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Report to Congressional Committees

September 2025

RUSSIA SANCTIONS AND EXPORT CONTROLS

U.S. Agencies Should Establish Targets to Better Assess Effectiveness

GAO-25-107079

GAO Highlights

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A report to congressional committees

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What GAO Found

GAO independently identified three broad categories for the objectives of U.S. sanctions and export controls on Russia (see figure). U.S. agencies have made progress toward these objectives, but Russia has circumvented some U.S. sanctions and export controls. Specifically, GAO found that Russia's economic growth was about 6 percentage points lower in 2022 than what might have happened absent the events in 2022, including the invasion of Ukraine and sanctions. However, GAO's analysis did not find that economic growth was statistically different than expected in 2023 and 2024. A price cap on Russian oil likely kept Russian oil production and exports relatively stable but Russian actions, such as the use of a "shadow fleet" to export oil, limited the cap's efficacy. U.S. agencies assess that export controls have hindered but not completely prevented Russia's efforts to obtain U.S. military technologies. While U.S. agencies have taken various actions to hold malign Russian actors accountable, including freezing assets, the agencies reported challenges in assessing their effectiveness.

GAO-Identified Categories for the Objectives of U.S. Sanctions and Export Controls on Russia

Source: GAO analysis of the Departments of the Treasury, State, and Commerce documents and interviews with agency officials; GAO, Burbuzin/stock.adobe.com, Esther_Design/stock.adobe.com, rohmad/stock.adobe.com, (icons). | GAO-25-107079

U.S. agencies primarily responsible for implementing sanctions and export controls on Russia have not established clearly defined objectives linked to measurable outcomes with targets for their activities. As a result, agencies cannot fully assess progress towards achieving their objectives, thus limiting the U.S. government's ability to determine the effectiveness of its broader sanctions and export controls efforts related to Russia. This information is crucial for improving current efforts and informing the future use of sanctions and export controls.

As of September 30, 2024, U.S. agencies had obligated about $164 million in Ukraine supplemental funding for activities related to sanctions and export controls on Russia. These agencies used this funding for staff and investigative tools, among other uses. For example, a Department of State bureau used supplemental funding to increase the size of its workforce dedicated to identifying Russian sanctions targets. GAO found that two State bureaus have not assessed risks to these sanctions activities when their supplemental funding expires on September 30, 2025. As a result, the bureaus cannot develop an effective plan to sustain or restructure these activities, threatening broader goals.

Why GAO Did This Study

The U.S. and its allies responded to Russia's 2022 invasion of Ukraine with wide-ranging sanctions and export controls, including a price cap on Russian oil. U.S. agencies received additional resources under Ukraine supplemental appropriations acts, some of which they used for sanctions and export controls.

Congress included a provision in Public Law 117-328 for GAO to conduct oversight of Ukraine supplemental funding. For U.S. sanctions and export controls related to Russia's invasion of Ukraine, this report examines progress toward objectives and the extent to which U.S. agencies have established objectives with measurable outcomes and assessed risks to activities funded by supplemental resources, among other objectives.

GAO analyzed agency documents and data, performed economic analyses, reviewed relevant literature, interviewed agency officials, and selected and interviewed 11 knowledgeable stakeholders, including former government officials and economists. GAO selected these stakeholders based on their expertise related to U.S. sanctions or export controls.

What GAO Recommends

GAO recommends that U.S. agencies define objectives with targets for sanctions and export controls on Russia, assess progress toward these objectives, and that two State offices assess the risks to their programs without future supplemental funding. Commerce and Treasury agreed with the recommendations. State partially agreed.

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Abbreviations

BIS	Bureau of Industry and Security
CHPL	Common High Priority List
Coalition	Price Cap Coalition
DRL	Bureau of Democracy, Human Rights, and Labor
EB	Bureau of Economic and Business Affairs
EU	European Union
FinCEN	Financial Crimes Enforcement Network
G7	Group of Seven
GDP	gross domestic product
IMF	International Monetary Fund
ISN	Bureau of International Security and Nonproliferation
NSC	National Security Council
OCE	Office of the Chief Economist
OFAC	Office of Foreign Assets Control
OPEC	Organization of the Petroleum Exporting Countries
REPO	Russian Elites, Proxies, and Oligarchs Task Force

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On February 24, 2022, Russia launched a full-scale invasion of Ukraine, eight years after its 2014 invasion and annexation of Crimea. The war is the largest armed conflict in Europe in decades, has led to a tremendous loss of life and a humanitarian crisis, and threatens the sovereignty of a democratic country. The U.S. government imposed economic sanctions and export controls on Russian entities and individuals in response to Russian aggression in Ukraine in both 2014 and in 2022.[1]

The U.S.'s economic sanctions have included denying Russian companies or other entities access to the U.S. financial system and freezing the assets of individuals, such as Russian oligarchs, under U.S. jurisdiction. Export controls have included restricting the transfer of sensitive or dual-use items, such as semiconductors, to Russia. Understanding the objectives and effectiveness of U.S. sanctions and export controls on Russia is critical for making informed decisions about the future of U.S. policy in this area.

The U.S. Departments of State, the Treasury, Commerce, Justice, and Energy, along with other U.S. agencies, have roles in reviewing, implementing, or enforcing sanctions or export controls. U.S. agencies received additional resources that they have used to implement and enforce sanctions and export controls related to Russia's invasion of Ukraine, including funding provided under four of five Ukraine supplemental appropriations acts.[2]

[1]Throughout this report, when we refer to "sanctions and export controls on Russia," we refer to sanctions and export controls on individuals and entities related to Russian aggression in Ukraine.

[2]In this report, we use the term Ukraine supplemental funding or Ukraine supplemental funds to refer to funding provided under the following acts, which we refer to as the Ukraine supplemental appropriations acts: Ukraine Supplemental Appropriations Act, 2022, Pub. L. No. 117-103, Div. N, 136 Stat. 776 (March 15, 2022); Additional Ukraine Supplemental Appropriations Act, 2022, Pub. L. No. 117-128, 136 Stat. 1211 (May 21, 2022); Ukraine Supplemental Appropriations Act, 2023, Pub. L. No. 117-180, Div. B, 136 Stat. 2127 (Sept. 30, 2022); Additional Ukraine Supplemental Appropriations Act, 2023, Pub. L. No. 117-328, Div. M, 136 Stat. 5189 (Dec. 29, 2022); and Ukraine Security Supplemental Appropriations Act, 2024, Pub. L. No. 118-50, Div. B, 138 Stat. 905 (Apr. 24, 2024). U.S. agencies did not use any resources from Pub. L. No. 117-180 to implement and enforce sanctions and export controls on Russia.

The Consolidated Appropriations Act, 2023, included a provision for us to conduct oversight, including audits and investigations, of amounts appropriated in response to the war in Ukraine.[3] This report is part of a broader series of reviews we are conducting in response to this provision. This report examines (1) the extent to which U.S. agencies have established objectives with measurable outcomes for their sanctions and export controls on Russia; (2) progress made toward addressing categories of U.S. sanctions and export controls objectives on Russia; (3) supplemental resources U.S. agencies have received and how they used them to implement and enforce sanctions and export controls on Russia; and (4) the extent to which U.S. agencies have developed plans for the use of remaining supplemental funds and assessed risks to their sanctions and export controls activities in the absence of future funding.

To address our first objective, we analyzed documents that agency officials told us provided insight into their objectives for sanctions and export controls on Russia, including nearly 300 relevant State, Treasury, and Commerce press releases issued from February 24, 2022, through January 17, 2025, as well as pertinent agency rules and regulations. We reviewed agency documents related to U.S. sanctions and export controls on Russia and interviewed or obtained written responses from relevant officials from State, Treasury, Commerce, Justice, and Energy. We assessed agency actions against federal internal control standards for defining objectives.[4]

To address our second objective, we estimated the impact of the events in 2022 and beyond, including the invasion and sanctions, on economic indicators. Specifically, we used a synthetic control methodology—a technique that enables comparison to a counterfactual situation—to estimate how Russia's economy might have evolved absent events in 2022 and beyond, including the invasion and sanctions. We also reviewed Treasury analyses of International Monetary Fund (IMF) forecasts of Russia's economy to analyze the effects of the 2022 war and sanctions on Russia's gross domestic product (GDP). We examined data

[3]Consolidated Appropriations Act, 2023, Pub. L. No. 117-328, Div. M, 136 Stat. 5189 (Dec. 29, 2022).

[4]Specifically, we determined the risk assessment component of internal control was significant to this objective, along with the underlying principle that management should define objectives clearly so they are understood at all levels of the entity and in measurable terms so that performance toward achieving those objectives can be assessed (principle 6). See GAO*, Standards for Internal Control in the Federal Government,* GAO-14-704G (Washington, D.C.: Sept. 2014).

on the volume of Russian oil production and oil export revenues to assess the effect on Russia's economy from a price cap on Russian oil. In addition, we reviewed Commerce and State analyses to assess agencies' progress on implementing and enforcing U.S. export controls on Russia. We also reviewed relevant documents from Commerce, State, Treasury, and Justice related to holding accountable those who support Russia's war or abuse human rights. Lastly, we interviewed State and Treasury officials about sanctions related to human rights and discussed visa restrictions with State officials.

To inform our first two objectives, we selected and interviewed 11 nongovernmental stakeholders based on their knowledge of U.S. sanctions and export controls on Russia.[5] We also conducted a literature review on sanctions and export controls related to Russia's 2014 annexation of Crimea and its full-scale invasion of Ukraine in 2022. We reviewed numerous studies and identified 87 relevant studies for more in-depth review.[6] We developed a data collection instrument to systematically review these studies to obtain information on sanctions and export controls' objectives and economic outcomes.

To address our third and fourth objectives, we analyzed Treasury, State, Justice, and Commerce obligations, staffing data, and relevant documentation.[7] We determined that the data were sufficiently reliable for our purposes of reporting on the amounts obligated and agencies' use of their Ukraine supplemental funding. We also interviewed and obtained written responses from Treasury, State, Justice, and Commerce officials. Lastly, we reviewed agency plans and asked for any risk assessments of agencies' activities supported by Ukraine supplemental funding to

[5]We conducted semi-structured interviews of these knowledgeable stakeholders. While we had a common set of questions, some stakeholders provided additional information beyond our questions based on their areas of expertise. As a result, not all stakeholders received nor provided responses to probes or follow-up questions based on their responses to our common set of questions. We quantified the number of knowledgeable stakeholders who commented on an issue where possible, but some statements cannot be attributed in relation to all stakeholders. In other cases, we use the term "knowledgeable stakeholders" to refer to instances in which more than one stakeholder commented on a topic outside our common set of questions. See appendix II for a list of the 11 knowledgeable stakeholders and their titles and affiliations.

[6]The papers included used quantitative empirical analysis to estimate the effectiveness or economic impact of U.S.-imposed bilateral or multilateral sanctions or export controls.

[7]Energy officials told us that Energy did not use any of its Ukraine supplemental funding on activities related to the implementation or enforcement of sanctions and export controls on Russia.

determine whether agencies had documentation that met federal internal control standards for identifying, analyzing, and responding to risks.[8] See appendix I for more details on our scope and methodology.

We conducted this performance audit from September 2023 to September 2025 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

U.S. Sanctions and Export Controls on Russia

The U.S. has imposed substantial economic sanctions and export controls on entities and individuals as a key element of its foreign policy response to Russian aggression in Ukraine. According to State officials, as of January 2025, nearly 3 years after the start of the war in Ukraine, State and Treasury had designated over 6,000 entities and individuals under Russia-related sanctions authorities. According to Commerce, it had placed over 900 foreign entities that supported Russia's military on its list of individuals, companies, and organizations subject to export control restrictions by the end of 2024. Sanctions and export controls on Russia are significant due to the large size of Russia's economy compared to other countries with much smaller economies where the U.S. has imposed comparable types of restrictions.[9]

U.S. sanctions may include actions which limit transactions involving targeted foreign governments, individuals and entities, including blocking property and interests in property subject to U.S. jurisdiction, and limiting

[8]Specifically, we determined the risk assessment component of internal control was significant to our fourth objective, along with the underlying principle that management should identify, analyze, and respond to risks related to achieving defined objectives (principle 7). See, GAO-14-704G*, Standards for Internal Control in the Federal Government.*

[9]According to the Congressional Research Service, Russia had the 11th largest economy in the world in 2021, the year before it began its full-scale invasion of Ukraine, and the U.S. imposed the sanctions and export controls described in this report. See Congressional Research Service, *The Economic Impact of Russia Sanctions* (updated December 13, 2022).

access to the U.S. financial system.[10] U.S. sanctions on Russia include those targeting its financial sector, such as sanctions on Russia's central bank and other financial institutions. U.S. sanctions have also sought to limit Russia's access to international capital markets and the international financial system, as well as prevent new U.S. investments in Russia.[11] Lastly, U.S. sanctions have targeted Russia's energy sector and the overseas wealth and economic activity of Russia's elites.

U.S. export controls on Russia restrict the export and reexport of certain items subject to U.S. export control jurisdiction, such as electronics; computers; telecommunications; sensors and lasers; navigation and avionics; marine, aerospace, and propulsion technologies; and other equipment and materials.[12] The U.S. government also has prohibited the export to Russia of U.S. dollar-denominated bank notes and luxury goods.[13] See table 1 for examples of U.S. sanctions and export controls on Russia.

[10] As part of implementing sanctions, Treasury publishes a list, known as the Specially Designated Nationals and Blocked Persons List, of individuals, groups, and entities whose assets in the United States are blocked and with which U.S. persons are prohibited from dealing. The addition of an individual, group, or entity to this list is referred to as a sanctions designation. Entities or groups listed include those owned or controlled by, or acting for or on behalf of, targeted country governments, such as Russia.

[11] Congressional Research Service, *Russia's War on Ukraine: Financial and Trade Sanctions* (updated Feb. 22, 2023).

[12] U.S. export controls also restrict the transfer within Russia of these items.

[13] Executive Order 14068, *Prohibiting Certain Imports, Exports, and New Investment With Respect to Continued Russian Federation Aggression*, 87 Fed. Reg. 14,381 (March 11, 2022).

Table 1: Examples of U.S. Sanctions and Export Controls on Russia, February 2022 – October 2024

Date Announced	Examples of sanctions and export controls on Russia
February 24-25, 2022	• **Treasury** imposed sanctions on President Putin and Russia's Minister of Foreign Affairs, and on Russia's two largest banks and almost 90 financial institution subsidiaries around the world. • **Commerce** imposed a series of export controls that primarily targeted Russia's defense, aerospace, and maritime sectors, including export controls on over 45 Russian military end users, which were added to Commerce's Entity List.[a]
March 11, 2022	• **State** imposed sanctions on Russian elites, including eight board members of a Russian bank and management company. • **Treasury** imposed sanctions on Russian elites, including 12 members of Russia's legislature, and family members of President Putin's spokesperson who have supported Russia's war. • **Commerce** imposed export controls on luxury goods to Russia, including high-end automobiles, alcoholic spirits, tobacco, clothing, and jewelry.
September 15, 2022	• **State** imposed sanctions on over 20 key Russia-installed authority figures in Ukraine territories controlled by the Russian military. • **Treasury** imposed sanctions on two entities and 22 individuals, including those connected to human rights abuses and leaders of key financial institutions. • **Commerce** expanded export controls against Russia on items potentially useful for Russia's chemical and biological weapons' production capabilities, and advanced manufacturing.
February 24, 2023	• **State** imposed sanctions on over 60 individuals and entities complicit in the administration of Russia's government-wide operations and policies of aggression toward Ukraine. • **Treasury** imposed sanctions on 22 individuals and 83 entities in the metals and mining sector, including over 30 third-country individuals and companies connected to Russia's sanctions evasion efforts, and those related to arms trafficking and illicit finance. • **Commerce** issued four rules imposing additional export restrictions on Russia, Belarus, and Iran—related to Russia's use of Iranian drones, as well as entities in third countries.
October 30, 2024	• **State** imposed sanctions on more than 80 individuals and entities, targeting entities in multiple third countries, including the People's Republic of China, India, Malaysia, Thailand, Turkey, and the United Arab Emirates, to disrupt sanctions evasion. • **Treasury** imposed sanctions on more than 270 individuals and entities involved in supplying Russia with advanced technology and equipment that Russia needs to support its war machine. • **Commerce** added 40 entities to its Entity List in connection with their support for Russia's war in Ukraine and tightened restrictions on 49 listed entities to address their procurement of high-priority U.S.-branded microelectronics and other items on behalf of Russia.[a]

Source: GAO analysis of the Department of State, Department of the Treasury, and Department of Commerce documents. | GAO-25-107079

[a]The Entity List is a list of foreign individuals, companies, and organizations reasonably believed to be involved, or to pose a significant risk of being or becoming involved, in activities contrary to the national security or foreign policy interests of the U.S., subjecting them to export licensing requirements. 15 C.F.R. § 744.16. The Entity List is found at Supplement No. 4 to Part 744 of Title 15.

Oil is a key source of revenue for Russia. On December 5, 2022, the U.S. implemented a price cap on Russian crude oil as part of the Group of Seven (G7) with the 27 member states of the European Union (EU) and

Australia.[14] These countries are collectively called the Price Cap Coalition (Coalition).[15] The oil price cap permits service providers in Coalition countries to support the Russian oil trade only if the oil is sold at or below a cap of $60 per barrel.[16] According to Treasury, which is the primary agency that administers and enforces U.S. sanctions related to the oil price cap, completely stopping the flow of Russian oil would have serious consequences for the global economy, including denying energy to the emerging world and raising global oil prices. The stated goal of the price cap is to reduce Russia's oil revenues while maintaining the stability of global energy markets, according to Treasury officials. The oil price cap is designed to force Russia to sell its oil for lower prices than it could otherwise obtain, according to Treasury documents.

U.S. Sanctions and Export Controls Authorities

U.S. sanctions and export controls are imposed pursuant to statute or other authorities. For example, the President may use authorities granted in the International Emergency Economic Powers Act and the National Emergencies Act to issue executive orders authorizing sanctions.[17] Executive Orders 14024 and 14114 are key authorities that have been used to impose sanctions related to Russia's 2022 invasion of Ukraine. Executive Order 14024 targets individuals who have carried out various harmful foreign activities on behalf of Russia, including undermining

[14]The G7 is an intergovernmental political and economic forum that consists of the U.S., Canada, France, Germany, Italy, Japan, and the United Kingdom. In addition to the Coalition price cap, the EU had previously imposed a ban on imports of Russian crude oil in December 2022 and refined petroleum products in February 2023.

[15]New Zealand joined the Coalition in spring 2024.

[16]While Russian crude oil was capped at $60 per barrel to access Coalition-based maritime services, Russian refined petroleum products that typically trade at a discount to crude oil (e.g., fuel oil, naphtha) were capped at $45 per barrel, and Russian refined petroleum products that typically trade at a premium to crude oil (e.g., diesel, kerosene, gasoline) were capped at $100 per barrel. On July 18, 2025, the United Kingdom and the EU announced they would lower the price cap for Russian crude oil from $60 per barrel to $47.60 per barrel, effective September 2, 2025, and September 3, 2025, respectively. The EU also established an automatic mechanism to adjust the cap.

[17]Pub. L. No. 95-223, title II, 91 Stat. 1626 (Dec. 28, 1977) (codified as amended at 50 U.S.C. §§ 1701-08), and Pub. L. No. 94-412, 90 Stat. 1255 (Sept. 14, 1976) (codified as amended at 50 U.S.C. ch. 34), respectively. An executive order is a signed, written, and published directive from the U.S. President that manages operations of the federal government.

democratic processes or institutions in the U.S. or abroad.[18] Executive Order 14114, in relevant part, amends Executive Order 14024 by adding a new section targeting foreign financial institutions that conducted or facilitated any significant transactions for or on behalf of persons sanctioned for operating in the technology, defense and related materiel, construction, aerospace, or manufacturing sectors of the Russian economy, or other such sectors as may be determined to support Russia's military industrial base. It also targets foreign financial institutions that conducted or facilitated any significant transactions or provided any service, whether directly or indirectly, involving Russia's military industrial base.[19]

Key legislative acts used to impose sanctions and export controls on Russia include:

- the Global Magnitsky Human Rights Accountability Act, which targets foreign entities or individuals worldwide connected to certain human rights offenses;
- the Countering America's Adversaries through Sanctions Act, which targets Iran, Russia, and North Korea with sanctions related to various activities, such as human rights abuses, development of ballistic missiles, cybersecurity attacks, and corruption; and
- the Export Control Reform Act of 2018, which requires the creation of a list of controlled items and that licenses or other authorizations be

[18]*Blocking Property With Respect To Specified Harmful Foreign Activities of the Government of the Russian Federation*, 86 Fed. Reg. 20,249 (Apr. 15, 2021). In Executive Order 14024, the President declared a national emergency to deal with the threat to the national security, foreign policy, and economy of the United States posed by Russian government efforts to undermine the conduct of free and fair democratic elections and democratic institutions in the United States and its allies and partners; engage in and facilitate malicious cyber-enabled activities against the United States and its allies and partners; foster and use transnational corruption to influence foreign governments; pursue extraterritorial activities targeting dissidents or journalists; undermine security in countries and regions important to United States national security; and violate well-established principles of international law, including respect for the territorial integrity of states.

[19]*Taking Additional Steps With Respect to the Russian Federation's Harmful Activities*, 88 Fed. Reg. 89,271 (Dec. 22, 2023). In Executive Order 14114, which in part amends Executive Order 14024, the President provided additional authority to specified executive agencies to address the national emergency declared in Executive Order 14024 in view of the Russian government's continued use of its military-industrial base to aid its effort to undermine security in countries and regions important to United States national security, including its reliance on the international financial system for the procurement of dual-use and other critical items from third countries.

required for exports, reexports, and in-country transfers of those items, among other things.[20]

Roles of Relevant Federal Agencies in Sanctions and Export Controls

State, Treasury, and Commerce are the primary agencies that review, implement, or enforce sanctions or export controls. Other agencies, including Justice and Energy, have specific roles in sanctions implementation and enforcement based on their expertise and broader duties.[21]

The following State offices are among those that have a role in sanctions, export controls, and visa restrictions on Russia:[22]

- The Office of Sanctions Coordination serves as the principal advisor to the Secretary of State on the development and implementation of sanctions policy, including for sanctions on Russia. It also serves as the coordinator for the development of sanctions policy within State. It acts as the lead representative in diplomatic engagements on sanctions matters to obtain international cooperation with U.S. sanctions.
- The Bureau of Economic and Business Affairs' (EB) Division for Counter Threat Finance and Sanctions develops and implements sanctions to counter threats to national security posed by specific activities, terrorist groups, and countries. EB also advises the Secretary of State on economic sanctions strategies to achieve U.S. foreign policy objectives and works with other agencies to enact such strategies.
- The Bureau of International Security and Nonproliferation (ISN) plays a key role in export controls policy to protect dual-use items and to prevent their use in ways that harm U.S. national security or are

[20]Pub. L. No. 114-328, Div. A, Title XII, Subtitle F, 130 Stat. 2533 (Dec. 23, 2016), Pub. L. No. 115-44, 131 Stat. 886 (Aug. 7, 2017), and Pub. L. 115–232, Div. A, Title XVII, Subtitle B, 132 Stat. 2208 (Aug. 13, 2018), respectively.

[21]The Department of Defense is also involved in the review of export license applications. However, we did not include this agency in the scope of our review because it does not have an extensive role with respect to the implementation and enforcement of sanctions and export controls on Russia.

[22]The descriptions in this section reflect State offices and roles prior to State's reorganization in summer 2025. The reorganization may have affected these offices and their roles related to sanctions and export controls on Russia.

contrary to U.S. foreign policy objectives.[23] According to ISN officials, ISN is the U.S. government's lead office for imposing sanctions under the Countering America's Adversaries through Sanctions Act. ISN imposes sanctions on foreign individuals, private entities, and governments that engage in proliferation activities, including Russia. According to ISN officials, ISN focuses on transactions within Russia's defense sector.

- The Bureau of Democracy, Human Rights, and Labor (DRL) submits nominations for sanctions programs and packages that relate to human rights violations and abuses, as well as efforts to undermine democracy, according to DRL officials. DRL also makes recommendations to the Secretary of State to impose visa restrictions on officials of foreign governments and their immediate family members who have been involved in gross violations of human rights, including violations related to Russia's war against Ukraine.
- The Office of the Chief Economist (OCE) provides analysis and advice to the Secretary of State and other senior leaders across the department. OCE monitors and explains current economic and financial trends in key countries and regions, including Russia. OCE also analyzes U.S. sanctions and export controls on Russia to determine possible sanctions evasion and trade diversion.
- According to State officials, other State offices have roles as well.
    - The Bureau of Energy Resources supports the development, coordination, implementation, and monitoring of State's sanctions against entities involved in the development or expansion of Russia's energy production and export capacities.
    - The Office of the Legal Adviser consults with State bureaus such as EB and ISN on proposed sanctions packages, including those on Russia, to strengthen them against any potential legal challenges.
    - The Bureau of Political-Military Affairs' Directorate of Defense Trade Controls implements an arms embargo on Russia and investigates reports of unauthorized exports of defense articles to Russia.
    - The Bureau of European and Eurasian Affairs plays a role in developing and implementing sanctions with allies and partners;

[23]For purposes of Commerce's Export Administration Regulations (15 C.F.R. §§ 730-774), a dual-use item is one that has civil applications as well as terrorism and military or weapons of mass destruction-related applications. 15 C.F.R. § 730.3.

for Russia, the Bureau has worked on sanctions involving trade, energy, human rights, travel, banking, and nonproliferation, among others.

- The Bureau of International Narcotics and Law Enforcement Affairs provides concurrence on Treasury's financial sanctions packages related to transnational organized crime, among others, such as Treasury's January 2023 designation of the Wagner Group, a Russian private military company. It also reviews Treasury's corruption-related financial sanctions packages, such as those under the Global Magnitsky Act, and makes recommendations to the Secretary of State to impose visa restrictions on officials of foreign governments and their immediate family members who have been involved, directly or indirectly, in significant corruption.

