

JANUARY 2023

# Enabling an Economic Transformation of Ukraine

*Recovery, Reconstruction, and Modernization*

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A Report of the CSIS Ukraine Economic Reconstruction Commission

**CSIS** | CENTER FOR STRATEGIC &  
INTERNATIONAL STUDIES

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# About the Ukraine Economic Reconstruction Commission

The aim of the bipartisan and international CSIS Ukraine Economic Reconstruction Commission is to produce a policy framework that will help attract private sector investments to support Ukraine's future economic reconstruction. To support the commission, CSIS convened a series of working groups to address a range of issue-specific areas that are critical for reconstruction and modernization of the Ukrainian economy, including agriculture, energy, and transportation and logistics, as well as addressing the impact of corruption on private sector investment.

# Acknowledgments

As the director of the CSIS Ukraine Economic Reconstruction Commission, I would first and foremost like to thank the commission cochairs, Ambassador Paula Dobriansky, Greg Page, and Michael Polsky, for their willingness to serve and support the work of the commission. I would also like to thank the commission members who provided feedback and guidance throughout the process. Finally, I would like to thank Vlad Rashkovan for the invaluable insight he provided to the commission.

On the CSIS side, I would like to thank Conor Savoy, who helped to provide thought leadership, organize the commission, and coauthor this report. I would also like to thank his coauthor, Janina Staguhn, for her work in supporting the commission. Thank you to my CSIS colleagues Romina Bandura, Max Bergmann, Ben Cahill, and Caitlin Welsh for leading working groups and writing important policy briefs on various aspects of Ukraine's reconstruction that helped inform the work of the commission. Additionally, I want to extend a thank you to all of the speakers and participants who took part in the working group meetings. Finally, I would like to thank the Project on Prosperity and Development interns, Emma Landi, Lydia Roeder, and Rebecca Elrod, for their research support. This report is made possible by general support to CSIS and the partnership of the Royal Danish Embassy.

—Daniel F. Runde

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# Executive Summary

At the end of February 2022, Russia launched an unprovoked and unjust invasion of Ukraine. The Russian attack has taken an immense human toll, forcing almost 7 million refugees to flee Ukraine, creating another 8 million internally displaced persons (IDPs), and destroying critical infrastructure.<sup>1</sup> Beyond this immense devastation, Russia's war is an attack on the rules-based order established after World War II and poses a significant national security challenge to the United States, North Atlantic Treaty Organization (NATO), Group of Seven (G7), and European Union. This threat to freedom has rallied the United States, European Union, and other G7 partners to support Ukraine, providing \$93 billion and counting in security, economic, and humanitarian assistance.<sup>2</sup> As Russia's initial offensive faltered and it became clear that Ukraine would not negotiate an end to the fighting absent a return to prewar borders, conversations over what economic reconstruction would look like began in Kyiv, Washington, and European capitals.

Experience has shown that countries should not wait until the end of a war to begin planning for the postwar period. Once Ukraine wins the war, it must also win the peace. The geostrategic stakes in Ukraine are such that failure could have disastrous consequences not just for Ukraine but also for the broader region. The war has already caused reverberations around the world through global food insecurity, a growing energy crisis, and disruptions of the broader global supply chains. It is in the national security interest of the G7 and European Union for Ukraine to become a modernized economy and remain a secure democracy.

Successful reconstruction will require efforts from a multitude of donor countries, multilateral institutions, and the private sector. The aim of this report is to focus on the critical role of private sector investment in Ukraine's economic reconstruction and how the private sector—both within Ukraine and internationally—can help Ukraine win the peace. The international donor community

will play a critical role in enabling this private sector investment. The audience of this report is not the Ukrainian government, though Kyiv will play a critical role in setting priorities for reconstruction; rather this report is intended to create a framework for the United States, European Union, and other G7 countries to help Ukraine attract critical private sector investment.

As president of the European Commission Ursula von der Leyen said, “Ukraine has everything it takes for a successful reconstruction. It has determination; it has a vibrant civil society; many friends around the globe who want to support [it] . . .; and an impressively resilient economic base.”<sup>3</sup> In October 2022, the CSIS Ukraine Economic Reconstruction Commission released an interim framework on what success looks like.<sup>4</sup> That report laid out a vision that in 10 years’ time Ukraine would be a stable Western-oriented democracy firmly anchored in the Euro-Atlantic world. A robust defense force and membership in the European Union would guarantee Ukraine’s independence, and its economy would be transformed from one dominated by oligarchs, vested interests, and state-owned enterprises (SOEs) to one that is dynamic, innovative, open, inclusive, and entrepreneurial. Ukraine would meet high international standards: Finnish levels of defense spending and engagement, Japanese-level infrastructure, German-style manufacturing, an information and communications technology (ICT) sector modeled on that of the Baltic states, and an agricultural sector with Canadian levels of productivity and efficiency. In short, Ukraine would leave its Soviet legacy behind and join the ranks of other successful Central and Eastern European countries like Poland, the Czech Republic, Slovakia, and Romania. Indeed, there is no reason Ukraine cannot surpass these countries and emerge as a leader in the region and Euro-Atlantic community.

Ukraine’s transformation requires the full and sustained support of its current partners. Above all, Ukraine and its allies need to create an environment within which businesses and companies have the confidence to invest and deliver the modernization the country critically needs. Investments in small and medium-sized enterprises (SMEs) will play a critical role in creating employment opportunities for refugees returning home to participate in the economy. To undertake this political and economic transformation, Ukraine and its partners should do the following:

- 1. Make a multiyear, multibillion-dollar commitment.** In early 2023, the United States should announce a multiyear, multibillion-dollar commitment to fund the economic reconstruction of Ukraine in tandem with a similar commitment by the European Union and other G7 partners (Canada, the United Kingdom, and Japan). As part of its commitment, the European Union should offer a specific timeline and set of conditions for Ukraine’s accession as a full member. This offer must be genuine on the part of the European Union, and the timeline for accession should be no more than 10–15 years. Anything longer is not serious and could weaken Ukrainian resolve to pursue the needed reforms. Alongside pledged financial assistance, this will ensure Ukraine has a clear, time-defined road map outlining what is required to join the European Union and thereby give businesses the confidence to invest for the long term.
- 2. Define roles and responsibilities for the development agencies, international financial institutions (IFIs), and development finance institutions (DFIs) to avoid onerous conditionality requirements or duplication of effort.** All conditionality requirements should be aligned with the reforms the Ukrainian government will need to undertake for accession to the European Union and membership in the Organization for Economic Cooperation and Development (OECD) and to successfully engage in an International Monetary Fund (IMF) program.



**3. Prioritize reforms that will strengthen governance and accountability and create the enabling conditions for greater private investment in Ukraine to support economic transformation.**

These reforms should coincide with the requirements of Ukraine's candidacy as an EU and OECD member and should include strengthening rule of law, increasing transparency, and implementing accountability mechanisms. One critical piece of implementing these reforms is strengthening Ukraine's judicial system to ensure it is free from corruption. On the economic front, this will include breaking the power of oligarchs and vested interests and creating a level playing field for Ukrainian businesses of all sizes free of the undue influence of corrupt actors. Another key aspect is developing a well-functioning, independent court system that draws upon the dispute resolution and bankruptcy laws of Ukraine's Western allies. Additionally, prewar efforts to decentralize the government should continue, and the international community should work with municipal governments on reconstruction efforts.

**4. Mitigate risk for private investors by creating a pool of development finance funding from the U.S. International Development Finance Corporation (DFC), the World Bank's International Finance Corporation (IFC), and European Development Finance Institutions (EDFIs), amounting to \$5 billion per year for five years.**

This commitment would provide \$25 billion in risk-mitigation financing for Ukraine's reconstruction and enable the private sector to mobilize at least four times that amount in private capital (\$100 billion). Ideally, this funding pool would enhance alignment and cofinancing among the DFIs in Ukraine by agreeing to a common term sheet, due diligence principles, and a shared pipeline of deals.

**5. Provide accountability and transparency to include support for local civil society contractor procurement and investor screening, preventing malign influence, and vetting and prequalifying companies and contractors.**

Working closely with the Ukrainian government, the United States, European Union, and other international partners should establish an independent monitoring and evaluation (M&E) system so that funds are tracked properly and it is possible to judge the success or failure of projects.

**6. Prioritize modernization—specifically through digitization—throughout the reconstruction effort to create the transparency and accountability that assure donors and the private sector of progress toward a well-governed economy.**

Digitization should be particularly appealing as the destruction of existing infrastructure provides an opportunity to install digital infrastructure (e.g., sensors, fiber, antennas) without digging twice. Digitization provides a platform for all vertical economic sectors to become more sustainable (greener) and more resilient. It will be equally critical to EU and NATO accession. Ultimately, modernization will help rebuild a Ukrainian society that is more inclusive, more accountable, and better prepared for the future.

# Introduction

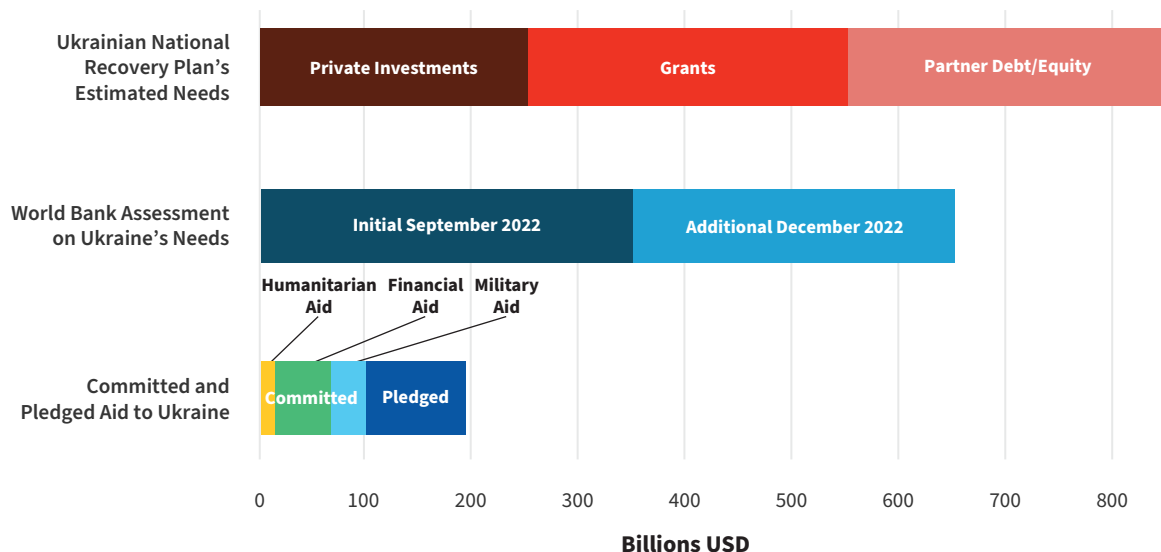
On February 24, 2022, Russia launched an unprovoked invasion of Ukraine following months of saber rattling by Russian president Vladimir Putin. To the surprise of many observers, Ukraine not only held its own but pushed back Russian forces, inflicting significant losses. The United States, Europe, and other allies responded quickly by providing significant assistance in the form of advanced weapons and ammunition as well as economic and humanitarian support to blunt the broader impacts of the war. Ukraine now seems to hold the upper hand militarily. However, Russian attacks have inflicted significant damage on Ukraine's economy, physical infrastructure, and social infrastructure. This destruction has caused over 7 million people to flee Ukraine as refugees and created over 8 million IDPs. The World Bank estimates that \$349 billion in damage was caused between February 24 and June 1, 2022.<sup>5</sup> With the recent dramatic increase in Russian strikes against Ukraine's infrastructure, the World Bank now estimates this figure at \$525 billion to \$630 billion.<sup>6</sup> Given the scale of devastation and the need for Ukraine to rebuild after the war, it is essential to begin planning for Ukraine's reconstruction. Ukraine and its partners must approach economic reconstruction with the same level of urgency, coordination, and resource commitment that drives the provision of military assistance.

To secure a durable peace, Ukraine must transform itself economically after the war. Business as usual can no longer continue: corruption must be tamed, governance and the rule of law improved, and the power of oligarchs and vested interests broken. Central to this economic transformation will be the political process of Ukraine's accession to the European Union. The reforms will also enable transformation of Ukraine's economy from the old model toward one that incubates innovation, supports entrepreneurs, interconnects with the rest of Europe and the world, and delivers inclusive prosperity for citizens. In June 2022, the European Union took the step of formally recognizing Ukraine as a candidate for membership; fulfilling this process after the war is essential.

