ECONOMIC SANCTIONS

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What GAO Found

The Departments of the Treasury (Treasury), State (State), and Commerce (Commerce) each undertake efforts to assess the impacts of specific sanctions on the targets of those sanctions. For example, Treasury and State both analyze or compile information on sanctions programs’ impacts, such as on a target country’s economy. In addition, Commerce assesses prospective impacts of some sanctions on targeted countries and others. According to Treasury and State officials, the agencies also use Intelligence Community assessments to gauge sanctions’ impacts. However, agency officials cited several difficulties in assessing sanctions’ effectiveness in meeting broader U.S. policy goals, including challenges in isolating the effect of sanctions from other factors as well as evolving foreign policy goals. According to Treasury, State, and Commerce officials, their agencies have not conducted such assessments on their own. However, they stated that agency assessments of sanctions’ impacts often contribute to broader interagency discussions that examine the effectiveness of sanctions in achieving policy goals.

Country-Based and Country-Related U.S. Economic Sanctions Programs as of July 2019

The academic studies GAO reviewed suggest that several factors have contributed to more-effective sanctions. Studies examining factors that contribute to the effectiveness of sanctions in changing targeted countries’ behavior provided evidence that sanctions have been more effective when (1) they were implemented through an international organization (e.g., the United Nations) or (2) the targeted countries had some existing dependency on, or relationship with, the United States, such as a trade or military relationship. In addition, studies examining factors that increased sanctions’ economic impact provided evidence that the impact has generally been higher when the sanctions were more comprehensive in scope or severity, or—similar to the findings on effectiveness in changing behavior—were imposed through an international organization. Sanctions may also have unintended consequences for targeted countries, such as negative impacts on human rights or public health. In some studies, larger economic impacts were associated with more unintended consequences.
Contents

Letter

Background
Treasury’s, State’s, and Commerce’s Roles in Implementing Sanctions Are Established by Statute, Executive Order, or an Interagency Process 9
Agencies Assess Sanctions’ Impacts but Cited Difficulties in Assessing Sanctions’ Effectiveness in Achieving Broader Policy Goals 12
Studies Suggest Certain Factors Contributed to More-Effective Sanctions, but These Studies May Not Fully Reflect Certain Types of U.S. Sanctions 19
Agency Comments 27

Appendix I
Objectives, Scope, and Methodology 28

Appendix II
Publicly Available Studies Reviewed 33

Appendix III
GAO Contact and Staff Acknowledgements 36

Figure

Figure 1: Country-Based and Country-Related U.S. Sanctions Programs as of July 2019 5
Abbreviations

BIS    Bureau of Industry and Security
Commerce Department of Commerce
DCI    data collection instrument
GDP    gross domestic product
INR    Bureau of Intelligence and Research
NSC    National Security Council
OFAC   Office of Foreign Assets Control
OIA    Office of Intelligence and Analysis
SPI    Office of Economic Sanctions Policy and Implementation
State  Department of State
TFI    Office of Terrorism and Financial Intelligence
Treasury Department of the Treasury

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October 2, 2019

The Honorable Gerald E. Connolly  
Chairman  
Subcommittee on Government Operations  
Committee on Oversight and Reform  
House of Representatives

The Honorable Steve Chabot  
House of Representatives

The United States engages in multifaceted programs to further U.S. interests abroad. One of these facets is economic sanctions. The United States maintains dozens of economic sanctions programs that can be implemented in conjunction with diplomatic or military efforts to counteract activities that threaten U.S. national interests. The U.S. Departments of the Treasury (Treasury), State (State), and Commerce (Commerce), among others, coordinate to implement these programs.

Sanctions may place restrictions on a country’s entire economy, targeted sectors of its economy, or individuals or corporate entities for reasons such as support for terrorism, narcotics trafficking, weapons proliferation, or human rights abuses. Economic restrictions can include, for example, denying a designated entity access to the U.S. financial system, freezing an entity’s assets under U.S. jurisdiction, or prohibiting the export of restricted items. The United States may implement sanctions unilaterally or may work with other countries—for example, in the United Nations Security Council or with the European Union—to sanction a target multilaterally.

The United States employs sanctions to serve various purposes. For example, in 2014, the United States imposed sanctions on Russia in response to the actions and policies of the Russian Federation government, including its purported annexation of the Crimea region of Ukraine. These sanctions targeted, among others, Russian Federation

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1Hereafter in this report, economic sanctions are referred to as sanctions. For the purposes of this report, a U.S. economic sanction is any restriction or condition on economic activity with respect to a foreign country or foreign entity that is imposed by the United States for reasons of foreign policy or national security. Other types of sanctions might include military or diplomatic sanctions.
officials and persons responsible for, or complicit in, certain activities with respect to Ukraine. In recent years, the United States has also imposed or expanded sanctions targeting Iran, North Korea, Syria, and Venezuela, among other countries.

You asked us to review issues related to the implementation and effectiveness of economic sanctions. This report (1) describes how Treasury’s, State’s, and Commerce’s roles in implementing U.S. sanctions authorities are identified; (2) examines the extent to which U.S. agencies assess the effectiveness of sanctions; and (3) identifies factors that have been shown by publicly available studies to contribute to the effectiveness of economic sanctions.

To describe how Treasury’s, State’s, and Commerce’s roles in implementing U.S. sanctions authorities are identified, we reviewed legal authorities (e.g., executive orders and statutes) that authorize various sanctions programs, and interviewed agency officials.

To examine the extent to which U.S. agencies assess the effectiveness of sanctions, we interviewed officials from Treasury, State, Commerce, and the Intelligence Community. We also obtained and reviewed agency assessments for sanctions programs related to Burundi, North Korea, Russia, and Somalia. We selected these country-based and country-related sanctions programs on the basis of the numbers of entities recently sanctioned under each program, to reflect a range from low to high and to obtain diversity in the types and numbers of authorities underlying the program. We used these assessments to gain insight into the types of analysis conducted.

To identify factors that have been shown by publicly available studies to contribute to the effectiveness of economic sanctions, we conducted a literature search to identify studies that assessed factors that contributed to the effectiveness of sanctions in changing behavior or that increased the economic impact of sanctions. While we focused on the effectiveness of sanctions in coercing states to change their behavior, sanctions may have other goals, including constraining a target state’s access to resources or enforcing international norms. To identify studies, we (1) searched various databases; (2) conducted “snowball sampling.”

In this report, “effectiveness” refers to the extent to which sanctions achieve underlying U.S. policy goals, such as denuclearization by a particular country; it does not refer to the impact of sanctions on a targeted country’s economy or a targeted person’s behavior.
identifying new studies cited in papers that we had previously identified; and (3) asked academic experts to validate our list of studies and recommend additional studies that met our criteria. We ultimately selected 17 studies for further review, each of which (1) was a peer-reviewed publication or academic working paper, (2) entailed a sufficiently rigorous statistical analysis of many sanctions, (3) focused on the effectiveness or impact of sanctions and included U.S. sanctions, and (4) was published between 2004 and October 2018 and relied on relatively recent data. We conducted detailed reviews of the selected studies’ research methodology, including the studies’ data, outcome measures, control variables, limitations, and analytic techniques. We also summarized each study’s major findings and the extent to which the findings were supported by the study’s methods. We synthesized the findings, and we categorized and aggregated the factors relevant to the effectiveness of sanctions. Three academic experts with significant publications in sanctions literature reviewed a draft of our summary of the literature. These experts agreed with our overall findings and provided additional comments and suggestions, which we incorporated as appropriate. See appendix I for a more detailed discussion of our report’s scope and methodology and see appendix II for a list of the studies we reviewed.