The following Treasury offices have a role in sanctions on Russia:

- The Office of Foreign Assets Control (OFAC) participates in all aspects of implementing sanctions, including targeting, outreach to the public, and compliance, according to Treasury officials. OFAC also enforces sanctions by conducting civil investigations of sanctions violators and working with law enforcement agencies. OFAC publishes the Specially Designated Nationals List.[24] Within OFAC, the Sanctions Economic Analysis Division provides economic analyses of U.S. sanctions' effect on various aspects of Russia's economy, including its energy sector.
- The Financial Crimes Enforcement Network (FinCEN) plays a role in identifying entities and individuals for new sanctions and export controls as well as supporting the enforcement of sanctions and export controls on Russia. According to FinCEN, it analyzes Bank Secrecy Act information to identify trends and patterns related to suspected evasion of Russia-related sanctions and export controls and provides alerts to U.S. financial institutions on such evasion. Its whistleblower incentive program encourages individuals to provide tips related to illegal monetary transactions, money laundering, and other financial crimes.

[24]The Specially Designated Nationals List is a list of individuals, groups, and entities whose assets in the U.S. are blocked and with which U.S. persons are prohibited from dealing. The addition of an individual, group, or entity to this list is referred to as a sanctions designation. Entities or groups listed may include those owned or controlled by, or acting for or on behalf of, targeted country governments such as Russia.

Commerce's Bureau of Industry and Security (BIS) implements and enforces the Export Administration Regulations, which regulate the export, reexport, and in-country transfer of dual-use, solely commercial and some less sensitive military items.[25] Through its export licensing process, BIS restricts specified countries' and persons' access to such items. In response to Russia's 2022 invasion of Ukraine, BIS maintains broad export controls on Russia. BIS has also added hundreds of Russian individuals and companies and third-party entities to its Entity List and developed the Common High Priority List to help U.S. industry identify items that are at risk of being diverted to Russia due to their importance to Russia's war efforts.[26]

In addition, Justice and Energy have a role in sanctions and export controls on Russia.

- Justice investigates and prosecutes violations of sanctions and export controls laws and provides legal reviews of sanctions' designations. According to Justice officials, Justice enforces criminal violations of sanctions and export controls on Russia and has led or co-led several task forces to prosecute such violations and to seize and forfeit or freeze the assets of Russian oligarchs. For example, from March 2022 to February 2025, Justice led an interagency task force to prosecute violations of sanctions and export controls on Russia.
- Energy's National Nuclear Security Administration supports sanctions by providing technical analyses of weapons of mass destruction and conventional arms transactions that may be subject to sanctions and making recommendations during sanctions development. The National Nuclear Security Administration also reviews export license applications for munitions and dual-use items, which may include parties subject to sanctions. According to Energy officials, the U.S. Energy Information Administration produces energy market analysis, data, research, and forecasts. It also prepared market impact analyses of proposed sanctions on Russia for Treasury and the National Security Council (NSC). Officials also noted that Energy's

[25]15 C.F.R. §§ 730-774. An in-country transfer is a change in end user or end use within the same foreign country. 15 C.F.R. § 734.16.

[26]The Entity List is a list of foreign individuals, companies, and organizations reasonably believed to be involved, or to pose a significant risk of being or becoming involved, in activities contrary to the national security or foreign policy interests of the U.S., subjecting them to certain export licensing requirements. BIS developed the Common High Priority List in March 2023 and the list identifies critical items that Russia is seeking to procure for its weapons programs.

Office of International Affairs provides feedback on potential sanctions targets related to violations of sanctions on Russian oil.

U.S. Agencies Have Not Established Objectives Linked to Measurable Outcomes with Targets for U.S. Sanctions and Export Controls on Russia

We identified three broad categories for the objectives of U.S. sanctions and export controls on Russia based on our analysis of State, Treasury, and Commerce documents, and other reports and studies. However, we found that these agencies have not established agency-level objectives that are linked to measurable outcomes with targets for their efforts.

Objectives of U.S. Sanctions and Export Controls on Russia Fell into Three Broad Categories

Perspectives on the Three Broad Categories for the Objectives of U.S. Sanctions and Export Controls on Russia

The 11 knowledgeable stakeholders that we interviewed generally agreed with our broad categories of objectives.

One stakeholder said there was an understanding at the NSC that the goals for U.S. sanctions and export controls on Russia were going to be about reducing Russia's resources, degrading the war effort, and holding bad actors accountable.

Another stakeholder noted that the three primary objectives of U.S. sanctions and export controls on Russia are to reduce Russia's revenues from commodity exports, such as oil, to cripple Russia's capability to conduct the war in Ukraine, and to further harm the Russian economy. Holding malign actors accountable is a component of crippling Russia's capability to conduct the war in Ukraine by preventing such actors from enabling and facilitating Russia.

Source: GAO Interviews with selected stakeholders knowledgeable about U.S. sanctions and export controls on Russia. | GAO-25-107079

Based on our analysis of State, Treasury, and Commerce documents, press releases, agency rules and regulations, and other reports and studies, we identified three broad categories for the objectives of U.S. sanctions and export controls on Russia. We were able to broadly classify the objectives as

- impacting Russia's economy, including depriving Russia of revenue;
- inhibiting Russia's war effort; and
- holding those who support Russia's war or abuse human rights accountable ("malign actors").[27]

Officials from State, Treasury, and Commerce noted a variety of sources that provided insight into the objectives of U.S. sanctions and export controls on Russia, including the NSC, executive orders, G7 leaders' statements, agency press releases, and agency rules and regulations.[28]

[27]Based on our analysis of agency documents, we use the term "holding malign actors accountable" to include restricting access to allied luxury goods or freezing, seizing, and forfeiting the assets of Russian elites, oligarchs, and other individuals who provide support for or commit human rights abuses related to Russia's war in Ukraine. State was the only agency that told us that holding malign actors accountable is an objective of U.S. sanctions and export controls on Russia. While neither Treasury nor Commerce officials cited "holding malign actors accountable" as an objective of U.S. sanctions and export controls on Russia, we identified language from these agencies that we determined to be in line with this objective. Specifically, Treasury press releases include language such as holding accountable individuals who profit from the invasion and their proximity to the Russian government, and Commerce officials stated that cutting off access by the Russian elite to allied luxury goods is an objective of U.S. export controls on Russia.

[28]The NSC is the President's principal means for coordinating executive departments and agencies in the development and implementation of national and homeland security policies, strategies, activities, and functions.

We asked agency officials about information that they obtained from the NSC and reviewed the other sources.[29]

- **NSC.** NSC provides broad strategic direction to agencies regarding the objectives and goals of U.S. sanctions and export controls on Russia. For example, according to State, Treasury, and Commerce officials, they have participated in interagency meetings through the NSC that included a discussion of the objectives and goals of sanctions and export controls on Russia.
- **Executive orders.** State officials also directed us to Executive Orders 14024 and 14114 as relevant documents that contain objectives of U.S. sanctions and export controls on Russia but explained that the objectives are not limited to those in the executive orders.
- **G7 leaders' statements.** According to Treasury officials, five G7 leaders' statements contained the objectives of sanctions and export controls on Russia. While these statements included numerous objectives of sanctions and export controls on Russia, they were not specific to the U.S.
- **Agency press releases**. State and Treasury officials also told us that the broad objectives for U.S. sanctions and export controls were publicly stated in agency press releases. We identified nearly 100 State press releases and fact sheets, nearly 100 Treasury press releases, and over 90 Commerce press releases from the start of Russia's invasion of Ukraine through January 2025. From these, we derived various objectives of U.S. sanctions or export controls.[30]
- **Agency rules and regulations.** According to Commerce officials, objectives of their export controls can be found in their published rules and regulations. Based on a review of selected Commerce rules, we

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[29]We also asked the NSC whether there were high-level, U.S. government-wide strategic objectives for U.S. sanctions and export controls related to Russia's 2022 war in Ukraine, and whether any assessments, formal or informal, of progress toward achieving government-wide strategic objectives for U.S. sanctions and export controls related to Russia's 2022 war in Ukraine were conducted at NSC's Interagency Policy Committee meetings. In response to our first question, the NSC did not provide us with any information nor a strategy, and they declined to answer the second question.

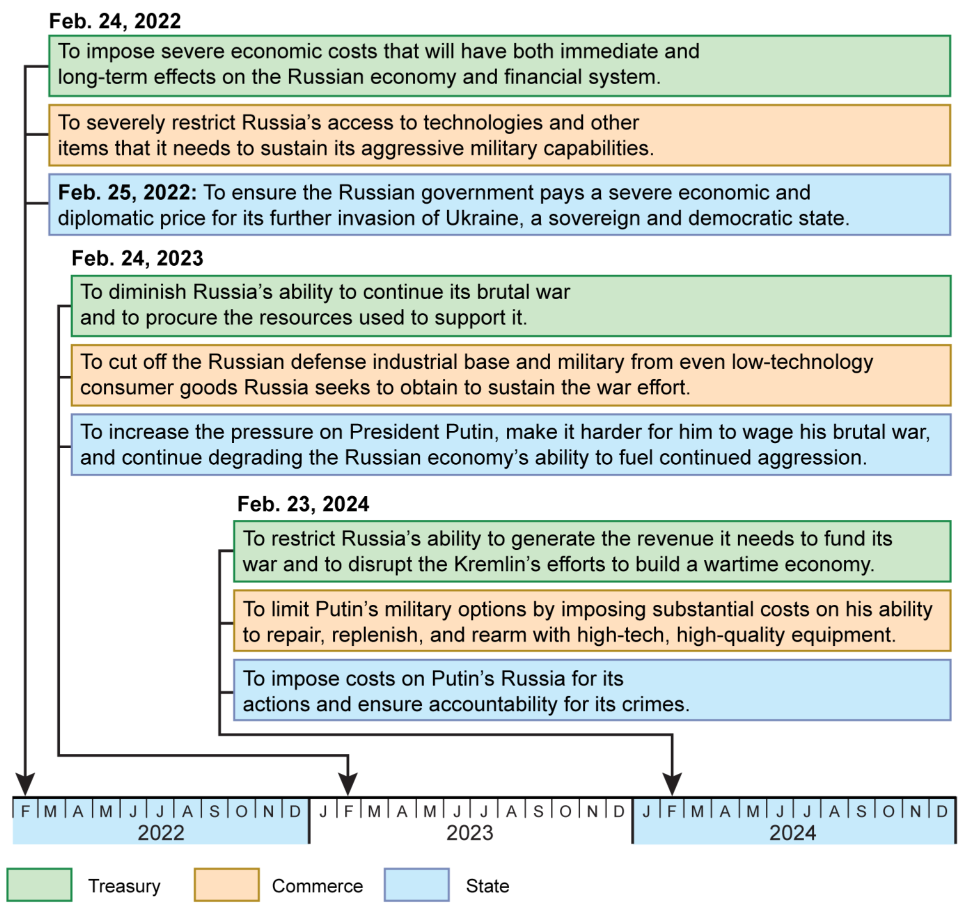
[30]Both State and Treasury cited press releases as sources for the objectives of their sanctions. Though Commerce did not cite press releases as a source for its objectives, agency officials explained that press releases may state, reflect, or summarize objectives from rules and regulations. As a result, we also analyzed Commerce's press releases for objectives. State officials also noted that fact sheets were a source of their objectives. We reviewed over a dozen White House fact sheets and found the language was similar to State's press releases.

found that they included a variety of policy statements but were generally consistent with the language provided in associated press releases.[31]

Figure 1 shows examples of objectives from agencies' press releases beginning the first day of the invasion, February 24, 2022, through February 23, 2024.

[31]For example, on Feb. 23, 2024, Commerce added 93 entities to its Entity List, including several for their provision of support to Russia's industrial sector by procuring U.S.-origin machine tools, electronics test equipment, and machine tool spare parts for Russian end-users without required BIS licenses. According to Commerce, these actions enable Russia to continue its war against Ukraine by developing Russia's industrial base. Bureau of Industry and Security, *Additions of Entities to Entity List*, 89 Fed. Reg. 14,385 (Feb. 27, 2024). One of the objectives of this action in Commerce's corresponding press release was to restrict Russia's access to items that can sustain its war effort.

Figure 1: Examples of Objectives of U.S. Sanctions and Export Controls on Russia from Agency Press Releases, February 24, 2022 – February 23, 2024



Source: GAO analysis of Department of State (State), Department of the Treasury (Treasury), and Department of Commerce (Commerce) press releases. | GAO-25-107079

Note: According to Commerce officials, the objectives of U.S. export controls on Russia are found in Commerce's rules and regulations. We reviewed the final rules that are associated with Commerce's press releases in the figure above and found that these rules included similar language to those found in the press releases.

In addition, we found that the language used in agency press releases to describe certain objectives of U.S. sanctions and export controls evolved slightly over time. For example, the press releases from State and Treasury used language at the start of the war in 2022 that focused on inflicting widespread, severe costs on the Russian economy, such as

- ensuring the Russian government pays a severe economic and diplomatic price for its further invasion of Ukraine (State); and

- imposing severe economic costs that will have both immediate and long-term effects on the Russian economy and financial system (Treasury).

However, in 2023, the objectives in several agency press releases had a more specific focus, such as degrading Russia's future energy production and export capabilities and reducing Russia's revenues from the metal and mining sectors. State and Treasury press releases in August 2024 generally continued this narrower focus, including:

- disrupting support for Russia's military-industrial base and curtailing the Kremlin's ability to exploit the international financial system and generate revenue in furtherance of its war against Ukraine (State); and
- holding Russia accountable for its aggression; disrupting Russia's military-industrial base supply chains and payment channels; and further limiting Russia's future revenue from metals and mining (Treasury).

U.S. Agencies Have Not Established Specific Objectives that are Linked to Measurable Outcomes with Targets

While U.S. agencies receive broad, strategic direction from the NSC, they have not established agency-specific objectives linked to measurable outcomes with targets for their sanctions and export controls activities related to Russia.[32] We asked officials from State, Treasury, and Commerce about the objectives of their agencies' sanctions and export controls on Russia.[33] We received the following responses, which are not reflected in any agency documents:

- State officials noted that the objectives are to deprive Russia of revenue, hinder its use of the international financial system to conduct its war, disrupt networks that support Russia's military-industrial base, increase the costs to Russia of perpetrating its war of aggression

[32]The objectives noted in the executive orders, G7 leaders' statements, agency press releases, and agency rules and regulations discussed above do not include measurable outcomes with targets.

[33]Since the Departments of Justice and Energy were included in the scope of this study, we also asked these agencies about the objectives of U.S. sanctions and export controls on Russia. According to Justice officials, the Department's role in sanctions enforcement is to investigate and prosecute criminal violations of sanctions, as sanctions policy objectives are determined by other agencies. Therefore, they deferred to Treasury, State, and Commerce to identify the objectives. Energy officials stated that they do not have any role in implementing the price cap on Russian oil, sanctions, or export controls related to the war in Ukraine.

against Ukraine, and promote accountability for actions that cause harm or enable Russia to continue its war against Ukraine.

- Treasury officials said the objectives are to deprive Russia of revenue and deprive Russia of key inputs needed to sustain and finance its war in Ukraine.
- Commerce officials said the objectives of U.S. export controls on Russia have broadly been to degrade Russia's ability to wage war against Ukraine and maintain its military force. Officials added that the goals are to stop direct trade in sensitive items to Russia, deny Russia access to sensitive items through third countries, impose measures to diminish the economic resources Russia needs to support its military and defense industrial base, and cut off access by the Russian elite to allied luxury goods.[34]

In addition, we asked agency officials how they tracked and measured progress on sanctions and export controls on Russia. Agency officials referred us to economic evaluation units within each agency.

- A senior official in State OCE told us that the office focused on conducting analyses of the effectiveness of U.S. export controls because it was an area where they could have the most impact. However, these analyses did not include measurable outcomes with specific targets on the effectiveness of U.S. export controls. Further, this office did not conduct other analyses that would help State officials understand sanctions' impact on Russia's economy because of the office's limited resources, according to officials. As of May 2025, the office is no longer analyzing U.S. sanctions or export controls on Russia due to insufficient resources, according to a State official.
- Treasury OFAC examines both macroeconomic and microeconomic indicators for Russia such as Russia's monthly tax revenue data, GDP, and the oil sector, according to a senior OFAC official. For example, OFAC's Sanctions Economic Analysis Division issued a monthly oil price cap dashboard that included trends in Russia's oil revenues. However, this official told us that this division does not have an analytical construct to assess its sanctions programs systematically; rather, they analyze specific sectors, focusing largely on energy. Moreover, Treasury's assessments did not refer to

[34]While agency officials we interviewed did not identify changing Russia's behavior or ending the war in Ukraine as an objective of U.S. sanctions and export controls, one State official noted that the role of sanctions is to soften the ground so that negotiating for peace becomes a more attractive option.

measurable outcomes with specific targets that the agency was tracking to assess the effectiveness of its sanctions on Russia.

- Commerce's Office of Technology Evaluation, an office within BIS, monitors open source information, general economic data, and intelligence for developments in Russia's wartime production and the state of its economy, according to BIS officials. However, these analyses are not linked to measurable outcomes with specific targets for export controls on Russia. For example, Commerce analyzed the increased costs that export controls have imposed on Russia, but this analysis did not include targets, such as a specific percentage increase in Russia's costs to import critical items, that would enable Commerce to assess its progress in imposing export controls.

Federal internal control standards state that management should define objectives in specific terms so they are understood at all levels of the entity and in measurable terms so that performance toward achieving those objectives can be assessed.[35] Some State and Commerce officials told us that they had defined objectives of sanctions and export controls on Russia and that they had some measures of the outcomes of those sanctions and export controls. However, State and Commerce officials did not provide us with documentation that linked agency-level objectives to outcomes used to measure their progress in achieving their objectives, nor did they provide any specific targets for their desired outcomes. Another State office noted that they had not established objectives linked to measurable outcomes because they received regular, direct feedback from the NSC on the prioritization of sanctions and export controls actions.[36]

Additionally, Commerce officials stated that measuring the efficacy of export controls is difficult. Similarly, Treasury officials noted there are challenges to establishing sanctions objectives that are linked to measurable outcomes, as potential metrics would have to account for limitations such as the availability of trade data and the volatility in, and complexity of, commodities markets. Treasury officials also cited the

[35]GAO-14-704G, *Standards for Internal Control in the Federal Government*; Principle 6—Define Objectives and Risk Tolerances.

[36]One State office plans to review its implementation of Russia sanctions projects. Specifically, a third-party company will conduct an evaluation of ISN's Office of Cooperative Threat Reductions' sanctions programming from November 2023 through March 2025. The evaluation will determine progress in all of its sanctions programs' lines of effort, the effects of programming on foreign partners, and recommendations for future programming, according to State officials. As of March 2025, the project was on hold due to the administration's freeze on foreign assistance funds, according to State officials.

evolution of foreign policy guidance and national security priorities, which could inhibit the linking of specific objectives to measurable outcomes with targets.

While there are inherent difficulties in assessing the progress of sanctions and export controls, it is nonetheless possible to develop measurable outcomes with specific targets in complex settings. For example, measurable outcomes of U.S. sanctions and export controls could include a targeted percentage decrease in Russia's oil revenues or a specific decrease in Russia's imports of products on Commerce's Common High Priority List that Russia uses for its war effort. Targets guide agencies' activities and provide a way for agencies to assess progress toward achieving their objectives. Without agency-level objectives that are documented and linked to measurable outcomes with specific targets, the agencies may not have clear direction for their activities. Moreover, they are unable to determine progress toward achieving targeted outcomes. This limits the U.S. government's ability to determine the effectiveness of its collective Russia-related sanctions and export controls efforts. Such information is crucial for improving current efforts and may provide important lessons learned for future scenarios where the U.S. government is considering the use of sanctions and export controls.

U.S. Agencies Have Made Some Progress Toward Broad Sanctions and Export Controls Objectives, but Challenges Remain

We examined progress U.S. agencies had made toward the three broad categories of sanctions and export controls objectives we identified. We found that various indicators of Russia's economy declined following the imposition of sanctions and export controls and the 2022 invasion of Ukraine, but partially recovered. We also found that Russian actions diminished the effectiveness of the price cap that the U.S. government imposed on Russian oil. In addition, we found that U.S. export controls hindered Russia's efforts to access military technology but could not completely prevent access due to enforcement challenges. Finally, we identified various mechanisms by which U.S. agencies attempt to hold Russian malign actors accountable, but the agencies have challenges in assessing the effectiveness of those efforts.

Russian Economic Indicators Declined in 2022 Following Sanctions and the Invasion, then Partially Recovered

We found evidence that Russia experienced initial declines and partial recoveries in various economic indicators, suggesting sanctions and the invasion affected Russia's economy.[37] Our estimate of what might have happened absent the invasion and sanctions in 2022 suggests that Russia's GDP growth was lower than expected in 2022. Relevant studies report declines in economic indicators in 2022 and partial recoveries afterward.[38] Some recoveries may be related to higher military expenditures, which may have contributed to subsequent increases in Russia's GDP. However, such high military expenditures and other factors associated with the sanctions and invasion such as Russia's decreased participation in global markets could affect Russia's future growth potential, according to agency officials, analyses, and knowledgeable stakeholders. These stakeholders indicated that Russia's anticipation of and adaptation to sanctions limited the effect of sanctions on economic outcomes.

Our Analysis of Russian Economic Indicators

To determine the effect of the events in 2022, including the invasion and resulting sanctions on Russia, we analyzed the following economic indicators: economic growth (real GDP percentage change), per capita real GDP, and inflation.[39] Our analysis found that Russia's economic growth was lower than expected in 2022.

Specifically, we found that Russia's economic growth in 2022 was about 6 percentage points lower[40] than what we estimate would have occurred absent the events of 2022, including the invasion and resulting sanctions.[41] Moreover, we also found that Russia's forecasted economic growth is expected to be lower each year from 2025 to 2029 than what we estimate would have happened absent the events of 2022, but these results may be less reliable because they are based on forecasted data.[42]

[37]We considered a variety of economic indicators through our own analysis, our review of studies, and our discussions with knowledgeable stakeholders. Such indicators include economic growth, real GDP per capita, inflation, production volumes, transactions in rubles, Russian import patterns, financial market indicators, and consumer spending.

[38]These studies generally do not separate the effect of sanctions from other factors.

[39]As noted earlier, based on our analysis of agency documents, we identified that impacting Russia's economy was a broad category of the objectives of U.S. sanctions and export controls on Russia.

[40]Our results for 2022 were statistically significant at the 94 percent confidence level.

[41]Our results were not driven by specific countries in our comparison pool. In addition, we found that Russia's decline in 2022 was specific to the events in 2022. For more information, see appendix III.

[42]The International Monetary Fund forecasted the GDP growth data for 2024 and later years as of October 2024.

Methodology to Estimate How Russia's Economy Would Have Evolved Absent Events in 2022 and Beyond

We used a methodology that enables comparison to a counterfactual situation representing how Russia's economy might have evolved absent events in 2022 and beyond, including the invasion and sanctions. The synthetic control methodology can be used when evaluating interventions where there is no readily available comparison country or countries. The methodology creates a synthetic counterfactual so that the intervention can be evaluated by comparing the outcome of the treated country with the outcome of the synthetic counterfactual country.

With the methodology, we calculated a counterfactual for Russia by matching Russia to other countries on the basis of economic indicators from 2017-2021. Specifically, we matched on the following predictors using their average values from the pre-sanctions period, consistent with literature that has used this methodology: inflation percentage change, real GDP percentage change, real GDP per capita, as well as the value of agriculture, value of industry, trade openness, gross capital formation, and oil rents in terms of percentage of GDP. We then compared values of Russia's actual and forecasted economic indicators to the corresponding values for the counterfactual calculated for Russia.

For additional details on the synthetic control methodology, see appendix III.