The EU accession experience of other Central and Eastern European countries shows that most of the benefit from EU membership comes from the reforms undertaken to enter the European Union rather than from eligibility for structural funds or other aspects of EU membership. In fact, countries that entered the European Union before completing their reforms have proven unable to qualify for the structural funds they are entitled to. Coupled with the scale of devastation caused by the Russian invasion, this is an immense undertaking that will require a significant investment of resources by the United States, European Union, other G7 countries, Ukraine, and the private sector. The alternative is a scenario where Ukraine remains disconnected from the West and never realizes its full potential as a free and prosperous country that can defend itself.

In May 2022, CSIS launched a high-level commission to examine the issue of Ukraine’s economic reconstruction. This report is the result of those efforts. The commission brought together a senior-level group of Americans, representatives from other G7 countries, and Ukrainians from the private sector, government, think tanks, and other organizations. The intent was to focus on the role that the private sector and investment can play in supporting economic transformation in Ukraine. This report—and the other work produced by the commission—is not meant to provide a comprehensive reconstruction plan for Ukraine’s physical infrastructure, nor does it present a grand strategic overview of Ukraine’s future. The intent is to present a framework for how Ukraine and its allies can enable economic modernization and transformation of Ukraine. This task is immense, and there is not enough foreign assistance or support from the international financial institutions (IFIs) to achieve it. Private investment will play a critical role in the renewal of the economy. Since there will not be enough foreign assistance to rebuild Ukraine, the G7 and its European partners must strategically use the money available to strengthen Ukraine’s enabling environment for private sector investment.

### Ukraine’s Estimated Reconstruction Needs versus Aid Provided by the International Community



Source: “Ukraine Support Tracker,” Kiel Institute for the World Economy, last updated December 7, 2022, <https://www.ifw-kiel.de/topics/war-against-ukraine/ukraine-support-tracker/>; “Rebuilding Ukraine After Russian Invasion Will Cost \$500-600 Billion, Says World Bank VP,” Radio Free Europe/Radio Liberty, December 4, 2022, <https://www.rferl.org/a/ukraine-war-reconstruction-500-billion/32161282.html>; National Recovery Council, *Ukraine's National Recovery Plan* (Kyiv: National Recovery Council, 2022), [https://uploads-ssl.webflow.com/621f88db25bf24758792dd8/62c166751fc41105380a733\\_NRC%20Ukraine%27s%20Recovery%20Plan%20blueprint\\_ENG.pdf](https://uploads-ssl.webflow.com/621f88db25bf24758792dd8/62c166751fc41105380a733_NRC%20Ukraine%27s%20Recovery%20Plan%20blueprint_ENG.pdf).

The private sector needs to engage in this process sooner rather than later, but the barriers to attracting needed investment are immense. The United States, European Union, other G7 countries, and the IFIs must find ways to use official finance to mitigate risks to incentivize investment in Ukraine. However, much of the hard work of governance, rule of law, and other regulatory reforms will need to be paid for with foreign assistance. Important initial planning has been undertaken, with Ukraine and the international community holding a series of conferences in Lugano (July 2022), Prague (August 2022), and Berlin (October 2022). Ukraine has also released a National Recovery Plan that lays out the country's preliminary effort at not only rebuilding but also transforming.

This report builds on the work of the CSIS Ukraine Economic Reconstruction Commission's interim report, released in October 2022.<sup>7</sup> It provides a more detailed analysis of the barriers that exist in Ukraine—beyond the war—and how to enable an economic transformation during reconstruction. Further, this report provides an overview of the strategic sectors in Ukraine that its partners should prioritize and how Ukraine's partners can coordinate in the reconstruction effort. As with the interim report, this report recognizes that for economic modernization and transformation in Ukraine, there must be a stable resolution to the brutal military invasion launched by Russia—above all one that settles the issue of Ukraine's borders to Kyiv's satisfaction. It is up to the Ukrainian government and its people to define what ultimate military victory looks like: one that respects the UN Charter and the internationally recognized borders of Ukraine.

## Current Conditions in Ukraine

Since the start of the war, Russia has deliberately targeted Ukraine's civilians and physical, social, and economic infrastructure. The World Bank estimates that, as of June 2022, Ukraine had suffered approximately \$97 billion in direct damages plus an additional \$252 billion in indirect damage, for a total of \$349 billion.<sup>8</sup> The World Bank now estimates that the figure has grown to between \$525 billion and \$630 billion.<sup>9</sup> The World Bank also projects that Ukraine's GDP will decline by 35 percent in 2022.<sup>10</sup> Over 7.3 million Ukrainians have fled the country and are refugees living in neighboring countries; a further 8 million are living as IDPs.<sup>11</sup> Social infrastructure—hospitals, schools, and residential housing—has been badly damaged over the course of the war. Rebuilding this infrastructure will need to be a priority in restarting the economy to entice refugees to return home and IDPs to resettle. In 2014, when fighting broke out in the Donbas, Ukraine's economy collapsed virtually overnight, and the government needed to take extraordinary measures to remain afloat and keep services flowing. Since February, however, Ukraine has shown remarkable economic and governmental resilience, with basic services continuing.

That said, the Ukrainian government's fiscal situation has deteriorated significantly since the start of the war. Dragon Capital estimated that due to Russia's recent strikes against Ukraine's infrastructure, Ukraine's GDP would decline by 32 percent.<sup>12</sup> Despite cutting its budget back to the bare minimum, Ukraine expects a monthly budget deficit of \$3 billion in 2023, or \$36 billion for the year. In August 2022 the nation reached an agreement with its creditors to suspend interest payments for 24 months.<sup>13</sup> This included a limited restructuring of its sovereign debt, but until Ukraine resumes payments, it is effectively blocked from accessing international capital markets. On the local capital markets, interest rates have risen to such a level that Ukraine cannot issue additional debt. To cover the fiscal gaps, Ukraine has relied on a large amount of direct budget support supplied by the United States, European Union, and IFIs. As of October 2022, for example, the United States has appropriated \$14.9 billion in budget support, alongside \$12.3 billion from the European Union and an additional

\$8.1 billion from other donors.<sup>14</sup> This money has enabled Ukraine to continue to meet its government obligations, though some have disbursed the money more slowly than others, forcing the government of Ukraine to resort to inflationary Central Bank financing when civil servant salaries must be paid and foreign funding is delayed. The European Union announced at the end of October it would commit in 2023 an additional €18 billion, or approximately €1.5 billion per month.<sup>15</sup> The United States also appropriated \$9.9 billion in additional budget support in the December 2022 passed FY 2023 omnibus.

The scale of destruction and the government's deteriorating fiscal position suggest that Ukraine could win the war militarily but lose economically. In October 2022, Russia began a series of sustained air and missile attacks that have inflicted extensive damage on Ukraine's electrical grid, water supply, and heating sources. This will likely make a looming winter even more difficult for Ukraine's people and strain the government further. In the short term, the United States, European Union, other G7 countries, and IFIs need to provide economic assistance that keeps Ukraine in the fight and enables its government to meet its obligations to its people. To counteract the effects of these new attacks, Ukraine's partners have recently pledged additional resources to support the sustainability of the electrical grid.

## Ukraine's National Recovery Plan

Recognizing the urgency of the moment, the Ukrainian government has moved quickly to formulate and release its reconstruction framework, known as the National Recovery Plan (NRP).<sup>16</sup> Released at the July 2022 Lugano conference, the NRP has three key objectives: economic, social, and environmental resilience; quick solutions for recovery of the economic, social, and environmental sectors; and a modernization and growth plan that will "ensure expedited sustainable economic growth and [the] wellbeing of the people." The NRP includes five guiding principles, listed below.

- 1 Start now, ramp up gradually
- 2 Grow prosperity in an equitable way
- 3 Integrate into the European Union
- 4 Build back better (for the future)
- 5 Enable private investment and entrepreneurship

The NRP is a bold, expansive plan that covers nearly every aspect of Ukraine's economy and infrastructure, and it should be at the center of future reconstruction efforts. The Ukrainian government estimates the plan would cost between \$750 billion and \$1 trillion and ideally would be financed through a mix of grants, soft loans, and private sector investment.<sup>17</sup> The plan is divided into three phases: immediate needs through 2022, medium-term needs (2023–25), and long-term needs for a modernization phase (2026–32). Further, donors at Lugano also endorsed a series of seven principles to guide their involvement in Ukraine's reconstruction. These principles are listed below.

- 1 Partnership
- 2 Reform process
- 3 Transparency, accountability, and rule of law
- 4 Democratic participation
- 5 Multistakeholder engagement

6 Gender equality and inclusion

7 Sustainability

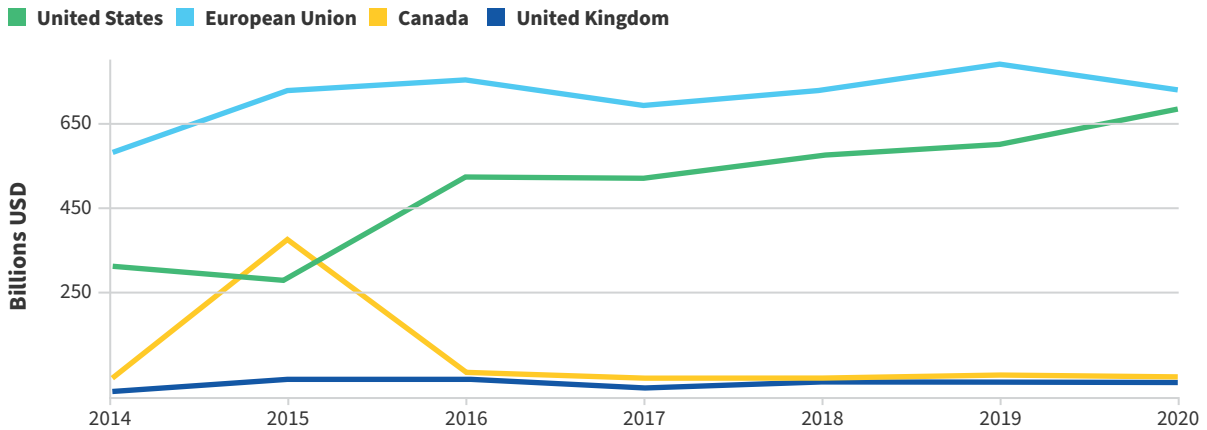
As endorsed by Ukraine and the other participating governments and multilateral institutions at Lugano, these principles will form the basis for any future reconstruction efforts in Ukraine. Indeed, they align well with the steps that Ukraine needs to take to join the European Union as a full member state and transform its economy.

# Barriers to Economic Transformation

Ukraine declared its independence in August 1991 following a referendum in which an overwhelming majority of the population voted to leave the Soviet Union. Support for independence was strong across the country, including in the Donbas and other regions that were majority Russian speaking. However, the Ukrainian government that emerged after the collapse of the Soviet Union was highly centralized, bureaucratic, and corrupt. Like much of the former Soviet space, this system facilitated kleptocratic capture of the economy as a series of oligarchs and vested interests took over various economic sectors. In 1994, in exchange for security guarantees, Ukraine, along with Belarus and Kazakhstan, agreed to give up the nuclear weapons it had inherited from the Soviet Union. During the 1990s, Ukraine also initially received significant foreign assistance from the United States, though unlike other countries in Central and Eastern Europe, it failed to make significant progress with this support.

During this period, Ukraine existed neither fully in the former Soviet space nor fully in the enlarged Euro-Atlantic world that incorporated much of the former Warsaw Pact countries in Central and Eastern Europe. Nevertheless, there emerged a growing body of Ukrainians who saw the future of the country in the European Union and the broader transatlantic community through NATO membership. The Orange Revolution, which began in 2004, ushered in a more Eurocentric government, but initial efforts to move Ukraine toward European democratic standards faltered in 2010 when Viktor Yanukovich won the presidency. Yanukovich pushed Ukraine back toward Moscow and did little to address corruption. Popular opposition to his rule came to a head in the 2014 Maidan revolution, following Yanukovich's decision to reject a trade agreement with the European Union, leading Ukrainians to the street once again to force the president from office. Yanukovich fled to Moscow. Since then, Ukraine has conducted two presidential elections, in 2014 and 2019, leading to two peaceful transfers of power, including President Volodymyr Zelensky's election in 2019.

