to determine the viability of repair and recognizing that some may be beyond repair. IDPs living in normal housing (either

#### **Priority measures for the health and education sectors, Recovery Phase**

- *Re-connect patients, including children, with a primary healthcare provider in their new locality, and catch-up on essential care foregone (immunization, screening).*
- *Expand provision of psychological and counselling services to address mental health impact of the war.*
- *Develop and finalize health facility reconstruction plans, around a future model of the healthcare system.*
- *Start planning for the longer-term school (re)construction effort.*
- *Prioritize return to school to address learning losses, including in new locations.*

#### **Priority measures for protecting households, Recovery Phase:**

- *End the temporary assistance programs for IDPs, but continue payments for displaced people living with host families/renting, with a clear timeline for phasing out.*
- *Ensure that all newly-poor households are enrolled in existing social safety nets programs, like the GMI, for which they are eligible.*
- *Establish data collection system that will include households in damaged buildings and displaced households.*
- *Maintain subsidies to municipalities for costs associated with collective centers.*
- *Prepare regulations for housing reconstruction to be less energy-intensive and to attract new private investment.*

<sup>29</sup> However, since programs require beneficiaries to actively re-enroll every six months, those who have left the country will exit by default after six months.

with host families or rentals) will need to be supported until their former dwellings are determined to be safe. IDPs living in temporary housing arrangements (collective centers, sports halls, tents, etc.) should be supported to return to their original units if safe, including through transparent subsidy programs for damaged buildings (which can also support improved energy efficiency and seismic resilience in relevant areas).

74. **For IDPs coming from units that are now too damaged to repair (or contaminated with mines), efforts should be made to identify adequate accommodations either by finding host families**, by repurposing dormitories, or by identifying vacant but safe housing that could be temporarily used and supporting the IDPs with payments for rent. Collective centers will likely continue during this period as preferable to tents and other more irregular (and unserviced) options, but some can be phased out (e.g., schools to allow buildings to be used again for classes).
75. **During the Recovery Phase, a critical need is to rapidly prepare regulations to guide reconstruction to be less energy-intensive and to address ways of attracting new investment** (building codes and urban planning). This would also be the time to assess constraints in terms of new housing supply/costs and to develop policy reforms to address them - including assessment of access to land, the regulatory framework, construction and building materials costs, construction finance and end-user finance).

*Restoring essential services, and planning for reconstruction: Energy*

76. **The priority in the energy sector, while maintaining a longer-term focus on resilience, is repairing key infrastructure to re-establish energy services.** This is especially important for key facilities that could be quickly reconditioned (hospitals, airports, schools, railway facilities, etc.) as well as for citizens. Critical repairs of substations and connections to key power plants, major transmission and distribution lines and transformers will be needed, prioritizing interventions with the highest impact for citizens
77. **With a view to future energy security and resilience, renewable generation facilities need to be prioritized for repair.** Repair and recondition of wind and solar power plants that were disconnected or damaged during war will help reduce reliance on coal and gas and enhance energy security. At the same time, the existing level of feed-in tariffs (FITs) for renewable energy developers are making the sector fiscally unsustainable – so consideration has to be given to renegotiating them further to reduce the financial burden on Ukrenergo, the electricity Transmission System Operator (TSO).

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| <p><b>Priority measures in the energy sector, Recovery Phase</b></p> <ul style="list-style-type: none"> <li>▪ <i>Undertake temporary repair and restoration of energy connections, including renewable generation.</i></li> <li>▪ <i>Repair and restore key gas distribution networks.</i></li> <li>▪ <i>Repair and restore district heating infrastructure for the 2024 heating season.</i></li> <li>▪ <i>Procure gas for the next heating season to replenish Ukraine’s depleted reserves.</i></li> <li>▪ <i>Develop plans for the reconstruction phase defining clear roles for the private sector.</i></li> </ul> |
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78. **Faster recovery of the energy sector will also be facilitated if the European Union facilitates commercial exchanges of electricity with ENTSO-E**, following the completion of synchronization on February 24th. This would also address liquidity shortages arising from the drop in collection rates, by allowing the export of affordable electricity from Ukraine into Europe.
79. **Purchasing and stocking gas for the next heating season will also be critical.** The replenishment of gas reserves is needed to ensure that heating is available for households, health services and the restoration of industrial activity. There is a potential for a humanitarian crisis next winter if heating services are not maintained. The cost of gas purchases depends on gas market prices, and the potential deals that Ukraine is able to close. In addition, sustainable energy planning will need to start soon after peace is secured, to inform the future reconstruction and modernization of the sector (including to diversify fuel sources) and to enable private participation and financing into the sector.
80. **Assuring the investments and technology needed for a flourishing energy sector and future energy independence in Ukraine will require considerable private sector investment.** The resources and technology needed will not be possible for the public sector to provide on its own. Therefore, the recovery period will need to be used to draw up systematic plans to pull in significant private investment, while designing a conducive regulatory framework that both protects the national interest and private investors.

### *Restoring essential services and planning for reconstruction: Transport and logistics*

81. **In transport, priorities in the Recovery Phase will be to continue to address urgent needs that could not be addressed during war**, carrying out essential repairs to provide connectivity for the mobility of both goods and people.
82. **A clear priority would continue to be ensuring that the railway SOE, which emerged as a critical lifeline during the war, has sufficient liquidity to continue to provide services** – but this support has to be transitional. It would need a clear timeline for phase-out as revenues build up, to enhance efficiency and reduce the burden of the SOEs on the over-stretched national budget.
83. **Preparation for reconstruction will require prioritizing two goals – planning for new transport patterns and “green”, less energy-intensive modes.** A new vision for the transport and logistics sector will be needed to address the new realities for trade and transport, and the desire for sustainable transport built around climate-friendly transport modes. This will also provide an opportunity for attracting private capital to the sector.