We conducted this performance audit from May 2018 to October 2019 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

Types of Economic Sanctions

Sanctions provide a range of tools that Congress and the President may use to seek to alter or deter the behavior of a foreign government, individual, or entity in furtherance of U.S. national security or foreign

3These studies had a general focus on country-based sanctions programs. In addition to country-based sanctions programs, individuals may be subject to targeted sanctions as a response to their specific behavior, such as for example, human rights violations, corruption, or drug trafficking.
policy objectives. For example, sanctions may be used in response to human rights abuses, weapons proliferation, or occupation of a foreign country; ultimately seeking to change the behavior of those perpetrating these offenses. Sanctions may include actions such as limiting trade; blocking assets and interest in assets subject to U.S. jurisdiction; limiting access to the U.S. financial system, including limiting or prohibiting transactions involving U.S. individuals and businesses; restricting private and government loans, investments, insurance, and underwriting; and denying foreign assistance and government procurement contracts.

Sanctions can be comprehensive or targeted.

- **Comprehensive sanctions.** Generally, comprehensive sanctions include broad-based trade restrictions and prohibit commercial activity with an entire country.⁴ Examples of comprehensive sanctions include U.S. sanctions against Iran and Cuba.

- **Targeted sanctions.** Targeted sanctions restrict transactions of and with specific persons or entities. For example, the U.S. sanctions program related to Somalia targets persons engaging in acts threatening the peace, security, or stability of Somalia. Sectoral sanctions are a form of targeted sanctions directed at a specified sector, or sectors, of a target’s economy. For instance, Executive Order 13662 authorized sanctions targeting certain sectors of the Russian economy as might later be determined by the Secretary of the Treasury in consultation with the Secretary of State, such as the financial services, energy, mining, and defense and related materiel sectors. The United States also uses supplementary sanctions, known as secondary sanctions, which target third-party actors doing business with, supporting, or facilitating targeted regimes, persons, and organizations. For example, in February 2017, Treasury imposed sanctions against 13 individuals and 12 entities, including persons outside Iran, for their involvement in or support for Iran’s ballistic missile program, as well as for acting for or on behalf of, or providing support to, Iran’s Islamic Revolutionary Guard Corps-Qods Force.

There are currently 20 country-based or country-related sanctions programs, according to lists of sanctions programs published by Treasury.

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⁴Comprehensive sanctions can contain exceptions for humanitarian assistance. For example, the United States maintains broad authorizations and exceptions that allow for the sale of food, medicine, and medical devices by U.S. persons or entities from the United States to Iran.
The sanctions may target the governments of these countries or individuals and entities. Figure 1 shows country-based and country-related U.S. sanctions programs as of July 2019.

Note: U.S. sanctions programs vary in scope. The country-based and country-related programs shown are oriented geographically and may target the governments of these countries or other individuals and entities. Others sanctions programs, such as counterterrorism, counternarcotics, and human rights–related programs, focus on specific individuals and entities regardless of their geographic location. Therefore countries other than those shown may also be affected by sanctions.

The 20 country-based or country-related programs do not include a Balkans-related sanctions program that targets individuals and entities in several countries located in the Balkans region.
Treasury, State, and Commerce, as well as various other U.S. agencies, play roles in implementing sanctions.

Treasury implements sanctions by taking actions such as designating entities for the application of sanctions. These sanctions may include blocking entities’ access to U.S.-based assets, prohibiting them from engaging in financial transactions in the United States, and restricting access to U.S. financial services. Treasury’s Office of Foreign Assets Control (OFAC), which is part of the Office of Terrorism and Financial Intelligence (TFI), has primary responsibility for Treasury’s sanctions implementation, according to Treasury. TFI is charged with safeguarding the U.S. financial system against illicit use and combating rogue nations, terrorist facilitators, weapons of mass destruction proliferators, money launderers, drug kingpins, and other national security threats. As part of its implementation of sanctions, OFAC publishes a list, known as the Specially Designated Nationals 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. OFAC also lists individuals, groups, and entities, such as terrorists and narcotics traffickers, designated under targeted sanctions programs that are not country specific. OFAC may also issue licenses, general or specific, to permit activities that would otherwise be prohibited under a sanction. For example, OFAC has issued a general license to allow nongovernmental organizations to engage in not-for-profit activities in Syria in support of humanitarian projects, democracy-building, education, and noncommercial development projects directly benefitting the Syrian people. According to Treasury, OFAC participates in all aspects of sanctions implementation, including, targeting, outreach to the public, and compliance. OFAC also enforces sanctions by conducting civil investigations of sanctions violators and working with law enforcement agencies.

State implements economic and other sanctions through a variety of actions, such as implementing sanctions-related controls on defense exports, restricting foreign aid, implementing arms embargoes pursuant to
United Nations Security Council resolutions, and restricting visas. State’s primary sanctions coordination office is the Office of Economic Sanctions Policy and Implementation (SPI), which is part of the Division for Counter Threat Finance and Sanctions in State’s Bureau of Economic and Business Affairs. According to State, SPI is responsible for developing and implementing foreign policy–related sanctions adopted to counter threats to national security posed by particular activities and countries. In addition, according to State, SPI builds international support for implementing sanctions, provides foreign policy guidance to Treasury’s OFAC and Commerce’s Bureau of Industry and Security on sanctions implementation, and works with Congress to draft legislation that advances U.S. foreign policy goals in these areas. Further, according to State, SPI works to remove sanctions when appropriate to reward and incentivize improved behavior or demonstrate U.S. support for newly established democratic governments.

Although SPI is State’s primary sanctions coordinating office, other State bureaus, offices, and overseas posts may have significant roles in sanctions implementation, depending on the sanctions program. Some functional bureaus interact with OFAC within their areas of expertise. For example, according to State, the Bureau of International Security and Nonproliferation has expertise on missile, chemical, and biological proliferation as well as how to counter proliferation. The bureau assists in developing sanctions programs and designating sanctions targets under nonproliferation law, according to State. Also, the Bureau of Counterterrorism and Countering Violent Extremism takes part in developing and evaluating sanctions policy as well as helping target entities for sanctions under various authorities, including an executive order targeting those that commit or support terrorism and the Foreign Terrorist Organization section of the Immigration and Nationality Act, according to State. Additionally, the Bureau of International Narcotics and Law Enforcement Affairs uses its expertise in drug trafficking, corruption, and crime to assist in selecting targets for counternarcotics sanctions, transnational criminal organization sanctions, and corruption-related sanctions under human rights law, according to State. SPI also works with State’s regional bureaus, such as the Bureau of African Affairs;

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6Other actions could include prohibiting the use of U.S. passports to travel, in limited circumstances, and downgrading or suspending diplomatic relations.
Both Treasury and State also have intelligence offices that provide the sanctions-implementing offices with information to facilitate sanctions targeting and enforcement efforts and developing new sanctions policy.

