

Strengthening Ukrainian Resiliency in the Medium to Long Term

Ilya Timtchenko



HARVARD Kennedy School
BELFER CENTER
for Science and International Affairs

REPORT
JUNE 2023



The Intelligence Project

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About the Intelligence Project

The Intelligence Project seeks to build a new generation of intelligence practitioners prepared to serve in a rapidly changing world and to help future policymakers and intelligence consumers understand how best to interact with intelligence to gain a decision advantage. Building on multi-disciplinary research being conducted at the Belfer Center, from history to human rights and cyber technologies, the Intelligence Project links intelligence agencies with Belfer researchers, Faculty, and Kennedy School students, to enrich their education and impact public policy.

About the Author

Ilya Timtchenko is a Master's in Public Policy candidate at the Harvard Kennedy School. As a Belfer Young Leader Student Fellow, Ilya wrote his senior recommendation paper on Ukraine's medium to long term reconstruction for the United States Agency for International Development under the supervision of Robert Zoellick, former President at the World Bank Group and 14th United States Deputy Secretary of State. Ilya is the Founder and Chair of the Ukraine Caucus, a student organization at the Harvard Kennedy School which hosts Ukrainian leaders and experts at Harvard enabling students to focus on geopolitics of Ukraine. He is also a Board Member at First Aid of the Soul, a 501(c)3-registered nonprofit provides free mental health services to Ukrainians affected by the war. Ilya's research interests include transatlantic security, Eastern Europe, NATO, diplomacy, human rights, and countering Russian disinformation.

Before studying at Harvard, Ilya worked as a journalist in Ukraine. As an editor at Kyiv Post, a leading English-language newspaper in Ukraine, Ilya trained and managed many journalists who are now at the newly established award-winning *Kyiv Independent*. As the Head of Ukraine at REDD Intelligence, an online information platform that provides intelligence and data on emerging market corporates, Ilya spearheaded the company's presence in Ukraine. Ilya has been published in *Foreign Affairs*, *The Washington Post*, *Foreign Policy*, *Newsweek*, *The National Interest*, and the *Atlantic Council* among others. Ilya received his bachelor's degree from Gordon College with a double major in international affairs and economics.



Ukrainians gather in downtown to celebrate the recapturing their city, Kherson, Ukraine, Saturday, Nov. 12, 2022. (AP Photo/Yevhenii Zavhorodnii, File)



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Executive Summary

The ongoing war between Ukraine and Russia has left Kyiv at a crossroads with a range of questions to consider for the future. What does extended conflict mean for Ukraine's survival and prospects? How can Ukraine's allies best support Ukraine through a long war? While no one knows how the war will play out, this paper assesses that neither Russia nor Ukraine is likely to execute a decisive military operation leading to the end of the war anytime soon, thus portending a conflict that could last for years absent a significant change in trajectory.¹

Given the potential for a long war this paper offers an assessment of key economic and political factors which will help define Ukraine's capacity to effectively resist Russian aggression, occupation, and ultimately strengthen affected sectors of society. It offers corresponding recommendations for policymakers in Washington and Europe. For the purposes of this paper, medium-term is between 12 months to 24 months and long-term over 24 months.

The report starts with **two key assumptions** that frame the war as an ongoing conflict through 2024.

Russia does not have adequate conventional force to defeat Ukraine in 2024.

Despite Ukrainian counteroffensives and the skilled use of Western-supplied multiple-rocket launching systems such as the HIMARS, the correlation of forces still favors Russia by a significant margin.² Russian troops, though weakened and demoralized, have captured large swaths of Ukrainian territory in the country's east and south. Though Ukraine has had highly successful counteroffensives, the army must still defend the territories it has reclaimed. Ukraine has faced heavy casualties and material losses, and the economy has been battered.³

Nevertheless, the Ukrainian army has pushed Russia out of some territories it captured in the early months of the war. Russia's prospects of capturing Kyiv, Odesa, or Kharkiv have faded. Russia continues to face significant challenges in force mobilization. Russian troops are reportedly demoralized, exhausted and ill-trained, and it may take Russia years to revamp and prepare its military for any consequential assault.⁴ In contrast, Ukrainian troops are receiving increased

Western training and modern military equipment. Western sanctions further impede Russia's efforts to replace military equipment losses.⁵

Ukraine does not have the capability to force Russia back to February 24 borders or to completely retake the occupied territories in the Donbas and Crimea in the short run.

There is a mismatch of expectations between Ukrainians and many Western politicians and experts regarding whether Ukraine will be able to soon return to its previous borders in the short-term. Most Ukrainians are determined and confident in their army's ability to push the Russian military back to the pre-February 24 borders, with many believing that it is possible to return all eastern Ukraine and Crimea. According to a poll conducted by the Sociological Group "Rating" on behalf of the International Republican Institute, which was published in August, 98% of Ukrainians believe in their country's ultimate victory toward these ends.⁶

Some Western experts believe the war will not last much longer. According to retired U.S. Lieutenant General Ben Hodges, Russian President Vladimir Putin has overextended his military. Hodges predicted the invasion may conceivably come to an end in 2023 if Western powers continue their military backing of Kyiv.⁷ Hodges had previously made an even more positive assessment, suggesting a pre-February 24 victory is possible by the end of 2022.⁸ However, most Western experts believe the war will last much longer given the correlation of forces between Russia and Ukraine.⁹ In June 2022, North Atlantic Treaty Organization (NATO) Secretary-General Jens Stoltenberg said that the West must prepare to continue supporting Ukraine in a war that lasts for years, while then-UK Prime Minister Boris Johnson said that Russia's war in Ukraine is possibly a longer-term conflict.¹⁰

The paper assesses it is unlikely that Ukraine will militarily push Russia back to its pre-February 24 borders soon. Instead, we are likely to see continuous conflict, raising several key questions regarding Ukrainian military capacity and governance, Russian force mobilization and strategy, and levels of Western support for Ukraine. These two assumptions also rest on the notion that most Russians remain in favor of the war.¹¹ If the overall sentiment inside Russia changes over the next year, developments could shift in Ukraine's favor.

Under these two key assumptions, this paper considers the following areas to better understand economic and political dynamics shaping Ukrainian capacity.

- **Part I Willingness to fight, leadership, and governance:**
Can willingness to fight remain high? Will President Zelensky stay in power, and what does this mean for Ukraine's resistance and democratic reform? What are prospects for anti-corruption efforts?
- **Part II Ukraine's economy: Energy, agriculture, and metals.**
How are key sectors adapting to war in support of the population? What is the state of agriculture, energy, and metals?
- **Part III International support and Russian public opinion:**
Where is support amongst Ukrainian allies versus Russian allies? What are the attitudes within Russia among the public, influencers, and oligarchs?

Ukrainians continue to show incredible resolve in fighting Russian invaders. But building and maintaining the capacity to fight and expel Russia will depend upon core sectors of the economy and material support. This must continue to be prioritized by President Zelensky and senior leadership. To sustain domestic and international support, sustained reform of the government and economy is needed. Government reform is not easy, even harder during conflict, yet it would signal to skeptical Western allies and neutral countries that Ukraine is committed to good governance and stewardship of investment that will transcend the current conflict and Kyiv will remain a reliable ally in the long-term. Finally, complimentary reforms will signal to the Russian people inside and outside of the country that Ukraine will never surrender and is committed to remaining an independent, sovereign country. Such a show of resolve might not only empower the Ukrainian people but turn the tide of the war against the Kremlin at home and abroad.

This report offers seven initial strategic recommendations below. Subsequently the report makes additional policy recommendations within the subsections of this paper. We acknowledge that these recommendations may already be implemented in secret; but if they are not, we recommend that they should be.

KEY RECOMMENDATIONS

This paper recommends the following strategic actions:

- Leverage every diplomatic negotiation or engagement that has potential influence with Russian leadership including China, India, Saudi Arabia, Brazil, and Israel.
- Provide effective air-defense systems which protect strategic locations, assets, and cities which also prioritize critical infrastructure including energy and agriculture systems.
- Prepare Ukraine for government transition contingency scenarios to minimize vulnerabilities Russia would exploit. Develop robust continuity of government planning as starting point to continue and reform government, including more anticorruption measures and transparent democratic mechanisms.
- Publicly affirm cooperation between NATO members and Ukraine to track Russian intelligence services operating in Europe, the United States, and abroad while supporting reform of the Ukrainian intelligence services as an elevated partner.
- Continue to combat Russian disinformation by providing factual, objective information on the ground akin to rapid response in defense of the information space.
- Develop and implement a comprehensive program that focuses on short, medium, and long-term rebuilding in Ukraine as soon as possible. Consider framing this effort as a reimagined, smaller yet targeted ‘Marshall Plan’ that helps to support and reinforce the strongest elements of a democratic civil society aligned with allied interests.
- Expedite the delivery of heavy artillery and air defense to Ukraine while also securing military industrial capacity that is able to export weapons to Ukraine at a rate that meets Ukraine’s demand.

Part I. **Willingness to Fight, Leadership, and Governance**

The high level of Ukraine's willingness to fight and resist Russian aggression surprised Moscow and Western allies to the point where it changed most calculations on the trajectory of the war. The rise of President Zelensky as a capable and effective leader quickly put old narratives to rest as the people of Ukraine fought a much larger Russian military to a standstill and have pushed them back in various fronts. This willingness to fight, coupled with effective leadership and governance, remains an indispensable element of Ukrainian resolve that may determine the outcome of the war. Nevertheless, none of these dynamics are foregone conclusions and must be ably considered by leadership in Kyiv and allied countries. Building durable models of resilient leadership and governance can empower the Ukrainian people in their fight for survival and prosperity.

Willingness to Fight

Russia continues to attack civilian infrastructure to wear down the population and force Ukraine to negotiate or capitulate. Instead, preliminary data shows that the more attacks Russia launches against Ukrainian civilians and infrastructure, the higher the Ukrainian willingness to fight.¹² A similar parallel occurred during The Blitz, Nazi Germany's bombing campaign against the United Kingdom in 1940-41. Germany hoped that its heavy bombing of the U.K. would draw the British into submission; instead, their morale remained high amid the "Blitz spirit."

During the initial stages of Russia's full-scale invasion of Ukraine, according to Ukraine-based polling organization Info Sapiens, 67% of Ukrainians were "willing to put up armed resistance" to counter Russia's invasion.¹³ According to another poll by Info Sapiens, conducted from March 14-15 2022, 91% of Ukrainians believed in their country's victory, contrasting with only 56% before the full-scale invasion.¹⁴ Four months later, a Wall Street Journal-NORC poll revealed that 89% of Ukrainians would reject a peace deal with Moscow by ceding Ukrainian territory that is under Russian occupation.¹⁵ According to the same poll, 81% of Ukrainians said that it would be unacceptable to cede territory that Russia has occupied since 2014 before the full-scale invasion, namely, Crimea and parts of eastern Ukraine.

Ukrainian willingness to cede territory to Russia varies based on region. For example, those who live in the east and south are generally more willing to consider land for peace.¹⁶ The region's most willing to cede territory are those that have been most influenced and targeted by Russia's propaganda for years: the south and the east.¹⁷ Considering that most Ukrainians expected that the war will end in less than a year, the attitude of Ukrainians in relation to ceding territory may change. Should Ukrainian casualties prove to have been highly underreported, morale may take a hit. Since these numbers are not disclosed and there is no easy and quick way of confirming them, it is difficult to take this variable into account. Yet the sheer number of war crimes committed against Ukrainians and that these atrocities continue, Ukraine's strong resistance is likely to remain firm. Ukrainians have never been more united and anti-Kremlin than post-February 24, 2022. Facing an existential threat, they are fighting for survival.¹⁸

As more Ukrainian soldiers receive training from the West and as Ukraine continues to replace killed and wounded, the country's military is also unlikely to give in to Russian demands. The military continues to sustain high trust from the public as well as high trust towards the country's leadership. There are trends in Ukrainian civilians' choices as to whether to be in their home country. One week into the war, only 11% of Ukrainians agreed that if they "could leave Ukraine safely tomorrow for another country" they would, whereas 69% strongly disagreed, according to a Lord Ashcroft Poll published on March 4.¹⁹ 85% of men and 63% of women said that they either had taken up arms or were willing to, according to the same poll. However, the poll also revealed that 56% of Ukrainians expected the conflict to be over by the end of March 2022, 14% expected it to last up to three months and only 6% expected it to last over a year.²⁰

As of as of early July 2022, there were over 6.2 million internally displaced people in Ukraine and over 5.6 million Ukrainian refugees in Europe.²¹ Meanwhile, about 5.5 million people were estimated to have returned to their homes, 10% of which were "self-reported returns from abroad." Many Ukrainians have been returning to their permanent living spaces in Ukraine since the summer of 2022. The main reasons for return are Russian military failures, improved safety, family reunification, and lack of finances to live abroad. The high rate of return may also suggest that most Ukrainians believe in their army's capabilities of winning back Ukrainian territories occupied by Russia.

Ukrainian military successes have sustained widespread belief in eventual victory over Russia. Counteroffensives in the north, east and south, strikes on Russian facilities in occupied Crimea, and the successful targeting of the Kerch bridge all contributed to Ukraine's belief in victory, despite Russia's attacks on power and water systems across the country.²²

RECOMMENDATIONS BUILDING ON G7 EFFORTS

- Enhance Ukraine's budgetary support via IFIs.
- Provide cash assistance to Ukrainian small and medium-sized enterprises via the largest banks. Ukraine's resilient banking sector has been underutilized. This could be similar to the U.S. COVID-19 Stimulus Checks but for SMEs.
- Promptly initiate the process of reparations using the more than \$300 billion in reserves of Russia's frozen assets for the rebuilding of Ukraine.
- Provide temporary housing via international and intergovernmental organizations.
- Deliver emergency power generation equipment to avoid humanitarian crisis.
- Under the leadership of G7 countries, which met on November 4, 2022, to spearhead the reconstruction of Ukraine's strategic infrastructure, the transatlantic community must establish a rebuilding program that goes into effect as quickly as possible to ensure that Ukraine is able to withstand Putin's efforts to extend the war and wear down both the Ukrainian population and Western supporters.²³

Leadership

Four years into his presidency, Volodymyr Zelensky has overwhelming popular support: 91% of Ukrainians support Zelensky's performance, according to a June 2022 poll conducted by the Sociological Group "Rating" on behalf of the International Republican Institute.²⁴ Another survey, conducted less than two months earlier, showed that 78% of Ukrainians approve of Zelensky's response to Russia's full-scale invasion while 7% said he performed poorly.²⁵ This is a stark jump from Zelensky's pre-February 24 ratings of only 31%.²⁶ The president's decision not to flee from Ukraine during the first weeks of the invasion has played a major role in securing trust from citizens and the Ukrainian army. Prior to this there was speculation of where Zelensky stood regarding Russia, based on his former business in Russia as an actor and the links to Russia of a few of his team members.^{27 28}

Much could change over the coming two years. However, as long as Zelensky follows the will of most Ukrainians – to decisively fight off the Russian army – he will remain popular. If in power at the conclusion of the war, Zelensky will face another major challenge: Ukraine's war on corruption. It is likely that criticism of Zelensky will pick up during this time as Ukrainians will not feel that criticizing the president is at the expense of the country's security. Post war political dynamics are often quite different than wartime.²⁹ Less than a year away from Ukraine's next presidential elections, there are many factors that will decide whether Zelensky will have an easy pass for his second term, but at the time of this report's publishing political victory remains strongly tilted in his favor.

