PETERSON INSTITUTE
FOR INTERNATIONAL ECONOMICS

Economic Sanctions RECONSIDERED

3rd Edition

Gary Clyde Hufbauer
Jeffrey J. Schott
Kimberly Ann Elliott
Barbara Oegg

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This third edition of *Economic Sanctions Reconsidered* is published with and without a companion CD-ROM titled *Economic Sanctions Reconsidered: Case Histories and Data*. This book describes the methodology, principal findings, and policy conclusions of the study.

The companion CD-ROM contains the 174 case studies of economic sanctions episodes that are used in the statistical analysis in this book plus four summary cases (S-1, S-2, S-3, and S-4), one state/local level case (Case 97-2), and 13 new case studies on sanctions episodes that the authors have identified since 2000. The CD-ROM also contains the new database (Hufbauer, Schott, Elliott, and Oegg 2007) and the tables and figures in this book. The CD-ROM is not sold separately.

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Economic Sanctions RECONSIDERED

3rd Edition

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Preface

For the past 25 years, the Institute has been in the forefront of economic research on the use of economic sanctions. Our team of sanctions experts—led by Senior Fellows Gary Hufbauer, Jeffrey Schott, and Kimberly Elliott—has compiled a comprehensive dataset on sanctions deployed over the past century. Based on analysis of some 200 cases, they derive lessons from this rich experience to inform policymakers who invoke economic sanctions as part of the response to foreign misdeeds, ranging across North Korea, Iran, Sudan, and points beyond. This volume is the thoroughly revised and updated third edition of their immensely influential previous work.

The project began in 1982 when Hufbauer and Schott—drawing on their experience in crafting sanctions during their time at the US Treasury in the late 1970s—joined forces to offer a critique of the haphazard way that the United States and other countries deployed the economic weapon. Their research, aided by Kim Elliott, provided the first comprehensive economic analysis on this critical tool of international relations. The initial monograph, *Economic Sanctions in Support of Foreign Policy Goals* (1983), rebutted the conventional wisdom of the time that "sanctions never work" and provided succinct recommendations for improving their effectiveness.

In contrast to the conventional wisdom, the authors found that sanctions succeeded in achieving foreign policy objectives in about a third of the cases—but that success depended importantly on the type of goal sought, the economic and political environment in the target country, and the way that the sanctions policy was implemented. They codified their policy prescriptions in "Nine Commandments" that set out criteria for the most effective use of sanctions. US Commerce Secretary Malcolm Baldrige reportedly put their commandments on an index card for quick reference during cabinet debates on sanctions during the Reagan administration.

In 1985, the Hufbauer-Schott-Elliott team published *Economic Sanctions Reconsidered: History and Current Policy*, which included policy analysis and detailed case studies of 103 sanctions episodes. The book was released just as public debate was heating up over the use of sanctions against the apartheid regime in South Africa and provided dispassionate analysis that influenced deliberations in the US executive branch, the Congress, and the United Nations. The second edition of the book, which was published in two volumes and covered 116 case studies, was released at the end of 1990 and cited on the Senate floor in the midst of the debate whether to continue sanctions or use military force to evict Saddam Hussein's army from Kuwait. The team's findings on the limited effectiveness of unilateral sanctions reinforced the search for multilateral measures that emerged with the end of the Cold War.

It has been 17 years since the publication of the second edition. Work on the sanctions dataset and case studies continued with major contributions by a new team member, Barbara Oegg. In a fresh chapter in this third edition, the authors examine the dual impact of the end of the Cold War and the rapid globalization of international trade and finance on how and where sanctions are used. Instead of East-West rivalry, sanctions have lately been provoked by civil insurrections in Africa, human rights abuses and weapons proliferation in second and third tier powers, and of course international terrorism (where sanctions now target both regimes and nonstate actors).

Despite the dramatic changes in world politics and the world economy, the conclusions reached by the authors a quarter century ago remain robust. In fact, some of the authors' early recommendations have guided the formulation and implementation of sanctions policies in the 1990s and 2000s. Regrettably, as evidenced in Haiti, Panama, and now Iraq, their concerns about post-sanctions planning—the importance of planning to unwind sanctions and restore normal commercial activities—have not been faithfully pursued.

We at the Institute are also deeply gratified by the impact this study has had on academic research in the field of economic sanctions. The book is probably the most widely cited source on the topic, and the underlying data have furnished a basis for numerous PhD dissertations and scholarly journal articles that have reexamined the methodology and policy conclusions of our own authors. This new edition reflects the substantive critiques of their earlier work, and we hope this iterative process will continue. To make this new edition more user-friendly for researchers and students, we are releasing the case studies and database on a CD-ROM.

The Peter G. Peterson Institute for International Economics is a private, nonprofit institution for the study and discussion of international economic policy. Its purpose is to analyze important issues in that area and to develop and communicate practical new approaches for dealing with them. The Institute is completely nonpartisan.

The Institute is funded by a highly diversified group of philanthropic foundations, private corporations, and interested individuals. About 30 percent of the Institute's resources in our latest fiscal year were provided by contributors outside the United States, including about 12 percent from Japan.

The Institute's Board of Directors bears overall responsibilities for the Institute and gives general guidance and approval to its research program, including the identification of topics that are likely to become important over the medium run (one to three years) and that should be addressed by the Institute. The director, working closely with the staff and outside Advisory Committee, is responsible for the development of particular projects and makes the final decision to publish an individual study.

The Institute hopes that its studies and other activities will contribute to building a stronger foundation for international economic policy around the world. We invite readers of these publications to let us know how they think we can best accomplish this objective.

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Nursing a manuscript of this size and complexity through the publication process is a Herculean task and for that we deeply appreciate the efforts of Valerie Norville, Ed Tureen, Madona Devasahayam, and Marla Banov. Finally, we must also recognize the support of the Institute's director, C. Fred Bergsten, whose patience has surely been tried by this project but whose support has never flagged.

1

Introduction

On May 22, 2003 the United Nations Security Council unanimously passed Resolution 1483, formally ending more than a decade of comprehensive sanctions against Iraq. During the 1990s, the Iraqi sanctions regime, the most comprehensive sanctions effort since World War II, dominated the debate about the use and effectiveness of economic sanctions, their humanitarian impact, and the legitimacy and morality of this "deadly weapon."

The long debate over the utility of economic sanctions, launched by US President Woodrow Wilson in response to the horrors of World War I, continues to this day.[1] Though few still concur with President Wilson that sanctions can be an alternative to war, advocates of sanctions still regard them as an important weapon in the foreign policy arsenal. They believe that sanctions can play a useful signaling role, in addition to whatever successes they achieve in their own right. Skeptics question whether sanctions are an effective instrument, especially when used unilaterally as a stand-alone weapon, since target regimes often can insulate themselves from the harsh impact even if the general population suffers. Skeptics also question whether the costs borne by other countries and populations indirectly affected by the sanctions, and by domestic firms and workers, are worth the benefits derived. At the beginning of the 21st century, the same as a century earlier, economic sanctions remain an important yet controversial foreign policy tool.

1. Speaking in Indianapolis in 1919, President Wilson said: "A nation that is boycotted is a nation that is in sight of surrender. Apply this economic, peaceful, silent, deadly remedy and there will be no need for force. It is a terrible remedy. It does not cost a life outside the nation boycotted but it brings a pressure upon the nation which, in my judgment, no modern nation could resist" (quoted in Padover 1942, 108). These views were reflected in the legal structure of the League of Nations, which gave prominence to the collective use of economic sanctions as a means of deterring aggression.

To put these issues in perspective, we delved into the rich history of the use of sanctions in the 20th century. Our main purpose is to identify circumstances in which economic sanctions are most likely to contribute to attaining foreign policy goals. Accordingly, our study concentrates on four central questions:

- What has been the record of economic sanctions in achieving foreign policy goals?
- What factors—both political and economic—improve the chances that sanctions will make a positive contribution to the desired foreign policy outcome?
- What are the costs of sanctions to both target and sender[2] countries?
- What lessons can be drawn from this experience to guide policymakers on the use of sanctions in the future?

A Case Study Approach

Much has been written about the use of economic sanctions in the conduct of foreign policy, and most of the literature takes the form of studies of one or a few sanctions episodes. In this study we attempt to extract propositions of general validity from that literature. The starting point for our analysis is the list in table 1A.1 (at the end of this chapter) of 174 cases of economic sanctions, from the Allied blockade of Germany in World War I through the threat by the Organization of American States (OAS) and the United States to impose sanctions against Ecuador in 2000 in response to the coup against President Jamil Mahuad. Each case abstract summarizes the key events of the episode, goals of the sender, response of the target, attitudes of third countries, and economic costs to both target and sender. It concludes with an overall assessment of the episode by scholars who have studied the case, along with our own summary evaluation. In some episodes, such as US sanctions against Cuba and UN sanctions against Iraq, the goals of the sender country or coalition or other circumstances have significantly changed over time. Depending on how much overlap or continuity there is, these stories may be broken into separate case studies, or the evolving goals may be evaluated in discrete phases of a single case.[3]

2. We use the term "sender" to denote the country that is pursuing foreign policy goals at least in part through the threat or imposition of economic sanctions. A synonymous term often found in the literature is "sanctioner."

3. Cases involving multiple goals, phases, or targets have separate entries for each observation in our new database (Hufbauer, Schott, Elliott, and Oegg 2007) for this third edition. For example, Case 95-1 details US sanctions against both Ecuador and Peru, but the variables are distinct for each target country. Thus, there are 204 observations for the 174 case studies, and

Each case has 14 variables, which across 204 episodes creates the most detailed dataset on the global use of sanctions. Each case history cites sources for all data presented, so we have minimized source notes in this book.[4] A bibliography follows chapter 6. Moreover, because our case histories summarize each episode, and because detailed narratives can be found in the literature, we deliberately refrain from describing extensively the events of individual case studies in this book.

The cases listed in table 1A.1 plainly do not include all instances since World War I of economic leverage applied by one sovereign state in an attempt to change the conduct of another. To focus our analysis on the use of sanctions to achieve foreign policy goals, we have taken care both to distinguish economic sanctions from other economic instruments and to separate foreign policy goals from other objectives of economic leverage. The boundaries we have set may be described in the following way.

We define economic sanctions to mean the deliberate, government-inspired withdrawal, or threat of withdrawal, of customary trade or financial relations. "Customary" does not mean "contractual"; it simply means levels of trade and financial activity that would probably have occurred in the absence of sanctions. We do not systematically cover cases in which positive economic incentives (e.g., new aid or credits) are used to achieve foreign policy goals. However, when such incentives are closely paired with economic sanctions in a "carrot-and-stick" approach, they are covered in our case histories and analysis (note that "carrots" often take the form of lifting prior sanctions).[5]

We define foreign policy goals to encompass changes the sender state explicitly or implicitly seeks in the target state's political behavior. We rely on the public statements of the sender country's officials, supplemented by the assessments of journalists and historians of the episode, to identify the foreign policy goals sought in each case. Often officials speak obscurely about their true objectives; hence we frequently rely on nonofficial assessments.

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most of the numbers cited in the statistical analysis refer to observations rather than case studies. The new database is on a companion CD-ROM, *Economic Sanctions Reconsidered: Case Histories and Data*.

4. The case studies are on a companion CD-ROM. Select cases are also available on the Institute's website, www.petersoninstitute.org. The CD-ROM also contains our new database (Hufbauer, Schott, Elliott, and Oegg 2007) and the tables and figures in this book. Since 2000, we have identified 13 new sanctions episodes, described in table 1A.2 (at the end of this chapter). These 13 case studies are not included in our statistical analysis but are included on the CD-ROM.

5. David Baldwin (1985) uses the term "positive sanctions" to refer to various incentives, including the lifting of sanctions. His terminology has not been widely adopted. Accordingly, we use the term "sanctions" to refer solely to the withdrawal of economic relations or benefits.

We exclude from foreign policy goals the normal realm of economic objectives sought in trade, financial, tax, and other commercial negotiations between sovereign states. It may seem a violation of this limit that several cases deal with attempts to settle expropriation disputes. During the Cold War, however, expropriation episodes often harbored political and ideological disputes that went beyond compensation issues; we include those episodes in our analysis.

We also generally exclude from the case histories national security export controls that are essentially designed to restrict the sale of weapons, military equipment, and precursor supplies (such as chemical and biological agents, gas diffusion equipment, magnetic rings, and the like). In most cases we do not attempt to score the success of such controls in their narrow objective of blocking designated exports.[6] However, we include major Cold War–era export control cases (CoCom and ChinCom) where the objectives of the United States and some of its allies went well beyond the restriction of military materiel and also sought to impair the economies of the Soviet Union, its Eastern European satellites, and China.

In several areas, the US Congress has provided broad authority to impose sanctions against countries that engage in objectionable behavior. In these instances, in addition to the country case studies, we have prepared policy summaries that give an overview of the broader foreign policy developments and legislative authorities. These policy summaries (S1 to S4) cover human rights abuses (including religious persecution), international terrorism, US antinarcotics efforts, and nuclear proliferation.

Finally, we do not explore the fascinating international legal questions raised by the imposition of sanctions, in particular the definition and proper limitation of extraterritorial measures, whereby one nation attempts to extend its laws to persons and firms overseas, or the legal merits of sanctions by state and local governments. Much literature is devoted to legal questions, and we could not usefully contribute to the legal debate. (On these issues, see, for example, Marcuss and Richard 1981, Rosenthal and Knighton 1983, Moyer and Mabry 1983, Marcuss and Mathias 1984, Carter 1988, Malloy 1990 and 1996, Bradley and Goldsmith 1997, and Koh 1998.)

Table 1A.1 probably omits many cases of sanctions imposed between powers of second or third rank. These cases are often not well documented in the English language, and we did not have adequate resources to study material in foreign languages. Also, we may have overlooked instances in which major powers imposed sanctions in comparative secrecy to achieve relatively modest goals or where threats were made privately and not im-

6. However, in a few instances where the arms embargo was part of a larger effort to quell civil strife, we have scored that feature. The cases of Liberia (Case 92-1) and Rwanda (Case 94-3) are illustrative.

plemented. To the extent of these omissions, our generalizations do not adequately reflect the sanctions experience of the 20th century.[7]

Sender Countries and Their Motives

Sanctions are part and parcel of international diplomacy, a tool for coercing target governments into particular avenues of response. In most cases, the use of sanctions presupposes the sender country's willingness to interfere in the decision making process of another sovereign government, but in a measured way that supplements diplomatic reproach without the immediate introduction of military force.

Among the cases we have documented, the countries that impose sanctions are for the most part large nations that pursue an active foreign policy. To be sure, there are instances of neighborhood fights: Indonesia versus Malaysia in the mid-1960s; Spain versus the United Kingdom over Gibraltar from the 1950s until 1984; India versus Nepal over the latter's warming relations with China in 1989–90; and Greece versus Albania in the mid-1990s over jailed leaders of the latter country's ethnic Greek community. But in the main, big powers, especially the United States, have used sanctions precisely because they are big and can seek to influence events on a global scale. Instances of the collective use of sanctions—the League of Nations against Italy in 1935–36, the United Nations against Rhodesia from 1965 to 1979, the Allies against Germany and Japan in World War II, and the United Nations against Iraq in 1990—are in fact usually episodes of major powers enlisting their smaller allies. The main exceptions to this general rule are the collective actions by the United Nations or African organizations in sub-Saharan Africa since the early 1990s.

"Demonstration of resolve" has often been the driving force behind the imposition of sanctions. This is particularly true for the United States, which frequently has deployed sanctions to assert its leadership in world affairs. US presidents seemingly feel compelled to dramatize their opposition to foreign misdeeds, even when the likelihood of changing the target country's behavior is remote. In these cases, sanctions often are imposed because the cost of inaction—in terms of lost confidence both at home and abroad in the ability or willingness of the United States to act—is seen as greater than the cost of the sanctions. Indeed, the international community often expects such action from the United States, to demonstrate moral outrage and to reassure the alliance that America will stand

7. The 1997 report of the President's Export Council on US unilateral economic sanctions as well as USA Engage, www.usaengage.org, list a number of current sanctions imposed in response to environmental activities and worker rights issues. These do not fit our definition of economic sanctions to achieve foreign policy goals and are therefore not included in this study. The handful of threat cases that we discovered are discussed in chapter 4.

by its international commitments. The impact of such moral and psychological factors on the decision to impose sanctions should not be underestimated, even if it is hard to document and impossible to quantify.

"Deterrence"—the notion that a sender country can discourage future objectionable policies by increasing the associated costs—is another frequently cited reason for sanctions. In many cases, such as the US sanctions against the Soviet Union over Afghanistan in 1980–81, it is difficult, if not impossible, to determine whether sanctions effectively deterred future misdeeds. Under President Mikhail Gorbachev, the Soviet Union dramatically changed its internal and external policies, but it is hard to credit the combined effect of all US sanctions with more than a marginal role in this historic transformation.

High-profile sanctions may well serve important domestic political purposes that can overshadow efforts to change the behavior of foreign states. As David Lloyd George, then a leader of the British political opposition, remarked of the celebrated League of Nations sanctions against Italy in 1935, "They came too late to save Abyssinia from subjugation by Italy, but they are just in the nick of time to save the British Government" (Rowland 1975, 723). Similar skepticism often seems appropriate today.[8] Which US president has not been obsessed with the need to demonstrate leadership, to take initiatives to shape world affairs, or at least to react forcefully against outrages abroad short of outright war? The desire to be seen as acting forcefully, but not to precipitate bloodshed, can easily overshadow specific foreign policy goals.

Going back to the early decades of the 20th century, prime ministers and presidents often launched sanctions to answer domestic outrage and to prepare the public for sterner measures. In some cases, domestic political goals were the dominant motivation for the imposition of sanctions. Sanctions often succeed in galvanizing public support for the sender government, either by inflaming patriotic fervor (as illustrated by US sanctions against Japan just prior to World War II) or by quenching the public thirst for retribution. The more recent cases of the US, European, and Japanese sanctions against China in the wake of the Tiananmen Square massacre, the Helms-Burton sanctions against Cuba, the Iran and Libya Sanctions Act, and sanctions imposed against Burma were principally designed to assuage domestic constituencies, to make moral and historical statements, and to send a warning to future offenders of the international order, whatever their effect on the immediate target country.

The role of domestic political considerations in shaping sanctions policy remains a subject of debate. William H. Kaempfer and Anton D. Lowen-

8. Some empirical evidence backs the made-for-domestic-consumption theory of international conflict, long supported by intuition and anecdote. See Morgan and Bickers (1992).

berg (1988) put forth a public choice analysis of sanctions, in which trade restrictions are expressive rather than instrumental. In support of their model, Kaempfer and Lowenberg (1989) argue that the structure of trade restrictions in the sanctions against South Africa reflected protectionist pressure from interest groups rather than a strategy to maximize economic damage. In contrast, Daniel W. Drezner (1999) summarizes three influential econometric studies that generally reject the explanation that domestic forces are the dominant inspiration for sanctions. He argues that sanctions have been "a purposive tool of foreign policy, to be employed in situations where the United States has a significant interest in the outcome."[9]

Though we do not weigh in on the expressive-versus-instrumental debate, the case studies and data presented here may aid scholars studying such questions. Similarly, we forego any evaluation of the merits of foreign policy goals sought in our case studies. We do have opinions on those goals but doubt that many readers are eager to discover our collective wisdom on the merits, for example, of the US government's disapproval of the Ernesto Samper regime in Colombia or UN efforts to uncover Iraq's weapons of mass destruction.

In sum, the imposition of sanctions conveys a triple signal: To the target country it says the sender does not condone the target's actions; to allies it says that words will be supported with deeds; and to domestic audiences it says the sender government will act to safeguard the nation's vital interests.

The parallels between the motives for sanctions and the three basic purposes of criminal law—to punish, deter, and rehabilitate—are unmistakable. Countries that impose sanctions, like states that incarcerate criminals, may find their hopes of rehabilitation unrealized, but they may be quite satisfied with whatever punishment and deterrence are accomplished. Nevertheless, in judging the success of sanctions, we confine our examination to changes in the target country's policies, behavior, or regime.

Limitations on the Use of Sanctions

Sanctions often do not succeed in changing the behavior of foreign countries. One reason for failure is plain: The sanctions imposed may simply be inadequate for the task. The goals may be too elusive; the means too gentle; or cooperation from other countries, when needed, too tepid.

9. The Kaempfer and Lowenberg (1989) study illustrates the pitfalls associated with analyzing only one or a few cases. While domestic interests seeking protection from imports "captured" specific sanctions imposed on South Africa, the case is highly unusual in relying on selective import restrictions as the principal measure. Most US sanctions involve restrictions on exports, which the US business community typically opposes.

A second reason for failure is that sanctions may create their own antidotes. In particular, economic sanctions may unify the target country both in support of its government and in search of commercial alternatives. This outcome is evident in a number of episodes: For example, a nationalistic reaction seems to have blunted the League of Nations' actions against Italy in 1935–36, Soviet sanctions against Yugoslavia in 1948–55, US measures against Indonesia in 1963–66, UN actions against Rhodesia in 1965–79, and US sanctions against Nicaragua in the 1980s. Benito Mussolini expressed Italy's nationalistic defiance of the League's sanctions in 1935 with these words: "To sanctions of an economic character we will reply with our discipline, with our sobriety, and with our spirit of sacrifice" (quoted in Renwick 1981, 18). Defiant leaders of target countries have often flung similar words in the face of sanctions.[10]

A third reason why economic pressure may fail is that sanctions may prompt powerful or wealthy allies of the target country to assume the role of "black knights"; their support can largely offset whatever deprivation results from sanctions themselves. In the period since World War II, offsetting compensation has occurred most conspicuously in episodes where big powers were caught up in ideological conflict over a smaller nation's policies: Examples include the US sanctions against Cuba and later Nicaragua and Soviet sanctions against Yugoslavia and Albania. Another example of countervailing support, with different historical origins, is the Arab League campaign against Israel, which has helped ensure a continuing flow of public and private assistance to Israel from the United States and Western Europe.

A fourth possible reason for failure is that economic sanctions may alienate allies abroad and business interests at home. When a sender's allies do not share its goals, they may, in the first instance, ask exasperating questions about the probability of a successful outcome; in the second instance, they may refuse to take the stern measures requested against the target country, thereby making the sender's own initiatives seem all the more futile; finally, they may revolt and enforce national antisanctions laws, such as the US antiboycott provisions and the British Protection of Trading Interests Act, to counteract the impact of the other nation's sanctions on their own foreign policy and economic interests. The protective legal barrier is a relatively new development but has spread to a number of countries—France, Denmark, Australia, and others—where the errant aim of a sender state has wounded domestic firms.

The backlash from the sender's allies may be exacerbated if the sender attempts to enforce the sanctions on an extraterritorial basis, as the United States did in the 1981–82 Soviet-European gas pipeline case. The Euro-

10. For example, Manuel Noriega used comparable rhetoric when the United States imposed sanctions on Panama in the late 1980s.

peans refused to cooperate with the United States and halt the pipeline project; indeed, they wondered who the real target of the sanctions was—the country subject to sanctions (the Soviet Union) or their own firms, whose trade was hard hit by the measures. The internecine feud that ensued between the United States and Europe undercut the economic and psychological force of the sanctions, rendering the action ineffective. Similar concerns arise from US laws mandating sanctions against investors in Iran (and Libya until 2006). To date, however, presidential invocation of the statute's national interest waiver has forestalled a potential clash over extraterritorial application of that US law.

Business firms at home may also experience severe losses when sanctions interrupt trade and financial contracts. Besides the immediate loss of sales, they may lose their reputation for reliability. Outcries from US business against both the grain embargo and the pipeline sanctions arose as much from the fear of future competitive weakness as "unreliable suppliers" as from the immediate sacrifice of grain, pipelaying equipment, and gas turbine sales to the Soviet Union. After the first flush of patriotic enthusiasm, such complaints can undermine a sanctions initiative.

These pitfalls are well known to most policy officials and can hardly escape the briefing memoranda prepared for world leaders considering sanctions. Why then are sanctions so frequently used? In the first place, as the results of this study show, sanctions have not been, on balance, nearly so unsuccessful as the episodes directed against the Soviet Union in the 1970s and 1980s would suggest.

In the second place, world leaders often conclude that the most obvious alternatives to economic sanctions would be unsatisfactory: Military action would be too massive and diplomatic protest too meager. Sanctions can provide a satisfying theatrical display yet avoid the high costs of war. The second Iraq case, where sanctions did not preclude the onset of a full-scale war in 2003, furnishes a harsh reminder of just how costly military intervention can be. This is not to say that sanctions are costless. Our purpose in this study is precisely to suggest conditions in which sanctions are most likely to achieve a positive benefit at a bearable cost.

Historical Overview

Economic sanctions entered the diplomatic armory long before World War I. Indeed the technique was used in ancient Greece. The most celebrated occasion was Pericles's Megarian decree, enacted in 432 BC in response to the kidnapping of three Aspasian women. Thucydides accords the decree only minor notice in *The Peloponnesian War*; by contrast, Aristophanes in his comedy *The Acharnians* (lines 530–43) assigns the Megarian decree a major role in triggering the war:

> Then Pericles the Olympian in his wrath
> Thundered, lightened, threw Hellas into confusion
> Passed laws that were written like drinking songs
> [decreeing] the Megarians shall not be on our land, in our market, on the sea or on the continent. . . .
> Then Megarians, since they were starving little by little, begged
> The Lacedaemonians to have a decree
> arising from the three strumpets withdrawn.
> But we were unwilling, though they asked us many times. Then came the clash of the shields.
> Someone will say it was not right. But say, then, what was.
> Come, if a Lacedaemonian sailed out in a boat
> and denounced and confiscated a Seriphian puppy,
> would you have sat still? (quoted in Fornara 1975)

Despite the rich history of sanctions episodes from ancient Greece through the 19th century, we start our investigation with World War I both because earlier episodes are less well documented and because lessons from the distant past may seem less relevant to today's problems. However, to provide a historical perspective, we list selected pre–World War I instances of economic sanctions in table 1A.3 (at the end of this chapter).

Most of these episodes foreshadowed or accompanied warfare. Only after World War I was extensive attention given to the notion that economic sanctions might substitute for armed hostilities as a stand-alone policy. Nonetheless, through World War II, the objectives sought with the use of sanctions retained a distinctly martial flavor. Sanctions were usually imposed to disrupt military adventures or to complement a broader war effort. Of the 11 cases we have identified in table 1A.1 between 1914 and 1940, all but two are linked to military action. Four of these cases involved collective action through the League of Nations to settle disputes. These efforts had varied results: from success in inducing Greece to back down from its incursion into Bulgaria in 1925 to the celebrated failure to persuade Italy to withdraw from Abyssinia (now Ethiopia) in the mid-1930s.

In the period following World War II, other foreign policy motives became increasingly common, but sanctions were still deployed on occasion to force a target country to withdraw its troops from border skirmishes, to abandon plans of territorial acquisition, or to desist from other military adventures. In most instances in the postwar period where economic pressure was brought to bear against the exercise of military power, the United States played the role of international policeman. For example, in 1956 the United States pressed the French and the British into withdrawing their troops from the Suez region; and in the early 1960s the United States persuaded Egypt to stop supporting rebels in Yemen and the Congo by withholding development and food aid.

However, most attempts at altering military adventures have not been successful. Turkish troops remain in Cyprus more than 30 years after their

invasion in July 1974 and in spite of US economic pressure in the mid-1970s (Case 74-1). The Jimmy Carter administration's grain embargo and boycott of the 1980 Moscow Olympics did not discourage the Soviet occupation of Afghanistan (Case 80-1). Indeed, aside from the 1956 Suez incident, major powers have never been able to deter military adventures of other major powers simply through the use of economic sanctions. As President George H. W. Bush subsequently admitted, US sanctions against Iraq in 1990, after Saddam Hussein's invasion of Kuwait, were regarded from the outset as a precursor to military action (Bush and Scowcroft 1998).

Closely related to these cases are those episodes in which sanctions are imposed to impair the economic capability of the target country, thereby limiting its potential to wage war or for foreign adventurism. This was an important rationale for the broad-based multilateral controls on strategic trade (in addition to controls on specific items of military equipment) that the United States instituted against the Soviet Union and China in the late 1940s. US officials cited the same rationale in defense of sanctions against the Soviet Union following the invasion of Afghanistan (Case 80-1) and the crisis in Poland in the early 1980s (Case 81-3). It is doubtful whether these cases yielded positive results, not least because it is difficult to hamper the military capabilities of a major power by inflicting marginal degrees of economic deprivation.

Attempts to impair another country's military potential usually entail narrowly defined national security controls—identifying military hardware and so-called dual-use technologies that the adversary can be denied. The sender country often seeks such controls in order to limit the target state's foreign policy options as well. In our view, the CoCom and ChinCom controls of the Cold War period were aimed *both* at restricting strategic exports to the Soviet Union and China, to prevent or at least retard technological advances in their weaponry, *and* at impairing the ability of the Soviet and Chinese economies to support an expanded military machine capable of advancing their foreign policy objectives.[11] The latter goal is the reason why these cases are included in our analysis.

11. Case 48-5: US and CoCom v. USSR and Comecon (1948–94) and Case 49-1: US and ChinCom v. China (1949–70). The Coordinating Committee for Multilateral Export Controls (CoCom) was an informal group of NATO countries (minus Iceland, plus Japan), which attempted to limit the shipment of strategic goods, both broadly and narrowly defined, to the Soviet Union and its Eastern European satellites. The case terminated in 1994 when CoCom was dismantled. ChinCom, a parallel but smaller group of countries controlling exports to China, was disbanded in 1958, at which time China came under CoCom controls. However, the United States unilaterally maintained a total embargo on China up to President Richard Nixon's celebrated visit to Peking in 1970. The Council of Mutual Economic Assistance (Comecon) was established in 1949 to facilitate economic cooperation among the Soviet Union and its satellites. After the dismantling of the Berlin Wall in November 1989, Comecon and its military counterpart, the Warsaw Pact, faded into history (the Warsaw Pact was officially dissolved on July 1, 1991). However, the Wassenaar Arrangement on Export Controls

The modern day version of the military impairment case studies are episodes aimed at hampering a target country's efforts to develop weapons of mass destruction, most notably nuclear capabilities. The United States and Canada frequently used sanctions in the 1970s and 1980s to enforce compliance with nuclear nonproliferation safeguards. In 1974 Canada acted to prevent Pakistan from acquiring a reprocessing capability and tried to control the reprocessing of spent fuel in both India (Case 74-2) and Pakistan (Case 74-3) to guard against the production of nuclear weapons. The United States joined the Canadians in applying financial pressure on South Korea (Case 75-1) to forestall its purchase of a nuclear reprocessing plant. Subsequently the United States imposed sanctions on shipments of nuclear fuel and technology to South Africa (Case 75-3), Taiwan (Case 76-2), Brazil (Case 78-2), Argentina (Case 78-3), India (Case 78-4), and Pakistan (Case 79-2) in similar attempts to secure adequate multilateral surveillance of nuclear facilities or to prevent the acquisition of technologies that could contribute to nuclear weapons development.

These assorted efforts were highly successful with respect to Korea and Taiwan. But they played only a limited role in dissuading South Africa, Brazil, and Argentina from becoming nuclear powers and failed with respect to India and Pakistan. When India and Pakistan carried out nuclear tests in 1998, the United States barred certain commercial dealings with and foreign assistance to both countries, as mandated by the 1994 Glenn Amendment to the US Arms Export Control Act.[12]

The two most prominent and surprisingly successful cases concerning weapons of mass destruction are Iraq and Libya. UN-authorized sanctions denying Saddam Hussein unlimited access to Iraq's oil revenues, coupled with the periodic use of force, provided UN inspectors with enough leverage to find and destroy Iraq's stockpiles and facilities for producing chemical, biological, and nuclear weapons.[13] These accomplishments were not fully revealed, however, until after the US invasion of Iraq in 2003. Likewise, the surprise decision by Libyan President Muammar Gadhafi in 2003 to renounce weapons of mass destruction was partly influenced by his de-

for Conventional Arms and Dual-Use Goods and Technologies, initiated in December 1995 after the Cold War ended, is designed more narrowly to limit the export of weapons, including chemical and biological precursors, and therefore is not included as a case. See Smith and Udis (2001) for background on the Wassenaar Arrangement.

12. Case Summary S-3, which is included on a companion CD-ROM, details the history of US and other national efforts to use sanctions to curtail nuclear proliferation.

13. As the subsequent investigations of the Volcker Commission revealed, Saddam siphoned many billions of dollars through corrupt means from the UN Oil for Food Program. However, Saddam preferred to spend the money on his own palaces and on maintaining the Republican Guard and the secret police rather than on creating nuclear, chemical, or biological weapons of mass destruction.

sire to end the decade-old US sanctions and to gain access to American oil field technology and know-how. On the other side of the nuclear ledger, neither US sanctions nor the threat of UN action prevented India and Pakistan from joining the nuclear club, nor have they squelched Iran's and North Korea's nuclear ambitions.

Sanctions have been deployed to pursue a number of foreign policy goals other than those related to warfare and national security. Especially noteworthy is the frequent resort to sanctions in an effort to explicitly or implicitly change a target country's regime, usually in the context of a foreign policy dispute involving other issues.[14] During the Cold War these episodes often found a superpower pitted against a smaller and formerly friendly country gone "astray." US sanctions against Cuba (Case 60-3), the Dominican Republic (Case 60-1), Brazil (Case 62-1), and Chile (Case 70-1) illustrate this point. Sanctions contributed at least modestly to the overthrow of Rafael Trujillo in the Dominican Republic in 1961, of Brazilian President João Goulart in 1964, and of Chilean President Salvador Allende in 1973. On the other hand, Fidel Castro has not succumbed to more than four decades of US economic pressure. Prior to 1990 Castro received compensating aid from the Soviet Union; between 1990 and 2006, he received moral support from a number of countries in the hemisphere and elsewhere, partly as a backlash against the Helms-Burton Act of 1996, which sought to extend US sanctions extraterritorially. Castro has also received limited financial assistance from other countries, most notably Venezuela since President Hugo Chavez took office in 2004.

In the late 1970s, following a series of congressionally inspired initiatives and under the leadership of President Carter, human rights became a cause célèbre and priority goal of US sanctions policy. Repressive regimes in the Western Hemisphere and elsewhere found themselves increasingly under pressure to improve their human rights record. In some cases, these demands sought relatively minor changes in public policy; in others, however, the desired policy changes threatened the very existence of the regime. In the case of Nicaragua (Case 77-5), for example, withdrawal of economic and military assistance conveyed the message that the United States was ending its support for the Anastasio Somoza regime, thereby contributing to its downfall. However, US sanctions against the Alfredo Stroessner regime in Paraguay (Case 77-1) and the military regimes in Argentina (Case 77-3) and El Salvador (77-6) failed to change the behavior of these regimes. In the cases of Manuel Noriega in Panama (Case 87-1) and Raul Cédras in Haiti (Case 91-5), it took US military intervention to dis-

14. In the second edition, we labeled these episodes as "destabilization" cases. In this edition, we adopt the broader term "regime change" to encompass not only the explicit targeting of a particular foreign leader but also structural changes that imply new leadership, such as broad human rights demands and, in the 1990s, the embrace of democratic reforms.

lodge the autocrats. Likewise, sanctions played only a minor role in the electoral defeat of the Sandinistas in Nicaragua in 1990 (Case 81-1).

Until its implosion, the Soviet Union also picked on its neighbors, although less successfully. Every time the Soviet Union used sanctions in an effort to topple a rebellious government within the socialist bloc—Yugoslavia in 1948 and Albania in 1961—the effort failed. The only Soviet success came in the "Nightfrost Crisis" of 1958, when Finland was coerced into adopting a more pliant attitude toward Soviet policies. Since the collapse of the Soviet Union, Russia has not deployed sanctions to destabilize neighboring governments, but it has frequently used sanctions for narrower objectives.

Nevertheless, regime change broadly defined has been a recurring theme in the post–Cold War period, accounting for nearly half of the sanctions initiated during the 1990s. These cases primarily represent US and EU efforts to encourage democratic reforms or restore a democratic government following a coup. While regime change cases in the 1970s and 1980s were for the most part unilateral US initiatives targeting Latin American countries, new sanctions episodes in the 1990s were concentrated in Africa and frequently involved multiple sender countries (most often the United States and the European Union). Pressure by Western donors played a significant role in bringing about the first multiparty elections since independence in Malawi, ending the 30-year rule of President Hastings Kamuzu Banda (Case 92-3). Sanctions also made a modest contribution to the restoration of the democratic government in Niger in 2000 (Case 96-2). However, in the cases of Togo (Case 92-2), Equatorial Guinea (Case 92-4), Cameroon (Case 92-6), Burundi (Case 96-1), The Gambia (Case 94-4), and Ivory Coast (Case 99-2), success was elusive.

Since the early 1960s, sanctions have also been deployed to achieve relatively modest foreign policy goals compared with the pursuit of war, peace, and regime change. For example, sanctions have been used to settle expropriation claims, to counter drug lords, and to combat international terrorism (a modest goal until al Qaeda launched its attacks on September 11, 2001 in New York and Washington).

Since World War II, the United States has used sanctions nine times in its efforts to negotiate compensation for property expropriated by foreign governments, in cases with foreign policy overtones. However, expropriation claims have become less urgent in recent years; until the Helms-Burton Act of 1996, which targets claims against Cuba, the last recorded use of sanctions in an expropriation dispute was against Ethiopia (Case 77-8, commencing in 1977). In almost all the expropriation cases, the United States hoped to go beyond the claims issue and resolve conflicting political philosophies. This was true when the United States (in conjunction with the United Kingdom) pressured Iran with economic sanctions—

seeking to overthrow the regime of Prime Minister Mohammad Mussadiq in the early 1950s (Case 51-1)—and was the trigger for US efforts to undermine Castro in Cuba, Goulart in Brazil, and Allende in Chile.

Beginning in the 1980s, during a spike in the cocaine epidemic, the US Congress initiated a certification process to compel other countries to cooperate with the United States in its antidrug efforts. To date, the United States is the only country that imposes sanctions to punish drug-producing countries.[15] The certification process requires the US government to identify and compile a list of major transit and drug-producing countries. Inclusion on the list automatically triggers certain economic sanctions unless the president certifies that the country in question made every effort possible to cooperate with the United States or waives the sanctions for national security reasons. Certification was routinely granted for most countries in the 1980s, and the process mainly affected countries with which the United States had limited relations, such as Iran, Syria, and Afghanistan. The Bill Clinton administration, however, gave the certification process a higher profile. Despite protests by US oil companies, Nigeria was decertified for the first time in 1994. Mexico and Colombia were threatened annually with decertification. In 1996, after extensive debate within the US government, the United States decided to certify Mexico but decertify Colombia because of President Samper's alleged ties to the drug cartels.[16] Many Latin American leaders criticized this apparent double standard. The controversy intensified in 1997 when the administration, despite revelations of drug-related government corruption, again certified Mexico but denied certification to Colombia. Following years of relative quiet, the George W. Bush administration's decision to decertify Venezuela in 2005, amidst deteriorating bilateral relations, again triggered heavy criticism of the decertification process for its political overtones.

Antiterrorism has been another relatively modest—but increasingly important—policy goal the United States has sought through the imposition of economic sanctions.[17] A wave of international plane hijackings in the 1960s and 1970s, together with the massacre of Israeli athletes at the Munich Olympics in 1972 and the downing of Pan Am flight 103 over Scotland in 1988, focused world attention on terrorism. The hijacking problem was greatly reduced through international hijacking agreements, including one signed in 1973 by the United States and Cuba. Lethal terrorist raids, often funded by oil-rich, Islamic countries and individuals, have proven much harder to control. In 1980, following a congressional direc-

15. For more details on this history, see Case Summary S-4 on a companion CD-ROM.

16. In addition, the United States froze all known Colombian drug cartel assets (primarily Cali cartel assets) located in the United States.

17. For more detailed discussion of this topic, see Case Summary S-1 on a companion CD-ROM; Hufbauer, Schott, and Oegg (2001); and Hufbauer and Moll (2007).

tive, the US State Department branded four countries—Libya, Syria, Iraq, and South Yemen—as international outlaws because of their support of terrorist activities. The United States soon thereafter imposed sanctions on Libya and Iraq in an attempt to limit their activity as suppliers of military equipment to terrorist groups. Over the years, Cuba, North Korea, Iran, Sudan, and Afghanistan were added to the list of target countries on account of their support for terrorism. Iraq was removed from the list following the US invasion in 2003. Libya was removed from the list in 2006 following its implicit admission of responsibility for the Pan Am bombing and its payment of substantial compensation to the families of the victims.

In the 1990s the emergence of nonstate terrorist entities, particularly Osama bin Laden's al Qaeda network, prompted new measures against nonstate actors. In 1995 and 1996 legislative acts gave the executive branch the power to impose financial sanctions, including asset freezes and transfer prohibitions, upon specially designated terrorists (SDTs) disrupting the Middle East peace process and on foreign terrorist organizations (FTOs). Though these measures targeted al Qaeda members, the US Treasury did not identify any of their US assets prior to 2001.

Following the attacks on the World Trade Center and Pentagon on September 11, 2001, President Bush highlighted the importance of economic sanctions in the ensuing "war on terror." The United States has since cast a wider net in sanctioning nonstate terrorist entities and crafted sanctions policy to induce other countries to cooperate in the war on terror. Antiterrorism now ranks as the most serious objective within the modest goal category. We discuss this issue more fully in chapter 5.

The Bush administration sought to develop "the international financial equivalent of law enforcement's 'most wanted' list" by expanding the SDT scope to include terrorism not related to the Middle East peace process and taking additional measures to combat international money laundering under powers granted by the USA Patriot Act.[18] The Department of the Treasury established a foreign terrorist asset tracking center to identify and investigate the financial infrastructure of the international terrorist networks. In addition, the United Nations and other international organizations implemented similar measures to impose multilateral sanctions against terrorist financial flows. By expanding its counterterrorism tactics, the United States has sought to deny terrorists the means with which to commit atrocities rather than seek changes in the behavior of organizations whose raison d'être is inflicting terror.

The United States has also used sanctions policy to promote cooperation with its counterterrorism operations since September 11, 2001. Sanctions against state sponsors of terrorism have been complemented with positive economic inducements such as preferential trade measures, fa-

18. See Reuter and Truman (2004) for a detailed analysis of anti–money laundering policies in the United States and globally.

vorable loans, and in some cases the removal of existing sanctions as a reward for cooperation in the war against terrorism.

This brief review underlines the central role that economic sanctions have played in the conduct of US foreign policy since World War I. Of the 174 cases documented in table 1A.1, the United States, either alone or in concert with its allies, has deployed sanctions 109 times. Other significant users have been the United Nations (20), the United Kingdom (16 cases, frequently in cooperation with allies), the European Community/ European Union (14), the Soviet Union and since 1990 Russia (13 uses, usually against recalcitrant satellites and former republics of the USSR), and the Arab League and its members (4 uses of its oil muscle).[19]

Sanctions have been deployed more frequently in the post–World War II era. Table 1.1 summarizes the record, presenting first the number of sanctions episodes initiated in each five-year period beginning with 1911–15; second, the cumulative cost imposed by ongoing sanctions against target countries every fifth year beginning with 1915 (expressed as an annualized figure in current US dollars); and third, for comparison, the value of total world merchandise exports (expressed in current US dollars). The table indicates that the incidence of new cases has increased from less than 5 episodes per five-year period in the pre-1945 era to approximately 10 to 15 new episodes per five-year period in the post-1960 period. The number of new cases grew sharply in the early 1990s (34 new cases in 1991–95) but returned to post-1960 levels in the latter half of the decade (13 new cases in 1996–2000).

The annual cost imposed on target countries was relatively high in 1915 and 1920, on account of World War I; it fell markedly thereafter and has since risen from very low levels in the 1920s and 1930s to some $2 billion and higher in the post-1965 period. The aggregate cost of sanctions to target countries rose to almost $7 billion in 1980. That total was subsequently swamped by the single case against Iraq, which cost the target on average more than $15 billion annually. That burden accounts for slightly more than half of the most recent figure: Sanctions in place as of 2000 cost target countries about $27 billion annually.

Table 1.1 also shows that, although sanctions activity has grown, particularly in recent decades, it has expanded much more slowly than world merchandise trade, which grew more than 400-fold (in nominal terms) between 1915 and 2000. Compared with total world trade flows, the cost imposed by sanctions on target countries represents barely a ripple in the world economy. This statement is true even when taking into account the very large dollar cost of sanctions against Iraq.

19. The tallies for nations do not include cases where they participate only as members of an international organization. For example, the United Kingdom has been involved in cases where the sender is the European Union, League of Nations, or United Nations, but those are not included in the UK figure.