- **Treasury’s Office of Intelligence and Analysis (OIA).** TFI’s OIA is responsible for TFI’s intelligence functions as well as for integrating the Treasury Department into the larger Intelligence Community and providing support to both Treasury leadership and the Intelligence Community.

- **State’s Bureau of Intelligence and Research (INR).** INR’s primary mission is to provide all-source intelligence and analysis to serve U.S. diplomacy. INR provides independent analysis of events to State policymakers as well as officials throughout the U.S. government and coordinates with other intelligence agencies to obtain relevant information to inform State policymakers. For example, INR’s analytical offices and its Sanctions Support Team, when requested, gather and provide information—both classified and open sourced—on sanctions targets to policy officials at State and Treasury.

In addition to OIA and INR, other U.S. intelligence agencies provide support to the sanctions-implementing agencies.

### Commerce

Commerce implements sanctions by restricting licenses for exports, reexports, and transfers (in-country) involving U.S.-origin items—commodities, software, and technology—subject to its jurisdiction and destined for sanctioned persons, entities, and destinations. Through its export licensing process, Commerce’s Bureau of Industry and Security (BIS) restricts sanctioned countries’ and persons’ access to U.S. items. BIS also enforces export controls through its Office of Export Enforcement, which conducts criminal and administrative investigations of potential violations of export regulations.

### Other Agencies

Other U.S. agencies with roles in sanctions implementation include the Departments of Defense, Energy, Homeland Security, and Justice. The

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7According to State, country offices are State Department clearing houses in Washington, D.C., for all policy and information related to each country. Each country office coordinates U.S. policy with its associated embassy and tracks information going to the embassy or originating from the country.
agencies involved and the extent of their involvement depend largely on their area of expertise. The following are a few examples of how other agencies are involved with sanctions:

- The Department of Defense restricts arm sales and other forms of military cooperation and is involved in decisions regarding export licenses.
- The Department of Energy assists in implementing nonproliferation sanctions.
- The Department of Homeland Security’s Customs and Border Protection helps assure that shipments to and from sanctioned countries and entities do not leave or enter the United States.
- The Department of Justice investigates and prosecutes violations of sanctions and export laws and provides legal reviews of sanctions’ designations.

The roles of Treasury, State, and Commerce in implementing sanctions are assigned either directly by the statute or executive order authorizing the sanctions or through an interagency process and agreement. Some statutes and executive orders designate an agency to serve as the primary agency for sanctions implementation and also designate one or more agencies to support the primary agency through consultation. For example, Executive Order 13570, Prohibiting Certain Transactions With Respect to North Korea, authorizes Treasury, in consultation with State, to carry out actions to employ all powers granted to the President by specified laws to carry out the purposes of the order. While some statutory authorities may designate specific agencies for implementation, most do not make such designations but rather delegate the authority to do so to the Office of the President, according to State officials. Agency officials also noted that they are often involved in drafting new sanctions legislation and, if the statute will designate specific agency roles, are able to advise lawmakers regarding the selection of the primary agency for implementing sanctions.

When a statute or executive order authorizing sanctions delegates authority to the Office of the President, specific agency roles are assigned
through an interagency process at the National Security Council (NSC). According to State officials, the NSC’s Principals Coordinating Committee discusses and assigns agency roles in a sanctions program. According to State officials, most of the committee’s decisions about agency roles are made at the staff level, and the actual principals become involved only if there is a disagreement among the agencies’ staffs. State officials told us that each agency’s area of expertise and its available resources factor into the selection of an agency to lead implementation of a particular sanctions authority. For example, according to a State official, Treasury is often the lead for country-based sanctions, because these programs often focus on international financial transactions, while State usually serves as the lead for sanctions requiring more specialized knowledge, such as those relating to weapons of mass destruction and nuclear nonproliferation. State officials added that there is usually very little, if any, disagreement among the agencies regarding whether they should have primary or consultative roles. Once a decision is made, the President typically issues a delegation memo assigning responsibility for implementation of elements of the sanctions authority to each agency involved, according to Treasury officials.

Treasury, State, and Commerce each provide publicly available information about the sanctions they implement and the authorities underlying those sanctions.

- **Treasury.** OFAC maintains a publicly available list of all sanctions laws and executive orders that Treasury has a role in implementing. The list is organized by sanctioned country and functional program.

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8The NSC serves as the President’s principal forum for coordinating sanctions policies between Treasury, State and other agencies as necessary. The President chairs the NSC, whose statutory members, in addition to the President, are the Vice President and the Secretaries of State, Defense, Energy, and the Treasury. The Chairman of the Joint Chiefs of Staff is the military advisor to the Council, and the Director of National Intelligence serves as its intelligence advisor. The U.S. Representative to the United Nations, the Assistant to the President for National Security Affairs, the Assistant to the President for Economic Policy, and the Chief of Staff to the President are invited to all meetings of the Council. The Attorney General and the Director of National Drug Control Policy are invited to attend meetings pertaining to their jurisdictions, and other agency heads (principals) engage with the NSC as needed.

9For OFAC’s list of current sanctions programs, see [https://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx](https://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx).

10A functional sanctions program is aimed at particular behaviors, such as terrorism, narcotics trafficking, and developing or proliferating weapons of mass destruction.
For each country-based, country-related, or functional program, the entry in the list includes a discussion of statutory authorities, executive orders, and regulations under which the program is implemented. According to Treasury officials, OFAC staff track and update changes in U.S. sanctions policy as needed and post new sanctions information to the agency’s website as soon as a sanction is approved.

- **State.** SPI also maintains publicly available lists of the major sanctions laws and executive orders that State has a role in implementing. These lists are organized by sanctioned country and by functional program. According to State officials, SPI typically updates these lists when authorities are established or rescinded and periodically reviews and updates the web pages where it posts the lists. According to State officials, the lists are not intended to be comprehensive and are meant only to give the reader a general understanding of some of State’s high-profile sanctions programs and to provide an initial resource for information and recent actions.

- **Commerce.** BIS produces a compilation of legal authorities pertaining to the administration of export controls under the Export Administration Regulations. Unlike Treasury and State’s lists, Commerce’s compilation comprises all of Commerce’s legal authorities to control exports, reexports, and transfers (in-country). These include executive orders, laws, and presidential declarations authorizing controls related to national security, chemical and biological weapons, and nuclear nonproliferation reasons, as well as controls for foreign policy–related sanctions. According to Commerce officials, the compilation is updated annually to reflect additions to, or deletions of legal authorities. BIS also issues rules amending the Export Administration Regulations to implement new executive orders and statutory and other legal authorities on a frequent basis, at times within a few days of the announcement or enactment of the underlying authority. According to Commerce officials, publishing rules amending the Export Administration Regulations provides the public with timely notice of changes to Commerce’s sanctions authorities and actions taken pursuant to these authorities.

