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The Reconstruction of Ukraine: Historical Parallels and the Role of the EU

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Excecutive Summary

Over a year of war since Russia's full-scale invasion of Ukraine on 24 February 2022, which has involved deliberate bombing campaigns on civilian targets and infrastructure, has caused enormous losses to Ukraine's physical capital and economy, in addition to the appalling loss of life. The country needs financial support to cover its current expenditure amounting to US$ 50 billion per year, while capital expenditure to repair damage is estimated in the range of US$ 100–250 billion. Based on the principles of building back better, reconstruction will cost in the range of US$ 750 million to US$ 1.1 billion. In comparison, the global aid budget in 2021 amounted to US$ 185 billion;[1] and Ukraine's entire gross domestic product was US$ 165–200 billion in 2021. Russia's Central Bank assets held abroad are estimated at US$ 300 billion. Financially, there is little doubt that the European Union (EU) together with the broader coalition of Ukraine's allies can afford to support Ukraine until victory, and to fund its post-war reconstruction. Like the historical experience of the Marshall Plan, motives of strategic self-interest alongside simple altruism make a strong case for this. However, the political will will depend crucially on how and when the war ends, on the one hand, and Ukraine's commitment to successful reform, on the other. The prospect of EU membership is a guiding star for Ukraine with the potential to both steer the practical details and inspire the political will to travel the comprehensive reform path that lies ahead. This process is not without risks, however, and elements of economic integration should be introduced along the way in parallel with the accession negotiations.

1 This figure is for what the OECD Development Assistance Committee defines as official development assistance (ODA) and excludes, among other things, military aid, aid from some new donor countries such as China and the Gulf states, and private donations.

Introduction

Since the fateful February morning just over a year ago when Russia escalated its senseless war of aggression, Ukraine has suffered immense losses. Heaviest weighs the loss of life, health and well-being that will affect the population, military and civilian alike, for generations. The damage to the physical environment has also reached huge proportions and is growing every day. The resources needed for reconstruction will be substantial. Nor is rebuilding everything as it was desirable. Ukraine was in a transitional phase before the war. Its path now lies away from Russia and the remnants of a Soviet model and towards Europe. Becoming a Western liberal economy will now be further accelerated. Reconstruction should consider this trajectory and focus on transformation rather than simply rebuilding.

Damage and Need

When thinking about the economic damage caused by the war, it is important to make a distinction between destruction, losses, and needs. Destruction refers to damage to the nation's physical stock of capital, such as homes and infrastructure, which is the tangible part of a country's wealth. Losses are the results of decreased or halted economic activity and the consequent absence of income flows due to the war. Finally, but no less critical, are current needs – or the resources the country requires in order to function in the everyday while the war continues. These quantities are difficult to estimate, but there are several methods for putting some figures on them, albeit with a broad range of uncertainty.

One useful starting point is the knowledge that the so-called capital/income ratio is a stable quantity; that is to say, the relationship between a country's wealth (or capital stock) and its or income flow, or gross domestic product (GDP), varies only extremely slowly over time.[2] Ukraine's GDP was US$ 165 billion in 2021 and its capital/income ratio has been calculated at about 4.5 for the preceding 10 years. This gives an estimated capital stock of US$ 660 billion at the beginning of the war. Physical capital, which includes infrastructure, land and housing stock but excludes financial assets, typically accounts for between half and three-quarters of the total. Based on the estimate that between one-third and half of the physical capital in Ukraine has been lost,[3] the figure for destruction is between US$ 100 and US$ 250 billion.[4]

An alternative, bottom-up, strategy is to list, estimate and sum all the physical damage incurred to buildings, infrastructure, land, natural resources, and so on. Something that would have been unthinkably cumbersome and time-consuming in the recent past has been made easier by modern technology and crowdsourcing. With external financing from the United Kingdom and the United States, the Kyiv School of Economics (KSE) has engaged with the population at the grassroots level through a website (Russia will pay), where anybody can contribute images and descriptions of the physical damage and destruction they find in their neighbourhood. Data analysts from the KSE and local institutions bring these inputs together in an estimate of the total physical destruction. The most recent amount using this method, for the period to December 2022, was US$ 138 billion. Thus, the estimates of the cost of the physical destruction produced using both methodologies are fairly similar. Using the "Damage and Loss Assessment (DaLA) Methodology" and "big data" from satellites, social media and mobile phones, augmented by government estimates, the World Bank reached a slightly lower figure of $US 97 billion.[5] This, however, is based on data up to June 2022 and therefore does not include the damage resulting from the intensified bombing strategy that Russia initiated in the following autumn and winter.