Table 1.1 Sanctions episodes initiated, cost to targets, and world exports, 1915–2000

Year	Number of cases initiated in past five years[a]	Sum of annual costs of ongoing cases[b] (billions of dollars)	Total world exports[c] (billions of dollars)
1915	1	0.84	15[d]
1920	2	0.45	n.a.
1925	2	0	25[e]
1930	0	0	30
1935	3	0.09	n.a.
1940	3	0.40	25[f]
1945	1	0.72	50
1950	8	1.09	65
1955	5	1.11	90
1960	10	1.74	125
1965	15	2.28	180
1970	4	2.44	300
1975	13	2.41	820
1980	25	6.81	1,880
1985	15	4.97	1,840
1990	20	28.90	3,330
1995	34	30.75	4,945
2000	13	27.21	6,375

n.a. = not available

a. The counts are based on table 1A.1; the figure for 2000, for example, represents cases initiated in 1996–2000.
b. The figures are sums of the net annualized cost (after offsets) to target countries of ongoing cases in that year.
c. Based on Yates (1959) for 1915 to 1940; United Nations, *Yearbook of International Trade Statistics* for 1945; and International Monetary Fund, *International Financial Statistics* for 1950 to 2000. All figures are in current dollars, rounded to the nearest $5 billion.
d. Extrapolated from 1913 data ($21 billion).
e. Extrapolated from average of 1926–29 data ($31.8 billion).
f. Extrapolated from 1938 data ($22.7 billion).

Sources: Tables 1A.1 and 4A.1 through 4A.5; Yates (1959); United Nations, *Yearbook of International Trade Statistics,* various issues; International Monetary Fund, *International Financial Statistics,* various issues.

Plan of the Book

Chapter 2 introduces the analytical framework and the explanatory variables that we use to examine each sanctions episode. We explain our methodology for defining a sanctions episode, its duration, and its outcome and provide an overview of the variables documented in the case studies.

In chapter 3 we examine several political variables and draw generalizations regarding their contribution to a successful outcome. We identify political variables that are possibly relevant to the five categories of policy goals: modest policy changes, regime change, disrupting military adventures, impairing military potential, and other major policy changes. We then highlight those political variables that appear to exert the strongest influence across a wide range of cases.

In chapter 4 we take a similar approach in analyzing the role of economic variables that might contribute to the success of a sanctions episode. We start by identifying several economic variables that have been identified in the literature for their possible relevance and then highlight those that seem to have the strongest influence.

In chapter 5 we examine new themes in the application of sanctions that have emerged since our second edition was published in 1990. With the end of the Cold War, the past 17 years have seen more activity by the United Nations, increased US resort to legislated sanctions at the federal and subfederal level, increasing concern for democracy and stability in Africa, and the introduction of targeted financial sanctions to isolate objectionable leaders. We discuss the nature of these changes and their implications for future sanctions policy.

Chapter 6 concludes the book, reporting on the results of our multivariate statistical analysis and summarizing the lessons we derive from the 174 case studies, which are presented on a companion CD-ROM. We distill past experience with economic sanctions in the 20th century and offer recommendations to guide policymakers in the 21st century.

Appendix 1A

Table 1A.1 Chronological summary of economic sanctions for foreign policy goals, 1914–2000

Case no.	Principal sender	Target country	Active years	Goals of sender country
14-1	United Kingdom	Germany	1914–18	Military victory
17-1	United States	Japan	1917–18	1) Contain Japanese influence in Asia 2) Persuade Japan to divert shipping to the Atlantic
18-1	United Kingdom	Russia	1918–20	1) Renew support for Allies in World War I 2) Destabilize Bolshevik regime
21-1	League of Nations	Yugoslavia	1921	Block Yugoslav attempts to wrest territory from Albania; retain 1913 borders
25-1	League of Nations	Greece	1925	Withdraw from occupation of Bulgarian border territory
32-1	League of Nations	Paraguay, Bolivia	1932–35	Settle the Chaco War
33-1	United Kingdom	USSR	1933	Release two British citizens
35-1	League of Nations, United Kingdom	Italy	1935–36	Withdraw Italian troops from Abyssinia
38-1	United States, United Kingdom	Mexico	1938–47	Settle expropriation claims
39-1	Alliance powers, United States	Germany, Japan	1939–45	Military victory
40-1	United States	Japan	1940–41	Withdraw from Southeast Asia
44-1	United States	Argentina	1944–47	1) Remove Nazi influence 2) Destabilize Peron government
46-1	Arab League	Israel	1946–	Create a homeland for Palestinians
48-1	United States	Netherlands	1948–49	Recognize Republic of Indonesia
48-2	India	Hyderabad	1948	Assimilate Hyderabad into India

48-3	USSR	United States, United Kingdom, France	1948–49	1) Prevent formation of a West German government 2) Assimilate West Berlin into East Germany
48-4	USSR	Yugoslavia	1948–55	1) Rejoin Soviet Camp 2) Destabilize Tito government
48-5	United States, CoCom	USSR, Comecon	1948–94	1) Deny strategic materials 2) Impair Soviet bloc military potential
49-1	United States, ChinCom	China	1949–70	1) Retaliation for communist takeover and subsequent assistance to North Korea 2) Impair military potential
50-1	United States, United Nations	North Korea	1950–	1) Impair military potential 2) Destabilize communist government
51-1	United States, United Kingdom	Iran	1951–53	1) Reverse the nationalization of oil facilities 2) Destabilize Mussadiq government
54-1	USSR	Australia	1954	Repatriate a Soviet defector
54-2	India	Portugal	1954–61	Assimilate Goa into India
54-3	Spain	United Kingdom	1954–84	Gain sovereignty over Gibraltar
54-4	United States, South Vietnam	North Vietnam	1954–74	1) Impede military effectiveness of North Vietnam 2) Retribution for aggression in South Vietnam
			1975–98	1) Account for MIAs 2) Withdraw from Cambodia 3) Improve human rights
56-1	United States	Israel	1956–83 (Intermittent episodes)	1) Withdraw from Sinai 2) Implement UN Resolution 242 3) Push Palestinian autonomy talks

(table continues next page)

Table 1A.1 Chronological summary of economic sanctions for foreign policy goals, 1914–2000 *(continued)*

Case no.	Principal sender	Target country	Active years	Goals of sender country
56-2	United States, United Kingdom, France	Egypt	1956	1) Ensure free passage through Suez canal 2) Compensate for nationalization
56-3	United States	United Kingdom	1956	Withdraw troops from Suez
56-4	United States	Laos	1956–62	1) Destabilize Prince Souvanna Phouma government 2) Destabilize General Phoumi government 3) Prevent communist takeover
57-1	Indonesia	Netherlands	1957–62	Control of West Irian
57-2	France	Tunisia	1957–63	Halt support for Algerian rebels
58-1	USSR	Finland	1958–59	Adopt pro-USSR policies
60-1	United States	Dominican Republic	1960–62	1) Cease subversion in Venezuela 2) Destabilize Trujillo government
60-2	USSR	China	1960–70	1) Retaliate for break with Soviet policy 2) Impair Chinese economic and military potential
60-3	United States	Cuba	1960–	1) Settle expropriation claims 2) Destabilize Castro government 3) Discourage Cuba from foreign military adventures
61-1	United States	Ceylon	1961–65	Settle expropriation claims
61-2	USSR	Albania	1961–65	1) Retaliation for alliance with China 2) Destabilize Hoxha government
61-3	United States, Western allies	German Democratic Republic	1961–62	Berlin Wall

62-1	United States	Brazil	1962–64	1) Settle expropriation claims 2) Destabilize Goulart government
62-2	United Nations	South Africa	1962–94	1) End apartheid 2) Grant independence to Namibia
62-3	USSR	Romania	1962–63	Limit economic independence
63-1	United States	United Arab Republic	1963–65	Cease military activity in Yemen and Congo
63-2	Indonesia	Malaysia	1963–66	Promote “Crush Malaysia” campaign
63-3	United States	Indonesia	1963–66	1) Cease “Crush Malaysia” campaign 2) Destabilize Sukarno government
63-4	United States	South Vietnam	1963	1) Ease repression 2) Remove Nhu 3) Destabilize Diem
63-5	United Nations, Organization of African Unity (OAU)	Portugal	1963–74	Free African colonies
64-1	France	Tunisia	1964–66	Settle expropriation claims
65-1	United States	Chile	1965–66	Roll back copper price increase
65-2	United States	India	1965–67	Alter policy to favor agriculture
65-3	United Nations, United Kingdom	Rhodesia	1965–79	Majority rule by black Africans
67-1	Nigeria	Biafra	1967–70	End civil war
68-1	United States	Peru	1968	Forgo aircraft purchases from France
68-2	United States	Peru	1968–74	Settle expropriation claims
70-1	United States	Chile	1970–73	1) Settle expropriations claims 2) Destabilize Allende government
71-1	United States	India, Pakistan	1971	Cease fighting in East Pakistan (Bangladesh)
71-2	United Kingdom	Malta	1971	Reinstitute defense agreement

(table continues next page)

Table 1A.1 Chronological summary of economic sanctions for foreign policy goals, 1914–2000 *(continued)*

Case no.	Principal sender	Target country	Active years	Goals of sender country
72-1	United States, United Kingdom	Uganda	1972–79	1) Retaliation for expelling Asians 2) Improve human rights 3) Destabilize Amin government
73-1	Arab League	United States, Netherlands	1973–74	1) Retaliation for support for Israel in October war 2) Restore pre-1967 Israeli borders
73-2	United States	South Korea	1973–77	Improve human rights
74-1	United States	Turkey	1974–78	Withdraw Turkish troops from Cyprus
74-2	Canada	India	1974–76	1) Deter further nuclear explosions 2) Apply stricter nuclear safeguards
74-3	Canada	Pakistan	1974–76	1) Apply stricter safeguards to nuclear power plants 2) Forgo nuclear reprocessing
75-1	United States, Canada	South Korea	1975–76	Forgo nuclear reprocessing
75-2	United States	USSR	1975–94	Liberalize Jewish emigration
75-3	United States	South Africa	1975–82	1) Adhere to nuclear safeguards 2) Avert explosion of nuclear device
75-4	United States	Kampuchea	1975–79	1) Improve human rights 2) Deter Vietnamese expansionism
75-5	United States	Chile	1975–90	1) Improve human rights and resolve Letelier case 2) Restore democracy
76-1	United States	Uruguay	1976–81	Improve human rights

76-2	United States	Taiwan	1976–77	Forgo nuclear reprocessing
76-3	United States	Arab League	1976–	Antiboycott restrictions on US firms
77-1	United States	Paraguay	1977–81	Improve human rights
77-2	United States	Guatemala	1977–2005	Improve human rights
77-3	United States	Argentina	1977–83	Improve human rights
77-4	Canada	Japan, European Community	1977–78	Strengthen nuclear safeguards
77-5	United States	Nicaragua	1977–79	1) Destabilize Somoza government 2) Improve human rights
77-6	United States	El Salvador	1977–81	Improve human rights
77-7	United States	Brazil	1977–84	Improve human rights
77-8	United States	Ethiopia	1977–92	1) Settle expropriations claims 2) Improve human rights
78-1	China	Albania	1978–83	Retaliation for anti-Chinese rhetoric
78-2	United States	Brazil	1978–81	Adhere to nuclear safeguards
78-3	United States	Argentina	1978–82	Adhere to nuclear safeguards
78-4	United States	India	1978–82	Adhere to nuclear safeguards
78-5	United States	USSR	1978–80	Liberalize treatment of dissidents—e.g., Shcharansky
78-6	Arab League	Egypt	1978–83	Withdraw from Camp David process
78-7	China	Vietnam	1978–88	Withdraw troops from Kampuchea
78-8	United States	Libya	1978–2004	1) Terminate support of international terrorism 2) Destabilize Gadhafi government 3) Stop pursuit of chemical, nuclear weapons

(table continues next page)

Table 1A.1 Chronological summary of economic sanctions for foreign policy goals, 1914–2000 *(continued)*

Case no.	Principal sender	Target country	Active years	Goals of sender country
79-1	United States	Iran	1979–81	1) Release hostages 2) Settle expropriation claims
79-2	United States	Pakistan	1979–2001	Adhere to nuclear safeguards; stop pursuit of nuclear weapons
79-3	Arab League	Canada	1979	Deter planned move of embassy in Israel from Tel Aviv to Jerusalem
79-4	United States	Bolivia	1979–82	1) Improve human rights 2) Deter drug trafficking
80-1	United States	USSR	1980–81	1) Withdraw Soviet troops from Afghanistan 2) Impair Soviet military potential
80-2	United States	Iraq	1980–2003	1) Terminate support of international terrorism 2) Renounce weapons of mass destruction
81-1	United States	Nicaragua	1981–90	1) End support for El Salvador rebels 2) Destabilize Sandinista government
81-2	United States	Poland	1981–87	1) Lift martial law 2) Free dissidents 3) Resume talks with Solidarity
81-3	United States	USSR	1981–82	1) Lift martial law in Poland 2) Cancel USSR-Europe pipeline project 3) Impair Soviet economic and military potential
81-4	European Community	Turkey	1981–86	Restore democracy

82-1	United Kingdom	Argentina	1982	Withdraw troops from Falklands Islands
82-2	Netherlands	Suriname	1982–91	1) Improve human rights 2) Limit alliance with Cuba and Libya 3) Reverse coup
82-3	South Africa	Lesotho	1982–86	1) Return refugees suspected of anti-state activities 2) Destabilize Chief Jonathan
83-1	Australia	France	1983–86, 1995–96	Stop nuclear testing in South Pacific
83-2	United States	USSR	1983	Retaliation for downing of Korean airliner
83-3	United States	Zimbabwe	1983–88	1) Temper opposition in United Nations to US foreign policy 2) Resume food shipments to Matabeleland 3) Apologize for anti-US rhetoric
83-4	United States, Organization of Eastern Caribbean States	Grenada	1983	Destabilize Bishop-Austin regime
83-5	United States	Romania	1983–89, 1990–93	1) Improve human rights 2) Ease restrictions on emigration 3) Establish democracy, elections
84-1	United States	Iran	1984–	1) Terminate support for international terrorism 2) End war with Iraq 3) Renounce weapons of mass destruction
84-2	United States	Lebanon	1984–97	1) Reaction to hostage taking by militias 2) Disarm Hezbollah
85-1	United States, British Commonwealth	South Africa	1985–91	End apartheid

(table continues next page)

Table 1A.1 Chronological summary of economic sanctions for foreign policy goals, 1914–2000 *(continued)*

Case no.	Principal sender	Target country	Active years	Goals of sender country
86-1	United States	Syria	1986–	Terminate support for international terrorism
86-2	United States	Angola	1986–92	1) Expel Cuban troops 2) Opposition to Marxist government
86-3	Greece	Turkey	1986–99	1) Renounce claims to Aegean Island 2) Withdraw troops from Cyprus 3) Improve human rights
86-4	France	New Zealand	1986	Repatriation of French agents
87-1	United States	Panama	1987–90	Destabilize Noriega
87-2	United States	Haiti	1987–90	1) Improve human rights 2) Restore democracy 3) Stop drug smuggling
87-3	United States	El Salvador	1987–88	Reverse amnesty decision
87-4	India, Australia, New Zealand	Fiji	1987–2001	1) Restore democracy 2) Modify constitution to protect minority rights
88-1	United States, European Union, Japan	Burma	1988–	1) Improve human rights 2) Restore democracy
88-2	United States, United Kingdom, United Nations	Somalia	1988–	1) Improve human rights 2) End civil war
89-1	India	Nepal	1989–90	Reduce ties with China
89-2	United States	China	1989–	1) Retaliation for Tiananmen Square 2) Improve human rights

89-3	United States	Sudan	1989–	1) Improve human rights 2) End civil war 3) Restore democracy
89-4	Turkey, Azerbaijan	Armenia	1989–	Withdraw from Nagorno-Karabakh
90-1	United States, United Nations	Iraq	1990–91	1) Withdraw from Kuwait 2) Release hostages
			1991–2003	1) Renounce weapons of mass destruction 2) Destabilize Hussein government (US goal only)
90-2	United States	El Salvador	1990–93	1) Improve human rights 2) End civil war
90-3	United States, Western donors	Kenya	1990–93	1) End political repression 2) Establish democracy
90-4	United States, Belgium, France	Zaire	1990–97	Establish democracy
90-5	USSR	Lithuania	1990	Revoke independence declaration
90-6	United States, Saudi Arabia	Jordan, Yemen et al.	1990–97	Enforce UN embargo vs. Iraq
91-1	United Nations, United States, European Community	Yugoslavia	1991–2001	End civil war in Bosnia, Croatia
91-2	United States	China	1991–	Stop weapons proliferation
91-3	United States	Thailand	1991–92	Restore constitutional regime
91-4	United States, Netherlands	Indonesia	1991–97	1) Improve human rights 2) End conflict, human rights violations in East Timor
			1999–2002	Independence for East Timor
91-5	United States, United Nations, OAS	Haiti	1991–94	Restore democracy
91-6	United States, European Community	USSR	1991	Block coup, restore Gorbachev government

(table continues next page)

Table 1A.1 Chronological summary of economic sanctions for foreign policy goals, 1914–2000 *(continued)*

Case no.	Principal sender	Target country	Active years	Goals of sender country
91-7	USSR/Russia	Turkmenistan	1991–95	Increase rights of Russian minority
91-8	United States	Peru	1991–95	1) Improve human rights 2) Promote democracy
92-1	Economic Community of West African States, United Nations	Liberia	1992–98 2000–06	End civil war End support for the Revolutionary United Front in Sierra Leone
92-2	EC/EU, France, Germany	Togo	1992–	1) Establish democracy 2) Improve human rights
92-3	United States, United Kingdom	Malawi	1992–93	1) Establish democracy 2) Improve human rights
92-4	European Union, Spain	Equatorial Guinea	1992–2000	1) Establish democracy 2) Improve human rights
92-5	European Union	Algeria	1992–94	Promote democracy
92-6	United States	Cameroon	1992–98	1) Establish democracy 2) Improve human rights
92-7	United States	Azerbaijan	1992–2002	End Armenia embargo
92-8	United Nations, United States, Germany	Cambodia, Khmer Rouge	1992–	1) Ban Khmer Rouge 2) Establish democracy
92-9	USSR/Russia	Estonia	1992–99	Increase rights of Russian minority
92-10	China	France	1992–94	Cancel arms sales to Taiwan
92-11	United States	Nicaragua	1992–95	1) Strengthen civil control over military 2) Settle expropriation claims
92-12	United Nations	Libya	1992–2003	Extradite Pan Am suspects

92-13	USSR/Russia	Latvia	1992–98	Increase rights of Russian minority
93-1	United States, United Nations	North Korea	1993–94, 2002–	Renounce nuclear weapons
93-2	United States, European Union	Guatemala	1993	Reverse coup
93-3	United Nations	Angola, UNITA	1993–2002	1) End civil war 2) Promote democracy
93-4	United States, European Union	Nigeria	1993–98	1) Improve human rights 2) Establish democracy 3) Stop drug trafficking
93-5	United States	Sudan	1993–	End support for international terrorism
93-6	USSR/Russia	Ukraine	1993–97	1) Recognize Russian control over Black Sea fleet 2) Relinquish nuclear weapons
93-7	USSR/Russia	Kazakhstan	1993–96	1) Secure nuclear weapons and military basing rights 2) Autonomy for ethnic Russians 3) Rights regarding Kazakh energy resources
94-1	Greece	Macedonia	1994–95	Change name of nation
94-2	Greece	Albania	1994–95	Release jailed ethnic Greek leaders
94-3	United Nations, United States	Rwanda	1994–95	Stop civil war
94-4	United States, European Union, Japan	The Gambia	1994–98	Restore democracy
95-1	United States	Peru, Ecuador	1995–98	End border conflict
95-2	European Union	Turkey	1995	Improve human rights
96-1	East African members of OAU	Burundi	1996–99	Restore democracy

(table continues next page)

Table 1A.1 Chronological summary of economic sanctions for foreign policy goals, 1914–2000 *(continued)*

Case no.	Principal sender	Target country	Active years	Goals of sender country
96-2	United States, European Union	Niger	1996–2000	Restore democracy
96-3	United States, Western donors	Zambia	1996–98	1) Improve human rights 2) Constitutional reform
96-4	United States	Colombia	1996–98	1) Stop drug trafficking 2) Improve human rights
96-5	United States, Mercosur	Paraguay	1996	Deter coup attempt
97-1	United Nations, Economic Community of West African States	Sierra Leone	1997–2003	Stop civil war
98-1	United States	India	1998–2001	1) Retaliate for nuclear test 2) Constrain nuclear program
98-2	United States, European Union	Yugoslavia, Serbia	1998–2001	1) Stop aggression in Kosovo 2) Destabilize Milosevic
98-3	Turkey	Italy	1998–99	Extradite leader of the Kurdish Workers' Party (PKK)
99-1	United States, United Nations	Afghanistan	1999–2002	Extradite Osama bin Laden
99-2	United States, European Union, France	Ivory Coast	1999–2002	Restore democracy
99-3	United States, Japan	Pakistan	1999–2001	Restore democracy
00-1	United States	Ecuador	2000	Prevent coup attempt

S-1	United States	Countries supporting international terrorism	1972–	Overview
S-2	United States	Countries violating human rights	1973–	Overview
S-3	United States and Canada	Countries pursuing nuclear weapons option	1974–	Overview
S-4	United States	Drug-producing countries	1988–	Overview
97-2[a]	New York, California	Swiss banks	1997–98	Restitution of dormant bank accounts and other assets of Holocaust victims

ChinCom = China Committee
CoCom = Coordinating Committee for Multilateral Export Controls
Comecon = Council for Mutual Economic Assistance
EC/EU = European Community/European Union
Mercosur = Mercado Común del Sur (Southern Common Market)
UNITA = National Union for the Total Independence of Angola

a. Case 97-2: New York, California v. Swiss Banks was not included in our statistical analysis since neither the sender nor the target is a federal government. Likewise, this case is not included in the tabulations in the following chapters. However, for the interest of readers, the case is included on a companion CD-ROM.

Note: This table summarizes 174 cases that were used in our statistical analysis, plus four summary cases (S-1, S-2, S-3, and S-4) and one state/local level case (Case 97-2). All these cases, plus the post-2000 episodes listed in table 1A.2, are included on a companion CD-ROM. However, the summaries (S-1, S-2, S-3, and S-4), Case 97-2, and the 13 post-2000 episodes are not included in the statistical analysis in appendix A or tabulations in subsequent chapters.

Table 1A.2 Post-2000 sanctions episodes

Sender country	Target country	Years	Background and objectives	Resolution
European Union, United States	Haiti	2001–05	The European Union suspended government-to-government economic assistance to Haiti in January 2001 after the opposition party boycotted Haiti's November 2000 elections. The United States blocked $500 million in international loans. Rebels took control of much of the country in February 2004, and President Jean-Bertrand Aristide went into exile. US and UN peacekeeping troops intervened to quell the ensuing violence.	In July 2004 the United States resumed aid to support the Haitian people through the Interim Cooperation Framework. The European Union lifted its sanctions in September 2005 after the interim government made efforts to improve the human rights situation. Haiti conducted a successful presidential election in February 2006.
United States	ICC signatories	2002–	Certain forms of economic assistance are prohibited to signatories that do not sign Article 98 agreements exempting US personnel from prosecution in the International Criminal Court (ICC). The assistance that is supposed to be denied potentially affects a number of countries. For example, 12 US allies in the war on terror may lose around $327 million in fiscal year 2006.	
European Union, United States	Zimbabwe	2002–	In February 2002 the European Union imposed an embargo on arms sales, on military assistance, and on the supply of equipment capable of being used for internal repression, as well as a travel ban and an asset freeze affecting President Robert Mugabe and	

			his top 19 officials. The measures were triggered by Mugabe's repression of the political opposition and refusal to accept EU election observers. Five days later, the United States barred Mugabe and senior members of his government and their families from entering the United States. In July 2002 the European Union extended its measures to include 52 more government officials. In March 2003 US President George W. Bush issued an executive order barring financial transactions with Mugabe and 76 other Zimbabwean officials. In March 2004 the United States blacklisted seven companies with ties to the Mugabe regime.	
United States	Guinea Bissau	2003–04	The United States imposed sanctions in response to a coup in September 2003.	The United States lifted sanctions after generally free and fair legislative elections were held in 2004.
African Union, European Union, United States	Central African Republic	2003–05	The European Union opened consultations with the Central African Republic (CAR) in June 2003, in the aftermath of the military coup of 15 March 2003. In December 2003 the European Union partially restricted cooperation with and aid to the CAR. The sanctions applied to road building projects and macroeconomic aid under the 9th European Development Fund. Restoration of aid was contingent upon a return to democracy and the rule of law.	The European Union lifted sanctions on 1 July 2005 after the CAR held presidential and legislative elections in March and May of 2005, respectively, which were recognized as generally free and fair by the African Union, the European Union, and the United States.

(table continues next page)

Table 1A.2 Post-2000 sanctions episodes *(continued)*

Sender country	Target country	Years	Background and objectives	Resolution
France, United Nations	Ivory Coast	2004–	In November 2004 the government broke an 18-month cease fire by attacking rebels controlling the northern half of the country and a French military camp. France retaliated by destroying most of the government's military aircraft, and the United Nations Security Council unanimously imposed an arms embargo upon the nation. Some 10,000 UN and French troops were dispatched to Ivory Coast, but they were not expected to be effective in monitoring the embargo. In February 2006, a UN Security Council panel imposed a 12-month travel ban and asset freeze on three Côte d'Ivoire politicians viewed as obstacles to peace.	
United Nations	Democratic Republic of the Congo	2003–	In 2003 the United Nations imposed an arms embargo on the Democratic Republic of the Congo (DRC) and expanded the peacekeeping force in the DRC in response to tribal fighting in the northeast. Later, the UN Security Council passed resolution 1596, which extended the arms embargo and imposed a travel ban and asset freeze on violators. The UN sanctions regime has been kept in place due to continuous arms smuggling.	
European Union	Guinea	2005–	In April 2005 the European Union reduced its disbursement of aid to Guinea through the 9th European Development Fund (2002–07) by 65 million euros. The European Union expressed concern about	

			the integrity of elections and political processes in Guinea and continued to fund programs designed to strengthen civil society and political transparency.
European Union, Switzerland, United States	Uzbekistan	2005–	In October 2005 the European Union banned arms sales to Uzbekistan and travel to the European Union by Uzbek officials in response to that country's refusal to allow an international investigation into the government's crackdown on a protest in May 2005. The crackdown was reported to have killed hundreds of unarmed people. Switzerland adopted a policy emulating the EU restrictions in January 2006. The United States blocked a payment of $23 million for two years' usage of an Uzbek air base to which it was subsequently denied access.
European Union, United States	Belarus	2006–	Both the European Union and the United States dismissed as fraudulent a March 2006 presidential election that was easily won by Alexander Lukashenko, who has been head of state since 1994. Each took steps to impose travel restrictions and asset freezes upon Lukashenko and officials who collaborated in electoral manipulation.
European Union, Israel, United States	Hamas-led Palestinian Authority	2006–	The United States and the European Union imposed financial sanctions upon the Palestinian government after a surprise electoral victory in January 2006 by Hamas, which the US government considers a terrorist organization. The senders demanded that Hamas renounce violence, recognize Israel, and abide by past

(table continues next page)

Table 1A.2 Post-2000 sanctions episodes *(continued)*

Sender country	Target country	Years	Background and objectives	Resolution
			commitments made by the Palestinian Authority. To further these goals, the United States and the European Union stopped their aid flows and the United States pressured banks in neighboring countries to freeze transfers to the Palestinian Authority.	
Russia	Georgia	2006–	In April 2006 Russia announced an import ban on Georgia's key agricultural exports due to hostile rhetoric toward Russia. In response, Georgia arrested four Russian servicemen and announced it would block Russia's World Trade Organization accession until sanctions were lifted. Russia halted all transport to and from Georgia, deported more than 1,000 illegal immigrants, and increased the price of oil exported to Georgia. Bilateral talks have been held; more are scheduled.	
Australia, European Union, New Zealand, United States	Fiji	2006–	In response to a military attempt to overthrow the elected government in Fiji, the United States denied $3 million aid to Fiji; Australia and New Zealand suspended their military ties with Fiji, imposed travel sanctions and suspended aid. The European Union announced its intention to suspend assistance. Power was then returned to President Ratu Josefa Iloilo, who in turn appointed coup leader Commodore Frank Bainmarama as prime minister. Australia and New Zealand withdrew only their trade sanctions and the European Union warned Fiji of the potential suspension of aid.	

Note: These 13 sanctions episodes are not included in our statistical analysis but are included on a companion CD-ROM.

Table 1A.3 Selected pre–World War I episodes of economic sanctions for foreign policy goals

Sender country	Target country	Active years	Background and objectives	Resolution	Source
Athena	Megara	Circa 432 BC	Pericles issued the Megarian decree limiting entry of Megara's products into Athenian markets in retaliation for Megara's attempted expropriation of territory and the kidnapping of three women.	The decree contributed to the Peloponnesian War between Athens and Sparta.	de Ste. Croix (1972, 252–60); Fornara (1975, 222–26)
American colonies	Britain	1765	England passed the Stamp Act as a revenue measure; colonies boycotted English goods.	Britain repealed the Stamp Act in 1766.	Renwick (1981, 5)
	Britain	1767–70	England passed Townshend Acts to cover salaries of judges and officials; colonies boycotted English goods.	Britain repealed the Townshend Acts except on tea; the tea tax gave pretext for the Boston Tea Party of 1774 and calling of the Continental Congress.	Renwick (1981, 5)
Britain and France	France and Britain	Napoleonic Wars: 1793–1815	British goal: Contain French expansion and defeat Napoleon. French goal: Deprive Britain of grain through the Continental System and defeat England.	"The experience of economic warfare during this period is inconclusive as to its possible effects when applied with more systematic organization." One result of sanctions was French development of sugar beet cultivation, anticipating development of substitutes in later war.	Jack (1941, 1–42)

(table continues next page)

Table 1A.3 Selected pre–World War I episodes of economic sanctions for foreign policy goals *(continued)*

Sender country	Target country	Active years	Background and objectives	Resolution	Source
United States	Britain	1812–14	United States embargoed British goods in response to British Naval Acts limiting US trade with France. The total embargo, which evolved out of the Non-Intercourse Acts of 1809, followed an ineffective embargo imposed from 1807 to 1809.	The acts were revoked, but the United States, not knowing of the revocation, declared war two days later. The War of 1812 ensued.	Knorr (1977, 101–102)
Britain and France	Russia	Crimean War: 1853–56	Britain and France blockaded the mouth of the Danube River so the Russian army could not receive supplies by sea.	Russia was defeated and the partition of Turkey prevented.	Oppenheim (1921, 514)
US North	Confederate states	Civil War: 1861–65	"In seapower, railroads, material wealth and industrial capacity to produce iron and munitions, the North was vastly superior to the South. This disparity became even more pronounced as the ever tightening blockade gradually cut off the Confederacy from foreign imports." (Matloff 1969)	The South lost. "Attrition and blockade had scuttled the Confederate capacity. . . ." (Leckie 1968)	Leckie (1968, 513); Matloff (1969, 192)
France	Germany	Franco-Prussian War: 1870–71	France declared war on Germany to prevent emergence of a unified German state. France blockaded the German coast and even blockaded three of its own ports that had been occupied by the Germans.	The German army prevailed despite supply problems.	Oppenheim (1921, 515)

France	China	Indochina War: 1883–85	At war with China over the Vietnamese territory of Annam, France declared rice to be contraband because of its importance to the Chinese population.	China ceded to France control over the Annamese territory.	Oppenheim (1921, 554)
United States	Spain	Spanish-American War: 1898	Matloff (1969): "To the extent the United States had a strategy for the conduct of the war against Spain in the Caribbean, it consisted of maintaining a naval blockade of Cuba while native insurgent forces carried on a harassing campaign against Spanish troops on the island." A companion blockade of the Philippines was intended to deny Spain revenues from that colony.	The United States obtained independence for Cuba and, after occupying the Philippines and Puerto Rico, forced Spain to cede those territories and Guam to the United States for $20 million.	Matloff (1969, 324–26); Leckie (1968, 566)
Britain	Dutch South Africa	Boer War: 1899–1902	The British denied articles of contraband to the Boers.	The Boers were eventually overwhelmed and South Africa was added to the British Empire.	Jack (1941, 73)
Russia	Japan	Russo-Japanese War: 1904–05	Russia declared rice, all types of fuel, and cotton as contraband.	Following military defeat, Russia ceded portions of its own territory to Japan and recognized Korea as within Japan's sphere of influence.	Oppenheim (1921, 454)
Italy	Turkey	1911–12	Italy used a limited blockade as part of its campaign to acquire Libya.	Italy acquired Libya from the Ottoman Empire.	Dupuy and Dupuy (1970, 926)

2

Analyzing the Utility of Sanctions

While some observers continue to argue that "sanctions never work," we agree with most scholars that the key question is when, not whether, sanctions work. What types of goals are relatively more likely to be advanced with economic sanctions? Which targets are most vulnerable? How should sanctions be imposed to maximize effectiveness? In this chapter we describe the framework we use to address these questions, as well as the explanatory variables we include in that framework. First, however, we summarize the key parameters that define a sanctions episode and its outcome.

Anatomy of a Sanctions Episode

Analysts of sanctions vary widely on how they define the relevant actors and on what specific tools may be counted as economic sanctions. In addition, a sanctions *episode* has a time dimension that must be defined. Finally, any assessment of the utility of economic sanctions depends critically on the standard against which it is judged. We offer our definitions here.

Senders and Targets

We use the term "sender" to designate the country (or international organization) that is the principal author of the sanctions episode. More than one country may be engaged in the campaign, but usually a single coun-

try takes the lead and brings others along. The leader may enlist support through bilateral consultations or, less frequently, through an international organization—the League of Nations, the United Nations, or the Organization of American States, for example. In a few instances, two countries, or a country and an international organization, may share leadership, and in these cases both are listed as sender countries in table 1A.1. Our case summaries concentrate on the motives and actions of the sender country (or organization), with separate mention made of the supporting cast.

We use the term "target" to designate the country that is the immediate object of the episode. On occasion, sanctions may be aimed at two or more countries—for example, the World War II sanctions directed against Germany and Japan (Case 39-1). Other examples may be found in cases where the sender seeks to settle a border dispute between two or more parties, as when the League of Nations imposed sanctions against Bolivia and Paraguay during the Chaco War of the 1930s.

The lessons of a sanctions episode can also (and importantly) be intended to deter the leaders of other countries who might be contemplating objectionable policies similar to those of the target—for example, engaging in terrorism, undertaking a nuclear or biological weapons program, or embarking on a military adventure. However, our analysis concentrates on the response of the immediate targets. We do not underestimate the exemplary power of forceful action, but it is inherently difficult to know when a good thrashing of one wrongdoer deters bystanders from committing similar misdeeds.[1]

Finally, domestic constituencies may be a "target," to the extent that a president or prime minister uses sanctions to respond to political demands to "do something." Domestic motivations for imposing economic sanctions are discussed further in the section below on foreign policy goals. But domestic constituencies are clearly not the intended target of the economic impact of sanctions, though affected businesses often complain bitterly about the costs they must bear. Thus, in terms of targets, we limit our analysis to the impact on and responses of the country against which sanctions are imposed.

Types of Economic Sanctions

A sender country tries to inflict costs on its target in three main ways: by limiting exports, by restricting imports, or by impeding the flow of fi-

1. In a recent study, Ioana Petrescu (2007), using a probit model to analyze our dataset, has estimated that economic sanctions, imposed on one of the parties in an episode involving militarized conflict, diminished the likelihood that the targeted actor, or another actor in the same geographic vicinity or with similar military capabilities, would participate in a different military conflict within the next five years by between 9 and 12 percent. This study appears to be the first quantitative study of the deterrence hypothesis.

nance (commercial finance, World Bank and International Monetary Fund credits, and bilateral aid), including by freezing or seizing target-country assets within the sender's control. Most of the cases we have studied involve some combination of trade and financial sanctions. Though still relatively rare, asset freezes and travel bans targeted at individuals responsible for undesirable behavior are gaining popularity with senders who want to avoid injury to ordinary citizens, who have little say in a target country's policies.

Trade sanctions engender costs to the target country in terms of lost export markets, denial of critical imports, lower prices received for embargoed exports, and higher prices paid for substitute imports. In a third of the cases studied, both export and import controls have been employed. In instances where only one or the other is invoked, export controls are almost always preferred to restrictions on imports. Exports have been restricted in such highly publicized cases as the Arab oil embargo of 1973–74 (Case 73-1), President Jimmy Carter's cutoff of grain shipments to the Soviet Union (Case 80-1), and the Soviet Union's embargo on Lithuania in the wake of Lithuania's declaration of independence (Case 90-5). One of the few examples of the use of import controls alone was the Soviet embargo on wool imports from Australia in 1954 in an unsuccessful attempt to force the return of a Soviet diplomat who had defected (Case 54-1). Several decades later, China froze imports from France in protest over French arms sales to Taiwan (Case 92-10).

Why have import controls been used less often? An important reason appears to be that the United States, which has been the primary user of sanctions since World War II, has only limited legal authority to impose import controls for foreign policy reasons. Under current legislation, the US president can only impose broad import limitations pursuant to a presidential declaration under section 232 of the Trade Expansion Act of 1962 or under the International Emergency Economic Powers Act of 1977 (IEEPA). A 1985 provision gives the president authority to ban imports from countries that support or harbor terrorists or terrorist organizations.[2] To date, the United States has invoked this provision only once: against Iran in 1987 (Case 84-1).

Prior to 1985, the United States rarely imposed import sanctions, since a finding of a national security threat or other national emergency was necessary to do so. The most notable cases were against Cuba (Case 60-3), Iran in 1979–80 (Case 79-1), and Libya (Case 78-8) pursuant to a 1975 national security finding under section 232 involving oil imports. In both cases, limited export and import controls were soon replaced with comprehensive trade and financial sanctions using authority under IEEPA. In

2. Section 505 of the International Security and Development Cooperation Act of 1985. In addition, section 504 of the statute provides specific authority to restrict Libyan imports. See Carter (1988, 111).

fact, in contrast to some of the literature predicting that policymakers will use sanctions to satisfy protectionist economic interests, import sanctions have rarely been used in this way.[3] The congressionally imposed sanctions against South Africa (Case 85-1), which were passed over a presidential veto in 1985, are the exception, targeting bans on the import of South African coal, iron and steel, textiles and apparel, and agricultural products but not reaching gold, uranium, platinum, chromium, and other exotic minerals.[4] Following the more normal pattern when import controls are used at all, Presidents Ronald Reagan and George H. W. Bush invoked IEEPA to impose comprehensive embargoes against Nicaragua in 1985 (Case 81-1) and Iraq in 1990 (Case 90-1).

Target countries are often hit with the interruption of foreign assistance or other official finance and less often with restrictions on private lending or investment. Financial sanctions were used alone or in combination with trade controls in 153 of our 204 observations. When a poor country is the target and economic or military aid is the tool, the funds withheld are often irreplaceable. The United States, for example, manipulated food and economic aid in the 1960s to great effect against the United Arab Republic (Case 63-1), India (Case 65-2), and Chile (in Cases 65-1 and 70-1). In the 1970s the United States used a carrot-and-stick approach with military aid, possibly helping to improve the human rights situation in Brazil (Case 77-7) but failing to move Turkey out of Cyprus (Case 74-1).

Senders might expect financial sanctions to be more effective than trade sanctions for several reasons (Elliott 2002). First, financial sanctions should be relatively easier than trade sanctions to enforce because governments and international financial institutions are important providers or guarantors of financial flows, especially with respect to poorer developing countries, and because private financial markets tend to be relatively more regulated than goods markets. Also, a smaller number of larger players are likely to be involved in international finance than in international trade, which means financial activities are more easily monitored and penalties for violations of government policy more readily levied.

Complementing stronger enforcement on the sanctioner's side, defensive strategies aimed at evading financial sanctions may be more difficult and more expensive than smuggling or stockpiling to evade trade sanctions. Development assistance or military aid, on soft terms, for example,

3. In their article, William Kaempfer and Anton Lowenberg (1988) argued that sanctions are likely to restrict imports from the target country more than exports to the target since producers are a more cohesive and politically effective interest group.

4. A major issue in the Export Administration Act debate of 1983–84 was whether to grant the president authority to control imports as a means of achieving foreign policy goals in "nonemergency" situations. The Reagan administration did not want this additional authority, fearing that the forces of protection would champion its misuse. In chapter 5 of his authoritative study, Barry Carter (1988) stresses the anomaly of narrow authority for import controls.

may be irreplaceable unless a "black knight" is ready and willing to provide offsetting assistance. Black knights were a significant factor in undermining US sanctions in a number of cases during the Cold War, most notably Cuba, but they are less likely to be a factor today. Defensive strategies for dealing with private-sector financial sanctions may also be difficult or expensive to invoke. For example, a moratorium on debt servicing or, more seriously, debt repudiation could impede the target's access to international credit long after sanctions are lifted. It is also difficult for the regime, or elites close to it, to reap illicit gains from evading financial sanctions, but profitable evasion often occurs via smuggling in the face of trade sanctions.

Market forces may also reinforce rather than undermine the effects of financial sanctions, but the contrary usually happens with trade sanctions. Under a sanction that bars exports to the target, for example, the induced scarcity leads to price increases that, in turn, encourage smugglers to evade the sanctions. To be sure, there is a risk of being caught and punished, but that risk is often small. By contrast, bankers or investors risk not only legal redress but also losing their capital. Financiers typically are repaid or reap their gains over time and thus tend to be more risk averse than goods traders, who can demand payment up front. Risk aversion also raises the possibility of "privately enforced" financial sanctions, when political instability or the effects of other sanctions raise the perception of risk so that lenders and investors shun the target even in the absence of formal government sanctions. This appears to have happened in South Africa in the mid-1980s.

Finally, in modern market economies, most trade and other economic activities depend on access to finance. Though barter is still used to some degree among cash-poor countries, significant restrictions on financial flows are likely to impede trade flows while avoiding the difficulties involved in enforcing trade sanctions. Similarly, a ban on imports from the target country may be thought of as a form of financial sanction since it deprives the target of hard currency and thus may have follow-on effects on the target's ability to buy foreign goods even in the absence of formal export sanctions. For example, in the Iraq case (90-1), it would have mattered little if sanctions on exports to Iraq were lifted as long as the oil boycott was maintained because Iraq had few other resources with which to buy goods. Similarly, the UN-mandated boycott of Angolan diamonds not certified by the Angolan government was intended to deny financial resources to the National Union for the Total Independence of Angola (UNITA) rebels.

Thus, financial sanctions offer the potential for greater effectiveness as a foreign policy tool because they are relatively easier to enforce, harder to evade, and may spur market-reinforcing effects. But this analysis does not suggest financial sanctions will necessarily be more humane or more likely to affect elites. The question, then, is whether financial sanctions

can be targeted in a way that both retains their relative utility and reduces the collateral damage.

One form of targeted financial sanction that has become popular in recent years is a freeze of a target country's—or individual leader's—foreign assets (e.g., bank accounts held in the sender country). Traditionally this weapon was used in cases involving military conflict or episodes entailing a high degree of hostility. When used against a government's assets, a freeze not only stops financial flows but also can impede trade. The US freeze of Iranian assets in late 1979 played an important role in the eventual resolution of the hostage crisis. The UK freeze of Argentine assets (Case 82-1) made a modest contribution to the British victory in the Falklands in 1982. Another key goal of an asset freeze is to deny an invading country the full fruits of its aggression. Such measures were used against Japan for that purpose just before and during World War II (Case 40-1), as well as in the 1990 Gulf crisis when the United States and its allies froze Kuwait's assets to prevent Saddam Hussein from plundering them.

More recently, asset freezes targeted at rogue leaders have been used in cases where senders wanted to avoid hurting innocent civilians. But US freezes of Panamanian and Haitian assets failed to destabilize either the Manuel Noriega or the Raul Cédras regime. In recent years, the United States has tried to use asset freezes to weaken drug cartels (especially the Cali cartel in Colombia) and terrorist groups (notably Osama bin Laden and other al Qaeda operatives).

Duration of Sanctions

The life of a sanctions episode is seldom defined with the precision of college matriculation and graduation. In the early phases, the sender country may take pains to conceal and even deny that it is imposing sanctions. This seems to have been the case when the United States first began its campaigns against the Salvador Allende government in Chile in 1970 and against the Anastasio Somoza regime in Nicaragua in 1981. In other cases, the whole episode may pass with hardly an official word, as in the US actions against the United Kingdom in the Suez episode of 1956 (Case 56-3) or in the case of US and Dutch sanctions against Indonesia over East Timor (Case 91-4). In many cases, the ending may be misty rather than sharp, as in the Soviet campaigns against Albania and China, or US sanctions against Vietnam, which have gradually yielded to normal commercial relations.