#### ***Priority measures in transport, Recovery Phase***

- *Undertake critical repairs to restore essential connectivity of the population in by road and rail.*
- *Simplify and increase transparency of project preparation and implementation procedures to be able to speed up reconstruction.*
- *Develop a transport logistics vision and strategy centered around alternative trade routes westwards utilizing railways.*
- *Identify opportunities for PPPs.*
- *Prepare investment plans for resilient public transport services to be implemented during the Reconstruction phase.*

### *Restoring services and planning for reconstruction: Water supply, sanitation and solid waste*

84. **The focus in the WSS sector in the Recovery Phase needs to be on continuing urgent repairs and critical maintenance across the entire country.** In parallel, the government needs to undertake an assessment of the sector’s infrastructure and develop a plan that should focus on how to adjust and rebuild the water supply and sanitation networks and facilities. It should be based on modern standards, taking into account climate change, the expected demand for services, and the relocation of IDPs (among other factors). Finally, phasing out operational support to utilities should be considered along with provision of subsidies to vulnerable households.
85. **Rubble removal will continue as a priority in this phase, as its presence will make other kinds of works difficult.** This will need to be separated from normal residential solid waste collection, including by identifying a site appropriate for rubble disposal. The private sector may also identify opportunities for rubble reuse for new building materials. In addition, this would be the time to develop an improved solid waste management plan, including sanitary landfills to support methane gas capture and reuse, thus reducing GHG emissions.

#### ***Priority measures in water supply, sanitation and solid waste, Recovery Phase***

- *Continue and expand urgent WSS repairs and maintenance nationwide.*
- *Conduct an assessment of WSS infrastructure conditions, develop a WSS strategy and develop a plan for reconstruction.*
- *Develop and start implementing a plan for phasing out operational support to utilities focusing subsidies on poor households.*
- *Scale up rubble removal and disposal using locally based workers.*
- *Identify key investments including sanitary landfills and methane gas capture.*

## **IV. Critical Economic Directions During the Resilient Reconstruction Phase**

86. **In the medium term, Ukraine will need to focus on building back its economy, with an opportunity to finally shake off some of the legacies of the past and leapfrog to a more productive, sustainable and inclusive society.** This will need a fundamental, forward-looking rebuild of not just housing and infrastructure, but also economic institutions that enable building a dynamic economy, which can jumpstart rapid economic growth and prosperity, while reducing the

dependency on legacy economic and trade links. This institutional rebuilding can be anchored in Ukraine’s strong commitment to becoming a member of the European Union, which will bring with it a well-developed blueprint in terms of the legal and institutional requirements of membership.

87. **The details of this institutional, infrastructural and individual “Marshall Plan” will need to be developed through a process that brings together lessons from past successes but also innovations that will be Ukraine’s own.** This paper will not attempt to lay out this detailed plan, but indicate four critical directions:

- **Reviving macro-financial stability** through fundamental reforms of the public finance system and the financial sector, while strengthening fiduciary institutions to be efficient, equitable and fair when allocating public resources.
- **Stimulating growth of a dynamic, outward-oriented, technologically sophisticated private sector**, including through a strong competition policy framework that dilutes concentration of economic power, and a fair and efficient judiciary to protect property rights.
- **Rebuilding public social services** to deepen human capital and provide dynamic protection to the most vulnerable.
- Building sustainable infrastructure to underpin the new economic model in a way that is financially, environmentally and socially responsible.

### *Reviving macro-financial stability*

88. **The reconstruction will need to be driven by judicious use of public finances balanced by a large inflow of private sector investment to critical economic activity.** Therefore, public finances have to be rethought to ensure a much more level playing field for both public and private actors – moving away from Ukraine’s recent tax structure that concentrated on generating revenue from a narrow economic base. Therefore, the tax framework would need to be fundamentally adjusted to remove the array of tax exemptions that now dominate, towards a lower tax rate that is fairly applied to most economic actors. At the same time, budget financing has to move away from excessive dependence on domestic banks, which throttles credit to the private sector. Accelerating divestiture of unnecessary public sector assets would provide quick and ample revenue that would be critical in this phase.

#### ***Priority directions for restoring macro-financial stability, Resilient Reconstruction Phase***

- *Restore productive credit to restructure the industrial and service sectors.*
- *Strengthen the tax structure by broadening the tax base, improving enforcement and reducing preferential exemptions.*
- *Reinforce macro-fiscal capacity to attract and channel capital needed for reconstruction.*
- *Address remaining issues in financial sector, including resolution of NPLs and setting the framework for resumption of insurance markets.*
- *Strengthen procurement institutions to transparently absorb reconstruction resources.*

89. **Shoring up business confidence would require reinforcing macro-fiscal capacity to attract and channel capital needed** for reconstruction. This will also require shoring up Ukraine’s procurement institutions to transparently absorb reconstruction resources.

90. **The financial sector would require strong reforms to address the legacy of the war and the resulting economic slowdown.** Critically, this would require addressing remaining issues in the financial sector, including the resolution of NPLs and setting a framework for the resumption of insurance markets.

