

DECEMBER 2023

# **Identifying Russian Vulnerabilities and How to Leverage Them**

Andrea Kendall-Taylor, Richard Connolly, Siemon Wezeman, Gavin Wilde, Elina Ribakova, Benjamin Hilgenstock, Edward Fishman, Eric Ciaramella, Paul Stronski, Peter Schroeder, Timothy Frye, and Maria Snegovaya

#### **About the Authors**

**Andrea Kendall-Taylor** is a Senior Fellow and Director of the Transatlantic Security Program at the Center for a New American Security (CNAS).

**Richard Connolly** is the Director of the Eastern Advisory Group and an Adjunct Senior Fellow for the Transatlantic Security Program at the Center for a New American Security.

**Siemon Wezeman** is a Senior Researcher in the Arms Transfers Programme at the Stockholm International Peace Research Institute.

**Gavin Wilde** is a Senior Fellow for the Technology and International Affairs Program at the Carnegie Endowment for International Peace.

**Elina Ribakova** is a nonresident Senior Fellow at the Peterson Institute for International Economics and Vice President for Foreign Policy at the Kyiv School of Economics.

**Benjamin Hilgenstock** is a Senior Economist for the KSE Institute at the Kyiv School of Economics.

**Edward Fishman** is a Senior Research Scholar at the Center on Global Energy Policy at Columbia University.

**Eric Ciaramella** is a Senior Fellow in the Russia and Eurasia Program at the Carnegie Endowment for International Peace.

**Paul Stronski** is an Adjunct Associate Professor for the Center for Security Studies at Georgetown University.

**Peter Schroeder** is an Adjunct Senior Fellow in the Transatlantic Security Program at CNAS.

**Timothy Frye** is the Marshall D. Shulman Professor of Post-Soviet Foreign Policy for the Department of Political Science at Columbia University.

**Maria Snegovaya** is a Senior Fellow for Russia and Eurasia at the Center for Strategic and International Studies and a Postdoctoral Fellow at Georgetown University's Walsh School of Foreign Service.

# About the Transatlantic Security Program

The mission of the Transatlantic Security Program is to strengthen transatlantic relations and help decision-makers understand, anticipate, and respond to challenges in Europe and Russia. Key among these challenges is the rise of China, a revisionist Russia, threats to democracy, and other changes in Europe's security landscape that will require NATO to adapt. The Transatlantic Security Program addresses these issues by working closely with CNAS's network of current and former U.S. and European government officials, private-sector partners, and academic experts to translate cutting-edge research into policy solutions. The program fosters high-level U.S.-European dialogue, convenes seminars and public forums, and engages with media and citizens to shape the context in which policies are made.

#### **Acknowledgments**

Thank you to Matt Rojansky and Dan Goldberg for their review of the essays and helpful feedback to the authors. The authors are also grateful to Maura McCarthy, Melody Cook, Rin Rothback, Emma Swislow, and Anna Pederson for their roles in the review, production, and design of this report. Any errors that remain are the responsibility of the authors alone. This report was made possible with the generous support of the Russia Strategic Initiative, U.S. European Command. The views expressed in this publication do not necessarily represent the views of the Department of Defense or the U.S. government.

As a research and policy institution committed to the highest standards of organizational, intellectual, and personal integrity, CNAS maintains strict intellectual independence and sole editorial direction and control over its ideas, projects, publications, events, and other research activities. CNAS does not take institutional positions on policy issues, and the content of CNAS publications reflects the views of their authors alone. In keeping with its mission and values, CNAS does not engage in lobbying activity and complies fully with all applicable federal, state, and local laws. CNAS will not engage in any representational activities or advocacy on behalf of any entities or interests and, to the extent that the Center accepts funding from non-U.S. sources, its activities will be limited to bona fide scholastic, academic, and research-related activities, consistent with applicable federal law. The Center publicly acknowledges all donors on its website annually.

# TABLE OF CONTENTS

01	Executive Summary
02	Introduction
04	Russia's Defense Industry By Richard Connolly
07	<b>Russian Arms Sales</b> By Siemon Wezeman
11	<b>Russia's Technology and Cyber Industries</b> By Gavin Wilde
15	<b>Russia's Financial Sector</b> By Elina Ribakova and Benjamin Hilgenstock
20	<b>Russia's Reliance on Oil and Gas</b> By Edward Fishman
25	<b>Ukraine as Russia's Soft Underbelly</b> By Eric Ciaramella
29	Russia's Declining Influence in Central Asia and the South Caucasus By Paul Stronski
34	<b>Russia's Crumbling Diplomacy</b> By Pete Schroeder
37	<b>Russian Public Opinion and the Putin Regime</b> By Timothy Frye
41	Russian Emigration By Maria Snegovaya

#### **Executive Summary**

tting U.S. policy toward Russia right requires an understanding of Russia's vulnerabilities and how to leverage them. The architect of containment, George F. Kennan, recognized the Soviet Union's weaknesses and internal contradictions—vulnerabilities he argued would ultimately undo the Communist regime. The same is true today. The highly personalized, authoritarian regime President Vladimir Putin has constructed over the past 23 years is beset with vulnerabilities that, if subjected to steady and forceful pressure, could give way to new political leadership more amenable to constructive relations with the United States and its allies. More immediately, leveraging these vulnerabilities could help the United States and its allies complicate Russia's ability to sustain the war in Ukraine and aggression beyond its borders more broadly, and grow the coalition of countries willing and able to oppose such aggression.

Russia's war in Ukraine has created or amplified long-standing vulnerabilities in Russia. This essay series identifies 10 of the most critical vulnerabilities present in today's Russia across the defense, economic, and diplomatic and political domains that the United States and its partners have the potential to exploit.

#### In the defense domain:

- Russia's reliance on imported components to produce weaponry leaves it vulnerable to efforts to restrict their supply;
- Russia's need to restock its own weapons stores and enhanced Western sanctions make it more difficult for Russia to sustain arms sales, providing an opportunity to weaken key Russian relationships;
- Russia's war in Ukraine has also jeopardized its access to the technology and talent that has long fueled its aggression in cyberspace.

#### In the economic domain:

Sanctions are limiting monetary and fiscal policy space, meaning that Russia's financial system will have to play a much bigger role in funding the government and boosting the economy. At the same time, authorities will not be able to provide the support banks need to effectively carry out these functions; Russia's economy remains staggeringly dependent on hydrocarbon sales, a dependence that leaves the country's economic well-being at the mercy of energy prices and vulnerable to actions that could disrupt the inflow of energy revenues.

In the diplomatic and political domains:

- Ukraine's growing ability to impose costs on Russia on the battlefield; through asymmetric means; and in diplomatic, cultural, and legal spheres—will pose a significant long-term vulnerability for Russia;
- Russia's war in Ukraine has alienated broad swathes of Central Asia and the South Caucasus, causing some of Russia's closest allies to start putting distance between themselves and Moscow. Russia's unexpectedly subpar military performance in Ukraine and distraction from other regional crises is pushing Russia's neighbors to look elsewhere for diplomatic and security partners;
- Putin's war in Ukraine has sapped the strength and vitality of Russian diplomacy, undermining a traditional strength and making it vulnerable to pressure that will make it harder for Moscow to punch above its geopolitical weight for the foreseeable future;
- Russia's war in Ukraine creates new domestic challenges for Putin and his longtime ability to maintain high levels of public support. Autocrats who lose popular support not only find it harder to govern, but they are also at greater risk of mass protest or an elite coup;
- Russia's war in Ukraine prompted another major exodus of Russians, including the country's best and brightest. While the escape of opposition-minded groups is generally beneficial to the Kremlin because it avoids a buildup of pressure on the regime, for the West, Russian exiles can serve as a conduit of information back into Russia, a talent pool, and an opportunity to invest in a better relationship with a future Russia.

1

#### Introduction

ussia will emerge from its war in Ukraine politically, economically, and militarily weaker than before it invaded its neighbor. Ukrainian forces are severely degrading the Russian military while Western sanctions are constricting Russia's economy. NATO is expanding and Russian influence is declining in regions where the Kremlin has historically held political sway, such as Central Asia. Yet, while Russia will be weakened, Moscow will adapt in the face of these mounting challenges. Russia, for example, is finding ways to circumvent the sanctions and export controls that the United States and Europe have imposed, mitigating their impact. And, despite Europe's historic transition away from Russian oil and gas and the tangible impact that the oil price cap is having on Russian government revenue, Moscow has increased sales to other countries, such as China and India. Russia may be weakened because of its war in Ukraine, but it will remain a long-term challengea good enough power with the ability to affect global affairs and put U.S.

interests at risk.

Addressing that challenge will require the United States and Europe to build on ongoing efforts to constrict and constrain the Kremlin's ability to sustain aggression in Ukraine and more broadly

beyond Russia's borders. It will also require a long-term and sustainable approach to lessen the impact of the tools and tactics Moscow will rely on most, which, given the degradation of its conventional forces in Ukraine, will likely heavily feature nonconventional methods, such as disinformation, sabotage, and cyberattacks, including on critical infrastructure. Strategies for addressing today's Russia, therefore, should resemble the containment strategy first set out in the 1940s, which was designed to apply steady and forceful counterpressure to a regime whose paranoia and insecurities represented a clear danger to the West, just as the Putin regime does today.

Getting such a policy of containment right requires an understanding of Russia's vulnerabilities and how to leverage them. The architect of containment, George F. Kennan, recognized the Soviet Union's weaknesses and internal contradictions—vulnerabilities he argued would ultimately undo the Communist regime. The same is true today. The highly personalized, authoritarian regime Putin has constructed over the past 23 years is beset with vulnerabilities that, if subjected to steady and forceful pressure, could give way to new political leadership more amenable to constructive relations with the United States and its allies.

U.S. efforts to leverage Russian vulnerabilities should not be pursued with the goal of orchestrating regime change—that is up to Russians themselves to decide. However, the United States and its allies should make the most of Russia's faults to help create conditions that are more conducive to reformers inside Russia working for a more liberal and less hostile nation. The United States and its allies should not shy away from actions that facilitate such political change out of fear of what comes after Putin. Political change in Russia carries risks—of violence, chaos, and internal conflict—but it also opens the possibility of a more hopeful future for Russia and for its relations with its neighbors and the West.

More immediately, Western efforts to exploit Russian vulnerabilities are necessary to prevent Russia from

The highly personalized, authoritarian

steady and forceful pressure, could give

amenable to constructive relations with

way to new political leadership more

regime Putin has constructed over

vulnerabilities that, if subjected to

the past 23 years is beset with

sustaining its war of aggression in Ukraine. Likewise, U.S. policy should aim to undermine Russia's capacity to sustain aggression more broadly beyond its borders, whether by weakening its military capacity or by introducing multiple challenges

the United States and its allies.

or by introducing multiple challenges will also require a long-term lessen the impact of the larly on most, which, given ational forces in Ukraine, will eventional methods, such as decyberattacks, including on or by introducing multiple challenges the Kremlin must confront, consuming its bandwidth to sustain its malign activities. Additionally, efforts to target Russia's vulnerabilities can aid in U.S. efforts to grow the coalition of countries willing and able to oppose Russian aggression, including by weakening Russian influence with its long-standing partners.

Russia's invasion of Ukraine has clearly exposed many of Russia's vulnerabilities. Russia's botched planning and the poor showing of its military in Ukraine, for example, demonstrated the vulnerabilities that come with the personalization of power. Putin's decision to surround himself with yes-men and loyalists led him to severely miscalculate not just in his decision to invade Ukraine but in his understanding of how the conflict would transpire and the faulty planning that followed. Likewise, the failed insurgency led by Wagner head Yevgeny Prigozhin in June 2023 exposed the vulnerability that the Kremlin itself created by relying too heavily on a private military

#### TRANSATLANTIC SECURITY | DECEMBER 2023

Identifying Russian Vulnerabilities and How to Leverage Them

company. By allowing an alternate center of power to develop—one with access to weapons—Putin planted the seeds of the most significant challenge to his power he has faced since entering office in 2000. Although the Kremlin may have neutralized the immediate threat, including through its likely assassination of Prigozhin, the entire episode exposed weaknesses that may eventually catch up with the regime.

For too long, the United
States has been on the back
foot in its confrontation with
Russia. These essays provide a
roadmap for a more assertive
Western posture.

This essay series identifies 10 of the most critical vulnerabilities in today's Russia across the defense, economic, and diplomatic and political domains. Some of these vulnerabilities, such as Russia's dependence on oil and gas exports or the exodus of many of the smartest and most talented Russians, are long-standing but have been exacerbated by Russia's invasion of Ukraine. Other vulnerabilities that the essays identify have been created by the war, such as Ukraine's ability to impose costs on Russia for the foreseeable future or the challenge that Russian diplomats now face in international organizations. Russia has many vulnerabilities that are not included in this series, such as the Wagner example previously discussed or its dismal demographic outlook. They represent key weaknesses in the Russian state and its government, but there are few actionable opportunities for the United States and Europe to leverage the vulnerabilities. This essay series focuses on 10 of the most critical vulnerabilities inside Russia that the United States and its partners can exploit. For too long, the United States has been on the back foot in its confrontation with Russia. These essays provide a roadmap for a more assertive Western posture.

#### **Vulnerability 1**

# Russia's Defense Industry

By Richard Connolly

Russia's reliance on imported components to produce weaponry leaves it vulnerable to efforts to restrict their supply.

#### The Vulnerability

ussia's defense industry has long been a crucial pillar of the country's national security and global influence. However, despite a concerted effort to reduce the defense industry's vulnerability to sanctions ahead of the decision to launch a full-scale invasion of Ukraine in February 2022, the sector remains highly dependent on external components and technology and, therefore, potentially vulnerable to sanctions. While allied sanctions and export controls are complicating and increasing the cost of Russia's defense-industrial production and may be degrading some of its military capabilities, there remains room to further exploit this critical vulnerability.

Before the annexation of Crimea in 2014, the Russian defense industry relied heavily on components and advanced technologies imported from abroad.¹ Such was the dependence that very few if any systems were built using purely Russian-produced components. The new Armata tank, for instance, used multiple Western components, as did many long-range precision-guided missiles, while warships were powered by foreign engines. A similar dependence on Western components was observed across the defense industry.

This dependence was especially acute in the sphere of electronic components, machine tools, power units, armored vehicles, helicopters, and unmanned aerial vehicles (UAVs). The sanctions that allies imposed in the wake of 2014 restricted or prohibited the export of these critical inputs to Russia, disrupting the production of numerous military systems, including the new Sarmat intercontinental ballistic missile (ICBM). The sanctions imposed after February 2022 hit even harder, targeting a much wider range of companies and technologies. Most importantly, export controls prohibited the sale of goods that were made using U.S. technologies, such as microchips, microprocessors, and optical equipment.<sup>2</sup>

Not only has Russia's defense industry experienced challenges as a result of its reduced access to technology and parts but, after 2014, allied sanctions also hampered Russian defense firms' access to capital from global financial markets. The number of defense firms subject to financial restrictions has grown sharply over the past year. As a result, the sector's ability to keep pace with technological advances across the world is under increased pressure. By restricting Russian defense firms' access to capital, sanctions should make it harder for them to invest in new equipment and research and development (R&D). Moscow will be faced with the choice of using public funds to cover the financing needs of local

defense firms or allowing them to scrimp on the investment required to remain capable of developing advanced weaponry in the future.

Responding to technological and financial sanctions costs Russia a lot of money, time, and effort. New suppliers need to be sourced, either via non-sanctioning third countries or illicit trade networks. Investment in new domestic capacity to produce substitutes also needs to take place. Both take time and do not always deliver perfect replacements for sanctioned equipment. Also, the financing needs of defense enterprises are covered by the state, putting the federal budget under increasing pressure.

Nevertheless, because Russia possesses one of the largest defense industries in the world, and because its leadership prioritizes defense production above all else, it is unrealistic to expect that sanctions will prevent it from producing a large quantity of the platforms and munitions required to sustain the war in Ukraine. Instead, sanctions raise the cost of production, disrupt supply chains, and can result in lower-quality weaponry. Munitions might be less accurate, fighting at night could be more difficult, and sensors might be more prone to error, all of which will reduce the effectiveness of weaponry used on the battlefield.

The difference made by sanctions, therefore, is likely to be qualitative rather than quantitative. Russia will still produce large volumes of weaponry. But it will be of a lower standard, will take longer to produce, and will be more expensive. This is likely to make it even more difficult than it was before the war for Russia to produce next-generation weaponry, such as fifth-generation combat aircraft, artificial intelligence (AI)-enabled control systems, and the sensors needed to coordinate complex operations on the battlefield. Instead of building a modern force, the Russian military might have to settle for 20th century equipment. As other countries make advances in developing new generations of weaponry, the gap between Russia and its competitors could grow further.

# Russian Efforts to Mitigate or Offset the Vulnerability

ince 2014, the Russian government has sought to mitigate or offset the impact of sanctions and export control on its defense industrial base. Russia developed a multipronged response, and the Kremlin continues to adapt as new sanctions are put in place.<sup>3</sup> However, these efforts have only delivered partial and often slow successes.

First, the government and intelligence services have spent years building up large inventories of prohibited goods, either via open purchases from third countries or through illicit trade networks.<sup>4</sup> As a result, prohibited components are often found in weaponry used or destroyed on the battlefield in Ukraine.<sup>5</sup> For instance, a recent comprehensive study found large numbers of foreign-produced components in Russian armored vehicles, missiles, electronic warfare (EW) systems, and combat aircraft, including UAVs and helicopters.<sup>6</sup>

Second, the Russian government focused on reducing its dependence on imported defense technologies and components. An ambitious and well-funded import substitution plan was created in 2014 and has been bolstered with new institutional innovations ever since.<sup>7</sup> Russia now produces its own power units for large warships, something it was unable to do until very recently. The government has also actively promoted indigenous R&D in vulnerable areas of production, such as microchip and machine tool production. While the quality of the output might not be world leading, it is often good enough for the needs of the defense industry. Production facilities have also been upgraded to support the development of secure domestic supply chains. The Sarmat, for example, now looks set to be manufactured using entirely Russian-produced components. Over the past year, the Russian government has undertaken more institutional innovation, such as creating a Special Coordinating Council to ensure that production bottlenecks are overcome, and allocated more funds to help cushion its defense industry from sanctions and to enhance local capabilities.

Third, Russia has cultivated closer ties with alternative suppliers in the "non-Western" world. This has involved sourcing components used in defense-industrial production from a wider range of countries across Eurasia, such as China, Turkey, and Vietnam. Moscow has also redoubled its efforts to bolster military cooperation with countries that are not aligned with Western interests, such as China and Iran. The large-scale use of Iranian-designed UAVs across Ukraine is a prime example of Moscow adapting to the demands of war and the allied sanctions regime. If, as has been reported by the White House, Russia begins local production of UAVs, it will represent an even higher level of cooperation between Russia and Iran.

Finally, Moscow has focused on the development of asymmetric capabilities and non-traditional defense technologies. By investing heavily in areas like cyber warfare, EW, and UAVs, Russia's leaders hope to offset vulnerabilities from limitations caused by sanctions. As

#### By investing heavily in areas like cyber warfare, EW, and UAVs, Russia's leaders hope to offset vulnerabilities from limitations caused by sanctions.

shown by the increased use of the Lancet loitering munition, there are signs of progress, even if production of other types of UAVs has been slower.

Moscow has also pinned its hopes on developing "wonder weapons," such as hypersonic missiles and giant nuclear-tipped torpedoes, to maintain the viability of Russia's strategic nuclear deterrent force. These weapons are often presented as containing cutting-edge technologies. In practice, they are upgraded versions of existing technologies that make the most of what Russia has at its disposal.9

Overall, Russia's response to the allied sanctions regime has achieved some success. The increase in the tempo of cruise missile attacks on Ukraine in May 2023 suggests, for example, that Russian manufacturers have been able to increase the rate of production well beyond levels observed before the war. That these continue to contain recently produced Western components shows the success of Russian efforts to source components using alternative trade routes. And that these attacks have been accompanied by large numbers of the Iranian Shahed-136 strike UAV shows that Moscow has been able to fill an important hole in its arsenal by cultivating defense-industrial ties with non-Western countries that didn't exist before the war. Indeed, reports in the Russian media indicate that production of several weapons systems has risen sharply over the last vear.<sup>10</sup> While these statements should be treated with a degree of skepticism, they do highlight the limits that allied powers have in undermining defense production in Russia.

# Opportunities for the U.S. and its Allies to Exploit the Vulnerability

anctions are unlikely to prevent the Russian defense industry—one of the three largest in the world—from producing weaponry. But they can raise the cost of production, reduce the quality and effectiveness of the weapons produced, and disrupt the rhythm of R&D and production. All these results are worthwhile objectives and will hamper the functioning of the Russian war machine. Three obvious opportunities exist to maintain this pressure.

First, more effort needs to be made in enforcing those sanctions already in place. This will require cracking down on illicit trade networks operating in allied countries and greater surveillance—and ultimately cutoff—of supplies to third countries that are profiting by reselling equipment to Russia. While China might be more difficult to dissuade, the likes of Turkey, Kazakhstan, and Vietnam might prove more amenable given their own interests in maintaining warm relations with allied countries.

Second, the technology control regime should be expanded to target some important blind spots. Rosatom, Russia's largest and best-equipped manufacturer of high-tech goods, stands out. Its importance in the global nuclear supply chain should not prevent allies from taking action to hinder its manufacturing operations. Rosatom is at the forefront of efforts to mitigate sanctions. It was already Russia's leading producer of advanced materials and precision machine tools but is now leading efforts to produce microchips. More needs to be done to disrupt its manufacturing activities and those of its subsidiaries.

Finally, the United States and Europe should increase diplomatic efforts to encourage other states to join in the allied sanctions regime. Even where countries do not impose sanctions, the deterrent effect of secondary sanctions can help dissuade third-country suppliers from supporting Russian efforts to circumvent sanctions.

Taking these steps will not stop defense production. But it will raise the cost of production, imposing greater strain on Russia's public finances, which are now bearing the full cost of military production. It will also reduce the quality and reliability of weapons that are produced with lower-quality components. And production lines will be disrupted if Russian manufacturers are forced to regularly seek new suppliers. This will lengthen the time it takes to deliver weapons to the armed forces. Together, these efforts will make it harder for Russian forces to prevail on the battlefield.

#### **Vulnerability 2**

# Russian Arms Sales

By Siemon Wezeman

The Kremlin's need to replace its weapons destroyed in Ukraine, combined with the sanctions and export controls the West has implemented in the aftermath of Russia's invasion, will make it harder and more expensive for Russia to sustain its arms sales—an important source of government revenue needed to sustain the war in Ukraine and a basis of influence with key external partners.

#### The Vulnerability

ince 1992, Russia has been the second-largest exporter of major arms globally-after the United States—taking over that position from the Soviet Union.12 Moscow has, until recently, maintained a substantial margin over other arms exporters and secured major orders from a host of states, including large orders for advanced and costly arms. Russia's invasion of Ukraine, however, will make it more difficult for Russia to sustain its leading role as an arms exporter. The Kremlin's need to replace its own weapons destroyed in Ukraine, combined with the sanctions and export controls the West has implemented in the aftermath of Russia's invasion, will make it harder and more expensive for Russia to produce many of the systems it exports. A decline in Moscow's capacity to sustain its arms exports, in turn, will diminish Russian budget revenue needed to sustain its war in Ukraine. A decline in arms sales also has the potential to diminish Russian influence in several countries where the Kremlin has used these deliveries to tether foreign capital to Moscow, a dynamic that the Kremlin has leveraged to encourage compliance with its policy preferences.

Arms exports have been an important source of income for Russia: arms exports reached around \$15 billion annually between 2011 and 2022. In 2022 they accounted for over 2.5 percent of Russia's total exports—a much higher share than that of other major arms exporters. Except for oil and gas exports, arms exports generally outperformed other export sectors for many years. Arms exports have also long been a substantial part of Russia's total arms production and critical to the Kremlin's ability to maintain an economically viable development and production pipeline for many weapons. Without such strong arms exports, Russia's cost of its own procurement would have been significantly higher.

Russia's invasion of Ukraine in February 2022, however, amplified several long-standing problems in its arms development. In the late-1980s, the Soviet Union's general technology development, which forms the basis for most military technology, began to trail Western development. After the breakup of the Soviet Union, Russia continued to face significant and basic weaknesses in its economy and technological base. This had started to hurt Russian arms exports before the West imposed sanctions on Russia in 2014. These sanctions significantly increased Russia's challenges, particularly by cutting off Russia's access to Western technology used in the development and production of its arms. The much broader and stricter Western sanctions after the

February 2022 invasion of Ukraine have substantially increased the problems facing Russia's arms industry.

Although Russia has found ways to circumvent the sanctions and export controls, these measures limit Russia's access to Western technology that can be used for military purposes. Russia's reduced access to technology could have a quick and negative impact on its arms production given that Russia has long relied on such technology in some of the weapons it manufactures, including in the advanced weapons systems that it offers for export. Unless Russia can access enough component parts cut off by Western sanctions from somewhere else (e.g., from China) or can quickly figure out how to close the technology gap with the West and produce the parts on its own, the sanctions are likely to have an increasingly significant negative impact on the development of Russia's general technology base over time.

Russia's technology gap vis-à-vis the West has hurt not only Russia's technology base but also its arms exports. Within a few years, Russia is likely to lose a substantial part of its market share and income from arms exports to the United States and other exporters. Russian arms exports may well drop below those of France, China, or even South Korea.<sup>20</sup> Already, Russian arms sales have declined in the past few years and Moscow has failed to secure major orders from states. There are several indicators discussed at greater length here suggesting

that this trend will continue.

One indicator of Russia's sustained downward trajectory is the annual export volumes of major arms, which The much broader and stricter Western sanctions after the February 2022 invasion of Ukraine have substantially increased the problems facing Russia's arms industry.

in the past three years have been substantially lower than earlier years. Russia's own announced financial values of exports and foreign orders also showed a marked decline in 2022, with the value of exports claimed to be just over \$10 billion, while in any of the 10 years before it stood at around \$15 billion.<sup>21</sup>

The second indicator of Russia's declining position as an arms exporter is the decline in its known orders of major arms. Russia's order books are thinner than in the past, and by the end of 2022 several states secured export orders in all or some categories that were significantly higher than Russia's. Orders for Russian combat aircraft, one of the main Russian arms exported in the past 30 years and often heralded as a success story by Russia, are much lower than those of several competitors: the United States outsold Russia by more than 10 times, and

France, Italy, China, and South Korea also outperformed Russia. The picture for warships, tanks, helicopters, and transport aircraft is similarly bleak for Moscow.<sup>22</sup> And, unlike a few years ago, Russia is no longer considered a serious candidate by several states with plans to import large numbers of advanced major arms. Even Russia's deepening military relationship with Iran is unlikely to offset Russia's troubles—Iran's economy and military budget are not large enough to replace lost markets like Indonesia and Egypt, not to mention lost orders from India.<sup>23</sup>

A third indicator suggesting Russia's arms sales will continue to decline is the success of some of Russia's main clients in replacing imports with local equipment. For the past three decades China has been the second-largest importer of Russian major arms, but Beijing's own military modernization has limited Russia's utility as an arms partner. This is also the case for India, Russia's main client for the past 30 years. India is increasingly building its own knowledge base and capacity to develop its own weapons, often in partnership with Western competitors of Russia, which will limit buys from Moscow in the future.<sup>24</sup>

The fourth factor indicating a sustained decline in Russian arms sales is the prospect that Russian arms simply have become less attractive. Russia increasingly lags behind in innovation and performance relative to

> what many Western states or even China offer. This is particularly true for next-generation weapons, such as the Su-57 fifth-generation combat aircraft, the Armata tank, or the

latest submarines with air-independent propulsion or new long-endurance batteries. Russia promised that these systems would be operational some years ago, but none are operational or as advanced as planned.<sup>25</sup> While some Russian weapons remain good enough for many states, the big-market countries demand better. India has been the clearest example of a buyer lacking trust in Russia's ability to produce weapons that can remain on the cutting edge for the next several decades. In 2018, for example, India ended plans for hundreds of Russian Su-57s after investing several billions of dollars in development, as it no longer believed Russia could deliver a system that met India's requirements.26 Additionally, it is likely that a similar lack of trust in Russia's ability to remain on the cutting edge has, at least in part, driven a downturn in orders from rich Middle Eastern states.

Recent wars provide case studies of the waning attractiveness of Russian arms for clients facing advanced adversaries. Syria is one example where Russia had success testing and showcasing its systems in combat situations.<sup>27</sup> However, the combat uses for many Russian weapons, including in Syria, has been against less advanced adversaries and often in situations where avoiding collateral damage was not high on Russia's agenda. The picture that emerged from Syria was a mix of advanced and outdated Russian weapons. For example, Russia's modern combat aircraft in Syria generally used the type of "dumb" ammunition long out of fashion with most Western states.<sup>28</sup> The war in Ukraine differs from most other recent wars: it is a full-scale, long war where both sides use the full spectrum of advanced major weapons. And it brings back memories of the last two similar wars: the 1990-1991 Gulf War and the 2003 war in Irag. In both wars, Western weapons were dramatically more successful than the Soviet weapons from which many current Russian weapons are developed. The lackluster performance of Russian weapons in Ukraine, even some of the most advanced ones, has added to doubts about their quality.<sup>29</sup>

The fifth and final factor underscoring declining Russian arms sales is Russia's waning ability to maintain its delivery schedules for existing orders. The war has created new challenges that hinder Russia's ability to stick to its delivery schedule. This may be a short-term issue due to Moscow's decision to prioritize replenishing its own weapons stocks as its military is being degraded in Ukraine rather than production challenges linked to Western sanctions and export controls. However, the short-term impact has strained Russia's relations with its clients; in the longer term, technology sanctions may hamper Russia's ability to fulfill existing or new orders, as it will need to find alternative sources for small components, such as microchips.<sup>30</sup>

# Russian Efforts to Mitigate or Offset the Vulnerability

t is doubtful Russia can do much to stem the decline in its arms exports. Prior to 2022, Russia had sought to respond to this challenge by offering more technology transfers. For example, for a while Russia was co-developing its fifth-generation combat aircraft (the Su-57) with India with the expectation that New Delhi would purchase up to 144 of the aircraft. However, India ultimately terminated the deal in February 2023. This example underscores a broader pattern: Russia's recent offers to transfer its technology have largely been

unsuccessful. Officials in India, its biggest customer, have openly questioned Russia's willingness and ability to provide the promised technology.

Other than allowing greater technology transfers, Russia has few other options to make its arms sales more attractive. Given Russia's rather small and weak economy (it had a gross national product (GNP) of \$1.48 trillion in 2022) and the challenges its budget faces as a result of the war in Ukraine, <sup>31</sup> Moscow has little capacity to offer incentives, such as soft loans to help arms exports. Such credits have been instrumental for other exporters, mainly European states and South Korea, to gain large orders, often in competition with Russia.

It is doubtful Russia can do much to stem the decline in its arms exports. Russia can flood markets in developing states with the weapons it can produce now or from existing surplus stocks, as it did in Mali, for example.<sup>32</sup> While such exports make headlines and can do serious damage locally, they are often of marginal economic or strategic importance.<sup>33</sup> To gain any medium- or long-term competitive edge on the larger markets, Russia will need to offer modern, next-generation weapons and the whole package of an integrated support; armaments; and Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISTAR) structure with the guarantee it will be able to support the equipment with spare parts and almost constant upgrades over decades. However, it does not have the money or the technology base to do this for all weapons. And, unlike most other producers, Russia has limited options to supply components for platforms developed elsewhere (as it currently still supplies engines for some Chinese aircraft) or niche systems that can be integrated with platforms or systems of Western origin.

#### Opportunities for the U.S. and its Allies to Exploit the Vulnerability

he United States, its allies, and other partners should build on ongoing efforts to use the aftermath of Russia's invasion to gain a larger part of the arms market. There are, of course, economic benefits from doing so. Increased arms sales bring financial and employment benefits and—although less important for the United States than other small and medium exporters—the larger production runs cut per-unit prices for national procurement. Perhaps even more important, arms exports are a tool for foreign and security policy—a dynamic more salient now than in the past three decades. Arms exports help cement, expand, and build friendly

The United States, its allies, and other partners should build on ongoing efforts to use the aftermath of Russia's invasion to gain a larger part of the arms market.

relations or formal alliances with states. This has historically been true for Russia: Moscow has used the high volume of sales to countries of geostrategic importance, such as India, Egypt, Algeria, Vietnam, Serbia, and Indonesia, to buttress relations with these states. Russia's influence with many of these countries is already declining, as Moscow has lost contracts, including to Western states.<sup>34</sup> Indeed, these countries have the option to turn to Western states for their armament needs, creating an opening the United States and the West can exploit.

For several years, the United States and its allies have used a combination of carrots—and sticks—pressuring states to stay away from Russian (and Chinese) arms while offering advanced arms, credits, technology transfers, partnerships, and various other benefits. Egypt, Indonesia, and the Philippines have canceled orders from Russia. Russia has almost disappeared from Latin

American markets. It is no longer considered a candidate for most of the large Indian procurement programs. Russia has not managed to break into the large Middle Eastern markets and is no longer a main candidate for medium markets like Malaysia, Indonesia, or Thailand. This carrot and stick policy has a high chance of success in India, and likely in Vietnam and Algeria, where the competition with Russia is strongest and the rewards the largest. This is a long game—all three have a large inventory of Russian weapons and have good arms trade experiences with Russia. It will take time to wean them off Russian arms. However, India seeks advanced technology and an assurance against China and Pakistan; Russia can't provide the latter, and India seems to no longer believe Russia can offer the advanced technology. Vietnam, of course, would like more support in regard to China, which Russia is not able to provide.

Of course, the opportunity to weaken Russia's position as an arms exporter should not be used blindly and must be balanced by other considerations: Russia (and China) are generally weak on norms for arms exports and provide arms with few conditions attached, while Western states generally do the opposite. Trying to use the advantage they have now over Russia in some states, Western states should not water down their norms but live up to their stated policies of responsible arms transfers.<sup>35</sup>

#### **Vulnerability 3**

# Russia's Technology and Cyber Industries

By Gavin Wilde

Russia's war in Ukraine has jeopardized its access to the technology and talent that has long fueled its aggression in cyberspace.

#### The Vulnerability

merican military theorists John Arquilla and David Ronfeldt wrote in 1993 that cyber conflict "is about organization as much as technology." Nearly 30 years later, cyber scholar Max Smeets affirmed this notion in his book on military cyber commands, No Shortcuts, stating that people are "the most important element [...] required to run an effective cyber operation." To the extent that these axioms hold true for yet another three decades, Russia faces an acute crisis. Even prior to Moscow's intensified invasion of Ukraine in February 2022, a chronic case of "brain drain" and heavy dependency on foreign-made technology had arguably begun chipping away at Russia's status as a global cyber power. As Moscow's war on Ukraine drags into its second year, both dynamics appear likely to intensify. 38

After Vladimir Putin took the helm of the presidency at the turn of the century, emigration from Russia steadily declined during his first two terms, according to Moscow's own figures.<sup>39</sup> His return to the presidency in 2012—after a brief stint as Prime Minister to Dmitriy Medvedev—was marked by popular protest and an ensuing wave of crackdowns and repressions. A sharp rise in outward migration followed, accompanied by dire metrics about Russia's broader demographic decline.<sup>40</sup>

The Kremlin's illegal annexation of Crimea and military incursion into Ukraine's Donbas region in 2014 kicked off a similar outflux. As a range of punitive Western economic sanctions began to bite, pollsters, researchers, and senior Russian officials noted a common theme: Russia's best and brightest were among those flocking to the exits. Out of an estimated 100,000 yearly émigrés from Russia, 40 percent held advanced degrees—and many had no intention of returning home. <sup>41</sup> By early 2018, then-Deputy Prime Minister Dmitriy Rogozin proclaimed that drastic measures were needed to stem the loss of highly educated specialists to countries abroad, calling it Russia's "greatest weak spot." <sup>42</sup> The worst, however, still lay ahead.