Our approach in dating episodes is to start the episode with the first recorded sanctions threat from official sources or the first recorded sanctions event, whether or not the threat or sanction was made public at the time. We treat the episode as ended when the sender or the target country changes its policies in a significant way or when the campaign simply withers away. Because the exact dates of onset and termination of sanc-

tions episodes are often indistinct, we have arbitrarily decided to round the length of sanctions episodes to the nearest whole year, disregarding the beginning and the ending month, with a minimum of one year. For example, an episode that began in January 1981 and ended in November 1983 would be counted as lasting two years (1983 minus 1981 equals 2), even though a more exact chronology would measure 34 months.

Foreign Policy Success of an Episode

The foreign policy "success" of an economic sanctions episode—as viewed from the perspective of the sender country—has two parts: the extent to which the policy *result* sought by the sender country was in fact achieved and the *contribution* to success made by sanctions (as opposed to other factors such as military action or the mere lapse of time). Policy outcomes are judged against the sender's foreign policy goals. Our conclusions regarding both the achievement of the foreign policy goals and the contribution of sanctions to the outcome are heavily influenced by the qualitative conclusions reached by previous scholars of individual episodes (summarized in the case studies). We recognize that such assessments entail a good deal of subjective evaluation. Indeed, since foreign policy objectives often come in multiple parts, since objectives evolve over time, and since the contribution of sanctions to the policy outcome is often murky, judgment plays an important role in assigning a single number to each element of the success equation. However, by drawing on the views of other analysts, we believe we have minimized the bias resulting from our personal views. This method of assessment works better, of course, when two or more scholars have examined the case. Fortunately, several have studied the major cases.

We have devised a simple index system, scaled from 1 to 4, to score each element. Our index system is described as follows.

Policy Result

1. *Failed outcome:* illustrated by the Soviet attempt to destabilize Yugoslavia's Marshal Tito in the period 1948–55 (Case 48-4) and by the Indian nuclear tests in the face of threatened US sanctions (Case 98-1).
2. *Unclear but possibly positive outcome:* illustrated by US and Saudi efforts to get Jordan to reduce its support for Iraq during the run-up to the first Gulf War.
3. *Positive outcome, meaning the sender's goals were partly realized:* illustrated by US efforts to promote a return to democracy in several Latin American countries in the 1970s and by UN efforts to halt ethnic cleansing and civil conflict in the Balkans (Case 91-1).

4. *Successful outcome, in the sense that the sender's goals were largely or entirely realized:* illustrated by the joint efforts of the United Kingdom and the United States to overthrow Idi Amin in Uganda in the late 1970s (Case 72-1), by the end of the apartheid era in South Africa (Case 85-1), and by the removal of General Raul Cédras from power in Haiti (Case 91-5).

Sanctions Contribution

1. *Negative contribution*: illustrated by the US/UN campaign against the Cédras regime in Haiti (Case 91-5), which triggered an outflow of desperate migrants trying to escape the impact of sanctions and find work in the United States.
2. *Little or no contribution*: illustrated by the Soviet withdrawal of assistance from China in the 1960s (Case 60-2) and by US suspension of economic and military aid to Thailand in the wake of the 1991 coup (Case 91-3).
3. *Substantial contribution*: illustrated by the withdrawal of Dutch economic aid to Suriname between 1982 and 1988 (Case 82-2) and by US-UN sanctions against South Africa over apartheid (Case 85-1).
4. *Decisive contribution*: illustrated by the US success in deterring a coup in Guatemala in 1993 (Case 93-2).

By multiplication, the two elements are combined into a "success score" that ranges in value from 1 to 16. We characterize a score of 9 or higher as a "successful" outcome. Success does not require that the target country was vanquished by the denial of economic contacts or even that the sanctions determined the outcome. Success is defined against more modest standards. A score of 9 means that sanctions made a substantial contribution to the sender's goals and that the goals were in part realized; a score of 16 means that sanctions made a decisive contribution to a successful outcome. By contrast, a score of 1 indicates that the sender country clearly failed to achieve its goals or may even have been left worse off, in foreign policy terms, than before sanctions were imposed.

Framework for Analysis

Stripped to the bare bones, the formula for a successful sanctions effort is simple: The costs of defiance borne by the target must be greater than its perceived costs of compliance. That is, the political and economic costs to the target from sanctions must be greater than the political and security costs of complying with the sender's demands. The difficulty lies in accurately predicting both the magnitude of those costs *and* how the target will perceive and weigh them.

Figure 2.1 Expected outcomes, depending on relative motivation and sender leverage

Relative intensity of interest	Relative size and sender leverage		
	T > S	T = S	T < S
T > S	Failure	Failure	Success possible but not likely
T = S	Failure	Indeterminate	Success possible but depends on goal, with modest goals being more achievable than ambitious goals
T < S	Success possible but not likely	Success possible	Success

S = sender
T = target

The potential leverage that the sender has over the target provides the obvious starting point. If trade and financial flows between sender and target are minimal, then the odds of a successful sanction are low, unless the goal is an extremely modest one. But, as will become obvious in later chapters, potential leverage is not sufficient. If the sender is not strongly interested in achieving the target's compliance, or if the sender government is satisfied with mollifying domestic political demands to "do something," then whatever potential leverage exists may not be fully deployed or used effectively.

Figure 2.1 summarizes what the sender might expect from sanctions, depending on various combinations of relative motivation and the sender's size and leverage, compared with the target. If the target is larger and has more leverage than the sender, in terms of trade and financial flows, then a successful sanction is unlikely unless the sender cares far more intensely about what is at stake than does the target. By contrast, the odds for a successful outcome are higher if the sender is larger and has extensive leverage over the target but still not guaranteed if the perceived costs of compliance for the target are high. In this situation, the outcome will depend on how highly the target values what the sender is asking it to give up.

Measuring the costs of defiance obviously begins with the estimated direct costs of the sanctions, in terms of lost trade or finance. These costs can be increased if the sender is able to attract international cooperation in its sanctioning efforts, and the political costs can be amplified if the sanctions are endorsed by an international organization that is viewed as legitimate. The impact of the sanctions may be intensified if economic conditions in the target are weak; conversely, they can be mitigated if the

target government is able to evade them or if it elicits offsetting assistance from a rival of the sender. The sender can also raise the costs of defiance by threatening or actually escalating to the use of military force. Finally, whether the pain of sanctions produces the desired change also depends on whether that pain produces a rally-round-the-flag effect that strengthens the government or leads to political dissatisfaction that weakens the target's ability to resist.

The nature of the sender's goals and the target regime primarily determine the costs of compliance. Sender demands that threaten national security or internal regime stability are obviously ambitious; in many cases, it is simply impossible to make sanctions costly enough to gain the target's acquiescence. For example, autocrats, such as Saddam Hussein, have little incentive to comply when the demand is for democratization or other regime change that means sacrificing the regime's primary source of wealth and the leader's physical safety. In such cases, economic sanctions can contribute to a successful outcome only if they change incentives or capabilities within the country so that more acceptable leaders can win power.

Foreign Policy Goals

In analyzing the costs of compliance and the relative intensity of interest, we have found it useful to classify the case histories in this study into five broad categories, according to the central foreign policy objective sought by the sender country (or coalition):

- *Change target-country policies in a relatively modest and limited way*—modest in the scale of national values of the target country but often of burning importance to individual parties in the episode. This type of goal is illustrated by some, but by no means all, of the human rights and religious persecution cases, as well as cases against countries sponsoring terrorism, *prior to* the September 11, 2001 terrorist attacks against the United States.
- *Change the target country's regime*, including, as an associated goal, changing the target country's policies. For the period of the Cold War, this category includes many cases where the United States used sanctions in efforts to destabilize governments viewed as tilting toward the Soviet Union. Examples include US campaigns against several left-leaning leaders in Latin America, from Fidel Castro in Cuba (Case 60-3) to President João Goulart in Brazil (Case 62-1) and Salvador Allende in Chile (Case 70-1). On the other side, the Soviet Union used similar tactics in a failed effort to destabilize Marshal Tito in Yugoslavia when he was viewed as tilting toward the West (Case 48-4).

More recent cases include US efforts to evict Manuel Noriega from Panama (Case 87-1) and Saddam Hussein from Iraq (Case 90-1, although the United Nations never officially subscribed to the destabilization goal). Since the end of the Cold War, democratization has become a goal of the European Union, as well as the United States. These cases are illustrated by efforts to broadly improve human rights and hold elections in Haiti, Burma, and much of sub-Saharan Africa over the past two decades.

- *Disrupt a military adventure*, as illustrated by US sanctions against India and Pakistan at the time of Bangladesh independence.
- *Impair the target country's military potential*, often in the context of major hostilities, as illustrated by the sanctions imposed during World Wars I and II (Cases 14-1 and 39-1), the CoCom sanctions against the Soviet Union and its allies (Case 48-5), the ChinCom sanctions against China (Case 49-1), and the prolonged US/UN sanctions against Iraq. Since the 1970s, countries seeking to acquire the capability to produce nuclear and other weapons of mass destruction have become frequent targets of US sanctions in this category.
- *Change target-country policies in another major way*. These cases most often include the surrender of territory, such as getting Saddam Hussein to withdraw from Kuwait in 1990, but may also involve other national security–related policies, such as the Indian sanctions designed to reverse Nepal's pro-China line (Case 89-1).

While exceptions occur, the target country's relative intensity of interest in the issues at stake usually exceeds the interest of the sender in the regime change and disruption of military adventure cases. Both sender and target should be intensely interested in the outcome of the military impairment cases, but one would expect these goals to be difficult to achieve with economic measures alone since they involve national security concerns. When cases are classified as seeking either modest goals or other major goals, the senders and targets often hold similar perceptions about the relative seriousness of issues at stake. If the target perceives an issue to be more serious than the sender, however, we may classify the goal as major even if it seems relatively modest from the sender's perspective.

Some episodes may have more than one objective. We prefer to classify these cases according to the most difficult objective. However, in several instances where two objectives are judged to be equally important or were pursued in sequential fashion as conditions changed, the cases are cross-listed and there are separate observations for each goal in the database. A prominent example is the US campaign against Cuba, where the principal objective shifted from settlement of US corporate and individual expropriation claims back in the early 1960s, to destabilization in the mid-1960s, to an attempt to disrupt military adventurism in Africa and elsewhere in

the 1970s and 1980s, to an effort to bring democracy and freedom in Cuba and restore property rights in the 1990s. We end up with three observations for this case: two phases for the destabilization goal, to account for the loss of Soviet support after the end of the Cold War, and one observation under the disruption of military adventure category. Other such cases are discussed in chapter 3.

Sender countries do not always clearly announce their goals. Indeed, obfuscation is the rule in many destabilization cases. The Soviet Union never directly said it wished to overthrow either Marshal Tito or Albanian President Enver Hoxha; the United States was equally circumspect in its public statements about Salvador Allende in Chile and Ngo Dinh Diem in Vietnam and wavered in its public rhetoric over Saddam Hussein. Moreover, goals may change during the course of an episode, and destabilization may be more important during one phase than another. Here, as elsewhere in this study, we must often rely on newspaper accounts and other secondary sources in assigning episodes to categories.

In some cases, domestic political motives may overshadow foreign policy concerns. Unfortunately, the literature on individual economic sanctions episodes seldom evaluates the weight placed by executive branch officials on domestic political objectives in launching economic sanctions, nor does it assess the role of special interest groups in advocating economic artillery. However, casual observation indicates that, for example, sanctions against South Africa proved enormously satisfying to domestic political constituencies in Europe, the United States, and Canada in the late 1980s and early 1990s. The same was true of British sanctions against Argentina in the context of the Falklands dispute and of US sanctions against China following the Tiananmen Square massacre. Satisfaction need not necessarily coincide with operational success; even if sanctions are not achieving the sender country's goals, the home populace may still support them because citizens believe that sanctions are a just action.

Usually, but not always, when domestic political objectives are a dominant consideration, the likelihood of achieving the foreign policy objective with sanctions shrinks to secondary importance. Indeed, the tactical mix of sanctions may be shaped more for domestic symbolism than for foreign efficacy. We believe that such sanctions ordinarily succeed in serving their domestic political objectives the moment they are launched.[5] The mere act of initiating sanctions justifies the rhetorical campaign against the foreign power, provides a rallying cry for stronger measures, and gives domestic lobbies some leverage over the foreign regime. Whether or not foreign governments or foreign policies change, the imposition of sanctions declares the values of the sender country, and that declaration of national values

5. The limited exception is sanctions designed as a prelude to military action: These succeed, from the president or prime minister's standpoint, only if they rally the public to support sterner measures.

serves important purposes in and of itself. While we recognize that domestic political considerations are often important in explaining the decision to impose sanctions, we do not assess their utility for that purpose. (See Drury 2005 for an analysis of presidential decision making on sanctions.)

Overview of the Variables Affecting the Costs of Defiance and Compliance

Several factors affect the costs of both compliance and defiance and therefore influence the outcome of a sanctions episode. The specific factors at play in each episode are described in the case histories. Several variables affect the costs of both defiance and compliance, albeit in opposite directions. Here and in chapters 3 and 4 we divide the forces, somewhat artificially, into two clusters: "political" and "economic" variables.

We focus on the following political variables:

- Companion policies used by the sender country or coalition, namely, covert maneuvers (identified by a "J" in the case abstracts and in the tables in chapter 3), quasi-military activity (Q), and regular military activity (R).
- The extent of international cooperation in imposing sanctions, scaled from 1 (no cooperation) to 4 (significant cooperation).
- The involvement of an international organization, scored as 1 if both the sender and target countries are members of an international organization that supports the sanctions and as 0 otherwise.
- The presence of international assistance to the target country (indicated by an "A").
- The warmth of prior relations (before the sanctions episode) between sender and target countries, scaled from 1 (antagonistic) to 3 (cordial).
- The political character of the target country's government, scaled from 1 (autocracy) to 3 (democracy).

We focus on the following economic variables:

- The cost imposed on the target country, expressed in absolute terms (US dollars), as a percentage of its gross national product (GNP), and in per capita terms.
- Commercial relations between sender and target countries, measured by the flow of two-way merchandise trade between them, expressed as a percentage of the target country's total two-way trade.
- The relative economic size of the countries, measured by the ratio of the sender's GNP to the target's GNP.

- The economic health and political stability of the target, measured by a judgmental scale from 1 (distressed country) to 3 (strong and stable country).
- The type of sanctions used, namely, an interruption of exports from the sender country (identified by an "X"), an interruption of imports to the sender country (M), and an interruption of finance (F).
- The cost to the sender country, measured by a judgmental scale from 1 (net gain to sender) to 4 (major loss to sender).

The variables just enumerated are described below in more detail. In chapter 3 we evaluate the connection between foreign policy success and the political variables. In chapter 4 we consider the relationship between success and the economic variables. In chapter 6 we summarize our findings and offer policy recommendations.

An important variable that we do not attempt to measure is the skill with which sanctions are employed as a foreign policy tool. For example, conflicting pressures within the sender country and its government can lead to an indecisive response, which neither emits the desired political signal nor imposes arduous costs on the target country. The classic example of confused signals was the League of Nations sanctions against Italy in 1935–36 (Case 35-1). The major powers in the League (the United Kingdom and France) were torn between their desire to stop the Italian advance in Abyssinia and their fear of upsetting the political balance in Europe by driving Italy into an alliance with Germany. With an eye on upcoming national elections, British leaders in particular wanted to keep the peace in Europe; thus, while the League Council was considering sanctions, the decision was made to exclude oil, which would have had the most impact on Italy, and attempts were also made to appease Italy by ceding some territory in Abyssinia. In this case, as in many others, sanctions were largely intended to pacify domestic constituencies that were outraged over a foreign country's behavior.

Political Variables

Companion Policy Measures

As Carl von Clausewitz (1832) famously observed, "War is nothing but the continuation of politics with the admixture of other means."[6] The same could be said of economic sanctions. Indeed, sanctions frequently serve as a junior weapon, or perhaps the starting gun, in a battery of

6. Cited in the *Oxford Dictionary of Quotation*, 3d ed. (Oxford: Oxford University Press, 1979, 152).

diplomatic artillery aimed at the antagonistic state. Leaving aside the normal means of diplomatic protest—recalling an ambassador or canceling a cultural mission—we distinguish three types of companion policies: covert action, quasi-military action, and regular military action.

Covert action, mounted by intelligence forces, often accompanies the imposition of economic sanctions when the destabilization of a target government is sought. An example of unsuccessful covert action was CIA assistance in 1996 to Kurdish opponents of Saddam Hussein. In destabilization cases and episodes where major policy changes are sought, the sender state may also invoke quasi-military force: for example, massing troops at the border or stationing war vessels off the coast. Finally, sanctions may precede or accompany actual armed hostility, as happened in Panama, Haiti, Iraq, and Bosnia. In fact, political scientist David Baldwin (1985) conceives of sanctions as just one element in the "force curve" implemented to resolve conflicts between nations.

International Cooperation

In high-profile cases, such as the two world wars, the League of Nations' foray against Italy, the series of US sanctions against the Soviet Union, and the UN sanctions against Iraq and Serbia, much emphasis has been placed on achieving international cooperation. The object is to deny the target country access to the supplies or markets of its principal trading partners and particularly when international organizations are involved to invoke the moral authority of the community of nations against the target. However, the degree of cooperation realized has usually disappointed the lead country. Even in World Wars I and II, when the Allies ultimately achieved a high degree of cooperation, Germany was able to draw on supplies from Eastern Europe and adjacent neutral powers. The following statement, taken not from President Bill Clinton's difficulties in maintaining strict sanctions against Iraq or from President George W. Bush's problems in erecting a sanctions regime against Iran but from a commentary on World War I, describes the problem:

> . . . all attempts in this direction [of a permanent inter-Allied organization] had been wrecked by the contradictory nature of the commercial interests of the Allied nations, which were only kept in touch with one another by means of intermittent conferences. . . . (Guichard 1930, 67)

That said, the extent of international cooperation in sanctions episodes increased sharply with the end of the Cold War, and the proportion of unilateral US sanctions declined sharply. This decline partly reflects a shift in the regional locus of many sanctions from the US backyard in Latin America to the European backyard in Africa and in part to increased activity by the United Nations (see chapter 5). But—as the sanctions against Haiti, Sudan, and Iran show—the end of the Cold War guarantees neither that

cooperation will be forthcoming nor that cooperative sanctions will work. Although a complete economic blockade is seldom achieved, there are substantial differences from episode to episode in the degree of cooperation realized. We have used an index scaled from 1 to 4 to grade the extent of cooperation:

1. *No cooperation*: A single sender country imposes sanctions and seeks (or gets) no cooperation; illustrated by the US campaign against Brazil to destabilize President João Goulart (Case 62-1) and by India's campaign against Nepal for its pro-China tendencies (Case 89-1).
2. *Minor cooperation*: The sender country enlists verbal support and possibly token restraints from other countries; illustrated by the US sanctions imposed on the Soviet Union in part for its support of repressive measures in Poland (Case 81-3) and by US sanctions imposed against India for its nuclear tests (Case 98-1).
3. *Modest cooperation*: The sender country obtains meaningful restraints—but limited in time and coverage—from some but not all the important trading partners of the target country; illustrated by the US sanctions against Castro's Cuba in the early phases of that drawn-out episode and by US sanctions against Iran during the hostage crisis of the 1970s.
4. *Significant cooperation*: Important commercial nations make a major and coordinated effort to limit trade and/or finance, although the sanctions scope may still be limited (e.g., several UN arms embargoes), or significant leakages may occur through neutral countries; illustrated by the two world wars, the early years of CoCom, and UN sanctions against Iraq and Serbia.

In addition to ad hoc cooperation, senders sometimes seek the cooperation or endorsement of an international organization. Tables 3A.1 through 3A.5 in chapter 3 record such endorsements, in instances when they occurred, by an abbreviation that indicates the cooperating organization. In addition, we created a variable indicating endorsement by an international organization of which both sender and target were members. These cases are indicated by marking the international organization's name in bold in the chapter 3 tables. From the standpoint of the principal sender, enlisting an international organization probably lowers the "transactions costs" of persuading other countries to support a sanctions initiative. Equally important is the greater aura of legitimacy conferred upon sanctions authorized by the United Nations or (in an earlier era) the League of Nations and the consequent political isolation of the target country. However, the humanitarian toll resulting from the near total embargo of Iraq has tarnished the UN "halo"; consequently it may take several years before the United Nations will again authorize comprehensive sanctions (as contrasted with targeted measures).

Moreover, we think that the many efforts and the inevitable failures in building watertight economic barriers have led to an exaggerated emphasis on the mechanical role played by cooperation in determining the success or failure of a sanctions episode. Proponents of economic sanctions often engage in a wishful "if only" form of argument: "if only" the United States would stop all commerce with South Africa (in the apartheid era); "if only" the Japanese would restrict their financial ties to China (in the aftermath of Tiananmen Square); "if only" the Europeans would deny Iran financial and trade links (in the context of Iran's attempted acquisition of nuclear weapons).[7] But the effort to create watertight barriers may be doomed from the beginning. And in many cases the symbolic moral authority of international cooperation exceeds the mechanical importance of stopping all trade and financial leakages.

Of course, from the sender country's standpoint, it is axiomatic that more cooperation is better than less—whether the cooperation involves strong sanctions or moral condemnation. But international cooperation is seldom decisive, since other variables are also at play. A critical variable is the nature of the objective. The inspiring words of Robert Browning seem written for sender countries: "A man's reach should exceed his grasp, or what's a heaven for?" The pursuit of more ambitious objectives accompanied by much fanfare often goes hand-in-hand with efforts to enlist international cooperation; yet the grasp of ambitious objectives may remain beyond the reach of sender countries, even when assisted by a large measure of international cooperation.

International Assistance to the Target Country

The mirror image of international cooperation with the sender country is the support received by the target country from its neighbors and allies. Target countries are seldom cut off from all alternative markets or financing sources when sanctions are imposed; trade and financial channels usually remain open, even if at a sharply higher cost. For this reason, we do not count evasive and covert trade and finance as "assistance." Such transactions are part and parcel of every episode. Rather we are concerned with overt rhetorical support accompanied by economic or military aid to the target country, in response to the imposition of sanctions.

The impact of sanctions on the target country can be reduced if it can rely on its friends to compensate for the burdens imposed by sanctions. Further, the psychological rebuke is considerably weakened when third countries provide assistance to the target. Indeed, in several Cold War cases, target countries turned sanctions to their economic advantage, coaxing opponents of the sender country to provide new or additional funds in

7. As an example of the "if only" argument in the Rhodesian context, see Brown-John (1975, 378).

order to "make a stand" against the policy excesses of the rival power. The United States and its allies came to the rescue of Yugoslavia in the early postwar period when Josef Stalin threatened Tito. The Soviets similarly joined forces with Colonel Haile-Mariam Mengistu in war-torn Ethiopia to deflect US attempts to foster human rights and gain compensation for expropriated property (Case 77-8). In both cases, the amount of aid provided to the target more than offset the economic impact of the sanctions. In many episodes—such as the Soviet efforts against Albania, US efforts against Nicaragua and Iran, and UN sanctions against Serbia—assistance from a major foreign power provided welcome moral support to the target. While we do not scale the degree of international assistance among our political variables in measuring the cost of sanctions to the target, we do take into account the estimated value of offsetting assistance. Among the political variables, however, we simply identify those cases where significant assistance was given to the target country.

Prior Relations Between Sender and Target

Sanctions are imposed against friends and foes alike. Forceful sanctions may be needed against belligerent countries to coerce them into yielding, especially since the stakes often involve national security or other major issues for both sender and target and because the target may be concerned about the reputational costs of conceding to a rival's demands (Drezner 1999). On the other hand, a friendly country will often consider the importance of its overall relations with the sender country before responding to economic sanctions. In addition, a sender is likely to trade more with an ally, and therefore have more leverage, than with an adversary. Such considerations led South Korea and Taiwan to accede to mild US pressure and forgo construction of nuclear reprocessing plants in the mid-1970s (Cases 75-1 and 76-2). Likewise, the decertification process had a galvanizing effect in turning the political tide against President Ernesto Samper in Colombia. With friends, subtle or symbolic sanctions may succeed.

To reflect the role of prior relations in determining the outcome of a sanctions episode, we have constructed an index for classifying the cases according to the state of political relations between the sender and target countries before the imposition of sanctions:

1. *Antagonistic*: The sender and target countries are in opposing camps; illustrated by most Cold War cases, US-Japan relations prior to World War II, Arab-Israeli relations, and US relations with Cuba, North Korea, Iran, and Libya for the past two decades or more.
2. *Neutral*: The sender country does not have strong ties to the target, but there is a workable relationship without antagonism; illustrated by immediate post–World War II relations between Spain and the United Kingdom despite centuries of dispute over Gibraltar (Case 54-3), US re-

lations with Haiti prior to the 1987 sanctions (Case 87-2), and US relations with Iraq in the late 1980s prior to the invasion of Kuwait.

3. *Cordial*: The sender and target countries are close friends and allies; illustrated by ties between the Arab League and Egypt prior to the Camp David accords (Case 78-6), US relations with the United Kingdom before the Suez crisis of 1956, Indian relations with Nepal before the 1989 dispute, and UK relations with Malta prior to base negotiations (Case 71-2).

Democracy versus Autocracy

To evaluate the target country's political regime type we rely on the Polity IIId database created by Ted Gurr and colleagues and described in McLaughlin et al. (1998). The Polity project focuses on five dimensions of a political system's authority: "(1) the influence relations between superordinate and subordinate strata; (2) the degree of inequality between the strata; (3) the institutional relations among superordinates; (4) the competitiveness of recruitment to superordinate positions; and (5) the basis of political legitimacy, whether personal, substantive or procedural" (Gurr and Jaeger 1995, 470). This analytical framework provides the basis for the construction of indicators of regime type, regime coherence, and regime durability.

In terms of regime type, Gurr argues that no sharp dividing line separates democratic and autocratic regimes, but each dimension can be measured independently. Focusing on the institutional dimensions of democracy, the indicators of democracy and autocracy are derived from subjective coding of the institutionalized competitiveness of political participation, the regulation of political participation, the openness and competitiveness of executive recruitment, and the institutional constraints on the exercise of executive power. Because most regimes have mixed authority characteristics, Gurr and Jaeger (1995) established a single summary measure of the institutional characteristics of political regimes by subtracting a state's autocracy score from its democracy score. The resulting index ranges from +10 for states that are purely democratic to –10 for completely autocratic states. We have adapted this variable for our regime type variable in this study, compressing the Gurr and Jaeger index to our own scale, running from 1 (autocracy) to 3 (democracy).

Economic Variables

Estimating the Economic Costs to Targets

Sanctions are designed to penalize the target country for its unwanted behavior. In theory, the target country will weigh the costs imposed by the

sanctions against the benefits derived from continuing its policies—the higher the net cost, the more likely the target country will alter its policies. The absolute cost exacted on a target country, however, is not the best measure of the potential impact: A cost of $100 million means more to Chile, for example, than to China. We have therefore related our estimated cost figures to the target country's GNP. Appendix C explains in detail our methodology for estimating the cost to the target country.

Country Size and Trade Linkages

Quite apart from the magnitude of costs that the sender imposes on the target, the outcome of a sanctions episode may be influenced by the relative size of the two countries and the trade links between them. The imposition of even minor sanctions carries the implicit threat of more drastic action. Whether that threat looms large or small depends very much on relative country sizes and trade flows. Hence, we include among our economic variables a ratio between sender-country and target-country GNP levels and figures on trade between target and sender expressed as a percentage of the target country's total trade.

Economic Health and Political Stability of the Target Country

The economic and political atmosphere in the target country also shapes the outcome of a sanctions episode. An analogy with rainmaking is appropriate. If storm clouds are overhead, rain may fall without anyone's help. If moisture-laden clouds are in the sky, chemical seeding may bring forth rain. But if the skies are clear and dry, no amount of human assistance will produce rain. Similarly, sanctions may be redundant, productive, or useless in pursuing foreign policy goals, depending on the economic and political situation in the target country.

It is no simple matter to summarize the complex of events that describe a country's political environment at a given point in time. Moreover, during the course of an episode, the target country's overall economic and political stability may deteriorate or improve, rendering it more or less susceptible to economic pressure. Consider, for example, the problem of assessing stability in the context of a successful regime change case. At the beginning of the episode, the target country might be experiencing significant problems; shortly before its downfall, the target government might well have reached a crisis stage quite apart from the pressure imposed as a result of sanctions.

In the first and second editions, we developed a judgmental index of economic health and political stability to capture the overall environment facing the target government when sanctions are imposed. Our judgmental scale runs from 1 to 3 and is described as follows:

1. *Distress*: a country with acute economic problems, exemplified by high unemployment and rampant inflation, coupled with political turmoil bordering on chaos; illustrated by Chile at the time of Salvador Allende (Case 70-1) and by Uganda in the later years of the Idi Amin regime (Case 72-1).
2. *Significant problems*: a country with severe economic problems, such as a foreign exchange crisis, coupled with substantial internal dissent; illustrated by Ceylon under S. W. R. D. Bandaranaike (Case 61-1).
3. *Strong and stable*: a country with the government in firm control (even though dissent may be present) and an economy experiencing only the normal range of inflation, unemployment, and similar ills; illustrated by India during the nuclear nonproliferation campaigns of the 1970s (Cases 74-2 and 78-4) and China at the time of the Tiananmen Square massacre (Case 89-2).

In this edition, we experimented with replacing our qualitative index with objective indicators of political stability prior to and during sanctions, as well as data on economic growth and inflation in the target country. The results were mixed, however, and the variables were not significant in the multivariate regression analysis, so we did not include them in the final results. To satisfy the potential interest of other scholars, we include these variables in the database on a companion CD-ROM and in tables 3A.1 through 3A.5 and 4A.1 through 4A.5 and discuss them briefly in chapter 4.

Types of Sanctions

As discussed at the beginning of this chapter, senders commonly use three types of sanctions: (1) export sanctions; (2) import sanctions; and (3) financial sanctions. These sanctions are sometimes used alone but more often in combination. Through trade sanctions, sender countries seek to limit their exports to and/or their imports from the target country. Financial sanctions are imposed by delaying or interrupting publicly funded loans or grants or, in extreme cases, by freezing all assets of the target country. Asset freezes are also becoming more popular as a means of targeting the leaders of "rogue" regimes, corrupt autocrats, and their associates. Chapter 4 examines these various types of sanctions in greater detail.

Estimating the Costs to Senders

We have not attempted to calculate the monetary costs of sanctions to sender countries nor to quantify the political costs visited on the sender as a result of flexing its economic muscle. Instead, we have drawn from the case abstracts a rough sense of the trade, financial, and political costs in-

curred by the sender from the imposition of sanctions. Our approach uses a judgmental index, scaled from 1 to 4, to measure the economic and political pain endured by the sender country on account of its own sanctions. The following description summarizes our index (chapter 4 provides more detail):

1. *Net gain to sender*: usually where aid is withheld; illustrated by the US suspension of aid to Turkey in 1974.
2. *Little effect on sender*: where there is a net economic gain to the sender and little public commentary and where a trivial dislocation occurs; illustrated by US export controls on nuclear fuel shipments to Taiwan in 1976.
3. *Modest loss to sender*: where some trade is lost, but neither the size nor the concentration of the loss creates a political backlash in the sender country; illustrated by the League of Nations campaign against Italy in 1935–36.
4. *Major loss to sender*: where large volumes of trade are adversely affected and, more important, the loss causes a distinct backlash among affected firms and communities; illustrated by the US pipeline sanctions against the Soviet Union and the US sanctions against China and Iran, the two world wars, and the US-UN sanctions against Iraq following its invasion of Kuwait.

3

Political Variables

In evaluating the success of economic sanctions, we first classify cases according to the type of foreign policy objective. The nature of the objective is an important political variable: Sanctions cannot stop a military assault as easily as they can free a political prisoner. Our analysis is organized by the five types of objectives listed earlier, namely: to effect relatively modest changes in the target country's policy, to change the target country's regime, to disrupt a relatively minor military adventure, to impair the military potential of an important adversary, and to change the target country's policies or behavior in other major ways.

In episodes where two ambitious goals are sought (some 12 cases in all), the cases are cross-listed under both objectives. Examples of dual-listing are those where regime change and impairment of military potential were side-by-side goals (e.g., the post-1990 UN and US sanctions against Iraq). However, in cases where the sender's objective was to change a target's regime, along with altering its policy in some modest way, the cases are listed only under the regime change goal. The reason is that sanctions imposed to change a target country's regime more often than not entail an ancillary goal of some modest policy change.[1]

Six political variables are considered in this chapter: (1) presence of companion policies beyond routine diplomacy (e.g., covert action), (2) extent of international cooperation with the sender, (3) whether an international institution cooperated with the sender, (4) presence of offsetting international assistance to the target, (5) prior relations between sender and target, and (6) nature of the target country's regime (scaled autocracy to

1. There is one exception, Case 75-5: US v. Chile, where sanctions aimed at resolving the murder of Orlando Letelier and an American colleague in Washington, DC both preceded and extended beyond the broader efforts to restore democracy in Chile.

democracy) at the onset of sanctions. Information on political stability in the target country before and after sanctions were imposed is included in tables 3A.1 to 3A.5 (at the end of this chapter) but is discussed in chapter 4 in conjunction with the effects of economic conditions. For each goal category, we highlight the political variables that seem most relevant. The economic variables are discussed in chapter 4, and the results for all the variables in all categories are analyzed in chapter 6.

Modest Changes in Policy

Sender countries have frequently threatened or deployed sanctions to pursue relatively modest changes in the policies of target countries. Modest changes are not trivial changes. Changes that we have labeled modest may have loomed large in the political life of the sender or target during the time of confrontation. However, we apply the label "modest change" to policy goals that do not threaten the government in power or its military capabilities. For example, the settlement of an expropriation dispute or releasing a few political prisoners does not compare with stopping a military adventure or destabilizing a government.

Illustrative of these cases is Case 94-2, in which Greece blocked EU aid destined for Albania in a successful effort to shorten the jail time of ethnic Greek leaders imprisoned in Albania following their conviction as Greek spies. The objective was quite specific, and Greece had considerable leverage owing to Albania's troubled economy. Another representative case was Case 92-11, in which the United States imposed mild sanctions on Nicaragua for three years (1992–95), both to encourage the government to establish better control of the military and to settle a number of expropriation cases. Because of its dominance in the Western Hemisphere, the United States achieved a measure of success in both objectives. In fact, the United States has actively pursued modest policy goals, accounting for 23 of the 43 modest policy change observations listed in table 3A.1.[2] A cosender accompanied the United States in 6 of the 23 cases.

Of the 43 modest change episodes listed in table 3A.1, we scored the policy result as positive (score of 3) or successful (score of 4) in 24 cases. In 27 of the 43 cases, we conclude that sanctions made a contribution to the outcome ranging from modest (3) to decisive (4). The combined result is that, in 22 of the 43 cases, we obtain a success score of 9 or higher (16 being the maximum success score). Thus, by our analysis, in half of the modest policy change cases, the sender country (often the United States)

2. To a small extent, the preponderance of US cases may reflect our inadvertent omission of contests between second-rank powers involving modest policy goals. However, the United States is also the most important sender in other more newsworthy categories as well, where the inadvertent omission of cases initiated by secondary powers seems less likely.

made some progress in achieving its goals through the use of economic sanctions. This, we think, is a significant finding: Batting .500 in diplomatic endeavors is a decent record.

In their quest for modest policy changes, sender countries seldom employ covert force, nor do they engage in quasi-military measures or regular military action. In this group of cases, sanctions are normally the standalone policy instrument. In fact, companion policies were deployed in only 7 out of 43 modest policy change episodes (table 3A.1) and were more frequently associated with failure than success. Senders do not typically seek cooperation in these cases, nor do other countries offer to bail out targets. Only 9 of 43 episodes involved more than minor cooperation, and only 4 targets attracted any offsetting assistance from the sender's rivals.

A common feature across most categories is that relations between the sender and target, prior to sanctions, are generally better in success cases than in failure cases. Our prior relations index averages 2.3 for the successes in the modest policy change category and 2.0 for the failures. It is easy to rationalize that economic sanctions would be more effective against friends than enemies: Groups in the target country that are sympathetic with the policy goals are likely to find a stronger voice when relations with the sender country were cordial prior to the episode.

A related finding is that sanctions seeking a modest change in policy are more successful against target countries that are relatively more democratic (2.2 versus 1.7 on our regime type index). Democracies are by definition more open to voices advocating a policy shift than autocratic countries. If important internal groups see merit in a policy change, that view is more likely to find advocates within the top circles of a democratic government. Unexpectedly, in this and most other goal categories (all but military disruption), sanctions were somewhat more likely to fail against targets that had suffered relatively greater political instability over the previous 10 years. This finding is discussed in more detail in chapter 4, in conjunction with the results related to economic health variables and the combined economic health and political stability variable used in previous editions.

Regime Change

By far, regime change is the most frequent foreign policy objective of economic sanctions, accounting for 80 out of the 204 observations (table 3A.2, including in both counts cross-listed cases and cases with multiple phases).[3] We score just under a third of the regime change episodes a success from

3. In the second edition of *Economic Sanctions Reconsidered,* we labeled "regime change" episodes as "destabilization" cases. Here we adopt the broader term "regime change" to encompass not only the explicit targeting of a particular foreign leader but also structural changes that imply new leadership, most notably the embrace of democracy.

the standpoint of the country imposing sanctions—a success ratio well below the rate for modest policy change cases but much the same as other major foreign policy objectives. In our view, success in a third of the cases contrasts favorably with the skepticism often expressed in the literature. International institutions (such as the United Nations and the Organization of American States) played a role in 36 percent of the successful episodes and 24 percent of the failures.

The Cold War era (1945–89) was particularly rich in regime change cases, accounting for 46 out of the 80 observations, most of them colored by tension between Moscow and Washington. For example, in episodes involving Yugoslavia, Finland, and Albania, the Soviet Union found its smaller allies attempting to stray from the socialist sphere, whereas in cases involving Cuba, Brazil, Chile, and Nicaragua, the United States suspected its Latin American neighbors of stealing away from the capitalist camp. More than a third of the cases during the Cold War era involved attempts to overthrow the regimes of former friends.

Illustrative instances of modest goals that accompanied regime change cases include: to compensate for expropriation (as in Case 62-1: US v. Brazil), to renounce terrorism (Case 78-8: US v. Libya), to cease drug dealing (Case 87-1: US v. Panama), and to energize antinarcotics efforts (Case 96-4: US v. Colombia). In celebrated cases leaving aside Cold War episodes, the United States has sought regime change because the target government adopted a deeply hostile attitude toward the United States (and vice versa). Cuba since 1990 (Case 60-3) and Iraq (Case 90-1) are classic episodes of this genre. Regime change is sometimes a goal of major wars, and accordingly two cases are cross-listed: World War II (Case 39-1) and the Korean War (Case 50-1). As well, regime change was a corollary objective in two other military impairment cases, two military adventure cases, and one case classed under other major goals—and again all these cases are cross-listed.

In cases initiated after the Cold War, regime change (generally led by the United States and the European Union) emerges as a common strategy for restoring or promoting democratic forms of government. Africa has been a frequent locale, accounting for 14 of the 30 cases since 1989, identified in table 3A.2. From the standpoint of target governments, a campaign by outside powers to insist on "clean" elections and other insignia of a democratic political structure looks much the same as a campaign to drive the sitting president from power. For this reason, such cases are classified as regime changes.

The most renowned case of this nature is Case 62-2: UN v. South Africa,[4] where the goal was to end apartheid. Everyone recognized that holding fair elections, with full participation, would spell the end of rule by a white minority government—an outcome that President F. W. de Klerk fi-

4. US sanctions (Case 85-1) significantly buttressed the UN case.

nally accepted as inevitable in 1994. In another example, Case 99-2, the United States, the European Union, and France worked to restore democracy in the Ivory Coast following a coup. During the post–Cold War era, in which regime change cases were mainly attempts to promote democratic elections, only 9 of 30 cases were successes. During the Cold War era, economic sanctions were frequently bolstered by companion measures in regime change cases. Covert action and quasi-military operations regularly played a role, and in a few instances both during and after the Cold War (namely, Panama, Haiti, and Iraq) regular military action was an essential part of the mix. However, companion policies were far less frequent in the post–Cold War cases than in earlier decades.

Regime change efforts during the Cold War were one front in the larger geopolitical battle, and thus targets frequently received assistance from the enemy of the sender country. For example, in two Cold War cases (Case 48-4: USSR v. Yugoslavia and Case 61-2: USSR v. Albania) the Soviet Union was supported by its East European allies, and in the long-running Cuba episode (Case 60-3) the United States enjoyed some international cooperation in its early efforts at isolating Havana. But in all three instances the target country received considerable material and moral support from the opposing major power—the United States or the Soviet Union. Support compensated for the impact of the sanctions on the target country and contributed to low success scores.[5]

Disrupting Military Adventures

At the close of World War I, the classic rationale offered for economic sanctions was to preserve peace, usually by coercing an aggressive country to abandon its military adventure. Lord Curzon, a member of the war cabinet of British Prime Minister David Lloyd George, suggested in 1918 that the sure application of sanctions might have averted the outbreak of a lesser conflict than World War I:

> Sanctions did not, it is true, succeed in preventing the war; they have not, at any rate at present curtailed its duration, but I should like to put it this way. I doubt very much whether, if Germany had anticipated when she plunged into war the consequences, commercial, financial, and otherwise, which would be entailed upon her by two, three, or four years of war, she would not have been eager to plunge in as she was. Remember this. Though possibly we have not done all we desired, we have done a great deal, and we could have done a great deal more if our hands had not been tied by certain difficulties. It is naturally a delicate matter for me to allude to this. A good many of them have been removed by the entry of the United States of America into the war, but we have always the task of handling with great and necessary delicacy the neutral states, and this difficulty still remains with us. (Quoted in Mitrany 1925, 36)

5. It is worth noting that we still score Cuba sanctions as a failure, even though external support withered with the collapse of the Soviet Union.

Influenced by Lord Curzon and President Woodrow Wilson, after World War I, British and American policy officials came to view sanctions as an explicit substitute for military action. This doctrine dominated official thinking until the dismal failure of the League of Nations to restrain Benito Mussolini in his conquest of Abyssinia (Case 35-1). Thereafter, advocates viewed sanctions as a key component of an overall effort to disrupt unwelcome military adventures. In recent years, the doctrine has taken a further twist: To reverse military adventures, sanctions are sometimes utilized as a prelude to force rather than a substitute for force.

Table 3A.3 identifies 19 military adventure cases (of which 5 are cross-listed in other goal categories). We define disrupting a military adventure as an action on a scale less grand than the two World Wars, the Korean War, or the Cold War, and an action where the sender is not itself involved as a military participant. As mentioned, the classic (and failed) instance of the use of sanctions to thwart a military adventure was Case 35-1: League of Nations and UK v. Italy. Other instances include Case 40-1: US v. Japan; Case 60-3: US v. Cuba; and Case 95-1: US v. Peru and Ecuador (border conflict).

Success was achieved in just 4 of these episodes, with scores of 12 or 16. Sanctions failed to deter the target country's martial ambitions in 15 cases. It is worth noting that, since the 1960s, not even one success has been attributable to sanctions. This category by far accounts for our lowest success ratio, under 1 in 5.

Because successes are so few and because the cases are so different from one another, it is difficult to ferret out potential sources of success and failure in these cases. Indeed, this set of observations contradicts several patterns we observe elsewhere, including in chapter 4. For example, unlike the other major goal categories, companion measures appear only in failed episodes, compliant targets were relatively more stable, and the costs imposed on the target in successes were just a third of those in failures.

Impairing Military Potential

The immediate purpose of practically every economic sanctions episode is to diminish the potential power of the target country. Nevertheless, we can distinguish between the imposition of economic measures to achieve defined political goals and the conduct of a major war or economic campaign to weaken an adversary. Table 3A.4 lists 29 episodes, many of them involving contests between major powers, often in wartime or in the shadow of war. In recent decades, another branch of cases has become prominent: efforts by the United States and other powers to limit the acquisition of nuclear weapons by secondary powers.

In neither of the two World Wars, the Cold War, nor the Korean and Vietnam wars did the Allies believe that sanctions would decisively con-

tribute to the outcome. Instead, they expected that economic denial would marginally erode the adversary's military capabilities, thereby constraining its actions. Economic sanctions became a minor adjunct to major war efforts, and "trading with the enemy" was labeled an offense in its own right, quite apart from calculations of cost and benefit. Thus for nearly four decades (until 1990), the United States sought to constrain the Soviet military machine by denying it technological sustenance, initially through the Coordinating Committee for Multilateral Export Controls (CoCom) (Case 48-5) and later, in the 1980s, through additional measures associated with the Afghanistan invasion (Case 80-1) and the Polish crisis (Case 81-3). Comparable broad sanctions were imposed on China (Case 49-1).[6] The nuclear weapons cases echo the same refrain but at a lower decibel level.