Considering Zelensky's recently high ratings, it is unlikely that he will be ousted by his own people anytime soon. The president's actions are monitored closely by both Ukrainians and internationally, and Ukrainian society has a history of resistance since the ousting of Kremlin-backed President Viktor Yanukovych. If Zelensky were coerced into ceding territory to Russia or agreeing to a ceasefire deal beneficial to Russia, civil society would likely reject him. It is likely that Zelensky will be reelected for his second term in April 2024. However, it is possible that Zelensky will be contested by military-related candidates such as Valerii Zaluzhnyi, Commander-in-Chief of the Armed Forces of Ukraine, or Serhiy Prytula, a public and political figure who gained prominence by crowdfunding money for the Ukrainian military.

The field could also change relatively quickly overnight. Just as Zelensky gained unexpected prominence in a short period, so might be the case with another public figure, a prominent journalist, Ukrainian veteran, a young ambitious member of parliament, or someone from his own team. Among many others, some examples of possible candidates may be (in no specific order): Iryna Vereshchuk, deputy Prime Minister of Ukraine; Dmytro Kuleba, Foreign Minister of Ukraine; Andriy Yermak, head of the presidential office; Serhiy Zhadan, a Ukrainian rockstar and poet.

Many critics of the president have recently tempered their critiques to avoid dividing the Ukrainian people. Such criticism may re-emerge if Ukrainians (a) see major reforms as stalling, or (b) become more confident in an impending Ukrainian victory. Such positions would also become far more public in the event of a leadership vacuum in the event Zelensky were to suffer a direct attack or become incapacitated. However, as long as Zelensky's successor strongly represents the interests of Ukrainians the country will likely be able to avoid political division among its people. Zelensky himself said that Ukraine is prepared for a "plan B" if something were to happen. He did not provide specifics.³⁰ According to Article 112 of Ukraine's constitution, in case of an early termination of the powers of the Ukrainian president the president's duties are temporarily transferred to the Chairman of the Verkhovna Rada until a new president is elected.³¹

Zelensky could also be removed from power by the Ukrainian public in the scenario of a major corruption scandal, especially involving the military or intelligence services, or suspicion of collaboration with the Russians. Any delays with major reforms will increase the chances of Zelensky facing corruption scandals, as was the case with his predecessors. Reform delays or setbacks will also cause further questioning of how financial support for Ukraine is being appropriated which in turn will delay further financial aid. Such delays can cause more disappointment internationally and domestically among Ukrainians.

Governance

Ukrainian leadership might shore up vulnerabilities with proactive reform efforts focusing on two main areas: reduction of Russian influence on Ukrainian society (including counterespionage) and anti-corruption efforts. A fundamental approach to stamp out corruption begins with removal of Russian soldiers, agents, and conspirators followed by genuine anti-corruption reforms reflective of an increasingly transparent democracy. Furthermore, this would signal to allies that Ukraine is committed to building stronger levels of trust and partnership with the public and private sectors inside allied states supporting the defense of a free and independent Ukraine. Good governance efforts would continue to reinforce Ukrainian government writ large for future leaders across different branches and ministries.

Hardening the office of the president, ministries, and civil service positions against corruption and foreign influence at all levels would improve outcomes for Ukraine and allies overall. The Ukrainian government must closely examine its key players to swiftly deal with pro-Russian influence operating against Ukrainian interests, and Western intelligence agencies can help with these investigations by sharing best practices, insight, and support.

Ivan Bakanov, Ukraine's Head of Security Service until July 17, is a prime example of recent problematic Security Services of Ukraine (SBU) leadership. Bakanov, Zelensky's childhood friend, was fired due to hundreds of treason investigations in the 30,000-agent state body. Bakanov had been at his post for five months since the full-fledge invasion began. As of the day of Bakanov's dismissal, Ukraine had registered 651 criminal proceedings against employees for alleged collaboration with Russians or working against the nation. Most notably, three former SBU officials were charged in March with state treason. Andriy Naumov, who headed SBU's internal security department, fled Ukraine just a few hours before Feb. 24.

The other two former SBU officials, General Serhiy Kryvoruchko and Colonel Ihor Sadokhin, oversaw the Kherson department. The southern city of Kherson was taken without much resistance during the first days of Russia's full-scale invasion. Kryvorychko allegedly ordered his officers to evacuate the city before Russian troops came. SBU officials failed to blow up the Antonovskiy Bridge, allowing Russians to easily come into Kherson. Meanwhile, Kryvorychko's assistant,

Sadokhin, allegedly provided Russian forces with instructions for taking over Ukrainian territory.³²

Other officials are suspected of bribery or Russian ties. Oleh Tatarov is a deputy to the head of the presidential office, Andriy Yermak. Tatarov is responsible for overseeing Ukraine's security services. In addition to suspicion of having accepted bribes,³³ Tatarov has links to the old Ukrainian regime: he was deputy head of the Interior Ministry's main investigation department under Kremlin-backed president Viktor Yanukovych. Zelensky defended Tatarov's appointment in 2020.³⁴ Furthermore, former Prosecutor General Iryna Venediktova and influential judge Serhiy Vovk of the Pechersk District Court have been accused of covering up Tatarov. Tatarov was also working in the Internal Services of Ukraine under pro-Kremlin President Viktor Yanukovych as the deputy chief of the Main Investigation Department and as a lawyer for pro-Russian Member of Parliament Vadym Novynskyi and former deputy head of the Yanukovych administration Andrii Portnov.³⁵ There remains ambiguity of whose interests are served in the SBU's leadership and how effectively counterintelligence has addressed the issues.

Before the February 2022 invasion, Ukraine was performing poorly on anti-corruption efforts, leading to Zelensky's historically low ratings. Appointments had stalled for key anti-corruption positions, such as the heads of Specialized Anti-Corruption Prosecutor's Office (SAPO) and the National Anti-Corruption Bureau of Ukraine (NABU). After almost two years of not having a head and at the urging of the European Union, SAPO finally was assigned a leader, Oleksander Klymenko, on July 28, 2022.³⁶ Given the delays, some controversial appointees, and enduring vacancies, Ukraine's judicial reform efforts have met heavy criticism from leading Ukrainian anti-corruption watchdogs, who issued a statement on June 24, 2022 saying that Ukraine's judicial reform might soon face disaster.³⁷

RECOMMENDATIONS

- The Ukrainian government has proven far more resilient than most expected. To enhance this resilience, Ukraine's government must be prepared for a scenario in which there is a leadership vacuum requiring a leadership transition to minimize vulnerabilities Moscow would exploit. Ukraine's Euro-Atlantic partners could provide security assistance for those who inherit the powers of the Ukrainian president.
- NATO countries should increase cooperation with Ukraine on detecting Russian spies and providing expertise for reforming Ukraine's secret services. The president and his closest advisors must be encouraged to remove or replace government officials with dubious backgrounds or possible connections with Russia's elite.
- The Ukrainian government must be strongly encouraged (albeit not publicly) to follow through with judicial reforms swiftly, as it is a matter of time until the Ukrainian population begins to criticize Zelensky closer to pre-February 24 levels, which would make Ukrainian society more vulnerable to Russian disinformation and misinformation.

Part II: **Ukraine's Economy: Energy, Agriculture, and Metals.**

The durability of Ukraine's economy is essential for the long-term stability and recovery of the country. Beyond material support for the war effort, three major sectors define the bulk of Ukrainian GDP that is central for survival: energy, agriculture, and metals including noble gasses. These three sectors are also of interest to Russia, either directly or indirectly, as points of leverage over the Ukrainian people. Kyiv and allies can limit Moscow's ability to pressure and inflict direct harm on civilian populations by making targeted investments through public and private sector cooperation, strengthening air defense of key sectors including agriculture, and increasing diversification of the energy sector.

















Economic Fallout

Russia has heavily targeted Ukraine's economy to suffocate the country's trade and force capitulation on Russian terms. Examples include the Kremlin's blockade of Ukraine's ports, targeting of strategic energy infrastructure, and destruction of industrial facilities. The war has heavily damaged Ukraine's economy. A study by the Kyiv School of Economics (KSE) that calculated the cost of destroyed infrastructure and buildings in monetary terms revealed that, as of August 8, direct damage caused by the war had reached \$110 billion.³⁸ Seven months later, KSE's calculations increased to \$144 billion.³⁹ The Ukrainian government estimated in April 2022 that Ukraine would require \$750 billion⁴⁰ in recovery funds while the World Bank estimated at that time that Ukraine's GDP would halve by the end of 2022.⁴¹

In the coming years Ukraine's economy might require over \$1 trillion in recovery and is expected to further contract. Global rating agencies Fitch and S&P have lowered Ukraine's foreign currency ratings to selective default and restricted default on August 12.⁴² Rough estimates show that Ukraine's GDP was running at a \$5 billion monthly financing gap during the first few months since the February invasion and then at \$4 billion per month.^{43 44} The World Bank estimated Ukraine's economy contracted by 45% in 2022.⁴⁵ In its most recent rapid damage and needs assessment report, The World Bank estimated Ukraine's total recovery and reconstruction needs to be \$410 billion.⁴⁶

Ukraine's economic condition is in critical condition. Despite the country's business sector showing strong resilience (in some cases – recovery and growth), Ukraine needs immediate economic attention and stimulus injections. Western support will play a key role in Ukrainian economic recovery.

Total damage assessment in monetary terms as of the end of the February, 2023

Property type	Damage assessment, \$ billion
 Housing	53,6
 Infrastructure	36,2
 Assets of enterprises, industry	11,3
 Education	8,9
 Agriculture and land resources	8,7
 Energy	8,1
 Forests	4,5
 Transport	3,1
 Trade	2,6
 Culture, sport, tourism	2,2
 Healthcare	1,8
 Utilities	1,4
 Electronic communications	0,6
 Administrative buildings	0,5
 Social sphere	0,2
 Financial sector	0,04
Total	143,8

KSE Institute | ГОЛОВНЕ УПРАВЛІННЯ УРАДОВОГО АРХІТЕКТУРИ ТА БУДІВНИЦТВА УКРАЇНИ | МИНІСТЕРСТВО ЕКОНОМІКИ УКРАЇНИ | МИНІСТЕРСТВО ІНФРАСТРУКТУРИ УКРАЇНИ | Міністерство розвитку громад та територій України

Ukraine has experienced the heaviest damage to its housing and infrastructure sectors, with apartment buildings and roads taking the heaviest toll.

Source: Kyiv School of Economics⁴⁷

Estimates have shown that Ukraine's economic production has significantly decreased in the east of the country while it has shown signs of growth in the central and western regions.⁴⁸ The American Chamber of Commerce in Ukraine conducted an August 2022 poll among its 600+ member companies and revealed that 72% of its members are fully operational, 27% of companies continue to work partially and that 96% plan to continue their operations in Ukraine next year. While 16% were paying reduced salaries, 83% were paying employees full salaries.⁴⁹

RECOMMENDATIONS

- G7 countries must secure a constant monthly flow of \$4-5 billion into Ukraine's economy.
- G7 countries must secure Ukraine's strategic infrastructure with effective air defense systems.
- Ukraine should start receiving the more than \$300 billion in Russian frozen assets for reparations.
- G7 countries must initiate a process of debt forgiveness for Ukraine.
- Ukraine's government should launch an effective anti-corruption campaign which will win over trust of investors and governments.

Energy

Russia has systematically targeted Ukraine's energy sector to impose suffering on the civilian populations which they hope will increase pressure on the Ukrainian government to negotiate. In October-November 2022, Russia launched a massive drone and cruise missile campaign against Ukraine's critical infrastructure with the aim of cutting off energy supplies before the winter.⁵⁰ Russia launched one of its heaviest missile strikes⁵¹ on November 15th 2022 across Ukraine's major cities, leaving millions of Ukrainians without electricity.⁵² Russian attacks in vicinity of the Zaporizhzhia Nuclear Power Plant (ZNPP), Europe's largest nuclear power plant with 6 reactor units,⁵³ threaten an international disaster of massive proportions.

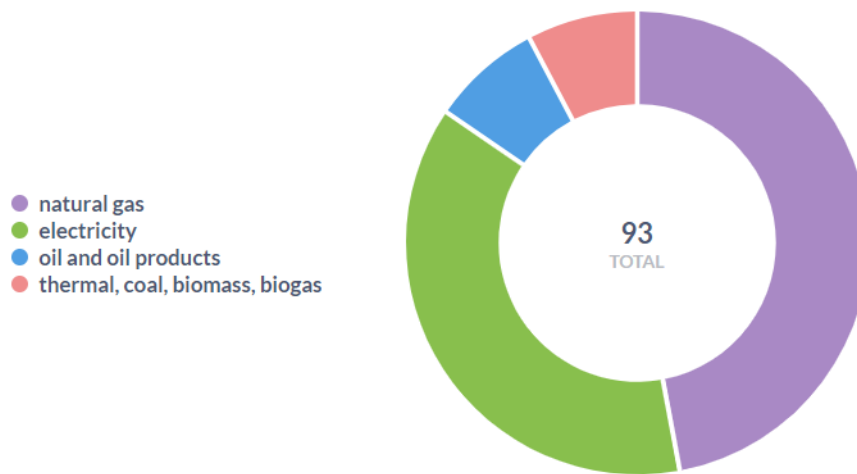
Ukraine's nuclear sector makes up more than 60% of its overall electricity, followed by thermal power production (24%), combined heat and power (6.5%), and renewable energy sources (4.5%), according to December 2021 data provided by NPC Ukrenergo.