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11For SPI’s list of current sanctions programs, see https://www.state.gov/economic-sanctions-programs/.

12For BIS’s list of authorities underpinning export controls, including those related to sanctions, see https://www.bis.doc.gov/index.php/documents/Export%20Administration%20Regulations%20Training/2263-2018-legal-authority-for-the-export-administration-regulations/file.
Treasury, State, and Commerce assess potential and observed impacts of specific sanctions, but officials stated they do not conduct agency assessments of the effectiveness of sanctions in achieving broader U.S. policy goals and cited various difficulties in doing so. Each agency’s sanctions implementation offices rely mainly on assessments performed by the Intelligence Community, including Treasury’s OIA and State’s INR. These assessments analyze the impacts of specific sanctions on a particular aspect of the sanction’s target—for example, the sanctions’ impact on the target country’s economy or trade, according to agency officials. However, these assessments do not analyze sanctions’ overall effectiveness in achieving broader U.S. policy goals or objectives, such as whether the sanctions are advancing the national security and policy priorities of the United States, according to Treasury officials. Treasury, State, and Commerce have not conducted such broader assessments on their own, and agency officials cited a variety of difficulties related to doing so. However, according to Treasury, State, and Commerce, agency assessments of sanctions’ impacts often contribute to broader interagency discussions, typically coordinated through the NSC, that examine the effectiveness of sanctions in achieving policy goals. According to agency officials, an NSC-led process allows the U.S. government to draw upon multiple agencies’ inputs and perspectives, and to consider these issues in the larger policy context, because sanctions are often only one element of broader government-wide strategies to achieve U.S. policy goals.

According to OIA officials, assessing impact is analyzing the potential or observed effect of the sanction on the target. According to officials, impact can be focused on a singular target or could be broader, such as the impact on the target country’s economy or trade flows. In contrast, OIA views effectiveness as the extent to which a sanctions program is achieving the overall broader policy goals of the sanctions program, such as ultimately altering or deterring specific behaviors of the target or furthering U.S. national security priorities.
Treasury has assessed both the observed and potential impacts of specific sanctions designations on various aspects of targets, such as a target country’s economy. Treasury’s intelligence component, OIA, conducts the majority of these impact assessments and produces analytic papers on sanctions’ impacts, according to officials. OIA officials stated that the type of analysis varies depending on the purpose or nature of the assessment. For example, some analytic papers focus on the overall economic impact of the sanction on the target country, while others examine the impact on a specific target, such as an entity or group of entities. According to Treasury officials, the office has conducted both short-range and long-range analyses of sanctions’ impacts at both the country-specific and the authority-specific level. Treasury officials said that the frequency of assessments conducted for a particular country or authority varies according to the sanctions program’s size and relative importance to current U.S. policy goals. OIA officials reported that the Under Secretary for TFI requires that impact assessments be conducted prior to an action as part of the targeting process and retrospectively after a designation takes place. According to Treasury officials, TFI, including OIA, considers conducting such impact assessments to be part of OIA’s mission. OIA officials noted that OIA, as well as TFI more broadly, considers understanding sanctions impact to be integral to developing sanctions policy and making targeting decisions.

14According to OIA officials, OIA’s impact assessments are narrowly focused and can be delivered in any number of formats, including emails, and spreadsheets. In contrast, OIA’s analytic papers on sanction’s impacts are written products that are typically broader in scope and more formalized than OIA’s impact assessments.

15According to Treasury officials, a country-specific analysis might examine the impact (prospective or retrospective) of all relevant sanctions in a particular country, whereas an authority-specific analysis would examine the impact (prospective or retrospective) of all relevant sanctions designations under a specific sanctions statute or executive order.
OIA officials stated that their impact assessments are circulated within Treasury and their broader analytic papers are circulated within the Intelligence Community and interagency.\textsuperscript{16} In addition, OFAC officials reported that they request impact assessments from OIA whenever new sanctions targets are being considered. OFAC officials stated that OIA’s impact assessments are an integral part of any targeting matrix prepared by OFAC’s Office of Global Targeting.\textsuperscript{17} According to OFAC officials, the type of assessment requested depends on the issue, program, and target. The requested assessments may include, for example,

- determining whether a target has assets in the United States to an extent that sanctions would be impactful,
- identifying the holdings of a given target globally and its interactions with the United States, or
- analyzing the second- and third-order effects of a potential sanctions designation.

OFAC officials said that these assessments are also used in risk-mitigation planning. For example, if an assessment revealed that a particular sanction would lead to an undesirable consequence, such as blocking important medical supplies or other humanitarian items, OFAC might take preemptive measures to mitigate that undesirable consequence through a general license or other available tools.

Treasury’s Office of International Affairs also prepares some assessments of sanctions’ impacts. According to Treasury officials, the Office of International Affairs occasionally conducts macroeconomic assessments of the impact of specific sanctions to inform TFI policymaking. A senior Office of International Affairs official reported that most of the office’s macroeconomic analyses of sanctions’ impacts are focused on the potential impact on economic growth and financial stability in the target country. In addition, OFAC officials stated that the Office of International Affairs often participates in agency discussions and may provide verbal or written assessments of sanctions’ impact on foreign partners’ industries and markets as well as on U.S. companies.

\textsuperscript{16}OIA’s impact assessments may be initiated by a request from senior Treasury officials, by OFAC officials, or by OIA analysts, according to Treasury officials.

\textsuperscript{17}According to OFAC officials, when assessing potential sanctions targets to designate, OFAC’s Office of Global Targeting assesses the potential impact on the target by creating a matrix that ranks the impact as low, medium, or high for each target.
State conducts some assessments of the impact of sanctions on their intended targets. INR produces most reports on sanctions impact, which are based on all sources of information (i.e., classified and open source). According to INR officials, these reports are often produced at the request of State policymakers, and occasionally coordinated with the broader Intelligence Community. INR facilitates the review of sanctions’ impacts on particular governments or other areas of interest at the request of, or in partnership with, State’s regional and functional bureaus. According to INR, most of INR’s intelligence support responds to specific questions and requests, such as whether a particular company is still operating in a sanctioned country. According to State officials, INR provides responses to requests in written products, such as formal INR or Intelligence Community assessments, or more informally through channels such as oral briefings or email responses. INR officials noted that written products often inform interagency discussions on sanctions at the NSC, since questions asked at State often become relevant to broader policy discussions.18

Other State entities have also examined the impact of sanctions. In 2016, State’s Office of the Chief Economist, responding to a request from SPI, analyzed the economic impact of targeted sanctions on Russian firms.19 According to SPI officials, they commissioned the study because they wanted to understand the specific impact of sanctions on a country that was already facing economic challenges, given that sanctions were among several foreign policy tools used to address Russian behavior. According to SPI officials, this was the only analysis of sanctions impact that SPI had requested of the Office of the Chief Economist in the past 5 years. In addition, some embassies have used cables to State headquarters to report on the impact of sanctions. According to State, most such information on a sanction’s impact is captured in a sentence or two as part of a cable focused on other issues. However, embassies in countries where sanctions are imposed on the host government (or

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18We requested written assessments produced by INR since fiscal year 2015 that related to our four case study sanctions programs—North Korea, Russia, Burundi, and Somalia. In response to our request, INR provided nine written assessments of impact regarding North Korea sanctions, 12 assessments regarding Russia sanctions, three assessments regarding Burundi sanctions, and one assessment regarding Somalia sanctions. The reports included information from State and other intelligence agencies.

nearby governments) often dedicate significant time to reporting on the impact of sanctions and how they affect broader foreign policy, according to State officials. For example, the U.S. embassy in Seoul produced a series of cables in 2017 and 2018 detailing observed impacts of sanctions on the North Korean economy.