Often the targets were major powers—not only Germany in the two World Wars but also the Soviet Union, China, and India. It is unreasonable to expect that sanctions that disrupt a modest amount of trade or finance can significantly detract from the economic strength or military ambitions of a major power. Few policymakers in the sender countries entertained such overblown expectations. Even in wartime, as subsequent studies of defeated Germany showed, it was hard to find economic links whose destruction—whether by sanctions or by bombing—could cripple the war machine. Instead, the contribution of sanctions was attrition. Similarly, if CoCom and ChinCom played any role in the economic troubles of the Soviet Union and China (under Mao), respectively, it was small. Denial of critical components and technology hindered Soviet and Chinese advances in particular weapons systems, but broad economic sanctions hindered the Soviet and Chinese economies far less than mismanagement within the communist camp.

As with regime change and military adventures, about a third of the military impairment cases passed our threshold test of success (table 3A.4). Not surprisingly, companion policies were associated with about twice as many success cases (78 percent) as failure cases (35 percent) and relations between sender and target prior to the imposition of sanctions tended toward the adversarial, with no impact on the outcome. Sender countries gained cooperation from individual allies and international organizations more often in successes than failures. On the whole, the target countries were politically stable even when in desperate economic straits (such as North Korea, North Vietnam, and Iraq).

In a few impairment cases, a related objective was regime change. That was a central goal in World War II and the Korean War, and it eventually became an explicit goal in two weapons of mass destruction (WMD) cases: Libya and Iraq. However, regime change was not a goal in several other

6. To this day, the United States and its allies, operating through the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, attempt to deny advanced military technology to Russia, China, and several other countries.

WMD cases: South Korea, Taiwan, Pakistan, and India. Regime change remains an unstated goal in two other nuclear cases: North Korea and Iran.[7]

In four cases, sanctions helped dissuade target countries from the pursuit of nuclear weapons. Two early and successful episodes involved the threat of US sanctions against South Korea (Case 75-1) and Taiwan (Case 76-2) when intelligence revealed that those allies were exploring nuclear weapons. In Case 78-8: US v. Libya, the United States had multiple goals—regime change, antiterrorism, compensation for Pan Am 103 victims, and renunciation of WMD. When President Muammar Gadhafi reversed diplomatic course in 2003, among other policy changes he abandoned Libya's quest for nuclear weapons. Finally the prolonged and harsh sanctions that deprived Saddam Hussein of resources were more successful than many realized in preventing the rebuilding of Iraq's WMD arsenal, including nuclear weapons (Case 90-1). Right to the end, Saddam maintained the bluff that he had WMD—fooling US intelligence and two presidents, several European prime ministers, along with his neighbors and the Iraqi people.[8] Instead, Saddam chose to spend his oil money on police and palaces to maintain his regime, rather than on chemical, biological, and nuclear weapons.

On the other side of the ledger, sanctions did not deter India (Case 78-4) and Pakistan (Case 79-2) from building nuclear bombs nor North Korea (Case 93-1, second phase) and Iran (Case 84-1) from vigorous and continuing efforts. In each of these episodes, denial of key components (such as centrifuges and triggering mechanisms) has no doubt added years to the target country's quest. But once national leaders elevated nuclear weapons capability to an overriding goal, sanctions lost their coercive effect.

Other Major Policy Changes

Under this heading we put a variety of cases that are not comfortably classified exclusively or at all under other categories, while three cases are cross-listed. We include in the major policy change category those cases where country A sanctioned country B because of country B's relations with country C. Examples include Case 73-1: Arab League v. US, over US support for Israel in the October war; Case 89-1: India v. Nepal, over Nepal's relations with China; and Case 92-10: China v. France, over French sales of arms to Taiwan.

7. President George W. Bush characterized North Korea and Iran, along with Iraq, as members of the "axis of evil" in his State of the Union address in January 2002. While these are borderline instances, we have not cross-listed the two cases under the regime change heading because explicit US goals—and those of key US allies—are focused on dismantling the nuclear capabilities of North Korea and Iran.

8. The evidence, even at the time, was far stronger for chemical than for nuclear weapons.

As with regime change and military impairment cases, success was achieved in just under a third of these cases (table 3A.5). A recent success was Case 91-4, in which the United States and the Netherlands persuaded Indonesia to abandon its occupation of East Timor.[9] Mentioning just two failures, there is little evidence that the Arab League boycott has moved Israel on the question of establishing a Palestinian homeland (Case 46-1) and sanctions did not help Indonesia prevent the consolidation of neighboring territory into Malaysia (Case 63-2).

Companion policies were frequently used but not particularly helpful in this category. As in the military impairment cases, however, international cooperation with the sender was significantly higher in success cases than in failures (2.5 versus 1.8 on our 4-part index), and international assistance to the target was significantly lower in success cases (10 percent of successes versus 35 percent in failures). The warmth of relations prior to sanctions appears to have been more important in this category than most others (2.5 for successes versus 1.9 for failures on our 3-point index), and sanctions were also more likely to succeed against democratic regimes.

Politics, the Cold War, and Sanctions Targets

Table 3A.6 sorts the countries targeted in sanctions cases by region. Asian and Latin American nations were the most frequent subjects (42 cases in each region), while Middle Eastern states were the least frequently targeted (only 20 cases), perhaps because of concerns that Middle Eastern states could retaliate using the oil weapon. More interesting is the character of cases. In Latin America and Africa, regime change cases dominate the picture, and they account for about a third of the total caseload in non-OECD Europe and Asia. Modest policy changes are more important in the OECD, non-OECD Europe, and the Middle East. It is worth noting that the United States, Canada, and Mexico have rarely been the target of economic sanctions—reflecting, of course, the hegemonic position of the United States after World War II.[10]

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9. In an intermediate phase of this episode, the United States, through its influence on the multilateral development banks and the International Monetary Fund, deliberately or inadvertently helped destabilize the Suharto government in Jakarta in 1998. Because US political intentions in withholding funds from Jakarta during the Asian financial crisis are not entirely clear, we have not listed this episode as a regime change case. An earlier phase, when the United States and the Netherlands sought more limited improvements in human rights in East Timor, is also listed under modest policy goals.

10. The Arab League sanctioned the United States in the wake of the October war (Case 73-1), and the United States and the United Kingdom sanctioned Mexico following the nationalization of oil prior to World War II (Case 38-1).

Also interesting is the changing distribution of targets over time as shown in the bottom half of table 3A.6. Before 1969 OECD Europe, Latin America, and Asia were favorite targets, reflecting interwar and Cold War tensions. Between 1970 and 1989, the targets were rather evenly spread across the six regions, though with a concentration in Latin America and Asia—again reflecting the Cold War and growing concern about human rights. In the 1990s the most prominent focus was Africa. The number of cases initiated against OECD countries, Latin America, the Middle East, and Asia remained relatively stable over the last three decades of the 20th century. The sharp increase in cases targeting Africa and non-OECD Europe reflects the end of the Cold War (sanctions by Russia against former Soviet republics) and increasing concerns about ethnic conflict, human rights, and democracy. The impact of the end of the Cold War on sanctions policy is explored further in chapter 5.

Appendix 3A

Table 3A.1 Cases involving modest changes in the target-country policies: Political variables

Case[a]	Sender[b]	Target	Policy result[c]	Sanctions contribution[d]	Success score[e]	Companion policies[f]	International cooperation with sender[g]	International assistance to target[h]	Cooperating international organization[i]	Duration of sanctions[j]	Prior relations[k]	Regime of target[l]	Political stability prior[m]	Political stability during[n]
33-1	United Kingdom	USSR	4	3	12	—	1	—	—	1	1	1	0.0	0.0
38-1	United States, United Kingdom	Mexico	3	3	9	—	2	—	—	9	2	1	0.1	0.0
54-1	USSR	Australia	1	2	2	—	1	—	—	1	1	3	0.0	0.0
56-2	United States, United Kingdom, France	Egypt	3	3	9	R	2	—	—	1	2	1	0.1	0.0
61-1	United States	Ceylon	4	4	16	—	1	A	—	4	2	3	0.0	0.0
62-3	USSR	Romania	1	2	2	—	4	—	—	1	3	1	0.0	0.0
64-1	France	Tunisia	2	3	6	—	1	—	—	2	3	1	0.1	0.0
65-1	United States	Chile	3	3	9	—	1	—	—	1	2	3	0.0	0.0
65-2	United States	India	4	4	16	—	1	—	—	2	2	3	0.0	0.0
68-1	United States	Peru	1	1	1	—	1	—	—	1	2	2	0.0	1.0
68-2	United States	Peru	3	4	12	—	1	—	—	6	2	1	0.1	0.0
71-2	United Kingdom	Malta	3	2	6	—	1	A	—	1	3	n.a.	n.a.	n.a.
75-2	United States	USSR	4	2	8	—	1	—	—	19	1	1	0.0	0.3
75-5*	United States	Chile	4	3	12	—	1	—	—	15	2	1	0.1	0.2
77-4 (1)	Canada	European Community	3	3	9	—	1	—	—	1	3	3	0.0	0.0
77-4 (2)	Canada	Japan	3	3	9	—	1	—	—	1	3	3	0.0	0.0

(table continues next page)

Table 3A.1 Cases involving modest changes in the target-country policies: Political variables *(continued)*

Case[a]	Sender[b]	Target	Policy result[c]	Sanctions contribution[d]	Success score[e]	Companion policies[f]	International cooperation with sender[g]	International assistance to target[h]	Cooperating international organization[i]	Duration of sanctions[j]	Prior relations[k]	Regime of target[l]	Political stability prior[m]	Political stability during[n]
78-1	China	Albania	1	2	2	—	1	—	—	5	3	1	0.0	0.0
78-5	United States	USSR	1	2	2	—	2	—	—	2	1	1	0.0	0.0
79-1	United States	Iran	4	3	12	Q	3	—	EC, **United Nations**	2	3	2	0.1	0.5
79-3	Arab League	Canada	4	3	12	—	3	—	—	1	2	3	0.0	0.0
80-2	United States	Iraq	2	2	4	—	1	—	—	23	2	1	0.0	0.0
83-1	Australia	France	1	2	2	—	1	—	—	3	3	3	0.0	0.0
83-1	Australia	France	2	2	4	—	2	—	—	1	3	3	0.0	0.0
83-2	United States	USSR	1	2	2	—	4	—	—	1	1	1	0.0	0.0
83-3	United States	Zimbabwe	2	2	4	—	1	—	—	5	2	2	0.3	0.2
84-2	United States	Lebanon	2	3	6	—	1	—	—	13	2	2	1.0	0.9
86-1	United States	Syria	2	3	6	—	2	—	EC	20+	1	1	0.0	0.0
86-4	France	New Zealand	3	4	12	—	1	—	—	1	3	3	0.0	0.0
87-3	United States	El Salvador	4	4	16	—	1	—	—	1	3	3	0.6	0.0
90-6 (1)	United States, Saudi Arabia	Jordan	2	3	6	Q	3	A	—	4	3	2	0.1	0.0
90-6 (2)	United States, Saudi Arabia	Yemen et al.	3	3	9	—	3	—	—	7	2	2	0.1	0.4
91-4**	United States, Netherlands	Indonesia	1	2	2	—	2	—	—	6	3	1	0.0	0.0
91-7	USSR/Russia	Turkmenistan	4	3	12	—	1	A	—	4	3	1	0.4	0.0
92-9	USSR/Russia	Estonia	2	2	4	Q	1	—	—	7	2	3	0.4	0.0
92-11	United States	Nicaragua	3	4	12	—	1	—	—	3	2	3	0.2	0.0
92-12	**United Nations**	Libya	4	3	12	—	4	—	—	11	2	1	0.0	0.0
92-13	USSR/Russia	Latvia	2	2	4	Q	1	—	—	6	2	3	0.4	0.0
93-5	United States	Sudan	2	3	6	Q	4	—	**United Nations**	13+	1	1	0.3	0.0

93-7	USSR/Russia	Kazakhstan	3	3	9	—	1	—	—	3	3	2	0.4	0.0
94-1	Greece	Macedonia	3	3	9	—	1	—	—	1	2	3	0.1	0.0
94-2	Greece	Albania	4	4	16	—	1	—	—	1	2	2	0.3	0.0
98-3	Turkey	Italy	3	3	9	—	1	—	—	1	3	3	0.0	0.0
99-1	**United Nations**, United States	Afghanistan	1	2	2	R	4	—	—	3	1	1	0.5	0.3

EC = European Community
n.a. = not applicable
* Also listed in table 3A.2.
** Also listed in table 3A.5.

a. The *case* numbers are those in table 1A.1. If more than one country is the target of a sanctions episode, the case has supplementary numbers in parentheses.
b. The name of an international organization is shown in bold when both sender and target were members during the period of sanctions.
c. The *policy result*, on an index scale of 1 to 4, indicates the extent to which the outcome sought by the sender country was achieved.
1 = failed outcome; 2 = unclear but possibly positive outcome; 3 = positive outcome; 4 = successful outcome.
d. The *sanctions contribution*, on an index of 1 to 4, indicates the extent to which the sanctions contributed to a positive result.
1 = negative contribution; 2 = minor contribution; 3 = substantial contribution; 4 = decisive contribution.
e. The *success score* is an index on a scale of 1 to 16, found by multiplying the policy result index by the sanctions contribution index.
f. Types of *companion policies* are covert action (J), quasi-military operations (Q), and regular military action (R).
g. The extent of *international cooperation with sender*, on an index scale of 1 to 4, indicates the degree of assistance received by the principal sender country in applying sanctions. 1 = no cooperation; 2 = minor cooperation; 3 = modest cooperation; 4 = significant cooperation.
h. *International assistance to target*, indicated by an A, is judged to exist when another country (usually a major power) extends significant economic or military assistance to the target country. The mere transshipment of goods subject to sanctions is not counted here as assistance.
i. *Cooperating international organization* that supports the senders in the sanctions episode either by imposing sanctions itself or taking other supporting actions. If the target belongs to the cooperating international organization, the organization's name is shown in bold. However, mere statements of support not followed by any action are not included.
j. The *duration of sanctions* is the time (rounded to the nearest year) from the first official threat or event to the conclusion. The minimum period is one year.
A "+" indicates that the sanction is still in effect as this book goes to press.
k. *Prior relations* index, scaled from 1 to 3, measures the degree of warmth, prior to the sanctions episode, in overall relations between target and sender country. 1 = antagonistic; 2 = neutral; 3 = cordial.
l. Types of *political regime of target* are 1 = autocracy, 2 = anocracy, 3 = democracy.
m. The *political stability prior* variable tracks the number of regime changes in the target in the 10 years prior to the imposition of sanctions. Values of 1 to 0 are found by dividing the number of observed changes by 10.
n. The *political stability during* variable measures the number of regime changes while sanctions were in place. Values of 1 to 0 are found by dividing the number of observed changes by years sanctions were in place.

Table 3A.2 Cases involving regime change and democratization: Political variables

Case[a]	Sender[b]	Target	Policy result[c]	Sanctions contribution[d]	Success score[e]	Companion policies[f]	International cooperation with sender[g]	International assistance to target[h]	Cooperating international organization[i]	Duration of sanctions[j]	Prior relations[k]	Regime of target[l]	Political stability prior[m]	Political stability during[n]
18-1	United Kingdom	Russia	1	2	2	R,Q	4	—	—	2	1	2	0.1	0.0
39-1** (1)	United States, Alliance powers	Germany	4	2	8	R	4	—	—	6	1	1	0.1	0.0
39-1**(2)	United States, Alliance powers	Japan	4	2	8	R	4	—	—	4	1	2	0.0	0.0
44-1	United States	Argentina	2	2	4	—	2	—	—	3	2	1	0.2	0.3
48-4	USSR	Yugoslavia	1	1	1	Q	4	A	—	7	3	1	0.6	0.6
50-1**	United States, United Nations	North Korea	1	1	1	R	4	A	—	56+	1	1	0.1	0.0
51-1	United States, United Kingdom	Iran	4	3	12	J	2	—	—	2	3	2	0.0	0.0
56-4	United States	Laos	3	3	9	J	2	—	—	6	3	2	0.5	0.7
58-1	USSR	Finland	4	4	16	—	1	—	—	1	3	3	0.0	0.0
60-1	United States	Dominican Republic	4	3	12	J,Q	3	—	**OAS**	2	3	1	0.0	0.5
60-3*	United States	Cuba	1	1	1	J,Q	2	A	**OAS**	29	1	2	0.6	0.0
60-3*	United States	Cuba	2	2	4	—	1	—	—	16+	1	1	0.0	0.0
61-2	USSR	Albania	1	1	1	J	4	A	—	4	3	1	0.0	0.0
62-1	United States	Brazil	4	3	12	J	1	—	—	2	2	2	0.2	0.5
62-2	**United Nations**	South Africa	4	2	8	—	3	A	**OAU**	32	2	2	0.0	0.1
63-3*	United States	Indonesia	4	2	8	—	1	—	—	3	2	2	0.3	0.0
63-4	United States	South Vietnam	4	3	12	J	1	—	—	1	3	2	0.1	0.0
65-3	United Nations, United Kingdom	Rhodesia	4	3	12	Q	4	A	OAU	14	3	2	0.1	0.0
70-1	United States	Chile	4	3	12	J	1	—	—	3	2	3	0.0	0.0

72-1	United States, United Kingdom	Uganda	4	3	12	—	2	—	—	7	2	1	0.4	0.0
73-2	United States	South Korea	2	2	4	—	1	—	—	4	3	1	0.1	0.0
75-4	United States	Kampuchea	1	2	2	—	1	—	—	4	1	2	0.4	0.3
75-5***	United States	Chile	4	2	8	—	1	—	**OAS, United Nations**	7	2	1	0.1	0.1
76-1	United States	Uruguay	3	2	6	—	1	—	—	5	2	1	0.3	0.0
77-1	United States	Paraguay	2	3	6	—	1	—	—	4	2	1	0.0	0.0
77-2	United States	Guatemala	3	3	9	—	1	A	—	28	2	2	0.1	0.2
77-3	United States	Argentina	3	2	6	—	1	—	—	6	2	1	0.2	0.0
77-5	United States	Nicaragua	4	3	12	—	1	—	—	2	3	1	0.0	0.0
77-6	United States	El Salvador	2	3	6	—	1	—	—	4	2	1	0.1	0.5
77-7	United States	Brazil	3	2	6	—	1	—	—	7	2	2	0.1	0.0
77-8	United States	Ethiopia	3	2	6	—	2	A	—	15	2	1	0.2	0.1
78-8**	United States	Libya	4	3	12	J,Q	1	—	—	26	1	1	0.0	0.0
79-4	United States	Bolivia	2	3	6	—	2	A	—	3	2	2	0.3	0.0
81-1	United States	Nicaragua	4	2	8	J,Q	1	A	—	9	2	2	0.3	0.1
81-2	United States	Poland	3	3	9	—	3	A	EC	6	2	1	0.0	0.0
81-4	EC	Turkey	3	2	6	—	2	—	—	5	3	2	0.2	0.2
82-2	Netherlands	Suriname	3	3	9	—	2	A	—	9	3	n.a.	n.a.	n.a.
82-3	South Africa	Lesotho	4	3	12	Q	1	—	—	2	2	1	0.0	0.0
83-4	United States, **OECS**	Grenada	4	2	8	R	3	—	—	1	2	n.a.	n.a.	n.a.
83-5	United States	Romania	3	2	6	—	2	—	—	3	1	2	0.2	0.0
83-5	United States	Romania	3	2	6	—	2	—	—	6	2	1	0.0	0.0
85-1	United States, British Commonwealth	South Africa	4	3	12	—	3	—	**United Nations,** EC	6	3	2	0.0	0.0
86-2	United States	Angola	3	2	6	J	1	A	—	6	1	1	0.0	0.2
87-1	United States	Panama	4	2	8	J,R,Q	1	A	—	3	3	1	0.0	0.3
87-2	United States	Haiti	2	3	6	—	2	—	—	3	2	1	0.2	1.0

(table continues next page)

Table 3A.2 Cases involving regime change and democratization: Political variables *(continued)*

Case[a]	Sender[b]	Target	Policy result[c]	Sanctions contribution[d]	Success score[e]	Companion policies[f]	International cooperation with sender[g]	International assistance to target[h]	Cooperating international organization[i]	Duration of sanctions[j]	Prior relations[k]	Regime of target[l]	Political stability prior[m]	Political stability during[n]
87-4	India, Australia, New Zealand	Fiji	2	2	4	—	2	—	**Commonwealth,** EC/EU	14	3	2	0.1	0.1
88-1	United States, EU, Japan	Burma	2	2	4	—	2	—	—	18+	2	1	0.0	0.0
88-2	**United Nations**, United States, United Kingdom	Somalia	1	2	2	R	4	—	—	18+	3	1	0.0	0.8
89-2	United States	China	1	2	2	—	2	—	EC/EU	17+	2	1	0.0	0.0
89-3	United States	Sudan	2	2	4	—	3	—	EC	17+	3	1	0.3	0.0
90-1**	United Nations, United States	Iraq, postwar	1	1	1	J,R,Q	2	—	**—**	12	1	1	0.0	0.0
90-2	United States	El Salvador	3	3	9	—	1	—	—	3	3	3	0.4	0.0
90-3	United States, Western donors	Kenya	2	3	6	—	3	—	—	3	3	1	0.0	0.0
90-4	United States, Belgium, France	Zaire	2	2	4	—	3	—	EC	7	3	1	0.0	0.7
90-5	USSR	Lithuania	3	2	6	Q	1	—	—	<1	2	3	0.3	0.0
91-3	United States	Thailand	3	2	6	—	1	—	—	1	3	2	0.1	0.0
91-5	**United Nations,** United States, **OAS**	Haiti	4	1	4	R	4	—	—	3	3	1	0.6	0.0
91-6	United States, EC	USSR	4	2	8	—	3	—	—	<1	2	2	0.4	0.0
91-8	United States	Peru	3	4	12	—	3	—	**OAS**	4	3	3	0.0	0.5
92-2	EU, France, Germany	Togo	2	2	4	—	2	—	—	14+	2	2	0.2	0.1

92-3	United States, United Kingdom	Malawi	4	4	16	—	3	—	EC	1	2	1	0.0	0.0
92-4	EU, Spain	Equatorial Guinea	2	3	6	—	2	—	—	8	2	1	0.0	0.0
92-5	EU	Algeria	2	2	4	—	1	—	—	2	3	1	0.2	0.0
92-6	United States	Cameroon	2	2	4	—	2	—	—	6	2	2	0.1	0.0
92-8	United Nations, United States, Germany	Cambodia, Khmer Rouge	2	2	4	—	3	—	**ASEAN,** EU	9+	2	1	0.7	0.2
92-8	**United Nations,** United States, Germany	Cambodia, Khmer Rouge	3	2	6	—	3	—	—	5	1	2	1.0	0.2
93-2	United States, EU	Guatemala	4	4	16	—	3	—	**OAS**	1	2	2	0.3	0.0
93-4	United States, EU	Nigeria	2	2	4	—	2	—	Commonwealth	5	2	1	0.1	0.0
94-4	United States, EU, Japan	The Gambia	2	3	6	—	2	A	—	4	3	1	0.1	0.5
95-2	EU	Turkey	3	3	9	—	1	—	—	1	3	3	0.0	0.0
96-1	East African members of OAU	Burundi	2	3	6	—	3	—	**OAU**	3	3	2	0.5	0.7
96-2	United States, EU	Niger	3	3	9	—	2	—	—	4	3	1	0.3	0.3
96-3	United States, Western donors	Zambia	2	2	4	—	3	—	—	2	3	2	0.2	0.0
96-4	United States	Colombia	2	3	6	—	1	—	—	2	3	3	0.0	0.0
96-5	United States, Mercosur	Paraguay	4	3	12	—	3	—	**OAS**	<1	3	3	0.2	0.0
97-1	**United Nations, ECOWAS**	Sierra Leone	4	2	8	R	4	A	EU, **Common-wealth**	6	3	2	0.2	0.8
98-2****	United States, EU	Yugoslavia, Serbia	4	3	12	—	3	—	—	3	1	1	0.1	0.3
99-2	United States, EU, France	Ivory Coast	2	3	6	—	2	—	**ECOWAS, OAU**	3	3	2	0.1	0.3

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Table 3A.2 Cases involving regime change and democratization: Political variables *(continued)*

Case[a]	Sender[b]	Target	Policy result[c]	Sanctions contribution[d]	Success score[e]	Companion policies[f]	International cooperation with sender[g]	International assistance to target[h]	Cooperating international organization[i]	Duration of sanctions[j]	Prior relations[k]	Regime of target[l]	Political stability prior[m]	Political stability during[n]
99-3	United States, Japan	Pakistan	1	2	2	—	2	—	EU, **Commonwealth**	2	2	1	0.1	0.0
00-1	United States	Ecuador	3	4	12	—	3	—	**OAS**	1	3	3	0.1	0.0

n.a. = not applicable

* Also listed in table 3A.3.

** Also listed in table 3A.4.

*** Also listed in table 3A.1.

**** Also listed in table 3A.5.

ASEAN = Association of Southeast Asian Nations
EC/EU = European Community/European Union
ECOWAS = Economic Community of West African States
Mercosur = Mercado Común del Sur (Southern Common Market)
OAS = Organization of American States
OAU = Organization of African Unity
OECS = Organization of Eastern Caribbean States

Note: For footnotes a to n, see table 3A.1.

Table 3A.3 Cases involving disruption of military adventures (other than major wars): Political variables

Case[a]	Sender[b]	Target	Policy result[c]	Sanctions contribution[d]	Success score[e]	Companion policies[f]	International cooperation with sender[g]	International assistance to target[h]	Cooperating international organization[i]	Duration of sanctions[j]	Prior relations[k]	Regime of target[l]	Political stability prior[m]	Political stability during[n]
21-1	**League of Nations**	Yugoslavia	4	4	16	—	4	—	—	1	2	2	0.4	0.0
25-1	**League of Nations**	Greece	4	4	16	—	4	—	—	1	2	1	0.9	0.0
32-1 (1)	**League of Nations**	Paraguay	3	2	6	—	3	—	—	3	2	2	0.0	0.0
32-1 (2)	**League of Nations**	Bolivia	3	2	6	—	3	—	—	3	2	2	0.0	0.0
35-1	**League of Nations**, United Kingdom	Italy	1	2	2	—	4	A	—	1	2	1	0.3	0.0
40-1	United States	Japan	1	1	1	—	2	—	—	1	1	2	0.0	0.0
54-4[o]	United States	North Vietnam	3	2	6	—	2	A	—	23	1	1	0.0	0.0
56-3	United States	United Kingdom	4	3	12	—	1	—	—	1	3	3	0.0	0.0
60-3*	United States	Cuba	4	2	8	J,Q	2	A	**OAS**	29	1	2	0.6	0.0
63-1	United States	United Arab Republic	4	3	12	—	1	—	—	2	2	1	0.0	0.0
63-3*	United States	Indonesia	4	2	8	—	1	—	—	3	2	2	0.3	0.0
71-1 (1)	United States	Pakistan	2	2	4	Q	1	—	—	1	2	2	0.4	0.0
71-1 (2)	United States	India	2	2	4	Q	1	—	—	1	2	3	0.0	0.0
74-1	United States	Turkey	1	1	1	—	1	—	—	4	3	3	0.2	0.0
78-7	China	Vietnam	3	2	6	R	3	A	—	10	3	1	0.0	0.0
80-1**	United States	USSR	1	2	2	J	3	—	EC	1	1	1	0.0	0.0
92-1***	**ECOWAS, UN**	Liberia[p]	4	2	8	—	3	—	EC/EU	6	1	2	0.7	0.0
95-1 (1)	United States	Peru	4	2	8	—	2	—	**OAS**	3	3	2	0.2	0.0
95-1 (2)	United States	Ecuador	4	2	8	—	2	—	**OAS**	3	3	3	0.0	0.0

* Also listed in table 3A.2.
** Also listed in table 3A.4.
*** Also listed in table 3A.5.

Note: For footnotes a to n, see table 3A.1.

o. This is phase II of this case, after the military conflict ended in 1975. Phase I with South Vietnam as a cosender is listed in table 3A.4.
p. The primary goal of phase II (begun in 2000) was to end Liberia's support for the Revolutionary United Front in Sierra Leone.

Table 3A.4 Cases involving impairment of military potential (including major wars): Political variables

Case[a]	Sender[b]	Target	Policy result[c]	Sanctions contribution[d]	Success score[e]	Companion policies[f]	International cooperation with sender[g]	International assistance to target[h]	Cooperating international organization[i]	Duration of sanctions[j]	Prior relations[k]	Regime of target[l]	Political stability prior[m]	Political stability during[n]
14-1	United Kingdom	Germany	4	3	12	R	4	A	—	4	1	2	0.0	0.0
39-1**(1)	United States, Alliance powers	Germany	4	3	12	R	4	—	—	6	1	1	0.1	0.0
39-1**(2)	United States, Alliance powers	Japan	4	3	12	R	4	—	—	4	1	2	0.0	0.0
48-5	United States, CoCom	USSR, Comecon	3	2	6	—	4	—	—	46	1	1	0.0	0.0
49-1	United States, ChinCom	China	1	2	2	—	3	A	—	21	1	1	0.9	0.0
49-1	United States, ChinCom	China	1	2	2	R,Q	3	A	**United Nations**	3	1	1	0.9	0.0
50-1**	United States, United Nations	North Korea	2	2	4	R	4	A	—	56+	1	1	0.1	0.0
54-4[o]	United States, South Vietnam	North Vietnam	1	1	1	R	2	A	—	20	1	1	0.1	0.0
60-2	USSR	China	2	2	4	Q	3	—	—	10	3	1	0.0	0.0
74-2	Canada	India	2	2	4	—	2	—	—	2	2	3	0.0	0.0
74-3	Canada	Pakistan	2	2	4	—	2	—	—	2	2	3	0.5	0.0
75-1	United States, Canada	South Korea	4	4	16	—	2	—	—	1	3	1	0.1	0.0
75-3	United States	South Africa	2	2	4	—	2	—	—	7	2	2	0.0	0.0
76-2	United States	Taiwan	4	4	16	—	1	—	—	1	3	1	0.0	0.0

78-2	United States	Brazil	2	2	4	—	1	—	—	3	2	2	0.1	0.0
78-3	United States	Argentina	2	2	4	—	2	—	—	4	2	1	0.2	0.0
78-4	United States	India	2	2	4	—	2	—	—	4	2	3	0.0	0.0
78-8**	United States	Libya	4	3	12	J,Q	1	—	—	26	1	1	0.0	0.0
79-2	United States	Pakistan	2	2	4	—	3	—	—	3	2	3	0.0	0.3
79-2	United States	Pakistan	1	1	1	—	1	A	—	18	3	1	0.5	0.1
80-1*	United States	USSR	1	2	2	J	3	—	EC	1	1	1	0.0	0.0
81-3	United States	USSR	1	1	1	—	2	—	—	1	1	1	0.0	0.0
82-1	United Kingdom	Argentina	4	3	12	R	3	—	EC	1	2	1	0.2	0.0
84-1	United States	Iran	2	2	4	Q	2	—	—	22+	1	1	0.4	0.1
90-1**	**United Nations**, United States	Iraq, postwar	3	3	9	J,R,Q	4	—	**Arab League**	12	1	1	0.0	0.0
93-1	United States, **United Nations**	North Korea	3	3	9	Q	3	—	—	1	1	1	0.0	0.0
93-1	United States, **United Nations**	North Korea	1	1	1	Q	3	—	—	4+	1	1	0.0	0.0
93-6	USSR/Russia	Ukraine	3	2	6	—	1	—	—	4	2	3	0.4	0.0
98-1	United States	India	1	2	2	—	3	—	—	3	2	3	0.0	0.0

* Also listed in table 3A.3.
** Also listed in table 3A.2.

ChinCom = China Committee
CoCom = Coordinating Committee for Multilateral Export Controls
Comecon = Council for Mutual Economic Assistance

Note: For footnotes a to n, see table 3A.1.

o. Refers to phase I of this case, which involved both the United States and South Vietnam as cosenders of sanctions. Phase II involved only the United States as a sender of sanctions and is cross-listed in table 3A.3.

Table 3A.5 Cases involving other major changes in target-country policies (including surrender of territory): Political variables

Case[a]	Sender[b]	Target	Policy result[c]	Sanctions contribution[d]	Success score[e]	Companion policies[f]	International cooperation with sender[g]	International assistance to target[h]	Cooperating international organization[i]	Duration of sanctions[j]	Prior relations[k]	Regime of target[l]	Political stability prior[m]	Political stability during[n]
17-1	United States	Japan	2	2	4	—	1	—	—	1	2	2	0.0	0.0
46-1	Arab League	Israel	2	2	4	R	3	A	—	60+	1	3	0.1	0.0
48-1	United States	Netherlands	4	4	16	—	1	—	**United Nations**	1	3	3	0.7	0.0
48-2	India	Hyderabad	4	2	8	R	1	—	—	1	3	n.a.	n.a.	n.a.
48-3 (1)	USSR	United States	1	2	2	Q	1	A	—	1	1	3	0.0	0.0
48-3 (2)	USSR	United Kingdom	1	2	2	Q	1	A	—	1	1	3	0.0	0.0
48-3 (3)	USSR	France	1	2	2	Q	1	A	—	1	1	3	0.4	0.0
54-2	India	Portugal	4	2	8	R	1	—	—	7	2	1	0.0	0.0
54-3	Spain	United Kingdom	2	3	6	—	1	—	**United Nations**	30	2	3	0.0	0.0
56-1	United States	Israel	2	2	4	—	1	—	—	4	3	3	0.1	0.0
57-1	Indonesia	Netherlands	4	2	8	R	2	—	—	5	2	3	0.0	0.0
57-2	France	Tunisia	1	2	2	R	1	A	—	6	3	1	0.1	0.0
61-3	United States, Western allies	German Democratic Republic	1	2	2	Q	3	A	—	1	1	1	0.0	0.0
63-2	Indonesia	Malaysia	1	2	2	Q	1	—	—	3	2	3	0.1	0.0
63-5	OAU, **United Nations**	Portugal	4	2	8	—	3	—	—	11	2	1	0.0	0.0
67-1	Nigeria	Biafra	4	3	12	R	1	—	—	3	3	n.a.	n.a.	n.a.
73-1 (1)	Arab League	United States	3	3	9	—	3	—	—	1	2	3	0.0	0.0

73-1 (2)	Arab League	Netherlands	3	3	9	—	3	—	—	1	2	3	0.0	0.0
76-3	United States	Arab League	3	2	6	—	2	—	—	30+	2	1	0.0	0.1
78-6	**Arab League**	Egypt	1	2	2	—	3	A	—	5	3	1	0.0	0.0
86-3	Greece	Turkey	2	2	4	—	1	—	—	13	1	3	0.2	0.0
89-1	India	Nepal	3	3	9	—	1	—	—	1	3	2	0.1	0.0
89-4	Turkey, Azerbaijan	Armenia	1	2	2	R,Q	2	A	—	17+	2	3	0.2	0.2
90-1	**United Nations,** United States	Iraq, prewar	1	2	2	R	4	—	**Arab League**	1	2	1	0.0	0.0
91-1	United Nations, United States, EC	Yugoslavia	3	3	9	R	4	—	—	10	3	2	0.1	0.1
91-2	United States	China	2	2	4	—	1	—	—	15+	2	1	0.0	0.0
91-4*	United States, Netherlands	Indonesia	3	4	12	—	3	—	**United Nations**, EU	3	2	2	0.1	0.0
92-1***	**ECOWAS, United Nations**	Liberia	4	3	12	R	4	A	EC/EU	6	2	2	0.3	0.5
92-7	United States	Azerbaijan	1	1	1	—	1	—	—	10	2	2	0.5	0.3
92-10	China	France	3	4	12	—	1	—	—	2	3	3	0.0	0.0
93-3	United Nations	Angola, UNITA	4	3	12	R	4	—	—	9	2	1	0.0	0.0
94-3	**United Nations**, United States	Rwanda	1	2	2	—	3	—	EU	1	2	1	0.2	0.0
98-2**	United States, EU	Yugoslavia, Serbia	3	2	6	R	3	—	United Nations	1	1	1	0.1	0.3

n.a. = not applicable
* Also listed in table 3A.1.
** Also listed in table 3A.2.
*** Also listed in table 3A.3.

UNITA = National Union for the Total Independence of Angola

Note: For footnotes a to n, see table 3A.1.

Table 3A.6 Episodes by target region

Goal/period	OECD countries	Non-OECD Europe	Latin America	Middle East	Asia	Africa
Policy goal						
Modest policy changes	9	12	7	8	4	3
Regime change and democratization	5	9	27	3	13	23
Disruption of military adventures	5	2	5	1	5	1
Military impairment	3	4	3	3	15	1
Other major policy changes	13	5	0	5	5	5
All episodes	35	32	42	20	42	33
By period[a]						
1914–44	9	3	4	0	0	0
1945–69	11	5	7	5	14	5
1970–79	7	3	12	5	12	3
1980–89	4	7	8	4	4	6
1990–2000	4	14	11	6	12	19
All episodes	35	32	42	20	42	33

OECD = Organization for Economic Cooperation and Development

a. Asia, 1990–2000, includes phase II of Case 93-1: US, UN v. North Korea, which began in 2002.

4

Economic Variables

In this chapter, we examine the economic dimensions of a sanctions episode. Of course economics and politics are often blurred, but our focus is on variables that emphasize economic relations between senders and their targets.

Tables 4A.1 to 4A.5 at the end of the chapter summarize data for the economic variables that we document in each episode. As in chapter 3, we have grouped the cases in the tables according to the principal foreign policy objective sought. However, we have organized the discussion in this chapter according to the economic variables.

Size of Sender and Target Countries

In all but 16 cases, the economy of the sender country is larger than that of the target country, and in most cases it is far larger. The sender's GNP is more than 10 times greater than the target's GNP in 80 percent of cases, and in half the cases, the ratio is greater than 100. These lopsided ratios reflect, on the one hand, the prominence of the United States, the United Kingdom, the former Soviet Union, and recently the United Nations and the European Union as senders and, on the other hand, the small size of the countries they usually try to influence with economic sanctions.

Though sanctions episodes where the GNP ratio is below 10 are not common, success in these episodes is observed approximately one-third of the time, similar to the record observed in cases characterized by higher ratios. A few of the small-ratio success stories involved cases dating from the two World Wars, but in the second half of the 20th century some sender countries successfully exercised economic leverage against economies of comparable size through their control of strategic commodities or finance.

During the Suez crisis (Case 56-3), for example, the United States threatened to provoke a sterling crisis by denying the United Kingdom access to temporary credits from the International Monetary Fund (IMF), as well as dollar credits from US banks. In the 1973 oil embargo (Case 73-1), control by the Arab countries of vast oil supplies gave them leverage far out of proportion to their economic size, measured by GNP. In the 1990s, China succeeded in compelling France to cease arms sales to Taiwan (Case 92-10) despite being only one-third its economic size (at market exchange rates). To summarize, large countries are more likely to use sanctions against smaller economies, but size is not all that matters.

Trade Linkages

Since sender countries are generally very large economies (foremost the United States), it is not surprising that the target's import and export trade with the sender usually accounts for over 10 percent of the target's total external commerce. In cases we have scored as successes, the sender country accounts, on average, for almost one-third of the target country's total trade. Interruption of even a small portion of that trade could carry an important message to the target country: Change your policies or risk a larger disturbance. But obviously other factors matter as well, since the average trade linkage in failed cases was only a bit smaller, some 29 percent.

The trade ratios in cases involving modest policy goals vary greatly as they do in all categories. Some cases were successful when only a small amount of bilateral trade was involved: For example, in Case 98-3 Turkey accounted for only 2 percent of Italy's exports and less than 1 percent of its imports. Yet many cases were unsuccessful even when a high proportion of trade could have been at risk: Limited UN and US sanctions against the Taliban of Afghanistan (Case 99-1) could have threatened the vast majority of external trade if expanded, but the threat of escalation was not credible and the regime did not alter its position regarding the extradition of Osama bin Laden. In general, however, higher trade linkages are more closely associated with success episodes than with failures, though the difference is small (23 versus 18 percent).

In regime change and democratization cases, trade linkages are usually strong; the average for this goal is above 38 percent. Historically, strong trade linkages reflected the tendency of large senders to target their smaller neighbors. In the 1990s, the high linkages reflected the efforts of the United States and the European Union to promote democracy in smaller countries around the globe. In the vast majority of regime change cases—and in 34 of the 37 cases since 1985—the sender purchased more than 10 percent of the exports, and supplied over 10 percent of the imports, of the target country. Within this group of cases, the extent of trade linkage appears somewhat

greater for success cases (average of 43 percent) than for failure cases (average of 38 percent), though once again the difference is small.

However, linkage seems quite relevant in cases involving high policy goals.[1] In the military impairment category, successes exhibit an average trade linkage of almost 37 percent, while failures average 21 percent. One notable failure is the economic isolation of North Korea in recent years (second phase of Case 93-1): Even though the sender countries account for the bulk of North Korea's external commerce, the regime still had not definitively reversed its nuclear acquisition policy as of summer 2007.

Trade linkage also seems to be an influential variable in compelling favorable outcomes in other major policy changes. Successes in this category (table 4A.5) exhibit an average trade linkage of 34 percent, while failures average 24 percent. While greater trade linkage is, to varying degrees, associated with an increased likelihood of success in the four policy goal categories described above, it is associated with failure in cases of disrupting military adventures. This evidence serves as a reminder that high levels of bilateral trade do not ensure success, especially when the sanctions imposed are relatively minor, as exemplified by the aid sanctions imposed on Nigeria for the seizure of power by a military regime (Case 93-4).

Types of Sanctions

Success may depend, to some extent, on whether the sanctions hit a sensitive sector in the target country's economy. A $100 million cost may have quite different effects depending on whether it is imposed by way of export, import, or financial sanctions. When, as often happens, an authoritarian government controls the target country, the impact of sanctions will be blunted insofar as the elite can shift the burden to the general population. Officials in the US State Department and other foreign ministries spend long hours tailoring their punitive measures, both because they believe that the cut of a sanctions policy matters a great deal in the target country and because the specific measures will differentially affect home firms and communities.

Trade Sanctions

When sender countries impose only one type of trade sanction, either alone or in conjunction with financial restrictions, they more frequently

1. We use the term "high policy goals" to refer only to episodes involving military impairment and other major policy change. Some authors have used the same phrase to refer to cases involving destabilization and disruption of military adventure as well.

use export controls than import controls (50 uses compared with 16). One reason is that sender countries are more likely to enjoy a dominant market position as suppliers of key exports (especially military equipment but also sophisticated capital goods). By contrast, there may be many alternative purchasers of imports. Hence, for a given interruption of trade, sender countries may inflict greater pain by stopping $100 million of exports than by stopping the same amount of imports. The dominant position of the United States as a manufacturer of military hardware and high-technology equipment has particularly influenced US tactics.[2] However, global economic development and the spread of sophisticated technologies mean that unilateral export controls generally provide less leverage today than in the period shortly after World War II, even for very sophisticated items.

A second reason for the emphasis on export sanctions, and one peculiar to the United States, is that the Congress has given the president much greater flexibility to restrain exports than to interrupt imports. Exports may be stopped readily through the mechanisms of the Export Administration Act, whose authorities have been maintained by executive order issued under the International Emergency Economic Powers Act of 1977 (IEEPA).[3] Presidential authority also exists to curtail imports—for example, under the national security provision (section 232) of the Trade Expansion Act of 1962, under preexisting quota legislation that covers sugar, and under IEEPA. However, import measures may be constrained because import controls violate the spirit, if not the letter, of international trade obligations—unless the sender invokes the extremely broad national security exceptions permitted under the General Agreement on Tariffs and Trade (GATT) Article XXI (see box 4.1 and table 4.1).[4]

Nonetheless, as Carter (1988) has noted, Congress was prepared, in revising the Export Administration Act in 1985, to expand the president's authority to control imports for foreign policy reasons. However, President

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2. However, as noted earlier, we do not evaluate cases where the overriding objective is simply to limit the export of dangerous items. Sender countries wish to control certain products or technologies—for example, nuclear materials and selected chemical and biological precursors—because the "toys" are too destructive.

3. The Export Administration Act of 1979 expired on August 20, 1994, but the law has been effectively extended by presidential adoption of its provisions under the authority of the IEEPA.