After its bumbling and brutal "special military operation" in 2022, a mixture of political repression, fears of military conscription, and economic uncertainty led to yet another exodus—conservatively estimated at 500,000, liberally at a million—at levels unseen since the 1917 Bolshevik Revolution or the Soviet collapse of 1991.<sup>43</sup> Once again, peppered throughout these throngs were the country's information technology (IT) professionals—at least 10 percent of Russia's entire IT workforce, per the country's own Communications Ministry last December.<sup>44</sup> There are even some indications that

Russian cybercrime syndicates were disrupted by the human displacement.<sup>45</sup> "That's a generational impact when you talk about the talent walking out the door," noted Mieke Eoyang, U.S. Deputy Assistant Secretary of Defense for Cyber Policy.<sup>46</sup>

This wasn't Russia's only once-in-a-generation exodus. Multinational tech firms—many of which were either firmly entrenched or amid yearslong investments into the Russian market—began pulling up stakes. Beyond Moscow's energy revenues, the tech sector had been one of the few bright spots for the Russian economy, yielding over a third of the country's overall gross domestic product (GDP) growth from 2015 to 2021.<sup>47</sup> But by spring 2022, major players like Intel, Adobe, Hewlett-Packard, Microsoft, Cisco, Dell, Eriksson, Nokia, LG, NVIDIA, Kyocera, Logitech, Siemens, SAP, Oracle, Juniper Networks, and Samsung had all announced suspensions of some (if not all) business operations in, or product deliveries to, Russia.<sup>48</sup> By some measures, IT companies constituted nearly a fifth of this historic pullback.<sup>49</sup>

Many of these companies did not even wait for Western sanctions and export controls to be announced. When they were, they came in full force.

The U.S. Commerce Department called its export restrictions to Russia—which were largely mirrored in scope by the European Union (EU)—"the most comprehensive application of [... its] authorities [...] targeting a single nation." Moscow's access to semiconductors consequently plummeted, impacting production of everything from consumer electronics to data servers and scuttling its rollout of 5G mobile networks. The country faced a critical data storage shortage, prompting a scramble by the Ministry of Digital Transformation to identify new options for major service providers. Legislators considered legalizing software piracy despite the fact that pirated programs are inherently insecure and unpatchable (Digital Ministry and industry leaders have since sought to temper the idea). 53

The pullback exposed what the Russian government recently called a "critical dependency" on high-tech imports from abroad.<sup>54</sup> According to economic figures from 2019, 45 percent of the \$19 billion in such imports to Russia were sourced from the EU, United States, China, and UK.<sup>55</sup> Information and communication technologies composed a fifth of that total. By contrast, the share of

high-tech products in Russia's total 2020 exports came to less than 15 percent, most of which were destined for (the now largely closed) European market.<sup>56</sup> Such figures are hardly indicative of a self-sustaining tech sector.

By the start of its 2022 war, Moscow was almost eight years into an "import substitution" initiative, designed in part to insulate the country's economy from external sanctions pressures, as well as to spur domestic industry and innovation. The effort was already flagging, as Moscow had proved unwilling or unable to build the necessary capacity and infrastructure for an indigenous tech sector to take shape, much less to thrive.<sup>57</sup> Particularly in the digital arena, it had pitted the intelligence and security services against the very industries that needed to innovate most, as the imperatives of regime stability ultimately prevailed against the economic freedoms necessary for competitive modernization. According to researchers at the German Council on Foreign Relations, rather than spurring the Russian IT sector, Moscow merely subjugated it.58 Meanwhile, as the West

set about isolating Russia economically and technologically, analysts Maria Shagina and Emily Kilcrease assessed these restrictions would "force Russia to go through some-

Even prior to Moscow's intensified invasion of Ukraine in February 2022, a chronic case of 'brain drain' and heavy dependency on foreign-made technology had arguably begun chipping away at Russia's status as a global cyber power.

thing of a reverse industrialization": Moscow's goals would necessarily have to shift from playing catch-up to merely making do with far less. Consequently, ambitious national projects on tech have quietly been scrapped.<sup>59</sup>

Analysts have closely examined the Russian military's heavy reliance on Western technology, which fuels its kinetic war machine. Such analysis of Moscow's cyber capabilities is far more difficult, as its premiere cyber-capable agencies—the General Staff Main Intelligence Directorate (GRU), Federal Security Service (FSB), and Foreign Intelligence Service (SVR)—are shrouded in secrecy. However, there is ample reason to suspect a similar dependency prevails there, too.

For example, documents from 2018 detailing the FSB's vast digital surveillance dragnet, SORM, outlined the central role Nokia and Cisco hardware played—without which functionality "would have been impossible," said Andrey Soldatov, an expert on Russian intelligence. More recent leaks from a Russian commercial subcontractor, Vulkan, detailed the cybersecurity company's development of a host of capabilities for all three agencies. Schematics for several commissioned projects

were riddled with references to hardware and software from Dell, Intel, Kyocera, Juniper, Cisco, and others necessary either for core componentry or for testing new techniques. U.S. sanctions on similar Russian intelligence subcontractors like Positive Technologies have highlighted past partnerships with Microsoft and IBM. Windows of opportunity to sustain such close ties and such ready access to hardware and software, however, have rapidly closed over the past year.

Cyber power on the global stage draws from the interplay between state, commercial, human, and technical capacities. Russia now risks running major deficits in all these areas in the coming years. The private-sector ecosystem to develop and test new digital toolsets is now losing both institutional heft and investment capital.<sup>64</sup> The domestic telecommunications infrastructure to both deploy and exfiltrate such toolsets is losing pace with global standards. 65 Data storage capacity is reportedly at critically low levels,66 as is the country's share of young, entrepreneurial, tech-savvy workers. R&D spending remains relatively stagnant.67 Russia has burned through a significant number of offensive cyber toolsets against Ukraine with little strategic impact—other than a much more resilient adversary—to show for it.68 Under such conditions, Moscow may be able to redirect dwindling digital and human resources toward the military and security services but will nonetheless have to run faster just to stay in place.

# Russian Efforts to Mitigate or Offset the Vulnerability

oscow's acknowledgment of this vulnerability lies on a spectrum. On one end, the rank and file of the national security bureaucracy seems to have registered a burgeoning crisis. For instance, Moscow has attempted to stem the tide of departing IT professionals by suspending their mandatory military service and offering preferential lending rates to businesses that manage to retain the bulk of their IT staff.<sup>69</sup> Meanwhile, the Digital Development Ministry reportedly circulated a memo to Russian national security officials last summer, warning that overreliance on Chinese tech providers posed clear dangers to not only Russia's information infrastructure but to the competitiveness of indigenous industries. "The assessment even suggests considering restrictions on technologies produced by Huawei and other Chinese companies in order to avoid a scenario of total dependence," Bloomberg reported, putting Moscow on a one- to two-year timeline to avoid such a fate.<sup>70</sup> Meanwhile, Huawei may have trimmed its

commercial ambitions in Russia, but the R&D facilities it maintains throughout the country have been on a hiring spree over the past year.<sup>71</sup>

On the other end is Putin himself, a reported technophobe and longtime advocate for Russia's technological autarky who, at least publicly, seems unfazed.72 His comments last summer indicated a sense of relief about the departure of Western firms, which he called a "blessing in disguise" and a forcing function for the Russian market to "finally move on." In his meeting with Chinese Premier Xi Jinping earlier this year, he boasted that "by combining our wealth of research capacity and industrial capabilities, Russia and China can become world leaders in IT, cybersecurity, and AI."73 In many ways, this is an acknowledgment of clear synergy that existed even before the war: Russia has ample natural resources but lacks tech and capital, while China has the inverse arrangement.74 Whether the Kremlin is dismissive or simply circumspect about the risk of becoming China's "junior partner" in the tech sector, as the war drags well into a second year, it does not appear to have any alternative. 75 As prospects for technological self-sufficiency continue to grow dimmer, Moscow will somehow have to square either its domestic shortfalls or its dependency on China with Putin's notions of Russian "sovereignty."76

Meanwhile, homegrown Russian suppliers are consolidating as they attempt to fill the void left by Western suppliers but are likely to face headwinds without the funding, know-how, and technology previously available to them.<sup>77</sup> Meanwhile, some Chinese tech firms, such as Huawei, appear skittish to rush in, as they risk running afoul of secondary sanctions.<sup>78</sup> Researchers from the Royal United Services Institute recently concluded that "although some components can be sourced from China, many critical components [...] cannot. Without the requisite domestic manufacturing capabilities, Russia [...] remain[s] highly vulnerable to multilateral efforts to choke off these component flows."

# Opportunities for the U.S. and its Allies to Exploit the Vulnerabilities

ltimately, any state's capacity to wage sophisticated, state-backed cyber campaigns against adversaries depends on human and technical capital. Cutting the Russian military, intelligence and security services, and their research and commercial facilitators off from that capital can only benefit the United States and its allies in terms of cybersecurity—not to mention Ukraine on the battlefield.<sup>80</sup>

But to maximize these benefits, the United States needs to work more closely with its allies and partners on enforcement. A patchwork of cutouts, obscure shell companies, and opaque end users have enabled Moscow to ensure "parallel imports" of desperately needed technology—often via entities located in allied states. Meanwhile, trade data since the onset of the war are

sufficient to reveal routes and volumes indicative of likely sanctions evasion.<sup>83</sup> For example, nearly \$1 billion worth of advanced chips and electronics were transferred to Russia via China from a foreign-controlled, UK-based company in 2022 despite restrictions

being in place.<sup>84</sup> Such instances suggest the need for enhanced anti-money laundering (AML), know-your-customer (KYC), and ultimate beneficial ownership (UBO) regulations and enforcement to stem the illicit flow of money and materiel to targeted Russian entities. New and developing outbound investment screening mechanisms from the United States, EU, and other like-minded states could also be synchronized toward this end.<sup>85</sup>

The United States and its allies should similarly welcome and incentivize the migration of Russia's tech talent—and anchor them permanently in the West—particularly as the globe faces a growing shortage.<sup>86</sup> By loosening visa regimes for Russian citizens with advanced degrees in cutting-edge fields, the West can gradually sap Moscow of the human capital necessary to

feed both its military and cyber aggression. The Western diplomats could mimic messaging blitzes by the U.S. Federal Bureau of Investigation and Central Intelligence Agency Agen

Turkey, Armenia, Israel, and elsewhere.89

Make no mistake, Russia is likely to remain a formidable cyber adversary, capable of significant disruption and sophisticated attacks. Its intelligence and security services may become even more brazen as the conventional war effort founders. Moreover, Western sanctions and export controls are hardly airtight. Even so, a rapidly diminishing pool of tech talent and a rapidly growing technological deficit threaten to combine over the longer term to make Russian cyber power difficult to sustain, making Russia more vulnerable to cyber foes and friends alike in the interim.

#### **Vulnerability 4**

# Russia's Financial Sector

By Elina Ribakova and Benjamin Hilgenstock

With sanctions limiting the government's room for maneuver in the monetary and fiscal policy domains, Russia's financial system will have to play a much bigger role in funding the government and boosting the economy. At the same time, authorities will not be able to provide the support banks need to effectively carry out these functions.

#### The Vulnerability

espite the unprecedented sanctions that the United States, EU, and other countries imposed on Russia following its full-scale invasion of Ukraine on February 24, 2022, the sanctions have not triggered a financial crisis in Russia or had significant spillover effects on its economy. This is in part due to high commodity prices in 2022, which increased Russia's foreign exchange inflows and budget revenues. In 2023, however, Russia faces a more challenging economic outlook given lower export earnings, a weakening ruble, and widening budget deficits. These challenges mean that the Russian government has less room to manage the economy and that many of Russia's underlying economic challenges could become more severe. Although Russia's financial sector has been more resilient than Western policymakers had hoped, it remains riddled with vulnerabilities that Ukraine's allies could exploit in ways that would exacerbate Russia's economic challenges and make it more difficult for the Kremlin to sustain its war of aggression in Ukraine.

International sanctions have, thus far, failed to undermine Russia's macroeconomic stability and the ability to sustain its aggressive war for several key reasons: (1) the United States' and EU's gradual approach to implementing crucial measures, especially concerning energy exports; (2) the highly favorable external environment characterized by surging commodity prices, which led to record-breaking export earnings and substantial budget revenues in 2022; (3) Russia's robust macroeconomic buffers, including relatively low government debt compared to the size of the economy, significant reserves (although some are currently immobilized), and funds saved in Russia's sovereign wealth fund; and (4) prudent Russian policies, such as recent fiscal consolidation efforts and the Bank of Russia's (CBR) credible inflation-targeting regime.

As a result, Russian authorities have been able to increase government spending, provide ample liquidity to banks to prevent spillovers into the real economy through the credit channel, and stabilize the ruble exchange rate via capital controls. However, the economy and financial system's overall resilience in the face of international sanctions should not conceal the fact that Russia's underlying economic vulnerabilities continue to exist and could resurface quickly. The United States and its allies could amplify Russia's following economic vulnerabilities, which are long-standing and tend to reoccur during crisis episodes in the country. These underlying vulnerabilities include:

Bank liquidity. The initial impact of international sanctions on liquidity conditions in the banking system shows the potential for significant stress. In addition, while the CBR was able to inject sufficient ruble liquidity, the simultaneous expansion of liabilities to and claims on the central bank suggests that Russian banks do not have enough trust to lend to each other on the interbank market. Lack of trust among Russian banks makes the system more dependent on the central bank to address liquidity shocks stemming from deposit runs. If the central bank must pursue multiple objectives (e.g., stabilizing foreign exchange, meeting inflation targets, and ensuring financial stability), addressing liquidity shocks becomes more challenging. As a result, monetary and financial systems overall become less stable.

Household behavior. As in previous Russian economic crises, households have shifted assets into short-term instruments, such as cash and current accounts, given a lack of trust in the banking system. Households' lack of trust in the banking system is also driving a shift of foreign currency from domestic banks into cash and accounts with foreign institutions. This may also be an indication of people leaving or planning to leave Russia and needing access to their money from abroad. These developments were pronounced in the immediate aftermath of the full-scale invasion and imposition of initial sanctions as well as during the partial mobilization in the fall of 2022.

**Budget deficit.** With the deficit rising, access to foreign financing essentially gone, and macroeconomic buffers, such as Russia's sovereign wealth fund, being depleted, banks have to bear most of the burden for government financing by buying sovereign debt issued in the domestic market. As they already hold substantial amounts of Russia's government debt, this could crowd out credit to the private sector and, thus, spill over into the broader economy.

**Economic management.** Russia's banking system is dominated by state-owned institutions, and any non-state institution has little choice but to comply with Kremlin demands. This means decision-making is highly centralized and the system is exposed to substantial risk from a sudden change in economic management. If Vladimir Putin were to decide to replace his still-technocratic current team—which is not yet the case, although some officials, such as Central Bank First Deputy Governor Ksenia Yudaeva, have opted to step down—ripple effects could lead to significant stress in the financial sector.

**External conditions.** In 2022, Russia's central bank competently managed the stress created in the financial

system and the broader economy. However, the supportive external environment created the policy space to do so. For instance, the CBR was able to simultaneously address financial stability concerns through the provision of liquidity to banks, and monetary stability concerns (e.g., rising inflation and ruble depreciation) through interest rate hikes and the imposition of capital controls. Higher foreign exchange inflows from trade in commodities helped stabilize the ruble. However, the environment has changed dramatically: the trade surplus for the first half of 2023 (\$54.3 billion) was 70 percent lower than in the corresponding period in 2022 (\$179.8 billion). Russia's currency has lost one-third of its value.<sup>90</sup>

**Fiscal stimulus.** Since sanctions were initially introduced in 2014 after the illegal annexation of Crimea, Russia underwent a period of substantial fiscal consolidation, especially through expenditure cuts. As a result, the country had a low debt-to-GDP ratio, which allowed authorities to meaningfully increase spending last year. This has provided critical support to the economy and partially explains why Russia's economy has outperformed expectations. However, with deficits widening quickly and financing becoming more challenging, there are fewer policy options now and cuts to nondefense spending are likely. Aside from the escalating costs of the war, lower export earnings from oil and gas—and, thus, lower budget revenues—are the key driver of such cuts.

Reserve assets. Another important development in Russian authorities' available resources for economic management is the immobilization of central bank assets by Ukraine's allies. An estimated \$310 billion in such funds are likely no longer accessible, leaving largely yuan and gold in usable reserves. Paccording to a recent analysis by the EU, around \$215 billion is frozen in EU member states alone. However, sanctions have only addressed the issue of reserve stocks, not reserve flows. In 2022 and the first quarter of 2023, Russian banks and corporations accumulated \$158 billion in assets abroad due to the country's large current account surplus. These may not formally belong to the government but could effectively be used to generate budget revenues or pay for imports.

# Russian Efforts to Mitigate or Offset the Vulnerability

n 2022, Russia accelerated many of the efforts it had undertaken since 2014 to reduce vulnerabilities in its financial sector, especially reducing its reliance on international financial architecture and shifting the currency composition of cross-border transactions away

from the dollar and euro. In taking these actions, the Kremlin has sought to limit the impact of existing and potential future sanctions, which leverage the West's still-dominant position in global finance. Here, the sense of urgency has only grown due to the further deterioration of relations with the West since Russia's invasion of Ukraine.

Russian authorities have spent considerable effort in recent years, especially since 2014–15, establishing alternative domestic systems for many types of financial transactions, including information exchange, payments infrastructure, credit card payments, and rapid transfers. In addition to increased reliance on domestic systems, Russian authorities have been attempting to strengthen links to China's Cross-Border Interbank Payment System in recent years to reduce dependence on Western financial infrastructure. This has proven to be challenging, but the current geopolitical environment will undoubtedly lead to intensified efforts in this direction. It would allow Russia to insulate its ability to conduct cross-border transactions from existing and future sanctions.

Russia is also increasing its use of currencies such as the ruble and yuan in its international trade. Since the ability to restrict access to the dollar and euro-and the corresponding financial markets—is a critical tool in the West's sanctions toolbox, such shifts could significantly impact the effectiveness of sanctions going forward. Since the start of the full-scale invasion, the combined share of dollars and euros in Russian goods trade-exports plus imports-has fallen from around 80 percent to slightly below 50 percent, according to data from the CBR.96 In contrast, the ruble's and yuan's shares have grown. The dollar and euro played a more significant role in exports than in imports before the full-scale invasion, but such differences have now largely disappeared. On the exports side, the ruble has seen the most significant gains—35-40 percent versus 10-15 percent previously—while on the imports side, the yuan's share has expanded most—from 5 percent to 20–25 percent. The share of yuan on the domestic market has also increased from less than 1 percent pre-February 2022 to over 30 percent now.97

Although Russia has been able to reduce its reliance on international financial architecture and diversify away from the dollar and euro, it has not been able to address the growing vulnerability posed by its budget deficit. Russia's federal government deficit reached 2.6 trillion rubles in the first half of 2023, with substantial month-to-month swings triggered primarily by the accounting of war spending. This is already close to 90 percent of what the government had planned for the entirety

of 2023 in the original budget. Government revenues derived from oil and gas have declined—they are sharply lower than in the corresponding period in 2022. 99 At the same time, expenditures are rising as a result of wartime spending. Without adjustment, the fiscal deficit could reach 5–6 percent of the GDP, although it is likely that the Kremlin will further cut nondefense spending instead of risking high deficits. Such cuts would certainly be painful for the population, but Russian authorities have demonstrated a willingness and ability to consolidate public finances via spending cuts before.

Given that Russia's financial system is essentially a closed circuit now, with foreign investors unlikely to return, this leaves the government with only two main financing channels: withdrawals from the country's sovereign wealth fund (National Wealth Fund, [NWF]) and issuance of ruble-denominated debt (so-called OFZ) in the domestic market. Their use was somewhat muted in the first five months of 2023, as Russia benefited from "overfinancing" in the fourth quarter of 2022, when more funds were brought in than needed for the deficit. However, the government will have to increasingly rely on NWF withdrawals and increase OFZ issuance because deficits will use up Russia's macroeconomic buffers (e.g., NWF assets) and burden domestic banks, as they are the only remaining major buyer of Russian sovereign debt. Banks already hold about 10 percent of their total assets in government paper; while they could purchase more, it would crowd out other consumer and corporate lending.100 And they will ask the government for higher interest rates to do so, which will increase medium- and long-term debt service costs.

# Opportunities for the U.S. and its Alies to Exploit the Vulnerability

iven these growing macroeconomic vulnerabilities, there are several opportunities to meaningfully increase pressure on the Russian financial system. These steps would undermine the Russian financial system's ability to provide credit to the private sector and finance the government; limit Russian entities' ability to conduct cross-border transactions; allow for more effective enforcement of sanctions in other areas; and restrict the Russian state's access to foreign assets. These measures are unlikely to lead to a full-blown economic, financial, or fiscal crisis. However, they would target key areas of concern, such as Russia's ability to pay for its war of aggression in Ukraine through its energy exports and acquire important components needed for military production. Ultimately, sanctions can

only achieve their objective of bringing the war to an end in conjunction with robust military, financial, and political support to Ukraine.

To undermine the financial system's ability to provide credit and finance the government, the United States and its allies should:

# Align and expand sanctions on systemically important banks.

Measures taken regarding Russia's largest financial institutions should be aligned across jurisdictions by imposing comprehensive restrictions (i.e., Specially Designated Nationals and Blocked Persons [SDN] listing or equivalent measures). The 10 largest banks in asset terms are of particular importance, <sup>101</sup> but measures should ultimately cover other banks, as these can partially substitute for sanctioned entities.

To limit Russia's ability to conduct cross-border transactions and allow for more effective enforcement of sanctions in other areas, the United States and its allies should:

# Limit channels through which Russian entities conduct cross-border business.

Banning transactions with additional Russian banks will allow for better monitoring of transactions—and, thus, more effective enforcement of measures, such as the G7/EU oil price caps or military and dual-use goods export controls. The financial system's critical role in facilitating trade can, thus, be leveraged to reduce violations as well as circumvention, and to make existing sanctions more impactful.

# Disconnect additional Russian banks from SWIFT (Society for Worldwide Interbank Financial Telecommunication).

Cutting off additional financial institutions from the SWIFT financial messaging system—while not eliminating their ability to interact with the outside world due to the existence of alternative systems as well as non-cut-off intermediaries—would increase transaction costs. However, new restrictions should be targeted and ensure that their ability to track financial flows—and, thus, enforce sanctions—remains intact.

## Set deadlines for the exit of remaining foreign banks.

Several Western banks (e.g., Raiffeisenbank and UniCredit) remain engaged in Russia, supporting the Russian economy through their activities and functioning as a key remaining channel for cross-border business. Regulators, including the European Central Bank, should establish clear processes and timelines that lead to the exit of any banks under their respective jurisdictions.

# Consider measures targeting third-country institutions.

Existing restrictions on Russian banks have already led to attempts to circumvent sanctions via financial hubs outside the sanctions coalition's jurisdiction, and new sanctions will accelerate such developments. Accordingly, governments should consider targeted measures to address this issue. This could involve threats of secondary sanctions by the United States to encourage third-country institutions to end relationships with Russian banks. In other jurisdictions that do not support extraterritorial application of sanctions (e.g., the EU), other types of measures should be considered to achieve the same objectives. For instance, the EU's 11th sanctions package has created a mechanism that allows for the imposition of sanctions on thirdcountry entities that contributed to sanctions violations by EU actors.

To restrict the Russian state's access to foreign assets, the United States and its allies should:

# Track official reserves and residents' foreign assets.

Sanctions on the CBR and the NWF have immobilized more than \$300 billion in official reserves. 102 Still, Russia has accumulated additional assets abroad due to the large balance of payment inflows since the start of the full-scale invasion. Governments that are part of the sanctions coalition need to identify these assets and their geographic location to keep them out of reach of the Russian state. The authors appreciate recent efforts by the EU to track state assets under its jurisdiction, and the authors encourage other governments to follow suit and urge authorities to closely follow newly accumulated foreign assets in addition to preinvasion reserves.

#### TRANSATLANTIC SECURITY | DECEMBER 2023

Identifying Russian Vulnerabilities and How to Leverage Them

#### More effectively enforce energy sanctions.

Russian entities' foreign assets include profits from attempts to circumvent energy sanctions and capture oil market arbitrage. The ownership structures of entities involved in oil trade are opaque, and Russian energy companies may employ third-country shipping companies, oil traders, and refineries to generate revenues in excess of the price cap. More vigorous enforcement would further limit the flow of revenues to Russia and indirectly put pressure on macrofinancial stability. In addition, governments need to ensure that Russia cannot establish alternative channels to access assets abroad or engage in other transactions that could generate foreign currency inflows.<sup>103</sup>

#### **Vulnerability 5**

# Russia's Reliance on Oil and Gas

By Edward Fishman

Russia's economy remains staggeringly dependent on hydrocarbon sales, a dependence that leaves the country's economic well-being at the mercy of energy prices and vulnerable to actions that could disrupt the inflow of energy revenues.

#### The Vulnerability

n 2022, sales of oil, petroleum products, and natural gas accounted for more than 60 percent of Russian export revenues and over 40 percent of budget revenues. 104 Among large economies, Russia stands out for its lack of diversification and reliance on selling commodities. In a ranking of economic complexity by academics at Harvard University known as the Economic Complexity Index, Russia places below not only powerhouses like the United States, Japan, and China but also Belarus and Saudi Arabia. 105

The Russian government has routinely emphasized the need to diversify the country's economy. Description But ultimately, the Kremlin has balked at implementing the measures required to do so, such as empowering an entrepreneurial class, fostering a stable business environment, and protecting private property. To the Kremlin, any benefits of such steps are outweighed by the threat they could pose to Vladimir Putin's grip on power.

In the wake of Russia's full-scale invasion of Ukraine, the prospects for diversification have gone from slim to none. Foreign investment has dried up. At least 500,000 Russians, many of whom are young and highly educated, have fled the country.<sup>107</sup> Sanctions and export controls have crimped Russia's access to microelectronics and other foreign components, leading to plummeting manufacturing output. Auto production slumped by nearly 70 percent in 2022, hitting the lowest levels since Soviet times. 108 It is little wonder that, despite Moscow's threats to refuse to sell oil below the G7 price cap, Russia has continued to sell oil in record volumes at steep discounts.<sup>109</sup> There is even evidence that Russia failed to abide by its February 2023 pledge to cut oil production by 500,000 barrels per day, which may have undermined the Organization of the Petroleum Exporting Countries' (OPEC) efforts to buoy prices. 110 Russia simply has no other choice: it must sell as much oil as possible if it wants to keep its economy afloat.

Russia's attempts to weaponize its gas sales to Europe, moreover, have failed to advance the Kremlin's objectives. Natural gas was supposed to be Russia's trump card. Before 2022, Russia accounted for roughly half of the EU's natural gas imports, and the EU accounted for a whopping three-quarters of Russia's gas exports. While the relationship was one of interdependence, it was widely believed that Russia held the upper hand. Gas, unlike oil, is mainly transported via pipelines, so one source cannot readily substitute for another.

Yet when Russia began shutting off gas sales to several EU member states, the EU quickly adapted. It surged

# Russia's dependence on hydrocarbon sales is its greatest economic vulnerability.

imports of liquefied natural gas from the United States and Qatar; it reined in energy consumption and tapped other domestic energy sources; and it benefited from a relatively warm winter. The result was that the EU weathered the storm, reducing Russia's share of its gas imports to just over 10 percent, while Russia's gas exports nosedived. Russian gas exports fell by 25 percent in 2022 and are projected to decline by as much as 50 percent this year, hampering the Russian government's revenues.

Before its full-scale invasion of Ukraine, Russia was heavily dependent on oil and gas sales. Today, it is even more dependent on them. It has no viable alternative sources of income, and its ability to withstand another sharp decline in oil and gas revenues has been weakened. Russia has just a small handful of buyers left for its hydrocarbons, giving China and India massive leverage in price negotiations. It has even worse prospects for diversifying its economy. And it is entirely shut out of international capital markets, so it cannot borrow money to plug any budget deficits, which are rising as oil and gas revenues plunge and military spending skyrockets.

Russia's dependence on hydrocarbon sales is its greatest economic vulnerability.

# Russian Efforts to Mitigate or Offset the Vulnerability

he Russian government is acutely aware of its reliance on oil and gas revenues. In 2022, Moscow overestimated the leverage its natural gas exports gave it over Europe and attempted to weaponize them. The ploy backfired, and now Russia's gas revenues will be depressed indefinitely. Russia's gas exports, however, have never been as important as its sales of oil and petroleum products. Oil and petroleum products accounted for over \$220 billion in export revenues in 2022, more than twice that of natural gas.<sup>115</sup>

In December 2022, the EU imposed an embargo on purchases of seaborne Russian crude oil, and the G7 imposed a price cap on Russian oil sales. The price cap bans the provision of G7 services—including shipping, maritime insurance, and other financial services—for sales of Russian oil that exceed a fixed cap, currently set at \$60 per barrel. Before the invasion, the EU was Russia's biggest market for oil. In 2021, roughly half of

Russia's oil exports were destined for the EU. By early this year, that figure was down to under 10 percent.<sup>117</sup>

Having lost the European market, Russia has been forced to ship oil out of its main export terminals in the Baltic Sea all the way to India. The implications are significant. The journey from the Russian ports of Primorsk and Ust-Luga to major EU import terminals takes less than a week; the journey to India takes more than a month. Because of far higher shipping costs and lower demand for barrels of Russian oil, India has obtained significant pricing power over Russia, driving up discounts for Urals, Russia's flagship brand of crude oil. As a result, following the EU embargo and the G7 price cap, Russia's oil revenues have fallen sharply. In the first half of 2023, Russian oil revenues were down by roughly 50 percent from the previous year.

While it is impossible to cleanly isolate factors, evidence points to the EU embargo, not the price cap, playing the primary role in depressing Russia's oil revenues. Russia is routinely selling oil to China out of the Pacific port of Kozmino for prices above the cap.<sup>120</sup> It has also recently sold its flagship oil, Urals, out of its Baltic ports for prices that exceed the cap.<sup>121</sup> This suggests that the price cap is not currently functioning as a binding constraint on the price of Russian oil, even when shipping and insurance services from the G7 are used. (The "shadow fleet" does not appear to be large enough yet to ship all of Russia's oil, and it does not solve the problem of insurance, though Russia has recently made headway in that area by shipping perhaps as much as three-quarters of its oil exports using non-Western insurance.<sup>122</sup>) The fact that the price cap is not serving as a binding constraint indicates that there is substantial room to increase pressure on Russia's oil revenues.

The picture for gas is even worse than it is for oil for the Kremlin. After losing most of the European gas market, Russia has found it impossible to identify alternative buyers. There just isn't enough demand, much less pipeline capacity, to place all the gas Russia used to ship to Europe. (China and Russia have been negotiating for the construction of a new pipeline called Power of Siberia 2, but Beijing has dragged its feet on concluding the deal.<sup>123</sup>) As a result, Russia has had to curtail gas production significantly.<sup>124</sup> Combined with the hit to oil revenues, the reduction in gas sales has cut Russia's total energy revenues in half. Anton Siluanov, Russia's Finance Minister, put it bluntly: "There is a problem with energy revenues."126 This "problem" has led to a sizable budget deficit, which stood at roughly \$25 billion through the end of August.<sup>127</sup>

To try to shore up its budget, the Russian government has changed the way it taxes oil sales. Oil taxes are now indexed to the price of Brent crude as opposed to Russia's flagship Urals product because Urals is selling at massive discounts to Brent. While this will help Moscow collect more tax proceeds from a shrinking pie of total oil revenue, it will also reduce resources for Russian oil companies. This will decrease the incentives for Russian oil companies to invest in production. <sup>128</sup> In effect, Moscow is trying to squeeze as much tax money as it can from its oil sales today, even though this will further weaken its oil sector in the future. Again, the Kremlin lacks other viable options.

Barring an unforeseen turnaround in oil prices, Russia's budget deficit will continue to grow. The Kremlin will need to sell more and more of its foreign currency holdings to finance its deficits, as it has already started to do. 129 Over time, its only option may be to allow the ruble to plunge against the dollar—and indeed, the ruble has slid significantly against the dollar thus far in 2023. 130 A weaker ruble will increase the ruble-denominated value of Russia's oil revenues, but it will also worsen inflation, undermine living standards, and destroy Putin's narrative that Russia is thriving under Western sanctions and that the war in Ukraine is not making life any worse for ordinary Russians.

Russia has limited options to contend with its increasing dependence on oil and gas sales. And they are all bad.

# Opportunities for the U.S. and its Allies to Exploit the Vulnerability

Ukraine, the West has tried to walk a fine line on sanctions. On the one hand, the West has attempted to impose "swift and severe consequences" on Russia's economy, as President Joe Biden promised. But on the other hand, it has tried to do so while largely sparing Russia's energy sector. It has not done this out of charity but, rather, because of concerns that aggressive sanctions on Russia's oil and gas sales could spike global prices, which, in turn, could worsen inflation, throw the West into recession, and endanger political support for Ukraine.

The December 2022 EU embargo on Russian oil, coupled with the price cap, marked a change in this approach—but only to a limited degree. The price cap itself was born of fears that a blanket EU ban on insurance and other services for Russian oil could rattle markets. Russia's oil revenues have fallen in the wake of

these policies, but the situation is not so dire yet that it could undermine Putin's war effort.

The West possesses multiple options to further exploit Russia's critical dependence on oil and gas sales. These options could be used independently or in combination, and they can be modulated depending on how much pressure the West wants to exert on Russia's economy and on what timeline.

#### For Oil and Petroleum Products

### OPTION 1: STRENGTHEN THE PRICE CAP ON RUSSIAN OIL AND PETROLEUM PRODUCTS

In designing the price cap policy, the G7 was more concerned about the possibility of overcompliance than undercompliance. These concerns were rooted in projections by multiple market analysts that the price cap would boost world oil prices. As a result, compliance obligations for insurers and shipping companies are relatively light. For instance, in the EU regulations, if a tanker is found to have shipped Russian oil above the price cap, it is banned from G7 insurance and other services for just 90 days. A penalty this mild can easily be considered a cost of doing business.

To strengthen the price cap, the G7 can threaten to impose sanctions on any entity—whether it is a commodities trading firm, a refinery, a vessel, a shipping company, or an insurance provider—that knowingly participates in a transaction for Russian oil that exceeds the price cap. For example, if a Russian vessel ships Russian oil for a price that exceeds the cap while benefiting from G7 insurance coverage, the G7 could impose sanctions on that vessel. The same sanctions could apply to a United Arab Emirates-based commodities trader or a Chinese oil refinery. Such a policy would significantly raise the costs of violating the price cap. It would almost definitely lead to stricter adherence to the cap, giving buyers of Russian oil even more leverage in price negotiations. Once the new policy is in place, the G7 would be well positioned to lower the cap as necessary to put more pressure on the Kremlin's oil revenues.