### *Stimulating growth of a dynamic, outward-oriented, technologically sophisticated private sector*

91. **Ukraine will need to resume the ambitious market-enabling reform agenda that was underway before the war.** For example, while private firms overwhelmingly contribute to GDP (84 percent), some critical sectors continue to be dominated by SOEs (such as agriculture, the financial sector, energy, and transport). FDI per capita remains low compared to peers, in spite of the demonstrated manufacturing capabilities of Ukrainian producers/suppliers to the European automotive value chains.



92. **A key building block would be implementing a strong and flexible competition policy framework, focused on enhancing the entry and growth of new firms.** If firm entry is eased, these firms can quickly attempt to take advantage of Ukraine’s new market realities, especially trading opportunities with the European Union.

93. **Given remaining logistical challenges, Ukraine’s information technology sector provides opportunities, since it requires less infrastructure compared to other industries.** This will entail re-energizing start-ups, facilitating venture capital, and promoting relationship with global technological actors. Strengthening the backbone network routes through Turkey, Romania and Georgia would also help with the needed infrastructure for these activities.

94. **Reviving the paused agenda of judicial reform is a prerequisite for private sector revival.** Completing the process where the judiciary is professional, non-corruptible, and fair would go a long way towards attracting the sort of dynamic private sector actors that Ukraine will need for its economic revival.

95. **Agriculture will be a keystone of private sector revival and exports.** This will require an expansion of well-conceived sources of finance (including the Partial Credit Guarantee Fund) coupled with technical support to small farmers to help them engage in climate smart agriculture, increase agricultural land productivity and incomes. Further liberalization of the agricultural land market, following Ukraine’s historic land reform, will enable farmers to effectively use land as collateral for attracting long-term financing. Development of a sustainable irrigation program that is affordable and efficient would also help increase production and incomes. Finally, further expanding the Crop Receipts program and using it to access climate finance could attract significant private capital to the agriculture sector.

***Priority directions for stimulating a dynamic private sector, Resilient Reconstruction Phase***

- *Accelerate corporatization and privatization of key SOEs, especially in the financial sector.*
- *Implement strong competition policy that prevents monopolization of key industries and allows easy entry to new firms.*
- *Concentrate on deepening the IT sector, including implementing the plan to build alternative backbone network routes through Turkey, Romania and Georgia.*
- *Complete the judicial reform process.*
- *Enable access to credit, including for agriculture.*
- *Liberalize the land market further to allow for collateralization of land.*
- *Expanding the Crop Receipts program to attract private capital.*
- *Increase the availability of climate smart agricultural services.*
- *Develop water users associations to expand irrigation.*

***Rebuilding public social services to deepen human capital and provide dynamic protection for the most vulnerable***

96. **Ukraine’s medium-term economic growth will require deep investments not only in physical infrastructure, but also in its human capital, with an immediate priority to rebuild the system to deliver high-quality education through an optimized network of education institutions.** Over the medium- to long-term, the network of education institutions (preschools, schools, vocational training institutions, colleges, and universities) will need to be rebuilt – in a manner that is energy efficient and sustainable. In areas that have been severely affected by the war, rebuilding will need to take into consideration both long-term trends in population movement and recent displacement, so that the prioritization of critical infrastructure investments is based on the “new” needs in those locations.

97. **Digital education, which has been an important asset during both the time of COVID and the war, will need to be deepened and developed.** It may be possible to realize efficiency gains through leveraging the expertise and resources of education institutions that were not affected by the war, including exploiting what has been learned during the past couple of years about digital learning applications.

98. **Modernizing the education system to embrace new pedagogical methods that respond to 21<sup>st</sup> century needs has to be a central part of the revival.** In this phase, Ukraine can resume its long-standing – and still-needed – reform directions, such as the state attestation assessments and examinations in grades 9 and 11, implementation of the New Ukrainian School reform, and higher education quality assurance, financing, and governance reforms.

99. **Over the medium-term, to improve population health and well-being, Ukraine will need to rebuild the health facility network in a way that is optimized for a new model of care and network efficiency.** In areas severely affected by conflict, where many hospitals have been destroyed or damaged, the construction of a few nodal hospital/facilities will be the priority to ensure a minimum of care. Rebuilding is also an opportunity to address persistent legacy issues (excessive reliance on inpatient care), move towards greater system-level efficiency (e.g., optimization of the hospital network and amalgamation of local-level health centers), and enhance environmental sustainability (e.g., through energy-efficient construction). The “capable network” of hospital providers identified by the ministry of health before the war provides an important basis for facility prioritization.

100. **Reconstruction provides the opportunity to resume the health financing reforms that were initiated before the twin crises of the pandemic and the war.** These reforms will promote much-needed sectoral efficiency. Chief among these is to continue the shift towards output-based payments for hospital care and reduce catastrophic out-of-pocket spending on healthcare.

101. **Given Ukraine’s likely increase in poverty, social protection will have to play a strong role helping the population to be resilient.** The adequacy of social benefits (especially pensions) has to be maintained, even though fiscal constraints will put pressure on public spending. Despite the inevitable post-war fiscal pressures, it will be imperative to continue with the annual indexation of pension benefits to prevent their erosion by inflation. Similarly, the value of the minimum subsistence income, on which the GMI benefit is calculated, has to keep pace with inflation.