4. In 1983, after the United States imposed a total embargo, Nicaragua brought a GATT case: "[a] Panel was established in this case but the terms of reference of this Panel stated that the Panel could not examine or judge the validity or motivation for the invocation of Article XXI by the United States" (Van den Bossche 2005). Moreover, "[t]he panel report of 13 October 1986 was not adopted by the GATT Council which, in its meeting in April 1990, only took note of the removal of the US measures affecting Nicaragua" (Petersmann 1997). The World Trade Organization (WTO) dispute settlement system has yet to adjudicate a case involving Article XXI, as the European Union and the United States bilaterally resolved their conflict over the Helms-Burton Act (see Case 60-3).

Box 4.1 GATT Article XXI

The international trade rules contain numerous exceptions that permit countries to impose trade restraints in specified circumstances, including in support of national security objectives. The General Agreement on Tariffs and Trade (GATT) Article XXI allows countries to take any action that they themselves deem necessary "for the protection of [their] essential security interests" in three broad areas:

- fissionable materials;
- traffic in arms and "such traffic in other goods and materials as is carried on directly or indirectly for the purpose of supplying a military establishment"; and
- during wartime or other international emergencies.

In addition, Article XXI specifically condones trade sanctions imposed pursuant to UN obligations "for the maintenance of international peace and security."

Article XXI provides an exceedingly broad exception from the international trading rules in cases in which a country decides that its security interests are at stake. The first area, fissionable materials, accommodates antiproliferation controls that have been in force since 1950. The second area opens a much bigger loophole: GATT/WTO member countries can impose economic sanctions theoretically against any good or service that could impair military capability or potential. The third area provides the biggest exception of all, since countries can justify action in response to any nonwar international emergency.

Sanctions imposed pursuant to Article XXI do not require preclearance by other GATT/WTO members. Indeed, the rules do not even require that the actions be notified to the other member countries (much less that they be justified as serving the above noted security interests). Moreover, unlike other GATT exceptions provided in Article XX for health, safety, and other reasons, the actions taken under Article XXI are not required to meet a "least trade restrictive" measure test. Recognizing the potential for abuse of these GATT exceptions, the GATT Contracting Parties agreed in November 1982 to add a hortatory notification requirement to Article XXI, urging countries to inform other GATT members "to the fullest extent possible of trade measures taken under Article XXI" as long as such disclosure is not considered "contrary to its essential security interests."

Table 4.1 documents nine instances in which Article XXI was invoked or referenced in conjunction with the application of national security trade sanctions by GATT member countries. Because of the absence of a notification requirement, many sanctions have not been justified under Article XXI and have proceeded without official approval, censure, or comment in the GATT. Indeed, the more ob-

(box continues next page)

Box 4.1 GATT Article XXI *(continued)*

vious the security rationale (e.g., CoCom controls), the less likely the imposition of the sanction will be raised or challenged in the GATT.

The nine sanctions episodes cited in table 4.1 demonstrate the wide latitude of trade actions that countries have taken in defense of their "essential security interests." The rationales range from the direct to the sublime to the ridiculous. The most clear cut use of Article XXI was by the European Community to justify its trade embargo with Argentina during the Falklands war. More subtle, albeit ingenious, was Ghana's import embargo of Portuguese goods because of concerns that Portugal's colonial repression in Angola created instability and threatened the peace in Africa. Finally, in a variant of the adage that an army marches on its stomach, Sweden justified import quotas on footwear to protect domestic industry and ensure that its army would never be without shoes! The United States has invoked Article XXI three times in defense of trade restrictions against Czechoslovakia (and other communist states), Cuba, and Nicaragua.

Ronald Reagan did not want this new authority for fear it would be later misused for protectionist purposes. Reagan's concerns were in a sense borne out by the nature of import controls later imposed by Congress against South African goods (Case 85-1): These controls were applied selectively to textiles and apparel, iron and steel, agricultural products, and a few other items, but important minerals were exempted from coverage.[5] Several years later, when import controls were imposed on the Sudan for harboring terrorists (Case 93-5), similar selectivity came into play: Imports of gum arabic, a key ingredient in candy, soft drinks, and cosmetics, were excluded from coverage out of congressional concern for the cost to a few US companies. But these cases are exceptions, not the rule.

Financial Sanctions

Financial sanctions, in the sense of delaying or denying credit or grants, were used alone, without trade controls, in 53 of our 204 observations. Export and/or import sanctions, unaccompanied by financial measures, were used in 40 instances. Financial sanctions in combination with trade controls were deployed in 100 of our 204 observations,[6] and in 62 of these 100 instances all three types of sanctions were imposed, though not necessarily comprehensively. The United States, which was a sender in 140

5. William Kaempfer and Anton Lowenberg (1988, 1989) examine this case in depth.

6. In the remaining 11 cases, not subject to trade and/or financial sanctions, sanctions were threatened but not imposed (see below).

Table 4.1 GATT Article XXI exemptions

Year	Invoking member	Target	Trade restriction	Result
1949	United States	Czechoslovakia et al.	US export licensing restrictions	Contracting parties denied Czech claim that US action was illegal under GATT
1954	Peru	Centrally planned economies	Import embargo	Peru justified restrictions under Article XXI
1961	Ghana	Portugal	Import embargo of Portuguese goods	Ghana argued that Angola was "a constant threat to the peace of the African continent and that any action which, by bringing pressure to bear on the Portuguese Government, might lead to a lessening of this danger, was therefore justified in the essential security interests of Ghana." GATT DPC. SR. 19/12 at 196 (1961)
1962	United States	Cuba	Trade embargo	Cuba notified the GATT of new US nontariff barriers. In 1986, the United States invoked Article XXI to justify the initial trade embargo and subsequent legislation to block transshipment of Cuban sugar via third countries
1970	United Arab Republic	Israel	Arab League boycott	The United Arab Republic invoked the national security rationale during negotiation of its protocol of accession to justify its boycott of Israel ("an enemy country") and of firms doing business with Israel. BISD 17S/33 (1970)
1975	Sweden	Footwear exporters	Global import quotas on footwear (1975–77)	Sweden claimed that restrictions were needed for "the maintenance of a minimum domestic production capacity in vital industries"
1982	European Community	Argentina	Trade embargo	European Community invoked Article XXI to justify trade restrictions during the Falklands war
1985	United States	Nicaragua	Trade embargo	Citing nontrade policy reasons, United States cut sugar imports from Nicaragua in 1983 but did not invoke Article XXI. US trade embargo imposed in May 1985 was justified under Article XXI
1991	European Community	Yugoslavia	Trade sanctions	Panel deliberations to review European Community invocation of Article XXI were suspended when Yugoslavia was disqualified from membership following the creation of the new Balkan States. BISD 39S/7 (1993)

observations overall, has played an even more dominant role in the use of financial sanctions, employing them in about 80 percent of the cases in which finance was used without accompanying trade controls (see tables 4A.1 to 4A.5).

The most common type of financial sanction is the interruption of official development assistance. Although Export-Import Bank financing, multilateral development bank loans,[7] and other forms of official and private credit have been linked to political goals from time to time (such as the effort to stop the Three Gorges Dam construction in China), the majority of cases involve the manipulation of bilateral economic and military assistance to developing countries.

Asset Freezes

An unusual sanction is the freeze of assets the target country holds in the sender country. A broad freeze of assets not only stops financial flows but also impedes trade, though freezes are often imposed in conjunction with broad trade controls. Merchandise, accounts receivable, and bank accounts all qualify as assets (as does real property), so once a freeze is announced anything owned by the target country, its corporations, or residents is potentially vulnerable. In general, foreign government assets have been frozen only in times of war or exceptional hostility. In recent years, however, the seizure of assets linked to drug traffickers or to terrorists or their supporters has become a more common weapon in the US arsenal, while the United Nations has been studying the seizure of assets owned by individual regime leaders and their supporters as a means of putting pressure on "bad guys" in target countries and avoiding civilian costs.

In our judgment, 8 of the 21 cases involving asset freezes had a positive or successful outcome to which sanctions contributed modestly. The asset freezes imposed by the United States against Iran in 1979 (Case 79-1) and by the United Kingdom against Argentina in 1982 (Case 82-1) clearly contributed to the resolution of those conflicts by inhibiting the ability of the target countries to purchase weapons and ammunition.[8] Economic sanctions, including an asset freeze, also contributed to Egyptian President

7. The charters of the IMF, World Bank, and other international financial institutions (IFIs) prohibit them from using their funds for political purposes. The US Congress has from time to time passed amendments to appropriations bills requiring the US representatives to these institutions to vote no or to abstain from voting on loans to various countries. However, US actions usually have no effect since the Unites States no longer has veto power over loan decisions in the IFIs, and other members have not shared either US goals or its occasional disposition to politicize those institutions. Nevertheless, suspension of multilateral loans does appear as a sanction in some cases, usually involving expropriation or nationalization, because in certain circumstances the IFIs deem these issues an appropriate economic policy concern.

8. In the Iranian case, Tehran was inhibited in pursuing its war against Iraq.

Gamal Abdel Nasser's willingness to negotiate a compromise solution for governing the Suez Canal after he had nationalized the canal in the summer of 1956 (Case 56-2). The freeze of Kuwait's assets during the Gulf War helped keep them out of Iraq's hands, and the asset freezes imposed upon the former Yugoslavia (Cases 91-1 and 98-2) may have assisted in weakening violent troublemakers. But in general the freezing of assets made a limited contribution to cases involving the pursuit of major objectives, and in these cases sanctions were usually a small supplement to the use of military force.

Comparing Trade, Financial, and Asset Sanctions

The economic and political effects of trade, financial, and asset sanctions differ in several ways. Trade controls are usually selective, affecting one or a few goods: for example, Soviet imports of wool from Australia in 1954 (boycotted in the context of an espionage scandal; Case 54-1) or US exports of nuclear technology to various developing countries in the 1970s. In such cases, trade may only be diverted rather than cut off. Whether import prices paid by (or export prices received by) the target country increase (or decrease) after the sanctions depends on the market in question. Often the price effects are very modest.

In contrast, alternative financing may be harder to find and is likely to carry a higher price (i.e., a significantly higher interest rate) and require greater credit security because of the uncertainties that sanctions create. Official development assistance may be irreplaceable. In addition, financial sanctions, especially involving trade finance, may interrupt a wide range of trade flows even without the imposition of explicit trade sanctions.

The economic effects of financial sanctions may tilt the political balance even more sharply in the sender country's favor. The pain from trade sanctions, especially export controls, usually is diffused through the target country's population. Financial sanctions, on the other hand, are more likely to hit the pet projects or personal pockets of government officials who can influence policy. On the sender's side of the equation, an interruption of official aid or credit is unlikely to create the same political backlash from business firms and allies abroad as an interruption of private trade.

Historically, the United States was the dominant user of financial sanctions. It was the sole sender in 25 of the 31 observations where financial sanctions were used alone prior to 1990. In the 1990s, however, the United States was the sole sender in only 6 of 19 observations. The European Union emerged as a frequent sender or cosender in financial sanctions cases in the 1990s.

In contrast, trade sanctions have suffered from declining popularity. While used by a variety of senders in the past (the United States was the

principal sender in only 14 of the 40 observations in which trade controls alone are imposed), trade sanctions have been implemented as a stand-alone policy only five times since 1990.

Some 20 of the 21 asset freeze cases occurred during or just prior to a period of military conflict or were accompanied by some degree of military force. In all of these cases, asset freezes were also supplemented with trade controls, often in the form of a complete embargo. The United States was the principal sender in 17 cases, and the United Kingdom in 3 cases. The UN asset freeze against Libya is the lone case not involving military force (though the United States had earlier used limited military force in its anti-Gadhafi campaign).

The differing cast of characters and types of tools deployed create significant variations in relevant economic and political variables as between trade, finance, and asset freeze cases:

- The economic costs of sanctions as a percentage of target-country GNP were substantially higher on average when finance alone was interrupted (1.7 percent) by comparison with episodes where trade alone was interrupted (0.7 percent). Comprehensive sanctions featuring both financial and trade measures had more impact, costing the target 2.9 percent of GNP on average (this figure excludes the Iraq observations (Case 90-1); including Iraq would raise the average to 4.2 percent). Packages including asset freezes were even more costly (4.3 percent excluding the Case 90-1 observations).
- The cost to the sender of financial sanctions was, on average, negligible (not counting reputation and indirect costs, discussed later). By contrast, asset freeze episodes involved costs to the sender that averaged 2.5 on our 4-point scale. This measure reflects the broad trade controls that frequently accompanied asset freezes.
- Relations between sender and target were relatively close (average index of 2.4 on a 3-point scale) prior to the imposition of financial sanctions; by contrast, they were usually less warm (average index of 1.7) prior to asset freezes.
- The incidence of international cooperation with the sender country was relatively low in financial sanctions cases, usually because it was not needed; by contrast, in asset freeze cases international cooperation was common (average index of 2.8 on a 4-point scale).

Overall, a successful outcome was scored in 19 of the 53 finance-only cases (36 percent), 32 of the 101 combined trade-finance cases (32 percent), and 8 of the 21 asset freeze cases (38 percent). By contrast, a successful outcome was scored in only 10 of the 40 trade-only cases (25 percent).

Economic Health and Political Stability of Target Countries

In addition to the choice of policy tool, conditions in the target country shape sanctions outcomes. Generally, we would expect economically weak and politically unstable targets to be more vulnerable to sanctions than strong and stable states. While other political variables are discussed in chapter 3, we discuss political stability here, along with the economic health of the target, because the evidence suggests that the overall political economy environment in the country matters. We note, however, that the results on this set of variables are mixed and weaker than expected, and we believe that this area would benefit from further research.

In the first two editions of this book, we used a qualitative index combining our assessments of the economic health and political stability in the target country at the time sanctions were imposed, ranging from distressed (score of 1) to strong and stable (score of 3). In this edition, we collected data on several additional variables: the average annual rate of GDP growth over the previous five years and the annual rate of inflation over the previous three years, both as measures of economic health, and data from the Polity IV database to construct measures of political stability prior to and during the sanctions period. Our first measure of political stability takes the number of regime changes in a country, as measured by the Polity IV database, over the 10 years prior to the sanctions and divides by 10 to produce an indicator ranging from 0 (very stable) to 1 (very unstable). Our second measure is similar except that it records political stability during the period sanctions are in place.

Overall, lower growth and higher inflation are associated with more successful outcomes, as we expected, but that pattern holds for only two of the five goal categories: modest and other major goals (table 4.2). Perhaps not surprisingly, given the nature of the targets in the military impairment category, successes are associated with higher growth and lower inflation in the target country, and results are mixed for regime change and disruption of military adventures. On average the results for the political stability variables based on the Polity IV database were the opposite of what we expected in four of the five goal categories. In fact, successful sanctions are associated with relatively more politically stable targets (table 4.2), perhaps because weak regimes are unable to respond or because they perceive the costs of complying with the sender's demands as being higher than do more stable regimes.

The data also suggest, however, that a combination of weak economic and political conditions makes targets more vulnerable to the effects of sanctions. There is no correlation in the data between either economic growth or inflation and our Polity IV measures of pre-episode political

Table 4.2 Economic health and political stability, by policy goal

	Political stability prior[a]		Political stability during[b]		Annual GDP growth rate (percent)		Annual inflation rate (percent)[c]	
Policy goal	**Success cases**	**Failure cases**	**Success cases**	**Failure cases**	**Success cases**	**Failure cases**	**Success cases**	**Failure cases**
Modest policy changes	0.12	0.16	0.05	0.14	1.5	4.0	326.1	22.4
Regime change and democratization	0.12	0.19	0.12	0.15	3.5	2.6	185.9	32.5
Disruption of military adventures	0.33	0.18	0.00	0.00	2.6	5.9	16.8	131.8
Military impairment	0.04	0.21	0.00	0.03	4.1	3.7	23.0	92.3
Other major policy changes	0.11	0.09	0.06	0.04	1.1	3.8	31.9	14.9
All cases	0.12	0.17	0.07	0.10	2.5	3.5	184.4	45.3

a. *Political stability prior* tracks the number of regime changes in the target in the 10 years prior to the imposition of sanctions (average per year). Values are calculated by dividing the number of observed changes by 10.

b. *Political stability during* measures the number of regime changes while sanctions were in place (average per year). Values are calculated by dividing the number of observed regime changes by years sanctions were in place.

c. Average annual inflation rates greater than 100 percent reflect severe dislocation or economic mismanagement. The calculated values ignore targets that experienced annual inflation rates greater than 500 percent (Cases 91-8, 92-1, 92-11, 93-6, 93-7, and 94-1).

stability. But there is a positive correlation between economic growth and our qualitative index of economic health and political stability (correlation of 0.22). There is also a correlation between the Polity IV measure of political stability and our qualitative index (simple correlation of 0.34). Our judgmental health and stability index is modestly significant in a few of the regressions summarized in appendix A, whereas the other economic and political stability variables are not.

While we recognize the weaknesses of subjective measures, we believe that our index combining economic health and political stability captures information that economic and political conditions measured separately cannot and that it is a better measure of weakness in the target country. For that reason, we report the results on the other variables here, but we rely on the health and stability index in the tabular analysis in chapter 6 and the multivariate analysis in appendix A. Those results suggest that weaker states are more vulnerable, though the relationship is not particularly strong.

A final pattern worth noting in the data is that target countries appear on average to be more politically stable after sanctions have been imposed than before. This result could be skewed by some of the very long-lasting cases, since one might expect that stability would be relatively greater when measured over longer than shorter periods. It might also be interpreted as supporting the hypothesis that sanctions lead to "rally-round-the-flag" effects that strengthen rather than weaken target regimes.

Cost of Sanctions to Targets

Sanctions are supposed to impose economic penalties, or carry a credible threat of penalties, in order to coerce the target country to alter its policies. If sanctions impose no costs, or if the threat is not credible, the measures are unlikely to change foreign behavior. Sanctions also carry costs for the sender. These costs demonstrate the sender's resolve, but they also create domestic constituencies that oppose sanctions. In short, economic costs (actual or threatened, both to the target and the sender) help determine the success or failure of a sanctions episode.

Economists have constructed elaborate theoretical models to suggest how the conditions of supply and demand for the sanctioned commodity might affect the level of costs incurred by the sender and imposed on the target, and how the balance of costs might affect the outcome of a sanctions episode. Unfortunately, the more elaborate the model, the less likely that it is tarnished by economic data. In fact, few studies go beyond anecdotal accounts of the costs that economic sanctions impose on target countries. We have therefore developed a very simple analytical construct to guide our own efforts to estimate the costs imposed on the target country. Our methodology is detailed in appendix C.

To calculate the cost of sanctions to the target country in each episode, we have estimated the initial deprivation of markets, supplies, or finance, expressed on an annualized basis in current US dollars. To calculate the welfare loss to the target's economy, we then used our own judgment to estimate the "sanctions coefficient" that should be applied in the context of the particular episode. Some types of sanctions affect the target country more than others for a given interruption of trade or finance. The welfare loss caused by reductions in aid may be 100 percent of the value of the aid; on the other hand, trade controls may cause far less harm than the value of the shipments affected because of the availability of other markets or substitution of other goods.

Isaac Newton's third law of motion—for every action there is an equal and opposite reaction—seems to play a role in the course of a sanctions episode. The helping hand of another major power may partially or totally offset the impact of sanctions on the target country. In several instances in the Cold War era, the target actually became better off, in economic terms,

as a result of the sanctions. Soviet attempts to pressure Yugoslavia in 1948 (Case 48-4) failed miserably from Moscow's perspective but yielded Marshal Tito an abundant harvest of Western aid and trade credits. Similarly, American efforts to sway Ethiopian policy on human rights and compensation issues (Case 77-8) helped push Colonel Haile-Mariam Mengistu into the waiting and generous arms of the Soviets. In our cost estimates we attempt to reflect these offsetting benefits. A brief survey of four cases may help illustrate our calculations of economic costs.

Case 35-1: United Kingdom and League of Nations v. Italy (1935–36: Abyssinia)

In a belated attempt to coerce Italy into withdrawing its troops from Abyssinia, the League of Nations agreed in late 1935 to a limited trade embargo and to restrictions on loans and credits to Italy. The sanctions did not include key commodities, particularly oil, nor were they universally applied by League and non-League members (the most important nonmember, the United States, did not apply sanctions). Nonetheless, trade was sharply reduced from the presanction period. The sanctions (and the cost of the war) also affected financial conditions in Italy: The lira was devalued by 25 percent in November 1935, and Italy was forced to sell about $94 million in gold between November 1935 and June 1936 to bolster its dwindling foreign exchange reserves.

The sanctions caused a decline in both exports and imports. During the six months when sanctions were in effect, exports dropped by $56 million and imports by $72 million from the previous year's levels. Yet in analyzing this period, M. J. Bonn (1937, 360) noted that "stocks on hand, the practice of economies, the development of substitutes, and the purchase of goods with gold, foreign securities, emigrants' remittances and tourists' disbursements kept the country going without too severe a strain." Elasticities of substitution were undoubtedly high. Accordingly, we estimated the welfare loss to the Italian economy at 30 percent of the value of interrupted trade or $34 million and $43 million, respectively, for exports and imports, when calculated on an annualized basis. In addition, we estimated that Italy incurred a financial loss of $9 million because of forced gold sales, which we estimated to have been made at a 10 percent discount. In sum, we estimate that the sanctions led to an $86 million loss in welfare to the Italian economy, equal to 1.7 percent of GNP.

Case 48-4: USSR v. Yugoslavia (1948–55: Nationalism)

Soviet leader Josef Stalin used economic pressure and threats of military intervention in an attempt to force Marshal Tito's Yugoslavia back into the

Soviet fold. Almost all economic ties between Yugoslavia and the Soviet bloc were suspended by mid-1949. The sanctions led Yugoslavia to expand its trade and to seek military and economic aid from the West. Total trade flows were not reduced, but the direction of trade shifted dramatically: In 1948, over 50 percent of Yugoslav trade was with the Soviet Union and Eastern Europe; by 1954, over 80 percent of trade was with the United States and Western Europe.

Yugoslavia claimed it lost $400 million between 1948 and 1954 as a result of the Soviet sanctions. Our calculations are in the same ball park. We took the amount of Soviet credits offered to Yugoslavia at the end of the sanctions episode—some $289 million in 1955—as a surrogate for the reduction in aid from the Council for Mutual Economic Assistance (Comecon) countries. Spreading the credits over a six-year period and estimating the welfare loss at 75 percent of the value of the aid results in an annualized cost of $36 million. The suspension of debt payments by Comecon countries also cost the Yugoslavs about $300 million over 1948–54, which, when valued at 70 percent of the lost revenues, led to a further loss of $35 million per year. The confrontation with the Soviet bloc also sharply increased military expenditures, which accounted for 22 percent of national income during 1950–54 (Farrell 1956, 27–30). The increase in the military budget was directly attributable to the heightened tensions caused by the Soviet sanctions; accordingly, we also took account of increases in the Yugoslav military budget over the sanctions period. Annual military expenditures in 1950–54 ran about $162 million above the 1948 level; we estimated the annual welfare loss at 25 percent of the additional expenditures, or $40.5 million a year.

These various costs amounted to 3.6 percent of Yugoslav GNP in 1952. However, the costs were more than offset by compensating aid flows from the United States and Europe, coupled with loans from the World Bank. From 1950 to 1954, Yugoslavia received about $1 billion in military and economic aid from the West. Clearly, such funds would not have been forthcoming in the absence of a breach in the Soviet bloc. We estimated Yugoslavia's welfare gain as 75 percent of the transfers, or $187.5 million a year. As a result, there was an annual net welfare gain to the Yugoslav economy during this period of $76 million, equal to 2.5 percent of GNP.

Case 60-1: United States v. Dominican Republic (1960–62: Trujillo)

The notorious abuses committed by Rafael Trujillo prompted the United States in 1960 to impose a limited trade embargo to destabilize the Trujillo regime. The embargo covered arms, petroleum products, trucks, and spare parts. In addition, the United States imposed a special entry fee of 2 cents a pound for sugar imported from the Dominican Republic in ex-

cess of the established quota. Although nominally multilateral, for all practical purposes the sanctions were imposed only by the United States.

The most costly measure was the US sugar fee. It has been estimated elsewhere (Brown-John 1975, 229) that this fee cost the Dominican Republic about $12.5 million per year. Imports of the sanctioned petroleum products fell by 25 percent, but limited product coverage and alternative sourcing in Europe softened the impact on the Dominican Republic economy. Accordingly, we estimated the annual welfare loss due to the petroleum embargo at 30 percent of the trade affected by the sanctions, or only $0.7 million on an annual basis. Imports of trucks, buses, and parts were so small that the losses caused by the sanctions had a negligible impact. Nonetheless, in total the sanctions put the squeeze on an already shaky economy and contributed both to a drop in per capita GNP from $293 in 1960 to $267 in 1961 and to a decline of $28 million in gold and foreign-exchange reserves. We estimated that the drop in reserves resulted in a welfare loss of $2.8 million (10 percent of the actual decline). Overall, then, the sanctions cost the Dominican Republic some $16 million, equal to 1.9 percent of GNP in 1960.

Case 92-2: EC/EU, France, and Germany v. Togo (1992– : Democracy, Human Rights)

In response to the repeated resort to violence by the government of long-time dictator and President General Gnassingbe Eyadema against pro-democracy opposition members, the European Community, France, Germany, and the United States suspended various forms of assistance to Togo. In 1990 and 1991 military cooperation was suspended multiple times. In 1992, the European Community suspended financing of new projects, and the United States froze aid to Togo. In 1993 France suspended nonhumanitarian assistance to the country, and Germany and Japan also froze aid projects.

In 1994, amidst the Rwandan crisis, France resumed some aid to Togo. The European Union announced that it would "gradually resume" some cooperation with the Eyadema regime, conditioned upon democratic progress. However, opposition parties boycotted Togolese elections in 1996, 1999, and 2002, and most donors did not resume aid to the country.

We measure the decrease in aid Togo received from France, Germany, Japan, and the United States by subtracting the average aid disbursements during the sanctions period (1993–2004) from the average level of assistance prior to sanctions (1991–92). This aid loss, a drop of $63 million annually—from $117 million to $54 million—is then multiplied by the sanctions coefficient of 90 percent. The result, about $57 million, is the average annual cost of the sanctions to Togo, equal to more than 3 percent of its GDP at the start of the episode.

Summing Up the Cost to Targets

As these examples show, we tried to err on the side of overestimating the economic impact of sanctions on target countries. Nevertheless, we uncovered few cases in which sanctions inflicted a heavy cost relative to national income—only 14 episodes involved costs that reached double digits as a share of GNP. The costs of sanctions (expressed on an annualized basis) exceeded 2 percent of the target country's GNP in a little more than one in four observations. Of course, government officials fight very hard for policy changes that might increase GNP by 2 percent, and elections are won or lost and coups staged with the expenditure of far less money. Still, the numbers seem small. The big exception is Iraq (Case 90-1). Almost all countries joined in the embargo against Iraq, making it the most extensive array of trade and financial restrictions since World War II.

By far the biggest cost to Iraq came from the oil embargo, which was most severe during the period from 1990 to 1992 (after that, expanded Oil for Food schemes came into play). We estimated welfare costs at 90 percent of the value of lost oil sales. These were calculated using as a base Iraq's average oil exports between 1988 and 1989 and applying the average 1990–96 Dubai Fateh prices. The calculated decline in Iraqi welfare works out to $13.6 billion annually. In addition, Iraq suffered from the loss of imports. Based on the value of Iraqi imports in 1988, we calculated the annual costs of the import embargo at $4.6 billion. The suspension of US agricultural export credits and the freeze of Iraqi assets inflicted additional costs on Iraq, of about $250 million and $370 million, respectively. Increased aid from Libya ($5 million annually) minimally offset the impact of the UN embargo. In later years, UN humanitarian assistance, private relief donations, and the Oil for Food Program lessened the costs of the embargo for the Iraqi economy. But the size of the economy was also much smaller, and we estimate that the UN embargo, over the 1990s, equaled roughly half of Iraq's average annual output.

On a per case basis, the economic damage done by sanctions has increased significantly since the first edition of this book, published in 1985. Observations prior to 1985 had an average cost to target of 1.4 percent of GNP. Cases initiated since 1985 had an average impact of 5 percent of GNP (3.3 percent if observations from Iraq Case 90-1 are excluded). The higher impact likely reflects the increased use of sanctions by major powers against small countries and a declining willingness to sanction significant countries: The median sender-to-target GNP ratio was 45 before 1985 and was 453 in the last 15 years of the 20th century.

Considering the median GNP ratio just cited, costs to target countries averaging merely 3 percent of GNP may seem small. Why don't sanctions generally impose a heavier cost on the target country? In many cases, the sender chooses to impose limited sanctions, either because its goals are limited or because the sender is more interested in responding to domestic

political demands than in making the sanctions effective. In other cases, sender countries may encounter difficulty in extending the scope of sanctions to cover a broad range of economic activity and a large number of trading partners. Even when allied governments embark on a joint sanctions effort, the obstacles are formidable. Sanctions create powerful incentives for evasion. It could be said that a sieve leaks like a sanction. Ingenious new trading relationships, devised by domestic and third-country firms, flower because it is difficult to trace the origin and destination of traded goods (particularly commodities like oil and grains). In the 1980s Iran and Argentina obtained spare military parts, and Libya marketed its oil in Europe (albeit at some cost and delay) thanks to triangular trade arrangements. Moreover, transshipments can be routed through friendly (or at least not antagonistic) countries: In the 1960s, the lifeline for Rhodesia was its continuing trade with South Africa, Zambia, and Mozambique. In the 1990s the National Union for the Total Independence of Angola (UNITA) faction in Angola routed its exports and imports through friendly Congo and Zambia.

Despite the many leakages, sanctions can be made to impose tangible costs, and when they do, success is possible. On average, the costs to the target as a share of GNP are twice as high in successful episodes as in failures (excluding the three Iraqi cases as outliers). Not surprisingly, the highest costs come when goals are ambitious: Successful cases in the other major goals category average 5.5 percent of GNP versus under 1 percent in the failures. The only category where higher costs are not associated with a higher probability of success is disruption of military adventures, and that result may be skewed because two of the four successes are threats, with no measured target costs.

Threat Cases

Threat cases differ from other sanctions episodes in that they entail no interruption of commercial relations; hence, no measurable cost is imposed on the target country. Our population of 174 cases includes 11 involving threats, with no sanctions ever imposed. These episodes are not covered in the multivariate analysis in appendix A since, by definition, the cases do not have data on the cost to target and certain other variables. Nevertheless, it is useful to comment on this group, using the simple statistical counts applied elsewhere in these chapters.

None of the 11 threat cases lasted more than one year. In terms of objectives, these 11 episodes show wide variation: four cases (Cases 62-3, 65-1, 87-3, and 98-3) sought modest changes in policy; two (Cases 96-5 and 00-1) sought regime change; two (Cases 21-1 and 25-1) worked to disrupt military adventures; two (Cases 75-1 and 93-1) tried to impair military potential; and one (Case 61-3) sought another major policy change.

Table 4.3 Characteristics of threat cases compared with all others
(percent of cases in category or average value)

Characteristic	Threat cases	All others
Companion policies (percent)	18	33
International cooperation (index)	2.6	2.1
Cooperating international organization (percent)	45	21
Offsetting assistance (percent)	9	20
Health and stability (index)	2.1	2.0
Prior relations (index)	2.4	2.1
Trade linkage (percent of two-way trade)	38	30
Regime type (index)	2.0	1.8

Among the 11 cases, nine were evaluated as successes and two as failures. This result represents a much higher success ratio than the experience of all cases taken together, reflecting a self-selection effect: If the threat succeeded, there was no need for the sender to apply sanctions. Indeed, these were the "easy victories" against targets that were probably predisposed to altering their policies.

Table 4.3 summarizes the differences between these cases and all the others. Not surprisingly companion policies are seldom used, but the involvement of international organizations is markedly higher. Offsetting assistance is also rare, but Soviet support for East Germany was a factor in the failure to deter the building of the Berlin Wall (discussed below). Relations prior to the imposition of sanctions are relatively warmer in the threat cases than in others, but trade linkages are only modestly higher. Target stability and regime are little different in the two samples, though both targets in the two failed threat cases were autocratic.

An early success in the threat category was Case 25-1 (League of Nations v. Greece). In 1925 the League of Nations warned of a possible naval blockade and economic sanctions unless Greece desisted from border skirmishes with Bulgaria. Greece ultimately agreed, and the case represents a successful example of League diplomacy. In Case 96-5 (Mercosur, US v. Paraguay), Paraguayan army commander General Cesar Oviedo and 5,000 troops set up barracks on the edge of the Paraguayan capital, demanding that President Juan Carlos Wasmosy reverse his decision to remove General Oviedo as army commander. To prevent the overthrow of President Wasmosy's democratic government, members of Mercosur warned of possible sanctions, including the ejection of Paraguay from Mercosur. The United States also expressed serious concern. In the wake of these threats, President Wasmosy gained public approval, General Oviedo lost the support of his fellow officers, and the coup attempt collapsed.

The failure cases, both involving the Soviet Union, tell different but interesting stories. In Case 61-3, the Western allies threatened sanctions against East Germany following construction of the Berlin Wall, but the threat was never carried out and the wall remained in place for three decades, until the Soviet Union itself collapsed. In 1962 a dispute erupted between the Soviet Union and Romania over development strategy (Case 62-3). The Romanian leader of the day, Gheorghe Gheorghiu-Dej, sought economic ties with the capitalist camp. In response, the USSR signaled the possibility of economic sanctions, with a collateral but unspoken goal of tightening the alliance among Comecon member nations. Romania, however, pursued its own economic and diplomatic course, and sanctions were never imposed.

Costs of Sanctions to Senders

Foreign policy measures generally entail domestic costs, and sanctions episodes are no exception. Domestic firms pay an immediate price when trade, aid, or financial flows are disrupted. Moreover, sanctions increase the long-term uncertainty, and therefore the cost, of doing business abroad. All trading partners of the sender country, not just the target country, may be prompted to diversify their sources of supply and seek alternative partners for joint ventures and technologies not developed in the sender country. In cases involving a large number of economically significant countries or a strategic commodity, as with the US-UN embargo of Iraq and the 1973 Arab oil embargo of the United States and the Netherlands, sanctions may even have broad macroeconomic effects.

There is a limited exception to the general rule that sanctions entail costs for the sender country. If the sender seeks to coerce the target by cutting aid or official credits, the sender may enjoy an immediate economic gain due to a reduction in budget expenditures. But even in these instances, the corollary loss of trade contacts may entail an economic burden, in the form of lost sales and jobs, on the sender country.

It is often said that the sender country in a sanctions episode should seek to maximize its political gains and to minimize its economic costs. Sometimes this advice is translated into the recommendation that the sender country should seek to maximize the ratio of costs inflicted to costs incurred. High costs to domestic constituents could undermine support for the sanctions and make them difficult to maintain over time. At the same time, if minimizing costs appears to take precedence over making the sanctions effective, then this could send a signal of weak resolve and encourage the target to hold out.

In practice, the domestic costs of a sanctions episode are rarely calculated, and almost never in advance, for two reasons. First, it is just plain hard to quantify the costs to the sender country. Too many intangible

factors are at play. If congressional legislation compelled the green eyeshade staff of the Office of Management and Budget to calculate the costs of imposing sanctions, the desk officers would be economically challenged. Hard data rarely exist. Some costs might appear only years later in the form of lost sales opportunities for domestic firms—if they are branded with the tag of "unreliable supplier." Though such legislation has been proposed, it has never passed.[9]

Second, for large countries, the overall impact on the sender's economy may be regarded as trivial. In more than two-thirds of the cases we have examined, the cost to the target is less than 2 percent of its GNP, and in more than half, it is less than 1 percent. The costs borne by the sender country, as a percentage of its GNP, will be much less, since as a rule the sender has by far the larger economy. From the lofty perspective of the White House or 10 Downing Street, the costs may seem entirely affordable.

However, the US grain embargo and pipeline sanctions cases of the early 1980s (Cases 80-1 and 81-3) focused attention on the very different perspective of individual firms and communities. Sanctions are paid for by the industries whose trade is most deeply affected. In contrast, most other foreign and defense policies are financed out of general treasury revenues.[10]

Sanctions can amount to a discriminatory, sector-specific, and therefore unfair tax to finance foreign policy. In many instances, sanctions restrict the sale of goods that are available from competitors in foreign countries, or require the cancellation of existing contracts, or both. The impact of sanctions may fall most heavily on those few firms that suffer lost sales and damaged reputations. Such lopsided burden-sharing can quickly arouse political opposition to the methods of the sender government and sometimes to the goals.

Reflecting these concerns, the US Export Administration Act of 1979 contained safeguards to guard against its overzealous use and the consequent damage to US export interests.[11] However, the grain embargo and pipeline cases quickly revealed these safeguards to be ineffective. The Export Administration Act was therefore eventually extended as the Export Administration Amendments Act of 1985 (1985 EAAA), which put additional limits on presidential power. The most important new limitations were a time limit on agricultural embargoes, a provision limiting the president's power to impose controls on exports subject to existing contracts, and stricter criteria for the imposition of controls, taking the availability of foreign substitutes into account.

9. "Enhancement of Trade, Security, and Human Rights through Sanctions Reform Act," HR 2708, introduced on 23 October 1997. See http://usaengage.org/archives/legislative/hr2708.html. The Senate version (S 1413) is available at http://usaengage.org/archives/legislative/S1413.html.

10. To be sure, the deployment of military forces often inflicts extreme costs on individual soldiers.

11. This discussion of the Export Administration Act is drawn from Hufbauer (1990).

Limitations on Agriculture

In light of the harsh domestic political backlash against the 1980 grain embargo imposed by President Jimmy Carter against the Soviet Union, Congress inserted, in the 1985 EAAA, a sunset provision that limited the duration of embargos on agricultural goods to 60 days, unless Congress agreed by joint resolution to extend the sanctions for a maximum of one year. Nevertheless, all agricultural exports could be blocked as part of a generalized export embargo. The question of a grain embargo resurfaced in the sanctions cases against India and Pakistan following their nuclear tests in 1998. To discourage nuclear proliferation, the 1994 Glenn Amendment to the Arms Export Control Act required the president to cut off financial assistance and to restrict exports, including farm products, to countries that conduct nuclear tests. The prospective cancellation of large grain shipments to Pakistan, at a time when prices were already soft, prompted new legislation that gave the president discretion to waive the Glenn Amendment for one year.

Contract Sanctity Rules

The 1985 amendments also protected existing contracts for export or reexport: Section 108(1) provides that the president can break those contracts only when a "breach of peace" threatens the strategic interests of the United States, and after Congress has been consulted. The contract sanctity issue cuts in two directions. On the one hand, sanctions are more likely to be effective when they are imposed abruptly and with maximum force. To do so, a sender would want to cancel existing contracts in spite of the inevitable domestic dissatisfaction. On the other hand, if existing contracts are honored, domestic costs will be reduced, and so will domestic opposition. But the initial impact on the target country will also be lessened, providing time for the target country to adjust and to attract compensating foreign assistance. The "breach of peace" threshold represented Congress' attempt to resolve this dilemma.

Foreign Availability

Finally, the 1985 EAAA required the president to dismantle national security and foreign policy controls when the goods in question are available from foreign sources.[12] Unlike national security export controls, whose

12. Section 2405(h)(3) of the act states that if the secretary of commerce "affirmatively determines that a good or technology . . . is available in sufficient quantity and comparable quality from sources outside the United States . . . so that denial of an export license would be ineffective in accomplishing the purpose of the controls . . . then he must provide an export license."

success depends on the prohibition of access to controlled goods (a modern form of contraband), the success of foreign policy sanctions does not entirely depend on restricting access to goods from other countries. However, the availability of goods from other sources lessens the impact of the sanctions, raises the level of international cooperation required to implement the sanctions, and increases the domestic political costs of maintaining the controls. It is clearly preferable to impose sanctions on goods not readily obtainable in foreign markets.

Our estimates of the costs of economic sanctions to the sender countries are very small, though not surprising given the typical GDP ratio of sender and target. On our qualitative scale, ranging from 1 for a net gain when the sender restricts aid flows to 4 for cases affecting large volumes of trade, the average in both success and failure cases is 2, signifying a "trivial dislocation" for the sender economy as a whole.

In more than a quarter of the cases involving modest policy goals, listed in table 4A.1, the sender country enjoyed a net gain (usually quite small) as a result of withholding aid and official credits. The only episode in the modest policy goals category in which significant trade diversion occurred, with consequent losses to the affected firms in the sender country, was the case involving US efforts to release hostages held by Iran (Case 79-1).

Although some of the regime change and military disruption cases involved modest costs for the sender country, the average cost in these cases was trivial, and it differed little between successes and failures. The only policy goal for which this does not hold true is military impairment, where average costs are higher and successes tend to cost more. But these cases also involve national security, where the costs are easier to justify. Only in the category of other major policy changes is failure associated with noticeably higher costs to senders.

Gravity Model Analysis

The intent of trade sanctions is of course to reduce trade—exports or imports or both. Financial sanctions and asset freezes also reduce trade by denying investment, foreign exchange, or credit to the target country or by raising the cost of credit. Together with Dean DeRosa, we adapted a gravity model devised by Andrew Rose to assess the impact of sanctions, at different levels of severity, on bilateral merchandise trade. We analyzed the impact of 28 US-inspired economic sanctions in place in 1999. The goal was to measure indirect as well as direct effects—for example, the chill that limited sanctions may create on trade of unrelated goods or the "unreliable supplier" reputation for exporters of capital goods. The methodology and results of our gravity model study are described in detail in appendix B.

To briefly summarize the key results, we find that the typical impact of US sanctions is to significantly reduce bilateral trade between the sender

and target and mildly reduce the target country's trade with all partners. However, the latter finding is fragile, and we show that sanctions of greater intensity and broader scope are, surprisingly, correlated with larger predicted total trade flows. Thus, the impact of sanctions on bilateral trade is in line with policymakers' expectations, but there is little evidence that the effect on total trade is powerful. Moreover, when we estimate trade losses by comparing trade flows with a counterfactual estimate in which US-inspired sanctions are absent, we find the trade losses to be very modest.

Summing Up the Cost to Senders

The costs of economic sanctions are not confined to the economic realm. A failed episode can impose heavy political costs on the sender country, particularly if the episode precipitates a public outcry. US sanctions against the Soviet Union over the Yamal gas pipeline project and Soviet support of repression in Poland (Case 81-3) badly disturbed the North Atlantic Treaty Organization (NATO) alliance. The Reagan administration was derided by its domestic political opponents for the failure of its sanctions policies against Nicaragua and Panama (Cases 81-1 and 87-1, respectively). Earlier celebrated episodes in which failure exacted large political costs for the governments of the sender countries include Case 35-1: UK and League of Nations v. Italy, and Case 40-1: US v. Japan. The most recent example in this category is the US Helms-Burton law against Cuba, which has antagonized friends and allies from Spain to Canada.

Even successful sanctions episodes can impose political costs on the sender country. Examples include the US response to the Franco-British Suez invasion (Case 56-3), which left a bitter taste in Europe for many years; the destabilization campaign and eventual overthrow of Chile's Salvador Allende (Case 70-1: US v. Chile), which gave the United States a reputation for being willing to use the Central Intelligence Agency (CIA) to do "dirty tricks"; and Case 77-4: Canada v. Japan and EC, in which Canadian insistence on nuclear safeguards (prompted by the "peaceful" Indian nuclear explosion) irked Canada's trading partners and allies.