## OPTION 2: IMPLEMENT FINANCIAL SANCTIONS TO LIMIT RUSSIA'S USE OF ITS OIL PROCEEDS

G7 sanctions on several of Russia's largest state-owned banks as well as restrictions on the Central Bank of the Russian Federation immobilized the *stocks* of Russia's economy. But they did not immobilize the *flows* into Russia's economy. As a result, throughout the war, Russia

#### TRANSATLANTIC SECURITY | DECEMBER 2023

Identifying Russian Vulnerabilities and How to Leverage Them

has continued to rake in hundreds of billions of dollars in revenues from energy exports, which it can use to buy imports and support its currency in a relatively unencumbered fashion. In essence, Russia has been able to amass large "shadow reserves"—stockpiles of cash that do not accrue to the balance sheet of the central bank but function much like ordinary central bank reserves.<sup>133</sup> This is a gaping hole in the sanctions regime.

The G7 can use financial sanctions to stymie the flow of oil money into Russia's economy and limit how the Kremlin can use it. The first step is to impose blocking sanctions on all the key nodes of Russia's energy sector, including big production companies, such as Rosneft and Gazprom, and financial institutions, such as Gazprombank. Even though the two largest banks in Russia, Sberbank and VTB, are under blocking sanctions, as is Rostec, the biggest Russian defense conglomerate, the energy sector retains free access to the global financial system-except transactions to raise new debt and equity, which have been banned since 2014. This odd situation, in which none of the major firms in Russia's energy sector face blocking sanctions, is a relic of the early days of the 2022 sanctions campaign, when G7 leaders feared spiking oil prices. Fixing it is long overdue.

# The G7 can use financial sanctions to stymie the flow of oil money into Russia's economy and limit how the Kremlin can use it.

The second step is to amend the exemptions (found in OFAC General License 8G) that permit virtually all energy-related transactions with Russia. The exemptions could be narrowed such that payments for Russian oil and petroleum products cannot be repatriated to Russia. The proceeds would need to stay in the country that bought the oil and could only be used for bilateral trade in humanitarian goods, such as food, medicine, and medical devices. A similar regime on payments for Iranian oil successfully trapped more than \$100 billion in Iran's oil money in overseas bank accounts. There is no reason that such a campaign could not be applied to Russia.

As with the price cap, such financial sanctions would continue to allow Russian oil to flow to global markets. Moreover, the policy would provide an incentive to buyers of Russian oil, such as China and India, to comply, as it would encourage Russia to buy more humanitarian goods from these countries. It is possible that Russia

could retaliate against such a policy by refusing to sell oil, but that would cause a host of problems, from requiring a shut-in that damages existing wells to endangering Russia's relationships with its key oil buyers. While divining Putin's actions is a fool's errand, Russia would retain a powerful incentive to keep selling oil even under such financial sanctions.

#### For Natural Gas

# OPTION 1: BAN EU IMPORTS OF RUSSIAN NATURAL GAS VIA BOTH PIPELINES AND LIQUEFIED NATURAL GAS (LNG)

Russian exports of natural gas to Europe have plummeted since early 2022. The declines initially resulted from Russia's attempt to weaponize natural gas by banning sales to EU members, such as Poland and Bulgaria. They then worsened when Nord Stream 1 was shut down by an act of sabotage. At the time of writing, Europe is importing the equivalent of 26 billion cubic meters (bcm) of pipeline gas from Russia, a steep drop from the roughly 140 bcm it was buying from Russia before the war.<sup>136</sup>

To provide European businesses with the clarity they need to make long-term investments in alternative energy sources, the EU could permanently ban the import of natural gas from Russia via pipelines. This would ensure that, even if the war in Ukraine becomes a little-discussed frozen conflict, the EU-Russia gas relationship will not be revived. Additionally, in 2022, the EU bought 22 bcm of Russian LNG, purchases that currently face no restrictions. The EU could also ban the import of Russian LNG, depriving the Kremlin of the last piece of the European energy market that remains open to it.

## OPTION 2: IMPOSE SECONDARY SANCTIONS ON INVESTMENTS IN NEW RUSSIAN GAS PROJECTS

Russia lacks viable, near-term options to place the large quantities of natural gas it used to sell to Europe. To do so over time, Russia will need to invest heavily in new pipeline capacity to Asia as well as LNG facilities and export terminals. The West can complicate these plans by threatening to impose secondary sanctions on banks and companies that invest in such projects. Without access to Western financing and technology—and with foreign firms facing the threat of secondary sanctions—Russia's efforts to reroute its natural gas production will be rendered exceedingly difficult, if not impossible. China, for instance, may never sign up for Power of Siberia 2.

There is also a useful precedent for these sanctions. The Iran Sanctions Act requires the U.S. government to impose secondary sanctions on any firm that makes a significant investment in Iran's energy sector. After the passage of the 2010 Comprehensive Iran Sanctions, Accountability, and Divestment Act, the State Department was afforded a "special rule" that it could use to negotiate gradual wind-downs of investments in Iran's energy sector. The State Department leveraged the special rule to good effect, securing agreement from companies such as Total, Eni, and Shell to exit Iran. A similar regime applied to investments in new Russian gas pipelines and LNG projects could put a decisive end to Russia's role as a major player in gas markets.

#### **Vulnerability 6**

# Ukraine as Russia's Soft Underbelly

By Eric Ciaramella

Ukraine's growing ability to impose costs on Russia—on the battlefield; through asymmetric means; and in the diplomatic, cultural, and legal spheres—will pose a significant long-term vulnerability for Russia.

#### The Vulnerability

s they fight their defensive war for survival, Ukraine's state and citizens now represent a serious vulnerability for Russia and for President Vladimir Putin's regime. This vulnerability is related primarily to the growing ability of Ukraine's military and intelligence services to impose costs on Russia, but it also manifests in other domains. It is an irony of Putin's own making: despite claiming to have invaded Ukraine to increase Russia's security, Putin's blunder saddled his country with a far more dangerous challenge. So long as Russian forces occupy Ukrainian territory, Ukraine will constitute, in the words of Carnegie scholar Eugene Rumer, "the most threatening, hostile, irreconcilable enemy on Russia's western frontier." 140

The military challenge Russia faces from its neighbor is undeniable. But it was not inevitable. Ukraine's army was in catastrophic disrepair in 2014, when Putin illegally annexed Crimea and launched an undeclared war in eastern Ukraine.141 Ukraine managed to defend itself for nearly eight years, aided by training and a small amount of weaponry from the West. Even with this support, the Ukrainian military posed no serious threat to the Russian military before February 2022, when Putin justified his full-scale invasion by purporting to seek Ukraine's "demilitarization." 142 Now, Ukraine boasts one of the most formidable forces on the European continent, armed with sophisticated American and European equipment. On the margins of the NATO summit in Lithuania in July, Western leaders committed to guaranteeing weapons supplies to Kyiv in perpetuity.143

The risk to Crimea—Putin's crown jewel—could eventually become acute as well. Ukrainian officials have telegraphed that a full-blown offensive to liberate the peninsula is probably not in the cards, and it does not appear likely that the Ukrainian military will reach the administrative boundary this year.<sup>144</sup> But Crimea is far from secure. Ukraine has already shown it can strike targets on the peninsula; in September alone, it destroyed two docked Russian warships and severely damaged the Black Sea Fleet headquarters in Sevastopol. 45 Armed with new long-range missiles and drones, it is in a position to hold Russian military and logistical facilities on the peninsula at permanent risk. 146 Moscow's options to keep Crimea resupplied are limited. If the overland route that Russian forces seized last year becomes impassable, they will have to rely increasingly on the Kerch Strait. Russia's multibillion-dollar bridge will then become a death trap, with attacks like the ones last October and this past July becoming the norm.<sup>147</sup> In this

respect, too, Putin is the author of his own misfortune: Ukraine and the West refused to recognize Russia's annexation of Crimea in 2014, but the risk that Ukrainian forces would rain missiles down on Sevastopol was, prior to the full-scale invasion, minuscule.

In the occupied territories, meanwhile, Ukrainian partisans—some self-organized, some with help from Ukraine's capable intelligence services—are diligently undermining Russian authority. Dozens of Russianinstalled collaborators have been killed in car bombings and shootings. Arson attacks against warehouses and checkpoints occur at regular clips. University of Ottawa professor Jean-François Ratelle notes that the Ukrainian insurgency remains "highly decentralized and compartmentalized," and that its discipline and limited aims have made it effective despite its relatively small size. The pace of partisan activities has picked up in recent months, highlighting the limits of Russian counterinsurgency tactics.

Russia has not been able to spare its own internationally recognized territory from the consequences of its war, either. Mysterious fires break out at factories and government buildings. <sup>150</sup> Trains derail. <sup>151</sup> Energy facilities

are sabotaged. 152 Kremlin-linked propagandists are assassinated in major Russian cities. 153 The Nord Stream pipeline,

Despite claiming to have invaded Ukraine to increase Russia's security, Putin's blunder saddled his country with a far more dangerous challenge.

which Russia spent years bringing to fruition, now has a gaping hole in it. Repeated explosions at airfields deep inside Russia have destroyed bomber and transport aircraft.<sup>154</sup> In May, a drone exploded atop one of the Kremlin's domes. Russia's humiliation was compounded a few weeks later, when four of its aircraft were shot down in a single day in its own airspace, near the border with Ukraine. <sup>155</sup> Cross-border raids by armed groups claiming to be anti-Kremlin militias are now a regular occurrence. <sup>156</sup> Since July, drone attacks have targeted skyscrapers in central Moscow that house Russian government offices. <sup>157</sup>

Kyiv has declined to confirm its involvement in many of these incidents. But Ukraine's intelligence services and agent networks seem to be pursuing an opportunistic cost-imposition strategy. Indeed, Ukraine's Defense Intelligence Chief, Kyrylo Budanov, warned earlier this year that attacks would occur "deeper and deeper" inside Russia. With Ukraine currently unable to mount a symmetrical response to Russian missile attacks, its reliance on unconventional warfare—in some ways, a mirror

image of the tactics Russia has used against Ukraine and the West since 2014—makes perfect sense. Ukraine's long-range drone program has been steadily expanding, and attacks against Russian military and government targets and critical infrastructure will only grow more frequent. Until the territorial integrity of Ukraine is restored," Budanov said, "there will be problems inside Russia."

Meanwhile, tens of thousands of Ukrainian IT specialists have joined a volunteer cyber army devoted to wreaking havoc in Russia. These cyber guerillas' links to the Ukrainian military are hard to pin down, but they have caused significant headaches for Russian firms and organizations, 162 disrupting public services and commercial activity. 163 Ukrainian hacker groups have also doggedly pursued the private data of Russian military and intelligence officials and posted it online. 164 Russia's countermeasures, meanwhile, have been unimpressive: Ukraine's digital infrastructure has proven far more resilient to Russian cyberattacks than anticipated. 165

Ukraine is also using its newfound diplomatic firepower to thwart Russia's war machine and magnify the damage to its global image. President Volodymyr

Zelensky's pleas for weapons and sanctions, bolstered by round-the-clock lobbying from Ukrainian diplomats and civil society

groups, have caused the United States, Europe, and other partners to take sweeping actions to punish Russia and support Ukraine since the invasion began. The scope of these actions—sanctions, military aid, and other measures—would have been far more modest were it not for Ukraine's power of persuasion and public relations savvy. Ukraine has notched fewer victories in the Global South, but Zelensky's appearance in May at the Arab League summit in Saudi Arabia and meetings with his Indian and Indonesian counterparts on the margins of the G-7 summit in Japan show that Russia does not monopolize the narrative outside the West. Meanwhile, repeated votes of censure at the U.N. show that Russia has few reliable allies. 167

Ukraine's sudden emergence as a soft power juggernaut also spells long-term trouble for Russia. Ukrainian activists have forced Russian musicians and performers who want to continue working in the West to denounce the war or else face a boycott. Ukrainian officials and athletes are cajoling the West into freezing Russian and Belarusian athletes out of international sporting

competitions, especially the 2024 Olympics in Paris. 169 Russian soft power was already on the decline before the invasion; Ukraine will make sure it is dead and buried.

Ukraine's legal minds also pose a growing risk to Russia. Ukrainian state-owned gas company Naftogaz's recent international arbitration victory in its long-running case against Gazprom provides a taste of what is to come: the Russian company owes \$5 billion for its seizure of Ukrainian assets in Crimea, and Naftogaz is seeking to enforce the judgment against Russian assets in third countries. 170 Ukrainian researchers are also meticulously gathering data on the economic and property damages inflicted by Russia since the invasion began.<sup>171</sup> Moscow can expect a wave of lawsuits and demands for reparations in the years to come. The West might be hesitant to seize frozen Russian assets and make them available for Ukraine's reconstruction, but that position will become increasingly untenable as the Ukrainians press their moral advantage and the bills come due.<sup>172</sup>

The West might be hesitant to seize frozen Russian assets and make them available for Ukraine's reconstruction, but that position will become increasingly untenable as the Ukrainians press their moral advantage and the bills come due.

The scale of Russian war crimes means that Kyiv will pursue accountability for generations. Zelensky's push for a Nuremberg-style tribunal for Putin and his top aides has met with some skepticism, but Ukraine's backers seem eager to find a solution.<sup>173</sup> As prosecutions get underway, Russian officials might never again be able to set foot in large swaths of the globe. Already, the International Criminal Court's issuance of an arrest warrant for Putin is complicating his overseas travel, with South Africa forced to disinvite him from a major summit with developing economies in August.<sup>174</sup>

If Ukraine cannot achieve accountability through international law, history shows that actors may pursue other options. Budanov's statements indicate a willingness to pursue extrajudicial punishments: "Any perpetrator that committed any war crimes or

crimes against humanity in Ukraine [...] will be found and eliminated in any part of the world."<sup>175</sup> Ukraine's intelligence services, for example, might consider Israel's efforts to bring Nazi war criminals to justice or its decades-long, globe-spanning assassination campaign against the perpetrators of the 1972 Munich Olympics massacre. The West would view such developments with unease—and one should hope that international law will provide enough avenues for accountability—but, in the end, few will come to the defense of war criminals.

# Russian Efforts to Mitigate or Offset the Vulnerability

he Kremlin has been slow to grasp the consequences of having created a determined, capable, Western-backed adversary at its doorstep. Although some prominent Russian nationalists have acknowledged the problem, Russian officials' deep-rooted chauvinism toward Ukrainians has meant that they perennially underestimate their neighbor's capacity and will to resist.<sup>177</sup> Putin's belief that his forces would march into Kyiv unopposed was the most tragic manifestation of this chauvinism, but it has persisted amid battlefield setbacks. When a Ukrainian missile sank the Russian flagship Moskva in the spring of 2022, for example, Russian officials and propagandists were quick to blame everyone else: NATO, bad weather, even the Russian navy's own corruption.<sup>178</sup> They could not fathom the possibility that Ukraine had secretly designed, tested, and fielded a deadly new capability.

Even if Moscow fully appreciated the challenge it faces, it has few options to address it. Ukrainians brush off the threat of retaliation by arguing that there is little more Russia could do to inflict pain; they appear unfazed even by the prospect of nuclear weapons use. Moreover, Russia's terror-bombing campaign against Ukrainian cities, launched last fall ostensibly in retaliation for the Crimean Bridge attack, has failed to erode Ukraine's willingness to challenge Russia across all domains. Putin might return to his earlier attempts to target the Ukrainian leadership, but Russia's ability to do so remains questionable.179 In any case, Russia's long-term vulnerability is not Zelensky or any particular group of Ukrainian officials: Putin has made unvielding foes out of tens of millions of Ukrainians. Ukraine has the will and unity to sustain its fight even under different future leadership.

# Opportunities for the U.S. and its Allies to Exploit the Vulnerability

n supporting Ukraine's legitimate right to self-defense, the United States is already magnifying many aspects of the vulnerability Russia faces on the battlefield. It can do more to persuade Putin that this challenge will grow over time, especially by codifying its commitments to train and equip Ukraine's armed forces over the long term. Iso In building Ukraine's future force, the United States must ensure that it has the right mix of tactics, technologies, and capabilities—including those that can hold strategic military targets inside Russia at risk—to be able to match or offset Russia's battlefield advantages. In doing so, Washington can make clear to any leader in the Kremlin that invading Ukraine will invariably fail.

It would also be in the interest of the United States to vigorously back Ukraine's efforts to seek accountability and reparations. In the diplomatic domain, the United States should continue working with Ukraine to assemble the broadest possible coalition of global actors invested in seeking peace based on the principles enshrined in the U.N. Charter, building upon recent international gatherings in Denmark and Saudi Arabia.<sup>181</sup>

The United States should not—and probably cannot—stand in the way of Ukraine's efforts to degrade Russia's resolve and warfighting capabilities.

Ukraine's asymmetric operations outside its territory are the trickiest part of this equation. Some Western officials worry that Ukraine's audacious moves will spark escalation. But Washington would be wise to remember that Kyiv has agency in this war. Moreover, its ability to inflict pain on Russia is a net asset rather than a liability. Ukrainians understand far better than Americans and Europeans what Russia's weaknesses are—and will exploit them relentlessly. Washington can offer its advice, making clear that Kyiv must operate according to the laws of armed conflict and choose its targets carefully. But at the end of the day, the United States should not—and probably cannot—stand in the way of Ukraine's efforts to degrade Russia's resolve and warfighting capabilities.

Putin will no doubt use Ukraine's vigorous self-defense to justify Russia's permanent war footing. But he cannot escape the fact that he has turned Russia's most sensitive frontier into a bloody quagmire and a source of internal instability. In exploiting this vulnerability, the West should not aimlessly seek to cause Russia pain. Rather, the purpose of imposing costs is to achieve a change in an adversary's behavior: to make Russia understand that it will be more secure once it withdraws from Ukraine and accepts its neighbor's integration into Western security institutions. The alternative—a Ukraine unmoored, powerful, and profoundly aggrieved—will be a hazard to Russia for generations.

#### **Vulnerability 7**

# Russia's Declining Influence in Central Asia and the South Caucasus

By Paul Stronski

Russia's war in Ukraine has alienated broad swathes of Central Asia and the South Caucasus, causing some of Russia's closest allies to start putting distance between themselves and Moscow. Russia's unexpectedly subpar military performance in Ukraine and distraction from other regional crises is pushing Russia's neighbors to look elsewhere for diplomatic and security partners.

#### The Vulnerability

f Russian President Vladimir Putin hoped his war in Ukraine would shore up the Kremlin's "privileged sphere of influence" in Eurasia, as Dmitriy Medvedev once labeled the region, Russia's subpar military performance, brutality against Ukrainian civilians, and threats of escalation instead have weakened Russia's position across Eurasia, from Moldova to Kazakhstan, creating space for other regional powers-China, India, Iran, and Turkey—to step in. 182 This new reality is a remarkable turnaround from early 2022, when Russia's regional influence appeared supreme. Just over a year before, the Kremlin had brokered a cease-fire between Armenia and Azerbaijan, realizing its long-standing goal of inserting troops (peacekeepers) into the latter. 183 The Kremlin also activated the Russian-sponsored Collective Security Treaty Organization (CSTO) for the first time in January 2022, helping to secure the Kazakhstani presidency for Kassym-Jomart Tokayev.<sup>184</sup>

Russia's preoccupation with and difficulties in Ukraine have led some of Russia's allies and neighbors to rethink their reliance on Moscow as an arms supplier and security partner. Border clashes in both Central Asia and the South Caucasus in 2022 and 2023, to which Moscow struggled to respond, revealed Moscow's limited capabilities to react to regional crises, particularly as it wages war in Ukraine.

Furthermore, with the exception of Belarus, Turkmenistan, and elements of the current Georgian ruling elite, Russia's neighbors are trying to distance themselves from Moscow. Tokayev, for instance, has yet to repay his debt to Putin; instead, he has publicly criticized Russia's war and permitted Kazakhstani charitable organizations' humanitarian relief shipments to Ukraine.<sup>185</sup> Despite signals in 2021 that Uzbekistan would join the Eurasian Economic Union (EEAU), Tashkent rejected membership in 2022 and existing EEAU members have started questioning the body. 186 And Russia's cultivation of the Georgian Dream government in Tbilisi has not translated into a rapprochement with Georgian society at large. 187 With Russian-sponsored regional integration projects weakened, global and regional powers now find more receptive audiences and opportunities in Central Asia and the South Caucuses.

Financial flows and trade turnover between Russia and its neighbors in Central Asia and the Caucasus rose dramatically in 2022, helping reinvigorate economies across the regions. However, these inflows of money reflected large-scale capital flight from Russia and Moscow's use of neighboring countries for sanctions evasion rather

than traditional investment.<sup>189</sup> This burst of economic ties may not prove sustainable in the long term because most of the Russians who recognized the need to move either themselves or their money out of the country have done so.<sup>190</sup> Washington, Brussels, and London all now signal a clampdown on sanctions evasion is coming.<sup>191</sup>

Furthermore, while the West warily watches the region's role in evading sanctions, this trend ironically highlights the shifting power dynamics between Moscow and its immediate neighbors. Moscow now depends on its former Soviet neighbors more than ever for economic survival and to demonstrate that it is not fully isolated on the diplomatic sphere. Sensing newfound Russian weakness, Azerbaijan, Kazakhstan, and Uzbekistan enjoy more leverage in their relationships with Moscow than before. Each to some extent has sought to buttress diplomatic and trade ties with the United States or EU since February 2022. Even Armenia, which is highly dependent on Russia, is showing an independent streak, reportedly pushing back at Russian pressure to join the Russia-Belarus Union State; publicly questioning the Russian-Armenian security alliance; and trying to

Russia's preoccupation with and

difficulties in Ukraine have led some

of Russia's allies and neighbors to

rethink their reliance on Moscow as

regional actor.199

enhance relations with the West, Middle East, and India.<sup>192</sup>

For example, the dynamics between Moscow and Baku have shifted signifi-

cantly over the past two years as Russia become more reliant on Azerbaijani interlocutors, among others, to help it get around sanctions and continue energy exports. <sup>193</sup> Azerbaijan essentially ripped up the Russian-brokered 2020 Nagorno-Karabakh ceasefire in December 2022 when it launched its 9-month blockade against the ethnically Armenian-enclave of Nagorno-Karabakh that Russian peacekeepers could not or would not break. <sup>194</sup> Moscow also stood aside during, and possibly even assented to, Azerbaijan's successful September 2023 attack that killed several Russian peacekeepers and quickly defeated the separatist entity. Baku apparently no longer sees Russia's formal alliance with Armenia or its presence on Azerbaijani territory as deterrents and is challenging Moscow in the region. <sup>195</sup>

In Armenian eyes, Russia's lack of assistance to the country in the 2020 war, combined with the increased Azerbaijani coercive diplomacy and incursions into Armenia proper to which Russia failed to respond, are cause to question the country's traditional political, economic, and security reliance on Russia and begin to

look elsewhere, with anti-Russian anger spiking visibly after Nagorno-Karabakh's defeat.<sup>196</sup>

# Russian Efforts to Mitigate the Vulnerability

Ithough Central Asia and Armenia are entrenched in the Russian security sphere through arms sales, bilateral security agreements, and the CSTO, Russia's military difficulties in Ukraine, subpar performance of Russian defense equipment, and supply problems are pushing Russia's allies to reassess their reliance on Moscow. With troops on the ground in Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova, and Tajikistan, Moscow is not going anywhere, but it reportedly has been forced to reassign some personnel from Central Asia, Armenia, and Georgia's breakaway territories to Ukraine.

Due to Russian and CSTO lukewarm support during regional border crises in 2022 and 2023, two Russian allies, Kyrgyzstan and Armenia, canceled alliance-wide training exercises in their territories over the past

> year.<sup>197</sup> In May 2023 the Armenian Prime Minister even publicly broached the idea of leaving the CSTO, exposing tensions and fissures in the block.<sup>198</sup> In a possible effort to placate both countries,

an arms supplier and security partner. In a possible effort to placate both countries, ars as Russia become more clocutors, among others, ons and continue energy that both capitals have legitimate grievances with the Russian-backed multilateral alliance and that the CSTO should address these grievances to remain a relevant

With the Russian armament burn rate high in Ukraine, NATO member Turkey is seen as an increasingly attractive partner by Azerbaijan, Kazakhstan, Kyrgyzstan, and Uzbekistan. Uncertain about the future of the Russian defense industry, they have signed agreements to purchase Turkish drones or launch joint production facilities. Pussia today contends with a Turkish military presence in the Caucasus and a robust Turkish-Azerbaijani security alliance. It also faces an Ankara-dominated Organization of Turkic States in which even neutral Turkmenistan participates as an observer. Pussian to see a security and security alliance as an observer.

Farsi-speaking Tajikistan turned to Iran for drones and the United Arab Emirates for military vehicles.<sup>202</sup> India is now an attractive security and arms supplier

to Central Asia and Armenia.<sup>203</sup> Yerevan is struggling to rebuild its military capabilities after its defeat in the 2020 Nagorno-Karabakh War, particularly because Moscow can no longer deliver those weapons.<sup>204</sup> Given sanctions and its own military-industrial production bottlenecks, there is little Russia can do to address this problem.

Russian soft power has taken hits too. Rising ethnic nationalism across Central Asia and the Caucasus in response to Russia's invasion of Ukraine has pushed local leaders to accelerate derussification in the cultural sphere and sparked public discussion of the need to "fully decolonize" both regions from Russia. <sup>205</sup> The mass arrival of hundreds of thousands of Russian citizens to the region may stall this decolonization trend and the steady decline in Russian-language use across Eurasia. However, that too may not be guaranteed. <sup>206</sup> Many of these new residents see the Caucasus and Central Asia as places to wait out the war or temporary stops toward their final destinations. <sup>207</sup> Some have already moved elsewhere. <sup>208</sup>

The Kremlin's denial of Ukrainian identity and that country's right to exist as a sovereign state are unwelcome precedents across the region. Azerbaijan, Armenia, Georgia, Kazakhstan, and Kyrgyzstan have been on the receiving end of Russian propagandists' questioning of their historical legitimacy or sovereignty decision-making since February 2022.<sup>209</sup> In response, several states have suffered from periodic Russian threats of kinetic action, not-so-veiled calls for the removal of the Armenian leadership, or outright economic punishment for domestic policies with which Moscow disagrees.<sup>210</sup>

Despite these fissures between Russia and its neighbors, the Kremlin certainly retains tools of coercive power and threatens to use them, particularly when it perceives one of its allies as being disloyal to Moscow. The Kremlin imposed dairy bans on both Armenia and Kyrgyzstan in protest of domestic policies the countries have taken. The former concerned Yerevan's willingness to ratify the founding treaty of the International Criminal Court—a body that issued an arrest warrant for Putin on war crimes allegations.<sup>211</sup> The latter was in response to the Kyrgyzstani parliament's decision to enhance the status of the Kyrgyz language in the country at the expense of Russian.<sup>212</sup> These asymmetrical punishments from Moscow, however, often prove to be self-defeating and cause further damage to Russian soft power in the Caucasus and Central Asia.

On the energy front, Russia still holds many cards it can deploy against its neighbors, as its periodic 2022 stoppages of Kazakhstani oil through the Caspian Pipeline Consortium indicate. <sup>213</sup> Given large-scale gas shortages in Central Asia, Uzbekistan in 2023 agreed

to buy reverse-flow gas from Russia, although it and Kazakhstan pushed back on Putin's proposal for a formal "gas union." Yet, the shock of the invasion, combined with concerns about Russia's use of energy as a tool of coercion, is pushing some Central Asian countries to begin thinking beyond hydrocarbons toward renewable energy. They have found partners in China, Europe, Saudi Arabia, the United Arab Emirates, and the United States in developing wind, solar, and hydropower projects in the region. Armenia is in discussions with the United States about building modular nuclear reactors with U.S. technology. These shifts are welcome stepping stones to greater energy independence and enhanced engagement with outside powers that have money and the technological prowess Russia now lacks.

#### Russia needs friends in Central Asia and the South Caucasus to demonstrate to domestic and international audiences that it is not fully isolated.

Russia needs friends in Central Asia and the South Caucasus to demonstrate to domestic and international audiences that it is not fully isolated. Russian senior leaders are engaging their Eurasian counterparts in bilateral, multilateral, and virtual meetings with greater frequency than in recent memory.<sup>217</sup> These interactions, however, are not bringing Putin substantive results, as his interlocutors increasingly prefer the path of symbolic diplomacy whenever possible to minimize the reputational risks and substance of any meeting with Putin. Eurasian leaders today can play harder to get, and Putin reportedly had to personally plead with several Central Asian leaders at the last minute to get them to attend his annual May 9 Victory Day celebration in Moscowsomething a Russian leader would not have had to do in years past.218

Finally, given the growing lack of interest in Russian-dominated regional organizations, Moscow recognizes the potential that China or another state could fill a growing vacuum of Russian power in the Caucasus or Central Asia. Moscow has doubled down in its engagement with Beijing, as well as New Delhi and Ankara, on regional issues. Moscow also sees expanding the regional organizations, like the Shanghai Cooperation Organization (SCO) or Brazil, Russia, India, China, and South Africa (BRICS) format, with additional members or observers to dilute the power of these potential competitors on the regional and global states.

# Opportunities for the U.S. and its Allies to Exploit the Vulnerability

oscow's war of choice is undermining its image as a reliable partner in Eurasia and over time is creating potential to create vacuums that others, such as China or Iran, could fill. China already is keen to take advantage of Russia's weakened position in the region, as the May 2023 China-Central Asia Summit in Xi'an, China, suggests. Beijing and Tehran both show interest in expanding their influence in the Caucasus as well. Yet, Central Asians and residents of the South Caucasus have been mistrustful of Chinese and Iranian ambitions in the region; regional elites likewise are hesitant to put all their eggs in the China basket and are wary of aligning with Iran.<sup>219</sup> Thus, it is important for the United States and its like-minded partners to help shape the new order that is emerging in Eurasia, making sure Central Asia and the South Caucasus are not dominated by an adversarial power and forcing Moscow (and Beijing) to expend more time and resources in the region that otherwise could be used against the West in Europe or East Asia.

The resources needed by the United States to help shape this order need not be extensive, particularly if Washington leans on those like-minded states. U.S. policymakers should refrain from unrealistic transformative agendas, like an elusive promise of NATO membership or broad ambitions to promote democracy. Instead, it

should focus on a more finite agenda enhancing regional governance and investment climates, supporting initiatives for economic growth,

It is important for the United States and its like-minded partners to help shape the new order that is emerging in Eurasia.

providing security assistance, and collaborating with locals to promote human and health security. Both Central Asia and the South Caucasus border highly unstable regions; the potential for internal stability remains high in both. Making sure Eurasian states remain sovereign and stable is in the United States' best interests.

However, cognizant of the limited attention span of Washington to the region, the governments of Central Asia and the South Caucasus are aware the United States alone cannot and will not solve their problems. Today they seek a more diverse array of diplomatic, trade, and security interlocutors and are looking for ways to engage the EU, wealthy Gulf states, Japan, India, Pakistan, and Turkey, among others. Russia's drive to weaken the

Western-dominated unipolar world and push the United States out of Eurasia instead created opportunities for others in Russia's backyard and enhanced the motivation for regional leaders to hedge. Washington need not fear this growing multipolarity in Eurasia. It instead should work with these regional powers—most of which are U.S. allies or partners—to shape the new landscape to its advantage. Stepping up efforts to foster greater regional cooperation among Eurasian states, which Europe, Japan, India, Turkey, and the United States already do, could help enhance the resiliency of the region and its ability to resolve regional problems without Russia.

The United States should take advantage of the presence of hundreds of thousands of Russian citizens in Eurasia who fled Russia either out of disenchantment with Putin or the war. Their arrival in neighboring states to some extent has undermined Moscow's propaganda narrative of its Ukraine invasion as a "just war." They provide new opportunities to enhance U.S. public diplomacy outreach to the Russian-speaking world. Through a variety of assistance efforts, the United States should try to enhance the economic resilience of the region, particularly as it prepares to ramp up sanctions enforcement. The United States can also help relieve the strain Russian exiles have put on local societies and foster development in promising economic sectors, such as IT.

The recent spike in Russian-Eurasian trade turnover will not subside unless the United States and Europe step up sanctions enforcement in Eurasia. Russian sanctions

> evasion is a complex process involving transshipment between multiple Eurasian states and major transportation hubs, including the United Arab Emirates

and Turkey.<sup>221</sup> It is time for greater enforcement, although these efforts should not just target Eurasian states and intermediaries. The U.S. government and the EU also should clamp down on international companies, exporters, cargo facilitators, and insurers that participate in transporting sanctioned goods from Europe or Asia to Eurasia for reexport to Russia. The West must offer financial relief to lessen the economic blow of greater enforcement on Eurasian economies and to foster development of new sectors to reduce the need for residents and Russian migrants to engage in transshipment.

Finally, providing Western training, military supplies, and armaments to the region, where and when appropriate, could further highlight Russia's reduced military capabilities and encourage greater cooperation with

#### TRANSATLANTIC SECURITY | DECEMBER 2023

Identifying Russian Vulnerabilities and How to Leverage Them

outside powers. It would buttress the recent push by Central Asian and Caucasus governments to find new suppliers in Europe, India, Iran, Turkey, or the United Arab Emirates. It would also enhance the region's ability to shore up its own security amid unstable neighbors. Aware that any formal break with Russia could prove dangerous to its neighbors, Western countries should neither expect nor demand Eurasian states formally leave the CSTO or EEAU but encourage local states to take advantage of the slow decline of both organizations to diversify their diplomatic, economic, and security interlocutors.

#### **Vulnerability 8**

### Russia's Crumbling Diplomacy

By Pete Schroeder

Putin's war in Ukraine has sapped the strength and vitality of Russian diplomacy, undermining a traditional strength and making it vulnerable to pressure that will make it harder for Moscow to punch above its geopolitical weight for the foreseeable future.

#### The Vulnerability

n November 18, 2021, just three months before Russia's invasion of Ukraine, Russian President Vladimir Putin attended the annual board meeting of Russia's Foreign Ministry. 222 It was a rare in-person appearance, particularly given his isolation during the COVID-19 pandemic.<sup>223</sup> Even as Putin was overseeing the military buildup on Ukraine's border, he charged Russia's diplomats with securing long-term security guarantees from the West, putting Russian diplomacy front and center on Moscow's path toward war.<sup>224</sup> It was an impossible task—if he was ever serious about it. Regardless of his intent, the emphasis that Putin placed on Russia's diplomats in the run-up to the invasion made the Ministry of Foreign Affairs (MFA) an accomplice in his war, and in doing so turned Russian diplomacy-traditionally a strength-into a vulnerability. Russian diplomacy has long been a key tool in helping Moscow punch above its weight, leveraging its experienced, expert corps of diplomats and positions in multilateral organizations to get Moscow a seat at the table for the most pressing global issues. Today, however, Russian diplomacy is cowering in a defensive crouch, ceding the initiative to others. Deft U.S. policy can capitalize on this vulnerable position to roll back Russian gains over the past decade and diminish Russian clout in international organizations and multilateral forums.