Source: GAO analysis. | GAO-25-107079

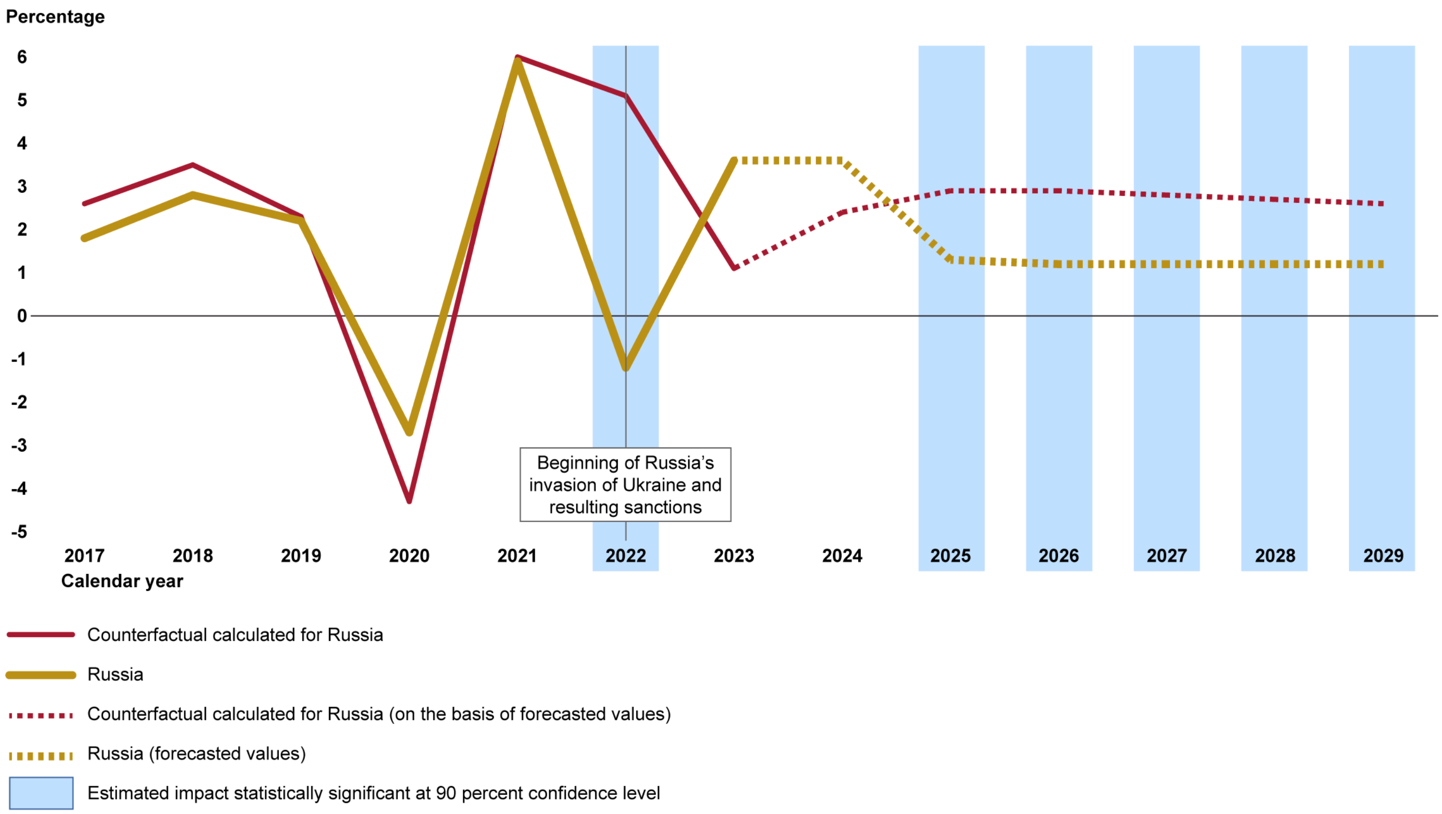
Our analysis could not isolate the effect of sanctions from the effect of other simultaneous events such as the war in Ukraine, but does suggest that events in 2022 hurt the Russian economy. However, our analysis did not find that Russia's economic growth in 2023 and 2024 was statistically different from what it might have been absent the events in 2022, including the invasion and resulting sanctions.[43]

To determine the effect of the events in 2022, including the invasion and resulting sanctions, on Russia, we calculated a counterfactual Russia representing what Russia might have experienced had the events in 2022 not occurred (see sidebar). Figure 2 compares Russia's economic growth to the counterfactual calculated for Russia and indicates when a yearly difference was statistically significant.[44]

[43]Our results for 2023 and 2024 were associated with a 25 and 12 percent confidence level, respectively, and thus were not considered statistically significant. For more information, see appendix III.

[44]For more information on the statistical significance of our estimates, see appendix III.

Figure 2: Comparison of Russia's Economic Growth to Counterfactual Calculated for Russia, 2017 – 2029



Source: GAO analysis of data from the International Monetary Fund (IMF), World Bank, U.S. Energy Information Administration, and International Energy Agency (IEA). IEA data from IEA (2024) Monthly Oil Data Service, https://www.iea.org/data-and-statistics/data-product/monthly-oil-data-service-mods-complete, all rights reserved. | GAO-25-107079

Notes: We used the percentage change in real gross domestic product (GDP) as our measure of economic growth. Russia values and forecasted values come directly from IMF's World Economic Outlook data. We implemented the synthetic control methodology to calculate the counterfactual for Russia. There were 20 nations in our pool of comparison countries for which data were available. The countries that we ultimately weighted in our counterfactual calculated for Russia were Poland, Mexico, Azerbaijan, Saudi Arabia, Algeria, and Sudan. Across countries, the IMF data for real GDP percentage change were generally forecasted starting in 2024, though some countries' forecasted data started earlier. The R-squared, which measures how well the counterfactual calculated for Russia matches Russia's pre-treatment outcomes, explains 93.3 percent of the variation in the GDP percentage change. We inferred the confidence level by conducting permutation testing that considered other countries to be the treated country instead of Russia if those other countries generally had a pre-2022 fit similar to Russia's, which we considered for this model as a mean squared prediction error limited to three times that of Russia's. For additional details on the synthetic control methodology, see appendix III.

We also examined real GDP per capita.[45] In addition to finding an initial decline in economic growth, we found that Russia's real GDP per capita in 2022 was about $584 lower[46] than what we estimate would have occurred absent the events of 2022, including the invasion and resulting sanctions.[47] For context, Russia's real GDP per capita was $11,953, averaged over 2017 through 2021. Most of the knowledgeable stakeholders indicated that sanctions have impacted Russia's economy but have not caused a major economic crisis.[48] Similarly, studies we reviewed reported initial declines in economic indicators following the invasion and sanctions and subsequent partial recoveries.[49]

Russia's actions before and after the 2022 sanctions appeared to have limited the decline in its economic outcomes. Knowledgeable stakeholders as well as studies we reviewed suggested that Russia's economy benefited from the actions of its central bank following the invasion and resulting sanctions, such as raising interest rates and imposing capital controls. In addition, knowledgeable stakeholders explained that Russia's history with sanctions enabled it to prepare for and adapt to the sanctions following the 2022 invasion.

Russia's Military Spending in Relation to GDP

Military spending is a component of GDP, and Russia's higher military spending may affect GDP and forecasts of its economy. Data from Stockholm International Peace Research Institute show an increase in

[45]We also examined inflation, but we do not have statistical evidence that Russia's inflation was different from what might have happened absent the events in 2022 (for more information, see appendix III). According to Bloomberg Economics, the decline in the exchange rate of the ruble toward the end of 2024 may impact the Bank of Russia's efforts to control inflation, at a time when import concerns were creating high inflation expectations. Our analysis of Treasury quarterly exchange rate data suggests some volatility in the ruble's exchange rate. Specifically, we found that the ruble depreciated against the dollar by 8 percent in the latter half of 2024 but appreciated against the dollar by 8 percent between December 2024 and March 2025.

[46]Our results for 2022 were statistically significant at the 91 percent confidence level.

[47]Our results were not driven by specific countries in our comparison pool. In addition, we found that Russia's decline in 2022 was specific to the events in 2022. For more information, see appendix III.

[48]While knowledgeable stakeholders described changes such as disruptions in supply chains, hindering of production, lower consumer spending, fluctuations in the ruble, and higher inflation, these stakeholders did not believe that sanctions led to a massive economic disruption.

[49]These studies examined various economic indicators including production volumes, volumes transacted in the ruble, the ruble exchange rate, Russian import patterns, and financial market indicators. For more information, see appendix IV.

Russia's military spending as a percentage of GDP from 3.6 percent in 2021 to an estimated 7.1 percent in 2024. In addition, the IMF's January 2024 World Economic Outlook Update revised Russia's projected growth upward for 2024 to reflect stronger-than-expected growth in 2023 associated with high military spending and private consumption stemming from wage growth.[50] Treasury also incorporated the revised IMF projections into an updated analysis of Russia's GDP and found that sanctions may have had a smaller effect than it had previously estimated. In April 2024, Treasury estimated that Russia's real GDP was over 2 percent lower in 2024 than had been predicted prior to the invasion, whereas in December 2023 Treasury had estimated that Russia's real GDP was 5 percent lower than pre-invasion.[51] Similarly, a publicly available study we examined noted that although Russia's GDP growth rate at the end of 2022 was negative, it was not as low as many forecasts had predicted.[52]

An official from State OCE explained that as Russia transforms its economy into a military economy, macroeconomic indices such as GDP are not representative of the economy's health. For example, the State official noted that while building tanks would increase a country's GDP, it is not a productive use of a country's resources. Similarly, knowledgeable stakeholders explained that Russia's GDP was likely lower because of sanctions but was also inflated because of military spending. Further, knowledgeable stakeholders indicated that military spending and employment has allowed Russia to maintain employment. One stakeholder indicated that military spending and employment constrained Russia's ability to produce. Moreover, high military spending might come at the expense of investment in economically productive programs,

[50]International Monetary Fund, *World Economic Outlook Update* (Washington, D.C.: Jan. 2024).

[51]Similar to our synthetic control methodology, Treasury compared the IMF projections in an attempt to understand what would have happened to Russian GDP absent the events of 2022. However, Treasury's comparison does not provide information on the statistical significance of the estimate.

[52]Roberto Lampa and Gianmarco Oro. "Can the Side Effects of Sanctions and Energy Inflation Trigger the Disintegration of the International Monetary Regime?" *PSL Quarterly Review,* vol. 76, no. 306 (2023): 225-242.

according to an IMF publication.[53] Thus, such high military spending could have implications for Russia's long-term growth.

Additional Long-Term Implications on Russia's Economy

Agency assessments and knowledgeable stakeholders indicate that Russia's long-term economic conditions may be worse following sanctions and the invasion. Knowledgeable stakeholders noted that Russia's continued heavy reliance on oil as an export may limit the country's future competitiveness. Similarly, a Treasury analysis noted that Russia's decreased participation in global markets could harm its potential for growth. According to Bloomberg Economics, sanctions designations on banks such as Gazprombank made toward the end of 2024 could further fracture Russia's financial market and increase Russia's reliance on remaining foreign-owned institutions in Russia that still have connections to the global financial system. In addition, a senior Treasury OFAC official and knowledgeable stakeholders noted that the high emigration of skilled workers following the invasion is contributing to labor challenges that could affect long-term growth. Finally, IMF's October 2024 World Economic Outlook noted a sharp slowdown in Russia's economy between 2023 and forecasted values for 2025 as private consumption and investment slowed.[54]

Russian Actions and Other Factors Diminished Effectiveness of Oil Price Cap and Other Sanctions

The U.S. government and its partners sought to limit Russia's revenues by imposing a price cap on Russian oil and implementing financial sanctions, according to Treasury. However, Russia limited the effects of these sanctions by shifting oil away from providers subject to the price cap and developing an alternate payment system with China to reduce its dependence on U.S. assets. In addition, other factors such as high commodity prices for oil and gas—a key source of revenue for Russia—enabled Russia to continue financing the war.

Price Cap on Russian Oil

The Coalition (including the U.S.) implemented the price cap in December 2022 in an effort to reduce Russia's oil revenues while maintaining the stability of global energy markets. A more aggressive policy could have triggered a spike in oil prices and affected the U.S., according to knowledgeable stakeholders. Russia initially responded to the price cap

[53]Richard Hemming and Daniel P. Hewitt, "Military Expenditure," in *Public Expenditure Handbook: A Guide to Public Policy Issues in Developing Countries*, eds. Ke-young Chu and Richard Hemming, (Washington, D.C.: International Monetary Fund, 1991), 88-93.

[54]International Monetary Fund, *World Economic Outlook: Policy Pivot, Rising Threats,* (Washington, D.C.: Oct. 2024).

by selling its oil at a significant discount to continue accessing dominant Coalition country service providers, according to Treasury.[55]

However, by summer 2023, Russia began to export more of its oil via a “shadow fleet.” The shadow fleet is composed of oil tankers that are anonymously owned or have opaque corporate structures, are solely deployed to trade oil or oil products from Russia or certain other sanctioned countries, and engage in various deceptive shipping practices such as relying on unknown or fraudulent insurance. These vessels provide Russia an outlet for its oil exports and a means to circumvent sanctions.[56]

Russia’s shadow fleet diminished the effectiveness of the oil price cap by shifting oil exports away from providers subject to the cap, making Russia less dependent on western ships and insurance, according to knowledgeable stakeholders. As Russia invested significant resources to export more of its crude oil and petroleum products with its shadow fleet in the summer and fall of 2023, the discount on Russian oil narrowed, according to Treasury analysis. Reflecting this shift, the percentage of Russian crude exports covered by the price cap on Russian oil declined from 83 percent in October 2022 to about 30 percent in December 2023, according to Energy officials.

In response to Russia’s use of its shadow fleet, the Coalition launched the second phase of the price cap in October 2023 to tighten enforcement of oil trades with Coalition service providers. The U.S. has taken several actions to enforce the price cap, including imposing sanctions on vessels and shipping companies that have violated the price cap and issuing alerts on how to identify and mitigate evasion efforts, according to

[55]According to a Treasury report, before Russia’s February 2022 invasion of Ukraine, the price of Urals oil (the principal reference blend for Russian crude oil) and Brent (the leading global benchmark for crude oil prices) traded very closely. After the 2022 invasion, global oil prices spiked due to fears of a supply disruption. At the same time, there was a significant discount on Russian crude oil as buyers, including the U.S. and EU, shunned Russian oil. Global oil prices cooled as 2022 progressed and the assessed discount on Russian crude oil narrowed. However, the discount on Russian crude oil returned to historically high levels when the Coalition price cap and EU embargo were implemented in December 2022.

[56]According to a February 2024 Coalition compliance and enforcement alert, there was ample evidence that Russia had used these shadow fleet vessels to transport its oil and oil products. As a result, some Coalition members, including the EU, introduced measures to more closely monitor the sale of tankers to third countries and prevent them from being used to transport oil priced above the price cap.

Treasury.[57] This second phase increased the costs to Russia of selling its oil via the shadow fleet, according to Treasury and State officials. According to State officials, the sanctions against additional entities involved in Russia's oil trade contributed to increased transportation costs and enabled countries to negotiate greater discounts on Russian oil.

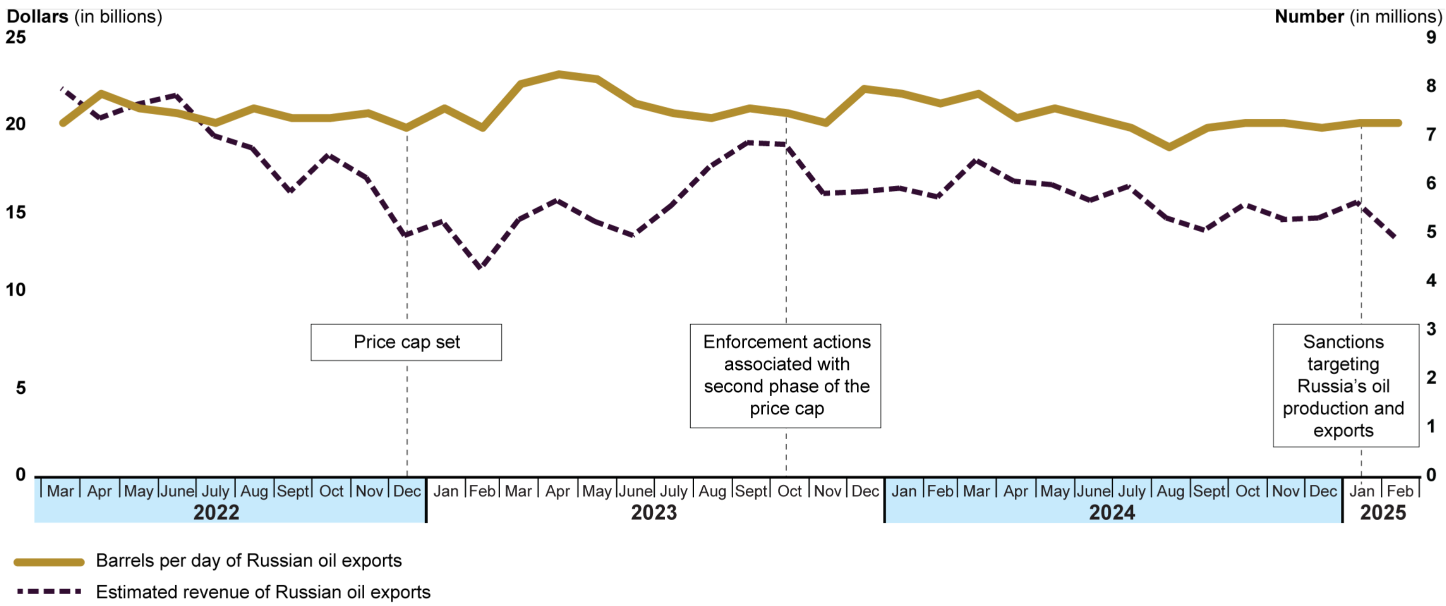
We examined trends in Russian oil production, export, and revenues. We found that Russia's oil export revenue declined somewhat in 2022, at the start of 2023 following the implementation of the price cap, and at the end of 2023 following the second phase of the price cap's enforcement actions, but has also recovered to some degree over time (see fig. 3). However, overall oil production has been relatively stable since Russia's invasion of Ukraine. Compared with the Organization of the Petroleum Exporting Countries (OPEC)+,[58] Russia's market share has also remained stable.[59]

[57]See appendix V for a timeline of events on the price caps on Russian crude oil and petroleum products.

[58]OPEC+ is a group of countries that align with OPEC to support sustainable stability in the global oil markets. OPEC+ is composed of the OPEC members in addition to Russia, Mexico, Kazakhstan, Oman, Azerbaijan, Malaysia, Bahrain, South Sudan, Brunei and Sudan.

[59]In addition to examining trends based on International Energy Agency data, we examined data from the Energy Information Administration. We found that Russia's crude oil production, both overall and as a share of OPEC+, has historically been relatively stable, except for a production decline coinciding with the COVID-19 pandemic and an initial decline following Russia's 2022 invasion of Ukraine.

Figure 3: Russia's Estimated Oil (Crude and Product) Export Revenue and Volume



Source: GAO presentation of International Energy Agency (IEA) data. IEA data from IEA (2023-2025) Oil Market Reports – June 2023 through April 2025, https://www.iea.org/data-and-statistics/data-product/oil-market-report-omr, all rights reserved. | GAO-25-107079

Notes: Revenue figures represent combined crude and product (including gasoline and diesel) exports. The price caps per barrel set for different types of oil exports include: $60 for crude, $100 for premium products, and $45 for discounted products. On July 18, 2025, the United Kingdom and the European Union announced they would lower the price cap for Russian crude oil from $60 per barrel to $47.60 per barrel, effective September 2, 2025, and September 3, 2025, respectively. The European Union also established an automatic mechanism to adjust the cap. According to the International Energy Agency, data in this figure were derived by granular analysis and estimates of country of origin data in cases where shipments transit via third countries. They may differ from customs information due to calculation methodology and estimates updates. Data presented in this figure generally reflect the newest available data for each month and year.

Energy officials explained that additional factors beyond the price cap influence Russia's oil revenues. They noted that the global price of oil, multiple import bans on Russian oil, and the general risk in being involved in the Russian oil trade have had a larger effect on Russia's oil revenues.[60] Studies describe high oil revenues for Russia in 2022, with some decline in 2023 concurrent with the price cap and the EU oil embargo.[61] Studies also noted that high commodity prices, like those for

[60]According to a Treasury report, Russia's oil prices declined at the time of the price cap in December 2022, but that decline may also reflect the decreasing global benchmark price of oil that began prior to the price cap.

[61]The period of these analyses is generally short and limits understanding of long-term trends. For more information, see appendix IV.

oil and gas, contributed to a large financial surplus immediately after the start of the war. High revenues have enabled Russia to continue financing the war, according to studies and knowledgeable stakeholders. Similarly, the IMF reported that Russia used high oil and gas revenues to finance a larger deficit in 2022.[62]

Russia's trading partners for oil have changed from European countries to countries such as China, India, Turkey, and others, which do not participate in the price cap coalition. This shift in trading partners may have long-term implications for Russia's energy sector. According to State officials, Russia's increased reliance on a limited number of partners represents a strategic and economic vulnerability that gives leverage to a handful of importers to negotiate oil prices. According to State officials, the Russian government is accepting a trade-off between revenue now and investment in future production. Further, Russia reduced or cut off the supply of natural gas to some European countries in 2022 to reduce their support for Ukraine, exposing its unreliability as an energy supplier. As importing countries turn to more reliable sources for energy, there are limited opportunities for Russia to secure additional markets. By trading with countries not honoring the price cap, Russia may be selling above the $60 price cap, but its costs to ship oil have also increased, according to State officials.

Other Effects of Sanctions on Russia's Finances

When Russia invaded Ukraine in February 2022, the U.S., EU, and partner sanctions immobilized $280 billion in Russian reserves in its National Wealth Fund and Central Bank sovereign assets, according to a Treasury analysis as of December 2023. One knowledgeable stakeholder highlighted the immobilization of Russian assets as a success. Other knowledgeable stakeholders cited the success of sanctions in forcing Russia to spend available reserves and sovereign wealth funds, including the savings from oil revenues over the years. As of late 2023, Russia's National Wealth Fund held about $146 billion, nearly half of which ($72 billion) was in gold and liquid yuan assets, according to Treasury.

However, Russia took actions that were likely in preparation for sanctions. According to the IMF, Russia's efforts to reduce fiscal deficits after the invasion of Crimea and following sanctions in 2014 resulted in lower public debt relative to GDP, providing a significant buffer to the

[62]International Monetary Fund, *World Economic Outlook: Navigating Global Divergences,* (Washington, D.C.: Oct. 2023).

government's finances.[63] Additionally, inflation targeting brought down inflation from double digits to 4 percent.[64] Russia also took steps to reduce its reliance on the U.S. dollar by developing alternate payment platforms with China, according to knowledgeable stakeholders. Russia's reduction of holdings in U.S. dollars was one factor that contributed to reduced external liabilities and bank vulnerabilities, according to the IMF.[65] However, while reduced reliance on the U.S. dollar partially shielded the Russian economy from the effects of sanctions, it also isolated Russia's economy and increased its reliance on a small number of countries.

U.S. Export Controls Have Hindered Russia's Efforts to Access Military Technology, but Enforcement Challenges Remain

U.S. export controls have hindered Russia's efforts to access military technology for the war in Ukraine but have not completely prevented it from obtaining U.S. technologies. U.S. agencies face various challenges in enforcing export controls on Russia, such as third-party procurement networks that enable Russia to circumvent export controls.

Export Controls on Military Technologies

According to Commerce officials, export controls have degraded Russia's ability to take advantage of high-level military technologies from the U.S. and its allies, either by cutting off reliable access, increasing prices, reducing quantity and quality, or delaying Russia's acquisition of these technologies. According to State officials, the lack of access to modern, high-tech components leaves Russia reliant on stockpiles of decades-old military equipment. Russia cannot manufacture enough of its own munitions or purchase from modern economies, so it depends on imports of lower-quality replacements from Iran and North Korea.

Commerce assesses that export controls have diminished the economic resources Russia needs to support its military and defense industrial base by increasing its costs to procure items for its war effort. Specifically, because of Russia's increased costs attributable to U.S. export controls, Commerce estimates that there is a $5 billion gap between the critical

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63International Monetary Fund, *Russian Federation: Staff Report for the 2020 Article IV Consultation* (Washington, D.C.: Jan. 2021).

64According to the IMF, inflation targeting aims to control the general rise in the price level. A central bank estimates and makes public a projected, or "target," inflation rate and then attempts to steer actual inflation toward that target, using tools such as interest rate changes.

65International Monetary Fund, *Russian Federation: Staff Report for the 2020 Article IV Consultation*.

items that it likely sought to import in 2023 and the items that it was actually able to import that year. Russia is also paying more than double the amount on average for microelectronics following the invasion of Ukraine than it did in the years prior to the invasion.[66]

Nearly all of our 11 knowledgeable stakeholders noted that U.S. export controls on Russia have achieved some success. One stakeholder stated that Russia has fundamentally reshaped its economy to supply its war effort, including repurposing factories for military production, while another said that it takes Russia a large amount of time, effort, and cost to bypass export controls. The cost of circumventing these controls hinders Russia's war effort, according to another knowledgeable stakeholder.

Studies that we examined also found some evidence that export controls initially hindered Russia's ability to acquire technology for its war effort. Using 2022 data, two studies found evidence of a decrease in exports to Russia in certain high-tech sectors, such as electronics and precision machinery, which were relatively more targeted by export controls.[67]

Trade Trends Related to Export Controls on Russia

Export controls have not completely prevented Russia from obtaining products that it sought. Some of these products are categorized by the four tiers of the Common High Priority List (CHPL), a set of 50 product codes for classifying categories of items that Russia seeks to procure for its war effort that was developed by the EU, Japan, U.S., and the United Kingdom.[68] Product categories in tiers 1 and 2 are of highest concern for diversion to Russia based on their capability to fuel Russia's war effort,

[66]Commerce estimates that Russia is paying approximately 135 percent more on average for microelectronics after the 2022 invasion of Ukraine than in the preceding years.

[67]Alessandro Borin, Francesco Paolo Conteduca, and Michele Mancini. "The real-time impact of the war on Russian imports: a synthetic control method approach." (2022). Kazunobu Hayakawa, and Satoru Kumagai. "The trade effect of economic sanctions: evidence from the 2022 Russia-Ukraine conflict." *IDE Discussion Paper* 857 (2022).

[68]Product categories correspond to World Customs Organization harmonized system 6-digit subheadings. The number of product categories subject to export controls has increased over time. In May 2023, BIS, along with the EU, United Kingdom, and Japan, alerted financial institutions to 9 harmonized system codes covering U.S. components that Russia relied on for its weapon systems, creating the High Priority Items List. BIS and these international partners expanded this list, known as the CHPL, to 50 item codes in February 2024.

according to Commerce.[69] Analyses from Commerce and State show that global exports of the four tiers of CHPL products to Russia declined sharply following the Russian invasion of Ukraine but rebounded somewhat in late 2022 and 2023.[70]

Our analysis of annual export data shows similar trends.[71] Between 2021 and 2022, world real exports to Russia of CHPL products declined from $12.2 billion to $7.3 billion, then increased slightly in 2023 to $8.2 billion.[72] Figure 4 shows that the slight increase in real exports in 2023 was due to higher exports of tier 3 and 4 products, while real exports in tier 1 and 2 products were lower in 2023 than 2022.