We have not attempted to systematically assess the political cost of each episode to the sender country. All diplomacy has its political costs; some episodes are dear, and others are cheap. The political costs of economic sanctions may be lower or higher than the political costs of achieving the same diplomatic ends by different means. We leave these matters for other scholars to explore.[13]

13. David Baldwin (1985) was a pioneer in comparing the costs of sanctions with other forms of diplomacy and coercion.

Appendix 4A

Table 4A.1 Cases involving modest changes in target-country policies: Economic variables

Case[a]	Sender	Target	Success score[b]	Cost to target[c]	Cost as percent of GNP[d]	Cost per capita[e]	Trade linkage[f]	GNP ratio[g]	Health and stability[h]	Sanction type[i]	Cost to sender[j]	GDP growth rate[k]	Inflation rate[l]
33-1	United Kingdom	USSR	12	4	0.02	0.02	13	1	2	M	2	2.4	—
38-1	United States, United Kingdom	Mexico	9	2	0.2	0.11	69.5	75	3	F,M	2	7.4	2.1
54-1	USSR	Australia	2	50	0.5	5.56	2.65	18	3	M	2	4.4	13.8
56-2	United States, United Kingdom, France	Egypt	9	138	3.4	5.87	22.5	160	2	F,X	2	1.8	–3.8
61-1	United States	Ceylon	16	9	0.6	0.86	6	375	2	F	1	2.0	0.3
62-3	USSR	Romania	2	—	—	—	40.5	24	3	—	2	4.7	—
64-1	France	Tunisia	6	12	1.5	2.67	47.5	106	2	F,M	2	5.9	0.9
65-1	United States	Chile	9	—	—	—	37	98	2	—	2	4.5	34.7
65-2	United States	India	16	41	0.08	0.08	24	13	2	F	1	5.2	6.6
68-1	United States	Peru	1	33	0.7	2.60	9.5	186	2	F	1	5.5	11.7
68-2	United States	Peru	12	35	0.7	2.72	9.5	186	2	F	1	5.5	11.7
71-2	United Kingdom	Malta	6	11	4.4	38.00	38.5	546	3	F	2	9.4	2.7
75-2	United States	USSR	8	102	0.01	0.40	3.5	2	3	F,M	2	4.4	—
75-5*	United States	Chile	12	54	0.7	5.29	18	224	1	F,X	1	2.1	114.6
77-4 (1)	Canada	European Community	9	40	0.002	0.15	1	0.1	3	X	2	3.3	13.7
77-4 (2)	Canada	Japan	9	75	0.01	0.66	3	0.3	3	X	2	4.5	14.8
78-1	China	Albania	2	43	3.3	16.54	34	249	3	F,X,M	2	3.4	—
78-5	United States	USSR	2	51	0.003	0.19	3	2	3	X	2	3.7	—
79-1	United States	Iran	12	3,349	3.8	90.51	13	28	1	F,X,M	3	2.6	16.8

(table continues next page)

Table 4A.1 Cases involving modest changes in target-country policies: Economic variables *(continued)*

Case[a]	Sender	Target	Success score[b]	Cost to target[c]	Cost as percent of GNP[d]	Cost per capita[e]	Trade linkage[f]	GNP ratio[g]	Health and stability[h]	Sanction type[i]	Cost to sender[j]	GDP growth rate[k]	Inflation rate[l]
79-3	Arab League	Canada	12	7	0.003	0.30	2	1	3	F,X,M	2	3.9	8.1
80-2	United States	Iraq	4	22	0.1	1.71	5	69	2	X	2	15.6	—
83-1	Australia	France	2	negligible	negligible	negligible	0.5	0.3	3	X	2	2.4	13.0
83-1	Australia	France	4	negligible	negligible	negligible	0.5	0.3	3	M	2	1.3	2.1
83-2	United States	USSR	2	negligible	negligible	negligible	1.65	2	3	M	2	1.1	—
83-3	United States	Zimbabwe	4	27	0.4	3.55	7.0	462	2	F	1	6.0	9.7
84-2	United States	Lebanon	6	33	1	9.45	5.8	1,534	2	X,M	2	–3.6	12.3
86-1	United States	Syria	6	4	0.02	0.42	3.0	189	2	F,X	2	3.0	10.9
86-4	France	New Zealand	12	1	0.005	0.40	1.65	27	3	M	2	3.2	9.7
87-3	United States	El Salvador	16	—	—	—	41.5	1,006	1	—	1	–0.5	21.9
90-6 (1)	United States, Saudi Arabia	Jordan	6	224	5.6	52.65	15.0	1,455	2	F,M	2	–0.4	10.7
90-6 (2)	United States, Saudi Arabia	Yemen et al.	9	537	5.2	47.80	19.7	573	1	F,M	2	5.7	18.0
91-4**	United States, Netherlands	Indonesia	2	148	0.1	0.80	16.0	47	3	F,X	2	7.2	7.4
91-7	USSR/Russia	Turkmenistan	12	1,090	19.8	286.84	12	32	2	F,X,M	1	2.5	4.0
92-9	USSR/Russia	Estonia	4	11.0	1,0	7.12	20	308	2	X,M	2	–1.1	58.2
92-11	United States	Nicaragua	12	53	2.4	12.83	26	2,787	2	F	1	–3.0	5,066.9
92-12	United Nations	Libya	12	282	0.9	57.55	100	601	2	F,X	2	–1.9	7.3
92-13	USSR/Russia	Latvia	4	14	1	5.38	27.9	260	2	X,M	2	–1.5	58.6

93-5	United States	Sudan	6	26	0.4	0.98	4	1,009	1	F,X,M	2	3.4	102.1
93-7	USSR/Russia	Kazakhstan	9	598	4.6	35.38	56.2	14	2	F,X,M	1	–8.2	784.3
94-1	Greece	Macedonia	9	109	3.2	57.37	4.5	29	2	F,X,M	3	–6.8	597.6
94-2	Greece	Albania	16	61	2.9	18.10	25.8	47	1	F	2	–5.0	115.6
98-3	Turkey	Italy	9	—	—	—	1.4	0.2	3	—	2	1.5	3.7
99-1	United Nations, United States	Afghanistan	2	33	1.1	1.67	100	5,939	1	F,X,M	2	8.2	—

— = not applicable
* Also listed in table 4A.2.
** Also listed in table 4A.5.

a. The *case* numbers are those in table 1A.1. If more than one country is the target of a sanctions episode, the case is identified by numbers in parentheses.
b. The *success score* is an index on a scale of 1 to 16, found by multiplying the *policy result* index by the *sanctions contribution* index, shown in appendix 3A tables.
c. The *cost to target* is in millions of current US dollars, as estimated in the case abstracts.
d. *Cost as a percentage of GNP* is the cost to target expressed as a percentage of its GNP.
e. *Cost per capita* is the cost to target divided by the population of the target.
f. *Trade linkage* equals the average of presanction target-country exports to the sender country as a percentage of total target-country exports and imports from the sender country as a percentage of total target-country imports.
g. *GNP ratio* is the ratio of the sender's GNP to the target's GNP.
h. The *health and stability* index, scaled from 1 to 3, measures the target country's overall economic health and political stability. 1 = distress; 2 = significant problems; 3 = strong and stable.
i. *Sanction type* includes the interruption of commercial finance, aid, and other official finance (F), the interruption of exports from the sender to the target (X), and the interruption of imports by the sender from the target (M).
j. *Cost to sender* is an index number from 1 to 4. 1 = net gain to sender; 2 = little effect on sender; 3 = modest welfare loss to sender; 4 = major loss to sender.
k. The *GDP growth rate* is the average rate of GDP growth during the five years prior to the initiation of sanctions.
l. The *inflation rate* is the average rate of inflation during the three years prior to the initiation of sanctions.

Table 4A.2 Cases involving regime change and democratization: Economic variables

Case[a]	Sender	Target	Success score[b]	Cost to target[c]	Cost as percent of GNP[d]	Cost per capita[e]	Trade linkage[f]	GNP ratio[g]	Health and stability[h]	Sanction type[i]	Cost to sender[j]	GDP growth rate[k]	Inflation rate[l]
18–1	United Kingdom	Russia	2	446	4.1	2.49	18.5	1	1	F,X,M	3	—	—
39–1**(1)	United States, Alliance powers	Germany	8	400	1.4	5.77	10.8	3	3	F,X,M	4	7.8	0.8
39–1**(2)	United States, Alliance powers	Japan	8	288	1.9	3.98	24.1	6	3	F,X,M	4	4.4	9.7
44–1	United States	Argentina	4	29	0.8	1.82	19.5	58	2	F,X	2	2.2	3.1
48–4	USSR	Yugoslavia	1	–76	–2.5	–4.47	13	52	2	F,X,M	1	—	—
50–1**	United States, United Nations	North Korea	1	8	1.2	0.83	20	378	2	F,X,M	2	—	—
51–1	United States, United Kingdom	Iran	12	186	14.3	11.14	41.5	235	2	F,X,M	1	—	0.2
56–4	United States	Laos	9	5	4.2	2.08	2	4372	1	F	1	3.1	—
58–1	USSR	Finland	16	45	1.1	10.23	19	58	2	F,X,M	2	4.5	6.5
60–1	United States	Dominican Republic	12	16	1.9	5.52	56	596	1	F,X,M	2	5.7	0.9
60–3*	United States	Cuba	1	150	3.9	20.00	47	173	2	F,X,M	3	3.5	—
60–3*	United States	Cuba	4	2,850	14	268.87	0	283	2	F,X,M	3	0.6	—
61–2	USSR	Albania	1	3	0.6	1.76	50.5	494	2	F,X,M	2	7.5	—
62–1	United States	Brazil	12	110	0.6	1.49	48.5	30	1	F	1	8.3	31.7
62–2	United Nations	South Africa	8	234	1.2	12.67	73	116	3	X	2	3.8	1.6
63–3*	United States	Indonesia	8	110	2	1.05	24.5	145	2	F	1	2.3	61.6
63–4	United States	South Vietnam	12	9	0.3	0.59	20	206	1	F	1	—	2.7
65–3	United Nations, United Kingdom	Rhodesia	12	130	13	28.89	68.5	1,388	2	F,X,M	3	3.8	—
70–1	United States	Chile	12	163	1.5	17.16	16.5	102	1	F	1	4.3	25.2
72–1	United States, United Kingdom	Uganda	12	36	2.6	3.44	22	860	1	F,X,M	2	4.7	12.4
73–2	United States	South Korea	4	333	1.8	9.60	29	78	2	F	1	9.5	13.7
75–4	United States	Kampuchea	2	39	6.4	5.87	negligible	2,603	1	F,X,M	1	0.3	—
75–5***	United States	Chile	8	54	0.7	5.29	18	224	3	F	1	1.6	313.7
76–1	United States	Uruguay	6	10	0.3	3.57	10	452	2	F,X	1	1.5	85.2
77–1	United States	Paraguay	6	2	0.1	0.71	13	959	3	F	1	6.7	12.2

77–2	United States	Guatemala	9	10.6	0.16	1.34	44.7	553	2	F	1	5.6	13.5
77–3	United States	Argentina	6	62	0.1	2.38	13	38	2	F,X	2	1.6	216.8
77–5	United States	Nicaragua	12	22	1.0	9.48	26.5	913	1	F,X	1	5.6	7.9
77–6	United States	El Salvador	6	13	0.5	3.02	31.5	685	1	F	1	4.8	14.3
77–7	United States	Brazil	6	94	0.1	0.84	18.5	12	2	F	1	10.0	38.2
77–8	United States	Ethiopia	6	–182	–6.3	–6.45	21.5	592	1	F,M	2	2.5	14.6
78–8**	United States	Libya	12	309	1.7	114.40	22.5	118	2	F,X,M	3	5.1	7.0
79–4	United States	Bolivia	6	48	1.7	8.73	22	562	1	F	1	4.4	7.7
81–1	United States	Nicaragua	8	45	3.2	16.67	33	1,727	2	F,X,M	3	–3.2	29.4
81–2	United States	Poland	9	246	0.1	6.83	4	17	1	F,X,M	2	0.7	8.3
81–4	European Community	Turkey	6	96	0.2	2.06	34	40	2	F	1	2.5	71.4
82–2	Netherlands	Suriname	9	58	6.2	112.00	32	516	1	F	1	1.7	12.6
82–3	South Africa	Lesotho	12	27	5.1	19.29	100	103	2	X,M	2	10.3	14.9
83–4	United States, OECS	Grenada	8	negligible	negligible	negligible	1	32,900	1	F,X,M	2	3.4	16.1
83–5	United States	Romania[m]	6	235	0.4	10.22	4	81	1	F,M	2	–0.8	0.7
83–5	United States	Romania[m]	6	235	0.4	10.22	4	81	2	F,M	2	1.2	17.8
85–1	United States, Commonwealth	South Africa	12	1,008	1.9	30.55	58.5	168	2	F,X,M	3	3.6	12.9
86–2	United States	Angola	6	4	0.04	0.44	24.5	437	2	F	2	1.5	16.6
87–1	United States	Panama	8	319	6	138.70	50	854	2	F,M	3	2.4	0.8
87–2	United States	Haiti	6	56	2.9	10.37	74	2,383	1	F	1	–0.5	6.8
87–4	India, Australia, New Zealand	Fiji	4	11	0.9	14.86	35	422	2	F,X,M	2	0.4	3.8
88–1	United States, European Union, Japan	Burma	4	191	1.7	4.78	22	1,125	2	F,M	2	1.4	13.6
88–2	United Nations, United States, United Kingdom	Somalia	2	63	7.5	7.30	100	19,004	1	F,X	2	2.3	31.9
89–2	United States	China	2	322	negligible	0.28	10.9	11	3	F,X	2	12.1	13.0
89–3	United States	Sudan	4	408	3.7	17.70	7.3	408	1	F	1	1.6	36.6

(table continues next page)

Table 4A.2 Cases involving regime change and democratization: Economic variables *(continued)*

Case[a]	Sender	Target	Success score[b]	Cost to target[c]	Cost as percent of GNP[d]	Cost per capita[e]	Trade linkage[f]	GNP ratio[g]	Health and stability[h]	Sanction type[i]	Cost to sender[j]	GDP growth rate[k]	Inflation rate[l]
90–1**	United Nations, United States	Iraq, postwar	1	15,400	54.0	830.00	97.5	169	1	F,X,M	3	–7.5	8.4
90–2	United States	El Salvador	9	58	1.3	11.15	37.5	1,256	1	F	1	1.2	20.8
90–3	United States, Western donors	Kenya	6	189	2.3	7.77	49.5	2,014	2	F	1	5.7	11.6
90–4	United States, Belgium, France	Zaire	4	298	3.8	8.40	73	1,462	1	F	1	1.4	84.6
90–5	USSR	Lithuania	6	124	1.5	34.44	91	44	2	X	2	—	1.7
91–3	United States	Thailand	6	39	0.04	0.68	15.8	59	2	F	1	10.3	5.0
91–5	United Nations, United States, OAS	Haiti	4	342	14.2	51.70	88	7,442	1	F,X,M	2	0.2	10.8
91–6	United States, European Community	USSR	8	negligible	negligible	negligible	82	6	2	F	1	1.3	—
91–8	United States	Peru	12	211	0.5	9.38	45.5	153	2	F	1	–1.5	3,849.1
92–2	European Union, France, Germany	Togo	4	57	3.4	15.00	31.6	4,607	1	F	1	2.1	0.2
92–3	United States, United Kingdom	Malawi	16	138	6.6	15.68	56.7	8,203	1	F	1	4.1	12.3
92–4	European Union, Spain	Equatorial Guinea	6	27	15.0	73.00	74	39,186	1	F	1	1.6	1.3
92–5	European Union	Algeria	4	–43	–0.09	–1.63	71.2	132	1	F	1	0.5	17.3
92–6	United States	Cameroon	4	20	0.2	1.61	4.8	596	2	F	1	–4.3	–0.2
92–8	United Nations, United States, Germany	Cambodia, Khmer Rouge	4	82	2.6	8.00	8.2	3,260	1	F	1	5.4	5.9
92–8	United Nations, United States, Germany	Cambodia, Khmer Rouge	6	negligible	negligible	negligible	100	9,200	1	X,M	2	2.1	131.4
93–2	United States, European Union	Guatemala	16	144	1.3	14.35	50	1,127	2	F	1	3.9	28.1

93–4	United States, European Union	Nigeria	4	127	0.4	1.21	77.5	375	1	F,X	2	6.6	21.7
94–4	United States, European Union, Japan	The Gambia	6	–0.08	–0.02	–0.07	53.5	50,869	2	F	1	3.8	8.2
95–2	European Union	Turkey	9	negligible	negligible	negligible	53	49	2	F,X,M	2	3.7	80.8
96–1	East African members of OAU	Burundi	6	124	10.4	20.79	14.5	38	1	F,X,M	3	–2.2	14.6
96–2	United States, European Union	Niger	9	89	4.9	9.88	62.5	8,592	1	F	1	0.8	15.1
96–3	United States, Western donors	Zambia	4	91	2.9	9.71	41.5	7,255	1	F	1	–1.3	92.2
96–4	United States	Colombia	6	119	0.15	3.40	36.5	92	2	F	1	4.1	22.5
96–5	United States, Mercosur	Paraguay	12	—	—	—	61.55	902	2	—	1	3.2	17.4
97–1	United Nations, ECOWAS	Sierra Leone	8	55	5.8	12.22	80	23,363	1	F,X,M	2	–4.3	24.4
98–2****	United States, European Union	Yugoslavia, Serbia	12	1,060	8.3	95.00	80	1,310	2	F,X,M	3	–1.8	56.7
99–2	United States, European Union, France	Ivory Coast	6	40	0.3	2.50	54	1,408	1	F	1	5.2	3.7
99–3	United States, Japan	Pakistan	2	negligible	negligible	negligible	20	232	1	F	1	3.4	9.3
00–1	United States	Ecuador	12	—	—	—	34	614	1	—	2	0.8	39.6

— = not applicable

* Also listed in table 4A.3.

** Also listed in table 4A.4.

*** Also listed in table 4A.1.

**** Also listed in table 4A.5.

Note: For footnotes a to l, see table 4A.1.

m. This case has two phases: 1983–89 and 1990–93.

ECOWAS = Economic Community of West African States; Mercosur = Mercado Común del sur (Southern Common Market); OAS = Organization of American States; OAU = Organization of African Unity; OECS = Organization of Eastern Caribbean States

Table 4A.3 Cases involving disruption of military adventures (other than major wars): Economic variables

Case[a]	Sender	Target	Success score[b]	Cost to target[c]	Cost as percent of GNP[d]	Cost per capita[e]	Trade linkage[f]	GNP ratio[g]	Health and stability[h]	Sanction type[i]	Cost to sender[j]	GDP growth rate[k]	Inflation rate[l]
21–1	League of Nations	Yugoslavia	16	—	—	—	26.5	37	2	—	2	–1.5	—
25–1	League of Nations	Greece	16	—	—	—	36	56	2	—	2	3.3	48.8
32–1 (1)	League of Nations	Paraguay	6	negligible	negligible	negligible	59.5	735	2	X	2	—	—
32–1 (2)	League of Nations	Bolivia	6	3	2.6	0.80	63	322	2	X	2	—	—
35–1	League of Nations, United Kingdom	Italy	2	86	1.7	1.98	16	6	3	F,X,M	3	–0.5	–4.4
40–1	United States	Japan	1	88	0.9	1.21	31	11	3	F,X	3	7.5	11.9
54–4[m]	United States	North Vietnam	6	115	1.2	1.72	0.5	591	2	F,X,M	2	3.8	5.0
56–3	United States	United Kingdom	12	167	0.3	3.25	9	7	3	F	2	2.9	2.3
60–3*	United States	Cuba	8	150	3.9	20.00	47	173	2	F,X,M	3	3.5	—
63–1	United States	United Arab Republic	12	54	1.4	1.93	14.5	153	2	F	1	5.5	–0.7
63–3*	United States	Indonesia	8	110	2.0	1.05	24.5	145	2	F	1	2.3	61.6
71–1 (1)	United States	Pakistan	4	33	0.3	0.28	17.5	103	2	F,X	1	7.1	2.9
71–1 (2)	United States	India	4	84	0.1	0.15	20	19	2	F,X	1	4.6	2.9
74–1	United States	Turkey	1	77	0.2	1.92	12	42	2	F	1	4.7	14.3
78–7	China	Vietnam	6	254	3.5	5.20	12	41	2	F	1	3.3	5.0
80–1**	United States	USSR	2	525	0.04	2.00	3.5	2	3	X	3	1.9	—
92–1***	ECOWAS, United Nations	Liberia[n]	8	99	18.8	31.93	80	47,948	1	F,X,M	2	33.3	1,260.0
95–1 (1)	United States	Peru	8	negligible	negligible	negligible	22.9	123	2	F,X	2	2.9	48.6
95–1 (2)	United States	Ecuador	8	negligible	negligible	negligible	34.4	437	2	F,X	2	2.9	42.3

— = not applicable

* Also listed in table 4A.2.

** Also listed in table 4A.4.

*** Also listed in table 4A.5.

Note: For footnotes a to l, see table 4A.1.

m. This is phase II of this case, after the military conflict ended in 1975. Phase I with South Vietnam as a cosender is listed in table 3A.4.

n. The primary goal of phase II (begun in 2000) is to end Liberia's support for the Revolutionary United Front in Sierra Leone.

Table 4A.4 Cases involving impairment of military potential (including major wars): Economic variables

Case[a]	Sender	Target	Success score[b]	Cost to target[c]	Cost as percent of GNP[d]	Cost per capita[e]	Trade linkage[f]	GNP ratio[g]	Health and stability[h]	Sanction type[i]	Cost to sender[j]	GDP growth rate[k]	Inflation rate[l]
14–1	United Kingdom	Germany	12	843	7.1	12.58	9.0	1	3	F,X,M	4	3.6	2.9
39–1*(1)	United States, Alliance Powers	Germany	12	400	1.4	5.77	10.8	3	3	F,X,M	4	7.8	0.8
39–1*(2)	United States, Alliance Powers	Japan	12	288	1.9	3.98	24.1	6	3	F,X,M	4	4.4	9.7
48–5	United States, CoCom	USSR, Comecon	6	706	0.2	2.19	23.0	3	3	X	3	2.2	—
49–1	United States, ChinCom	China	2	106	0.5	0.20	38.0	13	3	F,X,M	3	—	—
49–1	United States, ChinCom	China	2	106	0.5	0.20	38.0	13	3	F,X,M	3	—	—
50–1*	United States, United Nations	North Korea	4	8	1.2	0.83	20.0	378	2	F,X,M	2	—	—
54–4[m]	United States, South Vietnam	North Vietnam	1	18	1.6	1.09	1.0	477	2	F,X,M	2	4.5	—
60–2	USSR	China	4	287	0.5	0.42	46.0	4	3	F,X,M	4	7.0	—
74–2	Canada	India	4	33	0.04	0.06	2.0	2	3	F,X	2	3.2	8.8
74–3	Canada	Pakistan	4	13	0.1	0.18	1.5	14	2	X	2	5.1	11.0
75–1	United States, Canada	South Korea	16	—	—	—	32.0	87	3	—	2	8.3	13.1
75–3	United States	South Africa	4	2	0.005	0.08	12.0	43	3	X	2	5.8	9.2
76–2	United States	Taiwan	16	17	0.1	1.01	31.5	100	3	X	2	9.0	20.3
78–2	United States	Brazil	4	5	0.002	0.04	22.0	11	2	X	2	8.5	43.2
78–3	United States	Argentina	4	0	negligible	negligible	14.0	34	2	X	2	2.6	267.6

(table continues next page)

Table 4A.4 Cases involving impairment of military potential (including major wars): Economic variables *(continued)*

Case[a]	Sender	Target	Success score[b]	Cost to target[c]	Cost as percent of GNP[d]	Cost per capita[e]	Trade linkage[f]	GNP ratio[g]	Health and stability[h]	Sanction type[i]	Cost to sender[j]	GDP growth rate[k]	Inflation rate[l]
78–4	United States	India	4	12	0.01	0.02	12.5	18	3	X	2	4.5	2.1
78–8*	United States	Libya	12	309	1.7	114.40	22.5	118	2	F,X,M	3	5.1	7.0
79–2	United States	Pakistan	4	456	1	4.06	12.5	134	1	F,X	2	3.3	11.4
79–2	United States	Pakistan	1	456	1	4.06	12.5	134	2	F,X	2	5.0	7.8
80–1**	United States	USSR	2	525	0.04	2.00	3.5	2	3	X	3	1.9	—
81–3	United States	USSR	1	480	0.03	1.79	2.0	2	3	X	3	1.8	—
82–1	United Kingdom	Argentina	12	979	0.6	34.84	4.5	3	1	F,X,M	2	2.2	121.6
84–1	United States	Iran	4	545	0.4	7.27	3.0	40	2	F,X,M	3	0.8	20.9
90–1*	United Nations, United States	Iraq, postwar	9	15,400	54.0	830.00	97.5	169	1	F,X,M	3	–7.5	8.4
93–1	United States, United Nations	North Korea	9	—	—	—	100.0	709	1	—	2	—	—
93–1	United States, United Nations	North Korea	1	128	0.57	5.67	100.0	1,164	1	F,X	1	—	—
93–6	USSR/Russia	Ukraine	6	1,430	7.1	27.44	46.5	9	1	F,X,M	2	–3.6	624.4
98–1	United States	India	2	678	0.2	0.72	14.4	21	3	F,X	2	6.4	8.8

— = not applicable
* Also listed in table 4A.2.
** Also listed in table 4A.3.

Note: For footnotes a to l, see table 4A.1.

m. Refers to phase I of this case, which involved both the United States and South Vietnam as cosenders of sanctions. Phase II involved only the United States as a sender of sanctions and is crosslisted in table 4A.3.

ChinCom = China Committee
CoCom = Coordinating Committee for Multilateral Export Controls
Comecon = Council for Mutual Economic Assistance

Table 4A.5 Cases involving other major changes in target-country policies (including surrender of territory): Economic variables

Case[a]	Sender	Target	Success score[b]	Cost to target[c]	Cost as percent of GNP[d]	Cost per capita[e]	Trade linkage[f]	GNP ratio[g]	Health and stability[h]	Sanction type[i]	Cost to sender[j]	GDP growth rate[k]	Inflation rate[l]
17–1	United States	Japan	4	23	0.8	0.44	20.5	13	3	X	2	5.4	25.6
46–1	Arab League	Israel	4	346	1.7	84.90	2	11	3	F,X,M	4	—	—
48–1	United States	Netherlands	16	14	0.2	1.43	9	45	2	F	1	10.3	10.2
48–2	India	Hyderabad	8	18	2	1.10	99	22	2	F,X	2	—	—
48–3 (1)	USSR	United States	2	226	0.1	1.53	0.74	0.5	3	X,M	3	0.4	8.5
48–3 (2)	USSR	United Kingdom	2	26	0.1	0.51	0.9	4	3	X,M	3	–2.4	0.4
48–3 (3)	USSR	France	2	negligible	negligible	negligible	0.18	5	3	X,M	3	9.7	50.0
54–2	India	Portugal	8	negligible	negligible	negligible	negligible	13	3	F,X,M	2	3.3	–0.3
54–3	Spain	United Kingdom	6	5	0.009	0.10	1	0.2	3	X,M	2	2.0	5.9
56–1	United States	Israel	4	16	0.1	4.13	22	217	3	F,X	2	13.1	15.6
57–1	Indonesia	Netherlands	8	69	0.7	6.27	2.5	0.2	3	F,X,M	2	5.7	2.6
57–2	France	Tunisia	2	7	0.9	1.75	65.5	76	2	F	1	4.0	0.5
61–3	United States, Western allies	German Democratic Republic	2	—	—	—	12	40	3	—	2	5.5	—
63–2	Indonesia	Malaysia	2	29	1	3.14	6.5	2	2	X,M	4	5.3	0.0
63–5	OAU, United Nations	Portugal	8	11	0.3	1.25	14.5	10	2	F,X,M	2	5.1	2.4
67–1	Nigeria	Biafra	12	220	15.2	14.67	50	3	1	F,X,M	3	—	—
73–1 (1)	Arab League	United States	9	3,217	0.23	14.89	2	0.04	3	X	1	3.2	4.5
73–1 (2)	Arab League	Netherlands	9	2,681	4	199.63	4	0.9	3	X	1	5.2	6.3
76–3	United States	Arab League	6	8	0.04	0.06	10	9	3	F,X	2	5.8	13.1
78–6	Arab League	Egypt	2	–77	–0.4	–1.88	4	16	2	F,X,M	3	7.9	10.9
86–3	Greece	Turkey	4	69	0.07	1.31	1	0.5	2	F	2	4.9	41.6
89–1	India	Nepal	9	132	4.6	7.25	27.5	94	2	X,M	2	5.9	12.9

(table continues next page)

Table 4A.5 Cases involving other major changes in target-country policies (including surrender of territory): Economic variables *(continued)*

Case[a]	Sender	Target	Success score[b]	Cost to target[c]	Cost as percent of GNP[d]	Cost per capita[e]	Trade linkage[f]	GNP ratio[g]	Health and stability[h]	Sanction type[i]	Cost to sender[j]	GDP growth rate[k]	Inflation rate[l]
89–4	Turkey, Azerbaijan	Armenia	2	710	4	216.46	n.a	9	1	X,M	2	—	—
90–1	United Nations, United States	Iraq, prewar	2	18,800	30	1,093.00	97.5	169	3	F,X,M	4	–7.5	8.4
91–1	United Nations, United States, European Community	Yugoslavia	9	3,545	13.3	341.00	62	453	2	F,X,M	3	–1.4	—
91–2	United States	China	4	54	negligible	0.05	10.5	15	3	F,X	3	7.9	13.4
91–4*	United States, Netherlands	Indonesia	12	317	0.2	1.53	18	75	1	F,X	2	3.0	24.1
92–1***	ECOWAS, United Nations	Liberia	12	99	10.2	36.66	80	18,957	1	F,X,M	2	–19.0	2.9
92–7	United States	Azerbaijan	1	10	0.7	1.34	0.03	4229	1	F	1	—	—
92–10	China	France	12	126	0.01	2.20	5.25	0.4	3	M	2	3.0	3.4
93–3	United Nations	Angola, UNITA	12	105	7.5	32.81	80	11,221	1	F,X,M	2	–0.5	191.4
94–3	United Nations, United States	Rwanda	2	–42	–5.6	–5.38	60.8	27,690	1	F,X	2	–1.5	13.9
98–2**	United States, European Union	Yugoslavia, Serbia	6	1,060	8.3	95.00	80	1,310	2	F,X,M	3	–1.8	56.7

— = not applicable

* Also listed in table 4A.1.

** Also listed in table 4A.2.

*** Also listed in table 4A.3.

Note: For footnotes a to l, see table 4A.1.

UNITA = National Union for the Total Independence of Angola

5

Sanctions after the Cold War

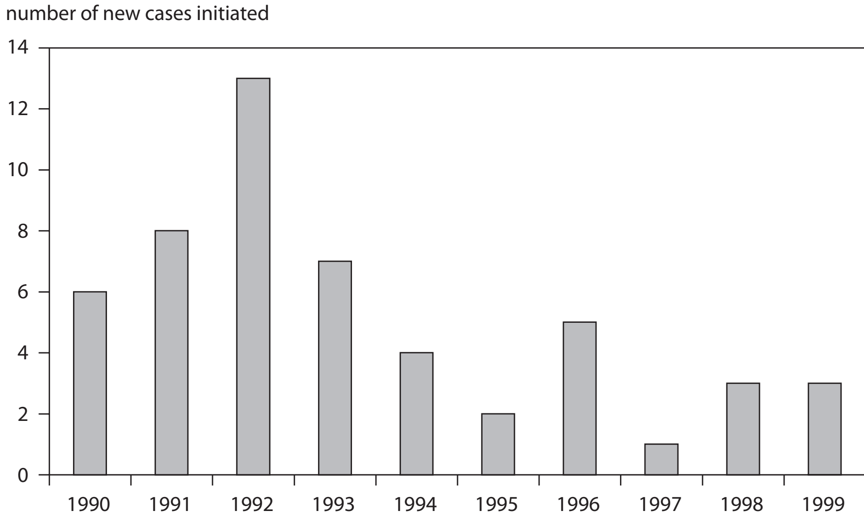
The end of superpower rivalry in the Cold War, coupled with the emergence of new conflicts and challenges, changed the focus of sanctions policies but did not diminish their use. In fact, the first half of the 1990s witnessed a spike in the average annual number of sanctions cases (see figure 5.1). The United States continued to be the predominant sender country, but the incidence of unilateral actions fell dramatically as US officials acted more frequently in concert with others. A few high-profile US cases were launched unilaterally in the 1990s (e.g., nonproliferation sanctions against India and Pakistan) but much less often than in past decades.

Interestingly, if one splits the sample of episodes into four periods—prior to World War II, the early postwar period up to 1970, the 1970s and 1980s, and the post–Cold War period through 2000—the distribution of cases among the various goal categories changes, but the overall success rate does not. Overall, the foreign policy effectiveness of sanctions was remarkably stable over the course of the 20th century, with the average success rate in each of the three subperiods after World War II being roughly the same 1 in 3 rate as observed for the period as a whole. US experience, however, was much more volatile, especially when sanctions were employed unilaterally. Equally striking, the military impairment and other major policy change categories show an increase in the probability of success, while the success rate for cases involving regime change and disruption of minor military adventures dropped sharply (table 5.1).

Several factors explain the shift in sanctions policies: the end of the Cold War; armed conflicts within countries, mostly in Africa but also in the Balkans; and the impact of globalization on the tools of economic sanctions.

The end of the Cold War dramatically altered the diplomatic chessboard. With the capitalist/communist battle all but over, other causes gained

Figure 5.1 Sanctions trends after the Cold War, 1990–99



greater prominence. Old players faded, new players emerged, and theaters shifted. The end of the Cold War not only meant diffusion of power from Washington and Moscow to capitals such as Beijing, London, and Paris but also accelerated the rise of congressional and subfederal players and, importantly, nongovernmental organizations (NGOs). The absence of an overriding global security threat made it harder for the industrial countries to reconcile their different strategies and priorities for using sanctions in regional trouble spots. Narrow constituency groups also became more active players in shaping national policy objectives, adding to the complexity. At the same time, the fading Cold War rivalry meant that American and Russian diplomats no longer automatically blocked one another's initiatives at the United Nations.

The result has been the opening of fresh diplomatic fronts across a wide spectrum of issues: ethnic strife, civil chaos, human rights and democracy, terrorism, narcotics, and others. In the United States, advocacy and lobbying groups often succeeded in mobilizing congressional or statehouse support for sanctions, even in the face of ambivalence or opposition from the foreign policy establishment. Such pressures resulted in new or tightened sanctions against Iran, Libya, Cuba, Burma, Nigeria, and Sudan.

Evolution of US Sanctions Policy

Reflecting its roles as economic hegemon and political and military superpower in the decades following World War II, the United States attempted

Table 5.1 Success by period

	1914–44		1945–69		1970–89		1990–2000	
Policy goal	**Success cases**	**Failure cases**	**Success cases**	**Failure cases**	**Success cases**	**Failure cases**	**Success cases**	**Failure cases**
Modest policy changes	2	0	5	4	7	10	8	7
Regime change and democratization	0	4	7	6	9	22	9	23
Disruption of military adventures	2	4	2	2	0	6	0	3
Military impairment[a]	3	0	0	6	4	10	2	4
Other major policy changes	0	1	2	13	3	4	5	5
All cases	7	9	16	31	23	52	24	42
All US cases	3	5	14	14	13	41	17	33
Unilateral US cases[b]	0	3	10	6	8	33	2	9

a. Military impairment failures for 1990–2000 include the 2002–06 phase of Case 93-1: US, UN v. North Korea.

b. Cases where the United States is the only sender and international cooperation is nonexistent or minor (1 or 2 on our index of cooperation).

to impose its will on many countries through the use of economic sanctions, seeking a broad array of objectives. By comparison, the Soviet Union generally confined its use of sanctions to efforts at keeping rebellious allies in line. During the Cold War, the unique US role translated into less reliance on international cooperation and, on average, more distant relations and less stable targets than was observed with other sender countries. This in turn contributed to a lower average cost imposed on target countries, although the dominant role played by foreign aid in US sanctions also meant that sanctions entailed low average costs for the US economy.

Table 5.2 summarizes US experience with sanctions in three periods since World War II. Two striking features are the increased level of cooperation in episodes involving the United States and the higher costs imposed on target countries after the end of the Cold War. In the early postwar period, US policymakers were able to achieve an even higher level of success with less cooperation and lower average trade linkages, perhaps because US foreign assistance and other financial flows are not entirely reflected in our data. However, with the passage of decades, changes in the global economy undermined the effectiveness of unilateral sanctions. In the decade following World War II, the US economy was the financial reservoir for rebuilding war-devastated countries. It was also the major supplier, and sometimes the sole supplier, of critical goods and services to the world economy. Well into the 1960s, the United States remained the primary source of economic assistance for developing countries.

Since the 1960s, however, trade and financial patterns have become far more diversified, new technology has spread more quickly, and the US foreign aid budget has virtually dried up with the exception of selected countries and objectives, the war on terror, and combating AIDS.[1] Recovery in Europe and the emergence of Japan have created new, competitive economic superpowers, and economic progress worldwide has reduced the pool of truly vulnerable target countries.

The most obvious and important explanation for the decline in the effectiveness of US sanctions is the relative decline of the US position in the world economy. Evidence from the cases also suggests three other contributing causes. First, the United States typically took smaller bites with its sanctions policies in the 1970s and 1980s, but even then, it did not always finish what it started. Concerns about Soviet influence and strategic position typically claimed first priority in the minds of US officials and frequently undermined the pursuit of less urgent goals. For example, the United States was reluctant to enforce human rights sanctions vigorously against El Salvador and Guatemala, for fear of weakening their regimes and abetting leftist rebel victories that would benefit the Soviet Union.

1. Nearly half of bilateral US foreign aid goes to Egypt, Israel, Iraq, Afghanistan, and Pakistan (Bazzi, Herrling, and Patrick 2007).

Table 5.2 US experience with sanctions since World War II

Sender	Number of observations	Incidence of companion policies (percent of cases)	International cooperation with sender index (average)	Health and stability index (average)	Prior relations index	Cost to target (percent of GNP; average)[b]	Trade linkage (percent; average)	Cost to sender index (average)
United States[a]								
1945–69								
Successes	14	50.0	1.6	1.8	2.5	3.2	26.3	1.4
Failures	14	50.0	2.4	2.4	1.4	1.5	28.5	2.1
1970–89								
Successes	13	30.8	1.6	1.6	2.3	1.4	27.2	1.9
Failures	41	24.3	1.7	2.1	1.9	0.9	16.9	1.8
1990–2000								
Successes	17	29.4	3.0	1.4	2.2	3.9[c]	59.5	1.8
Failures	33	27.3	2.5	1.6	2.1	2.5[c]	46.5	1.8
Other countries								
Successes	23	17.4	1.8	2.2	2.4	3.7	21.3	2.0
Failures	41	43.9	2.0	2.2	2.2	1.8	27.9	2.1

a. Includes cases where the United States is a cosender.
b. "Negligible" is valued at zero when calculating averages.
c. Excludes Case 90-1: UN, US v. Iraq.

Note: See text for explanation of variables.

Likewise, the United States backed off on sanctions against Pakistan's nuclear program following the Soviet invasion of Afghanistan in 1979.

Second, in the nuclear nonproliferation cases—India, Pakistan, Libya, Iran, and Iraq—denial of key hardware was an important part of the policy mix, and export controls were a key component of the sanctions package. However, since alternative suppliers of sanctioned components were often willing to sell, the nonproliferation goal proved elusive.

Finally, whereas financial measures were part of the sanctions package in more than 90 percent of episodes prior to 1973, they were present in only two-thirds of the cases after that date. The mix of financial sanctions also changed. Economic aid was the dominant choice in the earlier period, whereas military assistance was prominent in the later period, especially human rights cases, where military governments were often the target. Again, in some cases alternative sources of arms and financial assistance were available. Even more important, however, target governments perceived internal dissent to be a greater threat to their longevity than US criticism and sanctions.

On the other side of the ledger, US sanctions in the 1990s entailed more cooperation—contributing to stronger trade linkages and higher costs—and the rate of successes for all cases rose from a quarter in the 1970s and 1980s to a third in the 1990s. However, the proliferation of economic sanctions in the early 1990s generated considerable backlash, not just in the United States but also in the United Nations and among US trading partners. From the standpoint of the international community, the most distressing feature of sanctions launched by the United States in the 1990s was the secondary boycott, threatened or invoked against third parties that dealt with target countries. Moreover, the advocates of secondary sanctions increasingly extended beyond the US Congress to state and local governments, and the advocates harbored a long list of potential targets. The executive branch made efforts to soften the sharp edges of the Helms-Burton Act targeting Cuba, and the Iran and Libya Sanctions Act, partly in response to a threatened complaint by the European Union in the World Trade Organization (WTO). But the executive branch was often unable to deflect congressional initiatives. Moreover, until the legal suit against the state of Massachusetts for its sanctions against companies doing business in Burma reached the US Court of Appeals for the Second Circuit, the federal executive branch refused even to challenge the constitutionality of state and local sanctions. However, when the European Union and Japan lodged WTO complaints against the Massachusetts law that penalized their companies for doing business in Burma, diplomatic representations from Brussels and Tokyo finally galvanized the US State Department to file its own *amicus* brief in that case (see below).

The frequency of new sanctions cases in the 1990s, along with the expanded scope and reach of many sanctions, and the decreased flexibility accorded to the president, stirred new interest, especially in the business

community, about the costs inflicted on the United States itself. Sanctions launched by narrow but vocal domestic constituents at the state and local levels added to these concerns. As the decade wore on, however, the surge in sanctions faded and so too did the loudest calls for reform (figure 5.1).

New Targets and Goals for Sanctions

The targets of choice also shifted in the 1990s, reflecting a new political kaleidoscope after the Cold War. The Soviet Union or its allies were targets of Western sanctions (mainly US-led) nine times in the 1970s and 1980s. In the 1990s, Western sanctions against the former Soviet Union sharply diminished, but the new former Soviet states were subject to six sanctions initiatives by Russia to induce more favorable economic or political terms relating to the division of assets or treatment of ethnic Russian minorities after the break-up. This trend has continued in the 21st century with Russian sanctions against Georgia, Ukraine, and Belarus.

The other striking change is the geographic shift in sanctions episodes, especially the rise in new cases targeting African nations. In broad terms, this change reflects the greater willingness by Europe and the United Nations to act against strife, mass killings, and despotic leadership in Africa. This shift in locus from the US backyard to the EU backyard correlates with the use of sanctions to promote democracy. Much of this intervention has taken place in the new African targets. That continent accounts for 14 of the 30 newly initiated cases in the 1990s that had some element of democratization as a goal. Nine of the 30 efforts were scored as successes.

Recent evidence confirms the direction of this trend. We briefly survey 13 post-2000 sanctions episodes in table 1A.2. All but one of the cases involves the promotion of respect for human rights and democratic elections; US pressure on signatories to the International Criminal Court is the exception. Six of the targets are African countries.

As table 3A.2 shows, the goals of regime change and democratization have accounted for an increasing share of total sanctions cases in every period, growing from one-quarter of cases prior to World War II to nearly one-half of episodes in the 1990s. Moreover, while regime change cases were often associated with military engagements in the first half of the century and much of the Cold War, episodes in the 1990s primarily involved Western powers promoting democracy in countries where the senders were not militarily involved.

The United Nations and Postwar Sanctions Policy

Freed from its Cold War straitjacket after the collapse of the Soviet Union, the United Nations began to intervene more aggressively in international

affairs, including the imposition of mandatory economic sanctions. However, financial constraints and political differences among its member states limit the scope of action by the UN Security Council (UNSC), which often turns to targeted sanctions when pressured to "do something." The shift in the international environment, combined with an evolving and expanding definition of collective peace and security, led the UNSC to impose far more sanctions during the 1990s than during the previous 45 years.

Prior to 1990, the UNSC had imposed *mandatory* economic sanctions only twice—against the white minority regime in Rhodesia and an arms embargo against South Africa. After 1990, the United Nations conducted a much higher level of sanctions activity, but the nature of its activity changed sharply after the broad sanctions against Iraq and Haiti generated concerns about collateral damage to ordinary civilians. In the latter half of the 1990s, the United Nations moved away from comprehensive embargoes of an earlier era to more limited measures such as arms embargoes, travel restrictions, and asset freezes. Other than arms, restrictions on trade were limited to strategic commodities—lucrative diamond exports from rebel-held areas of Angola and Sierra Leone (as well as transshipments through Liberia) and an oil embargo against Sierra Leone for a short period when rebels controlled the capital. Interestingly, the nations of Western Europe, which had vigorously resisted US pressures to impose sanctions against Iran, Libya, and Cuba, became much more active when ethnic unrest struck close to home in the Balkans or roiled their traditional spheres of influence in Africa.

Since 1990, the United Nations has mandated comprehensive trade and financial sanctions against Iraq, the former Yugoslavia, and Haiti and various targeted sanctions (usually arms embargoes and travel sanctions) against Afghanistan, Libya, the National Union for the Total Independence of Angola (UNITA) faction in Angola, Rwanda, Liberia, Somalia, Sudan, Ethiopia and Eritrea, Sierra Leone, and Côte d'Ivoire.

Iraq, of course, is the Mount Everest of sanctions in the post–Cold War era. The outcome of this case will be long debated and will color world opinion on the utility of sanctions for years to come. Parallels can be drawn between the 1935 League of Nations sanctions against Italy and the 1990 UN sanctions against Iraq. But the strongest parallel is the power of each episode to shape informed opinion. Sanctions failed in forcing Iraq's troops out of Kuwait (in fairness to the "economic weapon," it was allowed insufficient time to do its work). Subsequent sanctions failed to rid Iraq of Saddam Hussein, but the pressure of sanctions achieved more in locating, destroying, and preventing the renewed acquisition of weapons of mass destruction than was realized prior to the Iraq War (2003–present).