102. **At the same time, there may be room for cost-savings through improving the efficiency of the social safety nets programs.** One potential area of efficiency gains is through further digitalization of benefit payments and beneficiary enrollment systems, to reduce the administrative cost per beneficiary. Another is through improving the targeting of social assistance programs, chiefly through slowly reducing or eliminating the more poorly targeted programs (such as the housing utility subsidy) in favor of the better targeted programs (like the Guaranteed Minimum Income). Finally, post-war reconstruction may present an opportunity to think differently about social services, which are an important part of the social protection system – reconstruction of facilities providing social services should be geared toward a new model of care that is no longer primarily institution-based (e.g., orphanages, old age homes, institutions for those with disabilities), but oriented toward home-and community-based care.

103. **Important political decisions will need to be made regarding the eligibility for and benefit size of the war veterans’ benefit.** This is of particular fiscal concern, considering the large number of people serving in various capacities in different types of defense units during the Russian invasion. Alternative types of recognition of veterans’ contributions and sacrifices could be considered.

***Priority directions for rebuilding public social services, Resilient Reconstruction Phase***

- *Procure supplies of education material to replace those lost or damaged during the war.*
- *Resume implementation of reforms in the education system.*
- *Rebuild the network of education facilities, optimized for current student needs, network efficiency, and sustainability.*
- *Rebuild health facilities, in a way that is optimized for a new model of care and an efficient provider network.*
- *Rebuild both in an efficient, digitally enhanced and climate-responsive manner.*
- *Get back on track with health financing reforms and other long-term sectoral goals.*
- *Carefully consider adequacy of social benefits while recognizing fiscal pressures. Phase out of emergency social support to longer-term social protection and skills training programs targeting most vulnerable.*
- *Renew efforts to improve the efficiency of the social safety nets program, including through better targeting and more digitalization.*
- *Avoid large permanent benefits to war veterans and their families, allowing for benefits to grow with economic/fiscal capacity.*

## *Building sustainable infrastructure to underpin the new economic model*

104. **In the Resilient Reconstruction Phase, Ukraine has the opportunity to fully align its infrastructure and economy to the European Green Agenda and the EU markets, by accelerating its alignment to European infrastructure standards.** This will entail harmonizing its energy model to European standards, facilitated by the interconnection to the European electricity transmission network, and re-conceiving its transport infrastructure to make it greener and more geared towards western markets.

105. **Ukraine’s energy model will need to be adjusted, as the country continues to modernize its energy policies, rebuilds its infrastructure, and optimizes its investments following energy-efficient practices.** This will help not only with energy security, but also by reducing energy demand from buildings and industry. Renewables will need to play an increasing role in Ukraine’s energy supply as it aligns to EU standards and advances consolidation of its electricity markets to accelerate energy integration with Europe. Hydro, variable renewables, and storage could help with achieving higher energy security, as would methane gas capture from solid waste disposal. The gas storage and transmission network of Ukraine could be fully integrated in the Europe’s gas infrastructure, to optimize the significant storage capacity in Ukraine (around 30 bcm) and provide much needed revenues to Ukraine’s gas transmission operator. And Ukraine will need to restart the liquidation of public coal mines in a socially responsible manner, so as to both reduce reliance on coal for power generation (in line with the country’s climate commitments) and reduce the fiscal cost of subsidizing unproductive mines.

### **Priority directions for building sustainable infrastructure, Resilient Reconstruction Phase**

- *Optimize gas (including biogas) production and supply infrastructure (including for imports of LNG).*
- *Reconstruct district heating infrastructure in accordance with modern sustainable heating standards.*
- *Restart the liquidation of public coal mines in a socially responsible manner.*
- *Implement railway reforms to increase transport efficiency and reliability and to establish railways as the backbone of freight transport.*
- *Identify and implement PPPs in transport, including logistics terminals and dry ports.*
- *Implement the new logistics strategy for trade establishing key railway routes westwards.*
- *Develop a housing sector strategy that addresses urban needs as well as bottlenecks inhibiting the housing market from working efficiently.*
- *Rebuild WSS infrastructure systems using a phased approach and in line with European Water Directives, climate resilience and sustainable practices.*
- *Implement WSS reforms to improve governance, transparency, accountability, performance and quality and financial sustainability.*
- *Improve disposal of solid waste in managed landfills with good methane capture and reuse.*

106. **A large part of Ukraine’s district heating infrastructure in war-affected areas are damaged beyond recovery, and will need to be built back to modern, more efficient standards.** This, combined with more energy-efficient reconstruction and refitting of existing public buildings, will go a long way towards bolstering energy security.

107. **Given the likely loss of gas transmission revenues, Ukraine will need to complete its gas sector reform and find new sources of gas through domestic exploration as well as diversified foreign sources.** New sources of gas will need to include biogas and liquified natural gas (LNG). Ukraine’s excellent gas transmission infrastructure will need to be redeployed for other uses, which may include green hydrogen.

108. **Ukraine will be well positioned to enhance its transport connectivity and logistics** to deliver essential transport services in a sustainable manner during the Resilient Reconstruction Phase. This requires modern transport policies and institutions. Ukraine needs to continue its transport and logistics modernization and seek alternative routes beyond the Black Sea for its international trade. More efficient and reliable logistics services will lower the cost of doing business for the private sector, helping spur growth and create jobs.