Structure of electricity production, million MWh ⓘ



Source: Dixi Group

Graph: Structure of Ukraine's energy consumption



Source: Dixi Group

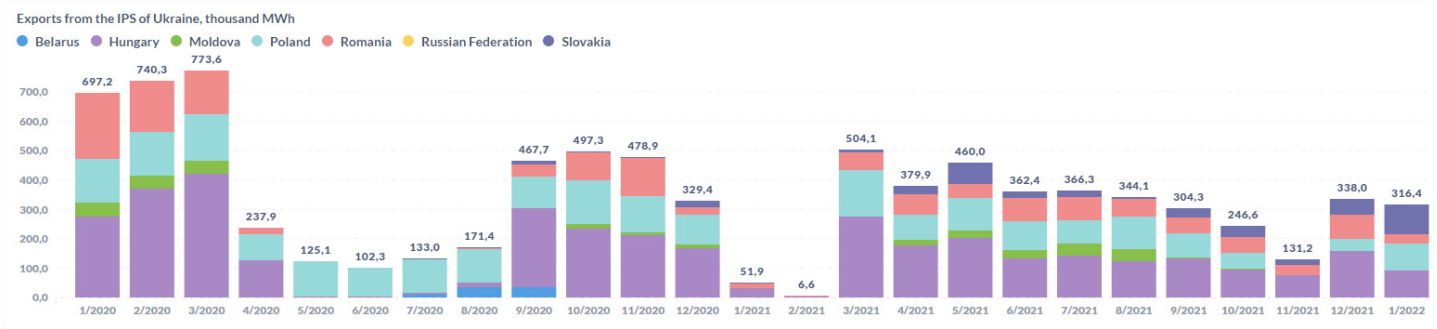
“The assessment of reduction in the electricity consumption during this war period is around 30 percent,” according to a July 7th 2022 interview for this report with Anton Antonenko, Vice President of Dixi Group, a think-tank that provides research and advice on information policy, security and investment in the energy sector.⁵⁴ This has resulted in Ukraine’s energy system not receiving roughly \$250 million per month which remains a “huge problem” as these debts are accumulating, according to Antonenko back in July. Ukraine has been selling some of its extra electricity capacity to the EU (such as Poland, Slovakia, Romania), but not at full capacity. Ukraine could sell its extra electricity to cover the \$250 million per month needed as well as make a profit, according to Antonenko.

Since the breakup of the Soviet Union, Ukraine's energy sector has been integrated with Russia and Belarus. It inherited a structure where it was almost completely unified with the electricity systems of Moldova and Lithuania and remains closely integrated with the two countries to this day. In 2012, Ukraine committed to becoming part of ENTSO-E, the European continental electricity system, a lengthy process of improving policies and technology. In 2021, Ukraine had to perform two major tests – one in the winter peak of 2021 and another in the 2022 summer peak⁵⁵ – to prove that it could completely function in isolation mode (together with Moldova) at 50 hertz for three days. Ukraine reportedly had scheduled its winter test for February 24.⁵⁶

One hour before Russia's February invasion, Ukrenergo, Ukraine's electricity transmission system operator, fully disconnected the electric grid from Belarus and Russia. Ukraine was faced with the question of whether to connect back to Russia or to proceed with the test. It chose to go with the latter and successfully ran all tests within three days and continued in such isolated mode for three weeks until it finally connected to ENTSO-E.⁵⁷

Russia's attacks on Ukraine's energy system will, therefore, have negative spillover effects within countries that are integrated with Ukraine's. Moldova, for example, temporarily had significant power outages on November 15, 2022 after Russia's missile strikes on Ukraine's energy infrastructure.⁵⁸ Furthermore, Ukraine's energy source is a key decision factor for Russia as it continues to undermine Ukraine's integration with the EU. Without controlling Ukraine's energy source, Russia has less leverage in controlling the country as a whole.

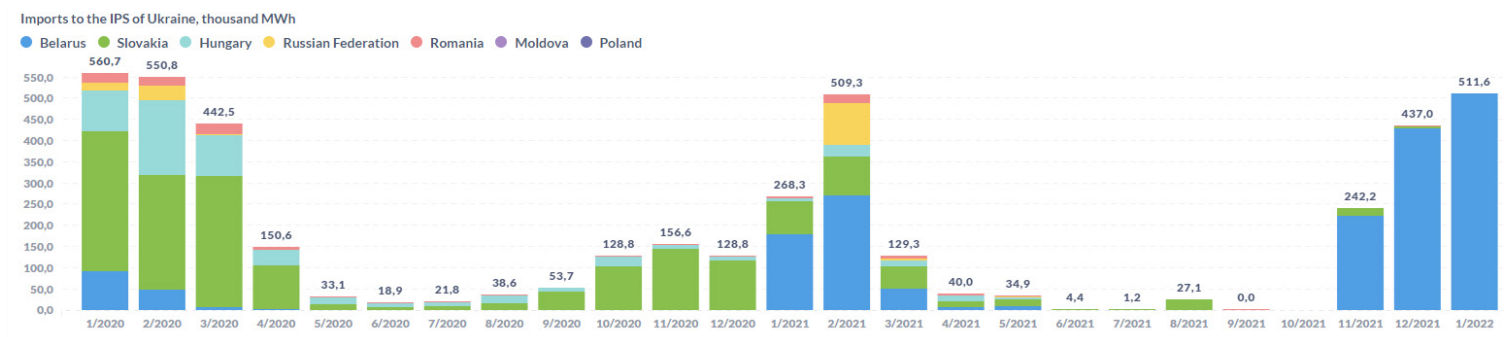
Exported and imported electricity



Source: Dixi Group⁵⁹

Being the largest energy source in Ukraine, natural gas was a high priority for the country as it prepared for the winter. As of November 2022, Ukraine had around 10 billion cubic meters (bcm) in gas storage and the government had a pre-war target of reaching near 19 bcm by the beginning of heating season to be at comfortable operating level, according to Antonenko.

Due to the war limitations of other sources of energy such as coal (since most coal production is in eastern Ukraine), Ukraine may have to use natural gas to generate additional electricity. The exact yearly natural gas needs are difficult to predict due to consumption demand both on the commercial and household levels. Additionally, as a result of Russia using natural gas as a political weapon, the overall demand for gas across Europe and the high price add additional pressure in securing gas for Ukraine's annual winter needs. All in all, the majority of Ukraine's natural gas needs are being met.



Source: Dixi Group⁶⁰

RECOMMENDATIONS

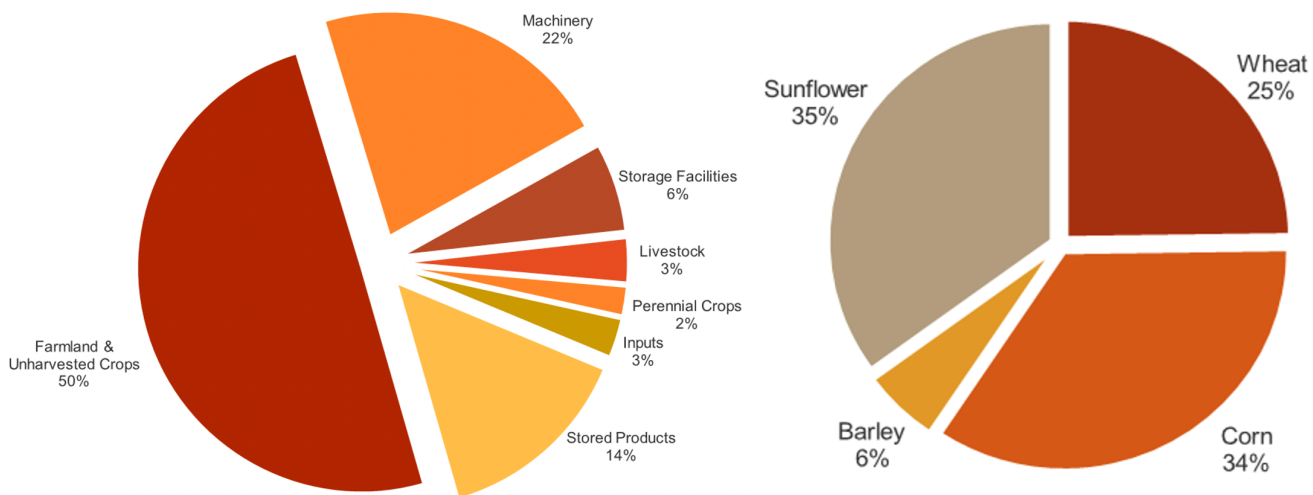
- The Euro-Atlantic community should continue to provide Ukraine with effective and abundant anti-missile systems and air defense which would reduce the threat of Russian missiles and their destruction to critical infrastructure. The quantity should amount to the degree that will have a strategic difference that will convince Russia that their air strikes will be effectively downed and will not reach their intent.
- NATO members must provide expedited training for Ukrainian soldiers on how to operate modern air defense systems.
- The EU must secure an energy backup plan to ensure a steady flow of energy supply to Ukraine during the winter months via coal, liquified gas and natural gas shipments (from Norway). EU countries have been providing power generators during the 2022-2023 winter season, but this is only a short-term and partial solution.
- The United Nations should insist on full access to the Zaporizhzhia Nuclear Power Plant and that the plant is fully demilitarized from Russian troops.
- The European Union must ensure that Ukraine and Moldova's energy systems are completely integrated with the EU to provide more stability and security for Ukraine as well as expedite the process. This will also allow Ukraine to export electricity to EU countries in larger capacities.
- The Ukrainian government could catalyze Ukraine's energy diversification by attracting foreign direct investment into the country through political risk insurance, tax cuts, and possibly feed-in tariffs (guaranteeing producers above-market prices for energy produced).
- Streamline development plans for full mixture of domestic energy supply to include gas, oil, solar, biofuel, and wind – all integrated into the European energy grid.
- Ukraine and NATO countries must take advantage of the Russian gas transit via Ukraine by canceling the transit flow in combination with pressuring Turkey not to accept gas from Russia.

Agriculture

Agriculture is central to Ukraine; the country is one of the top global leaders of grain exports thanks to its abundance of chernozem (black earth), a highly fertile organic matter. Not only does the country fully feed its population of over 40 million, but it also provides food to more economically vulnerable countries within Africa as well as the Middle East and is an integral part of global food supplies. Before the 2022 invasion, Ukraine's monthly agricultural commodity exports averaged approximately six million tons. In the 2020/21 season, Ukraine was responsible for producing more than 11% (or nearly 70 million tons) of cereals consumed across the globe.⁶¹ These supplies have been significantly disrupted since Russia's February invasion.

Direct damage to Ukraine's agriculture, according to a June 2022 study by the Kyiv School of Economics (KSE), had reached \$4.3 billion, or 15% of its capital stock.⁶² KSE estimates revealed that the indirect losses are almost sixfold, reaching \$23.3 billion due to decrease in production, logistics damage, and decreased prices of export commodities.⁶³

Damages structure by category



Source: Kyiv School of Economics⁶⁴

Russia embargoed shipping in the Black Sea since the February invasion, with its warships blocking international trade vessels from delivering Ukrainian grain throughout the globe.⁶⁵ Russia's military damaged, destroyed or took possession of almost 16% of Ukraine's grain storage facilities since the February invasion, according to a September 15th 2022 report.⁶⁶ As Ukraine loses its capacity to store grain, its crops are left underutilized or to rot in vast quantities.⁶⁷

Over 90% of Ukraine's crop exports were channeled through Ukraine's sea ports before Russia's full-scale invasion. After the February invasion, Ukraine was estimated to channel 20% of its pre-February 24 performance.⁶⁸ Furthermore, 2.4 million hectares of Ukraine's soil could go unharvested, worth roughly \$1.4 billion in 2022.⁶⁹

A grain deal was signed on July 22, 2022, between Ukraine, Turkey, the United Nations, and Russia to provide a safe passage for vessels to deliver grain from Ukraine's sea ports.⁷⁰ As of November 15, 2022, the agreement secured the export of more than 9 million tons of agricultural commodities allowing a passage for 790 cargo voyages, according to the United Nations.⁷¹ This performance, however, is still much lower than Ukraine's pre-February levels.

Before the February 2022 invasion, Ukraine was the fourth largest corn exporter in the 2021-2022 marketing year. In the 2022-2023 marketing year, Ukraine has managed a record crop of more than 42 million metric tons, according to the United States Department of Agriculture. Traditionally, Ukraine has exported the majority of its corn production, roughly at 80% of its overall harvest.⁷²

UKRAINE CORN OUTPUT IN MY 2022-23 MAY FALL AFTER RECORD YEAR



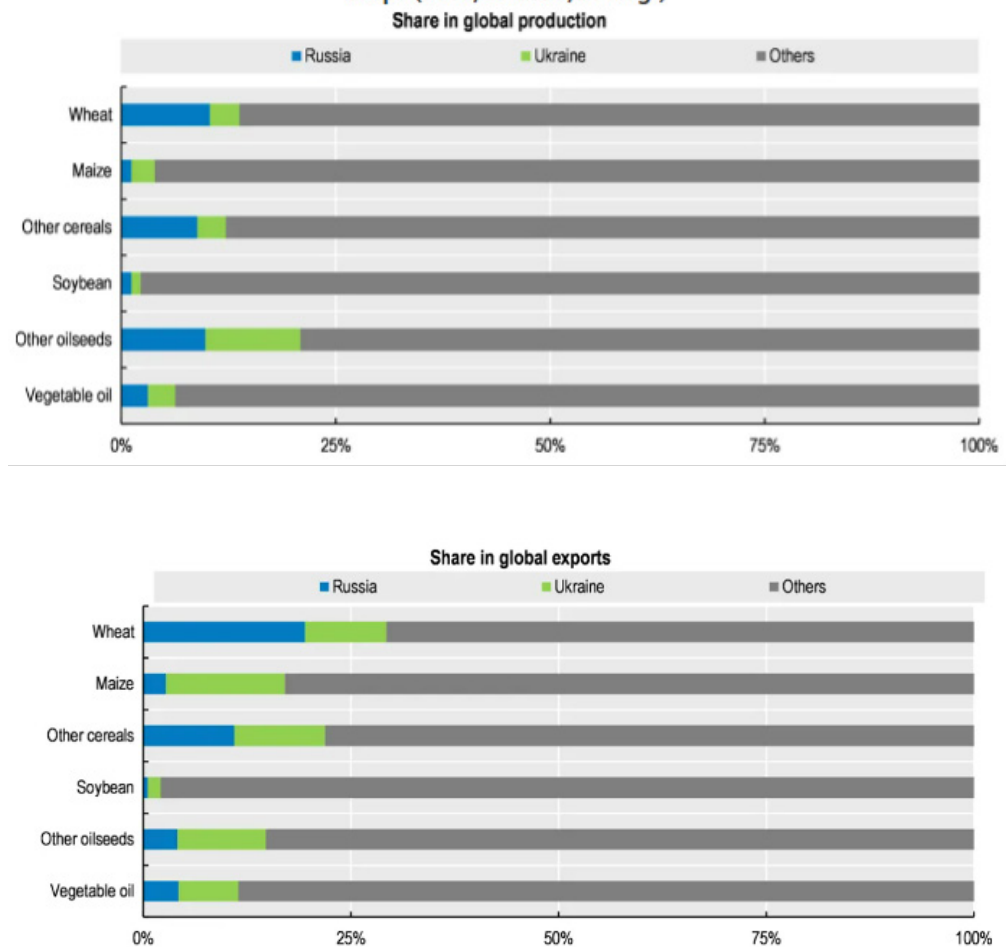
*Pre-2022 data points are previous USDA projections; 2022-23 are initial Platts Analytics projections