Initial enthusiasm for multilateral sanctions under UN auspices has, however, waned as these sanctions often failed to bring about desired policy changes. Awareness of collateral damage also generated a backlash. Particular concerns arise in two areas: the humanitarian consequences for

women, children, and the elderly, such as occurred under comprehensive sanctions in Iraq, and the costs of enforcing sanctions for front-line states, such as the Balkan neighbors of the former Republic of Yugoslavia during the Bosnian conflict. Both concerns have contributed to growing distaste for comprehensive sanctions. Moreover, experience with Iraq, Yugoslavia, Haiti, and others created "sanctions fatigue" among many UN members and a reluctance to impose broad new sanctions until the questions of collateral damage to innocent victims and front-line states are addressed.

On the other hand, horrifying ethnic conflicts in the Balkans, Africa, and elsewhere generate continued support for improving economic sanctions as a tool for promoting international peace and security. Those interested in making multilateral sanctions more effective sometimes question whether the United Nations has sufficient resources, authority, or expertise to monitor and enforce multilateral sanctions. Many UN officials and academic scholars are analyzing targeted sanctions—in particular freezing the personal assets of political, military, and economic leaders in rogue states—to see whether such sanctions are more effective and less blunt in their effects. So far, the evidence seems to suggest that sanctions targeted very narrowly against rogue regimes and their leaders can serve useful symbolic purposes but may not be adequate to achieve coercive goals, such as regime change.[2]

Congressional Intervention in Sanctions Policy

The US president enjoys broad authority under several statutes to impose sanctions in response to national security or foreign policy concerns. The Trading with the Enemy Act of 1917 (TWEA), the Export Administration Act of 1969 (EAA), and most importantly today, the International Emergency Economic Powers Act of 1977 (IEEPA) enable the president to prohibit some or all trade and financial transactions with foreign countries, groups, or individuals.

In addition to these far-reaching authorities, deployed in only the most serious cases, the president has several other options. For example, the executive branch can suspend or delay aid disbursements under the authority of Section 621 of the Foreign Assistance Act, which gives the president the authority to administer foreign aid programs. Similarly, Section 2(b)(1) of the Export-Import Act of 1945, as amended (1986), allows the president to deny Export-Import Bank credits for noncommercial reasons if the president determines that denial is in the national interest of the United States.

2. The authors have written about these issues in Elliott (2002) and Hufbauer and Oegg (2003a); see also Cortright and Lopez (2002) and Wallensteen and Staibano (2005).

In contrast to these broad, discretionary statutes, Congress at times has mandated or encouraged the imposition of economic sanctions in particular instances. The key pieces of legislation are summarized in table 5A.1. Economic restrictions imposed by congressional directive can be divided into three categories.

First, Congress has passed several laws aimed at specific behavior, rather than named countries. These laws encourage the executive branch to impose sanctions, usually the reduction of aid flows under defined circumstances, but in most cases they allow the president to determine when a "violation" has occurred and in almost all cases they allow the president to waive sanctions in the national interest. Under this heading, Congress has called for sanctions against governments that, for example, expropriate US property, launch coups against elected officials, do not cooperate with US antinarcotics efforts, support international terrorism, engage in human rights violations or religious persecution, or engage in weapons proliferation. This heading represents something of a middle ground, between the broad authorities described earlier (TWEA, EAA, and IEEPA) and the more specific congressional interventions described shortly.

Often, when the executive branch does not respond to congressional urgings to address problems identified in subject-specific statutes, Congress takes matters into its own hands by restricting economic assistance or military aid to specific countries in appropriations bills. In some instances, the president tries to preempt congressional action by imposing sanctions under existing executive branch authority, so as to ward off more severe and less flexible congressional sanctions. President Bill Clinton's tightening of sanctions against Iran under IEEPA in 1995, after several bills targeting Iran were introduced in Congress, exemplifies this approach.

Congress is most interventionist when it passes a stand-alone law targeted at a specific country, exemplified by the Comprehensive Anti-Apartheid Act of 1986 and the Iran and Libya Sanctions Act of 1996. We also include under this heading amendments targeting specific countries, such as the amendment to the Bretton Woods Agreement of 1978, which prohibited imports from Uganda (despite opposition from the US executive branch).

Figure 5.2 illustrates that, while the president imposed most sanctions under broad, discretionary authority prior to 1970 (using TWEA or EAA), Congress had a role in virtually all of the sanctions imposed after that.[3] A large congressional role was evident in the 1970s and carried right through to the 1990s. Indeed, as early as the 1970s, George Kennan (1977) lamented the impact of ethnic lobbying on American foreign policy, asserting that "[o]ur actions in the field of foreign affairs are the convulsive reactions of politicians to an internal political life dominated by vocal minorities. . . ."

3. This discussion draws on Elliott and Oegg (2002).

Figure 5.2 Increasing congressional involvement, 1940–99

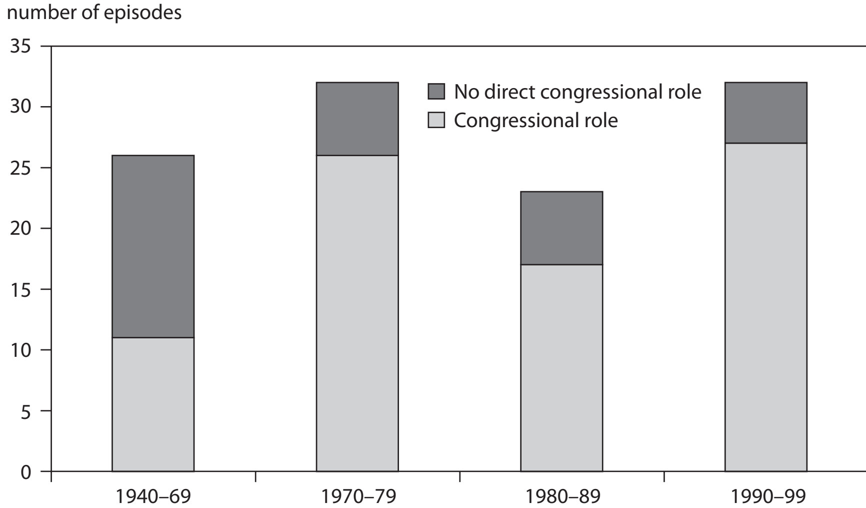
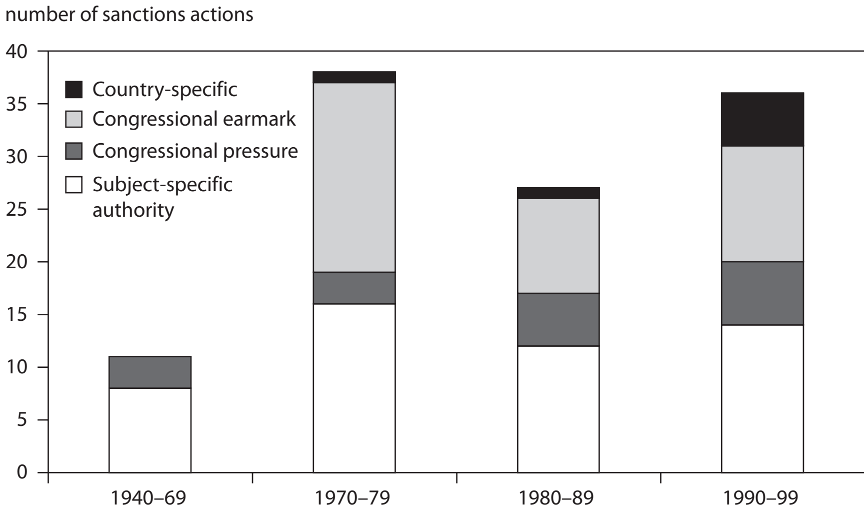


Figure 5.3 shows how the congressional role in imposing sanctions has evolved. In the early postwar period, the Hickenlooper amendment to the Foreign Assistance Act of 1962, sponsored by Senator Bourke B. Hickenlooper (R-IA), prompted executive branch action in many of the expropriation disputes of the 1960s. This was a rare example of congressionally mandated sanctions within the first 20 years after World War II. In the 1970s and 1980s, however, Congress increasingly forced the president's hand and constrained his discretion by passing legislation calling for the use of economic sanctions.

Amendments both to the Foreign Assistance Act of 1962 and the Trade Act of 1974, passed in the 1970s and 1980s, mandated sanctions against countries that violated human rights, harbored international terrorists, or abetted drug production or distribution. In 1980 the Carter administration came under pressure from Congress to tighten export controls on shipments to Iraq, as mandated by the Fenwick amendment to the Export Administration Act, because of Iraq's support for terrorism (Case 80-2). Congressional assertiveness flowered in the Comprehensive Anti-Apartheid Act in 1986. This act not only codified sanctions already imposed in 1985 by President Ronald Reagan using IEEPA (Congress thereby limited presidential discretion to relax the sanctions) but also mandated several new measures (Case 85-1).

In the 1990s, Congress passed the Helms-Burton Act of 1996 directed against Cuba, and the Iran and Libya Sanctions Act of 1996, both mandating sanctions on an extraterritorial basis, which sparked a backlash among friends and allies. The president used his waiver authority in both cases to

Figure 5.3 Evolution of congressional role in imposing sanctions, 1940–99



avoid an international clash of major dimensions. In 1998 the Glenn Amendment to the Arms Export Control Act required sanctions against India and Pakistan for their nuclear weapons test, with no waiver initially permitted. In 1999, however, Congress gave waiver authority to the president, and when circumstances changed after September 11, 2001 both sets of sanctions were lifted. The International Religious Freedom Act of 1998, threatening sanctions against regimes that engage in religious persecution, could potentially affect as many as 77 countries. So far, however, the law has had little effect because the president has used the waiver authority contained in the statute to avoid the imposition of sanctions.

State and Local Government Sanctions

Beginning in the late 1980s, state and local governments also acted to shape or redirect US foreign policy through the use of sanctions. The success of the antiapartheid movement in the 1980s, when 23 states and 80 cities used economic boycotts to protest racial segregation in South Africa, prompted states and municipalities in the 1990s to target countries such as Burma, Nigeria, and Indonesia because of their human rights violations. Sudan is now subject to similar protests over the genocide in Darfur. Using the portfolios of pension funds, together with public purchasing regulations, state and local governments have tried to influence the behavior of foreign countries through sanctions against firms doing business there.

A survey conducted by the Organization for International Investment (OFII) in 2001 showed that, in 33 instances, selective state and local purchasing laws were enacted in the 1990s (however, many of the laws are now suspended, and some were never enforced).[4] Selective purchasing laws prohibit public agencies from buying goods and services from companies doing business in the targeted countries. Several state legislatures also require that public and private pension funds divest their holdings in financial institutions or companies doing business with a growing number of "offensive" countries.

The legality of these measures has been the subject of controversy and litigation. Local and state government officials claim that taxpayers have the right to determine how their tax dollars are spent. The framers of the Constitution, while recognizing the legitimacy of states' rights in many areas, believed that, in relations with foreign countries, the nation should speak with one voice. Thus, the Constitution vests authority to conduct foreign affairs and to regulate foreign commerce in the president and Congress.

The Constitution also provides that the laws and treaties of the United States are the "supreme law of the land": They take precedence over conflicting state and local laws. In November 1999 the US Supreme Court agreed to review whether Massachusetts had exceeded its power by requiring state agencies to boycott firms doing business in Burma. In a lawsuit filed by the National Foreign Trade Council (NFTC) against the state of Massachusetts (*Crosby v. National Foreign Trade Council*, 530 US 363), the Supreme Court held that federal law preempted Massachusetts law. The court's decision in 2000, however, focused narrowly on the specifics of the Massachusetts law and its overlap with existing federal sanctions against Burma. The court stopped well short of prohibiting state and local governments from taking economic actions with foreign policy implications. The ruling left states free to pursue alternative methods of sanctioning a target country, such as requiring public pension funds to dispose of shares in offending companies. Contrary to the hope of business groups, the Supreme Court did not issue a broad decision in *Crosby* holding that such practices intrude on the president's foreign affairs powers. Another test case is now in the courts: In August 2006 the NFTC filed a lawsuit challenging an Illinois law that imposes sanctions on companies that have ties to Sudan (*NFTC v. Topinka*, 06 CV 4251). This case is still being argued in the federal district court.

In many other cases, lower US courts have been called upon to decide issues that affect US foreign policy interests (Hufbauer and Mitrokostas 2003). In a case that combined local sanctions with tort claims, a class action lawsuit was filed in 1996 against three Swiss banks over the dormant accounts of Holocaust victims (Eizenstat 2003). The legal merits of the case

4. See *State and Municipal Sanctions Report* (May 23, 2001), available at www.ofii.org/issues/SanctionsGrid.pdf.

were open to debate. However, New York City and New York state officials threatened to bar Swiss banks from underwriting municipal bonds, managing pension funds, or otherwise doing business in the city, as a means of bringing pressure on the banks to settle. The tactic succeeded, and the sanctions threat was dropped when the Swiss banks reached a settlement with the class action plaintiffs.[5]

The Incredible Lightness of "Smart Sanctions"

Comprehensive sanctions are blunt instruments; their use is designed to coerce the leaders of the targeted regime to change policies, but their economic impact often causes substantial collateral damage to the populace at large and sometimes neighboring countries. In some cases, regime leaders and their loyal supporters escape virtually unscathed. Authoritarian leaders may shift the costs to powerless citizens by controlling the flow of scarce commodities and selling them at ransom prices. Manuel Noriega in Panama and Slobodan Milosevic in Serbia are classic examples. Moreover, such leaders are adept at concealing their assets in multiple foreign banks. In short, when imposing hard-hitting sanctions, it is difficult to avoid hurting the "little guy."

This mismatch sparked interest in the search for "smart sanctions"—sanctions that could be aimed at specific officials or government functions without damaging the overall economy and imposing exceptional hardship on the general public.[6] To this end, sender countries have increasingly relied on arms embargoes, travel bans, asset freezes, and selective banking sanctions. However, the concept of smart sanctions as an alternative to broad trade sanctions is relatively new. Historically, asset freezes and travel bans were imposed in the context of broader measures. A survey of sanctions cases in the 20th century shows that in only 20 cases were smart sanctions (such as arms embargoes, asset freezes, and travel sanctions) imposed outside the framework of comprehensive embargoes. Even in these 20 cases (nine of which have occurred since 1990) the sanctions targeted on individuals or groups were almost always imposed in combination with selective export restrictions or aid suspensions.

In the recent North Korean case, UNSC sanctions were targeted at the country's top leader, Kim Jong-Il. Rather than comprehensive sanctions,

5. More details on this episode are provided on a companion CD-ROM.

6. Within the realm of smart sanctions, a distinction is sometimes made between targeted sanctions and selective sanctions. Selective sanctions are less than comprehensive sanctions involving restrictions on particular products or financial flows. Targeted sanctions aim for very narrow effects. For example, a restriction on public and private lending to a target country with no restriction on trade would be selective, but a freeze on the foreign bank accounts of individual leaders would be targeted.

UNSC banned the sale of luxury goods to North Korea in response to North Korea's nuclear test in October 2006. This sanction was carefully tailored to annoy Kim Jong-Il, known as a fan of Hennessy cognac, iPods, Harley Davidson motorcycles, and plasma televisions. Since the UNSC left the definition of luxury goods open to each country's interpretation, however, Kim Jong-Il and his elite supporters probably found ample provisions. More effective, in pushing the antiproliferation agenda, was the freeze of North Korean assets after the US Treasury cited the bank holding them, Banco Delta Asia, as a money laundering concern. The bank and Chinese authorities froze the suspect deposits in order to protect access to US financial markets. The assets were returned in April 2007 as part of the carrot-and-stick diplomacy between the United States and North Korea (see below). The choice of sanctions in this case was driven both by a concern about the effects on civilians and, more importantly, the opposition to broader sanctions by key allies and UNSC members, including South Korea, China, and Russia.

The latest attempt at smart sanctions is the UNSC's list of measures, adopted in March 2007, against the regime of President Mahmoud Ahmadinejad of Iran. So far Ahmadinejad has adopted a stance of defiance rather than compliance. While attractive in theory—namely changing government policy while respecting humanitarian values—smart sanctions work better as a signaling device than as a coercive measure. In practice it is very difficult to formulate economic sanctions that have the power and accuracy of a cruise missile.

Arms Embargoes

One purpose of an arms embargo is to induce a change in the political course by denying access to weapons and related equipment, yet spare the civilian population the pain of economic deprivation. An arms embargo can also be used as a focused way of reducing the flow of weapons to a conflict zone, a goal often sought in Africa.

During the 1990s the UNSC imposed 10 arms embargoes to limit local conflicts.[7] The embargoes may have curtailed the scale of violence in some cases, but their effectiveness in ending conflicts can be questioned. Only the use of force convinced the warring factions in Sierra Leone to lay down their arms. Weak enforcement, poor monitoring, chaotic conditions in bordering countries, and the profits earned through trafficking all work to undermine arms embargoes. The United Nations does not have a standing military force to enforce its embargoes, and UN resolutions may be delib-

7. Iraq (1990), Yugoslavia (1991), Somalia (1992), Libya (1992), Liberia (1992), Haiti (1993), Angola (1993), Rwanda (1994), Sierra Leone (1998), and again against the Federal Republic of Yugoslavia (1998) over the Kosovo conflict.

erately vague, leaving ample room for diverging interpretations by member states.

Trafficking in small arms pays high profits even in normal times. Profits increase further with the imposition of an embargo, creating lucrative markets for illicit trade. When the targeted group controls valuable natural resources—exemplified by the control once exercised by UNITA over Angolan diamonds—the conflict can last for years, with or without an arms embargo. UNITA rebels used diamond profits to finance their weapons purchases. As an additional response, the UNSC imposed an embargo on uncertified diamond exports from Angola, but the conflict ended only with the death of UNITA's commander Jonas Savimbi in 2002. Another problem is that a nominally even-handed arms embargo can lead to highly unequal access to weapons by the warring factions. This problem, in turn, can undermine support for the embargo, as happened in the former Yugoslavia, where the UN arms embargo effectively favored local Serb forces, who had access to arms supplies from Serbian stockpiles and the former Soviet Union—unlike the Bosnians, who were blocked from major transit routes.

Travel Bans

Travel and aviation bans are generally of two types: restrictions on all air travel to and from a target country and restrictions on the travel of targeted individuals or groups. In the case of restrictions on air travel to and from a target country, or areas under the control of targeted groups (such as UNITA), sender countries hope that the flight ban will affect powerful persons substantially more than the general population. Travel bans and visa restrictions against named individuals may deny legitimacy to political leaders, military officials, and their supporters, while avoiding the inadvertent impact of broader travel restrictions.

With the exception of the EU blacklist against Serbian leaders and possibly the flight ban imposed on Libya in response to the bombing of Pan Am 103, travel bans have had limited results. In the case of Libya, Muammar Gadhafi handed over the Pan Am 103 suspects to an international court only after the UN travel ban was falling apart. The ban was crumbling because the Organization of African Unity called on its members and others to suspend compliance. At the same time, however, Libya faced a sharp drop in oil prices and a rising need for foreign investment to bring new reserves on stream. The travel ban was at most a sidebar in Gadhafi's decision to comply with UNSC demands.

In cases where smart sanctions included restrictions on travel, policy success has been elusive. Military force was required in Sierra Leone to bring the rebels to the negotiating table. In cases of ongoing civil conflict, when travel bans are imposed against nongovernmental groups with no

diplomatic standing, they are likely to be dismissed by the targets as having no consequence.

In practice, travel sanctions are primarily symbolic measures, one step in denying legitimacy to the ruling elite or dissident forces. It is often hard to identify the appropriate group or individuals that should be targeted. Even then, false passports and visas may enable circumvention.

Limitations of Smart Sanctions

In sum, effective implementation of smart sanctions requires a tremendous amount of detailed knowledge about the country, persons, and groups targeted. Identification of funds belonging to particular individuals, government agencies, and companies can be difficult. Even when funds can be identified, secrecy and speed are critical in preventing targets from moving assets to numbered accounts. In many instances, members of the sending coalition lack the administrative capacity to monitor and enforce laser-sharp measures. Smart sanctions may satisfy the need in sender states to "do something," they may slake humanitarian concerns, and they may serve to unify fraying coalitions and isolate a rogue regime. But they are not a magic bullet for achieving foreign policy goals.

New Challenges for Sanctions Policy

Economic sanctions have played an important role in international diplomacy ever since President Woodrow Wilson delivered his famous speech at Indianapolis in 1919. Over the succeeding decades, the objectives of economic sanctions have evolved and widened—sometimes to act as a substitute for war, as Wilson envisaged; sometimes to signal that military conflict lies around the corner; sometimes to achieve lesser changes in target country policy such as freeing political prisoners; and sometimes merely to placate domestic constituencies in the sender nation. Over the past century, the types of sanctions have also evolved and widened—from prohibitions on merchandise imports and exports, to multiple forms of financial restraint, to measures aimed only at select members of the governing class. In decades ahead, this evolutionary process will almost certainly continue. The concluding sections of this chapter highlight areas where sanctions policy is likely to face ongoing challenges in the coming years.

Combating Terrorism

The United States has used sanctions as a counterterrorism tool since the 1970s, when aircraft hijacking by terrorists became a major concern (see chronology in Case S-1 for a fuller history). In that era, the sanctions strat-

egy targeted state sponsors of terrorism. Legislation in 1976 and 1977 sought to use foreign assistance termination and export controls, respectively, to deter countries from aiding or abetting international terrorism. The Export Administration Act of 1979 directed the State Department to maintain a list of state sponsors of terrorism, a designation that triggers a number of sanctions under various laws and remains the centerpiece of US sanctions policy with respect to state sponsors.

In the 1990s, sanctions policy shifted to address nonstate actors, the rising threat at the same time state sponsorship was declining. In 1995 President Clinton began aiming sanctions against individuals and organizations on the list of specially designated terrorists (SDTs). Through executive order, Clinton identified 12 terrorist organizations that threatened to disrupt the Middle East peace process and empowered the attorney general and secretary of the Treasury to add other entities to the list. All properties of SDTs were blocked; additionally, transfers of funds, goods, and services to SDT designees were prohibited.

The Antiterrorism and Effective Death Penalty Act of 1996 provided for the designation of foreign terrorist organizations (FTOs) by the secretary of state. Once designated an FTO, the terrorist group is prohibited from financial transactions, and all assets are frozen. Section 303 makes it a crime for US residents to knowingly provide material support or resources to a designated FTO.

Prominent terrorist organizations such as Osama bin Laden's al Qaeda network were named SDTs or FTOs, but these financial sanctions had little impact. The 2000 Treasury Department annual report on terrorist assets reveals that only $301,146 of assets belonging to designated FTOs or SDTs had been frozen in the years prior to the September 11 attacks.

Following the attacks, law enforcement officials sought to strengthen sanctions as a means of fighting terrorism. The George W. Bush administration has pursued three broad strategies. First, the United States cast a wide net in sanctioning nonstate terrorist entities under both existing and new legislation. Second, the United States buttressed multilateral sanctions regimes.[8] Third, the United States offered incentives in the form of lifting sanctions on previously targeted countries to induce their cooperation in the war on terror.

President Bush used his powers under IEEPA, on September 23, 2001, to broaden existing proscriptions to apply globally to groups "associated with" designated terrorists and to deny US market access to foreign banks not cooperating in freezing terrorist assets. New legislation, most notably the USA Patriot Act, expanded the ability of US law enforcement and intelligence agencies to track and detain suspected terrorists. Various bank-

8. For more on the expansion and strengthening of anti–money laundering efforts after the September 11 terrorist attacks, see Reuter and Truman (2004).

ing regulations were instituted to combat money laundering and the financing of terrorism.

North Korea

Economic ties between the United States and North Korea have been virtually nonexistent since 1950. When North Korea announced its withdrawal from the Nuclear Non-Proliferation Treaty (NPT) in March 1993, over a dispute about inspections of nuclear waste sites by the International Atomic Energy Agency (IAEA), the United States had very little remaining economic leverage that could be applied unilaterally. The United States called on the UNSC to impose sanctions but was resisted by Russia and China. With the threat of multilateral sanctions hovering in the background, albeit constrained by Russian and Chinese objections, the Clinton administration offered the "carrot" of reduced economic sanctions as an incentive for North Korean cooperation on curtailing its nuclear weapons program.

After a series of high-level negotiations, threats of economic sanctions, implicit threat of military force, and interventions by third parties, the United States, South Korea, and Japan reached an agreement with North Korea in 1994. Under the Agreed Framework, North Korea promised to freeze and eventually eliminate its nuclear weapons program in exchange for the construction of two light-water reactors. The agreement also provided for the easing of restrictions on diplomatic and trade relations with the United States. In early 1995 President Clinton relaxed travel, communications, and a few trade restrictions but conditioned any further relaxation on progress toward nuclear control.

In June 2000, hours after the presidents of North and South Korea signed an agreement on future cooperation between the two countries, Clinton administration officials announced a plan to lift a range of broad economic sanctions. The plan would allow North Korea to export raw materials and finished goods to the United States and open the way for US firms to invest in agriculture, mining, infrastructure projects, and tourism in North Korea. Restrictions associated with North Korea's status as a state sponsor of terrorism remained in place, but the imminent easing of sanctions signified a striking change in policy.

This trend underwent a sharp reversal, however, with the inauguration of George W. Bush as president, especially after he named North Korea as one "axis of evil" in his January 2002 State of the Union speech. Relations deteriorated further in the fall of 2002 when each party accused the other of violating the framework agreement. The United States and its allies suspended construction on the light-water reactors, as well as interim shipments of fuel oil; North Korea responded by unfreezing operation of its existing nuclear reactor and withdrawing from the IAEA.

A vague agreement calling for North Korea to dismantle its nuclear programs in exchange for unspecified carrots from the United States and other key countries was reached in September 2005. But negotiations quickly broke down over details related to sequencing and implementation. Relations between the United States and North Korea worsened further after the US Treasury declared a Macau bank, Banco Delta Asia, a money laundering concern because of North Korean accounts that US officials charged were used to launder illicit proceeds from counterfeiting operations. Chinese banking authorities, concerned that their banks might lose access to the US financial system, froze the accounts, worth some $25 million.

North Korea responded to the breakdown in talks by testing a nuclear weapon early in October 2006. Immediately after the tests, the United States called for sanctions, and the UNSC passed Resolution 1718 unanimously and quickly. The UN resolution approved a ban on shipments to North Korea of military hardware, nuclear technology, and luxury goods, as well as a targeted freeze of North Korean assets abroad.

The combination of sticks and carrots may have yielded results, but how extensive and how permanent remains to be seen. In February 2007 North Korea agreed to close its main nuclear reactor by mid-April 2007 in return for 50,000 tons of fuel oil, but that deadline was missed in a continuing dispute over the return of North Korea's assets held at Banco Delta Asia. North Korea also agreed to shut down the rest of its nuclear facilities and rejoin the IAEA on the condition that the United States and Japan would normalize relations and eventually lift all sanctions. After the funds in the Banco Delta Asia accounts were released in June 2007, North Korea reconfirmed its commitment to cooperate with IAEA inspections of its nuclear facilities and continue the six-party process toward dismantling of its program. Two IAEA inspection teams visited North Korea in July 2007 and reported that North Korea had shut down its reactor at Yongbyon. Even if the Yongbyon reactor remains permanently shut, North Korea has probably stockpiled enough plutonium to make six to ten bombs.[9]

Iran

The United States first imposed economic sanctions against Iran in response to the hostage crisis of 1979–81. The trade and, especially, financial sanctions provided a crucial negotiating chip to win release of the American hostages on the day of President Reagan's inauguration in January 1981.

9. Thom Shanker and David E. Sanger, "North Korean Fuel Identified as Plutonium," *New York Times,* October 17, 2006.

A few years later, in 1983, Iran was implicated in the terrorist bombing of a Marine Corps barracks in Beirut, Lebanon. Iran was then added to the US list of countries that support terrorism, notably Hezbollah in Lebanon. In incremental steps, the United States imposed new restrictions on US trade with Iran, targeted primarily at limiting development of the Iranian oil industry and thus Tehran's capability to fund terrorist groups. Subsequent concerns about Iran's nuclear power programs prompted additional US sanctions to impair the military potential of Iran, particularly regarding the development of nuclear weapons. The Iran and Libya Sanctions Act (ILSA) of 1996 supplemented these measures with additional restrictions on foreign companies that undertake new oilfield investments in Iran.

US sanctions did not persuade Iran to renounce the use of terrorism or the acquisition of nuclear weapons. Some US allies implemented narrowly targeted trade sanctions designed to limit Iran's access to components and technologies that could support the production and delivery of nuclear, chemical, and biological weapons; however, the same countries continued to trade extensively and invest in Iran. Meanwhile, other countries, possibly including Russia, Pakistan, and China, may have supplied Iran with nuclear equipment and technologies.

The ILSA sanctions did lead some companies to defer bidding on new contracts to develop Iranian oil and gas properties. US sanctions deserve some of the credit, but most of Iran's problems in attracting new investment were caused by self-inflicted wounds that its own domestic policies created. Despite these problems, Iranian oil production has grown modestly over the decade since ILSA was enacted.

The Iranian headaches confronting US policymakers two decades ago again dominate the headlines: funding Hezbollah terrorists in Lebanon and continuing the pursuit of nuclear weapons. Economic sanctions have not blunted Iranian determination, but they have inhibited the acquisition of key components and made the nuclear program more costly to pursue.

Can sanctions stop Iran from eventually developing a nuclear weapon? Probably not. Iranian leaders have energetically pursued a nuclear capability for more than two decades—despite diplomatic entreaties, limited economic sanctions, and the threat of military strikes. Tehran is concerned about having US and allied troops on its borders with Iraq and Afghanistan and about the pressure of nuclear-armed states in the neighborhood, especially Israel. It also believes that nuclear weapons will bring it regional dominance and that—just as with India and Pakistan—the West will grudgingly accept Iran's accession to the nuclear club.

Past experience suggests that sanctions cannot prevent a determined and well-financed country from eventually crossing the nuclear threshold. With its petrodollar bonanza, Iran will likely procure the necessary materiel and technology to achieve its nuclear ambitions. Nonetheless, history shows that targeted sanctions can push back the day of reckoning. Since the Nuclear Non-Proliferation Treaty entered into force in 1970, four coun-

tries have acquired nuclear weapons: Israel, India, Pakistan, and North Korea. The latter three were subject to US sanctions and some multilateral measures. Economic sanctions did not prevent proliferation, but collective denial by Western powers of key ingredients in the bomb maker's art—reprocessing technology, centrifuges, tubing, metallurgy, and timers—substantially slowed the process. Without these and other efforts South Korea, Taiwan, Brazil, Libya, Egypt, Ukraine, and Kazakhstan today might count themselves as nuclear powers.

Cuba

The trade embargo, which is still in place today, was enacted by the Dwight Eisenhower administration in 1960, both in response to Cuba's mass expropriation of US properties and as a riposte to Fidel Castro's close ties to the Soviet Union. In 1961 the United States ended diplomatic relations with Cuba and tightened the embargo.

Over time, sanctions against Cuba prohibited trade, travel, and investment with two main objectives. One is to exact a price for Cuba's socialist internationalism and Castro's decades of political and military support for Marxist revolutionary movements in the Americas and Africa. The other is to destabilize the Castro regime.

In February 1962, following the Bay of Pigs fiasco, the John F. Kennedy administration banned virtually all imports from Cuba. In October 1962 relations reached a new low point when the United States found that the Soviet Union was installing nuclear missiles in Cuba. In response, the United States placed US military forces on alert and imposed a naval quarantine against Cuba until the Soviet Union withdrew its missiles. In a side agreement with Russia, the United States promised not to mount another invasion of Cuba.

When the Soviet Union collapsed in 1991, the fall of the Castro regime was widely expected, owing to Cuba's loss of its number one trading partner and financial provider. When Castro did not fall, Congress further tightened sanctions in 1992, passing the Cuban Democracy Act, prohibiting foreign-based subsidiaries of US companies from trading with Cuba. In 1996 President Clinton signed the Helms-Burton Act, allowing US citizens and companies to sue foreigners investing in US properties seized by the Cuban government. This legislation further enabled the denial of US visas for persons who profit from such investments. At the president's discretion, these secondary boycott measures can be waived, which both Presidents Clinton and Bush have done.

Despite US pressure for nearly four decades, Fidel Castro remains in power and shows every chance of dying in office. He has blamed the embargo for economic ills and painted Cuba as a victim of the American bully. To his supporters at home and abroad, Castro is seen as a defender

of Cuban independence, and US sanctions are regularly condemned at the United Nations. Indeed, one of the major reasons the US embargo failed to achieve its major goals is that, despite many efforts, the United States could not enlist support from other countries.

Domestic and international demands are strongly voiced for ending the embargo against Cuba. In fact, the United States has begun to plan for the post-Castro regime. In October 2003 the Bush administration established an interagency Commission for Assistance to a Free Cuba (CAFC) to help plan for Cuba's transition to democracy. In July 2005 Caleb McCarry was appointed as a new Cuba transition coordinator in the State Department to direct US actions in support of a free Cuba.

According to a Congressional Research Service report, the Bush administration is willing to consult with Congress on ways to lift the embargo if Cuba is prepared to free political prisoners, respect human rights, permit the creation of independent organizations, and create a mechanism and pathway toward free and fair election (CRS 2006). None of this is likely to happen as long as Fidel and his brother Raul Castro control the Cuban government. As their regime passes from the scene, however, President Bush or his successor will need to fashion a sequence for lifting sanctions, both to reward internal political progress in Cuba and to ensure compensation of Americans and Cuban-Americans whose property was seized by the Castro regime.

In Summary

As these episodes illustrate, economic sanctions are still working hard to resolve old challenges while reaching out to address new problems. Open case files are numerous. More players are in the game, and the well-worn tools are given new edges. Beyond their utility in resolving the immediate conflicts and disputes, economic sanctions signal that a watchdog—usually the United States or the European Union—may step in to penalize future bad behavior. In our final chapter, we assess how successful sanctions have been in the episodes studied and offer recommendations to future policymakers.

Appendix 5A

Table 5A.1 Selected sanctions legislation by specific issue or country

Issue	Legislation	Date passed	Description
Communist countries	Foreign Assistance Act of 1961, as amended (Section 620[f])	1962	Prohibits US assistance for communist countries unless the president declares the assistance is vital to US national security
	Trade Act of 1974, Jackson-Vanik amendment	1974	Prohibits extension of most-favored-nation status (MFN) and credit or investment guarantees (Overseas Private Investment Corporation [OPIC] Ex-Im Bank programs) to nonmarket economy countries unless the president determines that the country does not deny, or impose certain financial restrictions on, emigration
	Export-Import Act of 1945, as amended	1986	Section 2(b)(2) amended to prohibit approval of Ex-Im Bank guarantees, insurance, or credits for sales to Marxist-Leninist countries
Coup on elected government	Foreign Operations Appropriations Act, included every year	1986	Prohibits economic aid to any country whose "duly elected head of government is deposed by military coup or decree"
Expropriation	Foreign Assistance Act of 1961, Hickenlooper amendment	1962	Prohibits providing assistance to countries that expropriate US-owned property and do not reach a compensation agreement within six months
	Foreign Assistance Act of 1961, expansion of Hickenlooper amendment	1994	Expands the coverage to include governments that have "repudiated or nullified any contract or agreement with any United States person" or take any other action "which has the effect of seizing ownership or control of the property of any United States person"

Human rights	Foreign Assistance Act of 1961, as amended (Section 502B)	1974	Prohibits security assistance to any government that engages in a consistent pattern of gross violations of internationally recognized human rights
	Foreign Assistance Act of 1961, as amended (Section 116)	1975	Prohibits economic assistance to any government that engages in a consistent pattern of gross violations of internationally recognized human rights
	International Financial Institutions Act (Section 701)	1977	Requires US representative in international financial institutions to vote against multilateral loans (other than those for "basic human needs") for countries whose governments engage in gross violations of human rights
	Foreign Assistance and Related Programs Appropriations Act of 1978	1978	Prohibits direct US aid for Uganda, Vietnam, Cambodia, Laos, Angola, Mozambique, and Cuba
	Foreign Assistance Act of 1961, as amended (Section 498A)	1996	Prohibits certain assistance to newly independent countries of the former Soviet Union engaging in gross violations of human rights
	Omnibus Appropriations Act for fiscal 1997	1997	Section 579 directs the United States to vote in international financial institutions against loans to countries condoning female genital mutilation
	Foreign Operations Appropriations Act of 1997	1997	Article 570 prohibits foreign assistance to security forces of any foreign country if secretary of state "has credible evidence that such unit has committed gross violations of human rights"

(table continues next page)

Table 5A.1 Selected sanctions legislation by specific issue or country *(continued)*

Issue	Legislation	Date passed	Description
Human rights	Trafficking Victims Protection Act	2000	Directs the State Department to annually report countries' measures to combat human trafficking and identify governments making insufficient efforts to comply with US standards. The president may sanction noncompliant countries
	Burmese Freedom and Democracy Act	2003	Bans US imports from Burma, freezes US assets of Burmese government and senior officials, prohibits US firms from providing financial services to any Burmese entity, expands the current visa ban, and codifies the existing policy of opposition to international loans and technical assistance to Burma
Narcotics production, transit	Foreign Assistance Act of 1961, amended by Narcotics Control Trade Act	1986	Requires that US economic aid—except for humanitarian and counternarcotics assistance—be withheld from countries designated as major drug producing/transit countries and not certified as adequately cooperating with US antinarcotics efforts. Requires that US representatives at international financial institutions vote against any multilateral aid to such countries
	Foreign Narcotics Kingpin Designation Act	1999	Authorizes the president to freeze the assets of specially designated narcotics traffickers and those assisting them
Nuclear proliferation	Foreign Assistance Act of 1961 Amended by the International Security Assistance Act (Section 669, Symington amendment)	1977	Prohibits military or economic assistance to any country that "delivers nuclear enrichment equipment, materials, or technology to any other country or receives such equipment, materials, or technology from any other country," unless the transaction follows specified international safeguards requirements

Nuclear Non-Proliferation Act	1978	Makes approval of nuclear exports dependent on buyer's acceptance of safeguards and US veto rights over retransfer or reprocessing of US-supplied fuel. Prohibits exports of nuclear materials, equipment, and certain technology to nonnuclear weapon state found by the president to have detonated a nuclear explosive device or terminated or violated an International Atomic Energy Agency safeguard or agreement. Export of such goods to other (nuclear weapon) countries prohibited if the president finds the country violated a cooperation agreement with the United States or assisted or encouraged proliferation to nonnuclear weapons state
Iran-Iraq Arms Non-Proliferation Act	1992	Prohibits export of defense items, nuclear material, and certain goods under the Export Administration Act and denies Export-Import Bank financing to Iraq and Iran. The legislation also calls for sanctions against any foreign government or person contributing "knowingly and materially to the efforts by Iran and Iraq (or any agency or instrumentality of either such country) to acquire destabilizing numbers and types of advanced conventional weapons"
Nuclear Non-Proliferation Prevention Act	1994	Section 826 Glenn amendment requires sanctions on nonnuclear states that conduct nuclear tests. Sanctions include restrictions on financial assistance except for humanitarian purposes, a ban on Trade and Development Agency, OPIC, and Export-Import Bank financing, restrictions on US exports of high-technology products, and opposition to loans from international financial institutions

(table continues next page)

Table 5A.1 Selected sanctions legislation by specific issue or country *(continued)*

Issue	Legislation	Date passed	Description
	Iran Nonproliferation Act of 2000	2000	Authorizes the president to take punitive action against individuals or organizations known to be providing material aid to weapons of mass destruction programs in Iran
Religious persecution	International Religious Freedom Act	1998	Imposition of sanctions against countries engaged in a pattern of religious persecution and for other purposes
Terrorism	Foreign Assistance Act of 1961, as amended by International Security Assistance and Arms Export Control Act of 1976 (Section 620A)	1976	Prohibits US assistance to governments supporting international terrorism. Requires the secretary of state to determine which governments "repeatedly provided support for acts of international terrorism." Includes provision for presidential national security waiver
	International Financial Institutions Act (Section 710)	1977	Section 701 requires US representative in international financial institutions to vote against multilateral loans (other than those for "basic human needs") for countries whose governments provide refuge to individuals committing acts of terrorism by hijacking aircraft and for those countries on the State Department list of designated terrorist-supporting countries
	Export Administration Act (Section 6[j])	1979	Section 6(j) identifies countries that have repeatedly supported international terrorism, designated state sponsors
	International Security and Development Cooperation Act (Section 505)	1985	Authorizes (but does not require) the president to restrict or ban imports from countries on US-designated terrorist country list

	Antiterrorism and Effective Death Penalty Act (Section 321)	1996	Bans Americans from engaging in financial transactions with governments on the US State Department list of designated terrorism sponsors. Regulations authorize transactions with the governments of Syria and Sudan. The act also adds amendments to the Foreign Assistance Act, the International Financial Institutions Act, and the Arms Export Control Act to prohibit US government assistance to countries providing assistance to terrorist-designated countries, to require US representatives at IFIs to vote against loans to terrorist designated countries, and to prohibit export licenses for defense items for these countries
	Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act (Title III)	2001	Title III of the USA Patriot Act is the International Money Laundering Abatement and Financial Anti-Terrorism Act of 2001. Section 313 prohibits US correspondent accounts with foreign shell banks. Section 319 authorizes the treasury secretary to mandate that US banks sever relations with foreign banks not complying with certain judicial proceedings. Other sections impose several new and heightened due diligence, monitoring, reporting, and record keeping requirements for financial institutions
	Syria Accountability Act	2003	Requires the president to prohibit the export of any dual-use item to Syria if Syria does not end its support for terrorist groups, cease support for terrorist activities in Iraq, withdraw from Lebanon, and give up its missile and weapons of mass destruction programs
South Africa	Comprehensive Anti-Apartheid Act (CAAA)	1986	Bans US trade with and investment in South Africa, authorizes the use of Economic Support Fund monies to assist victims of apartheid, and requires US departments and agencies to suppress funds and assistance to the proapartheid government

(table continues next page)

Table 5A.1 Selected sanctions legislation by specific issue or country *(continued)*

Issue	Legislation	Date passed	Description
Cuba	Cuban Democracy Act	1992	Prohibits vessels engaging in trade with Cuba, travel to Cuba by US citizens, and family remittances to Cuba. Authorizes the president to apply sanctions to the country that provides assistance to Cuba
	Cuban Liberty and Democratic Solidarity Act (also known as Helms-Burton Act)	1996	Enforces US and international economic embargo against Cuba, allows US nationals to sue foreigners investing in US properties held by the Cuban government, and denies US visas to executives of companies that are found to traffic in confiscated property
Iran and Libya	Iran and Libya Sanctions Act (ILSA)	1996	Requires the president to impose at least two out of a menu of six sanctions on foreign companies (entities, persons) that make an "investment" of more than $20 million ($40 million for Libya) in one year in Iran's energy sector
Iran	Iran Sanctions Act (ISA)	2006	Extends ILSA until 2011, changes its name to the Iran Sanctions Act (ISA) by terminating application to Libya, and allows substantial administration flexibility
Burma	Burmese Freedom and Democracy Act (BFDA)	2003	Bans imports from Burma and exports of financial services to Burma, freezes the assets of certain Burmese financial institutions and extends visa restrictions on Burmese officials.

Sources: Forsythe (1988); National Association of Manufacturers (1997); President's Export Council (1997). Also see chronologies in Case Summaries S-1, S-2, S-3, and S-4, which are on a companion CD-ROM.

6

Conclusions and Policy Recommendations

Economic sanctions were deployed frequently in the 20th century—and far more often than we originally thought when we started this investigation almost three decades ago. Our previous two editions abstracted a number of lessons from the rich sanctions experience of sender and target countries. In this concluding chapter, we reassess the overall effectiveness of sanctions as a foreign policy tool based on additional evidence garnered from cases initiated during the 1990s—including some still in force in 2007—and offer updated policy recommendations for the sanctions practitioner in the 21st century.

Our original work posited "nine commandments" to guide government officials in the formulation and implementation of sanctions policies. These common sense rules often contrasted with the responses of major powers to international crises: In many cases, sender countries hastily imposed economic sanctions without adequately analyzing their potential impact, simply to slake the public demand for action against foreign outrages. Our prescriptions reversed the standard modus operandi prevailing in the 1970s and 1980s, namely shoot first and ask questions later. We look back now with some gratification that our initial findings contributed to a rethinking on how sanctions are deployed and a reappraisal of the once conventional wisdom that "sanctions never work."[1]

1. By compiling the first comprehensive international database on economic sanctions, we provided the foundation for scholarly articles and PhD dissertations that addressed in more detail specific case studies or more focused aspects of the use of sanctions. Several of these works also contained useful comments and critiques of our previous methodology and analysis, which we have answered and incorporated in this third edition.