109. **Diversifying the transport and logistics options for key industries – including agriculture – that rely on ports and transport linkages (road and rail) affected by the war will grow increasingly urgent.** The ports along Ukraine’s Black Sea coast were responsible for more than 50 percent of Ukraine’s overall exports and 90 percent of its grain exports prior to the war. The ports along Ukraine’s Southern Black Sea coast, as well as inland waterways transport along the Dnipro river, have been particularly strategic for Ukraine’s agricultural industries. The current blockade of the Black Sea ports requires a change in orientation of Ukraine’s trade movements westwards – with a view to approaching the



European Union for support to develop required infrastructure beyond Ukraine's borders. Railway reforms that make freight more profitable and reduce unproductive cross-subsidization have to be an important element of this revival.

110. **The massive investment required for reviving transport infrastructure and to deepen transport logistics routes westwards for Ukraine's trade will require public-private partnerships (PPPs).** This is essential to meet the enormous financial needs, and to avail of resources that will not be available from the public sector alone. A key prerequisite for PPPs will be streamlining legislation and simplifying the selection and approval procedures for those PPP projects which will become part of the reconstruction framework.
111. **Ukraine's urban housing revival needs to be done through careful planning that lowers energy use and promotes efficient growth.** Buildings will have to be more energy efficient, with consideration given to switching to more efficient heating sources. Urban planning reforms will have to create a more walkable and transit-oriented environment and improve access to green space. Finally, urban housing growth will have to take into account patterns of return of citizens, using an incremental approach to allow the market to respond to actual housing demand as citizens return or move to other locations.
112. **Over the medium-term, Ukraine's rebuild of its water and sanitation infrastructure has to align with European standards of climate resilience and sustainability.** Infrastructure investments will need to be coupled with sector reforms to ensure better quality of service and governance, governance, transparency, and accountability as well as a funding approach that ensures cost-recovery.

## V. Preserving Ukraine's Capacity for Relief, Recovery and Resilient Recovery: A Call for Action

*With a cataclysmic fall in revenues, the financing gap for ongoing expenditures is enormous*

113. Today, the war continues. It is hard now to predict when it will ease, and when the massive actions around reconstruction can fully begin. **However, to limit irrevocable damage to Ukrainians' living standards, Ukraine needs substantial resources not just in the future – but now.** These resources are critical to maintaining the Ukrainian state's capacity to govern and provide services to the people, to preserve and protect Ukraine's national income through conserving the productive capacity (and to the extent possible, restoring the export capability) of the economy as far as possible, and to restore and rehabilitate Ukrainians' personal incomes and opportunities by sustaining the purchasing power of families for their basic needs.
114. **But this needed spending is hamstrung by very limited available fiscal resources.** Given the huge, expected fall in fiscal revenues (of about 45 percent year-on-year), currently available fiscal resources are vastly insufficient to pay for the deployment of immediate relief. Tax and non-tax revenues will remain depressed for foreseeable future, during (and for a period after) the war. Fiscal revenues are projected to decline further in April and May, in part reflecting the fact that some non-tax revenues were collected in advance in March. And Ukraine does not have the capacity to borrow externally from the market, with its access to external capital markets remaining closed, and the ability of its domestic market to absorb additional government debt limited.
115. **Currently, the non-military fiscal deficit is expected at around US\$17.4 billion for the Government in 2022,** with up to an additional US\$5.5 billion needed to cover Naftogaz' liquidity needs; having this financing on concessional terms would be very helpful for Ukraine (see section under "Mobilizing external resources for Ukraine – priorities and options").
116. **Implicit in these projections is the assumption that the Government continues to honor its social, pension and wage commitments.** The authorities have also committed to remaining current on all domestic and external debt obligations, despite an extremely challenging environment. This has been critical to allow the Government to retain access to domestic sources of financing, even though access to external capital markets remains closed. Retaining access to the

domestic debt market is expected to allow a full rollover of domestic debt repayments, estimated at UAH338 billion in 2022, which account for about 80 percent of Ukraine’s sovereign debt obligations.

117. **In parallel, the authorities have taken measures to manage their external debt service.** External debt interest payments amount to US\$1.9 billion in 2022, spread throughout the year. In January 2022, the authorities took proactive steps to reduce repayment pressures by buying back ten percent of outstanding Eurobonds falling due in September 2022. Still, the outstanding US\$1 billion Eurobond repayment in September remains a major pressure point. In addition, external debt service of Ukraine’s public corporations (SOEs and SOBs) amount to additional US\$0.9 billion in 2022 (including Naftogaz’s US\$335 million Eurobond payment due in July).

118. **As the war presses on and the fiscal pressure grows, the ability of the government to continue to service (external) debt becomes more challenging. Even before the war,** Ukraine’s public debt, although sustainable, was highly vulnerable to shocks. And by crowding out the private sector, it squeezed investment, thus contributing to weak growth. Once the war is over and the work starts on recovery and rebuilding, the macroeconomic framework and debt sustainability will need to be re-assessed, and a debt service strategy appropriate for the post-war reconstruction context will need to be devised.

119. **Thus far, disbursed and committed external pledges amount to about US\$7.2 billion,** leaving an unidentified financing gap of US\$15.6 billion, of which US\$10.1 billion is the fiscal gap and up to US\$5.5 billion is Naftogaz-related quasi-fiscal financing needs (Table 3).

#### *Options for filling the financing gap and their impacts*

120. **Given the size of the gap, Ukraine has only three options to meet urgent fiscal needs: financing from external partners, accelerated cash management or inflation financing – with the second and third options coming at great current costs to the population and compromising future recovery.** In the absence of significant flow of funds from partners, Ukraine will have to further squeeze its now bare-bones social expenditures and avail of monetization of the deficit from the central bank.