The disruption to economic activity and production, which affects wealth flows rather than the stock of capital or wealth, is referred to as losses. An approach that is widely employed in other types of crises, for example to estimate foregone income during the Covid-19 pandemic, is to compare the level of production realized during the crisis with the level that could be projected based on the previous growth trajectory. The latter gives an idea of what income could have been in the absence of the crisis. The World Bank's projections for Ukraine cover 21 months: the three months up to 1 June, for which it has data, and 18

2 Waldenström, D. (2021) "Wealth and history: An update". IFN Working Paper No. 1411.

3 Early reports by government officials and business leaders suggested that 30–50% of total capital stock had been destroyed or severely damaged. Although this is likely to have increased, the estimate that France and Germany lost approximately half to two-thirds of their capital as a consequence of the Second World War may be used as an upper bound.

4 This calculation was first proposed by Jesper Roine in the blog post "Vad kostar det att återuppbygga Ukraina?" (in Swedish, Ekonomistas, 2022-05-20).

5 World Bank (2022) "Ukraine Rapid Damage and Needs Assessment", World Bank, Washington, DC.

months forward covering the period up to the end of 2023. This projection is strongly reliant on assumptions about how the conflict might unfold and how it will affect the economy, which means that these estimates are in some ways even more uncertain and speculative. According to this methodology, Ukraine's lost income by the end of 2023 will amount to US$ 252 billion.

Given the lost income and the parallel increase in defence and humanitarian spending, the state budget is understandably under severe stress. At the beginning of 2023, Ukraine's Ministry of Finance forecast a deficit for the coming year of US$ 3.5 billion a month. This gap needs to be filled to meet current expenditure on schools, hospitals and the most urgent repairs, as well as everything else that allows the country to continue to function. For some time, the emergency solution has been a combination of printing money and borrowing, but in the long run this will be checked by the risk of a surge in inflation and unsustainable debt levels. Ukraine needs about US$ 50 billion a year, preferably in grants,[6] simply to survive as a country – or there will be nothing to rebuild at the end of the war.

A final reflection is that the cost of reconstruction is distinct from both the bill for damage and current financial needs. Simply replacing buildings, urban layouts, industrial plant and infrastructure to the same pre-war condition when so much was already an outdated legacy of Soviet models is not compatible with Ukraine's path to joining the European Union (EU), and would be a lost opportunity of huge proportions. "Building back better" is an idea that encompasses a number of dimensions, from enhanced energy efficiency to compatible railway standards, structural transformation to social inclusion, digitalization to civil service modernization, and big data-based urban planning. Such a plan for "Ukraine 2.0" could cost in the range of US$ 750–1,100 billion.[7]

Historical Parallels

The size of the estimates reviewed above might seem out of proportion and off-putting so it is useful to put them in historical perspective and to consider some relevant comparisons. A reference that is already quite commonplace in the debate is the Marshall Plan: the four-year, US$ 13 billion aid programme financed by the United States to rebuild 16 European countries after World War II. There are several reasons why this comparison is often made: the contribution was huge, corresponding to 2–5% of US GDP at the time; it was managed by an independent, newly minted agency, the Economic Cooperation Administration (ECA), to ensure efficiency and transparency; and it was time-limited, intended not as an assistance plan, but as a plan to move Europe beyond the need for assistance and make it fit to be a trading and business partner. Above all, it was successful. These are all elements that make the analogy desirable. In terms of size, 2–5% of US GDP is today equivalent to US$ 450–1,150 billion, which is remarkably similar to the range estimated for the reconstruction of Ukraine, although in a different time frame. One important difference is that, in this case, the funding would not come from a single country. Indeed, the US share, which has been

6 Olofsgård, A. (2022) "Foreign Aid to Ukraine: Lessons from the Literature on Strategic Foreign Aid". FREE Policy Brief https://freepolicybriefs.org/2022/09/19/foreign-aid-ukraine/

7 The lower bound comes from the Government of Ukraine's own 10-year reconstruction plan, presented in Lugano in July 2022. The upper bound is according to the European Investment Bank's President Werner Hoiyer, "Ukraine Reconstruction May Cost $1.1 Trillion, EIB Head Says", Bloomberg, 11 June 2022.

predominant in the early phase, is bound to wane over time as the EU steps up (see below). While the Marshall Plan was equivalent to just 2% of the recipient countries' collective GDP, however, today's sum is a multiple of Ukraine's entire GDP, which was US$ 165–200 billion in 2021. This presents very different challenges of management and sustainability.

Also relevant in this context are the experiences of modernization that many countries in Eastern Europe went through after the end of the Cold War, as well as the direct and indirect financial contributions linked to membership of the EU for some. The cost of the reunification of Germany is estimated at €2,000 billion, of which approximately 15% went on upgrading infrastructure. Poland received an estimated €160 billion in direct support from the EU in the first 15 years of its membership, while its GDP increased by 80% over the same period.