Source: S&P Global Commodity Insights, US Department of Agriculture

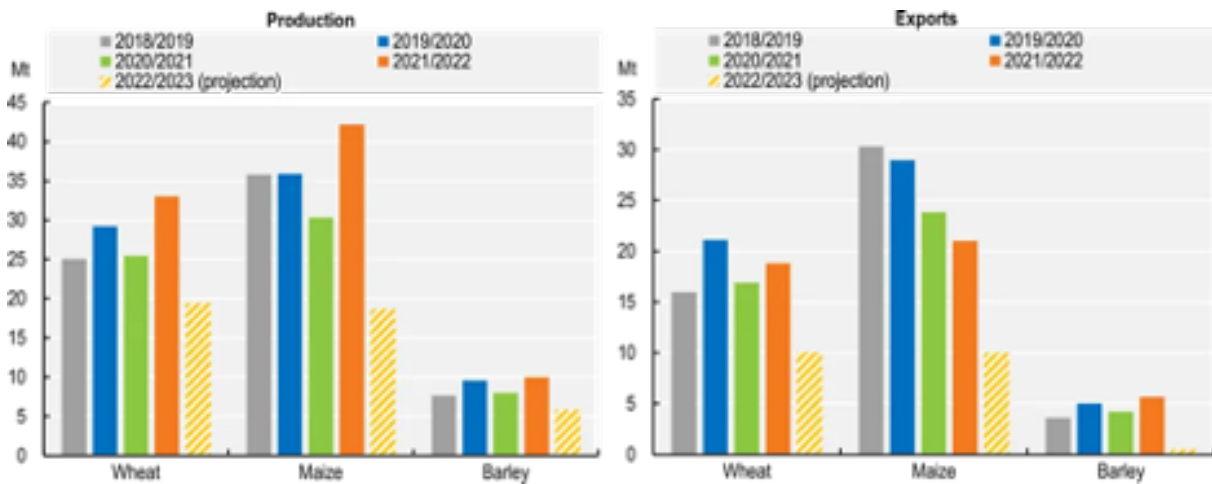
Ukraine was also the largest sunflower seed producer and a top wheat, rapeseed, barley, vegetable oil, and maize exporter.⁷³ As such, the implications of Ukraine's grain exports being suffocated by Russia has vast consequences both for Ukraine's economy and for the global food market. So far, a food crisis has been avoided due to the grain deal, but such an agreement hangs on a thin thread. Russia could decide to attack international and Ukrainian ships at any moment, and pull out of the deal with no warning. Ukraine and Russia have extended the grain deal in March 2023.⁷⁴

Russia's war against Ukraine has potentially longer-lasting implications for producers and consumers, according to the OECD.⁷⁵ Ongoing risks include farmers' safety, fertilizer availability, and transportation limitations. Additionally, the war could have long-term impact on the soil in terms of chemical contamination.⁷⁶

Figure 1. Shares of Russia and Ukraine in global production and exports of selected crops (2016/17-2020/21 Avg.)



Source: OECD⁷⁷



Source: OECD⁷⁸

The continuation of the war will have a destructive impact on Ukraine's agriculture as Russia continues to target agricultural production capacities by shelling grain silos,⁷⁹ stealing Ukrainian grain,⁸⁰ and threatening to cancel the grain deal.⁸¹ Russia has leverage with threatening to lower grain capacities being traded via Ukraine. Consequentially, countries that have traditionally relied on Ukraine's agricultural commodities will experience widespread shortages. The country's agriculture sector is heavily bleeding and will require immense external support to continue and function.

RECOMMENDATIONS

- The transatlantic community must swiftly build and protect new grain crushing and storage units which could store Ukraine's grain in Ukrainian territory and in neighboring countries such as Poland and Slovakia.
- The U.S. and its partners should sanction companies that agree to buy from Russia stolen grain and launch legal cases against these companies.
- NATO countries must secure a more permanent solution for the freedom of passage for Ukraine's commodities via the Black Sea. This might be achieved by providing Ukraine with long-range missiles that will further push the Russian fleet from Ukraine's borders as well as by strengthening NATO's presence in the Black Sea region.
- Ukraine's partners should help Ukraine rebuild infrastructure in a diversified way. This means the country's grain export capacity should be considerably increased via rail at the EU border and Ukraine's highway network expanded for large freight vehicles.

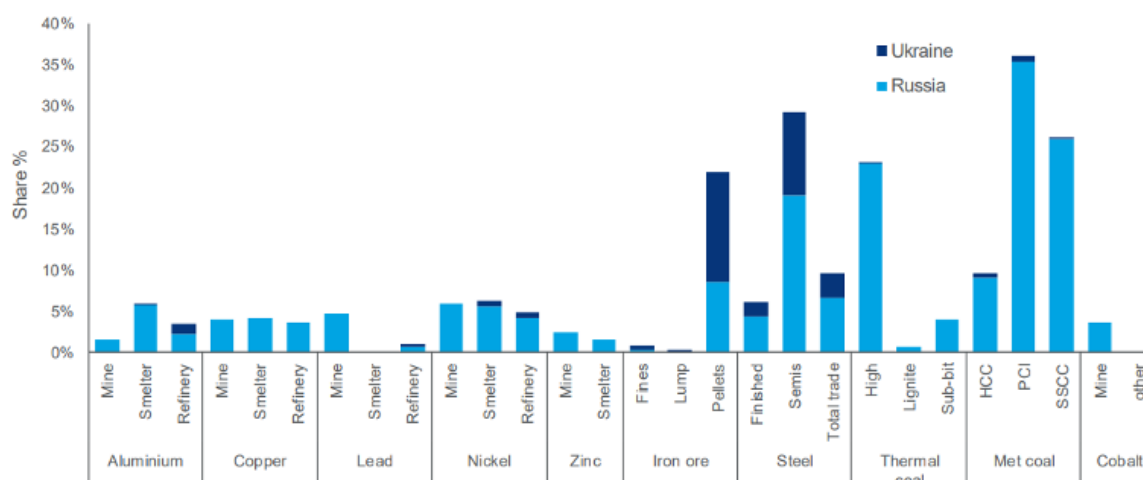
Metals

Metals, Ukraine's second largest commodity sector, has been seriously damaged by the war. Ukraine was the world's 14th largest steel producer, making 21.4 million tons of crude steel.⁸² It was the 9th largest steel exporter,⁸³ sending out 15.2 million cubic tons to other countries, based on 2020 data of the World Steel Association.⁸⁴

Bulk commodity markets at the centre of concerns over Russia/Ukraine war

Tight markets and limited ability to source alternatives mean no respite from tightness in the short term

Share of global production or traded supply from Russia and Ukraine 2021



Source: Wood Mackenzie
Note: Stocks calculated as demand minus supply

Some estimates show that as much as 90% of Ukraine's steel capacity has been destroyed since April 1st 2022, exacerbated by disruption of transportation and supply chains within the sector, most notably, coking plants.⁸⁵ These coking plants were heavily reliant on the supply of coking coal, 43% of which came from Russia. In 2021 alone, Ukraine imported 8 million tons of coking coal from Russia. As of April 2022, only 1 out of 6 integrated steel plants is functional – Kametsal. A third of Ukraine's steel capacities were located in Mariupol, occupied and destroyed by the Russians.⁸⁶ Ships were a dominant means of metals transportation whereas since the February invasion the industry is looking for alternative means, primarily rail. However, due to Russia's Black Sea threats, other economic sectors are competing for the same means of transportation. Russia's war against Ukraine, if continued long-term, will have an enormous impact on global steel demand and trade, according to the Japan Iron and Steel Federation.⁸⁷

An often-overlooked underperformance of Ukraine's economy is the neon market, as Ukraine's two leading neon suppliers produce around half of the global supply for chip-making. One of Ukraine's primary neon producers, Ingas, was based in Mariupol. The other company, Cryoin, is based in Odesa.⁸⁸ Their operations have been disrupted since Russia's attack. This causes a direct threat to global price hikes and shortages within the semiconductor market.⁸⁹ Overall, Ukraine supplies about 70% of the world's neon gas and 40% of krypton. Until recently, Ukraine supplied 90% of the highly purified, semiconductor-grade neon for U.S. chip production.⁹⁰ As a result, Ukraine's metals capacities should be viewed as a national security priority and Ukraine should prioritize de-occupying regions known as metals production hubs such as Mariupol.

As with the agriculture sector, metals in Ukraine have been severely hit. Ukraine's metals and noble gases market has plummeted, along with Ukraine's prominence within those sectors. Russia continues to attack Ukraine's most lucrative and metals-rich regions. With occupying Donbas, Russia not only strikes Ukraine's economy, but increases its own metals capacities and, therefore, its prominence within those markets. For Ukraine's economic survival, the country will require financial backing as rebuilding and reconquering its lost assets is not a quick process.

RECOMMENDATIONS

- The West should provide Ukraine with modern air defense for the country's non-occupied metals assets.
- Ukraine and its allies should concentrate on the medium- to long-term reconquest and recovery of Ukraine's metals-rich regions – primarily Donbas.

Part III: **International Support and Russian Public Opinion**

The U.S. and allies remain in an advantageous position to shape the narrative of the war and garner better support for Ukraine in different parts of the world through consistent and aggressive engagement. Not all publics exist within the same information conditions, but each are trending toward either resolute defense of democratic values or siding closer toward validating authoritarian aggression. It is a battle that must be fought across cyberspace and the airwaves. This specific concern is also not limited to the events in Ukraine. The war might prove to be a catalyst to rally allies and generate increasing support for democracies under siege. Core elements of the Russian approach must be met head on across the international space in addition to better understanding of trendlines within the Russian population at home.

International Engagement

Russia will continue to look for deals in the arms and economic sectors when negotiating with countries that are perceived as neutral when it comes to Russia's war in Ukraine. Russia will also invest in disinformation among these countries and strengthen its diplomatic envoys with these nations promising attractive deals most notably within energy and agriculture. Russia will aim to create division within countries by spreading misinformation to undermine a unified response. How the U.S. and allies combat these efforts, limit them, or sway support toward Ukraine will have a consequential impact on wider international support. The respective approaches might depend on the continent or specific country, but all represent consequential battlefields in the information space that will shape the outcome of the war.

Africa: Russia has been investing considerable effort in spreading its agenda on the African continent. In late July 2022, Russian Foreign Minister Sergey Lavrov visited four African countries: Egypt, Republic of Congo, Uganda, and Ethiopia. One of Russia's main achievements has been on the UN stage, where it convinced 24 African countries⁹¹ not to condemn its war against Ukraine during the March UN General Assembly vote,⁹² although another 28 African countries voted that Russian troops should withdraw from Ukraine. In April,

Russia received a favorable result in the UN General Assembly's vote to suspend Russia's membership of the Human Rights Council, with only 10 out of 54 African countries voting in support of the resolution, 9 opposing it and 35 being absent or abstaining.⁹³ In 2019, Putin gathered leaders from 43 African countries in Sochi,⁹⁴ and a year after Russia became the number one arms exporter to the African continent.⁹⁵ Yet, Russia was responsible for less than 1% of foreign direct investment into Africa in 2017.⁹⁶ Russia's victories on the UN stage have been limited, however, as 143 members of the General Assembly voted on October 12 in favor of Ukraine's territorial integrity,⁹⁷ and as 94 members of the General Assembly voted on November 14 to approve a resolution recognizing Russia's responsibility for reparations to Ukraine.⁹⁸

As part of its anti-West pitch, Russia has been emphasizing on U.S. colonialism, that African countries should take an independent path from the West's and not join in sanctions against Russia.⁹⁹ To amplify its pitch, Russia has invested in propaganda among African television networks, and it has been reported that RT (formerly Russia Today), the Kremlin's media channel largely banned across the globe, is opening a new bureau in Johannesburg, South Africa.¹⁰⁰ Leaders of Central European countries and Ukraine have launched a counteroffensive of Russian propaganda in Africa with Polish and Latvian leaders travelling to Egypt, Zelensky speaking to African Union leaders and declaring to create a special Ukrainian envoy to Africa.¹⁰¹ The U.S. has also been attempting to counter the Russian propaganda in Africa.¹⁰²

RECOMMENDATIONS

- NATO countries must counter Kremlin propaganda on the African continent by investing in information campaigns and freedom of speech.
- The US must encourage African countries to remove Kremlin-controlled media, similar to what has happened in the West, when companies such as Meta, Google and YouTube have blocked RT from generating revenue on their platforms,¹⁰³ and when the European Union issued a ban on Russian state-owned outlets.¹⁰⁴

Europe: Historically, Russia has been targeting either individual countries or specific groups within European countries that are vulnerable to Russian propaganda. Countries like Hungary and Serbia are traditionally known as countries that are more vulnerable to spreading Russian propaganda. Hungary's Prime Minister Viktor Orban is one of the most notable political examples of a European Union leader spreading Russian falsehoods and cozying up to Putin.¹⁰⁵ Serbian media has reported that it was Ukraine that attacked Russia back in February 2022.¹⁰⁶ In general, the Balkans have been susceptible to Russian propaganda.¹⁰⁷ In February 2022, Serbia appointed a pro-Russian politician Aleksandar Vulin as the country's director of the BIA, Serbia's intelligence agency.¹⁰⁸

European far-right and far-left political and social organizations have also shown their specific vulnerabilities to Russian influence.¹⁰⁹ For example, French presidential candidate Marine Le Pen had close ties with Russia for years,¹¹⁰ while Germany's far-right party Alternative für Deutschland and leftist Die Linke have both spread Kremlin propaganda regarding Russia's invasion of Ukraine.¹¹¹ Former British UK Independence Party leader Nigel Farage has been criticized for frequent appearances on Russia's state-owned Russia Today channel back in March 2014 praising Putin, during the annexation of Crimea.¹¹² Shortly after the February invasion, Farage denied allegations that he was paid more than half a million British pounds by the Kremlin.¹¹³ Italy's influential Lega and Forza Italia parties lead by Matteo Salvini and Silvio Berlusconi respectively, are historically known to have friendly ties with the Kremlin.¹¹⁴ Depending on their relationship with the Brothers of Italy party, they could have a significant impact on pushing Italy toward a more pro-Russian stance.

RECOMMENDATIONS

- As German's Chancellor Olaf Sholtz suggested, it is important to extend the "practice of making decisions by majority voting to areas that currently fall under the unanimity rule."¹¹⁵ In doing so, it will be easier for the European Union to preserve its unity, decisiveness and timeliness when dealing with an aggressive Russia. While unanimity against Russian aggression still exists, this should not be delayed.

- Any financial trails linking European leaders, organizations and companies with the Kremlin should be quickly publicly revealed, and those responsible held accountable.
- Any financial links between EU leaders and the Kremlin should be banned.