121. **It should be noted that all three options could be somewhat eased by the deferral of external debt payments of the government and public corporations, in a market-friendly way, with the consent of private sector creditors (if the Government so chooses).** In the case of external bonds of Government and public corporations, this

*Table 2: Estimated annual state budget revenues and non-military expenditures, UAH billion*

|   | Annual projected estimate |
|---|---------------------------|
| <b>Revenue</b>                              | <b>886.7</b>              |
| <b>Expenditure (non-military)</b>           | <b>1394.3</b>             |
| <b>Wages, goods and services</b>            | <b>743.6</b>              |
| Payments to first responders, with accruals | 339.0                     |
| Healthcare and Education                    | 280.1                     |
| Public administration                       | 49.7                      |
| <b>Interest payments</b>                    | <b>156.1</b>              |
| <b>Transfer to corporates</b>               | <b>45.1</b>               |
| <b>Social protection</b>                    | <b>437.6</b>              |
| <b>Capital expenditures</b>                 | <b>11.9</b>               |
| <b>Primary non-military balance</b>         | <b>-351.5</b>             |
| in US\$ billion                             | -12.0                     |
| <b>Non-military balance</b>                 | <b>-507.6</b>             |
| in US\$ billion                             | -17.4                     |

*Source: Ministry of Finance, Ukraine; World Bank staff calculations*

*Table 3: Estimated financing needs (US\$ billion)*

|  |             |
|--|-------------|
| <b>Total financing needs</b>                               | <b>31.4</b> |
| Incl. non-military primary deficit (from Table 2)          | 12.0        |
| Debt service domestic                                      | 15.0        |
| Debt service external                                      | 4.4         |
| <b>(Minus) Disbursed and committed financing</b>           | <b>21.3</b> |
| Disbursed external financing                               | 4.8         |
| Committed external financing                               | 2.4         |
| Domestic financing   | 14.1        |
| <b>Unidentified financing needs (fiscal)</b>               | <b>10.1</b> |
| (plus) quasi-fiscal Naftogaz                               | 5.5         |
| <b>Total Unidentified financing (fiscal +quasi fiscal)</b> | <b>15.6</b> |

*Source: Min of Finance, Ukraine; WB staff calculations*

could be accomplished through a “consent solicitation” using the existing Collective Action Clauses in the bonds.<sup>30</sup> Given the international community’s support for Ukraine and the clear need for a restructuring of the external debt in the aftermath of the war, there is likely to be little negative impact of this to Ukraine's future capital market access. Obtaining creditor consent to suspend payments may be rewarded down the road with better terms of borrowing, once market access is restored.

122. **Without sufficient external flows, Ukrainian authorities will need to resort to cash management measures** (with accumulation of arrears) to maintain macro stability while maintaining operations of Government. Ukraine has already taken steps to cut non-essential expenditures, including capital expenditures. The Government is continuing to honor its wage and social commitments (including pensions) but has cut capital expenditures by around 90 percent, from UAH 216 billion (approximately US\$7.2 billion) in 2021 to UAH 22 billion in 2022.

123. Given the severe contraction in the economy, and amid weak tax collection, **the Government is faced with the difficult financial decision of whether to fully fund the other activities (including emergency restoration of critical infrastructure) at the cost of reducing key social services, or to not fully pay out wages and pensions in the near term.** Either of these choices would have a significant impact on the welfare of people of Ukraine.

124. **The National Bank of Ukraine could serve as a lender of last resort to monetize the emerging fiscal financing gap;** however, the ensuing inflationary pressures will result in significant welfare losses for the most vulnerable people, significantly delay the economic recovery and risk undermining economic stability in the medium term. With large-scale monetization of the deficit or a sharp drawdown of foreign exchange reserves (with a subsequent sharper decline in the exchange rate), inflation can be expected to spike because of significant direct pass-through effects and inflationary expectations. Such inflation would erode household savings, with long-term welfare consequences – about 64 percent of deposits in Ukrainian banks are in local currency and would lose much of their value in the face of high inflation. The related uncertainty and macro-instability will also be a major “tax” on private investment, just when investment is needed the most.

125. It is useful to examine the implications of three potential scenarios given different levels of available financing from abroad. As mentioned above, with the consent of private sector creditors, all these three scenarios could be complemented by deferral of external debt payments of Government and public corporations.

- **Scenario 1** (Cash management) where arrears are built up in Ukraine’s central social spending (wages, pensions, other transfers) over the remainder of 2022
- **Scenario 2** (Monetization) where debt is monetized by the National Bank of Ukraine, and results in inflation eroding the value of purchasing power
- **Scenario 3** (Resource transfer) where significant external inflows meet the non-military financing gap and allows social and essential spending to be maintained

126. **While these scenarios examine Ukraine’s non-military expenditures, it needs to be emphasized that Ukraine’s military expenditure needs are also considerable.** If there is insufficient resource transfer from abroad, the likely scenario is some combination of cash management and monetization. Table 4 models poverty effects using

**Table 4: Poverty effects under different scenarios**

*Upper middle income poverty line (US\$5.5 per day in 2011 PPP)*

|      | Simulation prior to February 2022 | Scenarios 1 and 2: (Cash management and monetization)<br><i>Range depends on combination</i> | Scenario 3 (Resource Transfer) |
|------|-----------------------------------|--|--------------------------------|
| 2020 | 2.9                               | 2.9  | 2.9                            |
| 2021 | 2.1                               | 2.1  | 2.1                            |
| 2022 | 1.8                               | up to 45.5   | 21.6                           |
| 2023 | 1.6                               | up to 57.9   | 20.2                           |
| 2024 | 1.4                               | up to 56.0   | 18.6                           |
| 2025 | 1.2                               | up to 52.6   | 16.7                           |

*Source: World Bank staff calculations*

<sup>30</sup> Ukraine has outstanding Eurobond Notes that contain collective action clauses under which the terms of any one Series of Notes and/or multiple Series of Notes may be amended, modified or waived with the consent of a large majority of the holders of the Notes.

the US\$5.5/day poverty line, offering ranges of poverty effects depending on which combination of austerity versus monetization is opted for.