The economies of Poland and Ukraine were in a very similar situation at the beginning of the 1990s, before their paths diverged so substantially. More recent cases of post-conflict reconstruction are not as objectively comparable. The ongoing conflict is certainly among the most extensive of recent years, with far-reaching repercussions around the globe. However, Ukraine is not failing as a state like Afghanistan or Iraq. On the contrary, it is emerging as stronger and more stable by the day. The Ukrainian economy, while under stress, is functioning with external support. Production is far from pre-war levels, with due allowance for sectoral and geographic variations, but the banking system has not failed, and resilience and rapid recovery are by and large the order of the day. A comparison with the Afghanistan or Iraq operations is therefore not useful.

Financing

Another illuminating comparison can be made on the financing side. The idea of financing reconstruction with Russian war reparations to Ukraine has been circulating as an attractive possibility. How much could Russia pay? Russia's GDP was estimated at US$ 1,700 billion in 2021 but might have shrunk substantially as a consequence of the war and the international sanctions imposed on it. According to a highly conservative assessment by the International Monetary Fund (IMF), Russia experienced negative growth of −2.2% in 2022 and is projected to stagnate in 2023.[8] Even by these conservative figures, this would mean that Russia would have to pay almost 70% of its GDP to Ukraine in order to finance reconstruction, or close to 10% a year over 10-years. While there is little disagreement on the moral grounds for the proposal to make Russia pay, which would provide a sense of justice for the damage inflicted by Russia's aggression and a measure of accountability for Russia's actions, in practice this would face various material, legal and political obstacles. Any agreement to pay reparations would first require an end to the conflict. Moreover, agreement would be needed by all the parties involved, including Russia, making it a complex and challenging diplomatic process. More realistic is the proposal to use the assets of Russia's Central Bank held abroad and frozen under the sanctions regime. These amount to around US$ 300 billion, however, and could at best function as starting capital for the reconstruction plan.

8 Analyses that take more realistic account of the long-term effects of the sanctions and boycotts affecting the Russian economy estimate a double-digit decline in 2023, see for example Perrotta Berlin, M. and J. Roine (2022). "The Bleak Economic Future of Russia". FREE Policy Brief https://freepolicybriefs.org/2022/10/31/economic-future-russia/

It is clear that the brunt of the financing will in the end come from Ukraine itself. However, it is just as clear that the country does not realistically have the capacity to bear the total expenditure based on its relatively small economy, which has been severely weakened by the war. The support of its allies will be essential. There are grounds for some optimism that the international community will be able to find the resources needed to finance Ukrainian reconstruction. The West reacted from the very beginning with a strength and unity of intent that were previously unexpected. The fact that this war is seen as an act of aggression against not only Ukraine, but also the international order – and on the very ideals of democracy and freedom, and the self-determination of people – should lead to the expectation that the commitment to Ukraine's cause will withstand the test of time and continue unwavering until victory. There is simply too much at stake. However, when we think of other commitments, it is important to remember that, for example, not all countries fulfil their pledge to spend 1% of GDP on foreign aid. Even Sweden has recently reneged on this commitment. Moreover, total global Official Development Assistance (ODA) amounted to US$ 179 billion in 2021 so even if all the high-income countries that are currently funding development assistance were to redirect all of their aid budgets to Ukraine, which is of course no more desirable than it is realistically feasible, this would not be enough.

In the long run, the resources required for reconstruction are too great for public money. The private sector will have to become involved – and the good news is that this would make perfect economic sense. While the armed conflict is still ongoing, however, the risk involved is too high. Even after the fighting ceases, there will be substantial uncertainty about what kind of situation Ukraine will face, which makes public support essential in the short to medium term. At first, this will simply mean that public funds will dominate, in the form of both subsidized loans and grant aid. Gradually, however, the possibility of using public funds as a catalyst for private investment will become more palatable. Aid agencies and public development funds can offer instruments to reduce risk, and provide information and contacts to encourage private investment even in high-risk environments, such as public-private partnerships and credit guarantees.