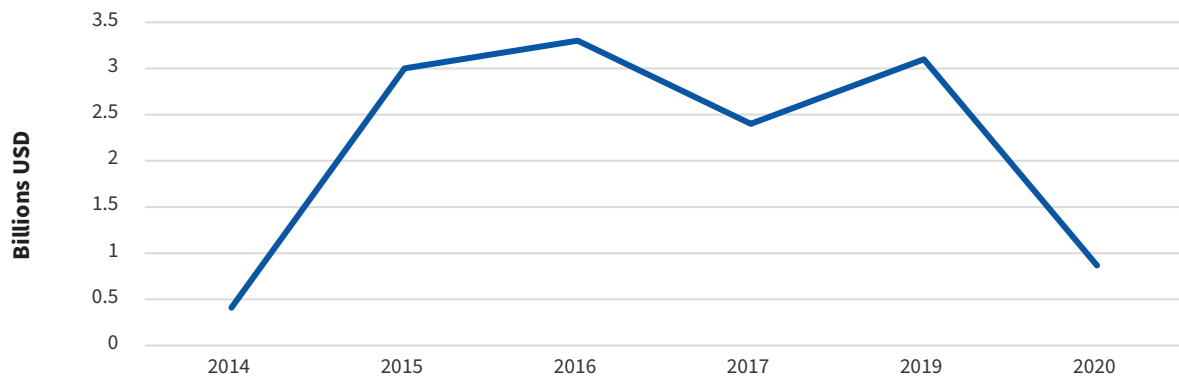
## Economic Assistance to Ukraine



Source: “EU Aid Explorer,” European Commission, [https://euaidexplorer.ec.europa.eu/index\\_en](https://euaidexplorer.ec.europa.eu/index_en); “Foreign Assistance.gov,” U.S. Department of State, <https://foreignassistance.gov/>; “Canada’s Foreign Aid,” Canadian International Development Platform, <http://cidpnsi.ca/canadas-foreign-aid-2012-2/>.

Since 2014, Ukraine has made steady, if uneven, progress on implementing a series of governance, anticorruption, investment climate, and other reforms that began following the Maidan revolution. At times there were steps backward, such as in 2020 when Ukraine’s Constitutional Court issued a series of rulings that called into question the legal underpinnings for the National Anti-Corruption Bureau and National Agency on Corruption Prevention. At the time, these actions caused the International Monetary Fund (IMF), World Bank, and European Union to suspend new concessionary loans. This highlights the importance of continued judicial reform, widely seen as one of the more corrupt institutions within Ukrainian society. Foreign direct investment (FDI) in Ukraine remained low compared to in other markets: in 2020 the country experienced a net outflow of FDI. In addition to the pandemic, investors cited corruption—particularly in the judiciary—as a key impediment to doing business in Ukraine.

## Foreign Direct Investment in Ukraine



Source: “World Investment Report,” UN Conference on Trade and Development, [https://unctad.org/publications-search?f\[0\]=product%3A397](https://unctad.org/publications-search?f[0]=product%3A397).

Despite low levels of FDI, Ukraine had made strides in improving its investment climate. Indeed, in 2020, the World Bank moved Ukraine to 64 in its Ease of Doing Business rankings, up from 140 in

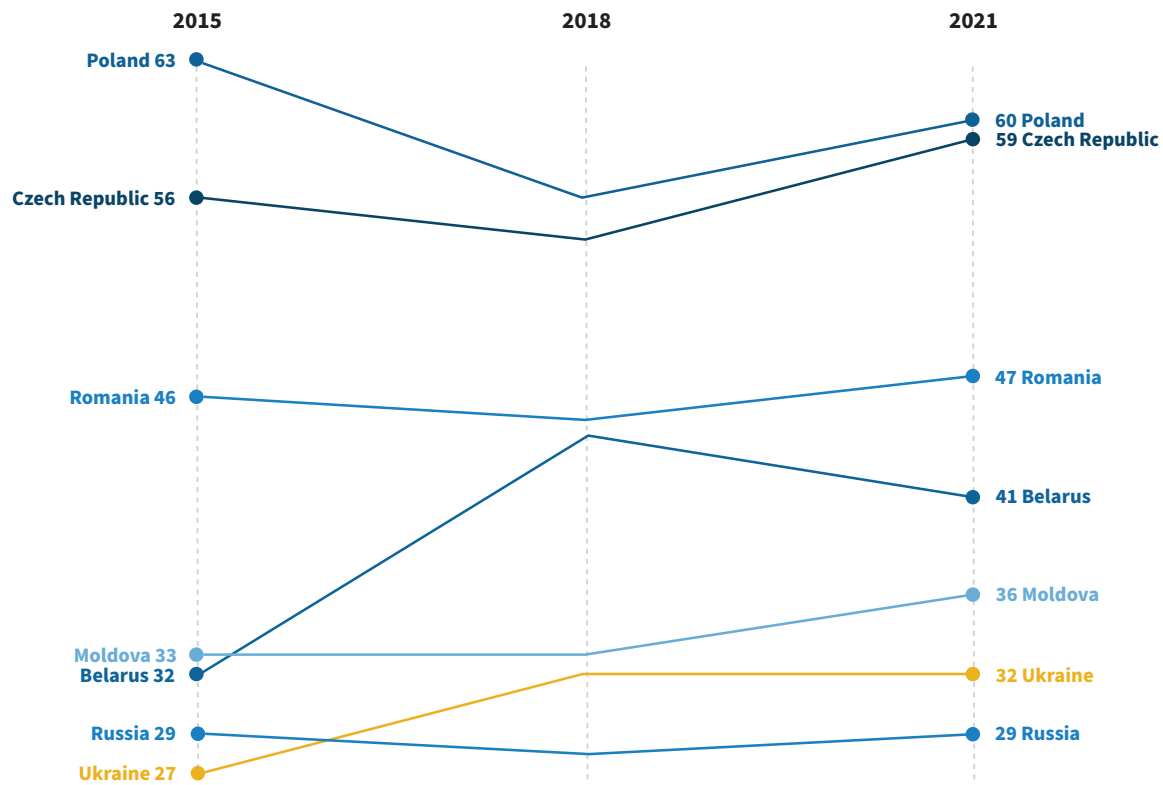


2012.<sup>18</sup> This represents a concerted effort by Ukraine’s government to make it easier for entrepreneurs and others to do business in the country.

## Governance, Corruption, and Accountability

Corruption remains a serious impediment to economic growth, private sector investment, and good governance in Ukraine. Transparency International ranks Ukraine 122 out of 180 countries on its Corruption Perceptions Index.<sup>19</sup> While this is a bad grade, it is in line with the broader region, including Russia (136), Belarus (82), and other former Soviet republics such as Moldova (105).<sup>20</sup> The numbers also obscure that the country has made significant progress in fighting corruption since 2014. Transparency International, for example, recorded mostly consistent improvement in Ukraine’s ranking on its index, though these gains remain small. With support from the IFIs, the United States, Canada, and the European Union, Ukraine implemented several reforms that have helped control corruption, bringing greater accountability and transparency to government.

Corruption Scores for Ukraine and Neighboring Countries (2015–2021)



Source: “Corruption Perceptions Index,” Transparency International, January 2022, <https://www.transparency.org/en/cpi/2021>.

To tackle corruption, Ukraine has created several specialized agencies and government units with support from donors. This includes the National Agency on Corruption Prevention, National Anti-Corruption Bureau, Specialized Anti-Corruption Prosecutor’s Office, and High Anti-Corruption Court. These entities are broadly tasked with preventing, investigating, prosecuting, and hearing cases related to corruption in Ukraine. They operate alongside a robust civil society—including investigative journalists, who provide additional oversight and accountability in Ukrainian society. Finally, Ukraine

also sought to improve its state procurement process—including digitizing much of the process—to reduce corruption in the state sector.

However, Ukraine’s judicial sector remains weak and prone to corruption, creating another major obstacle to private investment. Efforts to reform the judiciary have been uneven. Ukraine’s Verkhovna Rada (parliament) passed a law in 2016 that sought to professionalize and cement the independence of the judiciary, but to date, most outside observers view implementation of this law as largely uneven. Freedom House, for example, has judged that Ukraine has largely stagnated on its efforts to reform its judicial framework. Efforts continue, however, to legislate and implement additional reforms, and Ukraine has seen some progress in making civil justice more accessible and affordable, including through provision of free legal aid.

Ukraine inherited a highly centralized governing structure from the Soviet Union. Since 2014, efforts by the Ukrainian government, supported by international donors, have sought to shift power and resources toward local and municipal-level governments. Under decentralization, Ukraine created combined *hromadas* by merging smaller, municipal-level administrative units into larger units. It also transferred resources and power to local authorities, strengthening local self-government and provision of public services at a subnational level. In a recent review of Ukraine’s governance reforms since 2014, the Economist Intelligence Unit (EIU) rated these efforts a success. With the implementation of martial law in response to Russia’s invasion, however, increased centralization by the Ukrainian government has caused some reversal of these efforts.

In addition to reforms focused on administrative units, Ukraine has pursued a policy of fiscal decentralization to ensure local governments have access to the funding they need to pay for services, including education, health, and emergency services—all of which are essential to attract and sustain business investment. The EIU notes that under fiscal decentralization “local budgets were assigned part of state taxes with the aim of incentivising budget equalisation, expanding the base of local budget revenues, improving budget policy and strengthening the budgetary autonomy of local self-governments.”<sup>21</sup> In 2015–19, the share of local budget resources in the overall budget of Ukraine increased steadily to just over 23 percent. In 2021, the International Republican Institute (IRI) conducted a survey in Ukraine that revealed widespread satisfaction and confidence in local self-government to deliver services.<sup>22</sup>

Ukraine has also pursued reform of its civil service to bring it in line with EU standards. In addition to adopting a reform law in 2016, the country has focused on improving the overall efficiency and effectiveness of the civil service. This included new protections for civil servants from political interference or unfair dismissal, rules around merit-based recruitment and promotion, and an increase in salaries to make positions more competitive with those in the private sector. Issues remain with Ukraine’s civil service, including a standard for implementation of policies and regulations and a clearly defined salary structure that would prevent imbalances between different civil servants.

Continuing to make progress in these areas will be central to Ukraine successfully joining the European Union and undergoing a broader economic transformation. EU accession will take time, but it will help guarantee Ukraine’s future peace. In accepting Ukraine’s candidacy, the European Union specifically listed the following seven areas that the nation would need to address:

- 1 Implement a selection process for constitutional judges that aligns with the Venice Commission;
- 2 Complete the vetting of judges for the High Council of Justice and establish a qualification commission for judges;
- 3 Strengthen anti-corruption efforts through continued support for investigation and appointing senior leadership at Ukraine’s anti-corruption agencies;
- 4 Align Ukrainian legislation with international anti-money laundering standards;
- 5 Implement the anti-oligarch law to limit the excessive influence of oligarchs in economic, political, and public life;
- 6 Align Ukraine’s media law with EU standards to ensure a free and independent media sector; and
- 7 Reform the existing legal framework for national minorities.<sup>23</sup>

## Inefficient Economic Sectors

Ukraine’s economy holds great promise, but it remains hobbled by many inefficient SOEs and sectors dominated by oligarchs and vested interests. In 2021 there were 3,358 registered SOEs, with the government actively operating 1,600.<sup>24</sup> The remainder were no longer functioning as businesses. The U.S. State Department sums up the sector as follows: “SOEs are active in areas such as energy, machine-building, and infrastructure. Some of the companies have significant environmental problems, legacy legal issues, or oligarchs as minority owners.”<sup>25</sup> In addition to these problems, SOEs remain heavily subsidized by the state, and the ones that turn a profit have been largely privatized. What remains on the government’s balance sheet are the most inefficient companies, including ones in coal mining, rail transportation, gas, and communal heating. The Ukrainian government notes that “40% of these entities are deadhead and only exist on paper. Every third enterprise is unprofitable being a potential source of fiscal risks. The lack of adequate control mechanisms and low transparency make state enterprise activities a source of corruption risks causing financial loss to the state.”<sup>26</sup>

In March 2021, the Ukrainian parliament passed a law that canceled an earlier prohibition on the privatization of SOEs. This followed an earlier law in 2019 that reduced the number of SOEs deemed “strategic” and, thus, exempt from sale. In 2020 Ukraine began a process that would allow partial privatization of SOEs, including Naftogaz, MainGasPipelines of Ukraine, UkrTransGaz, and other companies involved in the energy sector. Parliament clarified the law further in 2021 by establishing a list of 659 exempt SOEs, including companies in the energy, defense, and aerospace sectors; the state railway; the postal service; and other entities determined to have “social value.”<sup>27</sup> Continuing these efforts in line with OECD principles during reconstruction—and further limiting the influence and power of oligarchs—will be important to establishing a level playing field for foreign and Ukrainian investors.