**Commerce Assessments**

Commerce has conducted some assessments of the prospective impacts of sanctions, according to Commerce officials. According to Commerce officials, the Under Secretary or Deputy Under Secretary communicates requests for analyses of sanctions that originate with the NSC’s Principals Coordinating Committee. According to Commerce officials, these requests are infrequent, with very few received in recent years, and generally related only to Russia and Iran.

According to Commerce, the results of these assessments may include two components: (1) a simulation of potential economic impact and (2) background data on trade flows and vulnerabilities. The first component may include a projection of sanctions’ impact on gross domestic product (GDP), consumer prices, production in specific industries, jobs, and trade flows. The second component may include background on the amount and nature of any U.S. trade with countries that might be sanctioned. For example, in March 2015, Commerce produced an analysis to determine the areas of greatest interdependence among the United States, Russia, and U.S. partners that were at risk of being affected by prospective sanctions against Russia.

**Other Intelligence Agencies’ Assessments**

Treasury and State officials reported using assessments of sanctions’ impacts provided by intelligence agencies outside Treasury or State.

- **Assessments used by Treasury.** OFAC officials reported requesting assessments from other intelligence agencies, in addition to OIA’s assessments. According to OFAC, the type of assessment requested—for example, gauging the reaction of a target or government leadership to sanctions or examining a target’s assets globally—depends on the issue and the program. OFAC also reported requesting analysis of sanctions’ impact on strategic targets and their associates. OFAC officials reported that these assessments are taken

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20According to Commerce officials, in addition to assessing potential impact, Commerce also monitors trade flows before and after sanctions are imposed, which provides some retrospective insight into the impact of sanctions.
Assessments used by State. INR and SPI officials stated that they use assessments of sanctions’ impact conducted by intelligence agencies outside State. According to an INR official, the INR sanctions team will obtain Intelligence Community assessments relevant to State policymakers concerns. SPI officials stated that most of the assessments they use are focused on the potential impact of proposed sanctions. According to the officials, the assessments help them design sanctions tools and develop targets to maximize impact. For example, according to SPI officials, the Intelligence Community will assess where the largest impact might be by assessing whether actors are likely to cease particular activities if targeted or will identify points where targets interface with the U.S. financial system. SPI officials stated that the number of assessments conducted depends on multiple variables, including current events in the targeted country and the degree of senior policymaker interest. An INR official stated that most Intelligence Community resources (i.e., intelligence collection and analysis) are focused on just a few sanctions regimes, such as North Korea, Iran, and Russia. Moreover, according to State officials, routine, finished analysis—assessing the impact of sanctions either before or after their imposition—is not always available from the Intelligence Community or is slow in delivery. State officials stated that this type of regular intelligence reporting and analysis is critical to informing sanctions policymaking at all stages (e.g., planning, targeting, implementing, enforcing, and revising).

Agencies Have Cited Difficulties in Conducting Assessments of Sanctions’ Effectiveness in Meeting Policy Goals

Treasury, State, and Commerce officials identified a range of analytic issues that make it difficult to assess the effectiveness of a sanctions program in meeting broad U.S. foreign policy goals. The difficulties they cited included the following:

- **Isolating sanctions’ effects from other factors is difficult.** Agency officials cited the difficulty—or, in some cases, the impossibility—of identifying sanctions as the sole or most significant cause of a target’s action relative to U.S. policy goals. For example, a sanctioned country may decide to cease certain behavior for any number of reasons that may be unrelated to the sanctions or other U.S. policy measures. OFAC officials also stated that behavioral change can be subtle, incremental, and lacking clear correlations with specific causes. In addition, Treasury officials noted that sanctions are often used in conjunction with other policy tools, such as diplomatic engagement with the target, export controls, and visa bans. Distinguishing the
impact of each policy tool used is exceedingly difficult due to the limited information available via intelligence and law enforcement channels, according to Treasury officials.

- **Policy goals and objectives often shift.** Treasury officials stated that U.S. policy goals and objectives underpinning the sanctions can change over the course of a sanctions program, making it difficult to measure sanctions’ effectiveness in achieving any ultimate policy objective. According to OFAC officials, because sanctions programs are ongoing, any assessments of a sanctions program’s effectiveness would necessarily be interim, not final, and the metrics used to measure effectiveness might change over the program’s duration.

- **Reliable data are sometimes lacking.** Agency officials stated that a lack of reliable data on certain targets or countries can also make it difficult to assess the effectiveness of sanctions.

According to Treasury, State, and Commerce officials, given these difficulties and limited resources, they do not conduct their own assessments of the overall effectiveness of existing sanctions programs in achieving broad policy goals. Instead, they have directed resources toward the assessments of sanctions’ impacts on targets, such as the impact on a target country’s economy or trade. Agency officials also noted that there is no policy or requirement for agencies to assess the effectiveness of sanctions programs in achieving broad policy goals. However, Treasury and State officials stated that sanctions policy is continuously evaluated informally by those implementing the sanctions, as new information comes in and as new targets are developed. Moreover, Treasury, State, and Commerce stated that agency assessments of sanctions’ impacts often contribute to broader interagency discussions, typically coordinated through the NSC, that examine the effectiveness of sanctions in achieving broad policy goals.

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21 According to officials of the Office of the National Director of Intelligence, assessing sanctions’ effectiveness in achieving policy goals inherently requires assessing the manner in which U.S. sanctions are executed, which they said is beyond the legal and policy authorities of the U.S. Intelligence Community. As a result, any analysis done by the Intelligence Community does not assess whether sanctions are meeting policy goals.

22 According to a senior Treasury official, the discussions at the NSC can take various forms, including analysis of the advantages and disadvantages of sanctions along with other policy tools, in achieving U.S. policy goals. For this review, we did not meet with officials from the NSC that chair these meetings but instead relied on agency officials’ characterization of these discussions.
According to agency officials, an NSC-led process allows the U.S. government to draw on multiple agencies’ inputs and perspectives, and to consider these issues in the larger policy context, given that sanctions are often only one element of broader government-wide strategies to achieve U.S. policy goals.