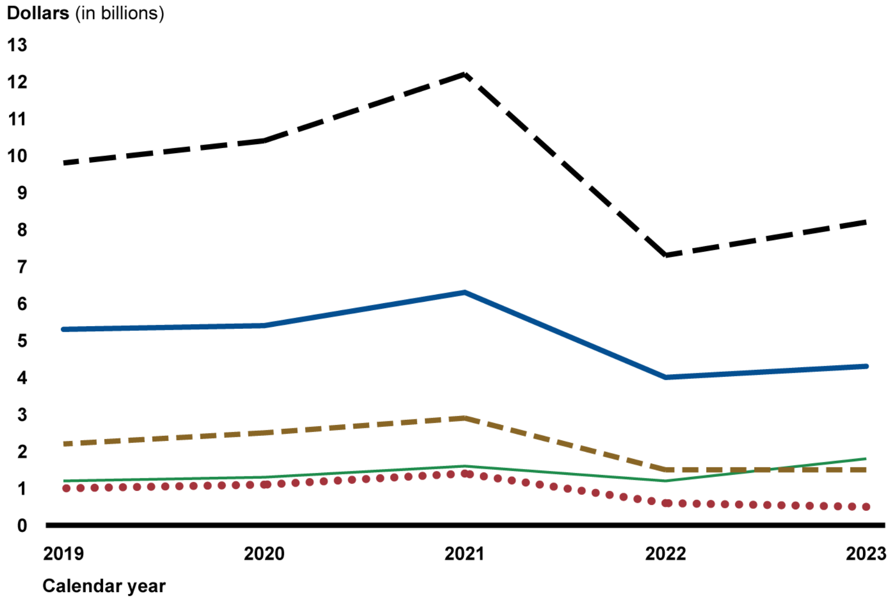
[69]According to Commerce, tier 1 items are of the highest concern due to their critical role in the production of advanced Russian precision-guided weapons systems, Russia's lack of domestic production, and limited global manufacturers. Tier 2 items are electronics items for which Russia may have some domestic production capability but a preference to source from the United States and its allies. Tier 3 items are electronic components used in Russian weapons systems with a broader range of suppliers, and mechanical and other components utilized in Russian weapons systems. Tier 4 items are manufacturing, production and quality testing equipment for electric components, circuit boards and modules, as well as Computer Numerically Controlled machine tools and components.

[70]According to Commerce, the largest share of exports that rebounded was for tier 3 products, which include electronic, mechanical, and other components utilized in Russian weapons.

[71]Our analysis covers reported exports and may not capture the full scope of trade due to limited reporting, intentional mislabeling, or circumvention of sanctions through third countries.

[72]Real exports are reported export values that have been adjusted to account for inflation. We use 2024 as the reference year for our inflation adjustment.

Figure 4: Dollar Value of World Exports to Russia of Common High Priority List (CHPL) Products, 2019 – 2023



- Tier 1 exports: Items of the highest concern for diversion to Russia due to their critical role in the production of advanced Russian precision-guided weapons systems, Russia's lack of domestic production, and limited global manufacturers
- Tier 2 exports: Electronics items for which Russia may have some domestic production capability but a preference to source from the United States and its allies
- Tier 3 exports: Electronic components used in Russian weapons systems with a broader range of suppliers and mechanical and other components utilized in Russian weapons systems
- Tier 4 exports: Manufacturing, production and quality testing equipment for electric components, circuit boards and modules, as well as Computer Numerically Controlled machine tools and components
- Total exports: Sum of all exports of Common High Priority List products to Russia

Source: GAO analysis of United Nations Comtrade data. | GAO-25-107079

Notes: This figure is based on United Nations (UN) Comtrade data and is reported in inflation-adjusted 2024 dollars. The EU, Japan, U.S., and United Kingdom developed the CHPL, a common set of 50 product categories related to products that Russia seeks to procure for its weapons programs. The data include reported exports to Russia from 51 countries and Hong Kong, covering 95 percent of total reported exports to Russia in the pre-invasion period of the figure (2019 to 2021). Data from 2023 were the most recent available for all 51 countries and Hong Kong at the time of our analysis. Russian import data are not available in the United Nations Comtrade database after 2021.

Trends in exports to Russia of products subject to U.S. export controls also vary by country and region of origin. Commerce analyses show that exports of such products from some regions remain lower than they were prior to Russia's invasion of Ukraine, while others are above pre-invasion levels.[73] As of July 2023, according to Commerce analyses, exports of products subject to U.S. export controls from the EU, East Asia, and Southeast Asia declined after the invasion of Ukraine in February 2022 and had not returned to pre-invasion levels.[74] However, such exports from India, China, and Hong Kong declined immediately following the invasion but returned to pre-invasion levels by early 2023. Commerce analyses showed that Central Asian countries' exports of products subject to U.S. export controls to Russia increased sharply after February 2022 and remained above pre-invasion levels through July 2023.[75] The increased exports from these countries to Russia may indicate circumvention of U.S. export controls, according to Commerce.

State analyses from February 2024 show that exports of all CHPL products to Russia from the U.S. and partner countries that imposed similar export controls on Russia have been reduced, but some products from these countries are still reaching Russia.[76] Moreover, some of these products have been found in Russian weapons, according to a State document. State reported that the majority of CHPL products from the largest U.S. and EU firms arriving in Russia were either produced in or shipped from China. China accounted for nearly 80 percent of exports to Russia of CHPL products since Russia's 2022 invasion of Ukraine, according to State and Commerce analyses. In addition, since the early days of the invasion, China has significantly increased its support of the Russian defense industrial base. According to a State analysis of Russian customs data, average monthly Russian imports of CHPL products from China increased by 87 percent in dollar value in the final six months of 2023 compared with the first six months of the war. From the start of the invasion through January 2024, Chinese intermediaries supplied more

[73]This analysis includes a broader set of product categories than those on the CHPL.

[74]East Asia includes Japan, South Korea, and Taiwan; Southeast Asia includes Malaysia, the Philippines, Singapore, Thailand, and Vietnam.

[75]Central Asian countries include Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Serbia, Turkey, and Uzbekistan. In addition to the countries and regions described above, both State and Commerce identified countries that are likely to be part of third-party procurement networks that Russia uses to obtain CHPL products, but are difficult to track because of missing export data.

[76]The partners included in this State analysis are the EU, the United Kingdom, Japan, Australia, Canada, New Zealand, and Switzerland.

than $2.3 billion worth of CHPL products to Russia that were produced by the U.S. and partner countries, according to State.[77]

Challenges for Export Controls Enforcement

State and Commerce analyses suggest that one reason Russia can still access products subject to export controls is that Russia actively develops procurement networks in third countries. As of November 2023, evidence suggested this circumvention was increasing and Russia's procurement networks were continuing to evolve, according to State officials. Commerce officials noted that lower-level technologies now subject to export controls on Russia tend to have greater foreign availability, and thus it is easier for Russia to obtain them. This makes it more challenging for Commerce to counter export controls circumvention of those items compared to higher technology items that have lower foreign availability. According to Commerce, it continued modifying its export controls throughout 2024 to target circumvention, including by expanding controls on third country procurement networks, imposing controls targeting shell companies in transit jurisdictions like Hong Kong, and by expanding the reach of controls on CHPL products.

According to Commerce officials, the continual evolution of third-country supply networks has made it challenging to apply export controls without affecting the broader global economy. Nearly all the knowledgeable stakeholders that we interviewed cited third-party diversion as a challenge to enforcing export controls on Russia. Some of these stakeholders noted that once a company is identified and sanctioned for export controls violations, others take its place.

Knowledgeable stakeholders also noted the following challenges:

- Financial institutions such as banks have a better understanding of how to comply with sanctions, rather than export controls, as banks have less experience complying with new export controls on Russia.[78] Banks see financial transactions, rather than the item being

[77]The partners included in this State analysis are the EU, the United Kingdom, Japan, Australia, Canada, New Zealand, Switzerland, Taiwan, and South Korea.

[78]A BIS and FinCEN alert to financial institutions stated that a financial institution may have visibility into various aspects of export-related financial activity, including when: (1) its customer (exporter) receives a letter of credit from its customer (the importer); (2) the financial institution issues a line of credit to its customer (exporter) to facilitate the transaction; or (3) the importer's wire transfer payment for the export is received by the exporter's financial institution or handled as part of a correspondent banking transaction.

purchased, so it is difficult for a bank to know if someone is using its systems to evade export controls;[79]

- Manufacturing companies are not required to know all the customers of their products after the initial sale;
- Small items, such as semiconductors, are easier to smuggle due to their size, making it more difficult to enforce export controls;
- Products made overseas and exported to Russia may be subject to export controls but do not show up in U.S. customs data. As a result, BIS is unaware of whether the companies that manufacture these products may have violated U.S. export controls on Russia.

[79]In October 2024, Commerce and Treasury issued joint guidance to financial institutions on best practices for compliance with export regulations to try to address this issue.

Knowledgeable Stakeholders' Suggestions for Improving U.S. Export Controls Enforcement

"The U.S. government must do more to push semiconductor firms and others to tighten up on who they are selling to a couple of layers down the chain since we are seeing a lot of leakage. The U.S. government needs to cooperatively work with companies to tighten up their vendor screening."

"The U.S. government could make an example of companies whose products end up in Russia through public enforcement actions."

"Putting export controls on selected items produced in G7 countries might be a more efficient approach to create additional complications for Russia, rather than placing export controls on everything at once."

"Specialists at BIS should be working with the Department of Defense and the Department of Energy to figure out what components are critical. More resources are needed to create a more focused approach to export controls on Russia. The U.S. government could have a database of violators on the export controls side and place high fines on export control violations. These steps will encourage companies to invest in compliance."

"The U.S. government would do better to focus on things that the West has a near monopoly on, such as microchips, and to try to interdict the flow of those items to Russia. The U.S. government could impose more secondary sanctions to address items reaching Russia from China."

Source: GAO Interviews with selected stakeholders knowledgeable about U.S. sanctions and export controls on Russia. | GAO-25-107079

Studies also noted other challenges to enforcing export controls such as the complexity of global supply chains, the absence of large economies such as China imposing similar controls on Russia, and the limited experience of partner countries with implementing and enforcing export controls.

Commerce and State officials noted that improvements could be made to export controls enforcement. Commerce officials noted that export controls overall could be more effective with broader third-country commitment to prevent diversion of controlled items and improved transparency in global trade data. Export controls have become more difficult to analyze over time because third-party procurement networks are becoming more elaborate and data are less available, according to a State document and State officials.[80] State also acknowledged that it must increase pressure on, and provide more information to, U.S. firms to prevent their goods from fueling the Russian war effort.

State and Commerce have taken steps to address enforcement challenges. For example, Commerce has worked with international partners in the G7 Sub-Working Group on Export Control Enforcement, as well as the Export Enforcement Five group to share information and best practices on enforcing export controls, according to Commerce officials.[81] Commerce has also issued alerts and guidance for industry on third-party diversion and export control evasion, and met with leaders of U.S. companies whose products have been found in Russian weaponry to discuss the importance of ensuring that they know the ultimate end users of their products, according to a Commerce document. State has engaged with countries such as the United Arab Emirates on sanctions evasion concerns and imposed sanctions on over 40 entities associated with third-country support for Russia's war effort since 2022, including those in China, Belarus, and Iran, according to State officials.

[80]According to State OCE, a major challenge in tracking the effectiveness of export controls has been Russia's more limited release of data on imports. State OCE also noted that apparent declines in reported exports to Russia may not present an accurate picture, as their analysis shows that Russian reported imports of CHPL products from Turkey increased through 2023 even though Turkey's reported exports to Russia declined.

[81]The Export Enforcement Five group consists of Australia, Canada, New Zealand, the United States, and the United Kingdom.

Agencies Have Taken Actions to Hold Russian Malign Actors Accountable, but Have Challenges in Assessing Their Effectiveness

According to our analysis, Justice, Commerce, Treasury, and State have held malign actors accountable by using task forces to seize and forfeit or freeze assets and prosecute sanctions and export controls violations, placing restrictions on exports of luxury goods, and imposing sanctions designations and visa restrictions. However, agencies face challenges in assessing the effects of their efforts to hold Russian malign actors accountable for actions related to the 2022 war in Ukraine, making the broader effect of these actions unclear.

Task Forces to Freeze, Seize, and Forfeit Assets and Prosecute Sanctions and Export Controls Violations

Seizures of Sanctioned Russian Oligarchs' Yachts

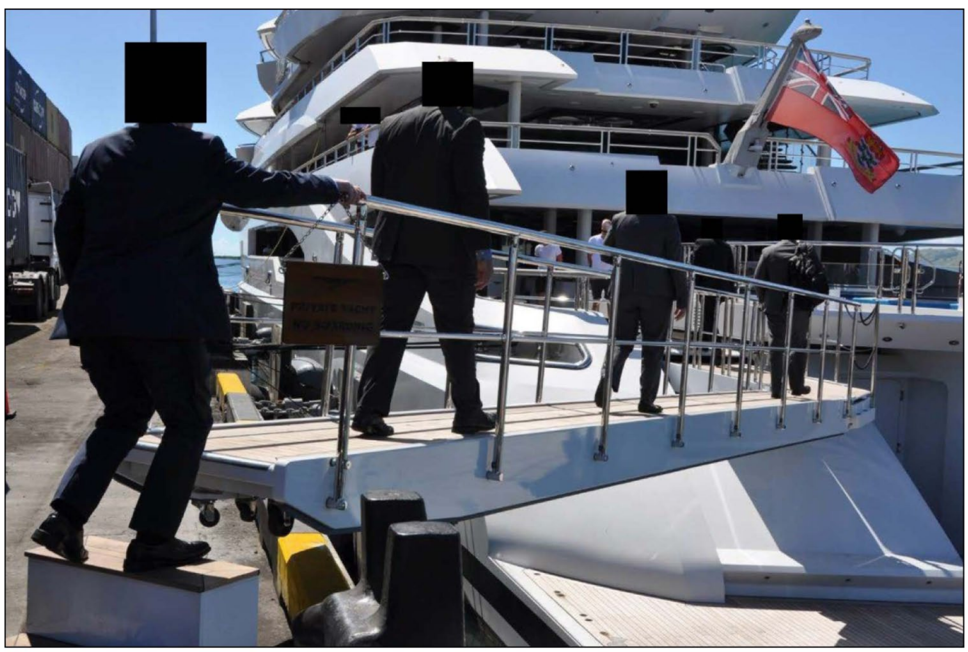
Justice's Task Force KleptoCapture coordinated the seizure of the two yachts described below to hold Russian oligarchs accountable for their attempts to evade U.S. sanctions.

1. The motor yacht Tango is a 255-foot luxury yacht owned by a sanctioned Russian oligarch. Justice officials coordinated with Spanish law enforcement to seize the Tango on April 4, 2022, marking the first seizure of an asset belonging to a sanctioned individual with ties to the Russian regime after the creation of the task force. The Tango is valued at approximately $90 million.
2. The motor yacht Amadea is a 348-foot luxury vessel owned by another sanctioned Russian oligarch. Justice officials coordinated with Fijian law enforcement to seize the Amadea in an operation announced on May 5, 2022. The Amadea is valued at approximately $230 million.

Source: Department of Justice press releases. | GAO-25-107079

From March 2022 to February 2025, Justice led Task Force KleptoCapture, a U.S. domestic interagency task force dedicated to enforcing the sanctions, export restrictions, and economic countermeasures that the United States imposed in response to Russia's military invasion of Ukraine. Task Force KleptoCapture's mission was to use law enforcement tools, including criminal prosecutions and asset seizures and forfeitures, to enforce sanctions and export controls on Russia. According to Justice officials, the task force did not set quantitative goals or performance metrics, but it did track cases charged, arrests, dispositions, and assets seized, restrained, or otherwise subject to forfeiture. As of November 2024, Task Force KleptoCapture had restrained, seized, and obtained judgments to forfeit about $650 million in assets from Russians and charged more than 100 individuals with violating international sanctions or export controls levied against Russia or for related criminal conduct, according to Justice officials. Figure 5 below shows the seizure of the Amadea yacht, coordinated by Task Force KleptoCapture.

Figure 5: Task Force KleptoCapture Coordinated the Seizure of the Yacht, Amadea, Owned by a Russian Oligarch, Announced on May 5, 2022



Source: U.S. Department of Justice (photo). | GAO-25-107079

Treasury and Justice are the lead U.S. agencies for the Russian Elites, Proxies, and Oligarchs Task Force (REPO), a multilateral task force established in March 2022 composed of representatives from the U.S., Australia, Canada, Germany, France, Italy, Japan, the United Kingdom, and the European Commission.[82] According to a Treasury official, the goal of the REPO Task Force is to enforce sanctions on Russian oligarchs' assets. To this end, the task force tracks assets across the globe and restricts Russians from accessing the global financial system, according to this official. It also investigates and works to counter Russian sanctions evasion, including attempts to hide or obfuscate assets, according to a REPO Task Force document.

While REPO Task Force officials said that the task force does not measure success in terms of the number of targets or actions, a March 2023 Treasury press release noted some of the task force's accomplishments. For example, it:

- blocked or froze more than $58 billion worth of sanctioned Russians' assets in financial accounts and economic resources;
- seized or froze luxury real estate and other luxury assets, such as yachts, that are owned, held, or controlled by sanctioned Russians; and
- restricted sanctioned Russians' access to the global financial system.

The Disruptive Technology Strike Force, launched in February 2023, is co-led by Justice and Commerce to counter hostile nation states' efforts to illicitly acquire sensitive U.S. technologies that advance their authoritarian regimes and facilitate human rights abuses, according to a Justice press release. As of December 2024, the strike force had publicly charged 26 cases involving alleged sanctions and export control violations and smuggling, among others, by actors connected to Russia, China, and Iran, according to a Commerce document. The cases brought by the strike force include the prosecutions of individuals and entities accused of illicitly providing microelectronics and other advanced technologies to companies affiliated with the Russian government and military, according to a Justice press release.

82The REPO task force consists of the Finance Ministry and Justice or Home Ministry in each member jurisdiction, according to a Justice press release. For the U.S. government, the Secretary of the Treasury and the Attorney General represent the United States on the task force. Task Force KleptoCapture acted as Justice's liaison to the REPO task force, according to Justice and Treasury officials.

Restrictions on Luxury Goods

Commerce officials stated that one of the goals of U.S. export controls on Russia is cutting off access by the Russian elite to allied luxury goods. According to Commerce analyses, luxury goods exports to Russia from the EU, Japan, South Korea, the United Kingdom, and the U.S. declined in 2022, 2023 and 2024, with the largest declines occurring in luxury imports from the United Kingdom and the U.S.[83]

To help identify suspicious transactions involving real estate, luxury goods, and other high-value assets of sanctioned Russian elites and their proxies, Treasury FinCEN issued alerts to financial institutions in March 2022 and January 2023. For example, FinCEN requested financial institutions' help in identifying sanctions evasion activities by Russian elites in the commercial real estate sector.

Sanctions Designations on Russian Oligarchs

Treasury OFAC and State have used their authorities to sanction Russian elites and their family members and blocked certain properties belonging to these individuals. According to Treasury FinCEN officials, they supported OFAC in its investigations through sharing information on Russian oligarchs and kleptocracy with representatives from law enforcement, national security agencies, financial institutions, and other relevant private sector entities.[84] They discussed red flags in export controls violations and illicit funds tracing through virtual currency, among other things.

Human Rights-Related Sanctions Designations and Visa Restrictions

State DRL had a goal of holding Russia's officials, military personnel, and their proxies accountable for their crimes against humanity, war crimes, and other atrocities and abuses. Pursuing sanctions and visa restrictions for those responsible for atrocities and abuses is one way of achieving

[83]Luxury goods subject to U.S. export controls include alcoholic beverages and spirits, tobacco, articles of leather, fur, or silk, precious stones, metals, and jewelry, passenger vehicles, and works of art, among others.

[84]Treasury FinCEN also developed a tracker to document some Russian oligarchs' potential illicit activities and issued a public report on the financial activity of Russian oligarchs. The report found that Bank Secrecy Act data filed on financial transactions of Russian oligarchs, high-ranking officials, sanctioned individuals, and their family members in 2022 showed transactional patterns indicative of corruption and sanctions evasion, including the movement or transfer of funds or ownership of assets and trusts; the purchase of high-value goods or property; and changes in financial flows with links to property or companies in the United States around the time of Russia's invasion of Ukraine. See U.S. Department of the Treasury, Financial Crimes Enforcement Network, *Trends in Bank Secrecy Act Data: Financial Activity by Russian Oligarchs in 2022*, Financial Trend Analysis (Washington, D.C.: December 2022).

this goal, according to a 2024 DRL policy paper on the war in Ukraine.[85] State and Treasury have imposed sanctions on individuals involved in serious human rights abuses or related harmful activities. Treasury has used Executive Order 13818 to impose sanctions on those who committed human rights abuses related to the war in Ukraine.[86] For example, Treasury imposed sanctions on individuals who were involved in the arbitrary detention of a Russian dissident for speaking out against Russia's war in Ukraine. State also imposed sanctions pursuant to Executive Order 14024 on members of the Russian judiciary who were involved in the prosecution and sentencing of this Russian individual.[87]

In addition, State officials have imposed visa restrictions on Russian malign actors for human rights abuses, according to State documents. These restrictions make these individuals ineligible for entry into the U.S.[88] For example, State imposed visa restrictions on members of the Russian armed forces for their involvement in the extrajudicial killings of unarmed Ukrainian civilians in Andriivka, Ukraine, according to a State press release and agency officials. In the fiscal year 2022 Report to Congress on Anti-Kleptocracy and Human Rights Visa Restrictions, State noted that it had designated six Russian individuals for gross violations of

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[85] State officials said they were taking other actions to hold Russian malign actors accountable beyond sanctions and visa restrictions. According to State officials, as of August 2024 they were working with the International Criminal Court to hold Russian malign actors to account legally. DRL officials said that they try to document and preserve the records of gross violations of human rights in Ukraine to support Ukrainians in their criminal justice process to hold individuals accountable after the war.

[86] *Blocking the Property of Persons Involved in Serious Human Rights Abuse or Corruption*, 82 Fed. Reg. 60,839 (Dec. 20, 2017). According to Treasury and State, this executive order implements and builds upon the Global Magnitsky Human Rights Accountability Act, Pub. L. No. 114-328, 130 Stat. 2000, 2533 (Dec. 23, 2016).

[87] *Blocking Property With Respect To Specified Harmful Foreign Activities of the Government of the Russian Federation*, 86 Fed. Reg. 20,249 (Apr. 15, 2021). This executive order does not specifically target human rights abuses, but focuses on various harmful activities of the Russian Federation, including pursuing extraterritorial activities targeting dissidents or journalists and violating well-established principles of international law.

[88] For instance, section 7031(c) of the Department of State, Foreign Operations, and Related Programs Appropriations Act, 2024, provides that, in cases where the Secretary of State has credible information that foreign officials and their immediate family members have been involved in significant corruption or a gross violation of human rights, those individuals shall be ineligible for entry into the U.S. Pub. L. No. 118-47, 138 Stat. 729, 784 (Mar. 23, 2024).

human rights. In the fiscal year 2023 report, State noted that it had designated 13 Russians for such violations.[89]

Some agency actions to hold Russian malign actors accountable have been effective, according to Treasury officials. For example, according to Treasury officials, the Russian noted above who was detained speaking out against the war in Ukraine was released in a prisoner swap in August 2024. According to Treasury officials, sanctions helped maintain a spotlight on his case. Moreover, advocates told Treasury officials that they believed the Global Magnitsky sanctions were instrumental in keeping him safe while in detention.

However, agencies face challenges in assessing progress in holding malign actors accountable, making the broader effectiveness of these efforts unclear. For example, Task Force KleptoCapture did not set quantitative goals or performance metrics because its actions were dependent on the outcomes of investigations and were often subject to contested litigation, according to Justice officials. In addition, a DRL official noted that the effectiveness of human-rights related accountability actions and sanctions is often long-term and difficult to observe. These types of sanctions and visa restrictions can be effective as a signaling and messaging tool, according to a DRL official. For example, they can make those subject to visa restrictions reluctant to travel and help the U.S. government show leadership in standing against human rights abuses.

In addition, knowledgeable stakeholders had differing views on the goals and effectiveness of U.S. efforts to hold Russian malign actors accountable. One said that the U.S. government believed that pressuring President Putin and Russian oligarchs would deter Russia's war effort, which did not happen. Another stated that although the U.S. government did not succeed in creating friction within President Putin's regime, this was not a major goal. The goal was to condemn bad actors to make their lives more difficult. The stakeholder noted that oligarchs have retreated within Russia and there is more public condemnation of these bad actors.

[89]State officials also noted that they did not designate any Russian nationals for involvement in significant corruption in fiscal years 2022 through 2023. As of May 2025, State officials told us that the Anti-Kleptocracy and Human Rights Visa Restrictions reports for fiscal year 2024 and the first and second quarters of fiscal year 2025 have been sent to Congress, but the unclassified portions of these reports have not been posted on State's website.

U.S. Agencies Obligated Over $164 Million in Supplemental Funding for Activities Related to Russia Sanctions and Export Controls

Agencies Obligated Over $164 Million in Ukraine Supplemental Funding

We found that agencies obligated about $164.4 million from four Ukraine supplemental appropriations acts toward activities related to sanctions and export controls on Russia from fiscal year 2022 through September 30, 2024.[90] Table 2 shows the amounts obligated by each agency that used Ukraine supplemental funds for these purposes as of September 30, 2024.