In addition, Ukraine continues to suffer from economic sectors dominated by oligarchs and vested interests, many of whom made their fortunes through black-market deals in the early days of independence. By one estimate, the top 100 wealthiest people in Ukraine controlled nearly 25 percent of Ukraine’s prewar economy.<sup>28</sup> Many oligarchs control sprawling, diversified holding companies that include energy companies, mining, metallurgy, and media. In the past, this economic dominance enabled oligarchs to exert outsized political influence through significant funding to some political parties. European auditors in 2021 noted that such influence by oligarchs and other privileged interests was the main barrier to economic growth in Ukraine.<sup>29</sup> Before the war, Ukrainian civil society remained concerned that vested interests continued to influence the government and prevent needed reforms to SOEs, the judiciary, and other accountability and transparency issues.

In November 2021, President Zelensky signed Law No. 1780-IX, On Prevention of Threats to National Security Related to Excessive Influence of Persons Who Have Significant Economic or Political Weight in Public Life (Oligarchs).<sup>30</sup> The purpose of the law is to limit the significant influence Ukrainian oligarchs have in the media and politics by separating major businesses from political activities. The document provides a legal definition of who qualifies as an oligarch, a requirement for transparency between politicians, oligarchs, and their representatives, and the creation of an oligarch registry list.<sup>31</sup> The overall goal of the law is to advance Ukraine's integration toward Europe and the Euro-Atlantic world.

Despite the ongoing war, the Ukrainian government has moved forward with deoligarchization. For example, in July 2022, Ukraine National Security and Defense Council secretary Oleksiy Danilov stated the government had begun creating an oligarchs registry that would publicly name the 86 Ukrainian oligarchs.<sup>32</sup> Then, in October, the council announced a bid for creating the registry's software. In addition, the Zelensky administration is reportedly stripping some oligarchs of their citizenship, including Ihor Kolomoisky, Hennadiy Korban, and Vadim Rabinovich.<sup>33</sup>

## Infrastructure and Trade Linkages

Russia's war has done enormous damage to Ukraine's physical infrastructure. Rebuilding—indeed modernizing—will be central to reconstruction and economic transformation in Ukraine. Houses, schools, and hospitals must be built or rebuilt to entice refugees to return home and IDPs to resettle. Railroads, energy infrastructure, highways, airports, and seaports must be repaired and upgraded to connect Ukrainian SMEs to global supply chains and new markets. The scale of destruction is appalling: 40 percent of housing, 30 percent of power stations, and 33 percent of infrastructure have been damaged, including 305 bridges, 19 airports, 57 railway stations, and 24,000 kilometers of road.<sup>34</sup> In its needs assessment, the World Bank estimates rebuilding the housing sector will cost \$69 billion and transportation, \$74 billion, for example.<sup>35</sup> These figures will only likely grow the longer the war lasts.



Source: CSIS.

The prewar Ukrainian economy depended on access to ports on the Black Sea. Over half of Ukraine's exports and 90 percent of grain left 13 critical ports on the Black Sea and Sea of Azov.<sup>36</sup> As of November 2022, Russia occupied three ports: Skadovsk, Mariupol, and Berdyansk. The other main ports, including Odesa and Kherson, are in Ukrainian hands but subject to a blockade because of mining and naval control of the Black Sea. As a result, Ukraine is losing the equivalent of \$170 million per day in export earnings.<sup>37</sup> A recent CSIS analysis noted, "There are no easy alternatives to the blocked maritime routes. There are options, none of which can replace what was exported by sea because of the volume and cost."<sup>38</sup> That said, Ukraine has an extensive network of railroads that could be used to provide alternative trade corridors via Poland to the northwest or Romania to the southwest. A critical barrier to fully utilizing these routes is the difference in rail gauges. The European Union does not use the same rail gauge as Ukraine, a legacy of Ukraine's earlier incorporation in the Russian Empire and Soviet Union. Some border crossing points on the Polish and Romanian border include facilities that allow trains to switch gauges, but this is a time-consuming process that increases transportation costs. The NRP includes proposed investments (estimated to cost \$2–\$3 billion) in improving logistical links with Europe—"de-bottlenecking"—through new railroads, expanded highways, and improvements to Danube River ports.<sup>39</sup> To unlock the potential of integration into European and global supply chains, upgrades to Ukraine's border infrastructure must be coupled with trade facilitation and border management reforms that enable goods to flow freely with minimal cross-border delays.

## Access to Finance

Access to finance will be important to sustained economic growth during reconstruction. Ukraine's capital and commodities markets are relatively underdeveloped with limited liquidity and few investment options for investors; government bonds represent 95 percent of trades.<sup>40</sup> Ukraine's financial sector mainly comprises commercial banks (88 percent of total financial sector assets), followed by financial companies (9 percent) and insurance companies (3 percent).<sup>41</sup>

Since the start of the war, Ukraine's banking sector has remained resilient due to its well-capitalized liquidity, preparation contingency plans, and thought-out operations to keep depositors' trust and operations intact.<sup>42</sup> By mid-June, 85 percent of the banks' branches had resumed operations.<sup>43</sup> Credit risk is the greatest threat to the banking sector as IFIs recognize their expected losses, and the sector is now operating at a loss.<sup>44</sup> It is likely Ukraine's banks will lose 20 percent or more of their loan portfolio due to the war, thus damaging their capital adequacy.<sup>45</sup> In one assessment by the National Bank of Ukraine, the top 20 Ukrainian banks could lose as much as 25 percent of their loan portfolio while keeping their core capital positive.<sup>46</sup> Risk appetite in the banking sector has dramatically decreased, and the sector has begun sharing credit risks with the government to provide loans. Ensuring the local financial sector can participate in reconstruction will be critical to business investment, and the IFIs should explore how they can provide support to these entities.

For Ukrainian banks to gain support from IFIs and address general accountability concerns across the country, Ukraine should work to privatize more of its banking system. Four of the top five largest banks operating in 2020 were state owned: the Ukreximbank (The State Export-Import Bank of Ukraine), Oschadbank (State Savings Bank of Ukraine), PrivatBank (Commercial Bank), UkrGasbank (Joint-Stock Bank), and Rozrakhunkovy Tsentri (Settlement Center).<sup>47</sup> In total, these banks represented 54 percent of all assets in Ukraine's banking system.<sup>48</sup> Prior to the invasion, the Ukrainian government

had set a goal to reduce these banks' share of the sector by 25 percent by 2025.<sup>49</sup> However, in many cases, these efforts have been slow, failing to meet objectives even before the war started. Although it is understandable that the war and corresponding economic crisis have made privatization of banks difficult, Ukraine must show it is serious about making reforms.

Ukrainian banks have the potential to play a significant role in supporting SMEs, which will be an essential part of reconstruction efforts to stimulate inclusive growth and address Ukraine's 35 percent unemployment rate.<sup>50</sup> Increased employment opportunities will also incentivize and enable refugees to return home. Ukrainian banks have a history of partnering with MDBs to support SMEs. For example, in 2017, the state-owned bank, Ukrgasbank, partnered with the EIB Group (European Investment Bank and European Investment Fund) under the EU4Business Initiative to provide €50 million of lending to SMEs in Ukraine.<sup>51</sup> The goal of this agreement was to help Ukrainian SMEs access finance through a 70 percent guarantee for each loan given by Ukrgasbank and to stimulate job and economic growth.<sup>52</sup> Ukrgasbank is also providing green financing to Ukrainian SMEs by helping them see the potential energy and cost savings they can have by investing in climate-related projects.<sup>53</sup> Since 2016, this state-owned bank has provided nearly \$1 billion in green loans to over 500 mid- to large-scale climate projects.<sup>54</sup> Bank financing for SMEs should be bundled with digital tools to give SMEs access to local and global e-commerce markets, as well as increase their transparency.

# “Brains, Hands, and Grains”

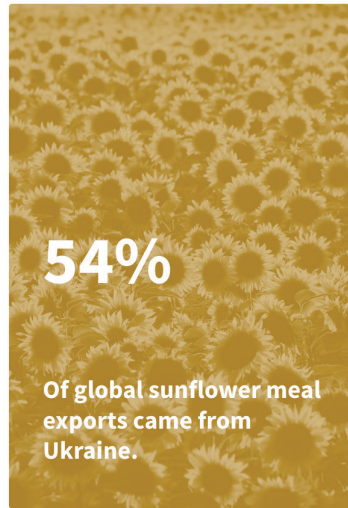
## *Ukraine’s Economy of the Future*

Lenka Koszarny, founding partner and chief executive officer of Horizon Capital, described Ukraine’s future economy as “brains, hands and grains,” meaning it will be structured around advanced manufacturing, digital and ICT, and agriculture.<sup>55</sup> These comparative advantages build on Ukraine’s already impressive economic foundation and, if done properly, could unlock significant equitable economic growth for years to come. Emphasizing these three economic areas would also offer clear opportunities to successfully integrate Ukraine into the EU economy as well as with trading partners such as the United States. FDI into productive sectors by Germany, France, the Netherlands, and other Western European countries has been critical to the economic success of Poland, the Czech Republic, the Baltic states, and other former Warsaw Pact countries. Rather than look to Russia, German manufacturers should look to Ukraine in the postwar environment. Ukraine is already a leading player in the technology and digital sector, and it should be seen as a source of innovation. Western-based technology and digital service companies—several of which already had a prewar presence in Ukraine—should double down on Ukraine’s well-educated workforce and create additional outposts in the country.

### **Agriculture**

Ukraine has long been viewed as a breadbasket that produces significant agricultural products for export, including wheat, sunflower oil, canola oil, barley, and maize. Prior to the war, agricultural exports from Ukraine totaled \$27.8 billion, or approximately 41 percent of overall exports.<sup>56</sup> In 2021, Ukraine exported 86 million tons of grain, but grain exports are down 30 percent so far in the 2022–2023 season.<sup>57</sup> Grain from Ukraine was especially important in helping food-deficient regions, such as Egypt, North Africa, and the Horn of Africa, meet their annual needs. Export of Ukraine’s agricultural products depends heavily on access to the country’s seaports on the Black Sea. Russia has targeted

## Ukraine's Agricultural Output in 2021



Source: Foreign Agricultural Service, "Ukraine Agricultural Production and Trade," U.S. Department of Agriculture, April 2022, <https://www.fas.usda.gov/sites/default/files/2022-04/Ukraine-Factsheet-April2022.pdf>

Photos: Viktor Bystrov via Unsplash; Roma Kaiuk via Unsplash; Genya Savilov/AFP via Getty Images; Alexey Furman/Getty Images

land are limited to 100 hectares, and until January 2024, only individuals may make purchases. After that, legally registered Ukrainian companies may purchase up to 10,000 hectares of land, but sales to foreigners remain banned. Even with these restrictions, the World Bank estimates that reforms could attract up to \$5 billion in new investments to the agriculture sector.<sup>60</sup>

## ICT/Digital Sectors

The digital sector in Ukraine will drive modernization, and reconstruction presents a significant opportunity for Ukraine to build a more modern society. ICT transcends sectors, including banking, energy, and infrastructure, making it a critical part of a well-functioning, educated, and democratic

these ports—including capturing them—since the start of the war, and this has created enormous strain for global food security. Improving and diversifying Ukraine's transportation linkages after the war will be important, as Ukraine's ability to export large volumes of grain through the Black Sea is central to making its agriculture sector attractive to investors.

Land reform is one area where Ukraine and its partners will need to focus attention to raise the efficiency of the agricultural sector. Approximately 27 percent of Ukraine's agricultural land lacks clear title to ownership.<sup>58</sup> Prior to the war, efforts were underway to establish clear ownership of this land, but with the start of the war, this effort has been suspended.<sup>59</sup> In March 2020, Ukraine adopted a law that lifted a moratorium on the sale of agricultural land and created new regulations for this market. State and municipality-owned agricultural land is not eligible for sale under the new law, limiting the agricultural land market to the 28 million hectares of land originally privatized in the early 1990s. Under the law, purchases of



society. Digitization can enable improvements in safety, efficiency, and productivity in all industrial sectors, from agriculture to mining to shipping and logistics. Fully digitized government resources can help citizens recover resources lost during the war and maintain digital records. Digitization will also be necessary to create the accountability and transparency that ensure a successful rebuilding process.