It is true that the Russian Foreign Ministry's role in policy formulation has been waning over the past decade, with the military and intelligence service taking on quasi-diplomatic roles.<sup>225</sup> As a case in point, when Russia began military operations in Syria in September 2015, Russian Foreign Minister Sergey Lavrov notably seemed out of the loop, according to then-Secretary of State John Kerry.<sup>226</sup> Moreover, Putin chose an obscure officer, Aleksandr Lavrentyev—not a senior diplomat—to manage Syria-related diplomacy back in 2015 after Russia's intervention.<sup>227</sup> And yet, despite the waning influence of the MFA, until 2022 Russia's diplomacy had been a relative strength, helping Putin play a poor hand well. It had been global, securing Moscow a voice in nearly every major international issue, from Middle East conflicts to Afghanistan's future, nuclear nonproliferation to climate change and technology. As a U.N. Security Council (UNSC) permanent member, Russia has wielded its veto and leveraged it for influence.<sup>228</sup> It has also been adept at using U.N. systems and other multilateral forums. For example, Moscow both shaped the creation of the U.N. Office of Counter-Terrorism and ensured a Russian diplomat leads it.229 In 2019, Russia also successfully

pushed a measure through the U.N. General Assembly (UNGA) to set up an international convention to fight cybercrime, over U.S. and Western opposition. Finally, Moscow has successfully navigated regional differences and bitter rivalries, deepening relationships and influence with a range of partners, including Iran and Israel, Turkey and the Kurds, and China and India.

But Russia's invasion of Ukraine has sabotaged its own diplomacy. Unsurprisingly, after selling Kremlin narratives about Ukraine while downplaying the likelihood of war, the invasion has damaged Russia's credibility, even among those more inclined to give Moscow the benefit of the doubt. Boris Bondarev, one of the few Russian diplomats to resign in protest, has described Russian diplomatic work as practically impossible now, adding that Russian foreign policy is fundamentally broken.<sup>231</sup> Western diplomats regularly walk out of multilateral meetings when Russian officials speak, and at the Raisina Dialogue in India this year, the audience

even laughed at Lavrov when he tried to portray Russia as a victim.<sup>232</sup> UNGA has repeatedly condemned Russia's invasion of Ukraine by

## Today, Russian diplomacy is cowering in a defensive crouch, ceding the initiative to others.

overwhelming margins—often by margins larger than in 2014—as seen most recently in February 2023 in a resolution that was supported by 141 states, with 7 against and 32 states abstaining.<sup>233</sup> At the second Russia-Africa summit in July 2023, less than half the number of leaders attended, compared to the first summit in 2019.<sup>234</sup>

Russia has had some success in keeping countries in the so-called Global South neutral in its war in Ukraine. For example, only 45 countries have imposed sanctions on Russia, and nearly 90 countries still offer Russian citizens visa-free entry, including Argentina, Israel, Mexico, Thailand, Turkey, and Venezuela.<sup>235</sup> However, much of Russia's apparent "success" has been more the product of these countries' colonial histories and their dissatisfaction with the United States than a result of Russia's diplomatic strength.<sup>236</sup> And even though Russia may be a colonial power, that legacy does not reside with the countries in question. A simple comparison makes the point. Although only 45 countries have imposed some form of sanctions against Russia, over three times that number—141—voted at UNGA against Russia's war.<sup>237</sup> The dichotomy suggests that it is not Russian diplomats persuading their counterparts of the justness of Russia's actions that is leading the Global South to stay neutral.

Russian diplomacy, therefore, has become more of a vulnerability than a strength. Russia has long relied on diplomacy to help keep threats at bay. Today that is less the case, opening the Kremlin up to a greater degree to external challenges. Moscow now has fewer resources and tools available to engage foreign partners and boost Russia's global influence. As of June 2023, Russia is already facing significant budget deficits, with few prospects for robust future growth.<sup>238</sup> Moreover, Moscow's traditional use of arms sales and security cooperation to build influence with foreign partners is already being undermined by its war in Ukraine.<sup>239</sup> Either Russia needs the arms and equipment for its own uses, it has fewer personnel available to spearhead cooperation and training, or foreign partners fear sanctions or the reputational risk of buying arms or working with Russian military and intelligence services.<sup>240</sup> Reports in early June, based on analysis of customs clearance data, suggest that Russia is even reimporting military equipment that previously was sold to India and Myanmar.<sup>241</sup> Russian diplomacy, therefore, is likely to remain in a

> defensive crouch, with Moscow unable to mount significant diplomatic initiatives and struggling to defend its prerogatives and global

influence. The growing weakness of Russian diplomacy in the wake of its invasion of Ukraine is already apparent. Despite years of Russia positioning itself at the center of Middle Eastern geopolitics, it was Beijing that brokered the normalization of ties between Iran and Saudi Arabia<sup>242</sup> Moscow is finding it harder to leverage its position at the U.N., as witnessed by the overwhelming defeat of Russian ally Belarus's pursuit of a rotating seat at the UNSC.243 Moscow's role as the indispensable player along its periphery is also slipping. Two years ago, Russian engagement was critical to halting Azerbaijan's offensive against Armenia, yet now Moscow's diplomatic role was eclipsed by the EU and Russia was unable to prevent renewed hostilities.<sup>244</sup> Russia is also moving from diplomatic creditor to debtor as the war forces Moscow to rely more on its partners. For example, Turkey has become a key interlocutor, helping broker the grain export deal with Russia, Ukraine, and the U.N., and serving as a key transshipment node for goods making their way to Russia.<sup>245</sup> Reflecting the changed dynamics, Russia in January supported the UNSC resolution extending cross-border aid into northwestern Syria from Turkey; it had previously bargained hard for concessions and ultimately abstained.<sup>246</sup> Greater reliance on its partners will also make it harder for Moscow to navigate regional rivalries. Closer defense ties with Iran likely will

make it harder to court Israel; greater economic reliance on China will likely make it more difficult to sustain constructive relations with states in Southeast Asia.<sup>247</sup>

## Russian Efforts to Mitigate or Offset the Vulnerability

he erosion of Russia's diplomatic legitimacy and influence certainly is not lost on senior foreign policy officials in Moscow. UNGA votes are a decent barometer of Russia's global standing, and as previously noted, Moscow is consistently losing by large margins. Russia's relations with the West have collapsed; Bondarev noted that Russian diplomats' personal relationships with their Western counterparts fractured in the immediate aftermath of Russia's invasion of Ukraine.<sup>248</sup>

Recognizing its vulnerable diplomatic position, Moscow seemingly is pursuing a three-pronged approach to mitigate the potential risks. First, Moscow is lowering its ambitions, eschewing broad, high-stakes initiatives, and focusing on simple engagement for engagement's sake to show that Russia is not isolated. For example, Russia is no longer pushing for a summit of the leaders of the five UNSC permanent members, which Putin had proposed in January 2020.249 Such simpler engagement contributes to the success that Russia has had in keeping the Global South and others neutral in the Ukraine war.<sup>250</sup> This engagement is buttressed by narratives, propaganda, and information campaigns that seek to reinforce skepticism and criticism of the West in the Global South.<sup>251</sup> In contrast to U.S. and Western efforts to get the Global South to support sanctions and other punishments, Moscow largely is not asking anything of these states other than to keep meeting.

The second prong in Moscow's approach is to pair with China whenever possible. Although not formal allies, Beijing and Moscow share many concerns about a U.S.-led world order, and so the Kremlin in many instances can now count on China to take the lead in opposing the United States.<sup>252</sup> Moscow probably will also try to place more emphasis on multilateral groups, such as SCO and BRICS, as a means to harness China's global weight and influence, though diluted through a multilateral mechanism.

For the final prong, Moscow is likely to focus its remaining diplomatic energy on defending its ties with strategic partners key to its ability to sustain its war in Ukraine and confront the West, in particular Iran, Turkey, India, and Saudi Arabia. Limited time, energy, and resources are likely to impose a more stringent prioritization.

#### Opportunities for the U.S. and its Allies to Exploit the Vulnerabilities

ussia's diplomatic vulnerability creates opportunities on which adept U.S. policy can capitalize. Washington can roll back Russian influence and create obstacles to Russian diplomacy in the future. Much of Moscow's success in the past decade has come from leveraging bilateral problems in a country's relationship with the United States to interpose Russia as an alternative. Global concerns about the direction of U.S. policy during the past decade, whether it be about the need for a deal with Iran or U.S. commitment to its allies in Europe, has provided Moscow additional room to maneuver. The resulting relations have not been based on deep ties and common values, but Moscow nevertheless has had success with these interests-based, realpolitik-like approaches. Turkey, Israel, and Saudi Arabia have provided the most obvious examples of locations where focused U.S. efforts could help roll back Russian influence, even if they don't completely resolve the various challenges in bilateral relations with Washington. Outside those three countries, targeted investments by the United States in security cooperation could help block one of Russia's main pathways to build influence, leveraging the retrenchment in Russian resources and greater global reputational concerns about working with Russian military and security entities. The United States can also mobilize concerns about Russia's actions in Ukraine to curb Moscow's influence and advance U.S. priorities at multilateral institutions. For example, Washington can mobilize global opinion to block Russian officials from occupying leadership positions in multilateral organizations, similar to how U.S. efforts helped defeat the Russian candidate to lead the International Telecommunications Union.253

Finally, Washington can use Russia's diplomatic weakness to push initiatives at multilateral organizations where Russia would usually pose a strong obstacle—for example, in security-related bodies and on issues such as space security, nonproliferation, and export controls. Countries are also already racing to establish frameworks for regulating AI, which might be easier to shape to U.S. interests with Russian diplomacy weaker.<sup>254</sup> It might even be a propitious moment to push forward on UNSC reform while Russia's influence is weak.

With Russia on the back foot, the United States has a number of opportunities to lock in weaker Russian global influence for the longer term. Deft U.S. policy now can help ensure that Russia will not punch above its geopolitical weight for the foreseeable future.

#### **Vulnerability 9**

# Russian Public Opinion and the Putin Regime

By Timothy Frye

Russia's war in Ukraine creates new domestic challenges for Putin and his longtime ability to maintain high levels of public support. Autocrats who lose popular support not only find it harder to govern, but they are also at greater risk of mass protest or an elite coup.

#### The Vulnerability

ussian President Vladimir Putin realizes that it is easier to rule as a popular than an unpopular autocrat. Like all autocrats, he faces the dual threats of a coup by elites and a revolt by the mass public, and it is difficult to address both problems at once. For example, state resources spent on social policy to placate the public cannot be directed to elite cronies and vice versa. Putin surely recognizes this tradeoff, and the Kremlin has long devoted great energy to shaping public opinion. To be sure, autocrats can rule with low levels of popular support, but this makes managing the tradeoffs of keeping the elite happy and the public off the street more difficult. Moreover, low levels of approval often invoke greater repression, a costly tactic that modern autocrats seek to avoid. Str

Maintaining public support has become more challenging since February 2022, as the decision to invade Ukraine put at risk the two greatest achievements of the Putin administration: a sense of stability in daily life and the perception that Russia has returned as a great power. Yet, it is uncertain how shifts in public opinion will play out politically. At one extreme, an unpopular war could lead to street protests and open challenges that topple the government. For the near future, this outcome is unlikely. The repressive apparatus remains willing to crack down on open dissent and, while many in the public and the elite may oppose the war, they are as yet unwilling to take actions to express that opposition, particularly given the lack of an alternative leader to rally around.

Short of actively opposing the regime, however, the Russian public and elements of the Russian state could resort to "weapons of the weak" that make it more difficult for the Kremlin to prosecute the war.<sup>258</sup> Recruits avoiding the draft, bureaucrats taking untimely vacations, and business owners asking for higher prices for cooperation with the war effort are all possible tactics that unhappy members of the public and the elite may employ. Conducting war requires great sacrifices from the population, and cooperation will be harder to come by should support for the war diminish. To the extent that the Kremlin feels compelled to buy support for the war via increases in pension payments, social transfers, and other benefits, it leaves less money to buy support from elites through government contracts, subsidies, and simple theft. It also leaves less money for the war. Indeed, the most recent budget has increased spending on both guns and butter and, while the government's current macroeconomic position is sustainable in the short run, it will become increasingly difficult to maintain these commitments over time.259

One area of particular concern for the Kremlin is the scale of casualties. Credible sources in the West estimate that Russia has suffered more than 200,000 casualties and roughly 40,000 to 50,000 killed in action. <sup>260</sup> For comparison, the Kremlin lost roughly 15,000 soldiers over 10 years in Afghanistan. The Kremlin has been keen to keep the size of losses from the public. It rarely mentions the scale of casualties and recruits soldiers largely from politically marginal populations like prisoners and the rural poor. It also has been reluctant to declare a full-scale mobilization of citizens for war, all of which indicates a degree of concern about how the public might respond to a general call-up.

### Russian Efforts to Mitigate or Offset the Vulnerability

he Kremlin likely sees the threat from public opinion as important but also manageable. Putin and his team have successfully shaped the popular narrative over the past 23 years thanks to their control over state media.<sup>261</sup> Since the invasion, the Putin administration has devoted great resources to repress public displays of opposition to the war. Even seemingly innocuous displays of public opposition to the war have been met with great ferocity.262 In addition, it continues to fund public opinion polls about the war at a prodigious rate. Moreover, it has funneled vast resources to state television and other media to shape the public narrative about the war. These efforts indicate the seriousness with which the Kremlin views public opinion regarding the war. Putin's team has also blunted criticism of the invasion by allowing many critics of the war to leave the country, thereby limiting their impact on public opinion and the likelihood of mass protest.

Kremlin efforts to manage public opinion about the war have had some success. The Kremlin has limited street protests, and surveys conducted over the past 18 months using a range of methodologies find considerable public backing for the war. Putin's approval ratings surged following the invasion and have remained high. When asked whether they approve of Putin's activities, roughly 80 percent of Russians answer yes. <sup>263</sup> Despite the repressive environment, there is evidence that the answers to this direct question are likely reliable. <sup>264</sup>

At the same time, simple questions on presidential approval are rather crude indicators, and support for Putin is more contingent than is often recognized. When asked to name five or six politicians that they trust, only about 40 percent of Russians name Putin.<sup>265</sup> He is the most frequently cited politician by a considerable

## Russian citizens have few illusions that Putin rules in their interest rather in the interests of the oligarchs and the security services.

margin, but a majority of Russians do not name him as a politician they trust, which is hardly a sign of confidence. Moreover, Russian citizens have few illusions that Putin rules in their interest rather in the interests of the oligarchs and the security services.

Support for the war reveals similar contradictions. The Levada Center, Russia Watcher, Russian Field, and Chronicles, which regularly conduct surveys about the war using different methodologies, find that roughly 60 percent of Russians support the war effort when asked in a direct question, and that roughly one-quarter to one-third of respondents are enthusiastic supporters of the war.<sup>266</sup> Surveys also show that a slight majority of Russians report that the war in Ukraine is proceeding successfully.<sup>267</sup>

These surveys also find that a large swath of the Russian public remains unenthusiastic about the war. For example, in April 2023, the Levada Center found for the first time that a majority of Russians preferred negotiations with Kyiv to continuing the war effort. In June, they found that only 44 percent of Russians were willing to donate 1,000 rubles (about \$10) to support the war effort and soldiers fighting in the war, while 51 percent were unwilling to do so.<sup>268</sup> Moreover, surveys found much skepticism toward the "partial mobilization" of September 2022.269 One review of public opinion toward the war finds that, while the "Putin regime has managed to maintain an 'imposed consensus' around the war in Russian public space, in reality, the 'support for the war' of the median electorate is internally contradictory, unstable, and unconsolidated."270 Qualitative research reportedly conducted by the Kremlin reaches similar findings.271

In sum, the Kremlin has considerable room to maneuver in managing public opinion. At the same time, it has not managed to consolidate public commitment to the war effort.

## Opportunities for the U.S. and its Allies to Exploit the Vulnerability

nfluencing public opinion in Russia from abroad is challenging, given the Kremlin's crackdown on independent media and on public discourse about the war. The Russian government has banned numerous social media platforms, such as Twitter and Facebook; closed independent media outlets and nongovernmental organizations; and harassed and arrested foreign journalists.<sup>272</sup>

There are, however, several opportunities for the United States and European partners to increase Russians' access to alternative information. More open discussions continue to take place on the social messenger platform Telegram and on YouTube. Although many Russians continue to rely heavily on state television as their main source for news, growing numbers now cite Telegram and social media as their main source of news. In April 2023, approximately 64 percent of Russians cited state television as their main sources of news, down from 85 percent in April 2018, while 41 percent cited social media and 19 percent cited Telegram, up from 6 percent in January 2021.273 Among Russians, women, younger people, and those with higher levels of education are significantly less likely to back the war, as are those that rely less on state television and more on social media for their news. Using a variety of means, including YouTube and

Telegram channels, the U.S. Agency for Global Media reported in April 2023 that it reached 10 percent of adult Russians each week, noting that

It is critical to undermine public perceptions about two pillars of the Putin regime: the economy and perceptions of great power status.

this figure is "as much as half the audience that the most popular, U.S.-based television networks get, even in a completely free media environment." 274

One way to expand access to non-state media is the use of virtual private networks (VPNs), which provide greater privacy over the internet. VPN use in Russia has surged. As of April 2023, roughly one in four Russians reported using a VPN, up from 3 percent in 2020 and 9 percent in 2021.<sup>275</sup> But the Russian government seeks to limit access to VPNs, and many users find them cumbersome. Voice of America and other U.S. government-backed channels on YouTube could give more advice about how to find and use VPNs in Russia.

In developing programing on YouTube and Telegram, the U.S. government should mix fact-based and emotional appeals. In other contexts, fact-checks to counter disinformation, particularly when combined with emotional appeals, have been shown to be effective. 276 One approach might involve using experts and celebrities known in Russia to counter Kremlin themes. Arnold Schwarzenegger's deeply personal and emotional appeal to ordinary Russians at the start of the war might serve as a model. 277 Moreover, recording cultural events on

Russian themes taking place in the United States and making them available on Telegram and YouTube would help debunk claims that the United States is canceling Russian culture. Interviews with members of the Russian diaspora who continue to work in their area of expertise would serve a similar purpose.

Similarly, one approach to providing alternative information to Russians about the war is to work with those outside Russia who have friends or relatives inside Russia. For example, shortly after the war began, one academic study polled Ukrainians about their conversations with relatives in Russia. 278 Many of these conversations delved deeply into discussions of war crimes by Russian soldiers and public support for Zelensky's government. Roughly half of respondents had family in Russia, and about 60 percent spoke with their relative in Russia about the war. Of this group, 38 percent felt that their discussions had reduced their relative's belief in Russian war propaganda, 54 percent felt that their discussions had no impact, and just 8 percent felt that their discussions increased their relative's belief

in Russian propaganda.
Respondents also believed that emotional appeals had more impact than appeals rooted in facts and logic.
This finding is in line with research in political psy-

chology that emphasizes perspective-taking. The war has split many families, which may limit directly replicating this approach, but the logic may be applied to anyone outside Russia who has close ties with Russians in Russia.

Programs that use experts to translate academic research on Russia for a Russian audience might help provide the kinds of complexity that are anathema to Kremlin propaganda. That Russian political scientist Ekaterina Schulman has more than 1 million YouTube followers suggests that there is a market for approaches that rely on expert academic opinion steeped in the local context.<sup>279</sup> Schulman regularly discusses topics ignored or distorted by state media and draws heavily on academic research. By translating academic research for a broader Russian-language audience, she often counters Kremlin narratives.

Identifying which themes about the war might shape public opinion in Russia is a challenge, as studies of public opinion during war in autocracies are exceedingly rare, but research from the United States highlights several themes that may guide U.S. government-backed efforts. Studies from the United States find that the public supports the use of force and tolerates casualties

as long as it believes that victory is likely, that political elites are united in support of the war, and that the decision to go to war was the right one. Broadcasts on Telegram and YouTube aimed at changing Russians' perceptions of the likely outcome of the war might reduce public support for the war, especially as casualties mount. Social media analysis suggests that this process may already be underway. Programs emphasizing disagreement among political elites in Russia about the war might have a similar effect. For example, ensuring that Russians are aware of Yevgeny Prigozhin's remarkable public criticism of the Kremlin and the Ministry of Defense prior to the Wagner Group's march on Moscow in June 2023 should be a high priority.

To further exploit this vulnerability, it is critical to undermine public perceptions about two pillars of the Putin regime: the economy and perceptions of great power status. Research has long shown that economic conditions shape public support for the Putin regime. A survey conducted on the one-year anniversary of the start of the full-scale invasion found that economic difficulties reduced support for the war, with an especially large impact among those who watched television.<sup>283</sup> Thus, sanctions that slow economic growth and reduce living standards might help to undermine support for the regime and the war effort.<sup>284</sup> To date, most Russians report that they have not been affected by sanctions,

and a Levada Center survey from March 2023 found that two-thirds of Russians were unconcerned about the sanctions. However, the medium- and long-term economic outlook for Russia is far from rosy, suggesting that these views may change over time. More broadly, shrinking the financial resources available to the Kremlin via sanctions will exacerbate the challenge of resolving the conflicting demands of elites and the public.

Actions that diminish Russians' perceptions of their country's role on the world stage might also undercut Putin's claim to have brought Russia back as a global power. For example, the United States might do what it can to support countries that refuse to host Putin, given his recent indictment by the International Criminal Court. More generally, diminishing Russian soft power abroad has the positive side effect of making Russia appear less powerful to its own population at home.

Perhaps the most enduring way to shape public opinion in Russia is for the United States to improve its own governance and secure its own democracy. The Kremlin enjoys nothing more than pointing to violations of democratic norms and the shortcomings of the U.S. government to try to dissuade the Russian public from asking for greater rights. Better performance from the U.S. government would increase the credibility of any messages it wishes to send to the Russian public.

#### **Vulnerability 10**

### Russian Emigration

By Maria Snegovaya

Russia's war in Ukraine prompted another major exodus of Russians, including the country's best and brightest. While the escape of opposition-minded groups is generally beneficial to the Kremlin because it avoids a buildup of pressure on the regime, for the West, Russian exiles can serve as a conduit of information back into Russia, a talent pool, and an opportunity to invest in a better relationship with a future Russia.

#### The Vulnerability

ussia's 2022 war in Ukraine has launched a wave of emigration unparalleled in recent history. The total number of Russians who have fled the country is estimated at around 800,000 people or higher.<sup>287</sup>

The Russians who have left the country vary considerably in terms of their skills, political preferences, and the extent to which the Kremlin needs them back home. One thing they have in common, however, is that they tend to be among the more highly educated, affluent, and younger segments of the Russian population.<sup>288</sup> Their departure from Russia creates several vulnerabilities for the Kremlin.

Most immediately, the large exodus of young, educated, and employable Russians is creating a significant labor force deficit and problems leading to a further reduction in the potential growth of Russia's already stagnating economy and its expanding military-industrial sector.<sup>289</sup> While many continued to work in Russia in the first few months after having fled the country,<sup>290</sup> over time their economic links to the homeland have weakened as they were able to find new local jobs or start their own businesses.<sup>291</sup>

In 2022 alone, the number of workers 16 to 35 years old collapsed by 1.33 million people, and their share in the labor force was the lowest on record since 1996.<sup>292</sup> The main contributing factor of this dramatic decrease was the war-related exodus of younger Russians (with estimated 80-90 percent of those who left being people under the age of 45).<sup>293</sup> The decline in workers was further exacerbated by the ongoing mobilization effort (with at least 350,000 men mobilized for military service).294 This April, a record number (35 percent) of surveyed enterprises in Russia said they experienced a shortage of workers. According to a recent report by the Central Bank of Russia, the situation is even worse with 60 percent of companies reporting a shortage of employees (most of them qualified specialists). At least 75 percent of companies had to raise salaries to retain employees.295

There is a particularly high deficit of blue-collar workers in fields like mechanical engineering, machine tool building, production of metal products, metallurgy, the timber industry, woodworking, chemicals, and the food industry.<sup>296</sup> White-collar workers are also lacking. Based on surveys, most of the Russians who have left the country (about half)

are employed in the IT industry (mostly IT specialists but also service personnel).<sup>297</sup> By official estimates, about 10 percent (100,000) of all IT workers left Russia in 2022 and did not return.<sup>298</sup> As a result, as many as 80 percent of government organizations, including systemically important enterprises and companies of critical information infrastructure, have experienced a deficit of qualified specialists in information security.<sup>299</sup> Russia's Sberbank CEO said that the national shortage of IT specialists exceeds 1 million people, and that this will get even worse in the coming years.<sup>300</sup> Defense companies also suffer from a severe personnel gap estimated at 400,000 workers (of which 120,000 are personnel with higher education), which is highly significant, given that the industry employs about 2 million people total.301

Their departure is also weakening Russia's dependency ratio (the ratio of pension-aged Russians to the general population), which increases the strain on Russian society and potentially the government budget. <sup>302</sup> Even before Russia's invasion of Ukraine, brain drain was a major challenge for Russia. From 2020 to 2023, on top of its normal demographic deterioration, Russia lost between 1.9 million and 2.8 million people (many of them young and well educated) as a combined effect of COVID-19, mobilization, and the war. <sup>303</sup>

## Over the longer term, this exodus jeopardizes Russia's ability to become more democratic and pro-Western.

Over the longer term, this exodus jeopardizes Russia's ability to become more democratic and pro-Western. Compared to an average Russian, self-exiles who left soon after February 2022 are more likely to demonstrate anti-war sentiments, pro-Western attitudes, higher levels of impersonalized trust, and an ability to build horizontal networks. This is the most modernized stratum of Russian society, its nascent upper-middle class. Even before the war, pro-Western liberal groups made up less than 7 percent of the Russian population. The departure of these groups will affect the discourse inside Russia; with so many of them fleeing the country, there will be fewer moderate voices left, so pro-Kremlin narratives are likely to become more dominant.

## Russian Efforts to Mitigate or Offset the Vulnerability

he Kremlin has welcomed the departure of those Russians most inclined to oppose the war and the Putin government. The Kremlin does not view the emigration of this group as a vulnerability—it benefits the Kremlin by serving as a pressure release valve that reinforces its grip over Russian society. Russian official discourse often presents the departure of this group as "a natural and necessary self-cleansing of society."

The Kremlin has struggled to develop a coherent approach to the less opposition-minded Russians who have left (mostly to avoid mobilization), largely because they are such a heterogenous group. Most Russians who fled the country include IT professionals, private entrepreneurs, representatives of cultural circles, academics and scientists, activists, office workers, journalists and employees in the noncommercial sector, doctors, mathematicians, physicists, cryptographers, financiers, advertisers, and interpreters.307 Kremlin policies targeting these much-needed professional groups are much softer, even if the policies vary between carrots and sticks. The sticks include threats to seize property or to introduce higher taxes for Russians who left or are working remotely, with a goal to bring them back.<sup>308</sup> So far, however, the Kremlin appears to have prioritized carrots for these groups. Predominantly targeted at IT professionals, carrot policies include tax holidays for Russian IT companies, exemptions from military service for IT sector employees, and preferential mortgages. Reflective of the urgency and consistency of the problem, throughout last year the Kremlin kept expanding these proposed benefits.<sup>309</sup> The preference is to make sure Russians are still employed in domestic companies, even if remotely.

To increase the number of qualified specialists, the Russian government has urgently introduced new educational and retraining programs for industries such as defense. For example, the unemployed are now offered free vocational courses to help them find employment in the military-industrial complex. The Kremlin also contemplated launching new educational clusters targeted at the needs of regional industrial enterprises. Proposed solutions also included reintroducing a system of forced labor by employing convicts from Russian prisons. The Kremlin even attempted to remove restrictions on child labor from the age of 14.313

If it can't bring enough Russians back and train new qualified employees domestically, the Kremlin also has plans to attract qualified foreign nationals to Russia. For example, it recently simplified bureaucratic requirements for foreign IT workers to live and work in Russia. 314 On May 12, 2023, Russian President Vladimir Putin signed a new decree aimed at facilitating immigration to the country. 315 Of particular interest to the Kremlin may be immigrants from countries like Azerbaijan, Armenia, and Central Asian countries that have historically been a source of labor migrants to Russia due to visa-free access. 316 Some can become a new source of qualified labor, while others will supply more cannon fodder to be sent to Ukraine. 317

## Opportunities for the U.S. and its Allies to Exploit the Vulnerability

he Kremlin's struggle to stop the outflow of qualified professionals from Russia may offer the West a unique opportunity to leverage a structural vulnerability of the contemporary Russian economy.

In the short term, the United States and Europe should focus their efforts on enabling the new exiles, especially those with Science, Technology, Engineering and Mathematics (STEM) skills, to sustain their work from outside the country.318 While Washington and Brussels may be interested in attracting such professionals, they can also help ensure a more welcoming climate for exiles in third countries like Turkey, Kazakhstan, Georgia, or Armenia, where most of the new exiles now reside.319 These groups require support for specific categories to receive yearlong visas that would allow them to leave for a secure location quickly, as well as assistance with work permits and refugee identification. The United States and Europe could offer more extensive legal assistance, including with visas; residence and work permits; emergency help with housing and food; psychological assistance; language and professional training; networking support; and fellowship and job opportunities. They could also facilitate the immigration processes for family reunification purposes.<sup>320</sup> Germany and the Czech Republic have already introduced such initiatives, and this effort can be mirrored in other contexts.

Many of the new émigrés need no more than a slight push to integrate economically into new countries. For many, initiatives like preferential loans for start-ups, training programs for self-employment, and start-up strategy may suffice for successful economic incorporation into new societies. <sup>321</sup> A targeted media strategy that goes beyond what RFE/RL does is also needed; if left vacant, this niche risks being occupied by pro-Kremlin media.

The new exiles maintain close contact with their Russia-based networks: almost 50 percent of émigrés talk to their relatives and friends in Russia every day or almost every day.322 The West should consider this as an opportunity to counter Russian domestic propaganda and spread more pro-Western sentiment in the country. The exile community can serve as a conduit for information by injecting non-Kremlin news sources into their networks that remain in Russia, using social networks like WhatsApp or Telegram, instant messengers, YouTube, samizdat, and closed nonpublic events. This might also be achieved through policies supporting investigative journalism and other Russianproduced media to help get information into Russia. This has the added benefit of enhancing Western policies, such as exposing loopholes in sanctions regimes and legislation.323

In the long term, the new emigration can become a source of a more stable relationship with future Russia. Unlike previous emigration waves, many of today's self-exiles, especially activists and journalists, appear intent on returning to Russia in the future rather than seeking to integrate into their host societies. As history shows, their desire to return home represents a potential opportunity to influence change in post-Putin Russia.<sup>324</sup> It is therefore worth conceiving policies, such as visa or start-ups assistance, that allow these networks to sustain themselves.

#### In the long term, the new emigration can become a source of a more stable relationship with future Russia.

New Russian emigrant communities are likely to maintain a decentralized cross-national structure rather than have one leader or organization that binds them together.325 However, Russian exiles are often poisoned by Soviet legacy, which includes low ability to build horizontal networks, reduced trust levels, and disinclination to volunteer or invest in local communities.<sup>326</sup> Therefore, they tend to require civic skills and coordination assistance that will help overcome collective action problems to develop civic practices, such as protest participation and consensus- and association-building skills.327 Such support, when implemented through organizations of prodemocratic Russian diasporas that work with new émigrés, may contribute to building horizontal networks among them and help them bring this knowledge back to Russia.

Assisting and actively engaging with the Russian diaspora in exile will not only help exacerbate Russia's domestic vulnerabilities but will also prevent the Kremlin from exploiting these new communities as agents of influence in their host countries.<sup>328</sup>While the new migrants are more politically aware and tend to be more liberal than previous waves of Russian migrants, over time the lack of successful incorporation into host societies and absence of targeted Russian-language sources risks creating resentment toward host societies, especially among the second generation (children of émigrés), which might provide the Kremlin an opportunity to use them as tools of soft influence. Working with Russian-speaking diasporas and maintaining a network of Russian-language sources targeted at these groups will help alleviate these risks.

- Vladimir Voronov, "Importozameschenye dlya Rogozina [Import substitution for Rogozin]," Svoboda.org. January 10, 2016, <a href="http://www.svoboda.org/content/article/27477140">http://www.svoboda.org/content/article/27477140</a>. html.
- "Sanctions Framework," International Trade Administration, updated July 21, 2022, <a href="https://www.trade.gov/country-commercial-guides/russia-sanctions-framework">https://www.trade.gov/country-commercial-guides/russia-sanctions-framework</a>.
- Richard Connolly, Russia's Response to Sanctions (Cambridge, UK: Cambridge University Press, 2018), chapter 5.
- Chris Cook, Federica Cocco, and Max Seddon, "EU Goods Worth At Least \$1bn Vanish in Russia 'Ghost Trade," Financial Times, May 10, 2023, <a href="https://www.ft.com/content/76f-c91b2-3494-4022-83d0-9d6647b38e3d">https://www.ft.com/content/76f-c91b2-3494-4022-83d0-9d6647b38e3d</a>.
- Jack Watling and Nick Reynolds, "Operation Z. The Death Throes of an Imperial Delusion," (Royal United Services Institute, April 22, 2023), <a href="https://static.rusi.org/special-re-port-202204-operation-z-web.pdf">https://static.rusi.org/special-re-port-202204-operation-z-web.pdf</a>; "Component Commonalities in Advanced Russian Weapon Systems," Conflict Armament Research (CAR), published September 2022, <a href="https://storymaps.arcgis.com/stories/239f756e2e6b49a-5bec78f5c5248bf3d">https://storymaps.arcgis.com/stories/239f756e2e6b49a-5bec78f5c5248bf3d</a>.
- Olena Bilousova, Oleksii Gribanovskiy, Benjamin Hilgenstock, Elina Ribakova, Nataliia Shapoval, and Vladyslav Vlasiuk, "Russia's Military Capacity and the Role of Imported Components" (Kyiv School of Economics, June 19, 2023), <a href="https://kse.ua/wp-content/uploads/2023/06/Russian-import-of-critical-components.pdf">https://kse.ua/wp-content/uploads/2023/06/Russian-import-of-critical-components.pdf</a>.
- Richard Connolly and Philip Hanson, "Import Substitution in Russia," Russia and Eurasia Programme Research Report (Chatham House).
- 8. Andrew David, Sarah Stewart, Meagan Reid, and Dmitri Alperovich, "Russia Shifting Import Sources amid U.S. and Allied Export Restrictions" (Silverado Policy Accelerator, January 2023), <a href="https://cdn.sanity.io/files/0wfzc71x/production/6745ea42c21d65d6709231e0e7767bd5de57469b.pdf">https://cdn.sanity.io/files/0wfzc71x/production/6745ea42c21d65d6709231e0e7767bd5de57469b.pdf</a>.
- 9. Sam Bendett, Mathieu Boulegue, Richard Connolly, Margerita Konaev, Pavel Podvig, and Katarzyna Zysk, "Advanced Military Technology in Russia" (Chatham House, September 23, 2021), <a href="https://policycommons.net/artifacts/1817221/">https://policycommons.net/artifacts/1817221/</a> advanced-military-technology-in-russia/2554160/.
- 10. Ministry of Defense of the Russian Federation, 'Ministr oborony Rossiyskoy Federatsii provel tematicheskoye selektornoye soveshchaniye s rukovodyashchim sostavom Vooruzhennykh Sil,' [The Minister of Defense of the Russian Federation held a thematic conference call with the leadership of the Armed Forces], May 2, 2023, <a href="https://function.mil.ru/news\_page/country/more.htm?id=12466014@egNews">https://function.mil.ru/news\_page/country/more.htm?id=12466014@egNews</a>.
- 11. "Rosatom shturmuyet El'brus [Rosatom storms Elbrus]," Kommersant, February 10, 2023, <a href="https://www.kommersant.ru/doc/5813229">https://www.kommersant.ru/doc/5813229</a>.