Table 2: U.S. Agencies' Obligations for Russia Sanctions and Export Controls from Ukraine Supplemental Appropriations Acts, as of September 30, 2024

(Dollars in thousands)

Agency	P.L. 117-103, Div. N (Mar. 15, 2022)	P.L. 117-128 (May 21, 2022)	P.L. 117-328, Div. M (Dec. 29, 2022)	P.L. 118-50, Div. B (Apr. 24, 2024)	Total
State[a]	$33,600	$7,448	$12,100	$275	**$53,423**
Commerce	$22,100	n/a	n/a	n/a	**$22,100**
Treasury	$18,071	$18,526	n/a	n/a	**$36,597**
Justice[b]	$6,267	$46,005	n/a	n/a	**$52,273**
Total	**$80,039**	**$71,980**	**$12,100**	**$275**	**$164,393**

n/a = Not applicable

Source: GAO analysis of Department of Commerce, Justice, State, and Treasury data. | GAO-25-107079

Notes: Ukraine Supplemental Appropriations Acts include the Ukraine Supplemental Appropriations Act, 2022, Pub. L. No. 117-103, Div. N, 136 Stat. 776 (Mar. 15, 2022); Additional Ukraine Supplemental Appropriations Act, 2022, Pub. L. No. 117-128, 136 Stat. 1211 (May 21, 2022);

[90] The four Ukraine supplemental appropriations acts referenced here are Ukraine Supplemental Appropriations Act, 2022, Pub. L. No. 117-103, Div. N, 136 Stat. 776 (Mar. 15, 2022); Additional Ukraine Supplemental Appropriations Act, 2022, Pub. L. No. 117-128, 136 Stat. 1211 (May 21, 2022); Additional Ukraine Supplemental Appropriations Act, 2023, Pub. L. No. 117-328, Div. M, 136 Stat. 5189 (Dec. 29, 2022); and Ukraine Security Supplemental Appropriations Act, 2024, Pub. L. No. 118-50, Div. B, 138 Stat. 905 (Apr. 24, 2024).

Additional Ukraine Supplemental Appropriations Act, 2023, Pub. L. No. 117-328, Div. M, 136 Stat. 5189 (Dec. 29, 2022); and Ukraine Security Supplemental Appropriations Act, 2024, Pub. L. No. 118-50, Div. B, 138 Stat. 905 (Apr. 24, 2024). The Ukraine Supplemental Appropriations Act, 2023, Pub. L. No. 117-180, Div. B, 136 Stat. 2127 (Sept. 30, 2022), also contains Ukraine supplemental funding, but none of the agencies above received funding from this act that was obligated for sanctions or export controls on Russia. This table does not include any Ukraine supplemental funding from the Department of Energy because Energy officials told us that they did not use any of this funding on Russia sanctions and export controls-related activities. The numbers in the table may not add up because of rounding

[a]State's Bureau of Democracy, Human Rights, and Labor (DRL) estimated that 60 percent of its obligations from Div. B of Pub. L. No. 118-50 were used for work related to Russia sanctions. Therefore, 60 percent of DRL's total obligations are included in the table. DRL's total obligations from this act were $433,597, as of September 30, 2024.

[b]Total Justice obligations do not include any funding from the Federal Bureau of Investigation, which received $43.6 million in appropriations from Div. N of Pub. L. No. 117-103 to respond to the situation in Ukraine and for related expenses and had obligated $19.7 million of this funding, as of September 30, 2023. However, not all this funding was used to support Russia sanctions and export controls.

Agencies Used Ukraine Supplemental Funding to Implement and Enforce Russia Sanctions and Export Controls

U.S. agencies used their Ukraine supplemental funding for a variety of activities in support of Russia sanctions and export controls. According to agency officials, they used Ukraine supplemental funds to increase staff, establish new offices, and develop analytical tools, among other activities. Table 3 provides examples of how each agency used Ukraine supplemental funding for sanctions and export controls on Russia.[91]

[91]See appendix VI for details on the use of Ukraine supplemental funding by State, Commerce, Treasury, and Justice for activities related to U.S. sanctions and export controls on Russia.

Table 3: Agencies' Reported Uses of Ukraine Supplemental Funding for Russia Sanctions and Export Controls-related Activities

Agency	Examples of Agency Uses of Ukraine Supplemental Funding
State	• Staffed 78 contractors to support a team on Russia-related sanctions targeting[a] • Staffed two contractors to support public affairs activities • Staffed one contractor for human rights sanctions and visa restrictions analysis support • Funded travel to support the creation of a claims commission for Ukraine
Commerce	• Created two Export Control Officer and one Export Control Analyst position to counter export controls evasion[b] • Hired 57 temporary employees to support export control implementation and enforcement • Established the International Policy Office to lead the implementation of Russia-related policies, including coordinating with other Commerce offices and international and interagency partners, and engaging with allies to implement similar export controls on Russia • Created a Cyber Intrusion and Incident Response Division to detect and investigate cyber-enabled export controls violations
Treasury	• Increased contractor support for Russia sanctions-related activities • Developed investigative tools, such as databases, to counter Russian illicit finance and support Russia-related sanctions activities • Expanded facilities, equipment, and systems • Funded 21 full-time equivalents assigned to Russia and Ukraine-related issues
Justice	• Funded ten Assistant U.S. attorneys and other staff to support Task Force KleptoCapture investigations • Detailed employees and staffed contractors to support Russia-related investigations • Used contractors to develop a software platform for analysis of foreign bank transaction data • Provided upkeep and investigative support for the seized Amadea yacht

Source: GAO analysis of Department of Commerce, Justice, State, and Treasury documents and interviews. | GAO-25-107079

[a]From October 1, 2024, through August 15, 2025, 15 of these contractors were temporary and provided support for special projects such as sanctions compliance workshops, according to State officials.

[b]Export Control Officers play a role in monitoring the compliance of transactions subject to Commerce's export controls regulations outside the U.S. to prevent and detect illicit diversion to unauthorized end uses, end users, or destinations. The Export Control Analyst, assigned in Ottawa, Canada, is responsible for intergovernmental coordination on export controls and enforcement in Canada, including helping to identify the expanded number of re-exports to Russia that are a violation of U.S. law, according to Commerce officials.

Some State Offices Did Not Assess Risks to Sanctions Activities in the Absence of Additional Funding

Some State offices identified several key activities related to sanctions and export controls on Russia that have been supported by Ukraine supplemental funding. However, the funding that two State offices use to sustain these sanctions and export controls activities expires at the end of fiscal year 2025 and neither office assessed the risks to these activities in the absence of future supplemental funding.[92] The supplemental funding allocated to Treasury and Commerce to support their sanctions and export controls activities expired or had been fully obligated as of the end of fiscal year 2024, according to agency officials. Justice officials told us they plan to use their unobligated Ukraine supplemental funding to support the ongoing maintenance costs of seized assets.

Some State Offices Did Not Assess Risks to Sanctions and Export Controls Activities in the Absence of Future Funding

Two State offices, EB and ISN, are using Ukraine supplemental funding that expires at the end of fiscal year 2025 to sustain their activities related to sanctions and export controls on Russia. However, neither office assessed the risks to these activities in the absence of future supplemental funding.

EB received approximately $41.9 million in Ukraine supplemental funding between fiscal years 2022 and 2024, according to EB officials. As of October 2024, EB had $4.6 million that was available for obligation until the end of September 2025 to sustain its economic sanctions targeting, analysis, and related operational activities to continue responding to Russia's invasion of Ukraine. According to EB officials, Ukraine supplemental funding has been instrumental in implementing and enforcing Russia sanctions. EB's sanctions targeting and analytics team had 78 contractors funded through Ukraine supplemental appropriations working on Russia sanctions as of January 2025.[93] These contractors have performed tasks such as researching potential entities and individuals for sanctions and helping EB officials analyze Russia

[92]The Ukraine supplemental funding that State's Bureau of Economic and Business Affairs (EB) and Bureau of International Security and Nonproliferation (ISN) have available for fiscal year 2025 was appropriated under the Ukraine Security Supplemental Appropriations Act, 2024, Pub. L. No. 118-50, 138 Stat. 913 and 915.

[93]According to State officials, on January 20, 2025, EB had 78 contractors working on the Russia sanctions targeting and analytics team, which is the greatest number of contractors that EB had working on this team. The number of EB's contractors on this team increased from 30 as of the end of fiscal year 2022 to 45 as of the end of fiscal year 2024, according to State officials. From October 1, 2024, through August 15, 2025, 15 of these contractors were temporary and provided support for special projects such as sanctions compliance workshops, according to State officials. As of August 15, 2025, EB has 14 contractors working on Russia sanctions, according to State officials.

sanctions-related data, including monitoring vessels linked to Russia that could be engaged in potential sanctions evasion.

Additionally, State's OCE received two contractors from EB in August 2024 through a Memorandum of Agreement that ended in March 2025. OCE officials told us that the additional support was very helpful for their efforts because, prior to the contractors' arrival, the entirety of OCE's Russia-related analysis was conducted by the Deputy Chief Economist, with some assistance from a staff economist. However, starting on May 21, 2025, OCE was no longer conducting any analysis of Russia's global sanctions evasion efforts because other offices, such as EB, could no longer provide financial support for the contractors, and OCE has insufficient resources to support this work, according to an OCE official.

ISN's Office of Export Control Cooperation received $8.7 million in Ukraine supplemental funding between fiscal years 2022 and 2024. As of March 2025, this office had not yet obligated $548,000 in Ukraine supplemental funding for its sanctions and export controls activities related to Russia's invasion of Ukraine. ISN officials told us that supplemental funding has been instrumental for scaling up the number and significance of its Russia sanctions designations. Additionally, supplemental funding allowed ISN program offices to rapidly establish new lines of programming in coordination with policy offices to maximize the impact of Russia sanctions and export controls, according to ISN officials. ISN officials noted that they will continue to obligate and expend funding for their efforts related to sanctions on Russia through fiscal year 2025.

Although the Ukraine supplemental funding has been important to EB's and ISN's work, neither EB nor ISN conducted a risk assessment or developed contingency plans related to the possible lack of availability of future funding for its Russia sanctions activities. When asked about an assessment of risk to its Russia sanctions activities in the absence of Ukraine supplemental funding, EB officials told us that they considered the risk to their Russia sanctions activities to be high. EB officials stated that without new funding, EB would need to significantly reduce its Russia sanctions activities, including the number of contractors working on these activities.

EB officials stated that they have communicated the potential resource constraints to senior leadership within State. In July 2024, EB also wrote a memo to State's Under Secretary for Economic Growth, Energy, and the Environment about the sustainability of its funding for maintaining its sanctions programs. The memo notes that EB has relied on supplemental funds to support its work, and that absent such funding the bulk of EB's work related to sanctions would have to cease. However, the memo does not specify how the absence of supplemental funding would affect EB's activities related to the sanctions on Russia, or how EB might use its regular appropriations to sustain such activities.

According to ISN officials, ISN did not conduct a risk assessment because it did not include supplemental funding in its core program planning assumptions. One ISN office noted that programming funded with Ukraine supplemental appropriations was always intended to be short-term programming.

Federal internal control standards state that agencies should identify, analyze, and respond to risks related to achieving defined objectives.[94] Without a risk assessment, EB and ISN cannot plan for how to sustain, restructure, or wind down their Russia sanctions and export controls-related activities if Ukraine supplemental funding is depleted or expires, and future supplemental funding is unavailable.

Justice's Plans for the Use of Its Unobligated Ukraine Supplemental Funding

Justice was appropriated $67 million from one of the Ukraine supplemental acts, and it had approximately $20.5 million of no-year funds that it had not yet obligated as of December 31, 2024.[95] According to the act, these funds, which remain available until expended, are to be used to respond to the situation in Ukraine and for related expenses. For example, the act states that these funds may be used to investigate, seize, maintain, sell, or dispose of any property related to Russian aggression, including Russian aggression toward Ukraine.

Justice had obligated about $46.5 million of the $67 million in supplemental funds it received by the end of calendar year 2024, all of which was used to support Task Force KleptoCapture. Specifically, the funding was used to maintain assets seized from sanctioned Russian oligarchs, such as the Amadea yacht, and to support personnel and contractors detailed to Task Force KleptoCapture, according to Justice officials. However, this task force was disbanded in early February 2025.

[94]GAO-14-704G, *Standards for Internal Control in the Federal Government;* Principle 7—Identify, Analyze, and Respond to Risks.

[95]The Additional Ukraine Supplemental Appropriations Act, 2022, Pub. L. No. 117-128. No-year funds are appropriations that have no defined period of availability and remain available until expended.

Justice officials told us that the approximately $20.5 million in remaining funds would be allocated to support the ongoing maintenance costs of assets seized pursuant to investigations of Russian sanctions violations.

Conclusions

In response to Russia's 2022 invasion of Ukraine, the U.S. government has imposed a substantial number of sanctions on the Russian government, as well as numerous associated entities and individuals. The U.S. government has also implemented export controls on a broad range of goods destined for Russia and penalized actors helping to circumvent these restrictions, according to Commerce.

According to agency officials, though the NSC provides strategic direction to State, Treasury, and Commerce regarding the broad goals and objectives of U.S. sanctions and export controls on Russia, these agencies have not defined specific objectives linked to measurable outcomes with targets to guide their efforts. As a result, the agencies may lack clear direction for their sanctions and export controls activities. Further, agencies cannot fully assess their progress toward addressing their sanctions and export controls objectives. Accordingly, U.S. agencies may not know which sanctions and export controls are most effective and how best to direct and manage their sanctions and export controls resources. This information is crucial for improving current efforts and may provide important lessons learned for future scenarios where the U.S. government is considering the use of sanctions and export controls.

Though most of the supplemental funding agencies used to implement and enforce U.S. sanctions and export controls on Russia is no longer available for fiscal year 2025, two State bureaus have remaining supplemental funds that are available for obligation through September 2025. Both bureaus have noted the importance of Ukraine supplemental funding for their Russia-related sanctions and export controls efforts. However, neither bureau assessed the risks to their sanctions and export controls activities when their supplemental funding expires. Without such an assessment, the bureaus cannot determine the impact that a lapse in supplemental funding may have and develop an effective plan to sustain, restructure, or wind down their activities. Information from a risk assessment can help determine how to use available resources to best meet broader U.S. goals for sanctions and export controls related to Russia.

Recommendations for Executive Action

We are making a total of seven recommendations, including three to State (Recommendations 1, 4, and 7), two to Treasury (Recommendations 2 and 5), and two to Commerce (Recommendations 3 and 6). Specifically:

The Secretary of State should define objectives that are linked to measurable outcomes with targets for the department's efforts related to sanctions and export controls on Russia. (Recommendation 1)

The Secretary of the Treasury should define objectives that are linked to measurable outcomes with targets for the department's efforts related to sanctions on Russia. (Recommendation 2)

The Secretary of Commerce should define objectives that are linked to measurable outcomes with targets for the department's efforts related to export controls on Russia. (Recommendation 3)

The Secretary of State should assess the department's progress toward achieving the measurable outcomes it establishes for its efforts related to sanctions and export controls on Russia. (Recommendation 4)

The Secretary of the Treasury should assess the department's progress toward achieving the measurable outcomes it establishes for its efforts related to sanctions on Russia. (Recommendation 5)

The Secretary of Commerce should assess the department's progress toward achieving the measurable outcomes it establishes for its efforts related to export controls on Russia. (Recommendation 6)

The Secretary of State should ensure that the Bureau of Economic and Business Affairs and the Bureau of International Security and Nonproliferation assess risks to their Russia sanctions and export controls activities related to the depletion of available supplemental funding and the absence of future funding. (Recommendation 7)

Agency Comments and Our Evaluation

We provided a draft of this product to Commerce, Energy, Justice, State, and Treasury for review and comment. Commerce agreed with our recommendations, State partially agreed, and Treasury agreed in principle, as discussed below.

Commerce provided comments via email and agreed with the two recommendations we directed to it. In its comments, Commerce stated that it believes establishing measurable outcomes can make export controls more effective, described various ways it has attempted to do so in the context of export controls for Russia, and pledged to continue to do so in the future. As we acknowledge in the report, Commerce noted that it has monitored progress by analyzing various datasets. In its comments, Commerce added that it has adapted its approach as the data of most interest for analyzing that progress changed over time. Commerce also cited quantitative indicators it has used to show the efficacy of its controls, such as the diminished supply or increased cost to Russia of critical components to its military systems, or the number and value of shipments intended for export to Russia that were detained.

Commerce underscored the need for flexibility as circumstances change. For example, Commerce explained that it targeted electronics exports to Russia in the early days of the war but recalibrated its approach to focus on a broader set of strategic items when new analysis indicated these items were also ending up on the battlefield. Commerce cautioned that focusing too rigidly on specific outcomes could distract from creative approaches that advance U.S. strategic goals. We agree that measurable outcomes may need to be adapted in light of changing circumstances and believe our recommendations allow for such flexibility.

In its comments, reproduced in appendix VII, State agreed with the three recommendations directed to it but disagreed with the assertion that it has not already taken actions in these areas. State agreed with the utility of our recommendation to define objectives that are linked to measurable outcomes with targets for the department's efforts related to sanctions and export controls on Russia and agreed that there should be an assessment of progress toward achieving such outcomes. However, State said that it has defined objectives for its efforts and made attempts to measure the impact of these efforts, such as its analysis of trade flows of export-controlled goods. State also noted that our methodology would have benefitted from considering bureau, regional, and embassy strategic plans, which it maintains include objectives and outcomes related to sanctions and export controls on Russia.

As described in the report, we identified broad categories of objectives for sanctions and export controls on Russia based on a variety of sources that State and other agencies said provided insight into these objectives. However, we did not identify any agency-specific objectives that are linked to measurable outcomes and targets. During our audit, we asked State officials where the objectives for its sanctions and export controls efforts were documented and we reviewed those sources, including executive orders and agency press releases. We also reviewed State's country strategy for Russia, which according to State was drafted after Russia's invasion of Ukraine in 2022 and covered fiscal years 2022 through 2026. However, this strategy did not include objectives for State's sanctions and export controls activities related to Russia's war in Ukraine that were linked to measurable outcomes and targets. Additionally, we reviewed strategies for the Bureau of Democracy, Human Rights and Labor and the Bureau of International Security and Nonproliferation. However, both of these strategies were completed before Russia's invasion of Ukraine and therefore lacked objectives linked to outcomes and targets for sanctions and export control activities implemented in response to the invasion.

State also disagreed with tying objectives to "narrow, fixed, and measurable outcomes," noting that sanctions and export controls are flexible foreign policy tools. While we provided examples of potential outcomes and targets in the report, we are not prescribing how State defines these measures or recommending that it refrain from changing or adding to them over time to adapt to evolving circumstances. We continue to believe that defining objectives linked to measurable outcomes with targets is critical for guiding State's efforts and enabling a full assessment of these efforts.

State agreed with our recommendation to assess risk to its Russia sanctions and export controls activities related to the depletion of available supplemental funding and absence of future funding. However, while it acknowledged that it had not conducted a formal risk assessment, State said that it had assessed risk in other ways and had planned for the eventual loss of temporary funding. We discussed these actions in the report but continue to believe that without a full risk assessment, State cannot adequately determine the broader impact on its sanctions and export controls-related activities if Ukraine supplemental funding is depleted or expires and future funding is unavailable.

Treasury provided comments via email and agreed in principle with the two recommendations directed to it. Treasury noted it highly values sanctions development that is outcome based and rooted in analytical rigor and assessment, although such analysis can be challenging due to data limitations and other factors. It highlighted various actions it has taken to establish a foundation for greater analytical rigor, such as the creation of a Sanctions Economic Analysis Division in April 2023. Treasury stated that it will continue to develop expertise and advance its capabilities to measure the efficacy of agency actions, commensurate with available resources.

Commerce, Justice, State, and Treasury provided technical comments, which we incorporated where appropriate. Energy did not have any comments on the report.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Commerce, the Secretary of Energy, the Attorney General, the Secretary of State, the Secretary of the Treasury, and other interested parties. In addition, the report is available at no charge on the GAO website at https://www.gao.gov.

If you or your staff have any questions about this report, please contact me at elhodirin@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix VIII.

//SIGNED//

Nagla'a El-Hodiri
Director, International Affairs and Trade

List of Committees

The Honorable Roger Wicker
Chairman
The Honorable Jack Reed
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Lindsey Graham
Chairman
The Honorable Jeff Merkley
Ranking Member
Committee on the Budget
United States Senate

The Honorable James E. Risch
Chairman
The Honorable Jeanne Shaheen
Ranking Member
Committee on Foreign Relations
United States Senate

The Honorable Rand Paul, M.D.
Chairman
The Honorable Gary C. Peters
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Mitch McConnell
Chair
The Honorable Christopher Coons
Ranking Member
Subcommittee on Defense
Committee on Appropriations
United States Senate

The Honorable Lindsey Graham
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The Honorable Brian Schatz
Ranking Member
Subcommittee on State, Foreign Operations, and Related Programs

Committee on Appropriations
United States Senate

The Honorable Mike Rogers
Chairman
The Honorable Adam Smith
Ranking Member
Committee on Armed Services
House of Representatives

The Honorable Jodey Arrington
Chairman
The Honorable Brendan Boyle
Ranking Member
Committee on the Budget
House of Representatives

The Honorable Brian Mast
Chairman
The Honorable Gregory Meeks
Ranking Member
Committee on Foreign Affairs
House of Representatives

The Honorable James Comer
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The Honorable Robert Garcia
Ranking Member
Committee on Oversight and Government Reform
House of Representatives

The Honorable Ken Calvert
Chairman
The Honorable Betty McCollum
Ranking Member
Subcommittee on Defense
Committee on Appropriations
House of Representatives

The Honorable Mario Diaz-Balart
Chairman
The Honorable Lois Frankel
Ranking Member

Subcommittee on National Security, Department of State, and Related Programs
Committee on Appropriations
House of Representatives

Appendix I: Objectives, Scope, and Methodology

Our objectives were to examine (1) the extent to which U.S. agencies have established objectives with measurable outcomes for their sanctions and export controls on Russia; (2) progress made toward addressing categories of U.S. sanctions and export controls objectives on Russia; (3) supplemental resources U.S. agencies have received and how they have used them to implement and enforce sanctions and export controls on Russia; and (4) the extent to which U.S. agencies have developed plans for the use of remaining supplemental funds and assessed risks to their sanctions and export controls activities in the absence of future funding.[1]

To determine the extent to which U.S. agencies have established objectives and measurable outcomes for their sanctions and export controls on Russia related to its 2022 invasion of Ukraine, we analyzed nearly 300 State, Treasury, and Commerce press releases issued from February 24, 2022, through January 17, 2025, that were relevant to U.S. sanctions and export controls related to Russia's 2022 war in Ukraine as well as pertinent agency rules and regulations. Analysts independently confirmed the relevance of the press releases and the categories of objectives that we identified in the analysis. We also examined over a dozen White House fact sheets and press statements from February 2022 through February 2024 to corroborate the objectives of U.S. sanctions and export controls from the agency press releases. We also reviewed various agency analyses related to the effect of sanctions and export controls on Russia, as described later in this appendix.

In addition, we interviewed officials from State bureaus and offices, including the Office of Sanctions Coordination, the Bureau of Economic and Business Affairs, and the Bureau of International Security and Nonproliferation; Treasury's Office of Foreign Assets Control, Financial Crimes Enforcement Network, and Office of International Affairs; Commerce's Bureau of Industry and Security; and other agencies and their relevant components that have a role in sanctions or export controls, including the Department of Justice and the Department of Energy. We

[1]When we refer to "sanctions and export controls on Russia," we refer to sanctions and export controls on individuals and entities related to Russian aggression in Ukraine.

assessed our findings from these analyses and interviews against federal internal control standards for defining objectives.[2]

To examine the progress made toward addressing categories of U.S. sanctions and export controls objectives on Russia, we developed a model to examine indicators of Russia's economy, analyzed Russian oil production and export revenue data, as well as Commerce and State data on trends in Russian imports, and reviewed Justice, Treasury, Commerce, and State documents on their actions to hold Russian malign actors accountable, among other methodologies. We used a synthetic control methodology—a technique that allows for comparison to a counterfactual situation—to estimate how Russia's economy might have evolved absent events in 2022 and beyond, including the invasion and sanctions. As part of this analysis, we selected countries for a pool of comparison using data from the U.S. Energy Information Administration and International Energy Agency Monthly Oil Trade Data (2024).[3] For more information on the synthetic control methodology, see appendix III.

To calculate the counterfactual for Russia, we used data from the October 2024 International Monetary Fund's (IMF) World Economic Outlook and the World Bank's World Development Indicators databases. We assessed the reliability of all datasets and of the data elements that we used to select the countries for a pool of comparison and calculate the counterfactual and determined that they were sufficiently reliable for our analyses. Specifically, we reviewed documentation on the general design and structure of the datasets and completed our own electronic testing to assess the accuracy and completeness of the data used in our analyses.

We also reviewed Treasury analyses of IMF forecasts of Russia's economy to analyze the effects of the 2022 war and sanctions on Russia's gross domestic product. We examined data on the volume of Russian oil production and oil export revenues from the International Energy Agency's (2023-2025) Monthly Oil Market Reports to analyze the

[2]Specifically, we determined the risk assessment component of internal control was significant to this objective, along with the underlying principle that management should define objectives clearly so they are understood at all levels of the entity and in measurable terms so that performance toward achieving those objectives can be assessed (principle 6). See GAO*, Standards for Internal Control in the Federal Government,* GAO-14-704G (Washington, D.C.: Sept. 2014).

[3]International Energy Agency (2024) Monthly Oil Data Service, https://www.iea.org/data-and-statistics/data-product/monthly-oil-data-service-mods-complete.

effect of a price cap on Russian oil on Russia's economy.[4] Through review of documentation and agency interviews, we assessed the reliability of these data and determined that they were sufficiently reliable for reporting the volume of Russian oil production and oil export revenues.

To examine the progress agencies made toward implementing and enforcing U.S. export controls, we reviewed more than 30 Commerce analyses of sanctions and export controls on Russia, as well as analyses done by State's Office of the Chief Economist. We used these sources to analyze trends in Russian imports overall and by country to understand the extent that global trade patterns changed following the imposition of U.S. export controls on Russia and to assess agencies' progress on implementing and enforcing these export controls. We also reviewed Commerce written responses and State documents assessing the effectiveness of U.S. export controls. Additionally, we analyzed United Nations Comtrade data to describe trade trends in world exports of Common High Priority List products to Russia. We determined that the data were sufficiently reliable to measure trends in world exports to Russia of export-controlled products for the years 2019-2023 for a subset of 51 reporting countries and Hong Kong.[5]

To examine progress the agencies made toward holding malign actors accountable, we reviewed Justice, Treasury, Commerce, and State documents, such as press releases and alerts to financial institutions, on sanctions and export controls enforcement activities directed at Russian elites and oligarchs. We also reviewed written responses from these agencies on the actions of Russia sanctions and export controls-related task forces and other agency activities to hold Russian malign actors accountable, and Commerce analyses on exports of luxury goods to Russia. Additionally, we examined State reports and interviewed State

[4]International Energy Agency (2023-2025) Oil Market Reports—June 2023-April 2025, https://www.iea.org/data-and-statistics/data-product/oil-market-report-omr.