Prior to the war, the digital sector was one of Ukraine's brightest spots, contributing up to 4 percent of GDP. In 2022, Ukraine's IT workforce was ranked number four in the world.<sup>61</sup> This success is in large part due to the launch of the Ministry of Digital Transformation in 2019. The ministry oversaw the creation of the Diia app, which automates government services such as driver's licenses, Covid-19 vaccination records, and passports. It was successfully adapted during the war to support refugees and IDPs in updating their official residences. Citizens can also upload location-tagged images of Russian military activity, which helps the Ukrainian government track damages. To support these efforts, the Ukrainian government has sought to grow the digital sector of the economy and increase the overall digital literacy of the population. The country saw the value of its digital exports increase from less than \$1 billion annually in 2011 to over \$6.8 billion in 2021.<sup>62</sup> IT also increased from 1.6 percent of total exports in 2013 to just over 10 percent in 2021.<sup>63</sup> This growth was largely facilitated by improvements in the regulatory and tax structure that provided incentives to IT companies—foreign and domestic—to invest in Ukraine. The number of ICT workers in Ukraine was 285,000 in 2021, twice what it was five years before.<sup>64</sup> This impressive workforce has attracted several Western-based tech companies, including Google, which has opened offices in Kyiv and other Ukrainian cities.

Growth in the digital sector prior to the war set a strong foundation for reconstruction efforts, which comprise five critical steps: implementing regulatory reforms, reconstructing physical infrastructure, developing human capital, supporting Ukrainian technology companies, and updating technology.

- 1. Implementing regulatory reforms.** Regulatory reforms are required for the digital sector to realize its full potential. The Ukrainian government has already taken steps to make legal improvements to allow for the use of state-of-the-art technology and increase the country's resilience. For example, in March, President Zelensky signed a law on cloud services, allowing the Ukrainian government to benefit from cloud-based IT infrastructure and services.<sup>65</sup> One of the early lessons of the war was the clear limit of data localization requirements, which this law addresses. The law allows government agencies to use cloud services, which reduces corruption risks, cuts costs, and introduces the "Cloud First" principle for transferring government services to the cloud. Such regulatory reforms will ensure the free flow of data to enable discourse and set clear, reliable legal boundaries for companies.
- 2. Reconstructing physical infrastructure.** Russia has seized or destroyed 4,000 telecommunication stations, 60,000 kilometers of internet lines, and 18 television and radio broadcasting antennas.<sup>66</sup> Internet access has fallen by 16 percent, though Ukraine has already rebuilt 1,232 telecommunications stations. High-speed broadband connectivity will be essential to the rebuilding effort. The rebuilding of Ukraine's infrastructure presents an opportunity to weave connectivity into the fabric of Ukrainian society. Infrastructure can be modernized by adding sensors, backing those sensors with cloud computing, and deploying artificial intelligence (AI) to act on sensor feedback, perhaps leapfrogging other countries into the Fourth Industrial Revolution. This internet connectivity will be essential for both SME and large business resiliency, enabling access to necessary online platforms.

- 3. Developing human capital.** Digital training and education will be a key part of developing human capital for the entire Ukrainian population, especially older workers and the vulnerable. This training, already taking place during the war, will be a critical piece of addressing the high rates of unemployment currently facing Ukrainians.
- 4. Supporting Ukrainian technology companies.** There are four main ways to support Ukrainian technology companies: First, they need support getting online. Second, they need exposure beyond their immediate communities and countries. Third, technology companies must be brought to export markets to maximize growth. Many of these support tools already exist, including Digital Garage from Google, which helps companies obtain the basic skills to get online, and Market Finder, which helps companies find ways to export their products.<sup>67</sup> Finally, companies need a more vibrant financial sector—one that covers the spectrum of financing, from angel investors to venture capital—to support the continued growth of the Ukrainian tech sector.
- 5. Ensuring the security of Ukraine’s digital infrastructure.** Ukraine must build its communications infrastructure with an eye toward EU and NATO accession by using the Prague Proposals of 2019 and 2021 and the EU Toolbox for 5G Security as foundations.<sup>68</sup> Choosing trusted equipment vendors enables information sharing with allies and facilitates alliances with the European Union and the Five Eyes countries, as well as easing commerce between those nations. Additionally, legacy software and unpatched vulnerabilities are the greatest cybersecurity risks today—not just in Ukraine but around the world. While the government has developed very impressive e-services solutions (like the Diia app), cybersecurity remains an issue—both in the interim as well as in the long term. Supporting the Ukrainian government and entities to upgrade their system to state-of-the-art cloud-based solutions is important for the country’s immediate defense and long-term reconstruction. IFIs should also support “infrotech,” integrating digital tools into infrastructure projects such as mining, agriculture, energy, transportation, and manufacturing.

## Manufacturing

Another legacy of the Soviet era is that Ukraine has a strong and diverse manufacturing base, especially with aerospace and defense, steel, food processing, and metallurgy. Manufacturing accounted for 10 percent of Ukraine’s GDP in 2021.<sup>69</sup> There has been some foreign investment in the sector with Porsche, IKEA, Heinz, Nestlé, Bentley, and Unilever present in Ukraine. The country could prove a major hub for advanced integration into global supply chains in manufactured goods due to its proximity to Europe and other export markets (the Middle East), well-educated work force, and competitive pricing. However, SOEs with limited connections to Eastern and Central European supply chains continue to plague the sector. Fully realizing its manufacturing potential will require continued efforts at privatization—well underway during the prewar period and supported by the Rada and government—as well as limiting the influence of oligarchs and ensuring trade infrastructure and processes can support the sector. In addition, unlike in the ICT and digital sectors, the Ukrainian government and industry have not prioritized a clear vision for the manufacturing sector. Some progress was made before the war to provide investment in manufacturing, but far more will need to be done to turn it into a world-class sector that can attract foreign investment and partnerships.

## Energy

Ukraine's diversified energy sector, consisting of nuclear, coal, gas, renewable, and hydropower stations, holds great promise. By one estimate, Ukraine could export 2.5 gigawatts of electricity on an annual basis.<sup>70</sup> Nuclear power, supplied by four power stations, including Europe's largest nuclear plant in Zaporizhzhia, provided over 50 percent of Ukraine's energy needs.<sup>71</sup> However, the war shut down Zaporizhzhia, which was responsible for 23 percent of Ukraine's electricity and 10.7 percent of the country's total power-generating capabilities.<sup>72</sup> Coal-and gas-powered plants provide approximately 29 percent of power; hydropower, renewables, and other sources cover the remaining share. Supplies of coal have proved problematic since 2014 when Russian-backed proxies in the Donbas seized control of most of Ukraine's coal mines. Since then, Ukraine has imported coal to meet its energy and industrial needs. Russia's constant bombardment of Ukraine's energy sector has forced the nation to reduce energy consumption by 35 percent.<sup>73</sup>

Ukraine relies on natural gas to provide home heating, heating for other buildings, industrial production, and some power generation. The country's pipeline network provides key transit of Russian natural gas to Europe, though Ukraine itself has not purchased natural gas directly from Russia since 2015. In 2021 Ukraine required 27.3 billion cubic meters of gas.<sup>74</sup> To meet its needs, it produced 19.8 billion cubic meters, imported 2.6 billion, and took 4.9 billion from storage. It is estimated that during winter months, Ukraine uses 140–150 million cubic meters of gas per day.<sup>75</sup>

Importantly, Ukraine is no longer connected to the Unified Power System of Russia but is now connected to the synchronous grid of continental Europe. The Ukrainian government initiated this shift in 2017 by seeking to run in a self-sufficient manner, demonstrating satisfactory control over its own power frequency. This required Ukraine to disconnect from Russia's power system, so USAID funded a project to test the feasibility of disconnecting Ukraine from Russia's grid and connecting it to the European grid. The test occurred on February 23, 2022, one day before Russia invaded Ukraine. Since then, Ukraine has remained connected to the European grid.

Renewable energy—in the form of wind and solar—supplies approximately 5 percent of Ukraine's power needs.<sup>76</sup> Over the 12 years prior to the war, Ukraine received approximately \$12 billion in investment in the renewable sector.<sup>77</sup> As a result, Ukraine could produce up to 60 gigawatts of solar power, 320 gigawatts of onshore wind power, and 251 gigawatts of offshore wind.<sup>78</sup> Of note, the best areas for renewable production are largely under Russian occupation in the southern part of Ukraine. To achieve its potential, Ukraine would need to liberate these areas. If that happens, investment in renewable power will be important to improve Ukraine's environmental sustainability and bring it in line with EU goals around a green future.<sup>79</sup>

# Roles and Responsibilities

In keeping with the recommendation of the German Marshall Fund, the United States should appoint a high-level special envoy to direct reconstruction efforts through a joint G7/EU secretariat based in Warsaw. To be successful, however, the reconstruction effort would require a genuine partnership between Ukraine, the United States, other G7 countries, and the European Union, especially given the centrality of EU accession to Ukraine's future. Ukraine's NRP should be at the center of these efforts, and Ukraine must lead in prioritizing reconstruction projects under a joint plan. The scale of reconstruction requires a clear commitment from Ukraine's partners for at least a decade. It also requires IFIs, the World Bank, G7 development agencies, and relevant DFIs to work closely to reduce overlap and inefficiency. The authors of this paper are concerned not with designing a perfect organizational structure for donors but instead with suggesting appropriate roles and responsibilities for each institutional grouping supporting Ukraine's reconstruction.

In September 2022, the German Marshall Fund of the United States published a report that called for a G7 coordinating mechanism led by a senior-level U.S. politician with global standing. Such a mechanism would be staffed by secondees from the United States, European Union, and Ukrainian governments and would coordinate the process.<sup>80</sup> This structure is promising, and if staffed appropriately and led by the right individual, it would likely succeed. Ideally, such an entity should be based as close to Ukraine as possible, located in a city such as Warsaw to enable easy access. Over time, as conditions improve, the secretariat could move to Kyiv. Basing the reconstruction efforts in Central Europe would send a strong message that the United States, G7, and European Union are fully invested in the region.

## International Financial Institutions

Led by the IMF, IFIs will play an important role in supporting Ukraine's macroeconomic stability during the rebuilding period. To date, Ukraine has received significant direct budget support in the form of grants from the United States, European Union, IMF, and World Bank. This support has enabled Ukraine to pay civil servants, maintain its health systems, pay old-age pensions, and keep other basic government services functioning. It is highly likely that in the short term, Ukraine will continue to need this support to meet its government commitments in the immediate postwar environment. It will take time for Ukraine to get its fiscal situation in order, and a quick reduction in budget support could create political and economic instability that Russia could easily exploit.

- **IMF.** The IMF will have an important role in providing macroeconomic stability for Ukraine during the reconstruction period. Given Ukraine's current fiscal position, the IMF will likely need to help restructure its existing debt and extend continued financial support until Ukraine can get its government finances in order.
- **World Bank.** The World Bank should bring the full force of its resources to the reconstruction effort in Ukraine, including the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), and the Multilateral Investment Guarantee Agency (MIGA). IBRD could offer a significant source of financing for infrastructure rebuilding, especially as the Ukrainian government will take time raising revenue through taxes and debt issuance once the war ends. IFC and MIGA will be important conduits to mobilize private investment in Ukraine (discussed further in the section on DFIs).
- **European Bank for Reconstruction and Development (EBRD).** The EBRD is a unique MDB in that it straddles the role other MDBs play in providing financing for infrastructure and policy reform but also has a clear mission to support private sector development and can operate like DFIs. The EBRD should play a role in coordinating investment and engagement on private sector development in the reconstruction of Ukraine.

## G7 Development Agencies

Development agencies will provide the funding and technical expertise needed to complete the vast array of governance, rule of law, anticorruption, and other enabling environment issues. Ideally, all G7 development agencies would structure their assistance and programming around conditions tied to EU accession. Conditionality will be important to ensure that Ukraine delivers necessary reforms. But conditionality must be applied smartly and not simply for the sake of imposing conditions. Former Ukrainian finance minister Natalie Jaresko noted that following the 2014 Maidan revolution, she was managing more than 400 individual conditions imposed by a multitude of bilateral and multilateral institutions. Such an approach is untenable; the G7 and European allies should instead agree to a set of conditions structured around governance, rule of law, anticorruption, trade liberalization, and bringing laws, rules, and regulations in line with EU standards.