Israel: After Lavrov called Zelensky an anti-Semitic Jew at the beginning of May, Israeli-Russian relations significantly soured with former Israeli Prime Minister Yair Lapid publicly criticizing Russia shortly after he was elected.¹¹⁶ Until then, Israel has been taking a more neutral stance¹¹⁷ in dealing with Russia's war against Ukraine. On one hand, Ukraine has a large Jewish population and had some of the highest Jewish casualties during World War II; on the other hand, Russia has not been interfering with Israeli airstrikes in Syria. Israel is also home to a number of influential Russian oligarchs and the country accepts ample Russian money.¹¹⁸ Israel did not participate in sanctions against Russia and has not been sending weapons to Ukraine,¹¹⁹ although it has been providing defensive equipment and humanitarian aid.¹²⁰ Russia did strengthen its ties with Iran, a staunch enemy of Israel. In response, Israel agreed to provide Ukraine (via NATO) intelligence in how to counter Iranian drones.¹²¹ Netanyahu's return to office brings a potential change in the Prime Minister's traditional neutral stance on Ukraine-Russia relations. With Israel's new administration reviewing its response to the war in Ukraine, it is still unclear what that might mean in practice – whether Israel will provide Ukraine with weapons or not.¹²² It is possible that Netanyahu will adopt an opportunistic ambiguous-signal strategy similar to that of Turkey's Erdogan. Netanyahu, like Erdogan, might want to increase his value in Ukraine-Russia mediation negotiations. Tensions have pivoted to an additional low as the Justice Ministry in Moscow is halting the activities of the Jewish Agency, a non-profit organization affiliated with the government of Israel that helps Jews immigrate from Russia.¹²³

RECOMMENDATIONS

- The U.S. should negotiate with Israel to sanction Russian entities and to provide Ukraine with air defense as Russia and Iran become more entwined.

Russia’s “traditional” sphere of influence: Many of the so-called post-Soviet states have been known to be within Russia’s traditional sphere of influence. Countries such as Kazakhstan, Armenia, Kyrgyzstan, Uzbekistan and Tajikistan have shared military exercises with Russia. However, Russia’s influence in its bordering regions is waning as it is struggling to keep up with mobilizing troops in its war against Ukraine.¹²⁴ For example, as Russia removes its military influence from the regions, there have been renewed border clashes between Kyrgyzstan and Tajikistan in 2022 claiming around 100 lives.¹²⁵ The Armenia-Azerbaijan conflict is another reminder that Russia is losing its grip in the region as last year Armenia asked French President Emmanuel Macron to chair peace talks with Azerbaijan and as the country’s Prime Minister Nikol Pashinyan refused to sign a summit declaration of the Russian-led Collective Security Treaty Organization in November.¹²⁶ Pashinyan also refused to host CSTO military exercises on January 10th.¹²⁷ Kazakhstan, perhaps the most important for Russia within Central Asia, has been moving away from Russia and strengthening ties with China.¹²⁸ Since Russia’s February invasion of Ukraine, Kazakhstan has also been trying to attract Western businesses leaving Russia since the February invasion.¹²⁹

RECOMMENDATIONS

- The U.S. must immediately take advantage of Russia’s weakening position in its bordering regions by assisting U.S. companies and signing bilateral or multilateral trade deals.
- The U.S. should support independent journalism by increasing funding for Radio Free Europe/Radio Liberty and/or Voice of America.
- The U.S. and EU should support the presence of human rights organizations.
- The E.U. should expedite its integration process with countries that have shown interest in strengthening ties with the EU.
- Allies must prepare for long-term conflict within the region and the geopolitical turbulences it will cause if the Russian system crumbles.

India: From the beginning of the invasion India has stayed officially neutral while profiting economically from continued trade with Russia. India has repeatedly

abstained from voting in the UN Security Council, General Assembly, and Human Rights Council to condemn Russian aggression.¹³⁰ India has been reaping cheap oil benefits and is well known to import Russian weapons, as well as sending exports to Russia. In April 2022, India planned to increase exports to Russia by an additional \$2 billion despite widespread Western sanctions against Russia, and Russian oil exports to India significantly increased since the February invasion.¹³¹ Kpler estimated that Russian oil exports to India reached 1.05 million per day in July 2022 whereas before the invasion such figures peaked at 200,000 bpd per day in any month of 2021.¹³²

Through continued engagement with Russia, India aims to limit Russia's reliance on ties with China and Pakistan.¹³³ U.S. Treasury Deputy Secretary Wally Adeyemo traveled to India in August 2022 in an attempt to deepen ties with India within the context of Russia's war in Ukraine.¹³⁴ India also participated in Russia's Vostok-22 military exercise, seemingly using such a move to buy negotiation power with the U.S., as the latter looks for ways to consolidate the international arena against the Kremlin's war in Ukraine.

The U.S. might be limited in its negotiations with India in the short run. However, India's bilateral relations with Russia are under significant pressure because of the conflict and there is no guarantee that it will prevail in the long run.¹³⁵ There could be opportunities to change the calculus in the near term that could add an additional pressure point to the campaign against unwarranted Russian action against a neighbor.

RECOMMENDATIONS

- The U.S. has refrained from “shaming” India considering the strategic importance of the relationship with India vis-à-vis China. While the U.S. government is hesitant to strain ties with India, a pragmatic step would be to constrain and balance India's ties with Russia through public discussion while simultaneously seeking to increase opportunities for U.S. arms sales to replace Russian systems.
- The U.S. might also identify clear red lines for Indian cooperation with Russia including military exercises. There should be clear negative consequences for India, a country which has been seeking U.S. support

against China. The U.S. of Europe could find points of diplomatic linkage that are not currently used as points of leverage with India while Ukraine could strengthen its diplomatic campaign in India.

Brazil: Like Turkey, China, and India, Brazil has been opportunistically taking advantage of the war for its economic interests. Russia – Brazil’s largest international supplier of fertilizer – is responsible for 23% of Brazil’s 40m tons of fertilizer imports,¹³⁶ exporting around \$3.5 billion worth of fertilizer in 2021.¹³⁷ As a result of Western sanctions against Russia, the latter announced that it would suspend its exports. Brazil’s then President Jair Bolsonaro saw this as an opportunity to achieve his domestic goals to push through the agenda of mining in Brazil’s indigenous lands for potassium which would allow Brazil to make its own fertilizer.¹³⁸

Furthermore, Brazil’s then Foreign Minister Carlos França said on July 12 that Russia is a strategic partner, reliable supplier and that Brazil will buy diesel to the maximum from the aggressor state.¹³⁹ Nine days before Russia’s full-scale invasion, Bolsonaro called Putin “a man of peace”¹⁴⁰ whereas Brazil’s then presidential front-runner for the October 2022 elections Luiz Inacio Lula da Silva said that both Zelensky and Putin are equally to be blamed for the war.¹⁴¹ Zelensky publicly criticized Brazil’s neutral position.¹⁴²

RECOMMENDATIONS

- There has been minimal public pressure against Brazil for cooperation with Russia as it seeks favorable energy deals. To balance against these opportunities, the US should explore better public-private cooperation in the energy sector with Brazil to draw the latter away from the Russian market, or at least mitigate its influence.
- Brazil should be pushed to purchase fertilizers from other countries.

China: According to U.S. intelligence, China is close to supplying Russia with additional weapons.¹⁴³ Officially, China promised greater ties with Russia just before the February 2022 invasion in a historic trade and energy deal. Actions since the invasion have also belied the growing relationship. China avoided speaking to Zelensky until recently, and in mid-July 2022 affirmed its support for

Russian “sovereignty and security.”¹⁴⁴ Chinese leader Xi Jinping has called Putin his best friend and largely aligned with Kremlin talking points in logic blaming the war as a result of NATO’s expansion.¹⁴⁵ Furthermore, Beijing has condemned Washington for providing military support to Ukraine and implementing sanctions against Russia. This is in line with policy in previous years.¹⁴⁶ China may continue to use the war as a bargaining chip against the U.S. as it has been doing since the February invasion. It may also raise support for Russia through linking increasing U.S. material support for Taiwan.¹⁴⁷

The U.S. has been clear that China will face consequences if it decides to support Russia militarily and evade sanctions.¹⁴⁸ Yet by increasing Russia’s reliance on China as a main hydrocarbon consumer, Beijing is also containing Russia – a strategy consistent with past approaches.¹⁴⁹ China faces a strategic paradox where Beijing does not want their ally to lose this conflict, but also may not want an emboldened Moscow.¹⁵⁰ Indeed, as Russia’s influence is decreasing, China has been losing no time in expanding its influence in Central Asia.¹⁵¹

RECOMMENDATIONS

- China should face a public information campaign that highlights Russian atrocities and Beijing should be routinely criticized for emboldening Russian aggression.
- The prospect of nuclear escalation is real and not in the interest of a safe world for all countries. China and the wider public should be reminded that its support of Russia increases the chances of nuclear use.
- China is benefiting from Russia’s cheap hydrocarbons. U.S. allies and competitors in the Middle East may continue to face an impacted market as a result, and this provides space for Washington to maneuver with Riyadh and allies.
- Washington and allies should continue to develop a robust, dynamic response in the event Beijing begins to support Russia with advanced weapons and military systems. This response should not be limited to the battlefields of Ukraine but directly affect Chinese interests on various fronts across the world.

Russia at Home

Accurately gauging Russian public opinion on the war is hampered by the unreliability of Russian public opinion polling. Polls underrepresent Russians who are against the war in Ukraine yet who fear to publicly voice their opinion, or such polls can simply be rigged, as they act as a medium to spread Russian propaganda.

Polling suggests Russians overwhelmingly support their country's war against Ukraine. For example, 80% of Russians supported Putin's decision to invade Ukraine as of April 2022, according to a Levada Center poll.¹⁵² Another poll, also conducted by Levada, shows that the approval of Putin was above 82% every month post February 2022, which is nearly 20 points higher than the Russian leader's numbers before the February invasion.¹⁵³ However, the public's support for its country's invasion of Ukraine has slightly declined, according to a Levada Center poll.

A different poll, published in mid-July, shows that the support of Russia's war is at 55%, a 9-percent decrease during a one-and-half-month period.¹⁵⁴ A recent study shows that there are significant levels of preference falsification among Russia's high levels of supporting the war: 71% of respondents support the war, while this share drops to 61% when using the study's list experiment.¹⁵⁵ According to a Levada Center August poll, most Russians believed that the war will not be long-term, whereas only 21% believed it will last over a year¹⁵⁶ and as many Russians hope that Ukraine will soon capitulate to Russia.¹⁵⁷ Therefore it is difficult to predict if the response will surge once the effects of sanctions are felt more directly as businesses continue to underperform and as goods and services become less affordable or unavailable.¹⁵⁸

Furthermore, the psychological effects of being from an outcast nation might also come into play as more Russians long for pre-February normalcy.¹⁵⁹ It is also difficult to understand and predict the preferences of Russians due to propaganda, lack of state-independent polls, and fear of expression considering Russia's laws that ban war criticism.¹⁶⁰

The country's military is heavily demoralized due to major military and intelligence failures as well as lies by the government and higher echelons of the military. Furthermore, regions significantly hit by inflation, such as Dagestan and

Buryatia, tend to be the regions providing most of the soldiers fighting in Ukraine. In addition to economic costs, these regions are facing some of the highest casualties, which has resulted in anti-war protests.¹⁶¹ Only six months into the war, the U.S. Department of Defense estimated back in August 2022 that as many as 80,000 Russian troops died or were wounded since the February invasion.¹⁶² There has been public criticism of Putin's war among Russian military experts as well.¹⁶³ Many Russians have refused to fight in Ukraine¹⁶⁴ and thousands have reportedly done so¹⁶⁵ before Putin signed a law stating that Russians will face up to 10 years in prison for refusing to fight in Ukraine;¹⁶⁶ as a result, tens of thousands of Russians have been fleeing the country.¹⁶⁷

The results of Western sanctions against Russian oligarchs have been ambiguous, as the country's richest experience financial burdens yet feel powerless to change Putin's mind.¹⁶⁸ Although influential, only a few oligarchs have spoken out against the war and mostly it has been in vague terms, without being clear which country is the oppressor versus the victim.¹⁶⁹ The majority of oligarchs have remained silent.¹⁷⁰

The perception of Russians is critical in how the war develops. If the anti-war sentiment in Russia is much stronger than what polls represent (a leaked internal Kremlin poll by Meduza agency in November 2022 showed that more than half of Russians are in favor of peace talks with Russia and a quarter want the war to continue)¹⁷¹, Putin might be constrained in policy choices and actions. At the very least, this will impact material support for the war. Key questions for consideration include: Will Russia reach a tipping point when more Russians are against the war than those who support it? When will Russians be so affected by the war that they are willing to openly protest? If there is deeper opposition to the war than what is publicly revealed, the timeframe of the war may tilt towards Ukraine's favor.

RECOMMENDATIONS

- The Euro-Atlantic community should expedite the shipment of heavy artillery and air defense to Ukraine to increase the pressure against Russia's army; this could have a tipping point effect where the morale within Russia's military is overwhelmingly low leading the war closer to an end.
- The U.S. and EU must implement sanctions and policies that affect a broad demographic of the Russian population with the message that

these sanctions are implemented as a result of decisions made by Russia's leadership. This could include:

- Cutting off the rest of the Russian banking system from SWIFT
- Banning all Russians from EU and U.S. travel

Conclusion

Russia's war against Ukraine has resulted in an ongoing military failure. Both the regime and the Russian public are still not fully aware of the price they are paying for the war now and how this impacts their future. The pendulum has swung against Russian success, yet a Ukrainian victory – and a return to pre-March 2014 Ukrainian borders – is not guaranteed. The correlation of forces continues to favor Russia in troops and equipment despite comparatively poor morale. Yet Russia will also continue to invest in propaganda at home and abroad. It will also implement blackmail and false-flag operations seeking cheap gains to manipulate both Ukraine and the West into division and, thus, hoping to sign deals advantageous to Moscow.

In Ukraine, Russia will attempt to increase espionage, sabotage, and information warfare operations to create political division within the country. Russia will also bet on a tired Ukrainian population, hoping that it will eventually lose trust in its government and accede to a peace deal that is advantageous to the Kremlin. However, Russia faces a dilemma. On one hand, Moscow must act swiftly before domestic disapproval of the war begins to grow. On the other, the Kremlin needs time to regain military strength for another major offensive. We can expect Russia will fully invest in its few existing allies and countries that have taken a neutral stance on the war to expedite its military replenishment, especially Iran and increasingly China, to limit the effects of Western sanctions on its economy.

Meanwhile, Ukraine's military continues to receive support from the West, as NATO countries are stepping in to provide training for thousands of Ukrainian troops. The West also boosts its financial support to Ukraine. Whether this support will continue in the long run is unclear due to risks of "Ukraine fatigue,"

foreign policy reprioritization of other countries, and internal political dynamics ostensibly separate from the conflict in Eastern Europe.

The longer the war continues, the more damage Ukraine's economy and infrastructure will suffer as Russian missiles hit Ukrainian cities. A protracted war means a heightened chance of disasters affecting millions of people across the globe, such as an environmental disaster caused by a nuclear plant explosion, or a global food crisis among poorer nations due to Russia's blocking of Ukraine's ports. In turn, this means the costs of the war continue to grow. It could require one trillion dollars to rebuild war-torn Ukraine and potentially hundreds of billions to continue to equip Ukraine's army.

Despite increased Western support for Ukraine, there is a significant risk that the longer the war extends, the more likely it is that Ukraine's partners will grow weary of the war and that transatlantic unanimity will falter, particularly if the war in Ukraine becomes a polarized issue domestically in the United States. A prolonged war in Ukraine means higher expenses for the country – both in terms of the economy and lives lost – as well as for the U.S. and Ukraine's other allies in terms of support, with an even more embattled Russian regime that is unlikely to acknowledge defeat given sunken costs and no politically viable alternative. This long-term prospect raises the risk of Russia making increasingly irrational, desperate decisions with negative consequences for Ukrainians and the international community.