As the conflict drags on, competing issues will vie for resources and attention in the minds of voters and politicians. Is supporting Ukraine affordable? Comparisons of public spending can provide clarity to this question. The required US$ 50 billion financial support is only 0.3% of the joint EU GDP. The current bill for energy cost subsidies that various countries are providing to their citizens is nearing €800 billion according to the Bruegel think tank, which is close to the total reconstruction bill. Financially, the EU can undoubtedly afford to support Ukraine. The level of political will of course remains open to question. Perhaps a more relevant question, given the far-reaching and long-lasting consequences of allowing Ukraine to lose, is whether the EU can afford *not* to support Ukraine for the long run until and after victory.[9]

A Role for the European Union

The EU has been a driving force in the international response to the war. This was expressed most immediately through its strong condemnation of Russia accompanied by the imposition

9 Becker, T. (2023) "The EU Cannot Afford Not to Support Ukraine Financially". SCEEUS Guest Commentary No. 13.

of sanctions that have been called unprecedented in their extent and force. The EU's support to Ukraine, both financial and military, has been stepped up over time after initial hold-ups that were criticized and raised doubts about the authenticity of its commitment and political will. While it has been clear from the start that these endeavours require broad international participation, appropriate coordination mechanisms and the question of leadership have been the subject of debate for some time.[10] From the start, however, it has felt natural that the EU should play a crucial role. This is mostly due to the geographic proximity of the conflict and the imminence of the threat posed by Russia, which is acutely felt by many European countries. The EU's important role in the matter was further reinforced when it granted Ukraine candidate status.

It is easy to see how valuable the prospect of EU membership might be for Ukraine. Access to the world's largest single market, with significant economic opportunities, and access to the EU's financial resources and development assistance make a clear case for it. Arguably the most important advantage, however, would be that membership firmly anchors Ukraine within a broader community of democratic nations committed to human rights, the rule of law and good governance, which could help to stabilize the country politically and enhance its future security. The journey to membership is of course not free of charge. Ukraine would need to undertake significant reforms to meet EU membership criteria, which could be a long and challenging process. On the other hand, the need to meet EU standards and regulations could provide a blueprint to guide the technical detail of physical rebuilding and the implementation of reforms, which would be necessary in any event. This is particularly true of anti-corruption reforms. Corruption is one of the chief concerns both internationally and among domestic civil society in relation to the billion-dollar flows connected to reconstruction. Not by chance, four of the seven initial recommendations for candidacy status are linked to anti-corruption reforms. In this and other areas, EU conditionality can provide external motivation, acting as both a carrot and a stick, to maintain political discipline and accountability, on the one hand, and satisfy popular opinion during potentially unpopular and costly reforms, on the other.

However, there is a risk that EU membership negotiations could become politicized, and that Ukraine could slip into a trap of endless negotiations that hang on the EU's internal process for reassessing the enlargement strategy, but do not in practice bring the country any closer to actual membership. Should this happen, the country might lose heart, and momentum in the reform process just as rapidly. Adding a number of elements of financial integration along the way could be a productive approach that brings practical results and strengthens the accession process in parallel. In the past, Sweden, Finland and Austria navigated their respective EU accessions while already participating in the European Economic Area (EEA). The same success can be achieved for Ukraine if the EU commits to work with the country along the two parallel tracks of accession negotiations and admission to the European single market as soon as the country is ready.[11] The seeds of such a development might already have been sown through numerous initiatives, in terms of risk mitigation and business cooperation, that are currently taking place at the instigation of individual EU member states,

10 See for example, Becker, T., B. Eichengreen, Y. Gorodnichenko, S. Guriev, S. Johnson, T. Mylovanov, M. Obstfeld, K. Rogoff, B. Weder di Mauro (2022) "A Blueprint for the Reconstruction of Ukraine", CEPR Rapid Response Economics 1 and Conley, Heather A. (2022). "A Modern Marshall Plan for Ukraine: Seven Lessons from History to Deliver Hope". GMF, Washington DC.

11 Getmanchuk, A. (2022) "How to Prevent Ukraine's EU Accession Process from Slipping into the Western Balkan Trap". SCEEUS Guest Platform for Eastern Europe Policy No. 5.

as well as of the EU as a collective, with the objective of strengthening the impetus for private sector mobilization in Ukraine's recovery and reconstruction. This could very well be the next frontier of the EU project.

Conclusions

In sum, the rebuilding of Ukraine will require significant outside support and the question arises whether the international coalition of its allies, and in particular the EU, has the resources and motivation to help finance such reconstruction. The challenges are significant but the price tag should not be considered a cost. From the perspective of the EU and the broader international community, the reconstruction of Ukraine is not just an obligation to fellow human beings, but a self-interested investment. The invaluable dividend is the preservation of European security and a world order based on international institutions and legal principles. A rebuilt, democratic and sustainable Ukraine can moreover be a beacon of hope for the leaders and people of other countries, including Russia, and act as a counterpoint to authoritarian development models. Ultimately, a prosperous, democratic Ukraine, with its high-value human capital, natural resources and modern infrastructure, will become one of Europe's growth engines.

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