- 12. See SIPRI Arms Transfers Database; "SIPRI Arms Transfers Database," Stockholm International Peace Research Institute (SIPRI), March 13, 2023, <a href="https://sipri.org/databases/armstransfers">https://sipri.org/databases/armstransfers</a>.
- 13. For financial data on Russia's arms exports (and those of most other exporters): SIPRI databases; "Financial value of the global arms trade," Stockholm International Peace Research Institute, <a href="https://sipri.org/databases/financial-value-global-arms-trade">https://sipri.org/databases/financial-value-global-arms-trade</a>.
- 14. Russia's arms exports were U.S. \$14.6 billion in 2021, while the total Russian exports of products and services was \$549 billion. "Exports of goods and services (current US\$)-Russian Federation," World Bank Open Data, January 1, 2023, https://data.worldbank.org/indicator/NE.EXP. GNFS.CD?locations=RU. Most other top exporters were substantially less than half of that share of total exports. The U.S. \$14.6 billion export can be compared to Russia's \$66 billion total military spending in 2021, of which less than half was for procurement. For a longer period view, see: Richard Connolly and Cecilie Sendstad, "Russia's Role as an Arms Exporter: The Strategic and Economic Importance of Arms Exports for Russia" (Chatham House, March 20, 2017), https://www.chathamhouse.org/ sites/default/files/publications/research/2017-03-20-russia-arms-exporter-connolly-sendstad.pdf.
- 15. Connolly and Sendstad, "Russia's Role as an Arms Exporter."
- 16. "Western" is used in this paper to describe not only the European states (except Russia and Belarus) and the United States but also other states allied or otherwise partnered with them (including Japan, South Korea, Canada, and Australia).
- A major, but certainly not the only, example of the lack of a developed technology base is the status of Russia's microchip development and production. This is almost hopelessly far behind Western states or China. Planned investment in local capacities, if fully realized, also are far behind that planned in Western states and China. Stephen Bryen, "Russia's Long-Time Chips Failure Coming Home to Roost," Asia Times, August 25, 2022, https://asiatimes. com/2022/08/russias-chips-failure-coming-home-toroost/; Alena Popova, "Russia Can't Replace Western Chips—so It Gets Them Illegally," The Hill, January 1, 2023, https://thehill.com/opinion/technology/3833248russia-cant-replace-western-chips-so-it-gets-them-illegally/; Michaël Grauwde and Nazarii Cherviak, "Report: Where Does Russia Get Its Microchips?" OSINT for Ukraine, https://www.osintforukraine.com/investigations/where-does-russia-get-its-microchips.
- 18. Ana Swanson and Matina Stevis-Gridneff, "Russia Is Importing Western Weapons Technology, Bypassing Sanctions," *The New York Times*, April 18, 2023, <a href="https://www.nytimes.com/2023/04/18/business/economy/us-russia-chips-sanctions.html">https://www.nytimes.com/2023/04/18/business/economy/us-russia-chips-sanctions.html</a>.

- 19. Andrew Macaskill, "Exclusive: Russian Weapons in Ukraine Powered by Hundreds of Western Parts, Report Says," Reuters, August 8, 2022, <a href="https://www.reuters.com/business/aerospace-defense/exclusive-russian-weapons-ukraine-powered-by-hundreds-western-parts-rusi-2022-08-08/">https://www.reuters.com/business/aerospace-defense/exclusive-russian-weapons-ukraine-powered-by-hundreds-western-parts-rusi-2022-08-08/</a>; Zoya Sheftalovich and Laurens Cerulus, "The Chips Are Down: Putin Scrambles for High-Tech Parts as His Arsenal Goes Up in Smoke," *Politico*, September 5, 2022, <a href="https://www.politico.eu/article/the-chips-are-down-russia-hunts-western-parts-to-run-its-war-machines/">https://www.politico.eu/article/the-chips-are-down-russia-hunts-western-parts-to-run-its-war-machines/</a>.
- 20. Currently the third-, fourth-, sixth-, and ninth-largest exporters of major arms. SIPRI databases; "SIPRI Arms Transfers Database"; Pieter Wezeman, Justine Gadon, and Siemon Wezeman, "Trends in International Arms Transfers, 2022" (Stockholm International Peace Research Institute, March 2023), <a href="https://www.sipri.org/publications/2023/sipri-fact-sheets/trends-international-arms-transfers-2022">https://www.sipri.org/publications/2023/sipri-fact-sheets/trends-international-arms-transfers-2022</a>.
- 21. Rosoboronexport, Russia's arms export agency, reported U.S. \$5.4 billion exports by mid-August 2022 and expected that to grow to \$10.8 billion. Defense News staff, "Russia Forecasts Drop in Arms Export Revenue," Defense News, August 29, 2022, https://www.defensenews.com/ global/europe/2022/08/29/russia-forecasts-drop-inarms-export-revenue/. Putin claimed \$8 billion would be reached by mid-November 2022. "Russian Arms Exports to Reach \$8 Billion in 2022-Putin," TASS, November 25, 2022, https://tass.com/politics/1542165. For earlier years. see SIPRI's database on official financial data on arms exports. SIPRI databases: "Financial Value of the Global Arms Trade," Stockholm International Peace Research Institute, https://sipri.org/databases/financial-value-global-arms-trade. It should be noted that Russia's official calculations of arms export values are not transparent.
- 22. Wezeman, Gadon, and Wezeman, "Trends in International Arms Transfers, 2022."
- 23. For the military budgets and GDP figures, see SIPRI databases; "SIPRI Military Expenditure Database," Stockholm International Peace Research Institute, https://sipri.org/ databases/milex. Iran seems to have ordered 24 Su-35S combat aircraft from Russia-aircraft originally ordered but then canceled by Egypt. Norbert Neumann, "Sukhoi Su-35 Fighters for Iran to Arrive Imminently amid Controversy over Jet's Combat Success," Shephard Media, May 15, 2023, https://www.shephardmedia.com/news/ air-warfare/sukhoi-su-35-fighters-to-land-in-iran-imminently-in-modernisation-push-amid-controversy-surrounding/. However, this is already outweighed by India's rejection of the offered MiG-29 for an (for India relatively small) order of 26 combat aircraft for its Navy in favor of a French or U.S. design. Pradip Sagar, "How Indian Navy's Fighter Jet Deal Enters Crucial Stage with Modi's Upcoming US, France Visits," India Today, May 27, 2023, https:// www.indiatoday.in/india-today-insight/story/how-indian-navys-fighter-jet-deal-enters-crucial-stage-with-modis-upcoming-us-france-visits-2385205-2023-05-27.

- 24. Lucie Béraud-Sudreau, Xiao Liang, Siemon T. Wezeman, and Ming Sun, "Arms-Production Capabilities in the Indo-Pacific Region: Measuring Self-Reliance" (Stockholm International Peace Research Institute, October 2022), <a href="https://sipri.org/publications/2022/other-publications/arms-production-capabilities-indo-pacific-region-measuring-self-reliance">https://sipri.org/publications/2022/other-publications/arms-production-capabilities-indo-pacific-region-measuring-self-reliance</a>.
- 25. According to plans from around 2012–2014, by today there should be around 100 Su-57 and 1,000 or more Armata in service—the actual numbers are very substantially lower and none are yet the final, fully developed version. Kyle Mizokami, "What Ever Happened to Russia's 'Wonder Weapons'?" Popular Mechanics, December 9, 2022, <a href="https://www.popularmechanics.com/military/weapons/a41968636/what-happened-to-russias-wonder-weapons/">https://www.popularmechanics.com/military/weapons/a41968636/what-happened-to-russias-wonder-weapons/</a>.
- 26. Joseph Trevithich, "It's No Surprise India Finally Ditched Its Stealth Fighter Program with Russia," The Warzone (blog) on The Drive, April 23, 2018, <a href="https://www.thedrive.com/the-war-zone/20347/its-no-sur-prise-india-finally-ditched-its-stealth-fighter-program-with-russia">https://www.thedrive.com/the-war-zone/20347/its-no-sur-prise-india-finally-ditched-its-stealth-fighter-program-with-russia</a>.
- 27. See, for example, "Russia Tested 320 Types of Weapons in Syria," Middle East Monitor, July 15, 2021, <a href="https://www.middleeastmonitor.com/20210715-russia-tested-320-types-of-weapons-in-syria/">https://www.middleeastmonitor.com/20210715-russia-tested-320-types-of-weapons-in-syria/</a>.
- 28. Seth Jones, "Russia's Battlefield Success in Syria: Will It Be a Pyrrhic Victory?" CTC Sentinel, 12 no. 9 (October 2019), 1–9, <a href="https://ctc.westpoint.edu/russias-battle-field-success-syria-will-pyrrhic-victory/">https://ctc.westpoint.edu/russias-battle-field-success-syria-will-pyrrhic-victory/</a>.
- 29. E.g., the Iskander missile, touted by Russia as advanced, did not do well. (Mizokami, "What Ever Happened to Russia's 'Wonder Weapons'?") Most of the evidence on how these impact potential clients of Russia is still anecdotal but there at least are indications that India is concerned about the vulnerability of its mainly Russian inventory, including the tanks that it produced under license from Russia. Rhitwique Dutta, "The Curse of Russian Weapons for India," Readers' Blog on *Times of India*, May 27, 2023, <a href="https://timesofindia.indiatimes.com/readersblog/the-war-in-ukraine/the-curse-of-russian-weapons-for-india-54290/.">https://timesofindia.indiatimes.com/readersblog/the-war-in-ukraine/the-curse-of-russian-weapons-for-india-54290/.</a>
- 30. India has reported that some expected deliveries did not happen, seemingly affecting existing equipment in Indian service and production of Russian weapons under license in India. Indian Ministry of Defence, Standing Committee on Defence: Thirty-Sixth Report (March 2023), https://loksabhadocs.nic.in/lsscommittee/Defence/17\_Defence\_36.pdf; Rhea Mogul, "Russia Can't Meet India Arms Deliveries Due to Ukraine War, Indian Air Force Says," CNN, March 24, 2023, https://edition.cnn.com/2023/03/24/india/india-russia-arms-delivery-ukraine-war-intl-hnk/index.html. Other states are likely facing the same problem but are, unlike India, generally not very open about arms-trade-related issues.

- 31. Russia's military spending in 2022 was 4.1% of the Russian GNP—an increase over 3.7% in 2021. However, the 2022 figure is likely to be an underestimate: see SIPRI databases; "SIPRI Military Expenditure Database," Stockholm International Peace Research Institute, https://sipri.org/ databases/milex. There are different opinions on how hard Russia's economy has been hit by the war and sanctions, but it is clear the impact is significant. See "FACT SHEET: Disrupting and Degrading—One Year of U.S. Sanctions on Russia and Its Enablers," U.S. Department of the Treasury, press release, February 24, 2023, https:// home.treasury.gov/news/press-releases/jy1298; Alexandra Prokopenko, "The Cost of War: Russian Economy Faces a Decade of Regress," Carnegie Endowment for International Peace, December 19, 2022, https://carnegieendowment.org/politika/88664; Olesya Dmitracova, "Russia May Run Out of Money in 2024, Says Oligarch," CNN, March 3, 2023, https://edition.cnn.com/2023/03/03/economy/russia-no-money-deripaska/index.html.
- Carl Michael Gräns, "Russia's growing influence in Mali

   Is Burkina Faso next?, FOI Studies in African Security,
   FOI Swedish Defence Research Agency, January 2023,
   <a href="https://www.foi.se/rest-api/report/FOI%20Memo%20">https://www.foi.se/rest-api/report/FOI%20Memo%20</a>

   8087.
- 33. In the past few years, Russia has supplied Mali with what is basically a new air force and partly a new army. However, total supplies have been only a handful of aircraft and several dozen land systems, all secondhand. See SIPRI databases; "SIPRI Arms Transfers Database."
- 34. See SIPRI Arms Transfers Database; SIPRI databases; "SIPRI Arms Transfers Database." Most notable among the signed orders lost are 24 Su-35 to Egypt and 11 to Indonesia, which were canceled by the buyers. U.S. pressure played an important role in this, and in both cases European states won replacement orders while more orders from Europe and the United States are being negotiated.
- 35. For the United States, those policies were restated in February 2023. The White House, Memorandum on United States Conventional Arms Transfer Policy, National Security Memorandum NSM-18, February 23, 2023, https:// www.whitehouse.gov/briefing-room/presidential-actions/2023/02/23/memorandum-on-united-states-conventional-arms-transfer-policy/. For European states they are mainly set out in a 2008 EU Common Position on arms exports: The Council of the European Union, "Council Common Position 2008/944/CFSP of December 2008 Defining Common Rules Governing Control of Exports of Military Technology and Equipment," Document 32008E0944, December 8, 2008, https:// eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX-%3A32008E0944. See the Arms Trade Treaty, which also binds several other important Western exporters: "Treaty Text," Arms Trade Treaty website, https://thearmstradetreaty.org/treaty-text.html?templateId=209884.
- 36. John Arquilla and David Ronfeldt, "Cyberwar Is Coming!" In In Athena's Camp: Preparing for Conflict in the

- Information Age (Santa Monica, CA: RAND Corporation, 1993), <a href="https://www.rand.org/content/dam/rand/pubs/">https://www.rand.org/content/dam/rand/pubs/</a> reprints/2007/RAND\_RP223.pdf.
- 37. Max Smeets, *No Shortcuts: Why States Struggle to Develop a Military Cyber-Force* (London: Hurst Publishing, May 2022).
- 38. Note: Primary source data on Russian trade, demography, and emigration are increasingly difficult to obtain—primarily due to Moscow omitting or obscuring its collection. Expert analysis and estimates are often drawn from secondary sources, as well.
- 39. Actual figures may be even higher, as Moscow only counts those who formally renounce citizenship or de-register from a residential address. See "The Problem with Russia's Best and Brightest," Rane, June 29, 2016, <a href="https://worldview.stratfor.com/article/problem-russias-best-and-brightest">https://worldview.stratfor.com/article/problem-russias-best-and-brightest</a>.
- 40. Ksenia Semenova, "A New Emigration: The Best Are Leaving" (Institute of Modern Russia, April 7, 2015), https://imrussia.org/en/nation/2224-a-new-emigration-the-best-are-leaving-part-1; "Russia's Demographic Crisis," Carnegie Endowment for International Peace, January 26, 2012, https://carnegieendowment. org/2012/01/26/russia-s-demographic-crisis-event-3537.
- 41. Maria Bondarenko, "Eksperty RANKHiGS rasskazali ob usilivsheysya utechke mozgov iz Rossii [RANEPA Experts Spoke about the Increased Brain Drain from Russia]," RBC, January 23, 2018, <a href="https://www.rbc.ru/society/23/01/2018/5a673f129a794712579d7dbe">https://www.rbc.ru/society/23/01/2018/5a673f129a794712579d7dbe</a>; Evgeny Gontmakher, "Changing Migration Trends in Russia," GIS, <a href="https://www.gisreportsonline.com/r/russia-mi-grants/">https://www.gisreportsonline.com/r/russia-mi-grants/</a>.
- 42. "Rogozin prizval ostanovit' «vymyvaniye mozgov» za rubezh [Rogozin Urged to Stop 'Brainwashing' Abroad]," RBC, February 27, 2018, <a href="https://www.rbc.ru/rbcfree-news/5a9524119a794717e2d20506">https://www.rbc.ru/rbcfree-news/5a9524119a794717e2d20506</a>.
- 43. Prokopenko, "The Cost of War: Russian Economy Faces a Decade of Regress."
- 44. Francesca Ebel and Mary Ilyushina, "Russians Abandon Wartime Russia in Historic Exodus," The Washington Post, February 13, 2023, <a href="https://www.washingtonpost.com/world/2023/02/13/russia-diaspora-war-ukraine/">https://www.washingtonpost.com/world/2023/02/13/russia-diaspora-war-ukraine/</a>.
- 45. Insikt Group, "Russia's War Against Ukraine Disrupts the Cybercriminal Ecosystem," Recorded Future, February 24, 2023, <a href="https://www.recordedfuture.com/russias-war-against-ukraine-disrupts-cybercriminal-ecosystem">https://www.recordedfuture.com/russias-war-against-ukraine-disrupts-cybercriminal-ecosystem</a>.
- 46. Dina Temple-Raston and Sean Powers, "'Cream of the Cream': Russia's High-Tech Brain Drain," The Record, May 9, 2022, <a href="https://therecord.media/cream-of-the-cream-russias-high-tech-brain-drain">https://therecord.media/cream-of-the-cream-russias-high-tech-brain-drain</a>.

- 47. Masha Borak, "How Russia Killed Its Tech Industry," MIT Technology Review, April 4, 2023, <a href="https://www.technologyreview.com/2023/04/04/1070352/ukraine-war-russia-tech-industry-yandex-skolkovo/#:~:text=In%20">https://www.technologyreview.com/2023/04/04/1070352/ukraine-war-russia-tech-industry-yandex-skolkovo/#:~:text=In%20</a> <a href="https://text-en/documents/text-en/documents/">the%20months%20after%20the,that%20is%20likely%20</a> <a href="mailto:an%20underestimate">an%20underestimate</a>.
- 48. "Over 1,000 Companies Have Curtailed Operations in Russia—but Some Remain," Yale School of Management, updated August 14, 2023, <a href="https://som.yale.edu/story/2022/over-1000-companies-have-curtailed-operations-russia-some-remain">https://som.yale.edu/story/2022/over-1000-companies-have-curtailed-operations-russia-some-remain</a>.
- Clay Lowery, Elina Ribakova, Benjamin Hilgenstock, and Greer Meisels, "Russia Sanctions: Adapting to a Moving Target" (Institute of International Finance, June 8, 2022), <a href="https://www.usubc.org/files/IIF\_Sanctions\_2022\_June8.pdf">https://www.usubc.org/files/IIF\_Sanctions\_2022\_June8.pdf</a>.
- 50. "Commerce Implements Sweeping Restrictions on Exports to Russia in Response to Further Invasion of Ukraine," Bureau of Industry and Security, press release, February 24, 2022, https://www.bis.doc.gov/index.php/documents/about-bis/newsroom/press-releases/2914-2022-02-24-bis-russia-rule-press-release-and-tweets-final/file.
- 51. Benjamin Schmitt, "Don't Stop Now—Tech Sanctions Can Wreck Putin's War Machine," Center for European Policy Analysis, July 28, 2022, <a href="https://cepa.org/article/dont-stop-now-tech-sanctions-can-wreck-putins-war-machine/">https://cepa.org/article/dont-stop-now-tech-sanctions-can-wreck-putins-war-machine/</a>; Anna Gross and Max Seddon, "Everything Is Gone': Russian Business Hit Hard by Tech Sanctions," Financial Times, June 2, 2022, <a href="https://www.ft.com/content/caf2cd3c-1f42-4e4a-b24b-c0ed803a6245">https://www.ft.com/content/caf2cd3c-1f42-4e4a-b24b-c0ed803a6245</a>.
- 52. Bill Toulas, "Russia Faces IT Crisis with Just Two Months of Data Storage Left," Bleeping Computer, March 15, 2022, <a href="https://www.bleepingcomputer.com/news/technology/russia-faces-it-crisis-with-just-two-months-of-data-storage-left/">https://www.bleepingcomputer.com/news/technology/russia-faces-it-crisis-with-just-two-months-of-data-storage-left/</a>.
- 53. Tim De Chant, "Russia Mulls Legalizing Software Piracy as It's Cut Off from Western Tech," Ars Technica, March 7, 2022, <a href="https://arstechnica.com/tech-policy/2022/03/russia-mulls-legalizing-software-piracy-as-its-cut-off-from-western-tech/">https://arstechnica.com/tech-policy/2022/03/russia-mulls-legalizing-software-piracy-as-its-cut-off-from-western-tech/</a>; "Mintsifry do kontsa aprelya predstavit proyekt o legalizatsii ispol'zovaniya zarubezhnogo PO [By the End of April, the Ministry of Digital Development Will Present a Draft on the Legalization of the Use of Foreign Software]," Interfax, April 19, 2023, <a href="https://www.interfax.ru/digital/896765">https://www.interfax.ru/digital/896765</a>.
- 54. "Ukraine Conflict a High Priority as Kerry Arrives for Talks in London," *The Moscow Times*, February 21, 2015, <a href="https://www.themoscowtimes.com/2015/02/21/ukraine-conflict-a-high-priority-as-kerry-arrives-for-talks-in-london-a44117">https://www.themoscowtimes.com/2015/02/21/ukraine-conflict-a-high-priority-as-kerry-arrives-for-talks-in-london-a44117</a>.
- 55. J. Scott Marcus, Niclas Poitiers, Monika Grzegorczyk, and Pauline Weil, "The Decoupling of Russia: High-

- Tech Goods and Components," Bruegel, March 28, 2022, <a href="https://www.bruegel.org/blog-post/decoupling-russia-high-tech-goods-and-components">https://www.bruegel.org/blog-post/decoupling-russia-high-tech-goods-and-components</a>.
- 56. Evgeny Gontmakher, "Russian Exports In Focus," GIS, May 25, 2021, https://www.gisreportsonline.com/r/russian-exports-2020/.
- 57. Charu Sudan Kasturi, "For Isolated Russia, Replacing Key Imports an Uphill Battle," Al Jazeera, April 1, 2022, <a href="https://www.aljazeera.com/economy/2022/4/1/for-isolated-russia-replacing-key-imports-an-uphill-battle">https://www.aljazeera.com/economy/2022/4/1/for-isolated-russia-replacing-key-imports-an-uphill-battle</a>.
- 58. Alena Epifanova and Phillipp Dietrich, "Russia's Quest for Digital Sovereignty," DGAP Analysis, no. 1 (February 2022), 1–27, https://dgap.org/sites/default/files/article\_pdfs/DGAP-Analyse-2022-01-EN\_0.pdf.
- 59. Maria Shagina and Emily Kilcrease, "Can Russia Rebuild Its Tech Sector with China's Help?" War on the Rocks, June 2, 2022, <a href="https://warontherocks.com/2022/06/can-russia-rebuild-its-tech-sector-with-chinas-help/">https://warontherocks.com/2022/06/can-russia-rebuild-its-tech-sector-with-chinas-help/</a>; "Sanctions Force Russia to Scale Back Ambitious 2030 Tech Strategy," *The Moscow Times*, April 10, 2023, <a href="https://www.themoscowtimes.com/2023/04/10/sanctions-force-russia-to-scale-back-ambitious-2030-tech-strategy-a80768">https://www.themoscowtimes.com/2023/04/10/sanctions-force-russia-to-scale-back-ambitious-2030-tech-strategy-a80768</a>.
- 60. "Enabling War Crimes? Western-Made Components in Russia's War Against Ukraine" (International Partnership for Human Rights and Independent Anti-Corruption Commission, February 2023), <a href="https://www.iphronline.org/wp-content/uploads/2023/02/Enabling-War-Crimes-report-final.pdf">https://www.iphronline.org/wp-content/uploads/2023/02/Enabling-War-Crimes-report-final.pdf</a>.
- 61. Adam Satariano, Paul Mozur, and Aaron Krolik, "When Nokia Pulled Out of Russia, a Vast Surveillance System Remained," *The New York Times*, March 28, 2022, <a href="https://www.nytimes.com/2022/03/28/technology/nokia-russia-surveillance-system-sorm.html">https://www.nytimes.com/2022/03/28/technology/nokia-russia-surveillance-system-sorm.html</a>.
- 62. Nikolai Antoniadis, Sophia Baumann, Christo Buschek, Maria Christoph, Jörg Diehl, Alexander Epp, Christo Grozev, Roman Höfner, Max Hoppenstedt, Carina Huppertz, Dajana Kollig, Anna-Lena Kornfeld, Roman Lehberger, Hannes Munzinger, Frederik Obermaier, Bastian Obermayer, Fedir Petrov, Alexandra Rojkov, Marcel Rosenbach, Thomas Schulz, Hakan Tanriverdi, and Wolf Wiedmann-Schmidt, "A Look Inside Putin's Secret Plans for Cyber-Warfare," Spiegel International, March 3, 2023, https://www.spiegel.de/international/world/ the-vulkan-files-a-look-inside-putin-s-secret-plans-forcyber-warfare-a-4324e76f-cb20-4312-96c8-1101c5655236; Craig Timberg, Ellen Nakashima, Hannes Munzinger, and Hakan Tanriverdi, "Secret Trove Offers Rare Look into Russian Cyberwar Ambitions," The Washington Post, March 30, 2023, https://www.washingtonpost.com/national-security/2023/03/30/russian-cyberwarfare-documents-vulkan-files/.
- 63. "Sanctioned Russian IT Firm Was Partner with Microsoft, IBM," Associated Press, April 15, 2021, <a href="https://apnews.">https://apnews.</a>

- com/article/business-europe-hacking-russia-dd8c331ff-30d366ea4f5d828e788c307.
- 64. "Russian Billionaires in Hunt for Stakes in Yandex's Local Assets—Sources," Rappler, May 20, 2023, https://www.rappler.com/business/russian-billionaires-hunt-stakes-yandex-local-assets/; "Startap napolovinu pust [Startup Half Empty]," Kommersant, January 12, 2023, https://www.kommersant.ru/doc/5760695.
- 65. "Vvedeniye v Rossii standarta svyazi 5G mogut otlozhit' do 2030 goda [The Introduction of the 5G Communication Standard in Russia May Be Postponed until 2030]," The Insider, May 19, 2023, <a href="https://theins.ru/news/261899">https://theins.ru/news/261899</a>; Gavin Wilde, "Can Russia's SORM Weather the Sanctions Storm?," Russian Analytical Digest, 298 (ETH Zurich Center for Security Studies, July 18, 2023): 5–10, <a href="https://doi.org/10.3929/ethz-b-000621535">https://doi.org/10.3929/ethz-b-000621535</a>.
- 66. "Tsodrazverstka [Data Allocation]," Kommersant, March 15, 2022, https://www.kommersant.ru/doc/5258236.
- 67. "Russia Has Lost 50K Scientists in 5 Years—RAS," The Moscow Times, May 19, 2023, https://www.themoscowtimes.com/2023/05/18/russia-has-lost-50k-scientists-in-5-years-ras-a81196; A.N. Klepach, L.B. Vodovatov, E.A. Dmitrieva. "Russian Science and Technology: Rise or Progressive Lag (Part I)." Studies on Russian Economic Development, 33 no. 6 (2022), 631–644, http://dx.doi.org/10.1134/S1075700722060077.
- 68. Matthias Schulze and Mika Kerttunen, "Cyber Operations in Russia's War against Ukraine," Stiftung Wissenschaft und Politik, April 17, 2023, <a href="https://www.swp-berlin.org/10.18449/2023C23/">https://www.swp-berlin.org/10.18449/2023C23/</a>.
- 69. Mary Ilyushina, "As Russia Drafts Young Men, Some Fear Ending Up on Ukraine's Front Line," The Washington Post, April 1, 2022, <a href="https://www.washingtonpost.com/world/2022/04/01/russia-military-army-conscripts-draft/">https://www.washingtonpost.com/world/2022/04/01/russia-military-army-conscripts-draft/</a>; "IT-kompanii smogut pretendovat' na l'gotny kredit, yesli sokhranyat ot 85% sotrudnikov [IT Companies Will Be Able to Qualify for a Preferential Loan If They Retain At Least 85% of Their Employees]," Interfax, April 19, 2022, <a href="https://www.interfax.ru/russia/835817">https://www.interfax.ru/russia/835817</a>.
- 70. Alberto Nardelli, "Russian Memo Said War Leaves Moscow Too Reliant on Chinese Tech," Bloomberg, April 18, 2023, <a href="https://www.bloomberg.com/news/articles/2023-04-19/russia-china-worries-set-out-in-private-memo-on-tech-risk">https://www.bloomberg.com/news/articles/2023-04-19/russia-china-worries-set-out-in-private-memo-on-tech-risk</a>.
- 71. Andrei Soldatov and Irina Borogan, "China Finally Enters Russia's Technological Treasure House," Center for European Policy Analysis, March 23, 2023, <a href="https://cepa.org/article/china-finally-enters-russias-technological-treasure-house/">https://cepa.org/article/china-finally-enters-russias-technological-treasure-house/</a>.
- 72. Andrew Roth and Pjotr Sauer, "Russian Defector Sheds Light on Putin Paranoia and His Secret Train Network," The Guardian, April 5, 2023, https://www.theguardian.

- com/world/2023/apr/05/russian-defector-sheds-light-on-putin-paranoia-including-secret-train.
- 73. Riya Baibhawi, "Blessing in Disguise': Putin Says Exit of Companies Will Help Russia End Dependency on Foreign Technologies," RepublicWorld.com, July 21, 2022, https://www.republicworld.com/world-news/russia-ukraine-crisis/putin-says-exit-of-companies-will-help-russia-end-dependency-on-foreign-technologies-articleshow.html; "Russian-Chinese Talks," President of Russia, March 21, 2023, http://en.kremlin.ru/events/president/news/70748.
- 74. Alexander Gabuev, "Neighbors, Partners, Competitors: Drivers and Limitations of China-Russia Relations," Carnegie Endowment for International Peace, December 31, 2021, https://carnegiemoscow.org/commentary/86104.
- 75. Staurt Lau, "China's New Vassal: Vladimir Putin," Politico, June 6, 2022, https://www.politico.eu/article/china-new-vassal-vladimir-putin/.
- 76. Hazel Vasquez, "The Launch of 5G in Russia Is Now Expected No Earlier Than 2030—Many Countries Will Have 6G by Then," Aroged, May 20, 2023, <a href="https://www.aroged.com/2023/05/20/the-launch-of-5g-in-russia-is-now-expected-no-earlier-than-2030-many-countries-will-have-6g-by-then/">https://www.aroged.com/2023/05/20/the-launch-of-5g-in-russia-is-now-expected-no-earlier-than-2030-many-countries-will-have-6g-by-then/</a>; Epifanova and Dietrich, "Russia's Quest for Digital Sovereignty."
- 77. Kommersant, "VK uvelichil vyruchku na 19% za 2022 god [VK Increased Revenue by 19% in 2022]," Kommersant, March 16, 2023, <a href="https://www.kommersant.ru/doc/5875758">https://www.kommersant.ru/doc/5875758</a>.
- 78. Iris Deng, "Huawei Disbands Enterprise Business Team in Russia in Further Pullback amid Western Sanctions, Local Media Reports," South China Morning Post, December 20, 2022, <a href="https://www.scmp.com/tech/big-tech/article/3203995/huawei-disbands-enterprise-business-team-russia-further-pullback-amid-western-sanctions-local-media; Dan Strumpf, "Chinese Tech Firms Weigh Opportunities in Russia after Western Pullout," The Wall Street Journal, March 7, 2022, <a href="https://www.wsj.com/articles/chinese-tech-firms-weigh-opportunities-in-russia-after-western-pullout-11646642178">https://www.wsj.com/articles/chinese-tech-firms-weigh-opportunities-in-russia-after-western-pullout-11646642178</a>.
- 79. James Byrne, Gary Somerville, Joe Byrne, Jack Watling, Nick Reynolds, and Jane Baker, "Silicon Lifeline: Western Electronics at the Heart of Russia's War Machine" (Royal United Services Institute, August 2022), <a href="https://static.rusi.org/RUSI-Silicon-Lifeline-final-updat-ed-web\_1.pdf">https://static.rusi.org/RUSI-Silicon-Lifeline-final-updat-ed-web\_1.pdf</a>.
- 80. Byrne, Somerville, Byrne, Watling, Reynolds, and Baker, "Silicon Lifeline."
- 81. "Russia Is Successfully Evading Western Technology Sanctions," BNE IntelliNews, March 6, 2023, <a href="https://intellinews.com/russia-is-successfully-evading-western-technology-sanctions-271899/">https://intellinews.com/russia-is-successfully-evading-western-technology-sanctions-271899/</a>.

- 82. "British Firm Ships \$1.2 Billion of Electronics to Russia Despite Sanctions," The Moscow Times, April 7, 2023, <a href="https://www.themoscowtimes.com/2023/04/07/british-firm-ships-12bln-of-electronics-to-russia-despite-sanctions-ft-a80753">https://www.themoscowtimes.com/2023/04/07/british-firm-ships-12bln-of-electronics-to-russia-despite-sanctions-ft-a80753</a>; Tobias Mann, "US Sanctions Fail to Stop Russia Connecting with Cisco Hardware," The Register, February 15, 2023, <a href="https://www.theregister.com/2023/02/15/grey\_market\_sellers\_defeat\_sanctions/">https://www.theregister.com/2023/02/15/grey\_market\_sellers\_defeat\_sanctions/</a>.
- 83. Kyiv Independent news desk, "Financial Times: UK Firm Has Exported \$1.2 Billion of Electronics to Russia Despite Sanctions," Yahoo News, April 7, 2023, <a href="https://www.yahoo.com/lifestyle/financial-times-uk-firm-exported-180830341.html?guccounter=1">https://www.yahoo.com/lifestyle/financial-times-uk-firm-exported-180830341.html?guccounter=1</a>.
- 84. Kyiv Independent, "Financial Times: UK Firm Has Exported \$1.2 Billion of Electronics to Russia."
- 85. Emily Benson and Margot Putnam, "The United States Prepares to Screen Outbound Investment," Center for Strategic and International Studies, April 27, 2023, <a href="https://www.csis.org/analysis/united-states-pre-pares-screen-outbound-investment">https://www.csis.org/analysis/united-states-pre-pares-screen-outbound-investment</a>.
- 86. Irina Plaks, "Want to Hurt Putin? Back a Brain Drain from Russia," Atlantic Council, March 24, 2022, <a href="https://www.atlanticcouncil.org/blogs/new-atlanticist/want-to-hurt-putin-back-a-brain-drain-from-russia/">https://want-to-hurt-putin-back-a-brain-drain-from-russia/</a>; Mikhail Khodorkovsky, "A Smart British Visa Policy Could Exploit the Russian Brain Drain and Weaken Putin," *The Guardian*, October 30, 2022, <a href="https://www.theguardian.com/politics/2022/oct/30/british-visa-policy-exploit-russian-brain-drain-and-weaken-putin">https://www.theguardian.com/politics/2022/oct/30/british-visa-policy-exploit-russian-brain-drain-and-weaken-putin</a>; Pedro Nicolaci Da Costa, "Global Competition for a Limited Pool of Technology Workers Is Heating Up," International Monetary Fund, March 2019, <a href="https://www.imf.org/en/Publications/fandd/issues/2019/03/global-competition-for-technology-workers-costa">https://www.imf.org/en/Publications/fandd/issues/2019/03/global-competition-for-technology-workers-costa</a>.
- 87. Peter Baker, "Biden Seeks to Lure Russia's Top Scientists to the U.S.," *The New York Times*, April 29, 2022, <a href="https://www.nytimes.com/2022/04/29/world/europe/biden-russia-scientists.html">https://www.nytimes.com/2022/04/29/world/europe/biden-russia-scientists.html</a>.
- 88. Devlin Barrett, "Want to Talk? FBI Trolls Russian Embassy for Disgruntled Would-Be Spies," *The Washington Post*, March 24, 2022, <a href="https://www.washingtonpost.com/national-security/2022/03/23/fbi-russia-spy-recruiting-ukraine/">https://www.washingtonpost.com/national-security/2022/03/23/fbi-russia-spy-recruiting-ukraine/</a>; Caitlin Yilek and Olivia Gazi, "CIA Seeks to Recruit Russian Spies with New Video Campaign," CBS News, May 16, 2023, <a href="https://www.cbsnews.com/news/cia-video-russian-spies-ukraine/">https://www.cbsnews.com/news/cia-video-russian-spies-ukraine/</a>.
- 89. Daniel Stolle, "Much of Russia's Intellectual Elite Has Fled the Country," The Economist, August 9, 2022, <a href="https://www.economist.com/international/2022/08/09/much-of-russias-intellectual-elite-has-fled-the-country">https://www.economist.com/international/2022/08/09/much-of-russias-intellectual-elite-has-fled-the-country</a>.
- 90. See the CBR's balance of payments data here: "External Sector Statistics," Bank of Russia, updated August 15, 2023, https://www.cbr.ru/eng/statistics/macro\_itm/svs/.