Therefore, the United States and allies must confidently continue to support Ukraine during their time of need. A more empowered Ukraine now means a shorter war timeframe in the future and, therefore, less costs for the U.S. and allies in the long run. The interests of a free and democratic Ukraine are aligned with the United States and allies in Europe and beyond. Strengthening capacity in the medium to long term will be a victory for free peoples, everywhere. Democratic resilience in the face of once overwhelming odds has the potential to not only save a battered people but serve as an important reminder for a world faced with the prospect of increasing authoritarian aggression.

Endnotes

- 1 This report assumes that Russia will not use tactical nuclear weapons in the conflict during this timeframe. It remains possible although unlikely barring an existential crisis for the leadership in Moscow. The use of nuclear weapons would dramatically alter our assessment, but we maintain it would not shift the wider geostrategic competition in favor of Russia. On the contrary, the use of tactical nuclear weapons might temporarily alter the trajectory of the war in Ukraine, yet the consequences for the Russian government would likely be catastrophic and weaken their relationship with its significant allies.
- 2 Ellie Cook, “Is Ukraine’s Army Now the Best in the World? Major Countries Compared”, Newsweek, April 1, 2023: <https://www.newsweek.com/ukraine-army-best-world-compared-russia-us-military-china-1791441>
- 3 Christopher Miller, “‘They are carpet-bombing us’: Ukrainian troops are getting pounded as they await heavy weapons from the West”, Politico, June 1, 2022: <https://www.politico.com/news/2022/06/01/ukraine-war-russia-donbas-weapons-00036156>
- 4 Olivier Knox, “Russia will take ‘years’ to recover from early Ukraine setbacks”, Washington Post, May 11, 2022: <https://www.washingtonpost.com/politics/2022/05/11/russia-will-take-years-recover-early-ukraine-setbacks/>
- 5 Jon Jackson, “Putin’s Crippled Economy Threatens Ability to Rebuild Weakened Military”, Newsweek, May 10, 2022: <https://www.newsweek.com/russia-economic-sanctions-rebuild-military-vladimir-putin-1705329>
- 6 International Republican Institute, “IRI Ukraine Poll Shows Strong Confidence in Victory over Russia, Overwhelming Approval for Zelensky, Little Desire for Territorial Concessions, and a Spike for NATO Membership”, August 11, 2022: <https://www.iri.org/news/iri-ukraine-poll-shows-strong-confidence-in-victory-over-russia-overwhelming-approval-for-zelensky-little-desire-for-territorial-concessions-and-a-spike-for-nato-membership/>
- 7 Jake Thomas, “‘Exhausted’ Russian Troops Could Be Defeated by 2023: Retired U.S. General”, Newsweek, July 14, 2022: <https://www.newsweek.com/exhausted-russian-troops-could-defeated-2023-retired-us-general-1724863>
- 8 Nick Mordowanec, “Retired U.S. General Predicts Ukraine Will Take Back Crimea by Mid-2023”, Newsweek, September 28, 2022: <https://www.newsweek.com/retired-us-general-predicts-ukraine-will-take-back-crimea-mid-2023-1747222>
- 9 Both of Ukraine’s and Russia’s armies are large: as of February 2023, Ukraine has an estimated 500,000 people listed among its total military personnel, whereas Russia had 1,330,900, according to Statista data. Of those, Ukraine has 200,000 active soldiers and Russia – 830,900, and both countries have reserve forces of 250,000.
- 10 Leo Sands, “Ukraine war could last for years, warns Nato chief”, BBC News, June 19, 2022: <https://www.bbc.com/news/world-europe-61856144>
- 11 According to a Levada March 2023 public poll, 75% of Russians still support Russia’s war against Ukraine. However, according to a leaked internal Kremlin poll published by Meduza news agency, only 25% Russians support the war.
- 12 InfoSapiens, “Will Terror Deter or Motivate Ukrainian Resistance? Survey Evidence from Besieged Ukraine”, March 26, 2022: <https://sapiens.com.ua/en/publication-single-page?id=210>
- 13 InfoSapiens, “Most Ukrainians are against accepting the terms of the Russian Federation”, March 9, 2022: <https://sapiens.com.ua/en/publication-single-page?id=201&fbclid=IwAR0r4WKDlvUU2rd9KGYauknF5DnkpzphLWjJeR00-lrs8byBr2KH02QFkqY>
- 14 InfoSapiens, “Before the war, 56% of Ukrainians were confident in Ukraine’s victory, now – 91%”, March 3, 2022: <https://sapiens.com.ua/en/publication-single-page?id=205>
- 15 WSJ/NORC Ukraine Poll June 2022: https://s.wsj.net/public/resources/documents/WSJ_NORC_Ukraine_Poll_June_2022.pdf
- 16 Russia has tried to artificially create a divide between eastern and western regions of Ukraine for years, hoping to instigate division within the country.
- 17 Channel 5, “Putin called Ukraine’s southeast Novorossiia”, April 17, 2014: <https://www.youtube.com/watch?v=2nLgIPCnHjA>
- National Academy of Sciences of Ukraine: Kuras Institute of Political and Ethnic Studies, “Donbas in the information security system of the state: regional distinctions, external challenges, tools of struggle against anti-Ukrainians propaganda”, 2015: <https://ipiend.gov.ua/publication/donbas-u-systemi-informatsijnoi-bezpeky-derzhavy-rehionalni-osoblyvosti-zovnishni-vyklyky-instrumenty-borotby-z-antyukrainskoju-propahandoiu-analitychna-dopovid/>
- 18 At least since Ukraine’s 1991 independence.
- 19 Lord Ashcroft, “Ukrainians want to stay and fight, but don’t see Russian people as the enemy. A remarkable poll from Kyiv”, Lord Ashcroft Polls, March 4, 2022: <https://lordashcroftpolls.com/2022/03/ukrainians-want-to-stay-and-fight-but-dont-see-russian-people-as-the-enemy-a-remarkable-poll-from-kyiv/>
- 20 Ibid.

- 21 ACAPS, "Ukraine: Return movement dynamics of IDPs and refugees", July 7, 2022: <https://www.acaps.org/country/ukraine/special-reports#container-1776>
- 22 Isabel van Brugen, "Russians Abandoning Positions in Kharkiv Counter-Offensive: Report", Newsweek, September 8, 2022: <https://www.newsweek.com/russia-abandoning-positions-kharkiv-counteroffensive-ukraine-1741061>
- 23 Humeyra Pamuk and Sabine Siebold, "G7 to coordinate help for reconstruction of Ukraine's energy sector", Reuters, November 4, 2022: <https://www.reuters.com/world/g7-agreed-need-coordination-mechanism-repair-ukraine-infrastructure-2022-11-04/>
- 24 International Republican Institute, "IRI Ukraine Poll Shows Strong Confidence in Victory over Russia, Overwhelming Approval for Zelensky, Little Desire for Territorial Concessions, and a Spike for NATO Membership", August 11, 2022: <https://www.iri.org/news/iri-ukraine-poll-shows-strong-confidence-in-victory-over-russia-overwhelming-approval-for-zelensky-little-desire-for-territorial-concessions-and-a-spike-for-nato-membership/>
- 25 WSJ/NORC Ukraine Poll June 2022: https://s.wsj.net/public/resources/documents/WSJ_NORC_Ukraine_Poll_June_2022.pdf
- 26 Afiq Fitri, "How President Zelensky's approval ratings have surged", The New Statesman, March 1, 2022: <https://www.newstatesman.com/chart-of-the-day/2022/03/how-president-zelenskys-approval-ratings-have-surged>
- 27 Radio Free Europe/Radio Liberty, "« »", July 23, 2022: <https://www.radiosvoboda.org/a/news-shemy-zelenskyi-shefir-kvartal-rosiya/31955765.html> Luke Harding, Elena Loginova and Aubrey Belford, "Revealed: 'anti-oligarch' Ukrainian president's offshore connections", The Guardian, October 3, 2021: <https://www.theguardian.com/news/2021/oct/03/revealed-anti-oligarch-ukrainian-president-offshore-connections-volodymyr-zelenskiy>
- 28 Mark Temnycky, "Zelensky, Servant of the People Experience Major Setback in Ukraine Local Elections", Wilson Center, November 9, 2020: <https://www.wilsoncenter.org/blog-post/zelensky-servant-people-experience-major-setback-ukraine-local-elections> Diane Francis, "Is Zelenskyy preparing for a thaw in Russia-Ukraine ties?" Atlantic Council, February 26, 2022: <https://www.atlanticcouncil.org/blogs/ukrainealert/is-zelenskyy-preparing-for-a-thaw-in-russia-ukraine-ties/>
- 29 Winston Churchill famously led Great Britain through in WWII and was subsequently voted out of office.
- 30 Valentyna Romanenko, " ", Ukrayinska Pravda, May 23, 2022: <https://www.pravda.com.ua/news/2022/05/23/7348094/>
- 31 The Constitution of Ukraine, Chapter V: <https://www.president.gov.ua/ua/documents/constitution/konstituciya-ukrayini-rozdil-v>
- 32 Christopher Miller, "Zelenskyy wants to replace Ukraine's top spy after security failures", Politico, June 23, 2022: <https://www.politico.com/news/2022/06/23/zelenskyy-top-spy-security-failures-00041794>
- 33 Oleg Sukhov, "Tatarov case pits old vs. new institutions", Kyiv Post, February 12, 2021: <https://www.kyivpost.com/ukraine-politics/tatarov-case-pits-old-vs-new-institutions.html>
- 34 Ukrayinska Pravda, " : , ", August 7, 2020: <https://www.pravda.com.ua/news/2020/08/7/7262136/>
- 35 Transparency International, "Who is Oleh Tatarov?" August 4, 2022: <https://ti-ukraine.org/en/news/who-is-oleh-tatarov/> The New Voice of Ukraine, "Yermak's ally Tatarov could be difficult to remove, says Ukrainian MP", July 10, 2022: <https://english.nv.ua/nation/yermak-s-ally-tatarov-could-be-difficult-to-remove-says-ukrainian-mp-ukraine-news-50255482.html>
- 36 Oleg Sukhov, "Who is Oleksandr Klymenko, Ukraine's new top anti-corruption prosecutor?" Kyiv Independent, July 29, 2022: <https://kyivindependent.com/hot-topic/explainer-whos-ukraines-new-anti-corruption-prosecutor-and-will-he-deliver-results>
- 37 Oleg Sukhov, "Watchdogs say Ukraine's judicial reform on brink of catastrophe", Kyiv Independent, June 24, 2022: <https://kyivindependent.com/national/watchdogs-say-ukraines-judicial-reform-on-brink-of-catastrophe>
- 38 Kyiv School of Economics, "Direct damage caused to Ukraine's infrastructure during the war has reached over \$110.4 bln, minimum recovery needs for destroyed assets — \$188 bln", August 10, 2022: <https://kse.ua/about-the-school/news/direct-damage-caused-to-ukraine-s-infrastructure-during-the-war-has-reached-over-110-4-bln-minimum-recovery-needs-for-destroyed-assets-188-bln/>
- 39 Kyiv School of Economics, "During the year of the full-scale war, the total amount of damages caused russia to Ukraine's infrastructure has reached almost \$143.8 billion", March 22, 2023: <https://kse.ua/about-the-school/news/during-the-year-of-the-full-scale-war-the-total-amount-of-damages-caused-russia-to-ukraine-s-infrastructure-has-reached-almost-143-8-billion/>
- 40 Dan Bilefsky and Nick Cumming-Bruce, "Ukraine's prime minister says rebuilding will cost \$750 billion", The New York Times, July 5, 2022: <https://www.nytimes.com/2022/07/05/world/europe/ukraines-prime-minister-says-rebuilding-will-cost-750-billion.html>
- 41 The World Bank, "Russian Invasion to Shrink Ukraine Economy by 45 Percent this Year", April 10, 2022: <https://www.worldbank.org/en/news/press-release/2022/04/10/russian-invasion-to-shrink-ukraine-economy-by-45-percent-this-year>