We found strong evidence—based on studies examining factors that contributed to the effectiveness of sanctions in changing targeted countries’ behavior\(^23\)—that sanctions have been more effective when implemented through an international organization, or when targeted countries had some existing dependency on or relationship with the United States.\(^24\) We also found strong evidence—based on studies examining factors that increased the economic impact of sanctions on targeted countries—that sanctions imposed through an international organization were associated with greater impact. In addition, we found strong evidence that the economic impact of sanctions has generally been greater when they were more comprehensive in scope or severity. Sanctions may also have unintended consequences for targeted countries, such as negative impacts on human rights or public health. In some studies, larger economic impacts were associated with more unintended consequences, suggesting an important policy trade-off. Some aspects of U.S. sanctions policy, such as targeted sanctions, were generally not analyzed separately in the studies we reviewed, which could reduce the studies’ applicability to contemporary policymaking.

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\(^{23}\) We reviewed a total of 17 studies. Ten studies examined the factors that contributed to the effectiveness of sanctions in coercing countries to change their behavior, and seven studies examined the factors that increased the economic impact of sanctions. These studies had a general focus on country-based sanctions programs. See appendix I for more details of our methodology, including how we identified and evaluated these studies. See appendix II for a list of the relevant studies.

\(^{24}\) Factors characterized as being supported by “strong evidence” had effects that were present and precisely estimated in at least four studies—including more than half of studies that included this factor. Factors characterized as being supported by “some evidence” had effects that were present and precisely estimated in at least two studies—including at least half of studies that included this factor. In addition, for both evidence categories, we required that no study found contradictory effects.
We found strong evidence, based on studies examining factors that contributed to the effectiveness of sanctions in changing behavior,\(^{25}\) that sanctions have been more effective when they were implemented through an international organization (e.g., the United Nations) or when the target had some existing dependency on or relationship with the United States (e.g., U.S. foreign aid, military support or alliance, or relatively large bilateral trade relationship).\(^{26}\) Studies using different methods, datasets, and time periods consistently found that the United States was more likely to achieve its sanctions goals when an international organization was involved or when the target had some existing dependency on or relationship with the United States.

We found some evidence, based on a smaller number of studies, that sanctions have been more effective when the target state had low per-capita income, when a country's threat of imposing sanctions was

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\(^{25}\)We reviewed 10 studies of the factors that contributed to the effectiveness of sanctions in coercing states to change their behavior. While these studies measured the extent of success on these terms, sanctions may have other goals, including constraining a target state's access to resources, enforcing international norms, and signaling resolve. Moreover, according to agency officials, sanctions may have multiple evolving goals, including some that are not explicit.

assessed to be credible,\textsuperscript{27} or when sanctions imposed relatively high costs on the target state.\textsuperscript{28} For example, one study found that the likelihood of the target’s acquiescing to all of the sanctioning country’s demands increased when sanctions were imposed on a target with low per-capita income.\textsuperscript{29} Another study found that targets were more likely to acquiesce in response to threatened sanctions when the United States had not backed down against a resisting target recently.\textsuperscript{30} A third study found that more-severe\textsuperscript{31} sanctions increased the likelihood that the

\textsuperscript{27}The studies used sanctions datasets that were developed by classifying publicly available instances of the imposition of sanctions designations or overt sanctions threats. The datasets do not include instances where sanctions law existed but no designations were made or instances where sanctions threats were not made publicly. Researchers assessed sanctions threats as credible if the sanctioning country’s conveyed threats to the target state were clear and the target’s behavior was linked to a well-defined sanctions measure or if the sanctioning country had not recently backed down against a target state. See Valentin L. Krustev and T. Clifton Morgan. “Ending Economic Coercion: Domestic Politics and International Bargaining,” \textit{Conflict Management and Peace Science}, vol. 28, no. 4 (2011): pp. 351-376; and Timothy M. Peterson, “Sending a Message: The Reputation Effect of U.S. Sanction Threat Behavior,” \textit{International Studies Quarterly}, vol. 57, no. 4 (2013): pp. 672-682.


\textsuperscript{29}Peksen, “Autocracies and Economic Sanctions.”

\textsuperscript{30}The author considers the United States to have backed down against a resisting target if the United States threatened but did not impose sanctions. Peterson, “Sending a Message,” pp. 672-682.

\textsuperscript{31}This paper defined the severity of sanctions as follows: “Minor sanctions are defined as having no economic impact on the target’s economy, major sanctions are defined as resulting in ‘significant macroeconomic difficulties on the health of the target economy,’ while severe sanctions are those that ‘halted the ability of the target’s economy to function.’” See Lektzian and Patterson, “Political Cleavages and Economic Sanctions,” pp. 46-58.
sanctioning country achieved more of its goals, suggesting that sanctions imposing relatively high costs have been more effective.32

Our review also suggests that in some circumstances, the risk of sanctions has deterred states from undertaking activities that would likely have resulted in the imposition of sanctions. Factors that have increased the measured effectiveness of sanctions may also increase their deterrent effect. For example, two studies found that the greater the trade flows between the target state and the sanctioning country, the greater the likelihood of sanctions' success.33 A separate study demonstrated that this same dependency—greater trade between the target and the United States—led to greater deterrence of nuclear proliferation.34

More generally, states are likely to consider the risks associated with undertaking activities that could lead to the imposition of economic sanctions, among other factors. These risks include the likelihood of sanctions being imposed or removed, the states' vulnerabilities to the different types and amounts of pressure that could result from sanctions, and the consequences that the states would experience if sanctions were imposed. See the text box for more detail on the potential risks that states that could be the target of sanctions might consider. (The text box is intended to provide a more general framework for understanding how states may anticipate and respond to sanctions; it reflects, but is not limited to, the specific factors included in the studies we reviewed.)

32Although two studies found that sanctions were more effective against democratic states, democracy did not meet our threshold for evidence of factors contributing to the effectiveness of sanctions because the effect was precisely estimated in fewer than half of the studies that included it. Most of the studies that included democracy as a factor measured it on a scale from authoritarian to democratic but did not account for different types of authoritarian regimes. More recent research, which better distinguished between different types of authoritarian regimes, was able to more credibly assess the role of democracies and found that sanctions were more likely to be successful against democratic states. See Peksen, “Autocracies and Economic Sanctions.”


Risk Framework for States That May Be Targets of Economic Sanctions

Likelihood of sanctions' being imposed or removed. States that may be targets of sanctions may assess the credibility of any explicit threats to impose or maintain sanctions and the credibility of any assurances that sanctions will be removed when the activity that motivated the imposition of sanctions ceases.