All G7 development agencies will likely be present in postwar Ukraine alongside the EU development institution and, potentially, other European development agencies, such as Sweden, Finland, and Norway. Establishing coordination early can help identify agencies that will lead the work in certain sectors and help establish working relationships with the relevant Ukrainian government entities

and other actors. Alongside funding from IFIs, aid agencies will provide the bulk of the funds Ukraine needs to enact reforms needed to join the European Union and create the conditions for private sector investment. In the short-to-medium term, foreign aid in the form of grants will fund these various projects. Over time, as Ukraine gets its fiscal house in order, it can take on more of the burden of paying for its own reconstruction.

## Development Finance Institutions

DFIs, including certain private sector-focused MDBs (e.g., EBRD and IFC), will play a central role in enabling private sector investment in Ukraine. This will require DFIs to take more risk and use innovative financial products such as guarantees and political risk insurance. In addition to EBRD and IFC, the DFIs that can invest in Ukraine include the DFC, the Japanese Bank for International Cooperation (JBIC), and the association of EDFIs.<sup>81</sup> Some of these institutions had significant prewar portfolios in Ukraine and bring deep experience in investing in the country. Private investors will likely eschew commitments in Ukraine, even when the fighting ends, given lingering uncertainty and the potential for political and economic instability. DFIs will need to step in and offer incentives.

Ideally, the DFC, IFC, JBIC, EBRD, and EDFI members with the ability to invest in Ukraine should create a common platform prior to the end of the war to enhance their ability to mobilize private capital. This could involve a common coordinating mechanism with a standard term sheet, agreed-upon due diligence terms, and a shared pipeline that would enhance the ability of DFIs and the EBRD to cofinance projects. Coordination, not competition, should be the focus of DFIs in supporting reconstruction in Ukraine. As with the development agencies, DFIs with specific sector investment experience or financial instrument experience should provide leadership to other DFIs that might have available capital but less experience.

The United States, as part of its support to Ukraine, provided a grant of \$500 million to the EBRD to help it match financing on its balance sheet for Ukrainian-based companies.<sup>82</sup> The EBRD has also received similar funding in the form of grants or guarantees from the European Union, G7, and others, totaling roughly \$900 million, for a total pool of roughly \$1.4 billion, to be used for risk sharing for investments in Ukraine. Donor governments should take a similar approach to other DFIs and provide additional grants to facilitate an increase in commitments and more risk taking, where appropriate. This will allow DFIs to increase the use of on-lending facilities to maintain Ukrainian firms in the short term; develop new guarantees and political risk insurance to enable greater investments; and create a coordinated funding mechanism to enable common term sheets, due diligence, and a deal pipeline. Such a commitment should be \$5 billion per year for five years, or \$25 billion in total. Ideally, the commitment would also mobilize at least four times this amount in private investment. Separate from grant increases, in the short-to-medium term, DFIs and MDBs will likely need a special capital increase from shareholders to support investments in Ukraine. Now is the time for donors to provide additional capital to the actors most heavily involved in Ukraine. These increases would allow such actors to invest and triple the impact of these monies.

# Recommendations

The task of rebuilding Ukraine is immense. Without significant long-term commitment from the private sector, reconstruction will be impossible. Securing this private commitment will require the full support of Ukraine's partners and require Ukraine to commit to a difficult political and economic transformation after the war. Modernization should be at the center of all reconstruction efforts, including rebuilding social infrastructure and attracting the private sector investment needed to build an innovation-led economy. Ukraine's strong digital sector will provide a foundation for building back Ukraine's entire economy better. The following steps should be taken in the short term:

- 1. Make a multiyear, multibillion-dollar commitment.** In the coming weeks, the United States should announce a multiyear, multibillion-dollar commitment to fund the economic reconstruction of Ukraine in tandem with a similar commitment by the European Union and other G7 partners (Canada, the United Kingdom, and Japan).
  - The United States should sign a memorandum of understanding (MOU) structured similarly to existing assistance MOUs with Jordan and Israel. An appropriate amount would be \$5 billion per year for five years; all assistance should be conditioned on certain reforms, with the United States reserving the right to withhold assistance in the case of poor performance.
  - As part of its commitment, the European Union should include a clear timeline of 10–15 years for Ukraine's accession as a full member. Such a timeline should be clearly defined, otherwise the promise of EU membership may lose its potential as a driver of reform. This should include a set of conditions for assistance that are instituted smartly and align with the reforms and other efforts needed for Ukraine to join the European Union and OECD, not just for the sake of implementing conditionality.

- To coordinate donor support, in keeping with the recommendation out of the German Marshall Fund, the United States should appoint a high-level special envoy who would direct reconstruction efforts through a joint G7/EU secretariat based in Warsaw. Ultimately, in the long term, a European could take over the coordination role as Ukraine gets closer to achieving full membership in the European Union.

**2. Prepare by defining roles and responsibilities for development agencies, IFIs, and DFIs to avoid onerous conditionality and duplication of effort.**

- Set clear and simple conditions for assistance that align with the EU accession process. Avoid overlapping or contradictory conditions as much as possible, and establish a framework with the Ukrainian government that enables strong ownership of the process by Ukraine.
- Identify lead agencies, where relevant, for sectors that will design projects as necessary and coordinate efforts of other donors engaged in the sector.
- Provide technical assistance and strategic planning support to the Ukrainian government to help develop a strong pipeline of feasible priority infrastructure and other reconstruction projects.

**3. Prioritize reforms that will strengthen governance and accountability and create the enabling conditions for greater private investment in Ukraine to support economic transformation.**

Such reforms will be needed to advance Ukraine’s candidacy as an EU and OECD member; indeed, all reforms geared toward laws, regulations, and rules should be in line with the EU standards Ukraine must meet.

- Create governance, anticorruption, and rule-of-law reforms, including progress on judicial reforms, anti-money laundering, and supporting an independent media.
  - Government reforms: Ukraine should continue to reform its government structures by streamlining and introducing greater efficiency and effectiveness where possible. Prior to the war, the government made good strides in introducing e-government platforms, including the ProZorro procurement platform, which helped bring greater transparency and accountability to government. These efforts should continue and form the centerpiece of reform after the war.
  - Judicial reform: Prior to the war, it was widely agreed that the process of judicial reforms in Ukraine had largely stalled. A strong, independent, impartial judiciary is at the center of ensuring rule of law prevails in Ukraine and will enable many of the reforms needed to transform Ukraine’s economy. This is also one of the main sticking points for EU accession, and Ukraine and its partners should prioritize this area.
  - Independent civil society: Since 2014, Ukraine has developed a robust civil society made up of corruption watchdogs, investigative journalists, and other civically minded groups. Donors and others should continue to provide support to Ukrainian civil society to enable a strong accountability and transparency mechanism for the government and broader society.
- Foster an improved investment climate that allows growth of Ukrainian SMEs and additional foreign investment to support Ukraine’s economic transformation.
  - Clear rules of the game: Ukraine should continue to improve its overall regulatory environment to encourage creation of new businesses, especially SMEs. Prior to the war, Ukraine made progress on this front, as evidenced by its improvement on the World Bank’s Doing Business indicators. Continued reform is necessary to quickly



address the remaining challenges, especially in land reform and ownership and dispute resolution.

- Commercial courts: Ukraine should establish commercial courts that can effectively adjudicate investor disputes, insolvency, and other commercial law matters. As with other judicial reforms, the goal should be to create a fair and impartial court system that reinforces a level playing field for all parties.
- Continue to focus on privatization of SOEs and align their corporate restructuring with OECD principles to reduce corruption and improve the economy's overall efficiency. This step includes fully implementing the law allowing for privatization of industry passed in 2021. Ukraine should prioritize the continued privatization of the banking industry to reduce government exposure to this critical sector and enable a recapitalization of the banking sector with an eye toward decreasing nonperforming loans and increasing liquidity available for business to restart and grow. This would likely require establishing a “bad bank” to take the bad debt out of the system and resolve and restructure it.
- Improve and modernize infrastructure consistent with EU standards, selecting trusted vendors that will enable Ukraine's accession to the European Union and enhance interoperability with NATO. Priorities should include construction and improvement of existing rail and road links with Europe via Poland, Romania, Slovakia, and Moldova. This will help diversify Ukraine's export and import routes but will not replace the Black Sea ports. Alongside construction of physical infrastructure, Ukraine and its partners should seek to expand digital connectivity through installation of leading-edge equipment, taking advantage of this “dig once” opportunity to accelerate connectivity to all citizens.

**4. Mitigate risk for private investors by creating a pool of DFI funding from the DFC, IFC, and EDFIs.** This group of DFIs should commit to \$5 billion per year for five years, providing \$25 billion in risk-mitigation financing for Ukraine's reconstruction. This commitment would also come with a pledge to mobilize at least four times that amount in private capital, or \$100 billion. Ideally, this funding pool would enhance alignment and cofinancing among the DFIs in Ukraine by agreeing to a common term sheet, due diligence principles, and a shared pipeline of deals.

- Create a special capital increase. DFIs will need additional resources to mobilize private capital to support Ukraine's economic reconstruction. DFI shareholders should authorize a special capital increase for any DFI that commits to support reconstruction through the pooled mechanism. EBRD, in particular, will likely need a special capital increase from its shareholders to ensure it plays a full role in reconstruction. This will enable them to invest in Ukraine and continue to engage in other priorities outside of the country.
- Develop new guarantees and insurance products to address the unique conditions in Ukraine. Guarantees and insurance will be necessary to jump-start private investment in an immediate postwar environment where uncertainty for investors will likely continue. Structured in the right way, these could help convince private capital that the benefits of investment outweigh the risks.
- Prioritize financing for SMEs to encourage inclusive growth using on-lending facilities with local banks and other financial institutions. SMEs led by innovative entrepreneurs represent the future of Ukraine's economy, as they are not tied to old SOEs. They form the backbone of an innovation-based economy that embraces the promise of digital transformation and connects Ukraine to global supply chains.

- Deepen capital and financial markets by providing support to investment funds and other financial institutions in Ukraine. The U.S.-backed Western NIS Enterprise Fund, for example, has had success in introducing private capital investment into Ukraine since the Clinton administration created it. But more should be done along these lines to create a sustainable, developed capital market in Ukraine. In particular, attention should be paid to supporting the full spectrum of finance to ensure Ukrainian SMEs have access to the capital they need to grow.

**5. Provide accountability and transparency.** As part of any reconstruction effort, the United States, European Union, and other G7 countries should ensure there is clear accountability and transparency in the use of foreign aid and other official finance. This could include carrying out contractor procurement and investor screening and preventing malign influence by vetting and prequalifying companies and contractors. Ukraine and its partners should work to develop a pipeline of bankable reconstruction projects that can be jointly vetted. An independent monitoring and evaluation (M&E) system should be created to track funds properly and identify simple indicators to judge the success or failure of projects. Ukrainian civil society can play an important role in providing transparency and accountability during rebuilding and reconstruction. With the support of the United States, European Union, and other G7 countries, Ukraine has a flourishing civil society that consists of a diverse set of groups, including corruption watchdogs, independent investigative media, and others. Continuing to provide support to these groups and individuals will be important.

**6. Prioritize modernization—specifically through digitization—throughout the reconstruction effort to create the transparency and accountability that assure donors and the private sector of progress toward a well-governed economy.** Digitization should be particularly appealing as the destruction of existing infrastructure provides an opportunity to install digital infrastructure (e.g., sensors, fiber, antennas) without digging twice. Digitization provides a platform for all vertical economic sectors to become more sustainable (greener) and more resilient. It will be equally critical to EU and NATO accession. Ultimately, modernization will help rebuild a Ukrainian society that is more inclusive, more accountable, and better prepared for the future.

# Conclusion

Since Russia's unprovoked invasion of Ukraine in February 2022, the United States, other G7 countries, and the European Union have provided an unprecedented volume of security, economic, and humanitarian assistance to Ukraine. Russia's military was not the overwhelming juggernaut many supposed it to be; Ukraine is stronger, more resilient, better trained, and appears to have the upper hand on the battlefield. The Russian invasion is not only a direct threat to the future independence of Ukraine but also the most serious challenge the rules-based international order has faced since the end of World War II. Critical to turning back this challenge is not just a battlefield victory for Ukraine but also its successful economic transformation and membership in the European Union. Absent these two actions, it is highly likely Ukraine will win the war militarily but will lose the peace by remaining frozen out of the European Union and the broader Euro-Atlantic world. This would be not only a shame for the brave Ukrainians fighting to remain free of imperial conquest but also a clear loss for the rules-based international order led by the United States, G7, and European Union.