[5]Specific countries represented include Armenia, Austria, Azerbaijan, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Malaysia, the Netherlands, Norway, the Philippines, Poland, Romania, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, Tunisia, Turkey, the United Arab Emirates, United Kingdom, the U.S., and Uzbekistan. Data also includes the Hong Kong Special Administrative Region of China.

officials about visa restrictions. Lastly, we interviewed State and Treasury officials about human rights-related sanctions.

To inform our review of the extent to which agencies established objectives and measurable outcomes for their sanctions and export controls on Russia, as well as progress made toward addressing those objectives, we interviewed 11 nongovernmental stakeholders selected for their knowledge of U.S. sanctions and export controls on Russia. We used four methods to create lists of potential knowledgeable stakeholders:

- a literature search of relevant articles, reports, and papers, including published research on U.S. sanctions or export controls (see below for details);
- congressional hearings to identify witnesses on Russia sanctions and export controls;
- recommendations from agency officials, including officials from State, Treasury, and Commerce, for individuals at nongovernmental organizations who they would consider knowledgeable about U.S. sanctions and export controls on Russia; and
- background research.

We identified 40 knowledgeable stakeholders that appeared on two or more of our lists. Our final selection criteria included having knowledgeable stakeholders that were well-versed in U.S. policies on sanctions and export controls; represented a variety of affiliations such as academic, research, think tank, and practitioner roles; and had specific knowledge about different aspects of U.S. sanctions and export control policy following Russia's 2022 invasion of Ukraine. We also used prior U.S. government service as a criterion because we thought the perspectives of former federal officials would provide unique insights into U.S. sanctions policy.

Based on these criteria, we selected 11 knowledgeable stakeholders, which included four former U.S. government officials, and individuals representing think tanks (e.g., the Atlantic Council and the Center for a New American Security) and academia (e.g., the Stanford Freeman

Spogli Institute for International Studies' International Working Group on Russian Sanctions and the Kyiv School of Economics).[6]

We also conducted a literature review of scholarly, conference, and working papers; dissertations; government reports and congressional hearings; and think tank publications related to the impact of U.S. sanctions and export controls on Russia. The literature search included articles from after Russia's 2014 annexation of Crimea through early 2024.[7] The search produced 269 studies. In addition, we identified 25 studies through other means such as email alerts and snowball sampling.[8] To focus on research on the effectiveness or economic impact of economic sanctions on Russia for detailed review, we included studies that met the following criteria:

- The study included quantitative analysis of data on Russia.
- The study examined the impact or effectiveness of sanctions or export controls on Russia.
- The study covered U.S.-imposed bilateral or multilateral sanctions or export controls on Russia.

We reviewed the abstracts and identified 87 relevant studies for more in-depth review after applying these criteria. We developed a data collection instrument to systematically review these studies to obtain information on sanctions and export controls objectives and economic outcomes. We reviewed and recorded each study's research methodology, including its data, outcome measures, control variables, limitations, and analytic techniques, and summarized its major findings. Two analysts then

[6]We conducted semi-structured interviews of these knowledgeable stakeholders. While we had a common set of questions, some stakeholders provided additional information beyond our questions based on their areas of expertise. As a result, not all stakeholders received nor provided responses to probes or follow-up questions based on their responses to our common set of questions. We quantified the number of knowledgeable stakeholders who commented on an issue where possible, but some statements cannot be attributed in relation to all stakeholders. In other cases, we use the term "knowledgeable stakeholders" to refer to instances in which more than one stakeholder commented on a topic outside our common set of questions. See appendix II for a list of the 11 knowledgeable stakeholders and their titles and affiliations.

[7]We conducted searches of various databases including Scopus; ProQuest; EBSCO; Dialog (which includes EconLit, Investext, ProQuest Dissertations and Theses Professional, and SciSearch®); Harvard Kennedy School Think Tank Search; Centre for Research on Energy and Clean Air; and Lexis+.

[8]Snowball sampling involved reviewing the list of papers cited in studies we had already selected to identify additional relevant studies.

independently reviewed the studies and the information captured in the data collection instrument, reconciling any differences in their assessments through discussion.

To identify supplemental resources U.S. agencies have received and how the agencies used these resources to implement and enforce sanctions and export controls on Russia, we analyzed Treasury, State, Justice, and Commerce obligations and staffing data on the use of their Ukraine supplemental funding.[9] We reviewed these agencies' documentation including congressional notifications, spend plans, statements of work, and a Memorandum of Agreement. Additionally, we interviewed officials from these agencies to understand their use of Ukraine supplemental funds. To determine the reliability of the funding and staffing data, we reviewed related documentation and conducted interviews with relevant agency officials. We determined that the data were sufficiently reliable for our purposes of reporting on the amounts obligated and agencies' use of their Ukraine supplemental funding.

To determine the extent to which agencies have developed plans for the use of remaining Ukraine supplemental funds and assessed risks to their Russia sanctions and export controls activities supported by Ukraine supplemental appropriations, we reviewed agency funding and staffing plans and asked for any risk assessments of agencies' activities funded by the Ukraine supplemental appropriations acts. We used this material to determine whether agencies had documentation that met internal control standards for identifying, analyzing, and responding to risks.[10] We also asked agency officials from the Departments of Treasury, State, Justice, and Commerce about their views on the risks to their activities related to sanctions and export controls on Russia in the absence of supplemental funding.

We conducted this performance audit from September 2023 to September 2025 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the

[9]Energy officials told us that Energy did not use any of its Ukraine supplemental funding on activities related to the implementation or enforcement of sanctions and export controls on Russia.

[10]Specifically, we determined the risk assessment component of internal control was significant to our fourth objective, along with the underlying principle that management should identify, analyze, and respond to risks related to achieving defined objectives. (principle 7). See GAO-14-704G*, Standards for Internal Control in the Federal Government.*

audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: List of Knowledgeable Stakeholders

To inform our review of the extent to which agencies established objectives with measurable outcomes for their sanctions and export controls on Russia, as well as progress made toward addressing those objectives, we selected and interviewed 11 nongovernmental stakeholders based on their expertise and knowledge of U.S. sanctions and export controls on Russia. Table 4 lists these knowledgeable stakeholders and their title and affiliation.

Table 4: List of 11 Knowledgeable Stakeholders

Name	Title	Affiliation
Daniel Ahn[a]	Chief Executive Officer	Delfi Labs
Max Bergmann[b]	Director, Europe, Russia, and Eurasia Program and the Stuart Center in Euro-Atlantic and Northern European Studies	Center for Strategic and International Studies
James Byrne[c]	Founder and Chief Executive Officer	Open Source Centre
Kimberly Donovan	Director, Economic Statecraft Initiative	Atlantic Council
Edward Fishman[d]	Senior Research Scholar, School for International and Public Affairs' Center for Global Energy Policy	Columbia University
Daniel Fried	Ambassador (retired); Weiser Family Distinguished Fellow	Atlantic Council
Peter Harrell	Nonresident Fellow	Carnegie Endowment for International Peace
Oleg Itskhoki	Professor, Economics Department	Harvard University
Emily Kilcrease	Senior Fellow and Program Director, Energy, Economics and Security Program	Center for a New American Security
Michael McFaul[e]	Ambassador (retired); Director, Freeman Spogli Institute for International Studies; Professor of Political Science	Stanford University
Elina Ribakova[f]	Nonresident Senior Fellow	Peterson Institute for International Economics

Source: GAO review of information provided by the knowledgeable stakeholders. | GAO-25-107079

[a]Dr. Ahn is also a Global Fellow at the Woodrow Wilson Center.

[b]Maria Snegovaya, Senior Fellow for Russia, the Europe, Russia, and Eurasia Program, Center for Strategic and International Studies, also provided her views during our interview with Dr. Bergmann.

[c]Mr. Byrne is also a Senior Associate Fellow at the Royal United Services Institute in Whitehall, London, United Kingdom.

[d]Dr. Fishman is also an Adjunct Senior Fellow at the Center for a New American Security and a Nonresident Senior Fellow at the Atlantic Council.

[e]Dr. McFaul is also a Senior Fellow at the Hoover Institution at Stanford University.

[f]Dr. Ribakova is also the Director of the International Affairs Program and Vice President for Foreign Policy at the Kyiv School of Economics and a Nonresident Fellow at Bruegel, a Belgian economics think tank.

Appendix III: Technical Details on Synthetic Control Methodology

Overview of Methodology

As part of our work examining progress made toward the broad categories of sanctions and export controls objectives we identified, we analyzed the effects of events in 2022, which included Russia's invasion of Ukraine and resulting sanctions, on economic growth (real gross domestic product [GDP] percentage change), per capita real GDP, and inflation. To do so, we used a synthetic control methodology, which allows us to model a counterfactual Russia representing what Russia might have experienced had the events in 2022 including the invasion and sanctions not occurred.

The synthetic control methodology can be used for evaluating treatments, interventions, or policy changes when there is only one treated unit (e.g., country) and no readily available counterfactual unit. The method creates a synthetic counterfactual so the change can be evaluated by comparing the outcome of the treated unit with the outcome of the synthetic counterfactual unit.[1] The synthetic counterfactual represents what we estimate would have happened without events of a given year. For instance, when we apply the synthetic control methodology to understand Russia's economy in 2022 and the years following, we estimate what would have happened to Russia without the events in 2022, which include the invasion and resulting sanctions.

To identify the pool of comparison countries for our analysis, we considered countries whose crude oil exports to European Union (EU) nations did not change substantially after the invasion of Ukraine, according to our analysis of International Energy Agency data.[2] Our goal was to find countries similar to Russia that were not affected by the sanctions, export controls, or oil price cap.

- Russia's exports to the EU decreased substantially following the invasion of Ukraine, leaving a gap in the desired oil imports of EU countries immediately after the invasion. Therefore, we excluded countries that increased their crude oil exports to the EU following the invasion of Ukraine, since they may have done so in response to the gap left by Russia.

[1]Alberto Abadie, Alexis Diamond, and Jens Hainmueller, "Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program," *Journal of the American Statistical Association,* vol. 105, no. 490 (2010): 493-505. Robert McClelland and Livia Mucciolo. "An Update on the Synthetic Control Method as a Tool to Understand State Policy." *Tax Policy Center* (Washington, D.C.: 2022).

[2]The data we examined only included EU countries that were in the Organization for Economic Cooperation and Development.

- We evaluated potential comparison countries whose crude oil exports to EU countries did not change substantially after the invasion of Ukraine. We examined their crude oil exports to the EU as a share of their own oil production to determine whether the exports represented a relatively small or large percentage of their own production. We excluded from the pool countries whose crude oil exports to the EU did not change substantially if the change represented a relatively large share of the country's own production.
- We also included countries who had some past or present relationship with the Organization of the Petroleum Exporting Countries (OPEC) or OPEC+ but were not exporting to EU countries, according to our analysis of International Energy Agency data.[3] We excluded Venezuela from the pool of comparison countries because it is also subject to sanctions and thus would not serve as an appropriate comparison. We ultimately selected 21 countries for our pool of comparison.[4]

The synthetic control methodology examines how indicators change following a particular year of interest. We applied the synthetic control methodology to 2022 as a year of interest to reflect Russia's 2022 invasion of Ukraine and resulting sanctions. We considered three indicators: economic growth, per capita real GDP, and inflation (percentage change in the average consumer prices). As part of our synthetic control methodology, we implemented the following steps for each indicator:

- In our main model, the synthetic control methodology selects and weights a small number of countries from our comparison pool based on data trends prior to the year of interest.[5] This methodology constructs a counterfactual for Russia using those weighted countries. We estimate treatment effects equal to the difference between the

[3]These countries include Sudan, Bahrain, Brunei, South Sudan, and Indonesia.

[4]We selected the following countries for our pool of comparison: Algeria, Azerbaijan, Bahrain, Brunei, Cameroon, Colombia, Democratic Republic of the Congo, Egypt, Greece, Indonesia, Italy, Lithuania, Mexico, Netherlands, Poland, Qatar, Saudi Arabia, South Sudan, Sudan, Tunisia, and the United Kingdom. Due to missing data in South Sudan, we excluded South Sudan from the synthetic control analysis.

[5]We used average values of the following predictors over 2017-2021: real GDP percentage change, inflation percentage change, real GDP per capita, value of agriculture, value of industry, trade openness, gross capital formation, and oil rents in terms of percentage of GDP. The use of these predictors is consistent with relevant literature that has used a synthetic control methodology.

economic indicator for Russia and the counterfactual calculated for Russia in 2022 and the years following the invasion of Ukraine.

- To estimate statistical inference from the main model, we conducted permutation testing that replaced Russia as the treated country. This permutation testing enabled us to examine whether Russia's treatment effect was unusually extreme[6] compared to the treatment effects of the other countries in the permutation tests.[7]
- We examined the sensitivity of our main model to the comparison countries used to calculate the counterfactual for Russia. Specifically, we used additional models in which we recalculated the counterfactual for Russia with varying subsets of the pool of comparison countries. By varying one factor or country at a time, we were able to determine if our estimates were generally consistent across the models.
- Finally, we considered the robustness of our findings by altering the year of interest in our analyses (2022). We applied the synthetic control methodology using earlier years as the year of interest to help ensure that the findings from our main model were unique to 2022 and the specific events that followed. In our analyses of Russia's 2022 invasion of Ukraine and resulting sanctions, we used 2019 and 2020 as alternative years of interest.

Findings Related to Russia's 2022 Invasion of Ukraine

Economic Growth

We found that economic growth declined initially, then may have recovered in part. Specifically, we found that Russia's economic growth in 2022 was about 6 percentage points lower than what we estimate would have occurred absent the events of 2022, including the invasion in February and resulting sanctions that were imposed afterwards (see fig.

[6]Given our use of permutation testing, which depended in part on the number of countries that generally had a pre-2022 fit similar to Russia's, we considered a p-value of less than 0.1 to be unusually extreme.

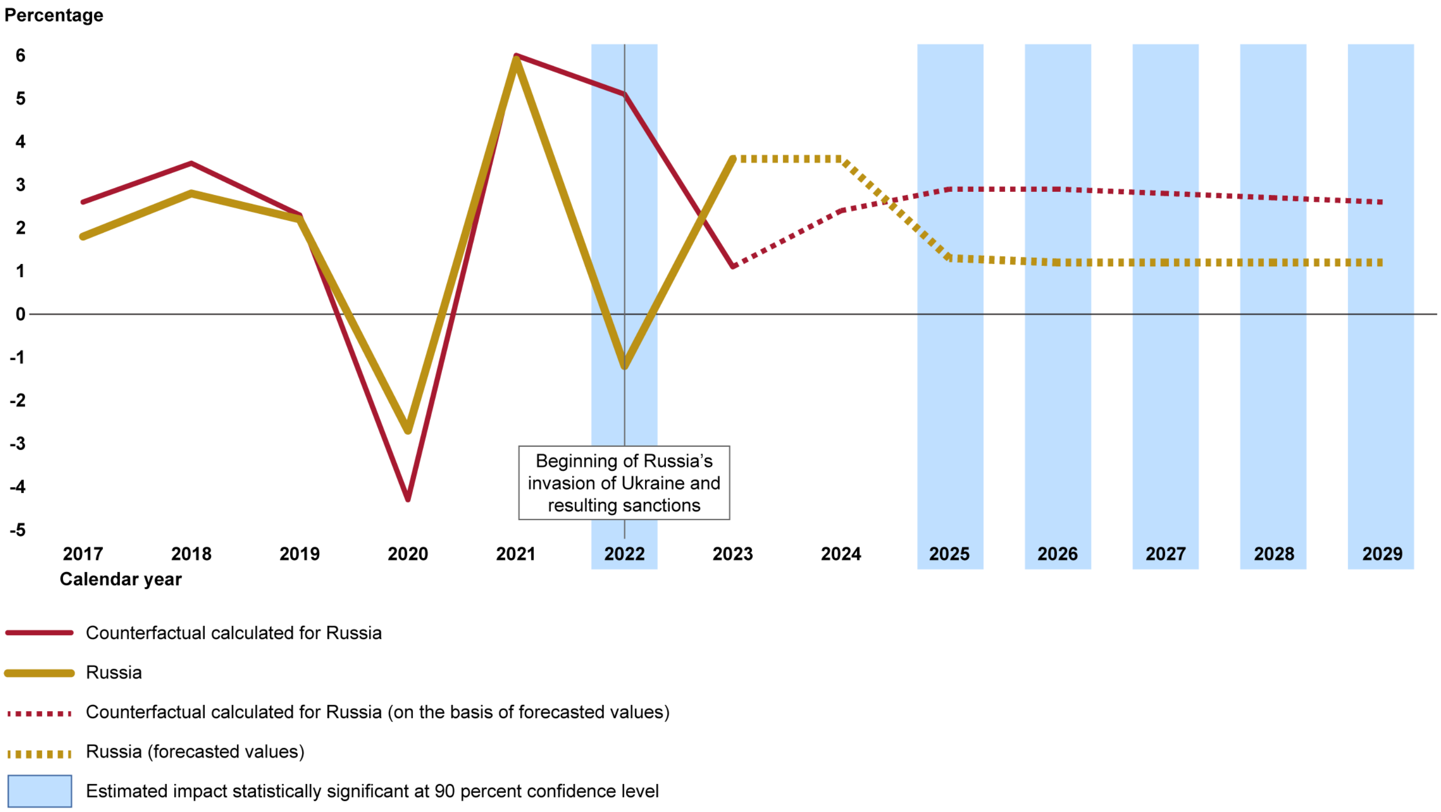
[7]Qiang Chen and Guanpeng Yan, "A Mixed Placebo Test for Synthetic Control Method," *Economics Letters,* vol. 224 (2023): 111004.

6).[8] We do not have statistical evidence that Russia's experience in 2023 and 2024 was different from what might have happened absent the events in 2022, including the invasion and resulting sanctions.[9] We also found that Russia's forecasted economic growth is expected to be lower each year from 2025 to 2029 than what we estimate would have happened absent the events of 2022, but these results may be less reliable because they are based on forecasted data.

[8]We also conducted our synthetic control analysis with earlier pre-treatment time periods. Specifically, we considered pre-treatment times starting in 2011, 2013, 2015 and 2016. The R-squared for 2011, 2013, and 2015 was relatively low compared to our baseline, suggesting that the synthetic counterfactual inadequately mimicked Russia's experience if we started in years prior to 2016. This result may be due to Russia's experience related to the annexation of Crimea and resulting sanctions.

[9]For the statistical significance level associated with our results for 2023 and 2024, see Table 7.

Figure 6: Comparison of Russia's Economic Growth to Counterfactual Calculated for Russia, 2017 – 2029



Source: GAO analysis of data from the International Monetary Fund (IMF), World Bank, U.S. Energy Information Administration, and International Energy Agency (IEA). IEA data from IEA (2024) Monthly Oil Data Service, https://www.iea.org/data-and-statistics/data-product/monthly-oil-data-service-mods-complete, all rights reserved. | GAO-25-107079

Notes: We used the percentage change in real gross domestic product (GDP) as our measure of economic growth. Russia values and forecasted values come directly from IMF's World Economic Outlook data. We implemented the synthetic control methodology to calculate the counterfactual for Russia. There were 20 nations in our pool of comparison countries for which data were available. The countries that we ultimately weighted in our counterfactual calculated for Russia were Poland, Mexico, Azerbaijan, Saudi Arabia, Algeria, and Sudan. Across countries, the IMF data for real GDP percentage change were generally forecasted starting in 2024, though some countries' forecasted data started earlier. The R-squared, which measures how well the counterfactual calculated for Russia matches Russia's pre-treatment outcomes, explains 93.3 percent of the variation in the GDP percentage change. We inferred the confidence level by conducting permutation testing that considered other countries to be the treated country instead of Russia if those other countries generally had a pre-2022 fit similar to Russia's, which we considered for this model as a mean squared prediction error limited to three times that of Russia's.

Table 5 presents the average values for variables used to calculate the synthetic counterfactual. It includes the average values for these variables for Russia and the counterfactual calculated for Russia. In addition, it lists the average values for these variables across the countries in the comparison pool without accounting for the weighting that occurs in the synthetic control.

Table 5: Variables Used in Synthetic Control Estimate of Real Gross Domestic Product (GDP) Percentage Change, Averaged over 2017-2021

Variable	Russia	Counterfactual calculated for Russia	Average of countries in comparison pool
Percentage			
Real GDP percentage change	2.0	2.0	1.7
Inflation percentage change	4.2	4.3	10.4
Value of agriculture (percentage of GDP)	3.7	4.0	6.8
Value of industry (percentage of GDP)	31.4	35.8	32.7
Gross capital formation (percentage of GDP)	23.0	22.9	23.9
Oil rents (percentage of GDP)	7.8	7.7	5.2
Trade openness (percentage of GDP)	48.8	85.3	77.9
Dollars			
Real GDP per capita	11,953	11,982	18,571

Source: GAO analysis of data from the International Monetary Fund, World Bank, U.S. Energy Information Administration, and International Energy Agency (IEA). IEA data from IEA (2024) Monthly Oil Data Service, https://www.iea.org/data-and-statistics/data-product/monthly-oil-data-service-mods-complete, all rights reserved. | GAO-25-107079

Notes: There were 20 nations in our pool of comparison countries for which data were available. The countries that we ultimately weighted in our counterfactual calculated for Russia were Poland, Mexico, Azerbaijan, Saudi Arabia, Algeria, and Sudan. The R-squared, which measures how well the counterfactual calculated for Russia matches Russia's pre-treatment outcomes, explains 93.3 percent of the variation in the GDP percentage change.

Table 5 indicates that the average values of the variables tend to be similar between Russia and the counterfactual calculated for Russia. Specifically, this table shows that the similarity is generally greater between Russia and the counterfactual calculated for Russia than the similarity between Russia and the average of countries in the comparison pool.

Table 6 presents the weights of the countries used in the synthetic control. Poland, Mexico, and Azerbaijan contribute the most, comprising 80 percent of the total. Additional countries included in the weighting are

Saudi Arabia, Algeria, and Sudan. Real GDP percentage change prior to 2022 was best reproduced by the combination of these countries.[10]

Table 6: Comparison Country Weights Used to Calculate Counterfactual for Russia When Estimating Effect on Real Gross Domestic Product (GDP) Percentage Change

Country in comparison pool	Weight
Poland	0.38
Mexico	0.24
Azerbaijan	0.21
Saudi Arabia	0.12
Algeria	0.05
Sudan	0.00

Source: GAO analysis of data from the International Monetary Fund, World Bank, U.S. Energy Information Administration, and International Energy Agency (IEA). IEA data from IEA (2024) Monthly Oil Data Service, https://www.iea.org/data-and-statistics/data-product/monthly-oil-data-service-mods-complete, all rights reserved. | GAO-25-107079

Notes: The weight for Sudan is equal to 0.004. There were 20 nations in our pool of comparison countries for which data were available. The R-squared, which measures how well the counterfactual calculated for Russia matches Russia's pre-treatment outcomes, explains 93.3 percent of the variation in the GDP percentage change.

We also consider the R-squared as a measure of the goodness of fit of the synthetic control model. The R-squared measures how well the counterfactual calculated for Russia matches Russia's pre-treatment outcomes, which generally indicates how well the counterfactual calculated for Russia replicates Russia's behavior before the invasion and resulting sanctions in 2022. The R-squared for this model explains 93.3 percent of the variation in the GDP percentage change, which provides confidence that the synthetic control model explains the data well.

Table 7 shows our treatment effects and the results of our statistical significance testing and sensitivity analysis. Specifically, table 7 provides:

- the treatment effects from our main model,
- the corresponding p-values[11] inferred from permutation testing, and

[10]The synthetic control methodology did not weight the following comparison countries we had identified: Bahrain, Brunei, Cameroon, Colombia, Democratic Republic of the Congo, Egypt, Greece, Indonesia, Italy, Lithuania, Netherlands, Qatar, South Sudan, Tunisia, and the United Kingdom.

[11]The p-value represents the smallest level of significance for which our estimate results in a rejection of the hypothesis of there being no difference between Russia and the counterfactual calculated for Russia.

- the results of our sensitivity analyses where we varied one country at a time to calculate the counterfactual for Russia.

For the permutation testing, we used other countries as the treated country instead of Russia if those other countries generally had a pre-2022 fit similar to Russia's.[12] Fifteen countries in our pool of comparison countries met that criteria. For 2022, we found that Russia's treatment effect was unusually extreme compared to the treatment effects of the other countries in the permutation tests, allowing us to infer that the p-value associated with our 2022 estimate is 0.06.[13] We also estimated an average impact across years 2022 through 2029. Across this time period, we found a decrease in economic growth of 1.3 percentage points, but this result had a p-value of 0.25 and thus was not statistically significant.[14]

We examined the sensitivity of our main model to the pool of comparison countries used to calculate the counterfactual for Russia. Specifically, we used additional models in which we recalculated the counterfactual for Russia with varying subsets of the pool of comparison countries. By varying one factor or country at a time, we were able to determine whether our estimates were generally consistent across the models. Table 7 shows that the treatment effects are in the range presented from the sensitivity analysis, suggesting our estimate is not driven by specific countries in our pool.

[12]For this model, the similar pre-2022 fit corresponded to a mean squared prediction error limited to three times that of Russia's.

[13]Because Russia's experience was the most extreme, we infer the p-value of 0.06 as equal to one divided by 16, where 16 is equal to the 15 countries from our pool that generally had a pre-2022 fit similar to Russia's plus Russia.