Vulnerabilities to potential pressure from sanctions. States that may be targets of sanctions may assess whether the benefits of withstanding pressure that could result from the sanctions exceed the costs. For example, states may be concerned that higher economic costs from sanctions could be associated with greater impact on the material wellbeing of individuals and firms. Higher economic costs could also make it more difficult to compensate those affected by the sanctions—and those costs could be especially burdensome in states with low per-capita income. However, states likely consider not only the costs from sanctions but also the extent to which they might over time avoid or adapt to these costs. For example, if potential sanctions are likely to disrupt trade and investments from major commercial partners, states that are potential targets may examine whether developing or expanding relationships with third parties could mitigate the loss of these economic relationships. Sanctions imposed via an international organization (e.g., a multilateral approach associated with the United Nations) may make it more difficult for targets to avoid or adapt to sanctions—for example, by finding alternative commercial partners—and may signal a more robust international consensus regarding the objectives of the sanctions.

Consequences if sanctions are imposed. States that may be targets of sanctions may assess the direct financial impact as well as future diplomatic, political, or security implications of the potential sanctions. That is, before engaging in activities that could trigger sanctions, states that depend on the United States may consider the possible impact of their actions on their future relationships with the United States in other areas, including military cooperation or the provision of aid. Conversely, states that are less dependent on the United States might anticipate fewer ongoing benefits from acquiescing to U.S. demands.

Source: GAO analysis of studies of economic sanctions | GAO-20-145.


Research on the Effectiveness of Sanctions May Not Fully Reflect Certain Types of U.S. Sanctions

Two important types of U.S. sanctions—targeted sanctions and secondary sanctions—were present during the time periods covered by the studies we reviewed. However, the studies generally did not account differently for these two sanctions types than for non-targeted and primary sanctions, respectively. As a result, the studies generally did not reflect differences between the effectiveness of these types of sanctions. This limitation of the available studies could reduce the applicability of this research to contemporary policymaking.

- **Targeted sanctions.** Targeted sanctions restrict transactions of and with specific entities and individuals, such as those who may have
influence with a state’s government. In response to such sanctions, the targeted actors may in turn influence their government to change its behavior. Targeted sanctions seek to minimize impact on society at large and maintain most trade relationships with non-targeted actors in the country. However, our interpretation of studies of sanctions suggests that the targeted actors may use their influence with their government to extract concessions that compensate them for the impact of sanctions, which could limit the effectiveness of certain targeted sanctions.

- **Secondary sanctions.** Secondary sanctions, also known as supplementary sanctions, target third-party actors doing business with, supporting, or facilitating targeted regimes, persons, and organizations. From the perspective of a third-party actor, secondary sanctions likely increase the risk involved in commercially partnering with primary sanctions targets. Thus, secondary sanctions, especially those implemented by a country as large and interconnected as the United States, may make it more difficult for primary targets to avoid or adapt to sanctions. Our interpretation of studies of sanctions suggests that the effects of secondary sanctions imposed by the United States could be similar to the effects of sanctions imposed with a large or multilateral coalition through an international organization, since sanctions imposed through an international organization also increase the difficulty of finding alternative commercial partners. However, our interpretation of the studies suggests that if secondary sanctions were imposed without an international organization they would be unlikely to signal a robust international consensus regarding the sanctions’ objectives, and thus may not as effectively deter their targets, or third parties, from developing alternative commercial arrangements.

While the studies we reviewed generally did not separately analyze targeted or secondary sanctions, states remain likely to consider the risks associated with undertaking activities that could lead to the imposition of these sanctions and sanctions in general. With respect to targeted and secondary sanctions, states—both primary targets and third-country actors—are likely to consider, among other things, the risks associated with undertaking activities that could result in targeted or secondary sanctions and the consequences they would experience if targeted or secondary sanctions were imposed.

35Some sanctions targets may not have influence with the government and may be subject to targeted sanctions as a response to their specific behavior, such as human rights violations, corruption, or drug trafficking.
We found strong evidence, based on studies examining factors that increased the economic impact of sanctions,\(^{36}\) that sanctions’ economic impacts on targets have generally been greater when the sanctions were more comprehensive\(^{37}\) or were imposed through an international organization.\(^{38}\) For example, one study found that UN sanctions had an adverse impact on target countries’ economic growth and that this impact increased with more-comprehensive sanctions.\(^{39}\) Another study found that imposing sanctions along with other countries led to reductions in both U.S. and other Group of Seven countries’ bilateral trade with targeted countries.\(^{40}\)

Some other studies suggest that sanctions may also have unintended consequences. For example, some studies suggest that sanctions have had a negative impact on human rights, the status of women, public

\(^{36}\)We reviewed seven studies of the factors that increased the economic impact of sanctions.

\(^{37}\)According to the studies, comprehensiveness refers to the scope and severity of the sanctions. For example, one study categorized sanctions as mild, moderate, or severe. Mild sanctions generally involve restrictions on aid to the target; moderate sanctions include certain restrictions on trade and finance with the target; severe sanctions generally refer to embargoes on most economic activity with the target. See Matthias Neuenkirch and Florian Neumeier, “The Impact of UN and U.S. Economic Sanctions on GDP Growth,” *European Journal of Political Economy*, vol. 40, part A, (2015) 110-125.


\(^{40}\)See Caruso, “Sanctions on Trade,” pp. 41-66. The other Group of Seven countries are Canada, France, Germany, Italy, Japan, and the United Kingdom.
health, or democratic freedoms in target countries. In addition, more frequent and comprehensive use of sanctions could encourage sanctions targets, potential targets, and their commercial partners to develop trade and financial ties that are less dependent on the United States.

The extent of these unintended consequences can be proportionate to the comprehensiveness or economic impact of sanctions. As a result, the cost or comprehensiveness of sanctions could entail important policy trade-offs—that is, higher economic costs may be more coercive but may also yield greater unintended consequences. For example, two academic studies, based on data from sanctions implemented between 1972 and 2000, found that the negative impact of sanctions on democratic and press freedoms was generally greater with more comprehensive sanctions. Two other studies found that the public health effect of sanctions depended on the costliness or economic impact of the sanctions. Targeted sanctions could, in principle, reduce the unintended consequences of sanctions by reducing economic impacts on society at large.


Agency Comments

We provided a draft of this report to Treasury, State, and Commerce for review and comment. We received technical comments from all three agencies, which we incorporated as appropriate.

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

If you or your staff have any questions about this report, please contact me at (202) 512-8612, or GianopoulosK@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 III.

Kimberly Gianopoulos
Director, International Affairs and Trade
Appendix I: Objectives, Scope, and Methodology

Our objectives were to (1) describe how the roles of the Departments of the Treasury (Treasury), State (State), and Commerce (Commerce) in implementing U.S. sanctions authorities are identified; (2) examine the extent to which U.S. agencies assess the effectiveness of sanctions; and (3) identify factors that have been shown by publicly available studies to contribute to the effectiveness of economic sanctions.

To describe how Treasury’s, State’s, and Commerce’s roles in implementing U.S. sanctions authorities are identified, we reviewed legal authorities, including statutes and executive orders, that authorize various sanctions programs and interviewed relevant agency officials. We also discussed with Treasury, State, and Commerce officials the interagency process used in determining sanctions roles.