- 42 Reuters, "Ukraine in default according to Fitch and S&P", August 12, 2022: <https://www.reuters.com/markets/rates-bonds/sp-fitch-lower-ukraines-foreign-currency-rating-2022-08-12/>
- 43 The Economist, "It will be hard for Ukraine's economy to sustain a long war", May 14, 2022: <https://www.economist.com/europe/it-will-be-hard-for-ukraines-economy-to-sustain-a-long-war/21809222>
- 44 Tobias Burns, "IMF estimates Ukraine needs \$4 billion a month to keep government operating", The Hill, October 12, 2022: <https://thehill.com/policy/3685408-imf-estimates-ukraine-needs-4-billion-a-month-to-keep-government-operating/>
- 45 World Bank, "Russian Invasion to Shrink Ukraine Economy by 45 Percent this Year", April 10, 2022: <https://www.worldbank.org/en/news/press-release/2022/04/10/russian-invasion-to-shrink-ukraine-economy-by-45-percent-this-year>
- 46 World Bank Group et al, "Ukraine Rapid Damage and Needs Assessment", The World Bank, March 2023.
- 47 Kyiv School of Economics, "During the year of the full-scale war, the total amount of damages caused by Russia to Ukraine's infrastructure has reached almost \$143.8 billion", March 22, 2023: <https://kse.ua/about-the-school/news/during-the-year-of-the-full-scale-war-the-total-amount-of-damages-caused-russia-to-ukraine-s-infrastructure-has-reached-almost-143-8-billion/> Kyiv School of Economics, "Damage caused to Ukraine's infrastructure during the war increased to \$113.5 bln, minimum recovery needs for destroyed assets is almost \$200 bln", August 22, 2022: <https://kse.ua/about-the-school/news/damage-caused-to-ukraine-s-infrastructure-during-the-war-increased-to-113-5-bln-minimum-recovery-needs-for-destroyed-assets-is-almost-200-bln/>
- 48 The Economist, "Tracking changes to Ukraine's economy", June 30, 2022: <https://www.economist.com/graphic-detail/2022/06/30/tracking-changes-to-ukraines-economy>
- 49 American Chamber of Commerce Ukraine, "Doing Business after Six Months of War in Ukraine – AmCham Ukraine latest survey results: 72% of members fully operational", August 23, 2022: <https://chamber.ua/news/doing-business-after-six-months-of-war-in-ukraine-amcham-ukraine-latest-survey-results-72-of-members-fully-operational/>
- 50 Kersten Knipp, "Russia's 'Iranian drones' tear at Ukrainian infrastructure", Deutsche Welle, October 26, 2022: <https://www.dw.com/en/russias-iranian-drones-tear-at-ukrainian-infrastructure/a-63564040>
- 51 Max Hunder, Pavel Polityuk, and Dan Peleschuk, "Russia pounds Ukraine in heaviest missile strikes of war", Reuters, November 15, 2022: <https://www.reuters.com/world/europe/two-explosions-heard-ukraines-capital-smoke-rising-over-city-2022-11-15/>
- 52 Scott Simon and Jason Beaubien, "Millions of Ukrainians left without electricity after Russian strikes", NPR, November 5, 2022: <https://www.npr.org/2022/11/05/1134514211/millions-of-ukrainians-left-without-electricity-after-russian-strikes>
- 53 Dan Ladden-Hall, Matt Young, and Shannon Vavra, "Russia Is Now Openly Threatening to Bomb a Nuclear Power Plant", The Daily Beast, August 8, 2022: <https://www.thedailybeast.com/zaporizhzhia-nuclear-disaster-miraculously-avoided-during-suicidal-russian-attack>
- 54 Report's author Ilya Timtchenko interviewed Anton Antonenko on July 7th, 2022, via video.
- 55 Reuters Staff, "Ukraine ready to test power grid to link with European network", Reuters, February 10, 2022: <https://www.reuters.com/article/ukraine-energy/ukraine-ready-to-test-power-grid-to-link-with-european-network-idUSL8N2UL5VT>
- 56 Report's author Ilya Timtchenko interviewed Anton Antonenko on July 7th, 2022, via video.
- 57 Ibid.
- 58 https://www.washingtonpost.com/politics/power-outages-in-moldova-after-russian-strikes-in-ukraine/2022/11/15/eec87966-6500-11ed-b08c-3ce222607059_story.html
- 59 The Energy Map: (As of October 18th) <https://map.ua-energy.org/en/dashboards/11/>
- 60 The Energy Map: (As of October 18th) <https://map.ua-energy.org/en/dashboards/11/>
- 61 Heinz Strubenhoff, "The war in Ukraine triggered a global food shortage", Brookings Institution, June 14, 2022: <https://www.brookings.edu/blog/future-development/2022/06/14/the-war-in-ukraine-triggered-a-global-food-shortage/>
- 62 Roman Neyter, Hryhorii Stolnikovych, and Oleg Nivievskiy, "Agricultural war damages review Ukraine," Kyiv School of Economics, June 8, 2022: https://kse.ua/wp-content/uploads/2022/06/Damages_report_issue1-1.pdf
- 63 Ibid.
- 64 Kyiv School of Economics, "The indirect war losses in Ukraine's agriculture estimated at \$23.3 billion," June 22, 2022: <https://kse.ua/about-the-school/news/the-indirect-war-losses-in-ukraine-s-agriculture-estimated-at-23-3-billion-kse-agrocenter/>
- 65 Shane Harris, "U.S. intelligence document shows Russian naval blockade of Ukraine", The Washington Post, May 24, 2022: <https://www.washingtonpost.com/national-security/2022/05/24/naval-blockade-food-supply-ukraine-russia/> Savage, Susannah, "Ukraine to Russia: Stop using food as a weapon", Politico, February 15, 2023: <https://www.politico.eu/article/ukraine-russia-garin-export-black-sea-delay/>
- 66 Conflict Observatory, "Ukraine's Crop Storage Infrastructure: Post-Invasion Impact Assessment," September 15, 2022: <https://hub.conflictobservatory.org/portal/apps/sites/#/home/pages/grain-1>

- 67 Ibid.
- 68 The Organization for Economic Co-operation and Development, “The impacts and policy implications of Russia’s aggression against Ukraine on agricultural markets”, August 5, 2022: <https://www.oecd.org/ukraine-hub/policy-responses/the-impacts-and-policy-implications-of-russia-s-aggression-against-ukraine-on-agricultural-markets-0030a4cd/>
- 69 Madeline Halpert, “Russia’s Invasion of Ukraine Has Caused Almost \$4.3 Billion In Agricultural Damage, Study Finds”, Forbes, June 15, 2022: <https://www.forbes.com/sites/madelinehalpert/2022/06/15/russias-invasion-of-ukraine-has-caused-almost-43-billion-in-agricultural-damage-study-finds/?sh=7aa2cd98618f>
- 70 United Nations News, “The Black Sea Grain Initiative: What it is, and why it’s important for the world”, United Nations, September 16, 2022: <https://news.un.org/en/story/2022/09/1126811>
- 71 Matina Stevis-Gridneff, “Here’s how the grain deal between Ukraine and Russia worked”, The New York Times, October 29, 2022: <https://www.nytimes.com/2022/10/29/world/europe/grain-deal-russia-ukraine.html>
- 72 Shikha Singh, “Russian invasion dents Ukraine’s corn export, output prospects”, S&P Global Commodity Insights, March 2, 2022: <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/agriculture/030222-russian-invasion-dents-ukraines-corn-export-output-prospects>
- 73 The Organization for Economic Co-operation and Development, “The impacts and policy implications of Russia’s aggression against Ukraine on agricultural markets”, August 5, 2022: <https://www.oecd.org/ukraine-hub/policy-responses/the-impacts-and-policy-implications-of-russia-s-aggression-against-ukraine-on-agricultural-markets-0030a4cd/>
- 74 Fowler, Sarah, “Russia and Ukraine extend grain deal despite disagreement”, BBC News, March 18, 2023: <https://www.bbc.com/news/world-europe-65000324>
- 75 Ibid.
- 76 Rebecca Dzombak, “Russia’s invasion could cause long-term harm to Ukraine’s prized soil”, Science News, June 21, 2022: <https://www.sciencenews.org/article/ukraine-russia-war-soil-agriculture-crops>
- 77 The Organization for Economic Co-operation and Development, “The impacts and policy implications of Russia’s aggression against Ukraine on agricultural markets”, August 5, 2022: <https://www.oecd.org/ukraine-hub/policy-responses/the-impacts-and-policy-implications-of-russia-s-aggression-against-ukraine-on-agricultural-markets-0030a4cd/>
- 78 Ibid.
- 79 Reuters, “Grain silos at Mykolaiv port hit by Russian attack - emergencies service”, August 31, 2022: <https://www.reuters.com/world/grain-silos-mykolaiv-port-hit-by-russian-attack-emergencies-service-2022-08-31/>
- 80 Michael Biesecker, Sarah El Deeb, and Beatrice Dupuy, “Russia smuggling Ukrainain grain to help pay for Putin’s war”, Associated Press, October 3, 2022: <https://apnews.com/article/russia-ukraine-putin-business-lebanon-syria-87c3b6fea3f4c326003123b21aa78099>
- 81 Sarah Anne Aarup, Leonie Kijewski, Eddy Wax and Meredith Lee, “Moscow threatens to exit Black Sea grain deal”, Politico, October 13, 2022: <https://www.politico.eu/article/moscow-threatens-to-exit-black-sea-grain-deal/>
- 82 World Steel Association, “2022 World Steel in Figures”, April 30, 2022: <https://worldsteel.org/wp-content/uploads/World-Steel-in-Figures-2022.pdf>
- 83 Javier Blas, “Steel Is the Other Big Commodity Shock from the War in Ukraine”, The Washington Post, March 23, 2022: https://www.washingtonpost.com/business/energy/steel-is-the-other-big-commodity-shock-from-the-war-in-ukraine/2022/03/22/b2cf3508-a9b2-11ec-8a8e-9c6e9fc7a0de_story.html
- 84 World Steel Association, “2022 World Steel in Figures”, April 30, 2022: <https://worldsteel.org/wp-content/uploads/World-Steel-in-Figures-2022.pdf>
- 85 Stanislav Zinchenko, “Impact of Russia-Ukraine war on steel production and supply chains”, Gas World, April 1, 2022: <https://www.gasworld.com/impact-of-russia-ukraine-war-on-steel-production-and-supply-chains/2022943.article>
- 86 Ibid.
- 87 Reuters, “Russia-Ukraine Conflict to Have Huge Impact on Global Steel Demand -Japan Steel Group”, March 29, 2022: <https://money.usnews.com/investing/news/articles/2022-03-29/russia-ukraine-conflict-to-have-huge-impact-on-global-steel-demand-japan-steel-group>
- 88 Rebecca Heilweil, “The neon shortage is a bad sign”, Vox, March 18, 2022: <https://www.vox.com/recode/22983468/neon-shortage-chips-semiconductors-russia-ukraine>
- 89 Alexandra Alper, “Russia’s attack on Ukraine halts half of world’s neon output for chips”, Reuters, March 11, 2022: <https://www.reuters.com/technology/exclusive-ukraine-halts-half-worlds-neon-output-chips-clouding-outlook-2022-03-11/>

- 90 Gabrielle Athanasia and Gregory Arcuri, "Russia's Invasion of Ukraine Impacts Gas Markets Critical to Chip Production", The Center for Strategic and International Studies, March 14, 2022: <https://www.csis.org/blogs/perspectives-innovation/russias-invasion-ukraine-impacts-gas-markets-critical-chip-production>
- 91 Declan Walsh and John Eligon, "Shunned by Others, Russia Finds Friends in Africa", The New York Times, March 3, 2022: <https://www.nytimes.com/2022/03/03/world/africa/russia-ukraine-eritrea-africa.html>
- 92 Antonio Cascais, "Russia's reengagement with Africa pays off", Deutsche Welle, July 26, 2022: <https://www.dw.com/en/russias-reengagement-with-africa-pays-off/a-61064011>
- 93 United Nations Association – UK, "UN General Assembly suspends Russia from the Human Rights Council", April 7, 2022: <https://una.org.uk/news/un-general-assembly-suspends-russia-human-rights-council>
- Antonio Cascais, "Russia's reengagement with Africa pays off", Deutsche Welle, July 26, 2022: <https://www.dw.com/en/russias-reengagement-with-africa-pays-off/a-61064011>
- 94 The Economist, "Why Russia wins some sympathy in Africa and the Middle East", March 12, 2022: <https://www.economist.com/middle-east-and-africa/2022/03/12/why-russia-wins-some-sympathy-in-africa-and-the-middle-east>
- 95 Mark Episkopos, "How Russia Became Africa's Dominant Arms Dealer", The National Interest, February 23, 2021: <https://nationalinterest.org/blog/buzz/how-russia-became-africa%E2%80%99s-dominant-arms-dealer-178656>
- 96 Alex Irwin-Hunt, "Russia's ongoing charm offensive in Africa", FDI Intelligence, September 15, 2020: <https://www.fdiintelligence.com/content/feature/russias-ongoing-charm-offensive-in-africa-78348>
- 97 UNifeed, "UN/Ukraine General Assembly Resolution", United Nations, October 12, 2022: <https://www.unmultimedia.org/tv/unifeed/asset/2953/2953958/>
- 98 Daphne Psaledakis, "U.N. General Assembly calls for Russia to make reparations in Ukraine", Reuters, November 14, 2022: <https://www.reuters.com/world/europe/un-general-assembly-calls-russia-make-reparations-ukraine-2022-11-14/>
- 99 Antonio Cascais, "Russia's reengagement with Africa pays off", Deutsche Welle, July 26, 2022: <https://www.dw.com/en/russias-reengagement-with-africa-pays-off/a-61064011>
- 100 Antony Sguazzin, "Banned in Europe, Kremlin-Backed RT Channel Turns to Africa", Bloomberg, July 22, 2022: <https://www.bloomberg.com/news/articles/2022-07-22/banned-in-europe-kremlin-backed-rt-channel-turns-to-africa#xj4y7vzkg>
- 101 Michael Birnbaum, "In Africa, Eastern Europe battles Russian narrative on Ukraine", Washington Post, June 25, 2022: <https://www.washingtonpost.com/national-security/2022/06/25/africa-hunger-ukraine-grain-russia/>
- 102 Robbie Gramer, "Western Allies Pressure African Countries to Condemn Russia", Foreign Policy, May 5, 2022: <https://foreignpolicy.com/2022/05/05/western-allies-pressure-african-countries-to-condemn-russia/>
- 103 Bethany Biron, "YouTube is blocking RT and other Russian state-funded media channels from generating revenue on its platform", Business Insider, February 26, 2022: <https://www.businessinsider.com/youtube-blocks-rt-state-funded-russian-media-after-ukraine-attacks-2022-2>
- 104 Council of the European Union, "EU imposes sanctions on state-owned outlets RT/Russia Today and Sputnik's broadcasting in the EU", March 2, 2022: <https://www.consilium.europa.eu/en/press/press-releases/2022/03/02/eu-imposes-sanctions-on-state-owned-outlets-rt-russia-today-and-sputnik-s-broadcasting-in-the-eu/>
- 105 György Dalos, "Orbán says Hungary is 'exempt' from the conflict: tell that to his friend in Moscow", The Guardian, October 29, 2022: <https://www.theguardian.com/commentisfree/2022/oct/29/viktor-orban-hungary-conflict-moscow-war-in-ukraine>
- 106 Tomislav Marković, "The cult of Putin in Serbia reflects a nation that has still not dealt with its past", The Guardian, October 28, 2022: <https://www.theguardian.com/commentisfree/2022/oct/28/the-cult-of-putin-in-serbia-reflects-a-nation-that-has-still-not-dealt-with-its-past>
- 107 James McBride, "Russia's Influence in the Balkans", Council on Foreign Relations, December 2, 2022: <https://www.cfr.org/backgrounder/russias-influence-balkans>
- 108 Euronews with AP, "Serbia appoints pro-Russian politician as new spy chief", December 2, 2022: <https://www.euronews.com/2022/12/02/serbia-appoints-pro-russian-politician-as-new-spy-chief>
- 109 Andrew Rettman, "Farage and Le Pen unite on Russia report", EU Monitor, June 11, 2015: https://www.eumonitor.nl/9353000/1/j9vvik7m1c3gyxp/vjuocce1a5yq?ctx=vgaxlcr1jzm0&tab=1&start_tab1=5
- 110 Romain Geoffroy and Maxime Vaudano, "What are Marine Le Pen's ties to Vladimir Putin's Russia?" Le Monde, April 21, 2022: https://www.lemonde.fr/en/les-decodeurs/article/2022/04/21/what-are-marine-le-pen-s-ties-to-vladimir-putin-s-russia_5981192_8.html
- 111 Vitalii Rybak, "Alternative for 'Peace:' German Far-Right and Leftist Parties Help Kremlin Propaganda", UkraineWorld, May 17, 2022: <https://ukraineworld.org/articles/infowatch/alternative-peace> Lóránt Győri and Péter Kerekó, "Don't ignore the left! Connections between Europe's radical left and Russia", openDemocracy, June 13, 2016: <https://www.opendemocracy.net/en/odr/don-t-ignore-left-connections-between-europe-s-radical-left-and-ru/> Kate Connolly, "Far-right German politicians accused of pro-Putin 'propaganda trip'", The Guardian, September 20, 2022: <https://www.theguardian.com/world/2022/sep/20/far-right-german-politicians-accused-of-pro-putin-propaganda-trip>