Ukraine's economy stands at a crossroads. Prior to the war, there were two economies: one that represented a legacy of SOEs, oligarchs, and corrupt vested interests, and the other an emergent Western-facing one led by innovative, well-educated entrepreneurs. To enable an economic transformation, Ukraine must double down on the latter by creating a level playing field and implement reforms that will end the former. Russia's unprovoked war has caused untold death and devastation in Ukraine. The invasion now offers an opportunity, if not an imperative, for Ukraine to transform itself. This will require Ukraine to politically commit itself to the necessary reforms, even though some may prove politically challenging. It will also require Ukraine's partners—the United States, other G7 countries, and the European Union—to commit to a multiyear process of substantial financial support that enables this economic transformation. Given the scale of support to date, it would be detrimental if Ukraine's partners were unable to reach an agreement on postwar support for reconstruction.

Since declaring independence in 1991, Ukraine has found itself wedged uncomfortably between the European Union and a revisionist Russia led by Putin, who is bent on restoring his vision of imperial Russia. Since the February 2022 invasion, few Ukrainians wish to be under Moscow's control, completing a process that started with the seizure of Crimea and Donbas in 2014. Rather, Ukrainians look to a future in the European Union and the broader Euro-Atlantic community. There is no reason Ukraine cannot join the ranks of other Central and Eastern European countries—Poland, the Baltic states, the Czech Republic, and others—that cast off their Russian-dominated pasts and became modern, vibrant democratic economies. Indeed, Ukraine should be a leader in the region and in Europe more broadly, becoming a net contributor to regional and global stability. The United States, European Union, and G7 should do everything in their power to realize this vision after Ukraine wins the war with Russia. Other than a battlefield defeat, the worst threat to Putin's continued power is an economically transformed Ukraine that serves as an example to the Russian people of what is possible. This would be true victory for all.

# About the Authors

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# Appendix A

The cochairs and commissioners of the CSIS Ukraine Economic Reconstruction Commission are signing this report in their personal capacity. Institutions listed do not imply institutional endorsement of this report.

## *Commission Director*

- **Daniel F. Runde**, Senior Vice President, William A. Schreyer Chair, and Director, Project on Prosperity and Development, CSIS

## *Commission Cochairs*

- **Ambassador Paula J. Dobriansky**, Former Under Secretary of State for Global Affairs
- **Greg Page**, Former CEO of Cargill
- **Michael Polsky**, Founder and CEO, Invenergy

## *Commission Members*

- **Paige Alexander**, CEO, Carter Center; Former Assistant Administrator for Europe and Eurasia, USAID
- **Philip Bennett**, Former First Vice President, EBRD; Former Vice Chairman, Citigroup
- **Karan Bhatia**, Vice President of Government Affairs and Public Policy, Google; Former Deputy U.S. Trade Representative
- **Brock Bierman**, CEO, Ukraine Friends; Former Assistant Administrator, USAID
- **Margaret Biggs**, Former President, Canadian International Development Agency
- **Dan Bryant**, Senior Vice President of Global Public Policy and Government Affairs, Walmart

- **Heidi Crebo-Rediker**, Adjunct Senior Fellow, Council on Foreign Relations; Former Chief Economist, U.S. Department of State
- **Tom Daschle**, Former U.S. Senator (D-SD) and Senate Majority Leader
- **Stephanie von Friedeburg**, Former Senior Vice President of Operations, IFC
- **Michael Froman**, Vice Chairman and President, Strategic Growth, Mastercard; Former U.S. Trade Representative
- **Earl Gast**, Former Mission Director, USAID; President, University Research Co.
- **Archbishop Borys Gudziak**, President, Ukrainian Catholic University, Lviv
- **John Hewko**, General Secretary and CEO, Rotary International; Former Vice President for Operations and Compact Development, Millennium Challenge Corporation; Former Partner, Baker & McKenzie Ukraine
- **Natalie Jaresko**, Chairperson, Aspen Institute Kyiv; Former Minister of Finance of Ukraine (2014-2016)
- **Jaroslawa Johnson**, President and CEO, Western NIS Enterprise Fund
- **Janez Kopač**, Former Director of Energy Community Secretariat; Former Minister of Environment, Spatial Planning and Energy of Slovenia; Former Minister of Finance of Slovenia
- **Lenna Koszarny**, Chair of the Board of Directors, American Chamber of Commerce in Ukraine; Founding Partner and CEO, Horizon Capital
- **Melissa Schoeb**, Chief Corporate Affairs Officer, Nokia
- **Hideki Matsunaga**, Director General, Middle East and Europe Department, Japan International Cooperation Agency
- **Lester Munson**, Former Staff Director, Senate Foreign Relations Committee
- **Penny Naas**, President of International Public Affairs, UPS
- **Robin Niblett**, Director, Chatham House
- **Ana Palacio**, Former Minister of Foreign Affairs, Spain
- **James Prokopanko**, Former CEO, Mosaic
- **Peter Roskam**, Former U.S. Representative (R-IL)
- **Oleh Rybachuk**, Former Chief of Staff to the President of Ukraine; Chairman and Cofounder, Centre United Actions
- **Alexander Stubb**, Former Prime Minister of Finland; Former Vice President, European Investment Bank; Director of the School of Transnational Governance, European University Institute
- **Martina Tauberova**, Former Deputy Minister for EU and International Trade of the Czech Republic
- **William Taylor**, Former U.S. Ambassador to Ukraine
- **Eka Tkeshelashvili**, Former Minister of Foreign Affairs of Georgia
- **Jay Truesdale**, CEO, Veracity Worldwide
- **Krystina Waler**, Director of Ukrainian Initiatives, Temetry Foundation
- **Philip Zelikow**, Former Counselor of the U.S. Department of State



# Endnotes

- 1 “Ukraine Refugee Situation,” UNHCR, <https://data.unhcr.org/en/situations/ukraine>; and “Ukraine,” Internal Displacement Monitoring Centre, <https://www.internal-displacement.org/countries/ukraine>.
- 2 Mark F. Cancian, “Aid to Ukraine Explained in Six Charts,” CSIS, *Critical Questions*, November 18, 2022, <https://www.csis.org/analysis/aid-ukraine-explained-six-charts>.
- 3 “Closing remarks by President von der Leyen at the International Expert Conference on the Recovery, Reconstruction and Modernisation of Ukraine,” European Commission, October 25, 2022, [https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT\\_22\\_6377](https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_22_6377).
- 4 Daniel F. Runde and Conor M. Savoy, “Ukraine Economic Reconstruction Commission: Interim Framework,” CSIS, October 13, 2022, <https://features.csis.org/ukraine-commission-interim-framework/>.
- 5 World Bank, “Ukraine Recovery and Reconstruction Needs Estimated \$349 Billion,” Press release, September 9, 2022, <https://www.worldbank.org/en/news/press-release/2022/09/09/ukraine-recovery-and-reconstruction-needs-estimated-349-billion>.
- 6 “Rebuilding Ukraine After Russian Invasion Will Cost \$500-600 Billion, Says World Bank VP,” Radio Free Europe/Radio Liberty, December 4, 2022, <https://www.rferl.org/a/ukraine-war-reconstruction-500-billion/32161282.html>.
- 7 Runde and Savoy, “Interim Framework.”
- 8 World Bank, “Ukraine Recovery.”
- 9 “Rebuilding Ukraine After Russian Invasion,” Radio Free Europe/Radio Liberty.
- 10 “Ukraine Overview,” World Bank, <https://www.worldbank.org/en/country/ukraine/overview>.

- 11 “Ukraine Refugee Situation”; and International Organization for Migration, “Needs Growing for Over 8 Million Internally Displaced in Ukraine,” Press release, May 10, 2022, <https://www.iom.int/news/needs-growing-over-8-million-internally-displaced-ukraine#:~:text=Geneva%20>.
- 12 Maryna Shashkova, “Economic Blackout? How Russian Air Raids Affect Ukraine,” *Kyiv Post*, November 26, 2022, <https://www.kyivpost.com/ukraine-politics/economic-blackout-how-russian-air-raids-affect-ukraine.html>.
- 13 Matt Wirz, Alexander Saeedy, and Caitlin Ostroff, “Ukraine Takes Unorthodox Pitch to Wall Street to Raise Billions in Debt,” *Wall Street Journal*, October 6, 2022, <https://www.wsj.com/articles/ukraine-takes-unorthodox-pitch-to-wall-street-to-raise-billions-in-debt-11665026229>.
- 14 “Ukraine Support Tracker—A Database of Military, Financial and Humanitarian Aid to Ukraine,” Kiel Institute, <https://www.ifw-kiel.de/topics/war-against-ukraine/ukraine-support-tracker/>.
- 15 Paola Tamma, “European Commission to Pledge Billions in Ukraine Aid Package, but Key Details Remain Unclear,” *Politico*, October 18, 2022, <https://www.politico.eu/article/european-commission-pledge-billion-ukraine-aid-package-detail-unclear/>.
- 16 National Recovery Council, *Ukraine’s National Recovery Plan* (Kyiv: National Recovery Council, 2022), [https://uploads-ssl.webflow.com/621f88db25fbf24758792dd8/62c166751fcf41105380a733\\_NRC%20Ukraine%27s%20Recovery%20Plan%20blueprint\\_ENG.pdf](https://uploads-ssl.webflow.com/621f88db25fbf24758792dd8/62c166751fcf41105380a733_NRC%20Ukraine%27s%20Recovery%20Plan%20blueprint_ENG.pdf).
- 17 “Recovery Plan,” Ukraine Recovery Conference 2022, <https://www.urc2022.com/urc2022-recovery-plan>.
- 18 The World Bank suspended the Doing Business indicators in 2021 following reports of data irregularities and ethical issues.
- 19 “Ukraine,” Transparency International, <https://www.transparency.org/en/countries/ukraine>.
- 20 “Corruption Perceptions Index,” Transparency International, January 2022, <https://www.transparency.org/en/cpi/2021>.
- 21 Economist Impact, *Ukraine Reform Tracker: Governance Reforms* (Economist Impact, 2022), [https://uploads-ssl.webflow.com/621f88db25fbf24758792dd8/62bea7c36f50dddbac058d9\\_ECO065-SDC-UkraineReport-3-Governance\\_v4.pdf](https://uploads-ssl.webflow.com/621f88db25fbf24758792dd8/62bea7c36f50dddbac058d9_ECO065-SDC-UkraineReport-3-Governance_v4.pdf).
- 22 Center for Insights in Survey Research, *Seventh Annual Ukrainian Municipal Survey* (Washington, DC: International Republican Institute, 2021), [https://www.iri.org/wp-content/uploads/2021/09/seventh\\_municipal\\_survey\\_may\\_2021\\_eng\\_-\\_v2.pdf](https://www.iri.org/wp-content/uploads/2021/09/seventh_municipal_survey_may_2021_eng_-_v2.pdf).
- 23 Directorate-General for Neighbourhood and Enlargement Negotiations “Opinion on Ukraine’s application for membership of the European Union,” European Commission, June 16, 2022, [https://neighbourhood-enlargement.ec.europa.eu/opinion-ukraines-application-membership-european-union\\_en](https://neighbourhood-enlargement.ec.europa.eu/opinion-ukraines-application-membership-european-union_en).
- 24 “2021 Investment Climate Statements: Ukraine,” U.S. Department of State, <https://www.state.gov/reports/2021-investment-climate-statements/ukraine/>.
- 25 Ibid.
- 26 “High-Performance State Enterprises,” Reforms Delivery Office, <https://rdo.in.ua/en/direction/high-performance-state-enterprises>.
- 27 “2021 Investment Climate Statements,” U.S. Department of State.
- 28 “100 найбагатших українців 2021” [100 richest Ukrainians 2021], *Forbes Ukraine*, May 6, 2021, <https://forbes.ua/ratings/100-bogateyshikh-ukraintsev-2021-06052021-1536>.