To examine the extent to which U.S. agencies assess the effectiveness of sanctions, we interviewed officials and reviewed documents from Treasury, State, Commerce, and the Office of the Director of National Intelligence. We also obtained and reviewed agency assessments for sanctions programs related to Burundi, North Korea, Russia, and Somalia. We selected these country-based sanctions programs to obtain at least one country program with more than 200 current sanctions designations and at least one country program with fewer than 200 but more than 10 current sanctions designations as of September 2018. In addition, we included a mixture of different-size economies, based on annual gross domestic product (GDP). We used the agencies’ assessments of the selected programs to gain insight into the types of analysis conducted.

To identify factors that have been shown by publicly available studies to contribute to the effectiveness of economic sanctions, we conducted a literature search for studies that examined:

- factors that contributed to the effectiveness of economic sanctions in changing behavior, and
- factors that increased the economic impact of sanctions.
To identify existing studies, we used three methods. First, we conducted searches of various databases, which produced 280 studies. Second, we conducted snowball sampling, by identifying additional studies cited in papers we had already identified. Third, we asked several academic experts to validate our list of studies and recommend any additional studies that they felt met our criteria.

To focus on recent research on the factors that contributed to the effectiveness or economic impact of economic sanctions and to target articles for detailed review, we included studies that met the following criteria:

- The study evaluated the factors that contributed to the effectiveness or economic impact of sanctions.\(^2\)
- The study included quantitative analysis of research data, which aggregated and identified patterns across many sanctions episodes.
- The study was published in a peer-reviewed journal or was an academic working paper.
- The study included data on U.S.-imposed bilateral or multilateral sanctions but may also have included sanctions imposed by other countries.
- The study was in English.
- The study was published from 2004 through October 2018. As an additional date restriction, we only included studies with at least some data from 2000 through October 2018, though the study could have included earlier data as well, in order to improve the likely relevance of the research. The publication date restriction made it more likely that included studies would be cognizant of an important source of bias in earlier sanctions research. Prior to 2004, researchers tended to examine the impact of implemented sanctions and generally excluded cases where the threat of sanctions might have led a target

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\(^1\)The databases we searched were ProQuest (Criminology Collection, Education Database, Eric, Global Newstream, Health & Medical Collection, Pilots: Published International Literature on Traumatic Stress, Policy File Index, ProQuest Dissertations & Theses Global, Research Library, Scitech Premium Collection, Sociology Collection); ABI/INFORM® Professional Advanced; EconLit; SOCIAL SCISEARCH®; Scopus; Web of Science; SSRN.com; World Bank ELibrary; IMF ELibrary; NBER Working Papers; and https://econpapers.repec.org.

\(^2\)We excluded studies that examined the unintended consequences of sanctions and the impact of sanctions on U.S. businesses, consumers, and trading partners.
to change their behavior prior to implementation.\textsuperscript{3} More generally, observed outcomes of implemented economic sanctions are not representative of the range of circumstances in which sanctions could be imposed, threatened, or useful for deterrence, and as a result these observed outcomes tend to understate the effectiveness of economic sanctions.

Finally, to select the studies to be included in our in-depth review, we evaluated them to determine whether they met additional criteria for methodological soundness. We assessed whether the studies used and clearly described appropriate statistical methods to adjust, or control, for factors that could influence the effectiveness or economic impact of sanctions. Additionally, we included only papers that ascribed statistical precision to modeled estimates.

To validate the studies we selected for in-depth review, we requested suggestions regarding our list of studies from the following academic experts: Daniel W. Drezner, Bryan R. Early, and T. Clifton Morgan.\textsuperscript{4} We identified these researchers on the basis of the relevance of their publications to our objectives, the methodological impact of their contributions to the literature, and the number of citations of any relevant publications since 2009.

Applying the selection criteria and the criteria for methodological soundness and incorporating the academic experts' suggestions resulted in a list of 17 sufficiently rigorous studies, all of which had appeared in peer-reviewed journals. Ten studies were relevant to the factors that contributed to the effectiveness of economic sanctions and seven studies were relevant to the factors that increased the economic impact of sanctions.

\textsuperscript{3}By excluding instances where sanctions were threatened but not yet implemented against a designated target, which tended to produce more favorable outcomes, researchers had underestimated the effectiveness of sanctions. An influential paper found statistical support that this selection bias caused sanctions to appear less effective. See Daniel W. Drezner, “The Hidden Hand of Economic Coercion,” \textit{International Organization}, vol. 57, no. 3 (2003): 643-59.

\textsuperscript{4}Daniel W. Drezner is a professor of international politics at the Fletcher School at Tufts University. Bryan R. Early is an associate professor of political science at the University at Albany, State University of New York. T. Clifton Morgan is the Albert Thomas Professor of Political Science at Rice University.
To obtain relevant context and background, we also examined additional studies related to the factors that contributed to the effectiveness of economic sanctions. These studies did not meet our criteria for inclusion in our in-depth review but provided insight into issues related to the analysis of effectiveness of sanctions and potential unintended consequences of sanctions. All of the studies that met the criteria for our in-depth review, as well as others we cited, are included in appendix II.

To review the 17 studies we selected, we used a data collection instrument (DCI) designed to record each study’s research methodology, including its data, outcome measures, control variables, limitations, and analytic techniques and to summarize its major findings. Analysts then independently reviewed the studies and the information captured in the DCIs, reconciling any differences in their assessments through discussion. Next, we summarized the findings and categorized and aggregated the factors relevant to the effectiveness or economic impact of sanctions. We also shared a summary of our initial findings with the academic experts, who generally concurred with our findings.

We characterized factors as being supported by “strong evidence” for the purposes of our review only if at least four studies—including more than half of studies that included this factor—found it to have a statistically significant effect and no studies found a statistically significant effect with the opposite sign. We characterized factors as being supported by “some evidence” for the purposes of our review only if at least two studies—including at least half of studies that included this factor—found it to have a statistically significant effect and no studies found a statistically significant effect with the opposite sign.

The studies we examined varied in the quality of their methodologies, and as a result, we could not confidently report on precise estimates of the impact of different factors on the effectiveness or economic impact of sanctions. While the statistical models used in the studies we reviewed controlled for factors that could influence the success or failure of sanctions in different circumstances, these models are also subject to some biases and imperfections. For example, studies may not have accounted for all factors that might influence the success of sanctions or may not have recognized or controlled for selection biases that influenced when and how sanctions were imposed. Finally, sanctions datasets include variables for which researchers exercised varying degrees of judgment to code accurately and consistently and which therefore may be measured with imprecision or error.
We conducted this performance audit from May 2018 to October 2019 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.
## Appendix II: Publicly Available Studies Reviewed

|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
Appendix II: Publicly Available Studies
Reviewed


Other Studies Cited


# Appendix III: GAO Contact and Staff Acknowledgements

## GAO Contact

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## Staff Acknowledgements

In addition to the contact named above, Drew Lindsey (Assistant Director), Michael Maslowski (Analyst in Charge), Eugene Beye, Nisha Rai, Michael Hoffman, Reid Lowe, Christopher Keblitis, Grace Lui, Justin Fisher, Leia Dickerson, Michael Simon, and Julia Robertson made key contributions to this report.
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