- 91. Elina Ribakova, "Sanctions Against Russia Will Worsen Its Already Poor Economic Prospects," Peterson Institute for International Economics, April 18, 2023, <a href="https://www.piie.com/blogs/realtime-economics/sanctions-against-russia-will-worsen-its-already-poor-economic-prospects">https://www.piie.com/blogs/realtime-economics/sanctions-against-russia-will-worsen-its-already-poor-economic-prospects</a>.
- 92. The numbers were calculated based on the CBR's data on official reserve assets, information on the pre-sanctions currency and geographical composition of reserves, and market exchange rates. "International Reserves of the Russian Federation (End of period)," Bank of Russia, updated August 1, 2023, <a href="https://www.cbr.ru/eng/hd\_base/mrrf/mrrf\_m/">https://www.cbr.ru/eng/hd\_base/mrrf/mrrf\_m/</a>; Obzor deyatel'nosti banka rossii PO upravleniyu aktivami v inostrannykh valyutakh i zolote [Business Overview of the Bank of Russia for the Management of Foreign Assets, Currencies, and Gold]", Bank of Russia, 2022, <a href="https://www.cbr.ru/Collection/Collection/File/39684/2022-01\_res.pdf">https://www.cbr.ru/Collection/Collection/File/39684/2022-01\_res.pdf</a>; "Foreign Exchange Rates—H.10," Board of Governors of the Federal Reserve System, updated August 14, 2023, <a href="https://www.federalre-serve.gov/releases/h10/">https://www.federalre-serve.gov/releases/h10/</a>.
- 93. See Stephanie Bodoni and Alberto Nardelli, "EU Blocks More Than €200 Billion in Russian Central Bank Assets," Bloomberg, May 25, 2023, https://www.bloomberg.com/ news/articles/2023-05-25/eu-has-blocked-200-billion-inrussian-central-bank-assets.
- 94. For more information about the challenge of newly accumulated foreign assets, see Guntram Wolff, Benjamin Hilgenstock, and Elina Ribakova, "Toughening Financial Sanctions on Russia," DGAP Policy Brief, May 16, 2023, <a href="https://dgap.org/en/research/publications/toughening-financial-sanctions-russia">https://dgap.org/en/research/publications/toughening-financial-sanctions-russia</a>.
- 95. See the CBR's balance of payments data at: "External Sector Statistics."
- 96. See the CBR's report at "Fevral' 2023 Obzor Riskov Finansovykh Rynkov: Informatsionno-analiticheskiy material [February 2023 Risk Overview for Financial Markets: Information and analytical material]," Bank of Russia, February 2023, <a href="http://www.cbr.ru/Collection/Collection/File/43828/ORFR\_2023-02.pdf">http://www.cbr.ru/Collection/Collection/File/43828/ORFR\_2023-02.pdf</a>.
- 97. "Obzor riskov finansovykh rynkov [Survey of Financial Market Risks]," Bank Rossii, February 2023, <a href="http://www.cbr.ru/Collection/Collection/File/43828/ORFR\_2023-02.pdf">http://www.cbr.ru/Collection/Collection/File/43828/ORFR\_2023-02.pdf</a>.
- 98. See the Ministry of Finance's fiscal data at "Kratkaya yezhemesyachnaya informatsiya ob ispolnenii federal'nogo byudzheta (mlrd. rub., nakopleno s nachala goda) [Brief monthly information on the execution of the federal budget (billion rubles, accumulated since the beginning of the year)]," The Russian Ministry of Finance, August 10, 2023, https://minfin.gov.ru/ru/document?id\_4=80042-kratkaya\_ezhemesyachnaya\_informatsiya\_ob\_ispolnenii\_federalnogo\_byudzheta\_mlrd.\_rub.\_nakopleno\_s\_nachala\_goda.

- 99. "Kartkaya yezhemesyachnaya informatsiya ob ispolnenii federal'nogo byudzheta (mlrd. rub., nakopleno s nachala goda) [ A Brief Montly Report on the Execution of the Federal Budget (billion rubles, accumulated since the beginning of the year)]," Minfin Rossii, August 8, 2023, <a href="https://minfin.gov.ru/ru/document?id\_4=80042-kratkaya\_ezhemesyachnaya\_informatsiya\_[...]enii\_federalnogo\_byudzheta\_mlrd.\_rub.\_nakopleno\_s\_nachala\_goda.">https://minfin.gov.ru/ru/document?id\_4=80042-kratkaya\_ezhemesyachnaya\_informatsiya\_[...]enii\_federalnogo\_byudzheta\_mlrd.\_rub.\_nakopleno\_s\_nachala\_goda.</a>
- 100. "Denezhno-kreditnaya i finansoaya statistika [Monetary and Financial Statistics]," Bank Rossii, n.d., <a href="https://www.cbr.ru/statistics/macro\_itm/dkfs/">https://www.cbr.ru/statistics/macro\_itm/dkfs/</a>.
- 101. Sberbank, VTB Bank, Gazprombank, Alfa-Bank, Rosselkhozbank, Credit Bank of Moscow, Bank Otkritie, VEB, Promsvyazbank, and Sovcombank.
- 102. The numbers were calculated based on the CBR's data on official reserve assets, information on the pre-sanctions currency and geographical composition of reserves, and market exchange rates. "International Reserves of the Russian Federation (End of period)," Bank of Russia, updated August 1, 2023, https://www.cbr.ru/eng/hd\_base/mrrf/mrrf\_m/; Obzor deyatel'nosti banka rossii PO upravleniyu aktivami v inostrannykh valyutakh i zolote [Business Overview of the Bank of Russia for the Management of Foreign Assets, Currencies, and Gold]", Bank of Russia, 2022, https://www.cbr.ru/Collection/Collection/File/39684/2022-01\_res.pdf; "Foreign Exchange Rates—H.10," Board of Governors of the Federal Reserve System, updated August 14, 2023, https://www.federalreserve.gov/releases/h10/.
- 103. Wolff, Hilgenstock, and Ribakova, "Toughening Financial Sanctions on Russia."
- 104. Tania Babina, Benjamin Hilgenstock, Oleg Itskhoki, Maxim Mironov, and Elina Ribakova, "Assessing the Impact of International Sanctions on Russian Oil Exports," Centre for Economic Policy Research, April 20, 2023, <a href="https://cepr.org/voxeu/columns/assessing-impact-international-sanctions-russian-oil-exports">https://cepr.org/voxeu/columns/assessing-impact-international-sanctions-russian-oil-exports</a>; "Oil and Gas Revenue to the Federal Budget in Russia from 2006 to 2022," Statista, April 3, 2023, <a href="https://www.statista.com/statistics/1028682/russia-federal-budget-oil-and-gas-revenue/">https://www.statista.com/statistics/1028682/russia-federal-budget-oil-and-gas-revenue/</a>.
- 105. "Country & Product Complexity Rankings," Growth Lab, <a href="https://atlas.cid.harvard.edu/rankings">https://atlas.cid.harvard.edu/rankings</a>; "Russia's Reliance on Energy Spells Trouble for Its Economy," *The Economist*, March 8, 2022, <a href="https://www.economist.com/graphic-detail/2022/03/08/russias-reliance-on-energy-spells-trouble-for-its-economy">https://www.economist.com/graphic-detail/2022/03/08/russias-reliance-on-energy-spells-trouble-for-its-economy</a>.
- 106. Chris Miller, Putinomics: Power and Money in Resurgent Russia (Chapel Hill, NC: University of North Carolina Press, 2014), 128-131. For instance, during his term as president, Dmitri Medvedev complained, "Finished products produced in Russia are largely plagued by extremely low competitiveness," and launched, among other initiatives aimed at diversification, the Skolkovo Innovation Center, which was intended to be the hub of a Russian version of Silicon Valley.

- 107. Ebel and Ilyushina, "Russians Abandon Wartime Russia in Historic Exodus"; Stolle, "Much of Russia's Intellectual Elite Has Fled the Country."
- 108. "Russian Car Production Slumped to Lowest since Soviet Times in 2022," Reuters, February 1, 2023, <a href="https://www.reuters.com/business/autos-transportation/russian-car-production-slumped-lowest-since-soviet-times-2022-2023-02-01/">https://www.reuters.com/business/autos-transportation/russian-car-production-slumped-lowest-since-soviet-times-2022-2023-02-01/</a>.
- 109. Ann Simmons, Andrew Duehren, and David Uberti, "Russia Bans Sales of Oil to Countries Imposing Price Cap," *The Wall Street Journal*, December 27, 2022, <a href="https://www.wsj.com/articles/kremlin-banssales-of-russian-oil-to-countries-that-impose-price-cap-11672161766">https://www.wsj.com/articles/kremlin-banssales-of-russian-oil-to-countries-that-impose-price-cap-11672161766</a>; Jim Tankersley, "An Untested Oil Price Cap Has Helped Choke Revenue to Russia," *The New York Times*, May 18, 2023, <a href="https://www.nytimes.com/2023/05/18/business/g7-biden-oil-price-cap-russia.html">https://www.nytimes.com/2023/05/18/business/g7-biden-oil-price-cap-russia.html</a>.
- 110. Joe Wallace, "Oil Prices Under Pressure on Economic Fears and Gusher of Russian Supply," *The Wall Street Journal*, May 4, 2023, https://www.wsj.com/articles/oil-prices-under-pressure-on-economic-fears-and-gusher-of-russian-supply-c96f7576.
- 111. "Infographic—Where Does the EU's Gas Come From?"
  Council of the European Union, updated February 7,
  2023, https://www.consilium.europa.eu/en/infographics/eu-gas-supply/; Chi; Kong Chyong, Anne-Sophie Corbeau, Ira Joseph, and Tatiana Mitrova, "Future Options for Russian Gas Exports" (Center on Global Energy Policy, January 19, 2023), https://www.energypolicy.columbia.edu/publications/future-options-russian-gas-exports/.
- 112. "Infographic—Where Does the EU's Gas Come From?";
  Paul Krugman, "Putin's Energy Offensive Has Failed,"
  The New York Times, April 6, 2023, https://www.nytimes.
  com/2023/04/06/opinion/putins-energy-natural-gas.
  html.
- 113. AFP, "Russian Gas Exports Sink by 25% Despite Rise in Oil Sales," *The Moscow Times*, February 14, 2023, <a href="https://www.themoscowtimes.com/2023/02/13/russian-gas-exports-sink-by-25-despite-rise-in-oil-sales-a80215">https://www.themoscowtimes.com/2023/02/13/russian-gas-exports-sink-by-25-despite-rise-in-oil-sales-a80215</a>.
- 114. Stanley Reed, "Russia's Gas Exports Are Expected to Slide in 2023," *The New York Times*, April 27, 2023, <a href="https://www.nytimes.com/2023/04/27/business/energy-environment/russias-gas-exports-2023.html">https://www.nytimes.com/2023/04/27/business/energy-environment/russias-gas-exports-2023.html</a>.
- 115. Babina, Hilgenstock, Itskhoki, Mironov, and Ribakova, "Assessing the Impact of International Sanctions on Russian Oil Exports."
- 116. Edward Fishman, "How the Price Cap on Russian Oil Will Work in Practice," Center on Global Energy Policy, November 30, 2022, <a href="https://www.energypolicy.columbia.edu/publications/how-price-cap-russian-oil-will-work-practice/">https://www.energypolicy.columbia.edu/publications/how-price-cap-russian-oil-will-work-practice/</a>.

- 117. Nerijus Adomaitis, "Factbox: How the EU Ban on Russian Oil Imports Affects Oil Flows," Reuters, March 15, 2023, <a href="https://www.reuters.com/business/energy/how-eu-ban-russian-crude-affects-oil-flows-2023-02-27/">https://www.reuters.com/business/energy/how-eu-ban-russian-crude-affects-oil-flows-2023-02-27/</a>.
- 118. Nuran Erkul, "Oil Trade Routes That Take At Least 5
  Times as Long After War Will Likely Result in More
  Pollution," Anadolu Agency, April 27, 2023, <a href="https://www.aa.com.tr/en/economy/oil-trade-routes-that-take-at-least-5-times-as-long-after-war-will-likely-result-in-more-pollution/2881764">https://www.aa.com.tr/en/economy/oil-trade-routes-that-take-at-least-5-times-as-long-after-war-will-likely-result-in-more-pollution/2881764</a>.
- 119. "Russian Oil and Gas Budget Revenues Almost Halved in the First Half of the Year," Reuters, July 5, 2023, <a href="https://www.reuters.com/business/energy/russian-oil-gas-budget-revenues-almost-halved-january-june-2023-07-05/">https://www.reuters.com/business/energy/russian-oil-gas-budget-revenues-almost-halved-january-june-2023-07-05/</a>; Andrea Shalal, "US Sees Price Cap on Russian Oil Working Despite Upturn in Prices," Reuters, August 3, 2023, <a href="https://www.reuters.com/business/energy/us-sees-price-cap-russian-oil-working-despite-upturn-prices-2023-08-03/">https://www.reuters.com/business/energy/us-sees-price-cap-russian-oil-working-despite-upturn-prices-2023-08-03/</a>.
- 120. Benjamin Hilgenstock, Elina Ribakova, Nataliia Shapoval, Tania Babina, Oleg Itskhoki, and Maxim Mironov, "Russian Oil Exports Under International Sanctions" (Yermak-McFaul International Working Group on Russian Sanctions and KSE Institute, April 26, 2023), <a href="http://dx.doi.org/10.2139/ssrn.4430053">http://dx.doi.org/10.2139/ssrn.4430053</a>.
- 121. Joe Wallace, Ian Talley, and Anna Hirtenstein, "Russia Defies Sanctions by Selling Oil above Price Cap," Wall Street Journal, July 23, 2023, https://www.wsj.com/articles/russia-defies-sanctions-by-selling-oil-above-price-cap-baelc271.
- 122. Byron McKinney, "Russia's Shadow Fleet—Understanding Its Size, Activity and Relationships," S&P Global, March 17, 2023, <a href="https://www.spglobal.com/marketintelligence/en/mi/research-analysis/russias-shadow-fleet-under-standing-its-size-activity-and-relat.html">https://www.spglobal.com/marketintelligence/en/mi/research-analysis/russias-shadow-fleet-under-standing-its-size-activity-and-relat.html</a>; Chris Cook and David Sheppard, "Russia Dodges G7 Price CapS Sanctions on Most of Its Oil Exports," *Financial Times*, September 24, 2023, <a href="https://www.ft.com/content/cad37c16-9cbd-473c-aa2f-102c21393d2e">https://www.ft.com/content/cad37c16-9cbd-473c-aa2f-102c21393d2e</a>.
- 123. Anastasia Stognei, Joe Leahy, and Yuan Yang, "Power of Siberia: China Keeps Putin Waiting on Gas Pipeline," *Financial Times*, May 25, 2023, https://www.ft.com/content/541f8bcb-118a-419e-869f-3273fcc9ce92.
- 124. Chyong, Corbeau, Joseph, and Mitrova, "Future Options for Russian Gas Exports."
- 125. Anastasia Stognei, "Russia Admits 'Problems' as Energy Revenues Drop," *Financial Times*, May 17, 2023, <a href="https://www.ft.com/content/c99fc8e9-35d5-42c6-9361-5012d5dec581?accessToken=zwAF-\_4byYGokdPJn8jpNdVCxtO-TYVAS1d7FgQ.MEUCIQCGdYLl8bGrnXFzklImo09O1m-hd3IfmwoTXAIfSRbuuhQIgRxp\_UsBIS2O9GrKb-52JRA-9tHuXa1HVibvjTdRp8-SM&sharetype=gift&token=1553132a-47f8-40f5-b8c1-52994fe9a8b9.

- 126. Stognei, "Russia admits 'problems' as energy revenues drop."
- 127. Reuters, "Russia maintains plans for budget deficit reduction in coming years," September 11, 2023, <a href="https://www.reuters.com/world/europe/russia-maintains-plan-budget-deficit-reduction-coming-years-finance-minister-2023-09-11/">https://www.reuters.com/world/europe/russia-maintains-plan-budget-deficit-reduction-coming-years-finance-minister-2023-09-11/</a>.
- 128. Elizabeth Rosenberg and Eric Van Nostrand, "The Price Cap on Russian Oil: A Progress Report," U.S. Department of the Treasury, May 18, 2023, <a href="https://home.treasury.gov/news/featured-stories/the-price-cap-on-russian-oil-a-progress-report">https://home.treasury.gov/news/featured-stories/the-price-cap-on-russian-oil-a-progress-report</a>.
- 129. Bloomberg News, "Russia to Boost Currency Sales to Offset Energy Revenue Drop," February 3, 2023, <a href="https://www.bloomberg.com/news/articles/2023-02-03/russia-to-ramp-up-currency-sales-to-offset-energy-revenue-plunge.">https://www.bloomberg.com/news/articles/2023-02-03/russia-to-ramp-up-currency-sales-to-offset-energy-revenue-plunge.</a>
- 130 Bloomberg News, "Why Putin Is Worried About Russia's Volatile Ruble," September 1, 2023, https://www.bloomberg.com/news/articles/2023-09-01/why-putin-isworried-about-russia-s-volatile-ruble-usd-rub.
- 131. "Statement from President Biden on United Nations Security Council Meeting," The White House, press release, January 31, 2022, <a href="https://www.whitehouse.gov/briefing-room/statements-releases/2022/01/31/statement-from-president-biden-on-united-nations-security-council-meeting/">https://www.whitehouse.gov/briefing-room/statements-releases/2022/01/31/statement-from-president-biden-on-united-nations-security-council-meeting/</a>.
- 132. "Questions and Answers: G7 Agrees Oil Price Cap to Reduce Russia's Revenues, while Keeping Global Energy Markets Stable," European Commission, December 3, 2022, <a href="https://ec.europa.eu/commission/presscorner/detail/en/QANDA\_22\_7469">https://ec.europa.eu/commission/presscorner/detail/en/QANDA\_22\_7469</a>.
- 133. Martin Sandbu, "Chasing Russia's Shadow Reserves," *Financial Times*, March 9, 2023, https://www.ft.com/content/99211a0c-67e3-4a9f-b5be-4611b34b78d9.
- 134. U.S. Department of the Treasury, Office of Foreign Assets Control, "Russian Harmful Foreign Activities Sanctions Regulations 31 CFR part 587: General License No. 8G Authorizing Transactions Related to Energy," May 5, 2023, https://ofac.treasury.gov/media/931721/download?inline.
- 135. Craig Kennedy, "Russian Oil's Achilles Heel," Davis Center for Russian and Eurasian Studies, April 7, 2022, <a href="https://daviscenter.fas.harvard.edu/insights/russian-oils-achilles-heel">https://daviscenter.fas.harvard.edu/insights/russian-oils-achilles-heel</a>.
- 136. Chyong, Corbeau, Joseph, and Mitrova, "Future Options for Russian Gas Exports."
- 137. Kate Abnett, Marwa Rashad, and Gabriela Baczynska, "Analysis: LNG Imports Test EU Resolve to Quit Russian Fossil Fuel," Reuters, April 12, 2023, <a href="https://www.reuters.com/business/energy/lng-imports-test-eu-resolve-quit-russian-fossil-fuel-2023-04-12/">https://www.reuters.com/business/energy/lng-imports-test-eu-resolve-quit-russian-fossil-fuel-2023-04-12/</a>.

- 138. Chyong, Corbeau, Joseph, and Mitrova, "Future Options for Russian Gas Exports."
- 139. James Steinberg, "Briefing on Iran Sanctions Act Implementation," September 30, 2010, Washington, D.C., <a href="https://2009-2017.state.gov/s/d/former/steinberg/remarks/2010/169315.htm">https://2009-2017.state.gov/s/d/former/steinberg/remarks/2010/169315.htm</a>
- 140. Eugene Rumer, "The Method Behind Putin's New START Madness," Carnegie Endowment for International Peace, February 28, 2023, <a href="https://carnegieendowment.org/2023/02/28/method-behind-putin-s-new-start-madness-pub-89161">https://carnegieendowment.org/2023/02/28/method-behind-putin-s-new-start-madness-pub-89161</a>.
- 141. Anna Shamanska, "Behind Closed Doors: Ukraine's Panicked Meeting ahead of Crimean Seizure," Radio Free Europe, February 23, 2016, <a href="https://www.rferl.org/a/ukraine-crimea-seizure-panicked-meeting/27569836.html">https://www.rferl.org/a/ukraine-crimea-seizure-panicked-meeting/27569836.html</a>.
- 142. Anton Troianovski, "Putin Announces a 'Military Operation' in Ukraine as the U.N. Security Council Pleads with Him to Pull Back," *The New York Times*, February 23, 2022, https://www.nytimes.com/2022/02/23/world/europe/putin-announces-a-military-operation-in-ukraine-as-the-un-security-council-pleads-with-him-to-pull-back. html.
- 143. "Joint Declaration of Support for Ukraine," U.S. Department of State, July 12, 2023, <a href="https://www.state.gov/joint-declaration-of-support-for-ukraine">https://www.state.gov/joint-declaration-of-support-for-ukraine</a>.
- 144. Anne Applebaum and Jeffrey Goldberg, "The Counteroffensive," *The Atlantic*, May 1, 2023, <a href="https://www.theatlantic.com/magazine/archive/2023/06/counteroffensive-ukraine-zelensky-crimea/673781/">https://www.theatlantic.com/magazine/archive/2023/06/counteroffensive-ukraine-zelensky-crimea/673781/</a>.
- 145. Aaron Mehta and Reuben Johnson, "Armed with Storm Shadow, Ukraine Could 'Starve' Russian Front Lines of Logistics, Leadership," Breaking Defense, May 16, 2023, https://breakingdefense.com/2023/05/armed-withstorm-shadow-ukraine-could-starve-russian-front-linesof-logistics-leadership/; Vasco Cotovio and Tara John, "Ukraine Admits It Was Behind Three Explosions in Crimea. Here's What We Know," CNN, August 17, 2022, https://www.cnn.com/2022/08/17/europe/crimea-explosions-russia-ukraine-intl/index.html; David Rising, "Russian Official: Ukrainian Drones Strike Crimea Oil Depot," Associated Press, April 29, 2023, https:// apnews.com/article/russia-ukraine-war-crimea-drone-29218ed006a79c4b0629688ce4820cc8; Yaroslav Trofimov, "Ukraine Strikes Headquarters of Russia's Black Sea Fleet in Crimea," The Wall Street Journal, September 22, 2023, https://www.wsj.com/world/europe/ukraine-strikesthe-headquarters-of-russias-black-sea-fleet-in-crimea-
- 146. Mehta and Johnson, "Armed with Storm Shadow, Ukraine Could 'Starve' Russian Front Lines."
- 147. James Glanz and Marco Hernandez, "How Ukraine Blew Up a Key Russian Bridge," *The New York Times*,

- November 17, 2022, <a href="https://www.nytimes.com/interactive/2022/11/17/world/europe/crimea-bridge-collapse.">httml</a>; Reuters, "Ukraine's SBU Claims Responsibilityc laims responsibility for Last Year's Crimea Bridge Blast," Reuters, July 26, 2023, <a href="https://www.reuters.com/world/europe/ukraines-sbu-claims-responsibility-last-years-crimea-bridge-blast-2023-07-26/">https://www.reuters.com/world/europe/ukraines-sbu-claims-responsibility-last-years-crimea-bridge-blast-2023-07-26/</a>.
- 148. Yuriy Matsiyevsky, "Ukraine's Resistance Movement in Occupied Territories," Real Clear World, March 23, 2023, <a href="https://www.realclearworld.com/2023/03/23/ukraines\_resistance\_movement\_in\_occupied\_territories\_888977">https://www.realclearworld.com/2023/03/23/ukraines\_resistance\_movement\_in\_occupied\_territories\_888977</a>. html.
- 149. Jean-Francois Ratelle, "Ukraine's Insurgency, Purposefully Limited in Aims and Size, Pokes Holes in Russian Occupation," Russia Matters, November 3, 2022, <a href="https://www.russiamatters.org/analysis/ukraines-insurgency-purpose-fully-limited-aims-and-size-pokes-holes-russian-occupation.">https://www.russiamatters.org/analysis/ukraines-insurgency-purpose-fully-limited-aims-and-size-pokes-holes-russian-occupation.</a>
- 150. "Russia On Fire: The Rate of Fires Has Doubled in the Last Three Months," Molfar, <a href="https://molfar.com/en/blog/">https://molfar.com/en/blog/</a> what-burned-best-in-russia.
- 151. Reuters, "Russian Freight Train Derails after Being
  Hit by Explosive Device, Bryansk Governor Says," ABC
  (Australia Broadcasting Corporation) News, May 1, 2023,
  <a href="https://www.abc.net.au/news/2023-05-01/russian-rail-ways-train-derailment-fire-bryansk-region-gover-nor/102289654">https://www.abc.net.au/news/2023-05-01/russian-rail-ways-train-derailment-fire-bryansk-region-gover-nor/102289654</a>.
- 152. "Suspected Drone Hits Oil Depot in Russia's Oryol, Officials Say," Reuters, November 16, 2022, <a href="https://www.reuters.com/world/europe/suspected-drone-hits-oil-de-pot-russias-oryol-regional-governor-2022-11-16/">https://www.reuters.com/world/europe/suspected-drone-hits-oil-de-pot-russias-oryol-regional-governor-2022-11-16/</a>.
- 153. "Explosion in Russian Café Kills Prominent Military Blogger," Associated Press, April 3, 2023, <a href="https://apnews.com/article/russia-explosion-military-blogger-killed-ea-2b036718512a1e93bab8f7f91e0d9f">https://apnews.com/article/russia-explosion-military-blogger-killed-ea-2b036718512a1e93bab8f7f91e0d9f</a>; Leo Sands, "Darya Dugina: Daughter of Putin Ally Killed in Moscow Blast," BBC News, August 21, 2022, <a href="https://www.bbc.com/news/world-europe-62621509">https://www.bbc.com/news/world-europe-62621509</a>.
- 154. Steve Rosenberg and Jaroslav Lukiv, "Ukraine War: Drone Attack on Russian Bomber Base Leaves Three Dead," BBC News, December 26, 2022, <a href="https://www.bbc.com/news/world-europe-64092183">https://www.bbc.com/news/world-europe-64092183</a>; Yaroslav Trofimov and Ann M. Simmons, "Ukrainian Drones Strike Deep Inside Russia, Hitting Military Airfield, Other Targets," *The Wall Street Journal*, August 30, 2023, <a href="https://www.wsj.com/world/europe/ukrainian-drones-strike-deep-inside-russia-hitting-military-airfield-other-targets-e42ca54">https://www.wsj.com/world/europe/ukrainian-drones-strike-deep-inside-russia-hitting-military-airfield-other-targets-e42ca54</a>.
- 155. "Four Russian Military Aircraft Shot Down near Ukraine, Russian Daily Reports," Reuters, May 14, 2023, <a href="https://www.reuters.com/world/europe/videos-show-helicop-ter-apparently-shot-down-russia-near-ukrainian-bor-der-2023-05-13/">https://www.reuters.com/world/europe/videos-show-helicop-ter-apparently-shot-down-russia-near-ukrainian-bor-der-2023-05-13/</a>.

- 156. Andrew Roth, "Anti-Putin Militia Claims to Have Overrun Village in Russia Border Region of Belgorod," *The Guardian*, May 22, 2023, https://www.theguardian.com/world/2023/may/22/anti-kremlin-militia-freedom-of-russia-legion-overrun-russian-border-village-kozinka.
- 157. Jaroslav Lukiv and Christy Cooney, "Ukraine war: Kyiv Warns Russia as Moscow Skyscraper Hit in Second Drone Attack," BBC News, August 1, 2023, <a href="https://www.bbc.com/news/world-europe-66368016">https://www.bbc.com/news/world-europe-66368016</a>.
- 158. Britt Clennett, Dragana Jovanovic, and Tatiana Rymarenko, "Expect More Strikes 'Deeper and Deeper' into Russia, Ukraine's Spy Chief Tells ABC News," ABC News, January 4, 2023, <a href="https://abcnews.go.com/International/expect-strikes-deeper-deeper-russia-ukraines-spy-chief/story?id=96127220">https://abcnews.go.com/International/expect-strikes-deeper-deeper-russia-ukraines-spy-chief/story?id=96127220</a>.
- 159. Christiaan Triebert, Haley Willis, Yelyzaveta Kovtun, and Alexander Cardia, "Ukraine's Other Counteroffensive: Drone Attacks on Russian Soil," *The New York Times*, July 31, 2023, <a href="https://www.nytimes.com/2023/07/31/world/europe/ukraine-drone-strikes-russia.html">https://www.nytimes.com/2023/07/31/world/europe/ukraine-drone-strikes-russia.html</a>.
- 160. Isabelle Khurshudyan, "Ukraine Intel Chief Predicted Russia's War. He Says Crimea Will Be Retaken," *The Washington Post*, January 31, 2023, <a href="https://www.washingtonpost.com/world/2023/01/31/kyrylo-budanov-ukraine-intelligence-boss-interview/">https://www.washingtonpost.com/world/2023/01/31/kyrylo-budanov-ukraine-intelligence-boss-interview/</a>.
- 161. Stefan Soesanto, "The IT Army of Ukraine: Structure, Tasking, and Ecosystem," (Center for Security Studies and ETH Zürich, June 2022), <a href="https://css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/Cyber-Reports-2022-06-IT-Army-of-Ukraine.pdf">https://css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/Cyber-Reports-2022-06-IT-Army-of-Ukraine.pdf</a>.
- 162. Lorenzo Franceschi-Bicchierai, "Inside Ukraine's Decentralized Cyber Army," Vice, July 19, 2022, <a href="https://www.vice.com/en/article/y3pvmm/inside-ukraines-decentralized-cyber-army">https://www.vice.com/en/article/y3pvmm/inside-ukraines-decentralized-cyber-army</a>; Shaun Waterman, "Ukraine's Volunteer Cyber Army Could Be Blueprint for the World: Experts," Newsweek, February 21, 2023, <a href="https://www.newsweek.com/ukraine-war-cyber-army-attack-strategy-war-fare-1780970">https://www.newsweek.com/ukraine-war-cyber-army-attack-strategy-war-fare-1780970</a>.
- 163. AJ Vicens, "Ukrainian Hackers Target Telecom Firm Connected to Russian Central Bank," Cyberscoop, June 9, 2023, <a href="https://cyberscoop.com/ukraine-counteroffensive-hack-ers-infotel/">https://cyberscoop.com/ukraine-counteroffensive-hack-ers-infotel/</a>.
- 164. "BagdasarovLeaks: Hacking Ex-Member of the Russian State Duma Semyon Bagdasarov. Iranian Gambit," Inform Napalm, April 7, 2023, <a href="https://informnapalm.org/en/bagdasarovleaks-hacking-semyon-bagdasarov/">https://informnapalm.org/en/bagdasarovleaks-hacking-semyon-bagdasarov/</a>; "Hacking a Russian War Criminal, Commander of 960th Assault Aviation Regiment," Inform Napalm, March 29, 2023, <a href="https://informnapalm.org/en/hacking-75387-960-aviation-regiment/">https://informnapalm.org/en/hacking-75387-960-aviation-regiment/</a>; "Hacked: Russian GRU officer Wanted by the FBI, Leader of the Hacker Group APT 28," Inform Napalm, April 10, 2023, <a href="https://informnapalm.org/en/hacked-russian-gru-officer/">https://informnapalm.org/en/hacked-russian-gru-officer/</a>.

- 165. "Cyber Conflict in the Russia-Ukraine War," Carnegie Endowment for International Peace, April 18, 2023, <a href="https://carnegieendowment.org/programs/technology/cyberconflictintherussiaukrainewar/">https://carnegieendowment.org/programs/technology/cyberconflictintherussiaukrainewar/</a>.
- 166. Vivian Nereim, "Zelensky Urges Arab Leaders Not to 'Turn a Blind Eye' to Russian Aggression," The New York Times, May 19, 2023, https://www.nytimes.com/2023/05/19/world/europe/zelensky-arab-league-saudi-arabia.html; HT News Desk, "PM Modi Meets Zelensky in Japan, Calls Russia-Ukraine War 'issue of humanity'," Hindustan Times, May 20, 2023, https://www.hindustantimes.com/india-news/modi-zelensky-hold-talks-on-sidelines-of-g7-summit-first-meeting-sincerussias-invasion-101684576024351.html; News Desk, "Jokowi Conveys Support for Ukraine Peace Initiative," The Jakarta Post, May 22, 2023, https://www.thejakartapost.com/world/2023/05/22/jokowi-conveys-support-for-ukraine-peace-initiative.html.
- 167. Michelle Nichols, "Russia Isolated as U.N. Marks One Year of Ukraine War," Reuters, February 23, 2023, <a href="https://www.reuters.com/world/russia-isolated-un-marks-one-year-ukraine-war-2023-02-23/">https://www.reuters.com/world/russia-isolated-un-marks-one-year-ukraine-war-2023-02-23/</a>.
- 168. Philip Kennicott, "Ukraine Wants a Boycott of Russian Culture. It's Already Happening," *The Washington Post*, December 14, 2022, <a href="https://www.washingtonpost.com/">https://www.washingtonpost.com/</a> arts-entertainment/2022/12/14/ukraine-culture-boycott/.
- 169. Andrius Sytas, "Olympics Row Deepens as 35 Countries Demand Ban for Russia and Belarus," Reuters, February 10, 2023, <a href="https://www.reuters.com/lifestyle/sports/ukraines-zelenskiy-took-part-meeting-olympics-lithuania-says-2023-02-10/">https://www.reuters.com/lifestyle/sports/ukraines-zelenskiy-took-part-meeting-olympics-lithuania-says-2023-02-10/</a>.
- 170. "Ukraine's Naftogaz Takes Crimea Compensation Battle against Russia to US," Reuters, June 23, 2023, <a href="https://www.reuters.com/legal/ukraines-naftogaz-takes-legal-action-us-against-russia-over-crimea-compensation-2023-06-23/">https://www.reuters.com/legal/ukraines-naftogaz-takes-legal-action-us-against-russia-over-crimea-compensation-2023-06-23/</a>.
- 171. KSE institute, "Russia Will Pay," Kyiv School of Economics, March 2023, https://kse.ua/russia-will-pay/.
- 172. Patricia Zengerle, "US Lawmakers Hope Ukraine Can Fight Russia with Russian Assets," Reuters, June 16, 2023, <a href="https://www.reuters.com/world/us/us-lawmakers-hope-ukraine-can-fight-russia-with-russian-assets-2023-06-15/">https://www.reuters.com/world/us/us-lawmakers-hope-ukraine-can-fight-russia-with-russian-assets-2023-06-15/</a>.
- 173. "Zelensky Insists on Creation of Special Court over Russian Aggression," Le Monde, May 4, 2023, <a href="https://www.lemonde.fr/en/international/article/2023/05/04/zelensky-insists-on-creation-of-special-court-over-russian-aggression\_6025418\_4.html">https://www.lemonde.fr/en/international/article/2023/05/04/zelensky-insists-on-creation-of-special-court-over-russian-aggression\_6025418\_4.html</a>.
- 174 . Gerald Imray, "South Africa Says Putin Will Skip a Johannesburg Summit Next Month Because of his ICC Arrest Warrant," Associated Press, July 19, 2023, <a href="https://apnews.com/article/putin-brics-summit-south-africa-icc-arrest-3c67877a198f25ceee9adad9f1dbe495">https://apnews.com/article/putin-brics-summit-south-africa-icc-arrest-3c67877a198f25ceee9adad9f1dbe495</a>.