- 29 Andrew Lohsen and Nick Fenton, “Corruption and Private Sector Investment in Ukraine’s Reconstruction,” CSIS, *CSIS Briefs*, November 8, 2022, <https://www.csis.org/analysis/corruption-and-private-sector-investment-ukraines-reconstruction>.
- 30 “President Immediately Signed the Anti-oligarchic Law Passed by the Verkhovna Rada,” President of Ukraine, November 5, 2021, <https://www.president.gov.ua/en/news/prezident-nevidkladno-pidpisav-uhvalenij-verhovnoyu-radoyu-a-71445>.
- 31 “Ukrainian President Signs ‘Anti-oligarch Law,’” RadioFreeEurope/RadioLiberty, November 5, 2021, <https://www.rferl.org/a/ukraine-zelenskiy-anti-oligarch-law/31548053.html>.
- 32 Mykhailo Minakov, “The War Has Helped Ukraine Rein in the Oligarchs,” Wilson Center, November 15, 2022, <https://www.wilsoncenter.org/blog-post/war-has-helped-ukraine-rein-oligarchs>.
- 33 Ibid.
- 34 National Council for the Recovery of Ukraine from the Consequences of the War, *Draft Ukraine Recovery Plan: Materials of the “Digitization” Working Group* (Kyiv: National Council for the Recovery of Ukraine from the Consequences of the War, July 2022), <https://www.kmu.gov.ua/storage/app/sites/1/recoveryrada/eng/digitization-eng.pdf>.
- 35 World Bank, *Ukraine Rapid Damage and Needs Assessment* (Washington, DC: World Bank Group, August 2022), 14, <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099445209072239810/p17884304837910630b9c6040ac12428d5c>.
- 36 Daniel B. Baer and Oleksandra Betliy, “Here’s How to Help Ukraine Handle Putin’s Food Blockade,” *Foreign Policy*, June 24, 2022, <https://foreignpolicy.com/2022/06/24/ukraine-russia-war-grain-food-shortage-blockade-exports-hunger-putin-global-africa/>.
- 37 “Ukraine Loses \$170 Million Every Day without Port Access, PM Says,” Reuters, May 9, 2022, <https://www.reuters.com/world/europe/ukraine-loses-170-million-every-day-without-port-access-pm-says-2022-05-09/>.
- 38 Romina Bandura, Janina Staguhn, and Benjamin Jensen, “Modernizing Ukraine’s Transport and Logistics Infrastructure,” CSIS, October 20, 2022, <https://www.csis.org/analysis/modernizing-ukraines-transport-and-logistics-infrastructure>.
- 39 National Recovery Council, *Ukraine’s National Recovery Plan*.
- 40 “2021 Investment Climate Statements,” U.S. Department of State.
- 41 Black Sea Trade & Development Bank, *Overview of the Financial Sector in Ukraine* (Thessaloniki, Greece: BSTDB, n.d.), [https://www.bstdb.org/BSTDB\\_Overview%20of%20the%20financial%20sector\\_UKRAINE.pdf](https://www.bstdb.org/BSTDB_Overview%20of%20the%20financial%20sector_UKRAINE.pdf).
- 42 Ibid.
- 43 National Bank of Ukraine, *Financial Stability Report* (Kyiv: National Bank of Ukraine, June 2022), [https://bank.gov.ua/admin\\_uploads/article/FSR\\_2022-H1\\_eng.pdf?v=4](https://bank.gov.ua/admin_uploads/article/FSR_2022-H1_eng.pdf?v=4).
- 44 BSTDB, *Overview*.
- 45 Ibid.
- 46 National Bank of Ukraine, *Financial Stability Report*.
- 47 OECD, *OECD Review of the Corporate Governance of State-Owned Enterprises: Ukraine* (Paris: OECD, 2021), <https://www.oecd.org/corporate/SOE-Review-Ukraine.pdf>.

- 48 Ibid.
- 49 Mark Savchuk, “Ukraine’s Faltering Efforts to Privatize State-Owned Banks,” Atlantic Council, July 18, 2021, <https://www.atlanticcouncil.org/blogs/ukrainealert/ukraines-faltering-efforts-to-privatize-state-owned-banks/>.
- 50 Natalia Datskevych, “Ukraine’s Unemployment Rate Record High amid War, but Labor Market Recovering in Some Regions,” *Kyiv Independent*, August 21, 2022, <https://kyivindependent.com/business/ukraines-unemployment-rate-record-high-amid-war-but-labor-market-recovering-in-some-regions>.
- 51 “EIB Group and Ukrgasbank to Support EUR 50 Million of SME Financing in Ukraine under the EU4Business Initiative,” European Union External Action, November 16, 2017, [https://www.eeas.europa.eu/node/35733\\_en](https://www.eeas.europa.eu/node/35733_en).
- 52 Ibid.
- 53 “Ukraine’s First Green Finance Bank Backs Climate-Smart Businesses,” IFC, January 2021, [https://www.ifc.org/wps/wcm/connect/news\\_ext\\_content/ifc\\_external\\_corporate\\_site/news+and+events/news/ukrgasbank](https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/ukrgasbank).
- 54 Ibid.
- 55 Yuri Bender, “Ukraine’s ‘brains, hands and grains’ attract investors,” *Financial Times*, November 4, 2022, <https://www.ft.com/content/000d0f32-2bd6-3dab-bf7c-cce62de7b52c>.
- 56 “Ukraine Agricultural Production and Trade,” U.S. Department of Agriculture, April 2022, <https://www.fas.usda.gov/sites/default/files/2022-04/Ukraine-Factsheet-April2022.pdf>.
- 57 “UPDATE 1-Ukraine grain exports down 29.6% at 18.1 mln T so far in 2022/23,” Reuters, December 2, 2022, <https://www.reuters.com/article/ukraine-crisis-grain-exports-idAFL1N32S2GN>.
- 58 Ibid.
- 59 Ibid.
- 60 “2021 Investment Climate Statements,” U.S. Department of State.
- 61 “The Growing IT Sector in Ukraine,” BBC, <https://www.bbc.com/storyworks/future/ukraine-innovating-for-the-future/ukraines-dynamic-it-sector>; and Beetroot, *Ukraine: The Home of Great Devs—2021 Tech Market Report* (Stockholm: Beetroot, 2021), [https://beetroot.co/wp-content/uploads/sites/2/2021/03/Ukraine-the-Home-Of-Great-Devs-2021\\_-Ebook-v3-2.0-3.pdf](https://beetroot.co/wp-content/uploads/sites/2/2021/03/Ukraine-the-Home-Of-Great-Devs-2021_-Ebook-v3-2.0-3.pdf).
- 62 National Council for the Recovery of Ukraine from the Consequences of the War, *Draft Ukraine Recovery Plan*.
- 63 Anatoly Motkin, “Now Is the Right Time to Launch a Digital Marshall Plan for Ukraine,” Atlantic Council, May 30, 2022, <https://www.atlanticcouncil.org/blogs/ukrainealert/now-is-the-right-time-to-launch-a-digital-marshall-plan-for-ukraine/>.
- 64 “Results of a National Study of the IT Industry,” IT Ukraine Association, January 20, 2022, <https://itukraine.org.ua/en/results-of-a-national-study-of-the-it-industry.html#:~:text=The%20number%20of%20talents%20in>.
- 65 Міністерство цифрової трансформації України [Ministry of Digital Transformation], “Президент України підписав закон про хмарні послуги” [President of Ukraine signed the law of cloud services], Facebook, March 16, 2022, <https://www.facebook.com/mintsyfra/posts/332997625536227>.
- 66 Vera Bergengruen, “The Battle for Control over Ukraine’s Internet,” *Time*, October 18, 2022, <https://time.com/6222111/ukraine-internet-russia-reclaimed-territory/>.
- 67 “Професії майбутнього” [Professions of the future], Google Digital Workshop, <https://learndigital.withgoogle.com/digitalworkshop-ua/>; “Market Finder,” Think with Google, <https://marketfinder>.

thinkwithgoogle.com/intl/uk\_ua.

- 68 “Prague 5G Security Conference 2021,” National Cyber and Information Security Agency, November 30, 2021, <https://www.nukib.cz/en/infoservis-en/news/1775-5g-security-conference-2021/>; “The EU Toolbox for 5G Security,” European Commission, June 29, 2021, <https://digital-strategy.ec.europa.eu/en/library/eu-toolbox-5g-security>.
- 69 “Manufacturing, Value Added (% of GDP)—Ukraine,” World Bank Open Data, <https://data.worldbank.org/indicator/NV.IND.MANF.ZS?locations=UA>.
- 70 “Zelenskiy Says Ukraine Is Now Exporting Power to EU,” Reuters, June 30, 2022, <https://www.reuters.com/world/europe/zelenskiy-says-ukraine-is-now-exporting-power-eu-2022-07-01/>.
- 71 “Mapping Ukraine’s Zaporizhzhia Nuclear Power Plant,” Al Jazeera, September 4, 2022, <https://www.aljazeera.com/news/2022/9/4/infographic-ukraines-zaporizhzhia-nuclear-power-plant>.
- 72 Andrian Prokip, “Why the Zaporizhzhia Nuclear Power Plant Matters ... for the Whole World,” *Focus Ukraine* (blog), Wilson Center, September 19, 2022, <https://www.wilsoncenter.org/blog-post/why-zaporizhzhia-nuclear-power-plant-matters-for-whole-world>.
- 73 Ibid.
- 74 “Factbox: Ukraine’s Energy Options Limited in Event of Russian Gas Disruption,” Reuters, February 24, 2022, <https://www.reuters.com/business/energy/ukraines-energy-options-limited-event-russian-gas-disruption-2022-02-24/>.
- 75 Ibid.
- 76 “Ukraine Energy Profile—Analysis,” International Energy Agency, April 2020, <https://www.iea.org/reports/ukraine-energy-profile>.
- 77 “Global Investment Trends in 1st Half of 2022,” UkraineInvest, <https://ukraineinvest.gov.ua/news/09-08-22/>.
- 78 “Renewable Energy in Ukraine: A Solution for European Energy Security and for Shifting the EU GND Eastward,” GLOBSEC, August 26, 2022, <https://www.globsec.org/what-we-do/press-releases/renewable-energy-ukraine-solution-european-energy-security-and-shifting>.
- 79 USAID and Power Africa, *Power Africa: A U.S. Government-Led Partnership* (Washington, DC: USAID, August 2022), <https://www.usaid.gov/sites/default/files/documents/Power-Africa-Fact-Sheet-English-08312022.pdf>. Power Africa, which is a U.S. government-led partnership that brings together resources from over 170 public and private sector partners to increase electricity access in sub-Saharan Africa, can provide a useful framework for rebuilding Ukraine’s energy sector. Power Africa was a presidential initiative that brought in donors such as the World Bank, African Development Bank, and others. It also forced the U.S. interagency to work with clear lanes and authorities and establish new instruments. Throughout this process, the National Security Council served as a useful accountability mechanism. From the beginning, the private sector, including developers, financiers, and equipment suppliers, assisted with design, with continual communication with USAID. These developers and financiers had the full support of the U.S. government in breaking the bottleneck, which has been extremely important. Since 2013, Power Africa has successfully provided 159 million sub-Saharan Africans with electricity and has generated over 6,000 megawatts of cleaner and more reliable electricity.
- 80 Ronja Ganster et al., “Designing Ukraine’s Recovery in the Spirit of the Marshall Plan” (working paper, German

Marshall Fund, Washington, DC, September 2022), [https://www.gmfus.org/sites/default/files/2022-09/Designing%20Ukraine's%20Recovery%20in%20the%20Spirit%20of%20the%20Marshall%20Plan\\_0.pdf](https://www.gmfus.org/sites/default/files/2022-09/Designing%20Ukraine's%20Recovery%20in%20the%20Spirit%20of%20the%20Marshall%20Plan_0.pdf).

- 81 EDFI is a group of 15 European DFIs: the United Kingdom (British International Investment), Belgium (BIO), Italy (CDP Development Finance), Spain (COFIDES), Germany (DEG), Finland (Finnfund), the Netherlands (FMO), Denmark (IFU), Norway (Norfund), Austria (OeEB), France (Proparco), Switzerland (SIFEM), Italy (SIMEST), Portugal (SOFID), and Sweden (Swedfund).
- 82 Lucia Sconosciuto, "USA Contributes US\$ 500 Million to EBRD Ukraine Response," EBRD, July 27, 2022, <https://www.ebrd.com/news/2022/usa-contributes-us-500-million-to-ebrd-ukraine-response-.html>.

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