127. **Most combinations of cash management and monetization policies will have a deep impact on the poorest.** The specific impact on the poor from austerity policies will depend on which budget items are actually slashed (or arrears built up). Inflationary policies will have a delayed effect, with the impact spread among more of the population in the early months, and then affecting the poor more, given the large share of consumables. If there is significant transfer of external resources, while there would still be a sharp rise in poverty due to fewer income-earning opportunities, the rise would be moderated and will decline over time as output and incomes recover.
128. **Therefore, the unique situation of Ukraine today provides a rationale for rapid and large-scale transfer of resources from abroad** to address the combination of: (i) urgent needs for massive social support to reduce human suffering; (ii) totally eroded domestic resource-generating capacities; and (iii) time needed for the recovery of output, export, and revenue generation.

### *Mobilizing external resources for Ukraine – priorities and options*

129. The first priority for filling Ukraine's current non-military financing gap is to do so in a way that adds least to its future debt burden as it tries to protect its population. Therefore, **the most effective way to help Ukraine is to provide the budget with grant resources to the maximum extent possible.** The Multi-Donor Trust Fund (MDTF) created at the World Bank that channels resources quickly, efficiently and with least cost to Ukraine's budget (supplementing the World Bank's support to Ukraine's budget) is one mechanism that can be further utilized. Already, US\$165 million has been pledged to the MDTF and will flow to Ukraine's budget. While relatively small compared to needs, these resources are very welcome for Ukraine. Significantly increasing these sorts of grants would be the single best way of protecting Ukraine's population today and into the future. The new Administered Account set up at the IMF can be another source to channel grant financing.
130. Second, **lending to fill the financing gap needs, as far as possible, to be on concessional terms** compared to market rates, to lower the costs to Ukraine of servicing its debt (and, to the extent possible, extending grace periods to allow the economy and finances to recover). Even before the war, Ukraine was borrowing from the market at rates that significantly exceeded its growth rate, thus constricting its future ability to spend for other purposes. Normal multilateral (for example, IBRD) and some bilateral lending terms are helpful for Ukraine as the extended payment periods and lower-than-market rates help manage debt servicing costs. Lending rates can be further decreased if donors leverage some of the grants that they may be considering to effectively "buy down" interest costs of such lending – for example, using grant co-financing to reduce the effective borrowing cost of buying down IBRD or other multilateral loans to IDA terms, with extended grace periods, lower interest rates, or both.
131. In terms of magnitude, at the minimum, **IFIs and bilateral lenders would need to strive to have positive flows to Ukraine over the short run** (especially this year and also over the next few years) – so as to not add to Ukraine's external debt servicing challenges. This would entail covering, at prevailing concessional rates, the debt services owed to them for the year, and then endeavoring to add to that to provide Ukraine with needed additional resources for financing both necessary current and capital expenditures.
132. Given prudential limits, in order to extend the ability of IFIs to use their own balance sheets to offer loans in the necessary extraordinary volumes, **useful instruments for donors to consider are bilateral partner guarantees, which can be used to significantly increase the volume of concessional loans.** Such guarantees – for example, as those extended by the UK, the Netherlands, and Sweden used to extend the resources in the World Bank's operations supporting Ukraine's budget – can help bring further resources to Ukraine, at terms more concessional than market rates, and at a much lower cost to external partners.
133. Finally, a critical need for Ukraine's external partners is to **closely coordinate all their resources to help finance and augment Ukraine's own budget-financed programs.** As a result of the humanitarian crisis, many development partners are responding quickly to create their own programs to support humanitarian needs. However, given that Ukraine's government is struggling to finance its own social commitments in terms of targeted cash transfers, pensions and

payments to IDPs, it would be preferable to coordinate these resources to provide direct support through the budget mechanisms to well-designed programs.

134. Given the high risk and uncertainty, **external financing is also needed to de-risk and to scale-up domestic and foreign private investment.** A strong private sector in Ukraine is vital to keeping critical goods flowing and to maintaining the production of agricultural goods. Further, a strong economic recovery and reconstruction in Ukraine is conditional on having a viable and vibrant private sector, since the public sector will not be able to bear the enormous burden alone. External financing will be critical for promoting trade finance, ensuring food security, improving agri-logistics and progressing the energy transition. Concessional funds will also be required for rebuilding Ukraine's infrastructure.

## Annex: Summary of “Ukraine Crisis: Physical Damage Assessment Report (as of 31st March 2022) through Adaptation of the Global Rapid Post Disaster Damage Estimation (GRADE) Approach

The report provides an estimate of the direct physical damage caused by the ongoing conflict that started on February 24, 2022, with the invasion of Russian forces into Ukraine. The damage estimates refer to data collected and assessed up to March 31, 2022. This report also provides information on the spatial distribution of damages and estimated fixed capital across the country, which could support development of a roadmap for recovery and reconstruction after the end of hostilities.