[14]We also did a robustness check using difference-in-differences, a separate methodology. While those results showed a statistically significant decline in Russia's economic growth averaged over 2022 through 2029, the validity of the model was sensitive to the length of the pre-treatment period used in the analysis.

Table 7: Synthetic Control Treatment Effects for Real Gross Domestic Product (GDP) Percentage Change, Results of Permutation Tests, and Sensitivity Analysis

Year	Treatment effects from main synthetic control model*	P-value inferred from 16 permutation tests[b]	Sensitivity analysis, one country at a time	
			Smallest treatment effect*	Largest treatment effect*
2022	-6.3	0.06	-7.6	-5.4
2023	2.5	0.75	2.2	4.1
2024[a]	1.2	0.88	1.0	2.1
2025[a]	-1.6	0.06	-2.6	-1.1
2026[a]	-1.7	0.06	-2.8	-1.2
2027[a]	-1.6	0.06	-2.2	-1.3
2028[a]	-1.5	0.06	-2.1	-1.2
2029[a]	-1.4	0.06	-2.1	-1.2

Legend: * = column values are in percentage point differences.

Source: GAO analysis of data from the International Monetary Fund (IMF), World Bank, U.S. Energy Information Administration, and International Energy Agency (IEA). IEA data from IEA (2024) Monthly Oil Data Service, https://www.iea.org/data-and-statistics/data-product/monthly-oil-data-service-mods-complete, all rights reserved. | GAO-25-107079

Notes: There were 20 nations in our pool of comparison countries for which data were available. The countries that we ultimately weighted in our counterfactual calculated for Russia were Poland, Mexico, Azerbaijan, Saudi Arabia, Algeria, and Sudan. The R-squared, which measures how well the counterfactual calculated for Russia matches Russia's pre-treatment outcomes, explains 93.3 percent of the variation in the GDP percentage change.

[a]Across countries, the IMF data for real GDP percentage change were generally forecasted starting in 2024, though some countries' forecasted data started earlier.

[b]The p-value represents the smallest level of significance for which our estimate results in a rejection of the hypothesis of there being no difference between Russia and the counterfactual calculated for Russia. We inferred the p-value by conducting permutation testing that considered other countries to be the treated country instead of Russia if those other countries generally had a pre-2022 fit similar to Russia's, which we considered for this model as a mean squared prediction error limited to three times that of Russia's.

We also examined how our findings changed by altering the year of interest in our analysis. We did not notice a similar decline in 2019 and 2020 when we used those years as the intervention year, suggesting that Russia's decline in 2022 was specific to the events in 2022, including the invasion and resulting sanctions.

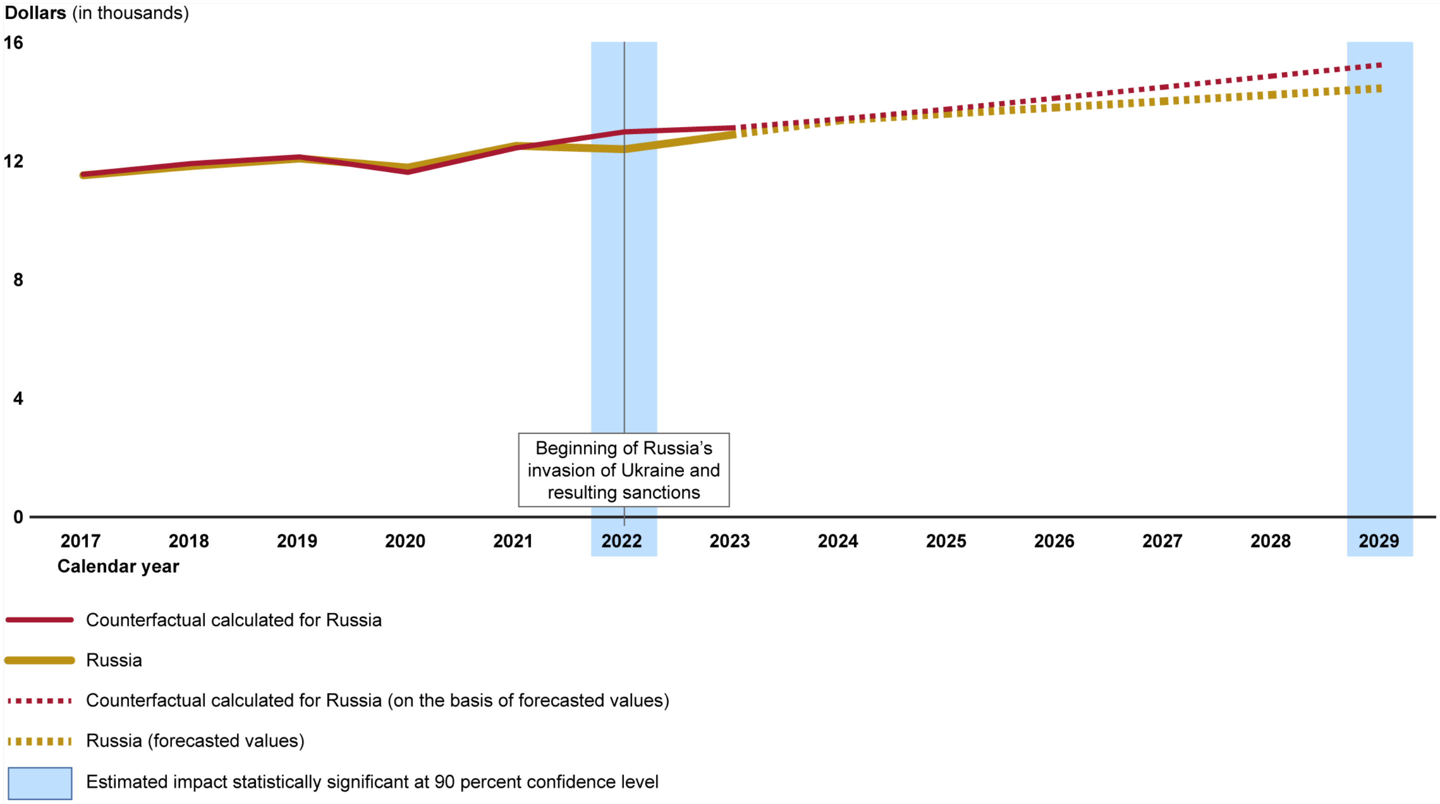
Real GDP per capita

We found that Russia's real GDP per capita was about 584 dollars lower in 2022 than what we estimate would have occurred absent the events of 2022, including the invasion of Ukraine in February and resulting sanctions (see fig.7).[15] For context, Russia's real GDP per capita was $11,953, averaged over 2017 through 2021. We do not have statistical evidence that Russia's experience in the years 2023 through 2028 was different from what might have happened absent the events in 2022.[16] We also found that Russia's real GDP per capita is expected to be lower in 2029 than what we estimate would have happened absent the events of 2022, including the invasion and sanctions, but these results may be less reliable because they are based on forecasted data.

[15]We also conducted our synthetic control analysis with earlier pre-treatment time periods. Specifically, we considered pre-treatment times starting in 2011, 2013, 2015 and 2016. The R-squared for 2011, 2013, and 2015 was relatively low compared to our baseline, suggesting that the synthetic counterfactual inadequately mimicked Russia's experience if we started in years prior to 2016. This result may be due to Russia's annexation of Crimea and resulting sanctions.

[16]For the statistical significance level associated with our results for years 2023 through 2028, see Table 10.

Figure 7: Comparison of Russia's Real Gross Domestic Product (GDP) Per Capita to Counterfactual Calculated for Russia, 2017 – 2029



Source: GAO analysis of data from the International Monetary Fund (IMF), World Bank, U.S. Energy Information Administration, and International Energy Agency (IEA). IEA data from IEA (2024) Monthly Oil Data Service, https://www.iea.org/data-and-statistics/data-product/monthly-oil-data-service-mods-complete, all rights reserved. | GAO-25-107079

Notes: Russia values and forecasted values come from IMF's World Economic Outlook data. We implemented the synthetic control methodology to calculate the counterfactual for Russia. There were 20 nations in our pool of comparison countries for which data were available. The countries that we ultimately weighted in our counterfactual calculated for Russia were Mexico, Poland, Algeria, Colombia, Brunei, and Sudan. Across countries, the IMF data used to calculate real GDP per capita were generally forecasted starting in 2024, though one country's forecasted data started earlier. The R-squared, which measures how well the counterfactual calculated for Russia matches Russia's pre-treatment outcomes for this model, is 92.3 percent. We inferred the confidence level by conducting permutation testing that considered other countries to be the treated country instead of Russia if those other countries generally had a pre-2022 fit similar to Russia's, which we considered for this model as having a mean squared prediction error limited to three times that of Russia's.

Table 8 presents the average values for variables used to calculate the synthetic counterfactual. We present the average values for these variables for Russia and the counterfactual calculated for Russia. In addition, we present the average values for these variables across the countries in the comparison pool, without accounting for the weighting that occurs in the synthetic control.

Table 8: Variables Used in Synthetic Control Estimate of Real Gross Domestic Product (GDP) Per Capita, Averaged over 2017-2021

Variable	Russia	Counterfactual calculated for Russia	Average of countries in comparison pool
Percentage			
Real GDP percentage change	2.0	2.0	1.7
Inflation percentage change	4.2	4.2	10.4
Value of agriculture (percentage of GDP)	3.7	3.7	6.8
Value of industry (percentage of GDP)	31.4	31.2	32.7
Gross capital formation (percentage of GDP)	23.0	22.9	23.9
Oil rents (percentage of GDP)	7.8	1.8	5.2
Trade openness (percentage of GDP)	48.8	86.8	77.9
Dollars			
Real GDP per capita	11,953	11,941	18,571

Source: GAO analysis of data from the International Monetary Fund, World Bank, U.S. Energy Information Administration, and International Energy Agency (IEA). IEA data from IEA (2024) Monthly Oil Data Service, https://www.iea.org/data-and-statistics/data-product/monthly-oil-data-service-mods-complete, all rights reserved. | GAO-25-107079

Notes: There were 20 nations in our pool of comparison countries for which data were available. The countries that we ultimately weighted in our counterfactual calculated for Russia were Mexico, Poland, Algeria, Colombia, Brunei, and Sudan. The R-squared, which measures how well the counterfactual calculated for Russia matches Russia's pre-treatment outcomes, for this model is 92.3 percent.

Table 8 indicates that the average values of the variables tend to be similar between Russia and the counterfactual calculated for Russia. Specifically, this table shows that the similarity is generally greater between Russia and the counterfactual calculated for Russia than the similarity between Russia and the average of countries in the comparison pool.

Table 9 presents the weights of the countries used in the synthetic control. Mexico and Poland contribute the most, comprising approximately 87 percent of the total. Additional countries included in the weighting are Algeria, Colombia, Brunei, and Sudan. Real GDP per capita prior to 2022 was best reproduced by the combination of these countries.[17]

Table 9: Comparison Country Weights Used to Calculate Counterfactual for Russia When Estimating Effect on Real Gross Domestic Product (GDP) Per Capita

Country in comparison pool	Weight
Mexico	0.44
Poland	0.43
Algeria	0.05
Colombia	0.05
Brunei	0.03
Sudan	0.00

Source: GAO analysis of data from the International Monetary Fund, World Bank, U.S. Energy Information Administration, and International Energy Agency (IEA). IEA data from IEA (2024) Monthly Oil Data Service, https://www.iea.org/data-and-statistics/data-product/monthly-oil-data-service-mods-complete, all rights reserved. | GAO-25-107079

Notes: The weight for Sudan is equal to 0.004. There were 20 nations in our pool of comparison countries for which data were available. The R-squared, which measures how well the counterfactual calculated for Russia matches Russia's pre-treatment outcomes, for this model is 92.3 percent.

The R-squared for this model explains 92.3 percent of the variation in the real GDP per capita, which provides confidence that the synthetic control model explains the data well.

Table 10 shows our treatment effects and the results of our statistical significance testing and sensitivity analysis. Specifically, table 10 provides:

- the treatment effects from our main model,
- the corresponding p-values[18] inferred from permutation testing, and
- the results of our sensitivity analyses where we varied one country at a time to calculate the counterfactual for Russia.

For the permutation testing, we used other countries as the treated country instead of Russia if those other countries generally had a pre-

[17]The synthetic control methodology did not weight the following comparison countries we had identified: Azerbaijan, Bahrain, Cameroon, Democratic Republic of the Congo, Egypt, Greece, Indonesia, Italy, Lithuania, Netherlands, Qatar, Saudi Arabia, South Sudan, Tunisia, and the United Kingdom.

[18]The p-value represents the smallest level of significance for which our estimate results in a rejection of the hypothesis of there being no difference between Russia and the counterfactual calculated for Russia.

2022 fit similar to Russia's.[19] Ten countries in our pool of comparison countries met that criteria. For 2022, we found that Russia's treatment effect was unusually extreme compared to the treatment effects of the other countries in the permutation tests, allowing us to infer that the p-value associated with our 2022 estimate is 0.09.[20] We also estimated an average impact across years 2022 through 2029. Across this period, we found a decrease in real GDP per capita of $405, but this result had a p-value of 0.55 and thus was not statistically significant.[21]

We examined the sensitivity of our main model to the pool of comparison countries used to calculate the counterfactual for Russia. Specifically, we used additional models in which we recalculated the counterfactual for Russia with varying subsets of the pool of comparison countries. By varying one factor or country at a time, we were able to determine whether our estimates were generally consistent across the models. Table 10 shows that the treatment effect we estimate in 2022 is in the range presented from the sensitivity analysis, suggesting that estimate is not driven by specific countries in our pool.

Table 10: Synthetic Control Treatment Effects for Real Gross Domestic Product (GDP) Per Capita, Results of Permutation Tests, and Sensitivity Analysis

Year	Treatment effects from main synthetic control model	P-value inferred from 11 permutation tests[b]	Sensitivity analysis, one country at a time	
			Smallest treatment effect	Largest treatment effect
2022	-$584	0.09	-$819	-$357
2023	-$232	0.18	-$476	$315
2024[a]	-$43	0.73	-$316	$741
2025[a]	-$156	0.45	-$439	$665
2026[a]	-$319	0.36	-$567	$565
2027[a]	-$479	0.36	-$673	$504
2028[a]	-$635	0.18	-$775	$447
2029[a]	-$790	0.09	-$874	$384

[19]For this model, the similar pre-2022 fit corresponded to having a mean squared prediction error limited to three times that of Russia's.

[20]Because Russia's experience was the most extreme, we infer the p-value of 0.09 as equal to one divided by 11, where 11 is equal to the 10 countries from our pool that generally had a pre-2022 fit similar to Russia's plus Russia.

[21]We also explored a robustness check using difference-in-differences, a separate methodology. The difference-in-differences model assumptions are not valid in the case of real GDP per capita, indicating that the model is not appropriate for this context.

Source: GAO analysis of data from the International Monetary Fund (IMF), World Bank, U.S. Energy Information Administration, and International Energy Agency (IEA). IEA data from IEA (2024) Monthly Oil Data Service, https://www.iea.org/data-and-statistics/data-product/monthly-oil-data-service-mods-complete, all rights reserved. | GAO-25-107079

Notes: There were 20 nations in our pool of comparison countries for which data were available. The countries that we ultimately weighted in our counterfactual calculated for Russia were Mexico, Poland, Algeria, Colombia, Brunei, and Sudan. The R-squared, which measures how well the counterfactual calculated for Russia matches Russia's pre-treatment outcomes, for this model is 92.3 percent.

[a]Across countries, the IMF data used to calculate real GDP per capita were generally forecasted starting in 2024, though one country's forecasted data started earlier.

[b]The p-value represents the smallest level of significance for which our estimate results in a rejection of the hypothesis of there being no difference between Russia and the counterfactual calculated for Russia. We inferred the p-value by conducting permutation testing that considered other countries to be the treated country instead of Russia if those other countries generally had a pre-2022 fit similar to Russia's, which we considered for this model as a mean squared prediction error limited to three times that of Russia's.

We also examined how our findings changed by altering the year of interest in our analysis. We did not notice a similar decline happening in 2019 and 2020 when we used those years as the intervention year, suggesting that Russia's decline in 2022 was specific to the events in 2022, including the invasion and resulting sanctions.

Inflation

When we applied the same methodology for inflation, we did not find statistical evidence that Russia's experience was different from that of the counterfactual calculated for Russia.[22]

[22]We also did a robustness check using difference-in-differences, a separate methodology. In implementing the difference-in-differences model for inflation, we did not find statistical evidence that Russia's experience was different from that of the counterfactual for Russia.

Appendix IV: Additional Details on Literature Review

We conducted a literature review of scholarly, conference, and working papers; dissertations; government reports; and think tank publications related to the impact of U.S. sanctions and export controls on Russia. The literature search included papers from after Russia's 2014 annexation of Crimea through early 2024.[1] These studies were generally from our literature search conducted in January and February of 2024, and consequently do not include more recent changes in economic indicators or other outcomes. Most of these studies were trend analyses, which do not separate the impact of the sanctions, export controls, or price cap on Russian oil from other factors such as the war, rising oil prices, tightening of supply chains, or inflation more broadly.

This appendix provides additional details on studies related to Russia's invasion of Ukraine in 2022, covering economic indicators, the oil price cap, trends in Russia's trade, and trade in key products related to Russia's war effort.

Economic indicators. Studies focused on trends between the sanctions and export controls on Russia and indicators of the Russian economy found initial declines followed by partial recoveries. For example, studies documented declining trends in economic indicators such as production volumes and volumes transacted in the ruble in early 2022.[2] While multiple studies examined the initial decline and later recovery in the ruble exchange rate following Russia's invasion of Ukraine,[3] some studies

[1]For more details on this methodology, see appendix I.

[2]Natalia Shapran, Igor Britchenko, Mykola Haponiuk, and Vitaliy Shapran. "The impact of the sanctions on the economy of the Russian Federation." *VUZF Review*, vol. 7, no. 3 (2022). Maria Demertzis, Benjamin Hilgenstock, Ben McWilliams, Elina Ribakova, and Simone Tagliapietra. *How have sanctions impacted Russia?* (Brussels, Belgium: Bruegel, 2022).

[3]Roberto Lampa and Gianmarco Oro. "Can the Side Effects of Sanctions and Energy Inflation Trigger the Disintegration of the International Monetary Regime?" *PSL Quarterly Review,* vol. 76, no. 306 (2023): 225-242. Dorina Clichici and Andreea Emanuela Dragoi. "Implications of the EU Sanctions for the Resilience of the Russian Financial System under the Current Geopolitical Environment." *Romanian Journal of European Affairs* vol. 23, no. 1 (2023). Guido Lorenzoni and Iván Werning. "A minimalist model for the ruble during the Russian invasion of Ukraine." *American Economic Review: Insights* vol. 5, no. 3 (2023): 347-356.

expressed uncertainty as to whether the exchange rate is an appropriate measure of the effectiveness of sanctions and export controls.[4]

Some studies showed that while economic indicators declined following sanctions, the declines were not as severe as might be expected. For example, one study found a declining trend in the monetary value of global cross-border transactions by sanctioned Russian companies following U.S. sanctions, but also found that such transactions were not eliminated.[5] Another study noted that although Russia's GDP growth rate at the end of 2022 was negative, it was not as small as many forecasts had predicted.[6]

Oil price cap. Studies describe relatively high estimated oil revenues for Russia in 2022, with some decline in 2023 concurrent with the price cap and the European Union (EU) oil embargo, but the period of these analyses is generally short and limits understanding of long-term trends. According to these studies, Russia's exports and revenues from oil were relatively high in the first months after the invasion partially because of high prices and shifting trade partners. In particular, the studies noted that India and China increased their imports of Russian oil. One study explained that the oil revenues had enabled Russia to continue financing the war.[7] It is difficult to assess the effectiveness of the Group of Seven (G7) price cap separate from the EU embargo.[8] One study proposed that the embargo was the primary driver behind oil market developments in 2022.[9] We also examined studies that modeled what would happen to Russia under various assumed fossil fuel embargos or energy import

[4]One study posited that the exchange rate is not the best measure of the economy and that it emphasizes Russia's dependence on oil and gas. Charles Lichfield. *Windfall: How Russia managed oil and gas income after invading Ukraine, and how it will have to make do with less.* (Washington, D.C.: Atlantic Council, 2022). Another study used economic theory to explain that the exchange rate is a poor measure of the effectiveness of export controls. Lorenzoni and Werning. "A minimalist model for the ruble," 347-356.

[5]Sebastian Bienkowski, et al. *Effectiveness of U.S. Sanctions Targeting Russian Companies and Individuals.* (Washington, D.C.: Free Russia Foundation, 2023).

[6]Lampa and Oro. "Side Effects of Sanctions and Energy Inflation," 225-242.

[7]Demertzis, et al. "How have sanctions impacted Russia?"

[8]The G7 is an intergovernmental political and economic forum that consists of the U.S., Canada, France, Germany, Italy, Japan, and the United Kingdom.

[9]Babina, Hilgenstock, Itskhoki, Mironov, and Ribakova. "Assessing the Impact of International Sanctions on Russian Oil Exports." February 2023.

reductions, though these studies' analyses generally required more assumptions.[10]

Russian imports. A couple studies found evidence of initial declines in Russia's imports following the 2022 invasion and resulting sanctions, with some partial recoveries later in 2022.[11] In addition, the studies documented shifting trade relationships. For example, one study using a synthetic control method[12] found that exports from non-sanctioning countries, in particular Turkey, recovered and exceeded the counterfactual.[13] Another study found an increase in exports from China and Turkey to Russia relative to the pre-sanctions trend.[14] This same study found that exports from the EU and United Kingdom to Russia fell by more than half while exports from those countries to Armenia, Kazakhstan and the Kyrgyz Republic increased between 15 and 90 percent, which may indicate sanctions circumvention.

Russian imports of key products. Studies provided mixed evidence regarding trends in imports of key products. Some of the studies that examined trends in Russia's imports of key products showed an initial decline.[15] One study noted an increase in Russia's imports of

[10]For example, one study modeled a price cap that applies to all or most sales and found that when the producer is large and has market power, such a price cap stabilizes world oil prices. However, that study also found that if the cap is poorly enforced, or if the sanctioned state has access to a noncompliant shadow fleet, the cap is less effective at stabilizing world prices. Simon Johnson, Lukasz Rachel, and Catherine Wolfram. *A theory of price caps on non-renewable resources*. No. w31347. National Bureau of Economic Research, 2023.

[11]Alessandro Borin, Francesco Paolo Conteduca, and Michele Mancini. "The real-time impact of the war on Russian imports: a synthetic control method approach." (2022). Bienkowski, et al. *Effectiveness of U.S. Sanctions Targeting Russian Companies and Individuals.*

[12]The synthetic control method creates a synthetic counterfactual so the treatment, intervention, or policy change can be evaluated by comparing the outcome of the treated unit with the outcome of the synthetic counterfactual unit.

[13]Borin, Conteduca, and Mancini. "The real-time impact of the war on Russian imports."

[14]Chupilkin, Maxim, Beata Javorcik, and Alexander Plekhanov. "The Eurasian roundabout: Trade flows into Russia through the Caucasus and Central Asia." (2023).

[15]Zsolt Darvas and Catarina Martins. "The impact of the Ukraine crisis on international trade." No. 20/2022. Bruegel Working Paper, 2022. Heli Simola. "Russian foreign trade after four months of war in Ukraine." No. 5/2022. Bank of Finland Institute for Emerging Economies Policy Brief, 2022.

microprocessors and semiconductors between 2021 and 2022.[16] Other studies of trade in key products showed declines and subsequent partial recoveries, though the extent of recovery varied. For example, in one study, authors found a declining trend in Russian imports of key products in mid-2022 with key products over 45 percent lower than the pre-sanctions period, but differing longer-term responses depending on the specific groups of products examined.[17] Specifically, data through October 2023 that those authors examined showed that the monthly average of Russian imports of Common High Priority List (CHPL) items largely recovered in that they were only 10 percent lower in 2023 compared to the pre-sanctions period.[18] However, for the broader set of components the authors deem critical, the monthly average of Russian imports in 2023 represented a 28.8 percent drop compared to the pre-sanctions period.[19]

List of studies

Babina, Tania, Benjamin Hilgenstock, Oleg Itskhoki, Maxim Mironov, and Elina Ribakova. "Assessing the Impact of International Sanctions on Russian Oil Exports." February 2023. Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4366337.

Bienkowski, Sebastian, et al. *Effectiveness of U.S. Sanctions Targeting Russian Companies and Individuals.* (Washington, D.C.: Free Russia Foundation, 2023).

Bilousova, Olena, Benjamin Hilgenstock, Elina Ribakova, Nataliia Shapoval, Anna Vlasyuk, and Vladyslav Vlasiuk. *Challenges of Export Controls Enforcement: How Russia Continues to Import Components for its Military Production.* (Yermak-McFaul International Working Group on Russian Sanctions and KSE Institute, 2024).

[16]Bienkowski, et al. *Effectiveness of U.S. Sanctions Targeting Russian Companies and Individuals.*

[17]Olena Bilousova, Benjamin Hilgenstock, Elina Ribakova, Nataliia Shapoval, Anna Vlasyuk, and Vladyslav Vlasiuk. "Challenges of export controls enforcement: how Russia continues to import components for its military production." (2024).

[18]These items represent those on the CHPL, a common set of 50 products developed by the EU, Japan, United States, and UK subject to varying levels of export controls. When the study was written there were 45 products on the CHPL.

[19]The authors rely on their own definition of "critical components". They exclude some battlefield goods that are largely used for civilian purposes (e.g., smart phones), but include additional products where they think a broader focus is needed.

Borin, Alessandro, Francesco Paolo Conteduca, and Michele Mancini. “The Real-Time Impact of the War on Russian Imports: A Synthetic Control Method Approach.” November 2022. Available at: https://www.econstor.eu/bitstream/10419/266330/1/synth_Russia.pdf.