- 112 Patrick Wintour and Rowena Mason, "Nigel Farage's relationship with Russian media comes under scrutiny", The Guardian, March 31, 2014: <https://www.theguardian.com/politics/2014/mar/31/nigel-farage-relationship-russian-media-scrutiny>
- 113 Nadine Batchelor-Hunt, "Nigel Farage denies £548K links to Russian state", Yahoo News UK, March 16, 2022: <https://uk.news.yahoo.com/nigel-farage-denies-500-k-links-to-russian-state-125157695.html>
- 114 Federica Marsi, "Will a right-wing win push Italy towards Russia?", Al Jazeera, September 23, 2022: <https://www.aljazeera.com/news/2022/9/23/will-a-right-wing-win-push-italy-towards-russia>
- 115 Olaf Scholz, "The Global Zeitenwende", Foreign Affairs, January/February 2023: <https://www.foreignaffairs.com/germany/olaf-scholz-global-zeitenwende-how-avoid-new-cold-war>
- 116 David Cloud, "Russia-Israel Ties Strained After Moscow's Top Diplomat Accuses Jews of Anti-Semitism", The Wall Street Journal, May 2, 2022: https://www.wsj.com/articles/israel-condemns-russian-foreign-ministers-comparison-of-zelensky-to-hitler-11651490079?mod=article_inline
- 117 David Daoud, "Israel won't stick out its neck for Ukraine. It's because of Russia", Atlantic Council, April 13, 2022: <https://www.atlanticcouncil.org/blogs/menasource/israel-wont-stick-out-its-neck-for-ukraine-its-because-of-russia/>The Economist, "Israel's Russian conundrum", July 28, 2022: <https://www.economist.com/middle-east-and-africa/2022/07/28/israels-russian-conundrum> Niko Vorobyov, "Israel treads careful line as public blames Russia" Al Jazeera, May 17, 2022: <https://www.aljazeera.com/news/2022/5/17/ukraine-war-israel-treads-careful-line-as-public-blames-russia>
- 118 Barak Ravid, "Israel tries to reassure U.S. on Russia sanctions", Axios, March 30, 2022: <https://www.axios.com/2022/03/30/israel-russia-sanctions-oligarchs-blinken>
- 119 David Cloud, "Russia-Israel Ties Strained After Moscow's Top Diplomat Accuses Jews of Anti-Semitism", The Wall Street Journal, May 2, 2022: https://www.wsj.com/articles/israel-condemns-russian-foreign-ministers-comparison-of-zelensky-to-hitler-11651490079?mod=article_inline
- 120 Dov Lieber, Aaron Boxerman and Evan Gershkovich, "Russia Moves to Close Key Jewish Group as Ties With Israel Sour", The Wall Street Journal, August 18, 2022: <https://www.wsj.com/articles/russia-moves-to-close-key-jewish-group-as-ties-with-israel-sour-11660816594>
- 121 Pfeffer, Anshel, "Why Netanyahu is suddenly a lot less friendly with Putin", CNN, February 7, 2023: <https://www.cnn.com/2023/02/07/opinions/netanyahu-putin-israel-russia-ukraine-pfeffer/index.html>
- 122 Ravid, Barak, "Israel conducting policy review of its response to Ukraine war", Axios, February 1, 2023: <https://www.axios.com/2023/02/01/israel-ukraine-policy-review-netanyahu-putin>
- 123 Bloomberg News, "Putin's Courting of Israel Fades as Ties Turn Bitter on Ukraine", August 3, 2022: <https://www.bloomberg.com/news/articles/2022-08-03/putin-s-courting-of-israel-fades-as-ties-turn-bitter-on-ukraine#xj4y7vzkg> Zvika Klein, "Moscow: The Jewish Agency has asked for another postponement of trial", The Jerusalem Post, December 22, 2022: <https://www.jpost.com/diaspora/article-725535>
- 124 Emil Avdalani, "As Russian Influence Plummets, China Capitalizes in Central Asia", The Jamestown Foundation, November 15, 2022: <https://jamestown.org/program/as-russian-influence-plummets-china-capitalizes-in-central-asia/>
- 125 Alys Davies, "Kyrgyzstan-Tajikistan border clashes claim nearly 100 lives", BBC News, September 19, 2022: <https://www.bbc.com/news/world-asia-62950787>
- 126 Daniel Boffey, "Putin's grip on regional allies loosens again after Armenia snub", The Guardian, November 25, 2022: <https://www.theguardian.com/world/2022/nov/25/putinsgrip-regional-allies-loosen-again-after-armenia-snub-csto-summit> Mark Trevelyan, "Hosting Putin, Armenian leader complains of lack of help from Russian-led alliance", Reuters, November 23, 2022: <https://www.reuters.com/world/front-putin-armenian-leader-laments-lack-help-russian-led-alliance-2022-11-23/>
- 127 Deutsche Welle, "Armenia says it will not host Russian-led military drill", January 10, 2023: <https://www.dw.com/en/armenia-says-it-will-not-host-russian-led-military-drill/a-64342953>
- 128 Polina Ivanova, "Kazakhstan 'chips away' at its reliance on Russia", Financial Times, October 13, 2022: <https://www.ft.com/content/3af8f2a5-b527-4fd1-8efe-fe2f259cbfb5>
- 129 Paul Goble, "Kazakhstan Seeks to Attract Western Companies Leaving Russia, Infuriating Moscow", The Jamestown Foundation, July 19, 2022: <https://jamestown.org/program/kazakhstan-seeks-to-attract-western-companies-leaving-russia-infuriating-moscow/>
- 130 Ashley Tellis, "'What Is in Our Interest': India and the Ukraine War", Carnegie Endowment for International Peace, April 25, 2022: <https://carnegieendowment.org/2022/04/25/what-is-in-our-interest-india-and-ukraine-war-pub-86961>
- 131 Shruti Srivastava, "India Plans \$2 Billion More of Exports to Sanctions-Hit Russia", Bloomberg News, April 12, 2022: <https://www.bloomberg.com/news/articles/2022-04-12/india-plans-2-billion-more-of-exports-to-sanctions-hit-russia#xj4y7vzkg>

- 132 Clyde Russel, "Column: Russian crude is more reliant on India and China, but signs of a peak", Reuters, August 9, 2022: <https://www.reuters.com/business/russian-crude-is-more-reliant-india-china-signs-peak-russell-2022-08-09/>
- 133 Ashley Tellis, "'What Is in Our Interest': India and the Ukraine War", Carnegie Endowment for International Peace, April 25, 2022: <https://carnegieendowment.org/2022/04/25/what-is-in-our-interest-india-and-ukraine-war-pub-86961>
- 134 Fatima Hussein, "US Treasury official to visit India amid Ukraine tensions", Associated Press, August 19, 2022: <https://apnews.com/article/russia-ukraine-asia-india-new-delhi-b3c40447f77ee86a1e07247f7c4597c0>
- 135 Gareth Price, "Why is India staying neutral over the Ukraine invasion?", Chatham House, May 9, 2022: <https://www.chathamhouse.org/2022/05/why-india-staying-neutral-over-ukraine-invasion>
- 136 Sam Cowie, "Russia-Ukraine war: What's behind Brazil's 'neutral' position?" Al Jazeera, April 22, 2022: <https://www.aljazeera.com/news/2022/4/22/russia-ukraine-war-whats-behind-brazils-neutral-position>
- 137 Terrence McCoy and Gabriela Sa Pessoa, "'A good opportunity for us': Brazil's Bolsonaro uses Ukraine war to justify exploiting Indigenous land", Washington Post, March 19, 2022: <https://www.washingtonpost.com/world/2022/03/19/brazil-bolsonaro-mining-amazon-russia-ukraine/>
- 138 Ibid.
- 139 Edith Lederer, "Minister: Brazil wants to buy a lot of diesel from Russia", Associated Press, July 12, 2022: <https://apnews.com/article/russia-ukraine-jair-bolsonaro-united-nations-moscow-de427fdc2cf0b1b74b57f3c409f5ec17>
- 140 Richard Sanders, "Why Brazil and Argentina Chose Russia Over Ukraine", The National Interest, March 20, 2022: <https://nationalinterest.org/feature/why-brazil-and-argentina-chose-russia-over-ukraine-201244>
- 141 France 24, "Brazil's Lula says Zelensky shares blame for Ukraine war", May 4, 2022: <https://www.france24.com/en/live-news/20220504-brazil-s-lula-says-zelensky-shares-blame-for-ukraine-war>
- 142 Ukrinform, "Zelensky criticizes Brazil's position on Russian war against Ukraine", June 20, 2022: <https://www.ukrinform.net/rubric-politics/3533155-zelensky-criticizes-brazils-position-on-russian-war-against-ukraine.html>
- 143 Berry, Lynn, "US warns China not to send weapons to Russia for Ukraine war", AP News, February 19, 2023: <https://apnews.com/article/russia-ukraine-putin-politics-antony-blinken-xi-jinping-4501b49359d73b6efbac87b2af54f189>
- 144 Al Jazeera, "China's Xi reaffirms support for Russia's security concerns", June 15, 2022: <https://www.aljazeera.com/news/2022/6/15/putin-xi-agree-to-ramp-up-economic-cooperation-amid-sanctions-k>
- 145 Al Jazeera, "Zelenskyy urges China's Xi to help end Russia's war in Ukraine", August 4, 2022: <https://www.aljazeera.com/news/2022/8/4/zelenskyy-urges-chinas-xi-to-help-end-russias-war-in-ukraine>
- 146 Brian Bonner and Ilya Timchenko, "Chinese Ambassador to Ukraine Du Wei: Sanctions don't work", Kyiv Post, September 14, 2018: <https://www.kyivpost.com/world/chinese-ambassador-to-ukraine-du-wei-sanctions-don-t-work.html>
- 147 Michelle Nichols, "As U.S. defends Ukraine at U.N., China warns against challenge over Taiwan", Reuters, July 29, 2022: <https://www.reuters.com/world/us-defends-ukraine-un-china-warns-against-challenge-over-taiwan-2022-07-29/>
- 148 BBC News, "Ukraine crisis: US warns China against helping Russia", March 14, 2022: <https://www.bbc.com/news/world-asia-china-60732486>
- 149 Clifford Krauss, Alexandra Stevenson, and Emily Schmall, "In Russia's War, China and India Emerge as Financiers", The New York Times, June 24, 2022: <https://www.nytimes.com/2022/06/24/business/russia-oil-china-india-ukraine-war.html>
- 150 Jane Perlez, "In Divide Over Ukraine, China Stakes a Position Further From U.S.", The New York Times, July 13, 2022: <https://www.nytimes.com/2022/07/13/world/asia/china-united-states-russia-ukraine.html>
- 151 Emil Avdaliani, "As Russian Influence Plummets, China Capitalizes in Central Asia", The Jamestown Foundation, November 15, 2022: <https://jamestown.org/program/as-russian-influence-plummets-china-capitalizes-in-central-asia/>
- 152 NPR, "What Russians think of the war in Ukraine, according to an independent pollster", April 18, 2022: <https://www.npr.org/2022/04/18/1093282038/russia-war-public-opinion-polling>
- 153 Sam Greene, "Storm Clouds Build Over Putin's War", Center for European Policy Analysis, August 12, 2022: <https://cepa.org/storm-clouds-build-over-putins-war/>
- 154 Telegram, Aleksey Minyalo: https://t.me/minyaylo_notes/2002
- 155 Philipp Chapkovski and Max Schaub, "Solid support or secret dissent? A list experiment on preference falsification during the Russian war against Ukraine", Sage Journals, April 2022: <https://journals.sagepub.com/doi/full/10.1177/20531680221108328>
- 156 Levada-Center, "Conflict with Ukraine: July 2022", August 17, 2022: <https://www.levada.ru/en/2022/08/17/conflict-with-ukraine-july-2022/>
- 157 Robyn Dixon, "As war drags on, weary Russians yearn for a return to normal life", Washington Post, June 5, 2022: <https://www.washingtonpost.com/world/2022/06/05/russia-war-public-opinion/>
- 158 Ibid.
- 159 Ibid.

- 160 Human Rights Watch, “Russia Criminalizes Independent War Reporting, Anti-War Protests”, March 7, 2022: <https://www.hrw.org/news/2022/03/07/russia-criminalizes-independent-war-reporting-anti-war-protests>
- 161 Sam Greene, “Storm Clouds Build Over Putin’s War”, Center for European Policy Analysis, August 12, 2022: <https://cepa.org/storm-clouds-build-over-putins-war/>
- 162 Nancy Youssef and Evan Gershkovich, “As Many as 80,000 Russian Troops Hurt or Killed in Ukraine, Pentagon Says”, The Wall Street Journal, August 8, 2022: <https://www.wsj.com/articles/as-many-as-80-000-russian-troops-hurt-or-killed-in-ukraine-pentagon-says-11659989514>
- 163 Yuliya Chernova, “In Russia, Far-Right Nationalists Offer Rare Criticism of Kremlin’s War Effort”, The Wall Street Journal, August 22, 2022: <https://www.wsj.com/articles/in-russia-far-right-nationalists-offer-rare-criticism-of-kremlins-war-effort-11660987801>
- 164 Peter Dickinson, “Russian army faces morale problems as Putin’s Ukraine invasion drags on”, August 4, 2022: <https://www.atlanticcouncil.org/blogs/ukrainealert/russian-army-faces-morale-problems-as-putins-ukraine-invasion-drags-on/>
- 165 Timofei Rozhanskiy, “Why Russian Soldiers Are Refusing to Fight In The War On Ukraine”, Radio Free Europe/ Radio Liberty, July 20, 2022: <https://www.rferl.org/a/russian-soldiers-ukraine-refuse-fight/31952117.html>
- 166 Andrew Stanton, “Putin Will Imprison Russians Refusing to Fight in Ukraine for 10 Years”, Newsweek, September 24, 2022: <https://www.newsweek.com/putin-will-imprison-russians-refusing-fight-ukraine-10-years-1746033>
- 167 Corky Siemaszko, “Russians avoiding conscription long for home but refuse to fight in Ukraine”, NBC News, October 23, 2022: <https://www.nbcnews.com/news/world/russians-flee-avoid-conscription-ukraine-kazakhstan-rcna52856> Patrick Reeve, “Russians who fled Putin’s mobilization speak out”, ABC News, September 28, 2022: <https://abcnews.go.com/International/tens-thousands-russians-flee-putins-mobilization/story?id=90588897>
- 168 Catherine Belton and Greg Miller, “Cracks emerge in Russian elite as tycoons start to bemoan invasion”, Washington Post, April 29, 2022: <https://www.washingtonpost.com/world/2022/04/29/russia-oligarchs-ukraine-invasion-dissent/>
- 169 Isabel van Brugen, “Every Russian Oligarch Who Has Spoken Out Against Putin’s War: Full List”, Newsweek, April 25, 2022: <https://www.newsweek.com/every-russian-oligarch-spoken-out-against-putin-ukraine-war-invasion-full-list-1700734>
- 170 Michael Race, “The Russian billionaire daring to speak out about Putin”, BBC News, August 11, 2022: <https://www.bbc.com/news/business-62037169>
- 171 Meduza, “Make peace, not war: The Kremlin’s internal polling shows that more than half of Russians now favor negotiations with Ukraine, while only a quarter want to continue the invasion”, Meduza, November 30, 2022: <https://meduza.io/en/feature/2022/11/30/make-peace-not-war>



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