Since February 24, 2022, there has been extensive damage to buildings and infrastructure. Damages are reported in 23 of the country’s 25 regions (oblasts and others), predominantly in Northern and Eastern Ukraine but also in other regions across the country, including the besieged cities of Mariupol (Donetsk oblast), Kharkiv, Chernihiv, Mykolaiv, and in the suburbs of the capital city, Kyiv (such as in Bojarka, Borodianka, Brovary, Bucha, Hostomel, Irpin, Vasyl’kiv) among others. Damage has been reported to all types of buildings including private houses and apartment buildings, schools and other educational buildings, hospitals and other health facilities, administrative, industrial as well as buildings of cultural significance (theaters, museums, etc.). Damage to roads, railways, power plants, refineries, oil depots, ports, airports and other infrastructure is also significant.

In this report, direct physical damage is quantified using the gross capital stock, which is the replacement cost of an asset newly rebuilt based on current unit costs and construction practice and it does not include fixed/mobile industry capital, transport equipment, etc. Direct physical damages relate to damage to capital; economic losses refer to loss due to production or business interruption and have not been estimated as part of this GRADE assessment. However, reconstruction costs are expected to be higher by a factor of 1.4 to 2.0 depending on the extent of new construction codes and guidelines being used. Reconstruction costs are expected to be proportionately higher for non-residential than residential buildings, due to the possibility of upgrades and “build back better” practices (because a large share of its capital stock and production technologies are outdated).

Specific findings from this analysis are:

### *Physical damage findings*

The minimum expected estimate of direct damage for the most affected regions and the rest of Ukraine (values in US\$ million) are shown below for key sectors.

**Table A1. Worst affected regions as estimated by the assessment in million US\$ as of March 31, 2022**

|                          | Residential<br>(mn USD) | Non-Residential<br>(mn USD) | Infrastructure<br>(mn USD) | Total<br>(mn USD) |
|--------------------------|-------------------------|-----------------------------|----------------------------|-------------------|
| Kharkivska               | 5,507                   | 3,489                       | 4,102                      | 13,097            |
| Donetska                 | 4,892                   | 3,428                       | 3,667                      | 11,987            |
| Chernihivska             | 1,840                   | 1,239                       | 4,094                      | 7,174             |
| Kyiv Misto & Kyiv Oblast | 1,967                   | 1,048                       | 3,506                      | 6,522             |
| Sumska                   | 1,751                   | 1,234                       | 2,951                      | 5,936             |
| Luhanska                 | 1,935                   | 1,380                       | 2,141                      | 5,456             |
| rest of Ukraine          | 861                     | 1,111                       | 7,104                      | 9,075             |
| <b>TOTAL</b>             | <b>18,753</b>           | <b>12,928</b>               | <b>27,565</b>              | <b>59,246</b>     |

The conflict (as of March 31, 2022) has caused physical damages in the order of at least US\$59.2 billion in Ukraine. These numbers are expected to increase in the coming weeks and months due to continued conflict.

The most impacted sector is infrastructure (47% of total damage) followed by damages to the residential sector (32% of total damage). The oblasts of Khariivska and Donetska have sustained the most damage (42% of total damage).

The physical damage estimation can inform an early financial planning and allocation at a macro level related to post conflict recovery, both by governments and among development partners. There will also be significant losses due to follow-on disruption in key sectors, such as education, health, commercial, and infrastructure, associated with the event.

A comparison of the Kyiv School of Economics (KSE) Institute's assessment and the adaptation of GRADE for Ukraine (Ukraine Crisis GRADE) analysis shows close alignment: the KSE's estimated damages were only 14% higher than that of the GRADE assessment. The KSE Institute provided estimates of damages to residential buildings which were around 6% higher than that of GRADE's; around 16% higher for non-residential buildings including the civilian airports and military airfields, around 19% higher for infrastructure including roads, railways, bridges, ports, and power plants. This report is based on data valid as of March 31, 2022, and estimates presented should be considered a lower threshold, given that as the crisis evolves, the estimates are expected to increase.

#### *Other important findings*

The capital stock exposure of Ukraine including buildings and infrastructure is estimated at US\$1.092 trillion, of which around 66% is in buildings and around 34% is in infrastructure.

The total exposure (or replacement) value of Ukraine's residential building stock was estimated at US\$452 billion which is equivalent to 2.9 times Ukraine's GDP in 2020. Similarly, the total replacement value of Ukraine's non-residential building stock was estimated at US\$263.5 billion which is equivalent to 1.7 times Ukraine's GDP in 2020.

The gender dimension in the Ukraine crisis is notably different from Europe's refugee wave of 2015, when some 1.3 million people from countries including Syria applied for asylum in EU countries. The highly skewed gender composition, with male household members remaining in Ukraine, is an important consideration for short-term needs.

From a methodological standpoint on estimating conflict related damage, many different databases were used for conflict analysis. In addition to the KSE Institute's damage data, using the ACLED database characterizing explosions as well as the Cen4InfoRes social media and satellite imagery reports, gave an insight into the affected locations. The VIINA database gave insights into the extent of Russian occupation as well as active locations of battles and violence, including the duration of such incursions. This was used to examine and calibrate the damage estimations on the basis of the duration and extent of fighting, shelling, and damage.