Chepeliev, Maksym, Thomas Hertel, and Dominique van der Mensbrugghe. “Cutting Russia’s Fossil Fuel Exports: Short-term Economic Pain for Long-term Gain.” GTAP Working Paper, 91, April 2022. Available at: https://www.gtap.agecon.purdue.edu/uploads/resources/download/11023.pdf.

Chupilkin, Maxim, Beata Javorcik, and Alexander Plekhanov. “The Eurasian Roundabout: Trade Flows into Russia through the Caucasus and Central Asia.” February 2023. Available at SSRN: https://ssrn.com/abstract=4368618.

Clichici, Dorina, and Andreea Emanuela Dragoi. “Implications of the EU Sanctions for the Resilience of the Russian Financial System under the Current Geopolitical Environment.” *Romanian Journal of European Affairs* vol. 23, no. 1 (2023): 18-33.

Darvas, Zsolt, and Catarina Martins. ”The Impact of the Ukraine Crisis on International Trade.” *Bruegel Working Paper*, 20, December 2022. Available at: https://www.bruegel.org/system/files/2022-12/WP%2020.pdf.

Demertzis, Maria, Benjamin Hilgenstock, Ben McWilliams, Elina Ribakova, and Simone Tagliapietra. *How have Sanctions Impacted Russia?* (Brussels, Belgium: Bruegel, 2022).

Hilgenstock, Benjamin, Elina Ribakova, Nataliia Shapoval, Tania Babina, Oleg Itskhoki, and Maxim Mironov. “Russian Oil Exports Under International Sanctions.” May 2023. Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4430053.

Johnson, Simon, Lukasz Rachel, and Catherine Wolfram. ”A Theory of Price Caps on Non-renewable Resources.” Working Paper 31347. Cambridge, MA: National Bureau of Economic Research, 2023. Available at: https://www.nber.org/papers/w31347.

Kilian, Lutz, David Rapson, and Burkhard C. Schipper. *The Impact of the 2022 Oil Embargo and Price Cap on Russian Oil Prices*. (Dallas, TX: Federal Reserve Bank of Dallas, 2024).

Lampa, Roberto, and Gianmarco Oro. “Can the Side Effects of Sanctions and Energy Inflation Trigger the Disintegration of the International Monetary Regime?” PSL Quarterly Review, vol. 76 no. 306 (2023): 225-242.

Lichfield, Charles. *Windfall: How Russia Managed Oil and Gas Income after Invading Ukraine, and How it Will Have to Make Do with Less.* (Washington, D.C.: Atlantic Council, 2022).

Liu, Li-Jing, Hong-Dian Jiang, Qiao-Mei Liang, Felix Creutzig, Hua Liao, Yun-Fei Yao, Xiang-Yan Qian et al. “Carbon Emissions and Economic Impacts of an EU Embargo on Russian Fossil Fuels.” *Nature Climate Change,* vol. 13 (2023): 290-296.

Lorenzoni, Guido, and Iván Werning. “A Minimalist Model for the Ruble During the Russian Invasion of Ukraine.” *American Economic Review: Insights* vol. 5, no. 3 (2023): 347-356.

Myllyvirta, Lauri, Hubert Thieriot, Jan Lietava, Andrei Ilas, Meri Pukarinen. *EU Oil Ban and Price Cap are Costing Russia EUR 160 mn/day, But Further Measures Can Multiply the Impact.* (Centre for Research on Energy and Clean Air, 2023).

Shapran, Natalia, Igor Britchenko, Mykola Haponiuk, and Vitaliy Shapran. “The Impact of the Sanctions on the Economy of the Russian Federation.” VUZF Review, vol. 7, no. 3 (2022): 13-22.

Simola, Heli. *Russian Foreign Trade after Four Months of War in Ukraine.* (Helsinki, Finland: Bank of Finland Institute for Emerging Economies, 2022).

Appendix V: Timeline of Selected Events Related to the Price Caps on Russian Crude Oil and Petroleum Products

Figure 8: Timeline of Selected Events Related to Price Caps on Russian Crude Oil and Petroleum Products, September 2022 – July 2025

2022	**September 2, 2022**	G7 Leaders confirmed their joint political intention to implement a price cap on Russian-origin crude oil and petroleum products.[a]
	December 2, 2022	The Price Cap Coalition jointly set a price cap on Russian crude oil at $60 per barrel.
	December 5, 2022	Treasury, in consultation with the Secretary of State, imposed the price cap on Russian crude oil.[b]
2023	**February 5, 2023**	The Price Cap Coalition set a price cap for Russian petroleum products traded at a discount to crude oil at $45 per barrel, and set a second price cap for Russian petroleum products traded at a premium to crude oil at $100 per barrel.[c]
	April 17, 2023	Treasury issued an alert on possible evasion of the price cap on Russian crude oil.
	Summer and Fall 2023	Russia exported more of its oil via the “shadow fleet” and developed new ways to defraud Price Cap Coalition service providers.[d] The average price that Russia earned on its oil rose above the cap.
	October 2023	Treasury implemented the “second phase” of the oil price cap, which included tightening enforcement of the oil price cap for trades that used Price Cap Coalition services. For example, on October 12, 2023, Treasury imposed sanctions on two entities and identified two vessels as blocked property for using Price Cap Coalition service providers while carrying Russian crude oil above the price cap.
	December 20, 2023	Treasury imposed sanctions on a Government of Russia-owned ship manager and several oil traders involved in the seaborne transportation of Russian oil.
2024	**January 18, 2024**	Treasury imposed sanctions on a shipping company that owns 18 vessels that engaged in the transport of Russian crude oil above the price cap while using Price Cap Coalition service providers.
	February 1, 2024	The Price Cap Coalition issued a compliance and enforcement alert regarding methods used to evade the oil price cap and recommendations for identifying and mitigating these methods.
	February 8, 2024	Treasury imposed sanctions on four entities and identified one vessel as blocked property for carrying Russian crude oil above the price cap while using services provided by covered U.S. persons.
	February 23, 2024	Treasury imposed sanctions on Joint Stock Company Sovcomflot, Russia’s state-owned shipping company and fleet operator, and identified 14 crude oil tankers in which Sovcomflot has an interest as blocked property.
	Late February 2024	Treasury analysis shows that the discount on Russian oil increased to $19 per barrel, from $12-$13 per barrel in October 2023.
2025	**January 10, 2025**	Treasury imposed sanctions on more than 180 oil-carrying vessels, and more than a dozen Russian energy officials and executives, Russian oil traders, and Russian-based oilfield service providers.
	July 18, 2025	The United Kingdom and the European Union announced they would lower the price cap for Russian crude oil from $60 per barrel to $47.60 per barrel, effective September 2, 2025, and September 3, 2025, respectively. The European Union also established an automatic mechanism to adjust the cap.

Source: GAO analysis of the Department of the Treasury (Treasury), Group of Seven (G7), Price Cap Coalition, European Union, and United Kingdom documents. I GAO-25-107079

[a]The price cap is a policy implemented by G7 countries (U.S., Canada, France, Germany, Italy, Japan, United Kingdom), the European Union, and Australia, collectively called the Price Cap

Coalition. The price cap permits service providers in coalition countries to support the Russian oil trade only if the oil is sold at or below a cap of $60 per barrel.

[b]On November 21, 2022, the Secretary of the Treasury, in consultation with the Secretary of State, issued a category of services determination entitled “Prohibitions on Certain Services as They Relate to the Maritime Transport of Crude Oil of Russian Federation Origin.” The determination took effect at 12:01 a.m. eastern standard time on December 5, 2022. According to the determination, the price cap was established pursuant to sections l(a)(ii), l(b), and 5 of Executive Order 14071. Prohibiting New Investment in and Certain Services to the Russian Federation in Response to Continued Russian Federation Aggression, 87 Fed. Reg. 20,999 (April 6, 2022).

[c]Fuel oil is an example of a petroleum product traded at a discount to crude oil and gasoline is an example of a petroleum product traded at a premium to crude oil.

[d]The “shadow fleet” is an infrastructure of aged oil tankers that are anonymously owned or have opaque corporate structures and are solely deployed in the trade of sanctioned oil or oil products and engage in various deceptive shipping practices.

Appendix VI: U.S. Agencies' Uses of Ukraine Supplemental Funding for Russia Sanctions and Export Controls Activities

U.S. agencies used their Ukraine supplemental funding for a variety of activities in support of sanctions and export controls on Russia.[1] Based on information provided by agency officials, agencies generally used Ukraine supplemental funds to increase their staffing, expand their capabilities, and enhance coordination.

State's Use of Ukraine Supplemental Funding

State had obligated $53.4 million in Ukraine supplemental funding to support the implementation and enforcement of sanctions and export controls related to the war in Ukraine as of September 30, 2024. State distributed Ukraine supplemental funds across various bureaus including the Bureaus of Economic and Business Affairs (EB), Democracy, Human Rights and Labor (DRL), International Security and Nonproliferation (ISN), and the Office of the Legal Adviser.[2]

State officials noted Ukraine supplemental funds were used for the following types of activities:

- **Staffing:** State offices including EB, ISN, and DRL used supplemental funds for contractors to support Russia sanctions and export controls. In total, State augmented its existing federal staff with the addition of 82 contractors using Ukraine supplemental funding across these offices, according to State officials.
    - EB used 78 of these contractors to support its sanctions targeting and analytics team, which works to improve the Secretary's ability to exercise sanctions authorities and to support diplomatic engagement with foreign governments, international

[1]In this report, we use the term Ukraine supplemental funding or Ukraine supplemental funds to refer to funding provided under the following acts, which we refer to as the Ukraine supplemental appropriations acts: Ukraine Supplemental Appropriations Act, 2022, Pub. L. No. 117-103, Div. N, 136 Stat. 776 (March 15, 2022); Additional Ukraine Supplemental Appropriations Act, 2022, Pub. L. No. 117-128, 136 Stat. 1211 (May 21, 2022); Ukraine Supplemental Appropriations Act, 2023, Pub. L. No. 117-180, Div. B, 136 Stat. 2127 (Sept. 30, 2022); Additional Ukraine Supplemental Appropriations Act, 2023, Pub. L. No. 117-328, Div. M, 136 Stat. 5189 (Dec. 29, 2022); and Ukraine Security Supplemental Appropriations Act, 2024, Pub. L. No. 118-50, Div. B, 138 Stat. 905 (Apr. 24, 2024).

[2]Officials from State's Bureau of Energy Resources noted that they received Ukraine supplemental funding, but that these funds were indirectly used to support Russia sanctions and export controls activities. The Bureau used supplemental funding for contractors to support analyses of global energy markets and for subscriptions to data providers that were used in part to track and analyze flows of Russian maritime oil and natural gas.

organizations, and commercial entities, as of January 2025.[3] EB also provided two of its contractors to State's Office of the Chief Economist in August 2024 to help analyze Russia sanctions evasion practices. The analytical support provided by these two contractors ended in March 2025, according to State officials. EB also used two public affairs contractors to assist with its sanctions programs, including its Russia sanctions program.[4]

  - ISN added one contractor to support Russia-related sanctions targeting, according to ISN officials.
  - DRL added one contractor to provide research, technical analysis, and advice related to the preparation of nominations and assessments for human rights-based visa restrictions and sanctions, according to DRL officials. This contractor also provided support for visa processing, visa ineligibilities, and other immigration functions to help develop and draft nomination packages for the Global Magnitsky sanctions program in support of Russia sanctions work.

- **Capabilities:** EB also used its supplemental funds to purchase classified computer systems to process Russia sanctions evidentiary packages. The Office of the Legal Adviser used its supplemental funds for travel to support the creation of a claims commission for Ukraine, which could draw on proceeds of sanctioned Russian assets and other legal diplomacy related to such assets. ISN used Ukraine supplemental funding to support its efforts related to Russia sanctions and export controls. For example, ISN has an interagency agreement with Commerce's Bureau of Industry and Security (BIS) to provide subject matter experts for raising awareness of U.S. export controls, identifying evasion tactics, and sharing resources available to comply with U.S. export controls.

[3]According to State officials, on January 20, 2025, EB had 78 contractors working on the Russia sanctions targeting and analytics team, which is the greatest number of contractors that EB had working on this team. The number of EB's contractors on this team increased from 30 as of the end of fiscal year 2022 to 45 as of the end of fiscal year 2024, according to State officials. From October 1, 2024, through August 15, 2025, 15 of these contractors were temporary and provided support for special projects such as sanctions compliance workshops, according to State officials. As of August 15, 2025, EB has 14 contractors working on Russia sanctions, according to State officials.

[4]As of July 24, 2025, EB does not have any public affairs contractors working on Russia sanctions, according to State officials.

- **Coordination:** EB funded travel related to diplomatic engagement with foreign partners on Russia sanctions.

Commerce's Use of Ukraine Supplemental Funding

Commerce's BIS had obligated $22.1 million in Ukraine supplemental funding to support implementing and enforcing export controls on Russia related to the war in Ukraine as of September 30, 2024.

BIS officials noted Ukraine supplemental funds were used for the following types of activities:[5]

- **Staffing:** BIS hired 57 temporary employees to support export controls on Russia, including law enforcement to conduct industry outreach and investigate cases related to trade with Russia, as well as analysts to identify the potential diversion of controlled items to Russia. BIS converted 56 of these temporary positions to permanent staff positions as of the end of fiscal year 2024 by filling existing vacancies, using funding from its regular appropriations.
- **Capabilities:** BIS increased its analytical capabilities to monitor trends in trade data, identify and counter export controls circumvention, and assess the impact of U.S. sanctions on Russia by purchasing access to new databases, establishing new offices, and expanding existing ones. Prior to the availability of Ukraine supplemental funding, BIS's analytical capabilities were limited to commercially available Microsoft products and analysis of U.S. aggregate trade data and U.S. transaction level customs data, according to BIS officials. With the supplemental funding, BIS expanded its data sources to include aggregate international trade data and international transaction level customs data to better map and understand transshipment flows. These improvements allowed BIS to better identify violations of the Export Administration Regulations abroad and implement more effective regulations on shipments outside of the U.S., according to BIS officials.

  BIS also established the International Policy Office to increase its capacity to work with other BIS program offices as well as the interagency community to help identify, develop, and educate others on country-based export control policies, such as those on Russia. In addition, BIS established a Cyber Intrusion and Incident Response Division to increase its ability to detect and investigate cyber-enabled

[5]In addition to the activities noted below, BIS officials said that they also used supplemental funds to pay government printing costs to publish over 20 regulations imposing export controls on Russia.

violations of U.S. trade restrictions. These investments have allowed BIS to review thousands of license applications related to trade restrictions on Russia, counter Russia's malign cyber activities, and deter non-compliance with U.S. export controls, according to BIS officials.

- **Coordination:** BIS expanded coordination with other enforcement and intelligence agencies in the U.S. and partner countries. This included the establishment of two new Export Control Officer positions in Finland and Taiwan, respectively, as well as assigning staff to conduct end-use checks in Canada. Additionally, BIS established an Export Control Analyst position in Ottawa, Canada to share information on export controls diversion with Canadian authorities. BIS established the Export Enforcement Five group with Australia, Canada, New Zealand, and the United Kingdom, and a similar effort among Group of Seven countries to increase coordination on export controls.

  BIS also established a data sharing arrangement with the European Union's Anti-Fraud Office to enable the sharing of information on Russian export control evasion. In addition, BIS expanded its National Computer Forensic Laboratory to enhance its ability to share information with partner agencies such as the Federal Bureau of Investigation, the Central Intelligence Agency, the Department of Defense, and the wider intelligence community; and assisted allied and partner countries in understanding Russian reliance on their exports and identifying ways to minimize the harm of retaliatory trade measures, according to BIS officials.

Treasury's Use of Ukraine Supplemental Funding

Treasury had obligated $36.6 million in Ukraine supplemental funding to support the implementation and enforcement of sanctions and export controls related to the war in Ukraine as of September 30, 2024. Treasury distributed Ukraine supplemental funds across various offices including the Financial Crimes Enforcement Network (FinCEN) and Office of Foreign Assets Control (OFAC).

Treasury officials noted Ukraine supplemental funds were used for the following types of activities:

- **Staffing:** FinCEN used Ukraine supplemental funding for contractor support of its efforts to target Russian illicit finance activity, Russian financial flows, and money laundering techniques. The contractors' Russia sanctions-related activities included analyzing Suspicious Activity Report filings related to Russian illicit finance; developing

Russia-related illicit finance analytical products; researching and analyzing banking transactions related to suspected Russian export control or sanctions evasion activity; and researching and analyzing investigative actions related to Russian illicit finance activities.[6]

OFAC used Ukraine supplemental funding to pay federal labor costs for staff assigned to Russia and Ukraine-related issues, as well as for contracted labor and services for investigative, licensing, compliance, enforcement, and analytical duties. According to a Treasury Ukraine supplemental funding spend plan, OFAC funded 21 OFAC full-time equivalents working on Ukraine. According to OFAC officials, OFAC also used Ukraine supplemental funding for up to 15 contractors to support its work on Russia sanctions. These contractors researched and drafted evidentiary memoranda for sanctions targets related to Russia's defense industrial base, reviewed prior OFAC Russia sanctions enforcement actions to inform ongoing investigations, and provided research assistance and analytical support to OFAC's Sanctions Economic and Analysis Division.

- **Capabilities:** FinCEN used Ukraine supplemental-funded contractor support to develop various investigative tools, such as a tracker documenting some Russian oligarchs' potentially illicit activities and software tools to simplify and increase the accuracy of its data analysis, according to FinCEN officials. FinCEN also used Ukraine supplemental funding to purchase access to commercial databases and licenses and expand its secure space to manage the significant increase in demand for Bank Secrecy Act and beneficial ownership information on Russian individuals and entities as a result of the war in Ukraine.[7]
- **Coordination:** According to FinCEN's Ukraine supplemental spend plan, FinCEN used Ukraine supplemental funds to establish a program to enable law enforcement, intelligence agencies, and

[6]A Suspicious Activity Report is a document that certain financial institutions must file with FinCEN whenever they know, suspect, or have reason to suspect that a particular transaction is intended or conducted to hide or disguise funds or assets derived from illegal activities as part of a plan to violate or evade any law or regulation, such as export controls, among other things. This requirement applies to transactions of $5,000 or more in the aggregate. 12 C.F.R. § 163.180(d)(3)(iv). These reports are tools that enable law enforcement to initiate or supplement major money laundering or terrorist financing investigations and other criminal cases, and identify emerging trends and patterns associated with financial crimes.

[7]Beneficial ownership information refers to identifying information about the individuals who directly or indirectly own or control a company.

international partners to request access to critical information that would be reported to FinCEN for use in combatting sanctions evasion and other illicit activities related to the war in Ukraine.

Justice's Use of Ukraine Supplemental Funding

Justice had obligated $52.3 million in Ukraine supplemental funding to support the enforcement of sanctions and export controls related to the war in Ukraine as of September 30, 2024. Justice distributed Ukraine supplemental funds across various components including the Criminal Division, Executive Office for United States Attorneys, the Federal Bureau of Investigation, Asset Forfeiture Management Staff, National Security Division, and Tax Division.

Justice officials noted Ukraine supplemental funds were used for the following types of activities:

- **Staffing:** Justice components, including the Criminal Division, Executive Office for United States Attorneys, and National Security Division, used supplemental funds for staff salaries and travel related to support for Task Force KleptoCapture. For example, the Executive Office for United States Attorneys funded up to 10 full-time staff on a temporary basis to work on Task Force KleptoCapture cases.[8]
- **Capabilities:** Justice's Tax Division contracted with a private firm for assistance related to the analysis of transactional data from foreign banks currently subject to reporting transactions at least twice a year, according to Justice officials. The contractors developed a software platform to assist the division in identifying transactions that may be related to the assets of sanctioned Russian oligarchs.
- **Coordination:** Some of the Ukraine supplemental funds were used for the upkeep and maintenance of a yacht owned by a Russian oligarch, according to Justice officials. The seizure of this yacht was coordinated through Task Force KleptoCapture.

[8]Task Force KleptoCapture, created in March 2022, was a U.S. domestic interagency task force led by Justice dedicated to enforcing the sanctions, export restrictions, and economic countermeasures that the U.S. imposed in response to Russia's military invasion of Ukraine. The task force was disbanded on February 5, 2025.

Appendix VII: Comments from the Department of State

United States Department of State

Washington, D.C. 20520

JUL 14 2025

Kimberly Gianopoulos
Managing Director
International Affairs and Trade
Government Accountability Office
441 G Street, N.W.
Washington, D.C. 20548-0001

Dear Ms. Gianopoulos:

We appreciate the opportunity to review your draft report, "RUSSIA SANCTIONS AND EXPORT CONTROLS: U.S. Agencies Should Establish Targets to Better Assess Effectiveness." GAO Job Code 107079.

The enclosed Department of State comments are provided for incorporation with this letter as an appendix to the final report.

Sincerely,

Jeffrey D. Johnson
Acting Deputy Comptroller for Financial, Audit, and Technology Management
Bureau of Comptroller & Global Financial Services

Enclosure:
As stated

cc: GAO – Nagla'a El-Hodiri
OIG - Norman Brown

Department of State Comments on GAO Draft Report

RUSSIA SANCTIONS AND EXPORT CONTROLS: U.S. Agencies Should Establish Targets to Better Assess Effectiveness
(GAO-25-107079, GAO Code 107079)

Thank you for the opportunity to comment on the GAO draft report *"Russia Sanctions and Export Controls: U.S. Agencies Should Establish Targets to Better Assess Effectiveness."*

GAO Recommendation 1: The Secretary of State should define objectives that are linked to measurable outcomes with targets for the department's efforts related to sanctions and export controls on Russia.

Department Response: The Department of State concurs with Recommendation 1 on the utility of defining objectives for sanctions and export controls but disagrees with the assertion that it has not done so and also disagrees with tying such objectives to narrow, fixed, and measurable outcomes. The objectives for the Russia-related sanctions and export controls the Department has implemented since February 2022 have been clearly and consistently defined, to include denying Russia the means to wage war and maintaining stability in key commodity markets. Tying objectives more narrowly to measurable indicators only, for example, blocking a certain monetary amount of Russian assets or achieving certain levels of cost imposed on the Russian defense industrial base, would be to take action devoid of context from the larger political and strategic goals of the Russia sanctions program. Sanctions and export controls are flexible foreign policy tools, and the Department has regularly adapted them to respond to changing circumstances such as Russia's efforts to evade our restrictions since February 2022 while still focusing on meeting the defined policy goals.

GAO Recommendation 4: The Secretary of State should assess the department's progress toward achieving the measurable outcomes it establishes for its efforts related to sanctions and export controls on Russia.

Department Response: The Department of State concurs with Recommendation 4 that there should be assessment of the Department's progress towards achieving measurable outcomes from sanctions and export controls but disagrees with the assertion that there have not been attempts to measure indicators of the impact of sanctions, even if the strategic goals are not clearly defined by measurable objectives alone. As noted in the report, many offices within the Department in fact did produce analysis of a variety of impacts and specific outcomes, such as changes in trade flows of goods identified on the Common High Priority List, reduced energy price premiums, and the ability of Russian entities to offload cargo from sanctioned vessels, among other indicators.

GAO Recommendation 7: The Secretary of State should ensure the Bureau of Economic and Business Affairs and the Bureau of International Security and Nonproliferation assess risks to their Russia sanctions and export controls activities related to the depletion of available supplemental funding and the absence of future funding.

Department Response: The Department of State concurs with Recommendation 7 recommending the assessment of risks to activities from changes in funding but disagrees with the assertion that this assessment has not occurred, despite agreeing that there has not been a formal risk assessment. As noted in previous comments by the Bureau of Economic and Business Affairs (EB), Department leadership has viewed the use of the Sanctions Targeting and Analytics Team (STAT) paid for by supplemental funds in far more positive terms than implied by the Statement of Facts (SOF), which put heavy emphasis on risk, because it has offered the Department unusual flexibility to staff up an extensive operation quickly to perform sanctions-related work in a fast-moving geopolitical environment where the policy priorities may also change rapidly.

The Bureau of International Security and Nonproliferation (ISN) has assessed risks to its Russia sanctions and export controls activities related to the depletion of available supplemental funding and the absence of future supplemental funding. ISN reiterates its previous comments that it designed sanctions targeting and programming around base budgets. Supplemental funding facilitated additional personnel to support the sanctions mission and ahead of the end of supplemental funding, ISN identified separate funding to continue support for such personnel. ISN's programming incorporates supplemental funding to expand activities in the short term to address acute national security issues but does not include supplemental funding in its core mission planning. ISN also regularly assesses and prioritizes its programming to engage the jurisdictions and audiences where it will have the most impact on increasing sanctions compliance and enforcement based on relevant internal and open-source trade and financial data analyses.

The mismatch between rising mandates and temporary funding mechanisms for new activities applies to the full range of sanctions actions, which rose to over 3,300 in 2024 alone across all programs. Temporary funding hinders long-term planning, limits hiring opportunities, and disrupts continuity, which raises net costs and undercuts productivity. Without a durable fiscal foundation, core sanctions and export control functions will remain at risk. The Department is exploring sustainable funding options.

Additional Department Comments:

The methodology used to determine objectives and measurable outcomes by looking at "NSC communications, Executive Orders, G7 Leaders' statements, and agency press releases" does not capture the full picture of activity by the Department of State. The GAO would have benefited from considering bureau, regional and embassy strategic plans, which do explicitly include objectives and measurable outcomes related to sanctions and export controls. The Department recommends that when it assessed strategic gaps, it should have considered the Department's operative and public strategic documents.

Appendix VIII: GAO Contact and Staff Acknowledgments

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Staff Acknowledgments

In addition to the contact named above, Drew Lindsey (Assistant Director), Rachel Dunsmoor (Analyst in Charge), Pedro Almoguera, Larissa Barrett, Yiwen Cheng, Neil Doherty, Elizabeth Gooch, Abigail Loxton, Dan Luo, Lisa A. Lusk, Sarah Oliver, Eugeniu Prodan, Nisha Rai, Bryan Ricciardi, Terry Richardson, Alexander Welsh, and Nicole Willis made key contributions to this report.

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