- 175. Kyiv Independent News Desk, "Intelligence Chief Vows to Eliminate Russian War Criminals 'Anywhere in the World," *The Kyiv Independent*, April 30, 2023, <a href="https://kyivindependent.com/military-intelligence-chief-vowsto-find-eliminate-russian-war-crimes-perpetrators-anywhere-in-the-world/">https://kyivindependent.com/military-intelligence-chief-vowsto-find-eliminate-russian-war-crimes-perpetrators-anywhere-in-the-world/</a>.
- 176. Erica Pearson, "Operation Wrath of God," *Encyclopedia Britannica*, https://www.britannica.com/topic/Operation-Wrath-of-God.
- 177. Jake Epstein, "Wagner Boss Prigozhin Says Putin's Plan to 'Demilitarize' Ukraine Has Been a Bust as Ukraine Now Has One of the 'Strongest' Armies," *Insider*, May 24, 2023, <a href="https://www.businessinsider.com/wagner-group-prigozhin-russia-putin-failed-demilitarize-ukraine-strongest-army-2023-5.">https://www.businessinsider.com/wagner-group-prigozhin-russia-putin-failed-demilitarize-ukraine-strongest-army-2023-5.</a>
- 178. Sam LaGrone, "Warship Moskva Was Blind to Ukrainian Missile Attack, Analysis Shows," USNI News, May 5, 2023, <a href="https://news.usni.org/2022/05/05/warship-mosk-va-was-blind-to-ukrainian-missile-attack-analysis-shows">https://news.usni.org/2022/05/05/warship-mosk-va-was-blind-to-ukrainian-missile-attack-analysis-shows</a>.
- 179. Timothy Bella, "Assassination Plot against Zelensky Foiled and Unit Sent to Kill Him 'Destroyed,' Ukraine says," *The Washington Post*, March 2, 2022, <a href="https://www.washingtonpost.com/world/2022/03/02/zelensky-russia-ukraine-assassination-attempt-foiled/">https://www.washingtonpost.com/world/2022/03/02/zelensky-russia-ukraine-assassination-attempt-foiled/</a>.
- 180. Eric Ciaramella, "Envisioning a Long-Term Security Arrangement for Ukraine," Carnegie Endowment for International Peace, June 8, 2023, <a href="https://carnegieen-dowment.org/2023/06/08/envisioning-long-term-security-arrangement-for-ukraine-pub-89909">https://carnegieen-dowment.org/2023/06/08/envisioning-long-term-security-arrangement-for-ukraine-pub-89909</a>.
- 181. Laurence Norman and Stephen Kalin, "Saudi Arabia to Host Ukraine Peace Talks as Part of Western Effort to Woo Global South," *The Wall Street Journal*, July 29, 2023, https://www.wsj.com/articles/saudi-arabia-to-host-ukraine-peace-talks-as-part-of-western-effort-to-woo-global-south-244f03f0.
- 182. Andrew E. Kramer, "Russia Claims Its Sphere of Influence in the World," *The New York Times*, August 31, 2008, <a href="https://www.nytimes.com/2008/09/01/world/europe/01russia.html">https://www.nytimes.com/2008/09/01/world/europe/01russia.html</a>; Galiya Ibragimova, "How Russia Torpedoed Its Own Influence in Moldova," Carnegie Endowment for International Peace, May 11, 2023, <a href="https://carnegieendowment.org/politika/89731">https://carnegieendowment.org/politika/89731</a>; Olzhas Auyezov, "Analysis: Shocked by Ukraine War, Russian Neighbour Kazkhstan Looks West," Reuters, November 17, 2022, <a href="https://www.reuters.com/world/asia-pacific/shocked-by-ukraine-war-russian-neighbour-kazakhstan-looks-west-2022-11-17/">https://www.reuters.com/world/asia-pacific/shocked-by-ukraine-war-russian-neighbour-kazakhstan-looks-west-2022-11-17/</a>.
- 183. Romain Houeix, "Nagorno-Karabakh: Everybody Benefits from Russian-Brokered Ceasefire Except Armenia," France 24, November 12, 2020, <a href="https://www.france24.com/en/europe/20201112-nagorno-karabakh-everyone-benefits-except-armenia-from-russia-brokered-ceasefire-deal">https://www.france24.com/en/europe/20201112-nagorno-karabakh-everyone-benefits-except-armenia-from-russia-brokered-ceasefire-deal</a>.

- 184. Gregory Gleason and Pal Dunay, "CSTO Deployment in Kazakhstan: Strategic Shift or Political Consolidation?" *The Diplomat*, February 8, 2022, <a href="https://thediplomat.com/2022/02/csto-deployment-in-kazakhstan-strate-gic-shift-or-political-consolidation/">https://thediplomat.com/2022/02/csto-deployment-in-kazakhstan-strate-gic-shift-or-political-consolidation/</a>.
- 185. Olena Goncharova, "Kazkhstan Denies Russia's Request for Troops," *The Kyiv Independent*, February 26, 2022, <a href="https://kyivindependent.com/kazakhstan-denies-russias-request-for-troops/">https://kyivindependent.com/kazakhstan-denies-russias-request-for-troops/</a>.
- 186. "Kazakh President Warns against Further Integration of Russia-Led Economic Bloc," *The Moscow Times*, May 25, 2023, https://www.themoscowtimes.com/2023/05/25/kazakh-president-warns-against-further-integration-of-russia-led-economic-bloc-a81281; Ali Koseoglu, "Does the Eurasian Economic Union Have a Place in Central Asia's Future?" *The Diplomat*, December 2, 2022, https://thediplomat.com/2022/12/does-the-eurasian-economic-union-have-a-place-in-central-asias-future/.
- 187. Will Cathcart, "Georgia's Ruling Party Is Tanking Its Own NATO Bid," *Foreign Policy*, August 8, 2022, <a href="https://foreign-policy.com/2022/08/08/georgia-nato-eu-russia/">https://foreign-policy.com/2022/08/08/georgia-nato-eu-russia/</a>.
- 188. Temur Umarov, "Russia and Central Asia: Never Closer, or Drifting Apart," Carnegie Endowment for International Peace, December 12, 2023, <a href="https://carnegieendowment.org/politika/88698">https://carnegieendowment.org/politika/88698</a>.
- 189. "Session II: Fiscal Policy," International Monetary
  Fund, March 7, 2011, <a href="https://www.imf.org/en/Videos/view?vid=817404091001">https://www.imf.org/en/Videos/view?vid=817404091001</a>; Iain Marlow, "US is Closely
  Watching Russia's Attempt to Evade Sanctions, Blinken
  Says," Bloomberg, February 28, 2023, <a href="https://www.bloomberg.com/news/articles/2023-02-28/us-closely-eyes-sanctions-evasion-in-central-asia-blinken-says#x-j4y7vzkg">https://www.bloomberg.com/news/articles/2023-02-28/us-closely-eyes-sanctions-evasion-in-central-asia-blinken-says#x-j4y7vzkg</a>.
- 190. "Coping with the Economic Impact of Russia's War in Ukraine: The Caucasus and Central Asia," International Monetary Fund, March 7, 2023, <a href="https://www.imf.org/en/Videos/view?vid=6322218731112">https://www.imf.org/en/Videos/view?vid=6322218731112</a>.
- 191. Marlow, "US Is Closely Watching Russia's Attempt to Evade Sanctions, Blinken Says"; Online News Editor, "EU Stresses Solidarity with Central Asia, Aims to Thwart Russian Sanctions Dodge," La Prensa Latina, May 19, 2023, https://www.laprensalatina.com/eu-stresses-solidarity-with-central-asia-aims-to-thwart-russian-sanctions-dodge/; "EU, US, UK Sanctions Coordinators Meet Georgian Officials," Civil.GE, June 27, 2023, https://civil.ge/archives/549841.
- 192. Ruzanna Stepanian, "Armenia 'Forced to Join Russia-Belarus Union," Radio Free Europe, December 27, 2022, <a href="https://www.azatutyun.am/a/32195524.html">https://www.azatutyun.am/a/32195524.html</a>; Taline Papazian, "Armenia and the West: Reassessing the Relationship," EVN Report, July 22, 2022, <a href="https://evnreport.com/politics/armenia-and-the-west-reassessing-the-relationship/">https://evnreport.com/politics/armenia-and-the-west-reassessing-the-relationship/</a>; Asbarez Staff, "Armenia Continues to Shore

- Ties with Gulf States as Pashinyan Visits to Qatar," Asbarez, June 13, 2022, https://asbarez.com/armenia-continues-to-shore-ties-with-gulf-states-as-pashinyan-visits-to-qatar/; "Armenia, Saudi Arabia Discuss Advancing Ties," *Asbarez*, June 1, 2022, https://asbarez.com/armenia-saudi-arabia-discuss-advancing-ties/; ANI, "India, Armenia's Relationship Developing Fast: Dy Foreign Minister Safaryan," The Print, March 4, 2023, https://theprint.in/world/india-armenias-relationship-developing-fast-dy-foreign-minister-safaryan/1418201/#google\_vignette.
- 193. Dan Sabbagh, "Azerbaijan's Nagorno-Karabakh Victory Highlights the Limits of Russia's Power, *The Guardian*, September 25, 2023, <a href="https://www.theguardian.com/world/2023/sep/25/azerbaijans-nagorno-karabakh-victory-highlights-limits-of-russias-power;">https://www.theguardian.com/world/2023/sep/25/azerbaijans-nagorno-karabakh-victory-highlights-limits-of-russias-power; "Azerbaijan's gas exports to the EU face challenges," *Economist Intelligence Unit*, July 10, 2023, <a href="https://www.eiu.com/n/azerbaijans-gas-exports-to-the-eu-face-challenges/">https://www.eiu.com/n/azerbaijans-gas-exports-to-the-eu-face-challenges/</a>.
- 194. "Averting a New War between Armenia and Azerbaijan,"
  International Crisis Group, January 30, 2023, <a href="https://www.crisisgroup.org/europe-central-asia/caucasus/nagorno-karabakh-conflict/266-averting-new-war-between-armenia-and-azerbaijan">https://www.crisisgroup.org/europe-central-asia/caucasus/nagorno-karabakh-conflict/266-averting-new-war-between-armenia-and-azerbaijan</a>.
- 195. Dan Sabbagh, "Azerbaijan's Nagorno-Karabakh Victory Highlights the Limits of Russia's Power, *The Guardian*, September 25, 2023, https://www.theguardian.com/ world/2023/sep/25/azerbaijans-nagorno-karabakh-victory-highlights-limits-of-russias-power.
- 196. "Averting a New War between Armenia and Azerbaijan," International Crisis Group; David Brennan, "Armenian Protestors Target Russian Embassy with Anti-Putin Slogans," *Newsweek*, September, 20, 2023, <a href="https://www.newsweek.com/armenia-protesters-target-russian-embassy-anti-putin-slogans-1828380">https://www.newsweek.com/armenia-protesters-target-russian-embassy-anti-putin-slogans-1828380</a>.
- 197. Catherine Putz, "Kyrgyzstan Cancels CSTO 'Indestructible Brotherhood' Military Exercises," *The Diplomat*, October 11, 2022, <a href="https://thediplomat.com/2022/10/kyrgyzstan-cancels-csto-indestructible-brotherhood-military-exercises/">https://thediplomat.com/2022/10/kyrgyzstan-cancels-csto-indestructible-brotherhood-military-exercises/</a>; Avet Demourian, "Armenia Cancels Military Drills, Widening Rift with Moscow," Associated Press, January 10, 2023, <a href="https://apnews.com/article/politics-moscow-armenia-yerevan-russia-government-68470e08f-2462c67920fdb554644bba3">https://apnews.com/article/politics-moscow-armenia-yerevan-russia-government-68470e08f-2462c67920fdb554644bba3</a>.
- 198. "Yerevan Considering Withdrawal from CSTO—Pashinyan," Interfax, May 22, 2023, <a href="https://interfax.com/news-room/top-stories/90714/">https://interfax.com/news-room/top-stories/90714/</a>.
- 199. "President of Belarus Defends Armenia's 'Justified' Criticism of CSTO," ArmenPress, June 20, 2023, <a href="https://armenpress.am/eng/news/1113700.html">https://armenpress.am/eng/news/1113700.html</a>.
- 200. Paul Iddon, "Turkey Likely to Gain the Upper Hand in Central Asia's Drone Market," *Forbes*, December 22, 2022, <a href="https://www.forbes.com/sites/pauliddon/2022/12/22/turkey-could-dominate-central-asias-nascent-drone-market/">https://www.forbes.com/sites/pauliddon/2022/12/22/turkey-could-dominate-central-asias-nascent-drone-market/</a>.

- 201. Nurretin Akcay, "Does the Organization of Turkic States Worry China and Russia," *The Diplomat*, November 3, 2022, <a href="https://thediplomat.com/2022/11/does-the-organization-of-turkic-states-worry-china-and-russia/">https://turkic States</a>, "Organization of Turkic States, https://turkicstates.org/en/turk-konseyi-hakkinda#.
- 202. Seth J. Frantzman, "Is Iran's New Drone Factory in Tajikistan a Threat?" *The Jerusalem Post*, May 18, 2022, <a href="https://www.jpost.com/middle-east/iran-news/article-707005;">https://www.jpost.com/middle-east/iran-news/article-707005;</a> "Tajikistan Opens Military Vehicle Assembly Plant," May 24, 2023, Eurasianet, <a href="https://eurasianet.org/tajikistan-opens-military-vehicle-assembly-plant">https://eurasianet.org/tajikistan-opens-military-vehicle-assembly-plant</a>.
- 203. Ashish Dangwal, "India Could Upgrade Armenia's Su-30 Flankers and Train Its Fighter Pilots as It Battles Nexus of Azerbaijan, Turkey, and Pakistan—Reports," *The Eurasian Times*, January 12, 2023, <a href="https://www.eurasiantimes.com/india-could-upgrade-armenias-su-30-flankers-train-its-fighter-pilots/">https://www.eurasiantimes.com/india-could-upgrade-armenias-su-30-flankers-train-its-fighter-pilots/</a>; Yeghia Tashijian, "Armenia-India Relations: From Politics to Arms Trade," *The Armenian Weekly*, October 5, 2022, <a href="https://armenianweekly.com/2022/10/05/armenia-india-relations-from-politics-to-arms-trade/">https://armenianweekly.com/2022/10/05/armenia-india-relations-from-politics-to-arms-trade/</a>.
- 204. Former Armenian government official, interview by author, June 21, 2023; Hovhannes Nazaretyan, "Armenia's Quest to Procure Arms," *EVN Report*, January 26, 2023, <a href="https://evnreport.com/magazine-issues/armenias-quest-to-procure-arms/">https://evnreport.com/magazine-issues/armenias-quest-to-procure-arms/</a>.
- 205. "Kak Kazakhstantsy Boryutsya s vystupleniyami zvezd, podderzhivayushchikh voynu v Ukraine [How Kazakhs Are Struggling with the Performances of Stars Supporting the War in Ukraine]," Masa, https://masa.media:7081/ ru/site/kak-kazakhstantsy-boryutsya-s-vystupleniyami-zvezd-podderzhivayushchikh-voynu-v-ukraine; Aigerim Konurbaeva, "Decolonisation of Central Asia. Challenges and Solutions," Central Asian Bureau for Analytical Reporting, March 31, 2023, https://cabar.asia/en/ decolonisation-of-central-asia-challenges-and-solutions; Rafik Yengibaryan, "The South Caucasus: In Pursuit of Its Lost Identity," Global Voices, March 20, 2023, https:// globalvoices.org/2023/03/20/the-south-caucasus-in-pursuit-of-its-lost-identity/; "Resurgence of Independence: How Central Asia Is Moving Towards Decolonization," Asia-Plus, April 5, 2023, https://asiaplustj.info/en/ news/centralasia/20230405/resurgence-of-independence-how-central-asia-is-moving-towards-decolonization.
- 206. Bermet Talant, "Is the Russian Language Losing Its Dominance in Central Asia," Radio Free Europe, May 27, 2022, https://www.rferl.org/a/russian-in-central-asia-talant/31871176.html.
- 207. Vasily Burov, "Are Fleeing Russians Welcome in Kazakhstan?" Russia.Post, November 17, 2022, <a href="https://russiapost.info/society/kazakhstan">https://russiapost.info/society/kazakhstan</a>; "S nachala goda v Kyrgyzstan v"yekhalo pochti polmilliona grazhdan Rossii [Nearly Half a Million Russian citizens Have Entered Kyrgyzstan

- since the Beginning of the Year]," 24.KG, October 22, 2022, https://24.kg/obschestvo/248782\_snachala\_goda\_vkyirgy-izstan\_vyehalo\_pochti\_polmilliona\_grajdan\_rossii/.
- 208. Burov, "Are Fleeing Russians Welcome in Kazakhstan?"; "Nearly Half a Million Russian Citizens Have Entered Kyrgyzstan," 24.KG.
- 209. Paolo Sorbello, "Former Russian President Threatens Kazakhstan's Sovereignty," *The Diplomat*, August 5, 2022, <a href="https://thediplomat.com/2022/08/former-russian-president-questions-kazakhstans-sovereignty/">https://thediplomat.com/2022/08/former-russian-president-questions-kazakhstans-sovereignty/</a>; Giorgi Lomsadze, "Russian Concern over Protests in Georgia," Eurasianet, March 27, 2023, <a href="https://eurasianet.org/russian-concern-over-protests-in-georgia">https://eurasianet.org/russian-concern-over-protests-in-georgia</a>; Nurbek Bezmurzaev, "Russian Diplomats React to New Law on Language in Kyrgyzstan," Global Voices, July 31, 2023, <a href="https://globalvoices.org/2023/07/31/russian-diplomats-react-to-a-new-law-on-language-in-kyrgyzstan-bringing-back-colonial-past/">https://globalvoices.org/2023/07/31/russian-diplomats-react-to-a-new-law-on-language-in-kyrgyzstan-bringing-back-colonial-past/</a>; Aigerim Turgunbaeva, "Russian Press Attacking Kyrgyzstan Leaders," Eurasianet, June 14, 2022, <a href="https://eurasianet.org/russian-press-attacking-kyrgyzstans-leaders">https://eurasianet.org/russian-press-attacking-kyrgyzstans-leaders</a>.
- 210. Kanat Altynbayev, "Russian Propagandists Threaten to Make Kazakhstan the Next Ukraine," CaravanSerai, November 30, 2022, https://central.asia-news.com/en\_GB/ articles/cnmi\_ca/features/2022/11/30/feature-02; Giorgi Lomsadze, "Russia Bans Armenian Dairy as Relations Continue to Sour," Eurasianet, April 3, 2023, https://eurasianet. org/russia-bans-armenian-dairy-as-relations-continueto-sour; Kyrgyz Service, "Russia Suspends Dairy Products from Kyrgyzstan after Calls in Bishkek to Drop Cyrillic Script," Radio Free Europe, April 21, 2023, https://www. rferl.org/a/russia-kyrgyzstan-dairy-products-banned-cyrillic-latin/32373802.html; Heydar Isayev, "Russian MP Threatens to Nuke Azerbaijan," Eurasianet, March 30, 2022, https://eurasianet.org/russian-mp-threatens-tonuke-azerbaijan; "Dmitri Medvedev, 'Guess what fate awaits him," MediaMax, September, 19, 2023, https://mediamax.am/en/news/foreignpolicy/52549/.
- 211. RFE/RFL's Armenian Service, "Russia Announces Ban on Dairy Imports from Armenia amid Souring of Relations," Radio Free Europe, April 1, 2023, <a href="https://www.rferl.org/a/russia-armenia-dairy-products-ban/32344893.html">https://www.rferl.org/a/russia-armenia-dairy-products-ban/32344893.html</a>.
- 212. "Kyrgyzstan, Russia Ties Tested by Differences on Trade, Language," Eurasianet, April 21, 2023, <a href="https://eurasianet.org/kyrgyzstan-russia-ties-tested-by-differences-on-trade-language">https://eurasianet.org/kyrgyzstan-russia-ties-tested-by-differences-on-trade-language</a>.
- 213. Ruxandra Iordache, "Critical for Kazakhstan to Pursue Oil Export Options Outside of Russia, Investor Says," CNBC, March 1, 2023, <a href="https://www.cnbc.com/2023/03/01/kazakhstan-must-pursue-oil-export-options-outside-of-russia-investor.html">https://www.cnbc.com/2023/03/01/kazakhstan-must-pursue-oil-export-options-outside-of-russia-investor.html</a>.
- 214. "Uzbekistan Completely Stops Natural Gas Export to Russia," Kun.uz, September 1, 2022, <a href="https://kun.uz/en/news/2022/01/07/uzbekistan-completely-stops-natural-gas-export-to-russia">https://kun.uz/en/news/2022/01/07/uzbekistan-completely-stops-natural-gas-export-to-russia</a>.

- 215. Ralph Jennings, "China Eyes Sunny Central Asia for Green Energy, Natural Gas Deals as Need to Bolster Power Supply Grows More Critical," South China Morning Post, September 15, 2022, https://www.scmp.com/economy/ china-economy/article/3192615/china-eyes-sunny-central-asia-green-energy-natural-gas-deals; Nigar Guliyeva, "Sustainable Energy Connectivity in Central Asia (SECCA)," Stantec, 2022, https://www.stantec.com/en/ projects/belgium-projects/sustainable-energy-connectivity-in-central-asia-secca; "Saudi: Acwa Power in Deal to Develop Green Projects in Uzbekistan," Zawya, March 22, 2023, https://www.zawya.com/en/business/energy/ saudi-acwa-power-in-deal-to-develop-green-projectsin-uzbekistan-kfm6fsue; "Masdar to Develop Uzbekistan Renewable Projects," ReNews, May 19, 2023, https:// renews.biz/85853/masdar-to-develop-uzbekistan-renewable-projects/; Patrick Meyer, "USAID Power Central Asia," U.S Agency for International Development, https:// www.usaid.gov/central-asia-regional/fact-sheets/usaid-power-central-asia.
- 216. Siranush Ghazanchyan, "Armenian in Talks with Several Partners to Build a New Power Plant: PM Pashinyan Comments on US Plans to Build Modular Nuclear Reactors," Public Radio of Armenia, May 24, 2023, https://en.armradio.am/2023/05/24/armenian-in-talks-with-several-partners-to-build-a-new-power-plant-pm-pashinyan-comments-on-us-plans-to-build-modular-nuclear-reactors/.
- 217. Umarov, "Russia and Central Asia: Never Closer, or Drifting Apart."
- 218. Temur Umarov, "Why Did Central Asia's Leaders Agree to Attend Moscow's Military Parade?" Carnegie Endowment for International Peace, May 12, 2023, <a href="https://carnegieendowment.org/politika/89741">https://carnegieendowment.org/politika/89741</a>.
- 219. Erik Brattberg, Philippe Le Corre, Paul Stronski, and Thomas De Waal, "China's Influence in Southeastern, Central, and Eastern Europe: Vulnerabilities and Resilience in Four Countries," Carnegie Endowment for International Peace, October 13, 2021, <a href="https://carnegieen-dowment.org/2021/10/13/china-s-influence-in-southeast-ern-central-and-eastern-europe-vulnerabilities-and-resilience-in-four-countries-pub-85415">https://carnegieen-dowment.org/2021/10/13/china-s-influence-in-southeast-ern-central-and-eastern-europe-vulnerabilities-and-resilience-in-four-countries-pub-85415</a>.
- 220. Nurbek Bekmurzaev, "Kyrgyzstan: Exiled Russians Facing Pressure for Anti-War Stance," Eurasianet, March 13, 2023, <a href="https://eurasianet.org/kyrgyzstan-exiled-russians-facing-pressure-for-anti-war-stance">https://eurasianet.org/kyrgyzstan-exiled-russians-facing-pressure-for-anti-war-stance</a>.
- 221. Yoshihiro Okumura, "Examining the Current State of Russian Sanctions Evasion," Dow Jones, March 21, 2023, <a href="https://www.dowjones.com/professional/risk/resources/risk-blog/examining-the-current-state-of-russian-sanctions-evasion;">https://www.dowjones.com/professional/risk/resources/risk-blog/examining-the-current-state-of-russian-sanctions-evasion;</a> Nikita Smagin, "Is the Blossoming Relationship between Russia and the UAE Doomed?" Carnegie Endowment for International Peace, April 13, 2023, <a href="https://carnegieendowment.org/politika/89531">https://carnegieendowment.org/politika/89531</a>; Jared Malsin, "Russia's Ukraine War Effort Fueled by Turkish Exports,"

- *The Wall Street Journal*, February 3, 2023, <a href="https://www.wsj.com/articles/russias-ukraine-war-effort-fueled-by-turkish-exports-11675447477">https://www.wsj.com/articles/russias-ukraine-war-effort-fueled-by-turkish-exports-11675447477</a>.
- 222. "Expanded Meeting of the Foreign Ministry Board," President of Russia, November 18, 2021, <a href="http://en.kremlin.ru/events/president/news/67123">http://en.kremlin.ru/events/president/news/67123</a>.
- 223. "Thanks to Covid-19, Vladimir Putin Has Become Almost Invisible," *The Economist*, October 2, 2021, <a href="https://www.economist.com/europe/2021/10/02/thanks-to-covid-19-vladimir-putin-has-become-almost-invisible">https://www.economist.com/europe/2021/10/02/thanks-to-covid-19-vladimir-putin-has-become-almost-invisible</a>.
- 224. Michael Crowley, "Blinken Warns Russia Against Making a 'Serious Mistake' in Ukraine," *The New York Times*, November 10, 2021, <a href="https://www.nytimes.com/2021/11/10/us/politics/russia-blinken-ukraine.html">https://www.nytimes.com/2021/11/10/us/politics/russia-blinken-ukraine.html</a>.
- 225. David Brennan, "The Decline of Sergei Lavrov," *Newsweek*, April 7, 2023, <a href="https://www.newsweek.com/decline-sergey-lavrov-russia-ukraine-vladimir-putin-kremlin-1792908">https://www.newsweek.com/decline-sergey-lavrov-russia-ukraine-vladimir-putin-kremlin-1792908</a>.
- 226. Andrew S. Weiss and Nicole Ng, "Collision Avoidance: The Lessons of US and Russian Operations in Syria," Carnegie Endowment for International Peace, March 20, 2019, <a href="https://carnegieendowment.org/2019/03/20/collision-avoidance-lessons-of-u.s.-and-russian-operations-in-syria-pub-78571">https://carnegieendowment.org/2019/03/20/collision-avoidance-lessons-of-u.s.-and-russian-operations-in-syria-pub-78571</a>.
- 227. Barak Ravid, "Russian Envoy Secretly Visits Israel for Talks on Syria," Haaretz, December 27, 2015, <a href="https://www.haaretz.com/israel-news/2015-12-27/ty-article/.premium/russian-envoy-secretly-visits-israel-for-talks-on-syria/0000017f-f40e-d47e-a37f-fd3e0adc0000.">https://www.haaretz.com/israel-news/2015-12-27/ty-article/.premium/russian-envoy-secretly-visits-israel-for-talks-on-syria/0000017f-f40e-d47e-a37f-fd3e0adc0000.</a>
- 228. Michael Schwirtz, "Russia Blocks Venezuela Measure at UN, Calling It a US Ploy for Regime Change," *The New York Times*, February 28, 2019, <a href="https://www.nytimes.com/2019/02/28/world/americas/russia-venezuela-ve-to-united-nations.html">https://www.nytimes.com/2019/02/28/world/americas/russia-venezuela-ve-to-united-nations.html</a>; Lara Jakes, "UN Yields to Russia's Limits on Aid Mission to Syria," *The New York Times*, July 12, 2022, <a href="https://www.nytimes.com/2022/07/12/us/politics/syria-refugees-russia-un.html">https://www.nytimes.com/2022/07/12/us/politics/syria-refugees-russia-un.html</a>.
- 229. Michelle Nichols and Shadia Nasralla, "UN Chief Appoints Russia Diplomat to Top Anti-Terror Job," Reuters, June 21, 2017, <a href="https://www.reuters.com/article/us-un-extremists-russia/u-n-chief-appoints-russian-diplomat-to-top-anti-terror-job-idUSKBN19C1Z3">https://www.reuters.com/article/us-un-extremists-russia/u-n-chief-appoints-russian-diplomat-to-top-anti-terror-job-idUSKBN19C1Z3</a>.
- 230. Karen Gullo and Katitza Rodriguez, "UN Cybercrime Draft Treaty Timeline," Electronic Frontier Foundation, April 7, 2023, <a href="https://www.eff.org/deeplinks/2023/04/un-cybercrime-treaty-timeline">https://www.eff.org/deeplinks/2023/04/un-cybercrime-treaty-timeline</a>.
- 231. Igor Sevryugin, "Putin's Invasion of Ukraine Has Made Diplomacy 'Impossible' For Moscow, Says Former Russian Diplomat," Radio Free Europe, October 29, 2022, <a href="https://www.rferl.org/a/russia-diplomat-bondarev-resigned-critic-ukraine-war-putin/32106766.html">https://www.rferl.org/a/russia-diplomat-bondarev-resigned-critic-ukraine-war-putin/32106766.html</a>; Boris Bondarev, "The Sources of Russian Misconduct," *Foreign Affairs*,

- October 17, 2022, <a href="https://www.foreignaffairs.com/rus-sian-federation/sources-russia-misconduct-boris-bond-arev">https://www.foreignaffairs.com/rus-sian-federation/sources-russia-misconduct-boris-bond-arev</a>.
- 232. Michelle Nichols, "US, Britain Walk Out at UN on Russian Wanted for War Crimes," Reuters, April 5, 2023, <a href="https://www.reuters.com/world/europe/us-britain-walk-out-un-russian-wanted-war-crimes-2023-04-05/">https://www.reuters.com/world/europe/us-britain-walk-out-un-russian-wanted-war-crimes-2023-04-05/</a>; Scott Horsley, "Janet Yellen and Other Finance Ministers Walk Out of G20 Meeting as Russia Speaks," National Public Radio, April 20, 2022, <a href="https://www.npr.org/2022/04/20/1093841174/janet-yellen-crystia-freeland-canada-rishi-sunak-uk-g20-walk-out-russia;">https://www.npr.org/2022/04/20/1093841174/janet-yellen-crystia-freeland-canada-rishi-sunak-uk-g20-walk-out-russia;</a> Juliana Kim, "Russia's Foreign Minister Gets Laughed At Over Ukraine Remarks at Global Conference," National Public Radio, March 4, 2023, <a href="https://www.npr.org/2023/03/04/1161128415/russia-foreign-minister-lav-rov-laughed-at.">https://www.npr.org/2023/03/04/1161128415/russia-foreign-minister-lav-rov-laughed-at.</a>
- 233. "UN General Assembly Calls for Immediate End to War in Ukraine," UN News, February 23, 2023, <a href="https://news.un.org/en/story/2023/02/1133847">https://news.un.org/en/story/2023/02/1133847</a>.
- 234. Alex Vines and Tighisti Amare, "Russia-Africa Summit Fails to Deliver Concrete Results," Chatham House, August 2, 2023, <a href="https://www.chathamhouse.org/2023/08/russia-africa-summit-fails-deliver-concrete-results;">https://www.chathamhouse.org/2023/08/russia-africa-summit-fails-deliver-concrete-results;</a> Vadim Zaytsev, "Second Russia-Africa Summit Lays Bare Russia's Waning Influence," Carnegie Endowment for International Peace, July 31, 2023, <a href="https://carnegieendowment.org/politika/90294">https://carnegieendowment.org/politika/90294</a>.
- 235. Peter Piatetsky, "What Are Countries Doing to Counter Russia's War?" Castellum.AI, March 22, 2023, <a href="https://www.castellum.ai/insights/which-countries-are-taking-action-on-ukraine;">https://www.castellum.ai/insights/which-countries-are-taking-action-on-ukraine;</a> "Visa Free Countries for Russian Passport Holders," Visaguide.World, Accessed August 1, 2023, <a href="https://visaguide.world/visa-free-countries/russian-passport/">https://visaguide.world/visa-free-countries/russian-passport/</a>.
- 236. Matias Spektor, "In Defense of the Fence Sitters," Foreign Affairs, April 18, 2023, <a href="https://www.foreignaffairs.com/world/global-south-defense-fence-sitters">https://www.foreignaffairs.com/world/global-south-defense-fence-sitters</a>; Joshua Askew, "Why Does So Much of the Global South Support Russia, Not Ukraine?" Euronews, March 31, 2023, <a href="https://www.euronews.com/my-europe/2023/03/29/why-does-so-much-of-the-global-south-support-russia-not-ukraine">https://www.euronews.com/my-europe/2023/03/29/why-does-so-much-of-the-global-south-support-russia-not-ukraine</a>.
- 237. Piatetsky, "What Are Countries Doing to Counter Russia's War?"
- 238. "Russia Budget Deficit Hits \$45 Billion, Exceeding Full-Year Goal," Bloomberg News; Prokopenko, "The Cost of War: Russian Economy Faces a Decade of Regress."
- 239. Cullen Hendrix, "Russia's Boom Business Goes Bust," Foreign Policy, May 3, 2023, https://foreignpolicy.
  com/2023/05/03/russia-arms-sales-weapons-exports-worldwide-ukraine-war/.

- 240. "Russian Arms Exports Fall as Ukraine War Limits Supplies-Think Tank," The Moscow Times, March 13, 2023, https://www.themoscowtimes.com/2023/03/13/russianarms-exports-fall-as-ukraine-war-limits-supplies-thinktank-a80460; "Russia Stages Scaled-Down War Games with China, India," The Moscow Times, September 1, 2022, https://www.themoscowtimes.com/2022/09/01/russiastages-scaled-down-war-games-with-china-india-a78694; Sudhi Ranjan Sen and Adrija Chatterjee, "Russian Arms Sales to India Stall on Fears over US Sanctions," Bloomberg, April 21, 2023, https://www.bloomberg.com/ news/articles/2023-04-21/russian-arms-sales-to-indiastall-due-to-fears-over-us-sanctions#xj4y7vzkg; "Kyrgyzstan Cancels Russian-Led Military Drill on Its Land," Associated Press, October 9, 2022, https://apnews.com/ article/russia-ukraine-asia-kazakhstan-central-tajikistan-8bd4550ca3831c25990165685a92cac6; Juan Peña, "Algeria and Russia Cancel Military Exercises in the Sahara," Atalayar, November 29, 2022, https://www.atalayar. com/en/articulo/politics/algeria-and-russia-cancel-military-exercises-sahara/20221129131128159233.html; Avet Demourian, "Armenia Cancels Military Drills, Widening Rift with Moscow," AP, January 10, 2023, https://apnews. com/article/politics-moscow-armenia-yerevan-russia-government-68470e08f2462c67920fdb554644bba3.
- 241. "Russia Buys Back Military Parts Exported to Asia," *The Moscow Times*, June 5, 2023, <a href="https://www.themoscow-times.com/2023/06/05/russia-buys-back-military-parts-exported-to-asia-a81399">https://www.themoscow-times.com/2023/06/05/russia-buys-back-military-parts-exported-to-asia-a81399</a>.
- 242. Peter Baker, "Chinese-brokered Deal Upends Mideast Diplomacy and Challenges US," *The New York Times*, March 11, 2023, <a href="https://www.nytimes.com/2023/03/11/us/politics/saudi-arabia-iran-china-biden.html">https://www.nytimes.com/2023/03/11/us/politics/saudi-arabia-iran-china-biden.html</a>.
- 243. Edith Lederer, "EU Member Slovenia Overwhelmingly Defeats Moscow Ally Belarus for a Seat on the UN Security Council," Associated Press, June 6, 2023, <a href="https://apnews.com/article/security-council-election-slovenia-defeat-belarus-d8ffe47a0353386b4fa9403f5207f8a3">https://apnews.com/article/security-council-election-slovenia-defeat-belarus-d8ffe47a0353386b4fa9403f5207f8a3</a>.
- 244. Gabriel Gavin, "EU's Michel Hails Prospect of Peace after High-Stakes Armenia-Azerbaijan Talks," Politico EU, May 14, 2023, <a href="https://www.politico.eu/article/charles-michel-armenia-azerbaijan-negotiation/">https://www.politico.eu/article/charles-michel-armenia-azerbaijan-negotiation/</a>.
- 245. Alexandra Prokopenko, "Russia's Return to Grain Deal Is Sign of Turkey's Growing Influence," Carnegie Endowment for International Peace, November 8, 2022, <a href="https://carnegieendowment.org/politika/88349">https://carnegieendowment.org/politika/88349</a>.
- 246. "Adopting Resolution 2672 (2023), Security Council Renews Cross-Border Aid Operations into North-West Syria for Six Months, Requests Special Report on Humanitarian Needs," United Nations, press release, January 9, 2023, <a href="https://press.un.org/en/2023/sc15168.doc.htm">https://press.un.org/en/2023/sc15168.doc.htm</a>.
- 247. Alexander Gabuev, "Russia's Reliance on China Will Outlast Vladimir Putin, Says Alexander Gabuev," *The Economist*, May 18, 2023, https://www.economist.com/ russias-reliance-on-china-will-persist-even-after-vladi-

- mir-putin-is-gone-says-alexander-gabuev; Lara Seligman and Alexander Ward, "New U.S. Intelligence Shows Russia's Deepening Defense Ties with Iran," Politico, June 9, 2023, https://www.politico.com/news/2023/06/09/united-states-security-council-russia-iran-weapons-00101191.
- 248. Bondarev, "The Sources of Russian Misconduct."
- 249. "Putin Proposes 2020 Summit with Leaders of Russia, France, China, US, and UK," Reuters, January 23, 2023, <a href="https://www.reuters.com/article/us-israel-russia-ne-tanyahu-putin-summit/putin-proposes-2020-summit-with--leaders-of-russia-france-china-u-s-and-uk-idUSKBN1ZM1Y9">https://www.reuters.com/article/us-israel-russia-ne-tanyahu-putin-summit/putin-proposes-2020-summit-with--leaders-of-russia-france-china-u-s-and-uk-idUSKBN1ZM1Y9</a>.
- 250. Liz Sly, "A Global Divide on the Ukraine War Is Deepening," *The Washington Post*, February 23, 2023, <a href="https://www.washingtonpost.com/world/2023/02/22/global-south-russia-war-divided/">https://www.washingtonpost.com/world/2023/02/22/global-south-russia-war-divided/</a>.
- 251. "How Russia Is Trying to Win Over the Global South," *The Economist*, September 22, 2022, <a href="https://www.economist.com/international/2022/09/22/how-russia-is-trying-to-win-over-the-global-south.">https://www.economist.com/international/2022/09/22/how-russia-is-trying-to-win-over-the-global-south.</a>
- 252. Stephen Fidler, "Russia, China Challenge U.S.-Led World Order," *The Wall Street Journal*, February 21, 2023, <a href="https://www.wsj.com/articles/russia-china-challenge-u-s-led-world-order-3563f41d">https://www.wsj.com/articles/russia-china-challenge-u-s-led-world-order-3563f41d</a>.
- 253. Emma Farge, "US Candidate Beats Russian to Head UN Tech Agency," Reuters, September 29, 2022, <a href="https://www.reuters.com/business/media-telecom/us-candidate-beats-russia-head-un-telecoms-agency-2022-09-29/">https://www.reuters.com/business/media-telecom/us-candidate-beats-russia-head-un-telecoms-agency-2022-09-29/</a>.
- 254. Kelvin Chan, "In Global Rush to Regulate AI, Europe Set to Be Trail Blazer," Associated Press, May 9, 2023, <a href="https://apnews.com/article/artificial-intelligence-chatgpt-eu-rope-rules-906fc89d2561b200fa6eb40a06b946a5">https://apnews.com/article/artificial-intelligence-chatgpt-eu-rope-rules-906fc89d2561b200fa6eb40a06b946a5</a>.
- 255. Timothy Frye, *Weak Strongman: The Limits of Power in Putin's Russia* (Princeton, NJ: Princeton University Press, 2021).
- 256. Milan Svolik, *The Politics of Authoritarian Rule* (Cambridge, UK: Cambridge University Press, 2012).
- 257. Sergei Guriev and Daniel Treisman, *Spin Dictators: The Changing Face of Tyranny in the 21st Century* (Princeton University Press, 2022).
- 258. James C. Scott, *Weapons of the Weak* (New Haven, CT: Yale University Press, 1987).
- 259. "Russia planning 10% spending cut for 2024 budget redistribution, Vedomosti reports," Reuters, July 4, 2023, https://www.reuters.com/markets/europe/russia-planning-10-spending-cut-2024-budget-redistribution-vedomosti-2023-07-04.
- 260. Erika Kinetz, "How many Russians have died in Ukraine? Data shows what Moscow hides," Associated Press, July 10, 2023, https://apnews.com/article/

- russia-ukraine-war-military-deaths-facd75c2311ed-7be660342698cf6a409.
- Samuel A. Greene and Graeme B. Robertson, Putin Versus the People: Perilous Politics of A Divided Russia (New Haven, CT: Yale University Press, 2018), <a href="https://doi.org/10.2307/j.ctvfc5417">https://doi.org/10.2307/j.ctvfc5417</a>.
- 262. Valerie Hopkins, "A Child's Drawing, a Dad's Antiwar Posts, and Russia's Latest Orphan," The New York Times, March 28, 2023, <a href="https://www.nytimes.com/2023/03/28/world/europe/russia-repression-children.html">https://www.nytimes.com/2023/03/28/world/europe/russia-repression-children.html</a>.
- 263. "Putin's Approval Rating," infographic on Levada-Center home page, <a href="https://www.levada.ru/en/">https://www.levada.ru/en/</a>.
- 264. Timothy Frye, Scott Gehlbach, Kyle L. Marquardt, and Ora John Reuter. "Is Putin's Popularity (Still) Real? A Cautionary Note on Using List Experiments to Measure Popularity in Authoritarian Regimes," *Post-Soviet Affairs*, 39 no. 3 (2023), 213–222, <a href="http://dx.doi.org/10.1080/1060586X.2023.2187195">http://dx.doi.org/10.108 0/1060586X.2023.2187195</a>.
- 265. "Approval of Institutions, Ratings of Politicians and Parties at the End of June 2023," Levada-Center, July 14, 2023, https://www.levada.ru/en/2023/07/14/approval-of-institutions-ratings-of-politicians-and-parties-at-the-end-of-june-2023/.
- 266. See Levada-Center home page; Russia Watcher home page, <a href="https://russiawatcher.com/">https://russiawatcher.com/</a>; "A Year of War as Seen by Russians," Chronicles, <a href="https://www.chronicles.report/en;">https://www.chronicles.report/en;</a> and "Storonniki, protivniki, neytraly: otnosheniye rossiyan k 'voyennoy operatsii' [Supporters, opponents, neutrals: the attitude of Russians to the 'military operation']," Russian field, <a href="https://russianfield.com/segmentation">https://russianfield.com/segmentation</a>.
- 267. "Conflict with Ukraine: Estimates of May 2023," Levada-Center, June 7, 2023, <a href="https://www.levada.ru/en/2023/06/07/conflict-with-ukraine-estimates-of-may-2023/">https://www.levada.ru/en/2023/06/07/conflict-with-ukraine-estimates-of-may-2023/</a>.
- 268. "Armiya: Chastichnaya mobilizatsiya, elektronnyye povestki, vyplaty uchastnikam svo I sluzhba po prizyvu [Army: Partial Mobilization, Electronic Subpoenas, Payments to NVO Participants, and Conscription Service]," Levada-Center, March 5, 2023, <a href="https://www.levada.ru/2023/05/03/armiya-chastichnaya-mobilizatsiya-elektronnye-povestki-vyplaty-uchastnikam-svo-i-sluzh-ba-po-prizyvu/">https://www.levada.ru/2023/05/03/armiya-chastichnaya-mobilizatsiya-elektronnye-povestki-vyplaty-uchastnikam-svo-i-sluzh-ba-po-prizyvu/</a>.
- 269. Denis Volkov, "Chastichnaya podderzhka: kak mobilizatsiya povliyala na rossiyskoye obshchestvo [Partial Support: How Mobilization Has Affected Russian Society]," *Forbes*, November 11, 2022, <a href="https://www.forbes.ru/mneniya/480957-casticnaa-podderzka-kak-mobilizacia-povliala-na-rossijskoe-obsestvo.">https://www.forbes.ru/mneniya/480957-casticnaa-podderzka-kak-mobilizacia-povliala-na-rossijskoe-obsestvo.</a>
- 270. Elena Konova, Alexander Chilingaryan, and Kirill Rogov, "The Plunge into War: Public Opinion Chronicled", Re:Russia, https://re-russia.net/en/expertise/057/.

- 271. Andrey Pertsey, "Tired of War in Principle': The Kremlin Secretly Commissioned a Series of Focus Groups to Probe Public Attitudes about the War in Ukraine, and the Findings Aren't Encouraging for Russia's President," Meduza, November 22, 2022, <a href="https://meduza.io/en/feature/2022/11/22/tired-of-war-in-principle">https://meduza.io/en/feature/2022/11/22/tired-of-war-in-principle</a>.
- 272. "Russia Completely Blocks Access to Facebook and Twitter," *The Guardian*, March 4, 2022, <a href="https://www.theguardian.com/world/2022/mar/04/russia-completely-blocks-access-to-facebook-and-twitter">https://www.theguardian.com/world/2022/mar/04/russia-completely-blocks-access-to-facebook-and-twitter</a>.
- 273. "Osnovnyye istochniki informatsii I populyarnyye zhurnalisty [Main Sources of Information and Popular Journalists]," Levada-Center, April 20, 2023, <a href="https://www.levada.ru/2023/04/20/osnovnye-istochniki-informat-sii-i-populyarnye-zhurnalisty/">https://www.levada.ru/2023/04/20/osnovnye-istochniki-informat-sii-i-populyarnye-zhurnalisty/</a>.
- 274. Amanda Bennet, "Special Online Briefing with Amanda Bennet, CEO, U.S. Agency for Global Media," April 13, 2023, U.S. Department of State Brussel's Media Hub, <a href="https://www.state.gov/special-online-briefing-with-amanda-bennett-ceo-u-s-agency-for-global-media/">https://www.state.gov/special-online-briefing-with-amanda-bennett-ceo-u-s-agency-for-global-media/</a>.
- 275. "Do You Use a Virtual Private Network (VPN) and If So, How Often?" Statistica, <a href="https://www.statista.com/statistics/1307055/russia-vpn-usage-frequency/">https://www.statista.com/statistics/1307055/russia-vpn-usage-frequency/</a>.
- 276. Ethan Porter and Thomas J. Wood, "The Global Effectiveness of Fact Checking: Evidence from Simultaneous Experiments in Argentina, Nigeria, South Africa and the United Kingdom," *PNAS*, 118 no. 37 (2021), <a href="https://www.pnas.org/doi/full/10.1073/pnas.2104235118">https://www.pnas.org/doi/full/10.1073/pnas.2104235118</a>; Lauren Young, "Mobilization Under Threat: Emotional Appeals and Pro-Opposition Behavior Online," *Political Behavior*, no. 45 (2023):445–468, <a href="https://link.springer.com/article/10.1007/s11109-021-09711-z">https://link.springer.com/article/10.1007/s11109-021-09711-z</a>.
- 277. "Arnold Schwarzenegger Tells Putin to Stop This War," YouTube, <a href="https://www.youtube.com/watch?v=fWClX-Zd9c78">https://www.youtube.com/watch?v=fWClX-Zd9c78</a>.
- 278. Tymofii Bryk, Aaron Erlich, and Jordan Gans-Morse, "Is Russian's Wartime Propaganda More Powerful Than Family Bonds?" *The Washington Post*, June 20, 2022, https://www.washingtonpost.com/politics/2022/06/20/russia-ukraine-relatives-conversations-propaganda/.
- 279. Ekaterina Shulman, "Inside Russia with Ekaterina Shulman," YouTube, <a href="https://www.youtube.com/watch?v=9\_0E9IzXT34">https://www.youtube.com/watch?v=9\_0E9IzXT34</a>.
- 280. John Mueller, War, Presidents, and Public Opinion (New York: John Wiley & Sons, 1973); John Mueller, Policy and Opinion in the Gulf War (Chicago: University of Chicago Press, 1994); Eric V. Larson, Casualties and Consensus (Santa Monica, CA: Rand Corporation, 1996); Christopher Gelpi, Peter D. Feaver, and Jason Reifler, Paying the Human Costs of War: American Public Opinion and Casualties in Military Conflicts (Princeton, NJ: Princeton University Press, 2009).

- 281. Julian E. Barnes, "Russian Public Appears to Be Souring on War Casualties, Analysis Shows," *The New York Times*, May 26, 2023, <a href="https://www.nytimes.com/2023/05/26/us/politics/russia-public-opinion-ukraine-war.html">https://www.nytimes.com/2023/05/26/us/politics/russia-public-opinion-ukraine-war.html</a>.
- 282. Joshua Yaffa, "Inside the Wagner Group's Armed Uprising," *The New Yorker*, July 31, 2023, <a href="https://www.newyorker.com/magazine/2023/08/07/inside-the-wagner-uprising.">https://www.newyorker.com/magazine/2023/08/07/inside-the-wagner-uprising.</a>
- 283. "A Year of War as Seen by Russians," Chronicles.
- 284. Timothy Frye, "Economic Sanctions and Public Opinion: Survey Experiments from Russia," *Comparative Political Studies*, 52 no. 7 (2018), <a href="https://journals.sagepub.com/doi/10.1177/0010414018806530">https://journals.sagepub.com/doi/10.1177/0010414018806530</a>.
- 285. "Are You Worried about Political and Economic Sanctions by Western Countries on Russia?" Statista, April 26, 2023, https://www.statista.com/statistics/1103976/russia-concern-with-western-sanctions/.
- 286. Julia Horowitz, "IMF Chief: Ukraine War Will Have 'Devastating' Consequences for Russia's Economy," CNN, March 8, 2023, <a href="https://www.cnn.com/2023/03/08/economy/imf-kristalina-georgieva-interview/index.html">https://www.cnn.com/2023/03/08/economy/imf-kristalina-georgieva-interview/index.html</a>.
- 287. "Begstvo ot voyny: novyye dannyye pozvolyayut otsenit' chislo uyekhavshikh rossiyan v boleye chem 800 tysyach chelovek [Flight from war: new data estimates the number of Russians who left at more than 800 thousand people]," Re:Russia, <a href="https://re-russia.net/review/347/?utm\_source=telegram&utm\_medium=social&utm\_campaign=347">https://re-russia.net/review/347/?utm\_source=telegram&utm\_medium=social&utm\_campaign=347</a>.
- 288. These are often younger and better-educated people than the Russian society writ large. While many young Russians would like to leave the country, they often lack foreign experience, language skills, money, and even passports needed to make that move. See: Julia Sapronova, "Polovina rossiyskikh shkol'nikov zayavila o zhelanii uyekhat' iz Rossii [Half of Russian Schoolchildren Expressed Their Desire to Leave Russia]," Forbes, September 15, 2022, <a href="https://www.forbes.ru/society/477179-polovina-rossijskih-skol-nikov-zaavila-o-zelanii-uehat-iz-rossii">https://www.forbes.ru/society/477179-polovina-rossijskih-skol-nikov-zaavila-o-zelanii-uehat-iz-rossii.</a>
- 289. The Gaidar Institute, "Opros biznesa pokazal rekordnyy s 1996 goda uroven' kadrovogo goloda [Business Survey Reveals Record High Workforce Shortage since 1996]," RBC, May 18, 2023, https://www.rbc.ru/economics/18/05/2023/64649bbd9a79470db02e0730.
- 290 "Chem nyneshnyaya volna emigratsii otlichayetsya ot drugikh? Predstaviteli kakikh professiy uyekhali? Sobirayutsya li migranty vernut'sya? [How Is the Current Wave of Emigration Different from Others?]" Meduza, July 31, 2022, <a href="https://meduza.io/feature/2022/07/31/chem-nyneshnyaya-volna-emigratsii-otlichaet-sya-ot-drugih-predstaviteli-kakih-professiy-uehali-sobirayutsya-li-migranty-vernutsya.">https://meduza.io/feature/2022/07/31/chem-nyneshnyaya-volna-emigratsii-otlichaet-sya-ot-drugih-predstaviteli-kakih-professiy-uehali-sobirayutsya-li-migranty-vernutsya.</a>
- 291. Nika Kostenko, Margarita Zavadskaya, Emil Kamalov, and

- Ivetta Sergeeva, "Rossiyskaya Rizoma: Sotsial'nyy Portret Novoy Emigratsii [Russian Rhizome: Social Portrait of the New Emigration]," Re:Russia, January 11, 2023, <a href="https://re-russia.net/expertise/045/">https://re-russia.net/expertise/045/</a>.
- 292. "«Rabotodateli vedut bitvu za molodezh'»: spasut li rynok truda migranty? [Business Survey Reveals Record High Workforce Shortage since 1996]," The Gaidar Institute, April 20, 2023, https://kazanfirst.ru/articles/612083.
- 293. "YA uyekhala, chtoby ostat'sya chelovekom". Emigratsiya ili evakuatsiya? ["I left to be human." Emigration or evacuation?]," Svoboda, April 7, 2022, <a href="https://www.svoboda.org/a/ya-uehala-chtoby-ostatsa-chelovekom-emigracia-ili-evacuacia/31787493.html">https://www.svoboda.org/a/ya-uehala-chtoby-ostatsa-chelovekom-emigracia-ili-evacuacia/31787493.html</a>.
- 294. "Defitsit rabochey sily: problema, kotoroy net [Labor shortage: a problem that does not exist]," Riddle, August 2, 2023, https://ridl.io/ru/defitsit-rabochej-sily-problema-kotoroj-net/?fb-clid=IwAROZsbHhcNIWI75pJjX7-H8flXtVCkP8gWOK-yIRqsaPlA1KlzpBHZfpo7u4.
- 295. "CB: 60% kompanij ne hvataet personala, 75% podnjali oplatu iz-za deficita kadrov," Kommersant, Septenber 6, 2023, https://www.kommersant.ru/doc/6199122.
- 296. Ibid, "SVO v kadre. Kak pobedit' defitsit rabochikh, ne pustiv v RZHD potentsial'nykh diversantov [How to Overcome the Shortage of Workers without Letting Potential Saboteurs into Russian Railways]," Vgudok Light, June 19, 2023, <a href="https://vgudok.com/rassledovani-ya/svo-v-kadre-kak-pobedit-deficit-rabochih-ne-pustiv-v-rzhd-potencialnyh-diversantov.">https://vgudok.com/rassledovani-ya/svo-v-kadre-kak-pobedit-deficit-rabochih-ne-pustiv-v-rzhd-potencialnyh-diversantov.</a>
- 297. "Chem nyneshnyaya volna emigratsii otlichaetsya ot drugikh? Predstaviteli kakikh professiy uekhali? Sobirayutsya li migranty vernut'sya? [How Is the Current Wave of Emigration Different from Others? Which Professions are Leaving? Are Migrants Planning to Return?]," Meduza, July 31, 2022, <a href="https://meduza.io/feature/2022/07/31/chem-nyneshnyaya-volna-emigratsii-otlichaet-sya-ot-drugih-predstaviteli-kakih-professiy-uehali-sobirayutsya-li-migranty-vernutsya.">https://meduza.io/feature/2022/07/31/chem-nyneshnyaya-volna-emigratsii-otlichaet-sya-ot-drugih-predstaviteli-kakih-professiy-uehali-sobirayutsya-li-migranty-vernutsya.</a>
- 298. "UK Intelligence Says Russia Experiences Biggest Labour Shortage in Decades," Pravda, May 7, 2023, <a href="https://www.pravda.com.ua/eng/news/2023/05/7/7401041/">https://www.pravda.com.ua/eng/news/2023/05/7/7401041/</a>.
- 299. The distinct quality of the current migration wave is that along with the record number of professionals, IT companies left as well, including some of the most advanced international firms that set the trends of Russian IT. See "V Mintsifry zayavili o nekhvatke vysokokvalifitsirovannykh kadrov po informbezopasnosti v RF [The Ministry of Digital Transformation Announced a Shortage of Highly Qualified Personnel for Information Security in the Russian Federation]," TASS, March 10, 2023, <a href="https://tass.ru/ekonomika/17234399">https://tass.ru/ekonomika/17234399</a>.
- 300. "Gref: Rossii ne hvataet 1 mln IT-specialistov." Vestnik Ka-

- vkaza. September 21, 2023, <a href="https://vestikavkaza.ru/news/gref-rossii-ne-hvataet-1-mln-it-specialistov.html">https://vestikavkaza.ru/news/gref-rossii-ne-hvataet-1-mln-it-specialistov.html</a>.
- 301. Pavel Luzin, "Russia's Defense Industry Growing Increasingly Turbulent," The Jamestown Foundation, November 17, 2022, <a href="https://jamestown.org/program/russias-defense-industry-growing-increasingly-turbulent/">https://jamestown.org/program/russias-defense-industry-growing-increasingly-turbulent/</a>.
- 302. "Chego zhdat' ot sverkhnovoy real'nosti? Analitika rynka truda i prognozy [What to Expect from Supernova Reality? Labor Market Analytics and Forecasts]," HH, November 7, 2022, https://hh.ru/article/30969.
- 303. "Russia's Population Nightmare Is Going to Get Even Worse," *The Economist*, March 4, 2023, <a href="https://www.economist.com/europe/2023/03/04/russias-population-nightmare-is-going-to-get-even-worse">https://www.economist.com/europe/2023/03/04/russias-population-nightmare-is-going-to-get-even-worse</a>.
- 304. Nika Kostenko, Margarita Zavadskaya, Emil Kamalov, and Ivetta Sergeeva, "Rossiyskaya Rizoma: Sotsial'nyy Portret Novoy Emigratsii [Russian Rhizome: Social Portrait of the New Emigration]," Re:Russia, January 11, 2023, <a href="https://re-russia.net/expertise/045/">https://re-russia.net/expertise/045/</a>.
- 305. Alexey Levinson, ""Nevelikost' zhizni dolzhna byt' kompensirovana velichiyem derzhavy': zachem vlasti tsenzura [The Smallness of Life Must Be Compensated by the Greatness of the State: Why the Authorities Need Censorship]," Levada-Center, February 28, 2023, https:// www.levada.ru/2023/02/28/nevelikost-zhizni-dolzhna-byt-kompensirovana-velichiem-derzhavy-zachem-vlasti-tsenzura/. For example, since the vast majority of human rights activists left Russia in the first months of war, in some Russian cities today only as few as one or two of the six to seven most prominent civil activists remain. See Igor Gretskiy, "Is There Life in the Desert? Russian Civil Society after the Full-Scale Invasion of Ukraine" (International Centre for Defense and Security, May 2023), https://icds.ee/wpcontent/uploads/dlm\_uploads/2023/05/ICDS\_Report\_Is\_There\_Life\_in\_the\_Desert\_Igor\_Gretskiy\_May\_2023.pdf.
- 306. "V kremle ob"yasnili slova Putina o samoochishcheni Rossii [The Kremlin Explained Putin's Remarks on the Self-Purification of Russia]," RIA Novosti, March 17, 2023, https://ria.ru/20220317/rossiya-1778651331.html.
- 307. Margarita Zavadskaya, "Anti-War Wave of Emigration: Should I Stay or Should I Go?" Riddle, July 25, 2022, <a href="https://ridl.io/anti-war-wave-of-nbsp-emigration-should-i-nbsp-stay-or-nbsp-should-i-nbsp-go/">https://ridl.io/anti-war-wave-of-nbsp-emigration-should-i-nbsp-stay-or-nbsp-should-i-nbsp-go/</a>.
- 308. "Official Offers to Take Away the Property of the Departed Russians. These Are Not Empty Threats, Lawyers Say," The Insider, January 19, 2023, https://theins.ru/news/258675; Reuters, "Duma Prepares Higher Taxation for Russians Who Left Country, Speaker," CNBC, December 25, 2022, https://www.cnbc.com/2022/12/25/duma-prepares-higher-taxation-for-russians-who-left-country-speaker.html; "Which of Those Who Left Will Have to Pay 30% Personal Income Tax, a Ban on Changing Sex

- in the Passport and the First European Company worth \$500 billion," The Bell, April 24, 2023, <a href="https://thebell.io/komu-iz-uekhavshikh-pridetsya-platit-30-ndfl-zapret-na-smenu-pola-v-pasporte-i-pervaya-evropeyskaya-kompaniya-na-500-mlrd">https://thebell.io/komu-iz-uekhavshikh-pridetsya-platit-30-ndfl-zapret-na-smenu-pola-v-pasporte-i-pervaya-evropeyskaya-kompaniya-na-500-mlrd</a>.
- 309. "The Russian Government has Expanded the Conditions for Obtaining IT-Mortgages," Interfax, January 30, 2023, https://realty.interfax.ru/ru/news/articles/142493/.
- 310. AFP, "Russia to Up-Skill Jobless to Work in Defense Sector," *The Moscow Times*, March 15, 2023, <a href="https://www.themoscowtimes.com/2023/03/15/russia-to-up-skill-jobless-to-work-in-defense-sector-a80495">https://www.themoscowtimes.com/2023/03/15/russia-to-up-skill-jobless-to-work-in-defense-sector-a80495</a>.
- 311. "Startoval otbor na sozdanie obrazovatel'nykh tsentrov programmy «Professionalitet» [Selection for the Creation of Educational Centers has Started for the program "Professionality]," Regnum, May 5, 2023, <a href="https://regnum.ru/news/3803089">https://regnum.ru/news/3803089</a>.
- 312. "Eksperty predlozhili borot'sya s defitsitom kadrov s pomoshch'yu osuzhdennykh [Experts propose to fight the shortage of personnel with the help of convicts]," RBC, June 21, 2023, <a href="https://www.rbc.ru/economics/21/06/2023/649185d39a79473830be525a">https://www.rbc.ru/economics/21/06/2023/649185d39a79473830be525a</a>.
- 313. The Insider, "Putin poruchil ispol'zovat' trud detei ot 14 let," The Insider, August 26, 2023, <a href="https://theins.info/news/264581">https://theins.info/news/264581</a>.
- 314. The Moscow Times, "Russia Turns to Foreign IT Workers After Wartime Brain Drain," *The Moscow Times*, March 15, 2023, <a href="https://www.themoscowtimes.com/2023/03/15/russia-turns-to-foreign-it-workers-after-wartime-brain-drain-a80493">https://www.themoscowtimes.com/2023/03/15/russia-turns-to-foreign-it-workers-after-wartime-brain-drain-a80493</a>.
- 315. "Ukaz Prezidenta RF OT 12 maya 2023 G. N 342 'O Vnesenii Izmeneniy v Kontseptsiyu Gosudarstvennoy Migratsionnoy Politiki Rossiyskoy Federatsii NA 2019 2025 Gody, Utverzhdennuyu Ukazom Prezidenta Rossiyskoy Federatsii ot 31 Oktyabrya 2018 G. N 622 [Decree of the President of the Russian Federation of May 12, 2023 N 342 'On Amendments to the Concept of the State Migration Policy of the Russian Federation for 2019-2025, Approved by Decree of the President of the Russian Federation of October 31, 2018 N 622]," Garant, May 12, 2023, <a href="https://www.garant.ru/hotlaw/federal/1623644/">https://www.garant.ru/hotlaw/federal/1623644/</a>.
- 316. Caress Schenk, "Post-Soviet Labor Migrants in Russia Face New Questions amid War in Ukraine," Migration Policy Institute, February 7, 2023, <a href="https://www.migrationpolicy.org/article/labor-migrants-russia-ukraine-war-central-asia">https://www.migrationpolicy.org/article/labor-migrants-russia-ukraine-war-central-asia</a>.
- 317. RFE, "Putin Signs Decree to Fast-Track Naturalization for Foreigners Joining Armed Forces," Radio Free Europe, September 30, 2023, https://www.rferl.org/a/

- putin-decree-simplified-naturalization-foreigners-army/32059786.html; Isabel Van Brugen, "Putin to Offer Foreigners Who Fight for Russia Fast Track Citizenship," *Newsweek*, May 16, 2023, <a href="https://www.newsweek.com/putin-foreign-citizens-army-military-citizenship-ukraine-1800594.">https://www.newsweek.com/putin-foreign-citizens-army-military-citizenship-ukraine-1800594.</a>
- 318. Jennifer Jacobs and Alberto Nardelli, "Biden Seeks to Rob Putin of His Top Scientists with Visa Lure," *Bloomberg*, April 29, 2022, <a href="https://www.bloomberg.com/news/articles/2022-04-29/biden-seeks-to-rob-putin-of-his-top-scientists-with-visa-lure">https://www.bloomberg.com/news/articles/2022-04-29/biden-seeks-to-rob-putin-of-his-top-scientists-with-visa-lure</a>.
- 319. "Chem nyneshnyaya volna emigratsii otlichaetsya ot drugikh? Predstaviteli kakikh professiy uekhali? Sobirayutsya li migranty vernut'sya? [How Is the Current Wave of Emigration Different from Others? Which Professions are Leaving? Are Migrants Llanning to Return?]," Meduza, July 31, 2022, <a href="https://meduza.io/feature/2022/07/31/chem-nyneshnyaya-volna-emigratsii-otlichaet-sya-ot-drugih-predstaviteli-kakih-professiy-uehali-sobirayutsya-li-migranty-vernutsya.">https://meduza.io/feature/2022/07/31/chem-nyneshnyaya-volna-emigratsii-otlichaet-sya-ot-drugih-predstaviteli-kakih-professiy-uehali-sobirayutsya-li-migranty-vernutsya.</a>
- 320. Andrea Kendall-Taylor and Maria Snegovaya, "Supporting Russian Civil Society: A Report of the Transatlantic Forum on Russia," CNAS, December 1, 2022, <a href="https://www.cnas.org/publications/reports/supporting-russian-civil-society">https://www.cnas.org/publications/reports/supporting-russian-civil-society</a>.
- 321. Boris Nemtsov Foundation for Freedom, "Ideas for Russia," Boris Nemstov Foundation for Freedom, 2023, https://nemtsovfund.org/projects-ru/ideas-for-russia/.
- 322. Kendall-Taylor and Snegovaya, "Supporting Russian Civil Society: A Report of the Transatlantic Forum on Russia."

- 323. Kendall-Taylor and Snegovaya, "Supporting Russian Civil Society: A Report of the Transatlantic Forum on Russia."
- 324. Georgy Garin, "Nazad radi budushchego. Kak vernuvshiyesya emigranty pomogali vosstanavlivat' svoi strany [Back for the Future. How Returning Emigrants Helped Rebuild Their Countries]," The Insider, May 16, 2023, https://theins.ru/history/259405.
- 325. Kostenko, Zavadskaya, Kamalov, and Sergeeva, "Russian Rhizome: Social Portrait of the New Emigration."
- 326. Boris Grozovski, "Emigration 2022: A School of Democracy for Russian Refugees," The Russia File (blog) on Wilson Center, April 8, 2022, <a href="https://www.wilsoncenter.org/blog-post/emigration-2022-school-democracy-russian-refugees">https://www.wilsoncenter.org/blog-post/emigration-2022-school-democracy-russian-refugees</a>.
- 327. Oxana Schmies, "Building Up the Democratic Potential of the New Russian Emigrants," German Marshall Fund, March 21, 2023, https://www.gmfus.org/news/building-democratic-potential-new-russian-emigrants.
- 328. "Is There a Russian 5th Column inside Germany?" (German Council on Foreign Relations, March 7, 2016), <a href="https://dgap.org/en/research/publications/there-russian-5th-column-inside-germany">https://dgap.org/en/research/publications/there-russian-5th-column-inside-germany</a>.

## About the Center for a New American Security

The mission of the Center for a New American Security (CNAS) is to develop strong, pragmatic and principled national security and defense policies. Building on the expertise and experience of its staff and advisors, CNAS engages policymakers, experts and the public with innovative, fact-based research, ideas and analysis to shape and elevate the national security debate. A key part of our mission is to inform and prepare the national security leaders of today and tomorrow.

CNAS is located in Washington, DC, and was established in February 2007 by co-founders Kurt M. Campbell and Michèle A. Flournoy. CNAS is a 501(c)3 tax-exempt nonprofit organization. Its research is independent and non-partisan.

©2023 Center for a New American Security

All rights reserved.

#### **CNAS Editorial**

#### **DIRECTOR OF STUDIES**

Paul Scharre

#### **PUBLICATIONS & EDITORIAL DIRECTOR**

Maura McCarthy

#### **ASSOCIATE EDITOR**

**Emma Swislow** 

#### **CREATIVE DIRECTOR**

Melody Cook

#### **DESIGNER**

Rin Rothback

#### **Cover Art & Production Notes**

#### **COVER ART**

Melody Cook, CNAS

#### **COVER PHOTOS**

Department of Defense; U.S. Navy; U.S. Air Force; U.S. Army

#### **PAPER**

Mohawk Renewal 100% Recycled

#### PRINTER

CSI Printing & Graphics
Printed on an HP Indigo Digital Press

Center for a New American Security

1152 15th Street, NW Suite 950 Washington, DC 20005 CNAS.org @CNASdc CEO

Richard Fontaine

Vice President & Director of Studies
Paul Scharre

**Vice President of Development** Anna Saito Carson **Contact Us** 

202.457.9400 info@cnas.org