That said, however, we must report mixed results in the application of our policy recommendations, based on the sanctions experience since our first edition was published in 1985. Some of the lessons from our research have become ingrained in the deliberative process of national governments and international institutions, including the United Nations. Advance planning for the imposition of sanctions is now the norm. Other "commandments" have required modification in light of rapidly changing conditions in world markets and the differing geopolitical circumstances in which sanctions have been applied since the end of the Cold War (as discussed in chapter 5). Sanctions now are often deployed amidst civil strife, where central government authority is fragile or fragmented. Instead of being targeted at the presidential palace, in recent years sanctions have often been aimed at dissident factions (witness the recent sad history of Somalia and war-torn West African nations). Finally, and regrettably, still other "commandments" have been ignored or violated. Despite more diligent aforethought preceding the imposition of sanctions, governments continue to give short shrift to exit strategies for the unraveling of sanctions and compensation for the collateral damage that sanctions inflict on domestic firms and neighboring countries. Post-sanctions planning is still deficient, as clearly evidenced in Iraq and Haiti.

As a result, we have reconstructed our policy recommendations to respond to the new challenges confronting the practitioner of this not-so-subtle form of statecraft. While some progress has been made in tempering and refining sanctions policies, governments are still prone to misjudging the economic and political impact of sanctions. Reflecting the historical learning of the past two decades, our original nine "commandments" can now be compressed. Some lessons from past sanctions experience need to be repeated and others revised to reflect the changing political and economic environment in which sanctions operate in the 21st century.

The first and second editions of *Economic Sanctions Reconsidered* offered nine "commandments" to policy officials. In this third edition, we instead offer seven "recommendations." Some of our prior lessons have been consolidated and rephrased in light of almost two decades of experience. More importantly, in light of the uncertainties of diplomacy, reflected in our statistical analysis (appendix A), we think that it is better to express lessons less insistently than conveyed by the term "commandments."

In this concluding chapter, we address the central, albeit multifaceted and highly subjective, question: "Do sanctions work?" We base our answers on 174 case studies encompassing 204 observations in our dataset (some cases have more than one target or policy objective or have distinct phases over an extended period).[2] As in previous editions, we discuss

2. By comparison, the second edition of this study covered 116 cases, including measures against Iraq, which were just being implemented prior to the first Gulf War when that volume went to press (Iraq was not included in our previous statistical analysis).

both *whether* sanctions are effective in contributing to the achievement of foreign policy goals and *when* (or under what conditions) sanctions policies are most effective. We then consolidate our findings in concise recommendations for improving the use of the "economic weapon."

Before doing so, however, we should restate what exactly we are grading—in other words, which of the multiple purposes of sanctions are being judged when we grade success or failure. This is not so simple, since sanctions may be intended to demonstrate resolve both at home and abroad, to express outrage, to punish, to deter future wrongdoers, and to change current policies in the target country. Sometimes the primary purpose of the sanctions is to slake the thirst of domestic constituencies for action, symbolic or otherwise, rather than to change foreign practices; other times the purpose is not to change the status quo but to deter future misdeeds by the target or emulation of the proscribed practice by others. Further complicating the story, sender countries usually pursue more than one goal, and the goals often evolve over time.

As in prior editions, we focus on the effectiveness of sanctions in coercing the identified target country to conform to the sender's demands: in other words, the achievement of the avowed foreign policy goals. Moreover, in assessing effectiveness, we emphasize the most ambitious goal in each phase of a sanctions campaign.

As one sanctions scholar has observed, "Compellant purposes of sanctions are the most difficult to achieve . . ." (Leyton-Brown 1987, 304), and many of the cases we have judged to be failures would be considered successes if measured against criteria other than coercion of foreign policies. A very recent probit study (Petrescu 2007) indicates that sanctions imposed against one party in a militarized conflict deterred (to a modest extent) not only the targeted party but also other similarly situated countries from engaging in new and different military conflicts in the next five years. Thus sanctions may "fail" in the episode at hand yet "succeed" (to a modest extent) in deterring future episodes. To illustrate additional possibilities of success, applying criteria different than our own, several prominent episodes that we rate as failures in coercive terms—Cuba, Haiti, the destabilization of the Saddam Hussein regime in Iraq, and dismantling of the North Korean nuclear program (so far)—clearly demonstrate US resolve (and sometimes the resolve of allies) and certainly punish the target populace. In other cases, the sanctions may be intended for symbolic or signaling purposes (e.g., Western responses to Chinese repression in Tiananmen Square in 1989), and the design may not be appropriate for coercive purposes. Nonetheless, we believe that a careful analysis of the factors contributing to the success of coercive sanctions is important and can provide insights to guide the use of sanctions in other circumstances as well.[3]

3. David Baldwin (1985) has argued the case for a broader definition of success in evaluating the utility of "economic statecraft." Margaret Doxey (1987, 144) has emphasized the im-

Economic sanctions are typically only one weapon in a larger array brought to bear against the target. Most cases involve diplomacy to one degree or another. Some engage a full armory of diplomatic, economic, covert, and military forces—as in various phases of the US/UN campaign against Iraq. In these cases, sanctions may well be necessary, if only to reassure the home public in the sender coalition that all elements of society—business firms as well as troops and diplomats—are making sacrifices to attain the common goal. Indeed, in most circumstances a country cannot send troops, ships, or airplanes into hostile territory without preliminarily or simultaneously cutting off trade and financial relations.[4]

Thus we recognize that sanctions are often necessary in the broader political/military context. But we also try to assess sanctions against a more demanding sufficiency test: What was the extent of their contribution to the outcome in terms of altering policy in the target country? Of course, even if the sanctions made little or no contribution by this test, that does not mean it was a mistake to impose them. It only means that, in similar episodes, presidents and publics should not count on sanctions alone to achieve the declared objectives.

One final word of caution is in order. Forecasting the outcome of statecraft, like forecasting the stock market, is a hazardous business. As one might expect from a diverse collection of 174 cases, the statistical results are not clear-cut. Idiosyncratic influences are often at play. Human personalities and plain luck may well determine the outcome of a sanctions episode. Much depends on the kaleidoscope of contemporaneous world events and factors not captured by our variables. Hence our summary assessments and recommendations must be read as general indicators, not infallible guideposts, in the fine art of statecraft.

Are Sanctions Effective?

Overall, we found sanctions to be at least partially successful in 34 percent of the cases that we documented. However, the success rate importantly depended on the type of policy or governmental change sought. Episodes involving modest and limited goals, such as the release of a political prisoner, succeeded half the time. Cases involving attempts to change regimes

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portance of identifying whether a goal is coercive or symbolic and of designing the sanction accordingly. Michael Malloy (1990) has taken a different tack, arguing that the effectiveness of sanctions should be judged against the immediate "instrumental" goal (denying goods, markets, or finance) and not confused with the effectiveness of the overall foreign policy that sanctions serve. In contrast to these scholars, our scoring is guided by the frequent declarations of presidents and prime ministers to the effect that the sanctions they impose will prompt the foreign adversaries to reconsider and amend their policies.

4. The civil wars in Somalia, Bosnia, and Kosovo and attendant mass slaughter of civilians illustrate the exceptions, as detailed in the relevant case evaluations.

Table 6.1 Success by policy goal

Policy goal	Success cases	Failure cases	Total	Success ratio (percent of total)
Modest policy changes	22	21	43	51
Regime change and democratization	25	55	80	31
Disruption of military adventures	4	15	19	21
Military impairment	9	20	29	31
Other major policy changes	10	23	33	30
All cases	70	134	204	34

(e.g., by destabilizing a particular leader or by encouraging an autocrat to democratize), to impair a foreign adversary's military potential, or to otherwise change its policies in a major way succeeded in about 30 percent of those cases. Efforts to disrupt relatively minor military adventures succeeded in only a fifth of cases where that was the goal. Table 6.1 summarizes the scorecard.

It is important to reiterate that we score sanctions episodes on a scale from 1 to 16 (see chapter 3, tables 3A.1 to 3A.5). By our standards, successful cases are those with an overall success score of 9 or higher (the success score is derived by multiplying the assigned policy result score by the sanctions contribution score, where 4 is the maximum index for each). We emphasize that a score of 9 does not mean that economic sanctions achieved a foreign policy triumph. It means only that sanctions made a modest contribution to a goal that was partly realized, often at some political cost to the sender country. Nor does a score of 8 indicate dismal failure. In fact, in all of the cases assigned a score of 8 and about a third of those scored as 6, the sender's objective was at least partially achieved, but sanctions played only a minor role in reaching the outcome. In other words, our judgment in these cases is that sanctions did not contribute importantly to the sender's goals. Yet in many cases, it is fair to say that sanctions were a necessary component of the overall campaign that focused primarily on the projection of military force.

Thus, in our view, the bald statement "sanctions never work" is demonstrably wrong. That said, there are several reasons why sanctions often do not "work." First, sanctions are of limited utility in achieving foreign policy goals that depend on compelling the target country to take actions it stoutly resists. In some cases, the security, political, or other costs of complying with the sender's demands may simply be higher than any pain that can be imposed with sanctions. In other instances, particularly situations involving small target countries and relatively modest policy goals, sanctions have helped alter foreign behavior. Even in those cases, how-

ever, sanctions may fail if the sender feels less intensely about the stakes involved than the target, since the sender may choose to impose sanctions that are too weak to achieve even relatively modest objectives.

Second, we classify some sanctions as failing to produce a real change in the target's behavior when their primary if unstated purpose—namely, demonstrating resolve at home, signaling disapproval abroad, or simple punishment—may have been fully realized. As one analyst has noted, when sanctions have been used primarily for domestic political or other rhetorical purposes, "[the imposition of] 'effective' sanctions [in an instrumental sense] were not a primary policy goal, and such sanctions were not imposed" (Malloy 1990, 626). This point is clearly illustrated by President George H. W. Bush's sanctions against China after the 1989 massacre in Tiananmen Square.

Third, sanctions sometimes fail because sender countries have cross-cutting interests and conflicting goals in their overall relations with the target country. Tensions among economic interests in the sender country that could either benefit or lose from a disruption in trade, finance, and investment often lead to tepid measures timidly imposed. Cross-cutting economic and security interests with the target regime complicate the construction of a sanctions package, leading to ambiguous signals of policy resolve and intent by the sender country.

Two examples illustrate this point. US sanctions against Iran under the Iran and Libya Sanctions Act of 1996 were constrained by the waiver of sanctions against European firms investing in Iranian oil and gas fields. As a result, Iran continued to have access to Western capital and oilfield technology, just not from US firms. In 1988 the Ronald Reagan administration attempted to impose sanctions that would force Manuel Noriega out of power without permanently damaging the Panamanian economy. Sanctions were imposed incrementally and then gradually weakened by a number of exemptions intended to spare the Panamanian economy. In the end, the sanctions proved inadequate to remove Noriega, and military force was applied.

Policy Recommendations: Using Sanctions More Effectively

In determining the role of sanctions in the overall response to foreign provocations, policymakers need to take a close look at both the vulnerability of the target country to prospective sanctions and the viability of maintaining the sanctions regime. The sender needs to understand how the target views the costs of complying with the sanctioner's demands. That in turn will determine whether sanctions can be designed that change the incentives facing the target sufficiently to compel different policies or behavior. In other words, the sender must evaluate the costs the target will incur by defying sanctions, reflecting the target's potential vulnerabilities

that arise from its existing economic and political situation, as well as the direct costs the sanctions themselves will impose. At the same time, the sender needs to consider whether a broader coalition of countries is needed to convey the appropriate political signal and economic punch and whether the sanctions regime can be sustained over time if the costs that sanctions impose on the sender's own firms and workers, as well as on innocent civilians and neighbors of the targeted regime, will ultimately erode political support for the overall policy.

The discussion below focuses on results using cross-tabulation tables that control for only one or two explanatory variables at a time. In addition, results from more sophisticated econometric analysis are mentioned below where appropriate and discussed in detail in appendix A, where we estimate the probability of a successful outcome in a given case based on the values of the explanatory variables included in the regression. This logit analysis, unlike the simple tabular analysis emphasized in this chapter, estimates the statistical significance of each individual variable in explaining sanctions outcomes, while controlling for other variables that also affect the outcome. For example, while we can observe a correlation in the data between success and the relative warmth of relations between sender and target prior to the imposition of sanctions, we would also like to know if that correlation remains statistically significant after controlling for the level of trade between sender and target.

The econometric results do not support the statistical significance of several of the individual factors that we believe to be important. However, they do support three broad conclusions discussed in more detail below: The relative difficulty of the goal sought is important; so too is the nature of the target regime and the sender's relations with it; and the economic costs imposed by sanctions on the target are among the more statistically significant and robust variables explaining sanctions, success and failure.

The importance of other variables that might be expected to affect the size of the economic and political costs imposed by sanctions varies across goal categories. Thus, international cooperation, offsetting assistance by a political rival, or the use of companion policies, such as military force, are used less frequently in episodes involving relatively modest goals and make little discernible difference to the outcome in those cases. Military force is an important variable in the military impairment cases, however, and international cooperation with the sender is present in far more successes than failures when the goal is a major one, such as the surrender of territory.

From our historical analysis, we now derive lessons on how to apply sanctions to maximize the opportunities for success. Careful attention should be given to who is targeted and how the sanctions regime is crafted. The dedicated practitioner of sanctions should choose the target carefully and tailor the measures imposed to their expected impact. Design

and implementation of sanctions are important, and the methods used in a particular episode should be matched to the results that the sender hopes to achieve.

It is clear that sanctions sometimes bear fruit but only when planted in the right soil and nurtured properly. We therefore offer seven propositions for the statesman who would act as a careful gardener. These recommendations are intended to maximize the chances of success when sanctions are deployed to coerce changes in the policies of a target country. The same advice is not necessarily optimal for achieving other goals, such as signaling resolve to allies or placating domestic constituencies.

Don't Bite Off More Than You Can Chew

Policymakers often have inflated expectations of what sanctions can accomplish. This is especially true of the United States today and was true of the United Kingdom in an earlier era. At most there is a weak correlation between economic deprivation and political willingness to change. The *economic* impact of sanctions may be pronounced, especially on the target, but other factors in the situation often overshadow the impact of sanctions in determining the *political* outcome.

Sanctions are seldom effective in impairing the military potential of an important power or in bringing about major changes in the policies of the target country. Of the 62 cases involving these high policy goals, success was achieved in 19 cases, or 30 percent of the time.[5] This is not a bad record, given the high stakes for the target in these cases. Moreover, sanctions were often *necessary* to rally public opinion in the sender country. But they are seldom sufficient to achieve even a modest part of the objectives sought in the absence, or the threat, of force. In high policy cases, the costs of compliance for the target are high, both sender and target are intensely interested in prevailing, and the sender must be able to either threaten or impose unusually high costs on a defiant target in order to prevail.[6] Not surprisingly, successful cases in these categories tend to involve above-average levels of international cooperation with the sender and much higher costs to the target than when sanctions fail. Trade between senders and targets is also 50 percent higher in successful cases than in failed ones.

Efforts to compel changes in target-country regimes also succeed in slightly less than one of three attempts, while efforts to disrupt relatively minor military adventures by targets against third parties are even less

5. We use the term "high policy goals" to refer only to episodes involving military impairment and other major policy change. Some authors have used the same phrase to refer to cases involving destabilization and disruption of military adventure as well.

6. Early in 2007 the United States added veiled military threats to long-standing sanctions to induce more cooperation from Iran, with respect to both the insurgency in Iraq and nuclear weapons. It remains to be seen whether the United States can achieve either goal.

successful (table 6.1). In the regime change cases, senders are on average far larger than their targets, and the average trade linkage is higher for this category than any other, so the problem does not appear to be one of inadequate potential leverage. Rather, in these cases, the costs of complying with the sender's demands are generally high, and the target is typically more intensely interested in the outcome than the sender. This divergence seems obvious when the demand is for the targeted government to give up power (in regime change cases) or desist from a military excursion deemed vital to its national security. The sender's goals in these cases are important but less critical to the sender than to the target. Thus, the incidence of military or other companion policies and the level of international cooperation are lower in these cases than in the high policy cases. Cases where the goal was disruption of a minor military adventure entailed lower than average costs being imposed on target countries, and these cases exhibited the lowest odds of success.

When the goals are more modest, however—freeing a political prisoner, inducing a more friendly foreign policy, or protecting one's emigrants abroad—sanctions have a far higher chance of contributing to successful outcomes (51 percent on average versus 30 percent in all other categories). Companion policies are seldom used in these cases, international cooperation is typically not sought, and the average costs imposed on the target are lower than in other cases. But the costs imposed in successful cases are twice as high as the costs in failure cases.

Friends Are More Likely to Comply than Adversaries

While this advice may sound like blasphemy to diplomats, the evidence suggests that economic sanctions are most effective when aimed against erstwhile friends and close trading partners. These countries have more to lose, diplomatically as well as economically, than countries with which the sender has limited or adversarial relations. To be sure, cordial target countries may be less likely to face the threat that a dispute will be escalated or that force will be used, but they are more likely to receive foreign aid or to have extensive trade and financial relations with the sender country.[7] All these economic ties are at risk in a sanctions episode. Furthermore, an ally of the sender will be a less likely candidate for offsetting assistance from black knights and will be less willing to accept assistance if offered.

7. In general, such considerations may not be decisive in the calculus of an antagonistic target country or a target country that has little economic contact with the sender. Moreover, while oil-exporting countries might seem vulnerable because of their extensive economic ties with the United States, the European Union, and Japan, unilateral sanctions against those targets have had little impact because oil is fungible and the market global.

Table 6.2 Success and prior relations, by policy goal

a. Prior relations index

Policy goal	Success cases	Failure cases
Modest policy changes	2.3	2.0
Regime change and democratization	2.6	2.1
Disruption of military adventures	2.3	1.9
Military impairment	1.6	1.7
Other major policy changes	2.5	1.9
All cases	2.3	2.0

Note: The *prior relations* index, scaled from 1 to 3, measures the degree of warmth, prior to the sanctions episode, in overall relations between target and sender countries. 1 = antagonistic; 2 = neutral; 3 = cordial.

b. Success rates by policy goal and prior relations (percent)

Policy goal	Cordial	Neutral	Antagonistic
Modest policy changes	50	68	13
Regime change and democratization	46	22	15
Disruption of military adventures	20	33	0
Military impairment	50	10	40
Other major policy changes	56	29	0
All cases	46	33	19

The higher compliance with sanctions by allies and trading partners reflects their willingness to bend on specific issues in deference to the overall relationship with the sender country. In addition, allies will not be as concerned as adversaries that concessions will undermine the government's reputation and leave it weaker in future conflicts.[8] Sanctions may succeed more often against friends than foes, but a word of caution must be inserted: The preservation of political alliances and economic ties should be equally important to prospective senders as to intended targets.

We quantified the warmth of preepisode relations between sender and target countries by means of an index scaled from 1 (antagonistic) to 3 (cordial). Table 6.2, which reports the average prior relations index in successful and failed cases in the top panel, indicates that, for four of the five categories of sanctions goals, preepisode relations were warmer in successful than in failed cases. Not surprisingly, however, when the sender's goal involved military impairment, prior relations were relatively more antagonistic toward all the targets involved.

8. See Drezner (1999, especially pp. 4–6) for detailed analysis of this argument and Mastanduno (2000, 298–99) for an alternative analysis.

Table 6.3 Average trade linkage, by policy goal and success score (percent)

Policy goal	Success cases	Failure cases
Modest policy changes	23.1	18.4
Regime change and democratization	42.5	37.8
Disruption of military adventures	21.5	29.6
Military impairment	36.9	21.2
Other major policy changes	33.8	24.3
All cases	33.2	29.1

Note: *Trade linkage* equals the average of presanction target-country exports to the sender country as a percent of total target-country exports and imports from the sender country as a percent of total target-country imports.

Table 6.2 probes these issues further in the bottom panel by breaking out the cases by goal and by warmth of the presanction relationship. Only 19 percent of the observations involving adversarial relations between sender and target achieved any degree of success, and 7 of the 9 somewhat successful cases involved either military force or the threat of military action, including the two World Wars (Cases 14-1 and 39-1), air strikes against Libya (Case 78-8), and enforcement of the no-fly zones in Iraq after the first Gulf War (Case 90-1).[9] When the goal of sanctions was anything other than modest (as defined here), barely 20 percent of episodes involving neutral or antagonistic relations between sender and target achieved any degree of success. By contrast, the sender was more than twice as likely to achieve some degree of success in cases where prior relations were cordial.

Higher levels of trade between senders and targets, calculated as a share of the target's total trade, are also associated with successful outcomes but less strongly than the broader prior relations index (table 6.3). The trade linkage variable is also positively associated with successful sanctions in the econometric analysis, but it is seldom statistically significant. We measured trade linkage by first evaluating the target country's merchandise imports from the sender expressed as a percentage of the target's total imports, then evaluating the target country's merchandise exports to the sender expressed as a percentage of the target's total exports, and then taking the average of the two figures. By this measure, the average trade linkage is lowest when goals are relatively modest and highest when senders seek regime change, but there is little apparent difference between successful and failed cases. In cases involving military disruption attempts, the average linkage is actually higher in the failed cases. Substantially higher

9. There are two targets and two goals for each in the World War II case (39-1), accounting for 4 of the 7 observations.

Table 6.4 Success and regime type, by policy goal

a. Regime type in the target (index)

Policy goal	Success cases	Failure cases
Modest policy changes	2.2	1.7
Regime change and democratization	1.9	1.5
Disruption of military adventures	1.8	1.9
Military impairment	1.2	1.7
Other major policy changes	2.3	2.0
All cases	2.0	1.7

Note: The *regime type* index is 1 for autocracy, 3 for democracy, and 2 for the intermediate type, "anocracy."

b. Percent of cases scored as successes

Policy goal	Autocracy	Anocracy	Democracy
Modest policy changes	39	50	69
Regime change and democratization	23	28	78
Disruption of military adventures	33	11	25
Military impairment	37	50	0
Other major policy changes	9	67	29
All cases	28	34	47

trade linkages between sender and target are associated with a higher probability of success only in high policy cases.

Beware Autocratic Regimes

It is hard to bully a bully with economic measures. The evidence from the cases suggests that democratic regimes are more susceptible to economic pressure than autocratic ones and that economic weakness and political instability in the target country can make it still more vulnerable, but the evidence on this last point is weaker than expected. Both regime type and "economic health and political stability" are measured as three-level indices, where 1 indicates autocracy or weakness and instability and 3 indicates democracy or strength and stability.[10] Tables 6.4 and 6.5 report the average indices for both successful and failed cases, as well as more detailed results on the success rate by goal and by the level of each index.

10. The regime type variable is based on the more detailed Polity IV data. With respect to economic health and political stability, we also experimented with data on economic growth, inflation, and the Polity IV data on regime stability; see chapter 4 for a brief discussion of those results.

Table 6.5 Economic health and political stability, by policy goal and success score (index)

Policy goal	Success cases	Failure cases
Modest policy changes	2.0	2.4
Regime change and democratization	1.5	1.7
Disruption of military adventures	2.3	2.1
Military impairment	2.2	2.4
Other major policy changes	1.9	2.4
All cases	1.9	2.1

Note: The *health and stability* index, scaled from 1 to 3, measures the target country's overall economic health and political stability: 1 indicates weakness and instability and 3 indicates strength and stability.

On average, our data support the hypothesis that democracies are more willing to accommodate the sender's demands and that strong and stable countries are less vulnerable to coercion than weak ones. However, the results differ markedly by type of goal, and the econometric analysis provides only modest support for the conclusion that regime type matters. In table 6.4, when the goals are modest or involve regime change, success is more likely when the target is democratic than when it is not. In the lower half of the table, the success rates are almost always lower when targeting autocrats than others. Similar patterns hold with respect to these goals and the effects of economic health and political stability. The results for the cases involving disruption of military adventures or military impairment are either the opposite of what was expected or show no discernible pattern.

In the great majority of cases we have documented, the target country has been much smaller than the sender country. Considering the median value, the sender's GNP is nearly 105 times larger than the target's, and there is little correlation between the size of the gap and the odds of a successful outcome. Even when the ratio between the sender and target GNP is 10 or less, there is little difference in the odds of a successful outcome when compared with the sample as a whole.

Because senders are almost always far larger in economic terms than their targets, relative size is not very helpful in predicting success in the majority of cases. It does not make much difference whether the sender country (or coalition) is 10 or 200 times the size of the target. Within a very broad range, the relative size of the target economy is less important than other factors that come into play, such as the goal sought, the warmth of relations between sender and target prior to the imposition of sanctions, and the economic impact of the sanctions (see below).

In sum, senders should not expect that sanctions will work as well against very large targets that are strong, stable, hostile, and autocratic.

The econometric results presented in appendix A modestly support the hypotheses that success is more likely against relatively democratic regimes, perhaps because dictators can better ignore the costs of defying sanctions, and that success is more likely when the sender's relations with the target are cordial than when they are antagonistic.

Slam the Hammer, Don't Turn the Screw

Political leaders value an incremental approach toward deploying sanctions to avoid immediate confrontation and to justify the subsequent use of force, if all else fails. Our analysis continues to stress the opposite: There is a better chance to avoid military escalation if sanctions are deployed with maximum impact. That was our conclusion in 1990 regarding Iraq[11] and is our policy advice in 2007 in the confrontation with Iran over its ambitions to develop nuclear weapons. Vigorously using the stick, however, does not mean that carrots cannot be part of the package as well (see box 6.1).

Relatively minor sanctions can serve symbolic purposes, but if the goal is to change policies or behavior in the target country, the economic costs imposed by sanctions clearly matter.[12] Excluding the three observations involving the UN sanctions against Iraq because they are extreme outliers, table 6.6 shows that the average cost to the target for all successful cases was 3.3 percent of GNP, nearly double the 1.6 percent of GNP in failures. When other major policy changes are at stake, the cost in success cases is far larger than for the sample as a whole, and it is nearly eight times the level imposed in failed cases. The economic costs imposed in military impairment cases seem surprisingly low but are still three times as high when the sender achieves some degree of success. The costs imposed when the goal is regime change are also, not surprisingly, quite high and are almost 50 percent higher in successes than failures. Only when the objective is the disruption of relatively minor military adventures are the economic costs lower for successes than for failures.

Elements of a sanctions episode that obviously affect costs are the type and the scope of sanctions chosen. As shown in table 6.7, broader sanctions have higher success rates on average. Cases in which financial, export, and import sanctions were all used, often comprehensively, were successful 40 percent of the time, versus 25 percent for trade controls (either export only, import only, or both), and roughly 20 percent for either export or import

11. Kimberly Ann Elliott, Gary Clyde Hufbauer, and Jeffrey J. Schott, "The Big Squeeze: Why the Sanctions on Iraq Will Work," Outlook Section, *Washington Post,* December 9, 1990.

12. See Mastanduno (2000) for an analysis of why the relationship between economic and political gain is not linear; also see Jentleson (2000, 131–32) for a discussion on how and why costs matter.

Box 6.1 Reinforcing the stick with carrots

When goals are ambitious, involving high stakes for both parties, sanctions must generally impose significant costs to have any chance of contributing to a positive outcome for the sender. Even then, however, the costs to the target of complying with the sender's demands are, by definition, high, and the costs of defiance related to the sanctions may not be high enough to change the target's behavior. In such cases, a deft manipulation of carrots might lower the costs of compliance enough that the target will be willing to make a deal. When extensive sanctions are in place, promises to lift them obviously become an important carrot, as with Libya and Muammar Gadhafi's decision to surrender, first, the suspects in the Pan Am bombing and then his programs for developing weapons of mass destruction (Cases 78-8 and 92-12).

Carrots can also be helpful in cases where maximum sanctions are politically infeasible, despite our recommendation to use the hammer rather than the screwdriver. For example, in both North Korea and Iran (Cases 93-1 and 84-1, respectively), US efforts to blunt nuclear weapons proliferation have been overshadowed by concerns of key allies about regional stability, energy security, commercial relations, and other competing goals. In these two cases, the United States has limited remaining economic leverage, because its own long-standing comprehensive sanctions against North Korea and Iran have cut off almost all commercial ties; meanwhile, key allies in Europe, Russia, China, and South Korea have been reluctant to impose their own stiff sanctions for a variety of reasons.

Particularly with respect to Iran (and previously Libya), the US Congress has repeatedly tried to use US economic leverage to coerce cooperation from those allies and is considering new legislation to further limit the executive branch's ability to waive third-party sanctions. This approach is extremely costly to US foreign policy and commercial interests and has never been effective.

In these and similar cases, the United States needs to retain the stick and continue to seek the cooperation of its allies in using sanctions in the face of intransigent targets. This was the objective of US diplomacy toward Iran at the G-8 Summit held in Heiligendamm, Germany in June 2007. At least in rhetorical terms, the G-8 members strengthened their resolve to use sanctions to deter Iran's nuclear ambitions. But in cases such as Iran, involving national security goals, sanctions seldom work as a stand-alone instrument. US policymakers must also be prepared to negotiate and to offer positive incentives as a means of inducing cooperation from targets. Sticks are needed to ensure that carrots do not become simply rewards for bad behavior, but negotiations themselves are a process, not a carrot.

Table 6.6 Average cost to target, by policy goal
(as percent of GNP)

Policy goal	Success cases	Failure cases
Modest policy changes	2.6	1.1
Regime change and democratization[a]	3.4	2.3
Disruption of military adventures	0.9	2.3
Military impairment[a]	2.1	0.7
Other major policy changes[a]	5.5	0.7
All cases	3.3	1.6

a. These averages exclude the three observations for Case 90-1: UN vs. Iraq, because the costs to target in that case are an extreme outlier.

Note: Negligible costs are valued at zero.

Table 6.7 Success by sanction type

Sanction type	Success cases	Failure cases	Total	Success frequency (percent)
Financial, export, and import	25	37	62	40.3
Financial	19	34	53	35.8
Export or import or both	10	30	40	25.0
Financial and import	2	8	10	20.0
Financial and export	5	23	28	17.9

sanctions used in conjunction with financial sanctions.[13] Not surprisingly, the costs imposed in cases using all three categories of sanctions were twice as high, at 4.3 percent of GNP, as for the sample as a whole (calculated from the database and excluding Iraq from both samples).

Interestingly, financial sanctions were only slightly less effective than the triple combination, contributing to successful outcomes in nearly 36 percent of cases where they were used; they were also used more often than trade controls alone. Most of these cases involved the reduction of economic aid, sometimes in conjunction with reduced military aid or other public financial assistance. The interruption of private financial flows, such as bank loans or foreign investment, has been used far less often—though post-2000 cases against North Korea and Iran suggest sophisti-

13. Import controls alone have a 50 percent success rate, but there are only six such cases, and we would not put too much weight on such a small number. Why import controls might be more effective, as well as the legal constraints and potential risks in using them, are subjects discussed in chapters 2 and 4.

Table 6.8 Success and duration of sanctions episodes, by policy goal (average number of years)

Policy goal	Success cases	Failure cases
Modest policy changes	3.5	6.5
Regime change and democratization	5.4	8.0
Disruption of military adventures	1.3	6.1
Military impairment	6.2	11.7
Other major policy changes	3.7	9.8
All cases	4.4	8.4

cated interventions by the US Treasury may provide leverage on the target (see our discussion in chapter 5). In some cases, the denial of finance may compound the cost to the target country by inhibiting its ability to engage in trade, even without the imposition of formal trade controls.

Regime change is often the goal sought when financial sanctions are used alone. Moreover, the targets are, on average, less economically healthy and politically stable than in other episodes where sanctions are imposed (1.6 versus 2.1 on our 3-level index), and they have closer relations with the sender (2.4 versus 2.0 on our 3-level index). Under such conditions, the relatively modest costs imposed by manipulating aid might have disproportionate economic effects, or the target might be wary about alienating an important friend. In addition, these sanctions have the smallest immediate costs for the sender and may be easier to maintain than trade controls (see below).

When the goal in a sanctions episode is an ambitious one, the speed and decisiveness with which sanctions are imposed can also affect the outcome. Sanctions imposed slowly or incrementally may simply strengthen the target government at home as it marshals the forces of nationalism. Moreover, either the sender's own firms or foreign competitors are likely to undercut such measures over time. Sanctions generally are regarded as a short-term policy, with the anticipation that normal commercial relations will be restored after the crisis is resolved. Thus, even though popular opinion in the sender country may welcome the introduction of sanctions, the longer an episode drags on, the more public support for sanctions dissipates. This is particularly true for sanctions imposed by a coalition of sender countries, where views regarding the importance of the objective may not be shared equally.

The cases we have documented show a clear association between the duration of sanctions and the waning prospects of success (table 6.8). The impact of sanctions may be less than expected because either the sanctions take too long to bite or their bite loosens too soon.

However, the passage of time alone does not undermine economic sanctions. Other factors are correlated with the length of an episode. Episodes between erstwhile allies are generally short, to the point, and often successful, lasting on average four years versus over eight years for cases where relations between the sender and target are less than cordial prior to the imposition of sanctions. The length of sanctions episodes is also highly correlated with the presence of offsetting assistance from another major power, with the average "black knight" case lasting more than 13 years versus under six years in cases where no such assistance is provided. This difference underscores how causality between the length of an episode and the probability of success or failure goes in both directions: Sanctions that do not end quickly are more likely to attract a black knight to assist the target, but such assistance also erodes the chances of success and, given the reluctance of most senders to admit failure and lift sanctions, contributes to episodes that drag on indefinitely.

In any event, the inverse relationship between success and the duration of sanctions argues against a strategy of "turning the screws" on a target country, slowly applying more economic pressure over time until the target succumbs. Time affords the target the opportunity to adjust: that is, to find alternative suppliers, build new alliances, and mobilize domestic opinion in support of its policies.

The lesson that sanctions imposed quickly and decisively are more likely to succeed can pose a dilemma, however. When the goal is ambitious, especially involving the target's national security, decisive sanctions usually require multilateral cooperation, if not from the UN Security Council, at least from the industrial democracies. However, ensuring multilateral cooperation takes time to arrange and often is not achievable. Quick UN sanctions against Iraq in 1990 were a notable exception; more typical was the measured and indecisive international reaction to the Indian and Pakistani nuclear weapons tests in 1998, which was subsequently repeated when Iran ventured down the same path.

More Is Not Necessarily Merrier

A large coalition of sender countries does not necessarily make a sanctions episode more likely to succeed. International support for a sanctions policy can strengthen the political signal and economic threat, but it also can hurt chances of success by diluting the scope and impact of the common sanctions in the process of securing agreement among the senders.

In general, the greater the number of countries needed to implement sanctions and the longer the sanctions run, the greater the difficulty of sustaining an effective coalition. An observation on military alliances made by the great 19th century Prussian strategist Field Marshal Count Helmuth Von Moltke applies equally well to 21st century sanctions. Von Moltke held:

> A coalition is excellent as long as all interests of each member are the same. But in all coalitions the interests of the allies coincide only up to a certain point. As soon as one of the allies has to make sacrifices for the attainment of a large common objective, one cannot usually count on the coalition's efficacy. Coalitions never readily perceive that the large objects of a war cannot be attained without such sacrifices. (Quoted in Hughes 1993)

The 1990 UN embargo against Iraq, which was unprecedented in its comprehensive coverage and almost universal participation, was the exception that proves the rule. Few cases provide the glue for common action by raising such overriding security concerns as the invasion of one sovereign country by another and by threatening world oil supplies to boot, as Iraq did in 1990–91. Indeed, in the post–Gulf War period, when the central purpose of sanctions was to deprive Iraq of its nuclear, chemical, and biological weapons capability, the UN coalition progressively frayed and by 1999 showed major tears.

The idea that international cooperation is a necessary ingredient in all sanctions cases is also misplaced. A sender country looks to its allies for help when its goals are ambitious; in cases involving truly modest goals, cooperation may be helpful but not essential. These conclusions are borne out in tables 6.9 and 6.10, which compare successful and failed cases based on the extent of international cooperation achieved (as measured by our international cooperation index, with a maximum score of 4) and whether an international organization was involved.[14] On average, there is no difference in the degree of international cooperation between successes and failures, and the relationship may even be negative in cases involving modest goals or demands for regime change.[15] In cases involving high policy goals, however, international cooperation was markedly higher in successes than failures.

In high policy cases, international cooperation serves three useful functions: to increase the moral suasion of the sanction, to help isolate the target country from the global community psychologically as well as economically, and to preempt foreign backlash, thus minimizing corrosive friction within the alliance. However, pressing too hard to corral reluctant allies can have the perverse effect of undermining the impact of the sanctions, if multilateral agreement takes too long to achieve or requires watering down the sanctions imposed.

When pursuing high policy objectives, the inherent prospects for ultimate success through the use of sanctions alone are seldom bright, and

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14. Involvement by an international organization could improve sanctions in at least two ways: by lowering transactions costs involved in organizing and implementing sanctions and by increasing the legitimacy and political weight of a sanctions companion. To isolate the latter, our variable indicates those cases where both sender and target were members of the international organization cooperating in a sanctions effort.

15. These findings modify the second edition, in which we reported that the relationship between international cooperation and the probability of success was negative on average.

Table 6.9 Success and international cooperation with sender, by policy goal (index)

Policy goal	Success cases	Failure cases
Modest policy changes	1.5	1.9
Regime change and democratization	2.0	2.2
Disruption of military adventures	2.5	2.2
Military impairment	2.9	2.4
Other major policy changes	2.5	1.8
All cases	2.1	2.1

Note: The extent of *international cooperation with sender,* on an index scale of 1 to 4, indicates the degree of assistance received by the principal sender country in applying sanctions. 1 = no cooperation; 2 = minor cooperation; 3 = modest cooperation; 4 = significant cooperation.

Table 6.10 Success and cooperation from an international organization, by policy goal (percent of cases)

Policy goal	Success cases	Failure cases
Modest policy changes	9	10
Regime change and democratization	24	25
Disruption of military adventures	50	47
Military impairment	22	10
Other major policy changes	30	22
All cases	21	22

Note: Involvement of an international organization is scored as 1 if both the sender and target countries are members of an international organization that supports the sanctions, and zero otherwise.

even high degrees of cooperation are often not enough to overcome the target's resistance. Without significant cooperation from its allies, a sender country will have difficulty achieving success in cases involving high policy goals. However, international cooperation does not guarantee success even in these cases, as evidenced from the long history of US and CoCom strategic controls against the Soviet Union, the Arab League's futile boycott of Israel, and the frustrated US/UN sanctions campaign to restore democracy in Haiti in the mid-1990s.

These observations, together with our statistical analysis, suggest that international attempts to force "cooperation," using the heavy hand of extraterritorial controls, will seldom yield desirable results. Sanctions should

Table 6.11 Success and international assistance to target, by policy goal (percent of cases in each category)

Policy goal	Success cases	Failure cases
Modest policy changes	9	10
Regime change and democratization	16	22
Disruption of military adventures	0	27
Military impairment	11	25
Other major policy changes	10	35
All cases	11	23

be either deployed unilaterally, because the need for one's allies is slight, or designed in genuine cooperation with one's allies in order to reduce backlash and evasion. In the latter cases, cooperation from an international organization can also be helpful, though not decisive. Table 6.10 shows that cooperation from an international organization in which both the sender and target are members is associated with a higher rate of success in the high policy categories.

On the other hand, active noncooperation by other countries can sabotage the effort by providing offsetting assistance to the targeted regime. This last point is significant. Too many cooks *opposing* sanctions can spoil the sender's broth. Adversaries of the sender country may be prompted by a sanctions episode to assist the target. Such opposition frequently occurred in episodes that either provoked or derived from East-West rivalry. In the post–Cold War world, the same forces have eroded US efforts to isolate Cuba, Iran, and Burma. Assistance extended by a black knight not only offsets the economic cost inflicted on the target country but also bolsters the target government's standing at home and abroad. Table 6.11 indicates that external assistance to the target country erodes the chances of sender-country success, particularly in cases where the policy goal is disruption of a military adventure or a high policy goal such as deterring the Soviet-supported forces of North Vietnam in the 1960s and 1970s.

Choose the Right Tool for the Job

Sanctions often are the first course in a menu of actions against belligerent nations. In many instances, they are deployed in conjunction with other measures directed against the target: covert action, quasi-military measures, or regular military operations. Indeed, in some cases, economic sanctions merely provided an interim governmental response until military action could be organized—as President George H. W. Bush admitted in his memoirs about the first Gulf War (Bush and Scowcroft 1998). The

Table 6.12 Success and companion policies, by policy goal (percent of cases)

Policy goal	Success cases	Failure cases
Modest policy changes	9	24
Regime change and democratization	36	29
Disruption of military adventures	0	33
Military impairment	78	35
Other major policy changes	40	57
All cases	31	34

aim of these "companion" measures is to strengthen pressure on the target and to increase chances of achieving the desired foreign policy outcome. As table 6.12 shows, companion measures are used most frequently in episodes involving regime change and high policy goals, but the effect on outcomes is marginal or negative, except in the case of military impairment, where most successful cases also involve military force or threats to use force. By contrast, companion policies are seldom used in cases involving modest policy changes.

The figures on success and failure in cases involving companion policies are somewhat misleading, since our methodology recognizes success only in cases where sanctions made a positive contribution to the policy outcome. In several cases counted as failures for the use of sanctions—for example, against Noriega in Panama (Case 87-1), against Iraq (Case 90-1), and against Haiti (Case 91-5)—the sender country achieved its goal, but military or covert measures swamped the impact of the sanctions. Nevertheless, the imposition of sanctions was often a necessary prelude to the use of stronger weapons. In such cases, leaders recognized early on that sanctions alone would not achieve the sender's objectives; but a sanctions campaign amounted to the requisite "college try" before military measures could be unleashed.

Don't Be a Cheapskate or a Spendthrift

Senders need to match costs imposed on domestic constituencies (and allies) to expected benefits; otherwise, public support for the sanctions policy may quickly erode. But senders also need to take care not to worry so much about minimizing self-inflicted costs that they devalue the impact of the overall exercise.

On average, the cost-to-sender index (scored from 1 to 4, with 1 representing a net gain and 4 a major loss to the sender) is slightly lower in successful than in failed cases (table 6.13). Not surprisingly, the costs that

Table 6.13 Average cost to sender, by policy goal and success score (index)

Policy goal	Success cases	Failure cases
Modest policy changes	1.7	1.9
Regime change and democratization	1.6	1.7
Disruption of military adventures	1.8	1.9
Military impairment	2.9	2.4
Other major policy changes	1.9	2.4
All cases	1.9	2.0

Note: The extent of *cost to sender* indicates on an index scale of 1 to 4 the degree of economic and political pain endured by the sender country in applying sanctions. 1 = net gain to sender; 2 = little effect on sender; 3 = modest welfare loss to sender; 4 = major loss to sender.

senders bear are generally insignificant in cases where the sender is less intensely interested in the outcome than in high policy cases, where average costs are higher. The relationship to successful outcomes in two high policy categories goes in divergent directions, however. It appears from the evidence that senders should be prepared to bear relatively high costs when military impairment is the goal but will want to avoid them when other major policy objectives are the goal, albeit not objectives that necessarily directly engage the sender's national security.

These results suggest that sender governments should design sanctions so as not to inflict concentrated costs on particular domestic groups. One example of actions to avoid, in all but extreme situations, is the retroactive application of sanctions to cancel existing contracts. Attempts to do so during the Soviet gas pipeline sanctions of the early 1980s created a strong backlash against the sender's policy by affected US firms and their European subsidiaries. Such actions not only leave the affected firms high and dry, with unsold inventories and excess capacity, but also sour those firms' chances of competing for future business. Such practical considerations prompted the US Congress in 1999 to pass legislation allowing the president to waive many sanctions under the 1994 Glenn Amendment to the Arms Export Control Act, which would otherwise have blocked US agricultural and other business contracts with India and Pakistan.

Although some analysts have argued that imposing a high cost on one's own economy sends a signal of seriousness, the intended signal may be quickly drowned out by a cacophony of protests from injured domestic parties. Efforts to extend sanctions extraterritorially will very likely produce the same effect abroad—in part due to "blocking statutes" that were introduced in the United Kingdom and elsewhere starting in the 1980s to legally block British firms from complying with US extraterritorial controls.

Conclusion: Look Before You Leap

Sender governments should think through their means and objectives *before* taking a final decision to deploy sanctions. Leaders in the sender country should be confident that their goals are within their reach, that they can impose sufficient economic pain to command the attention of the target country, that they can follow up economic sanctions with the threat or reality of military force or covert action as necessary, that their efforts will not prompt offsetting policies by other powers, and that the sanctions chosen will not impose insupportable costs on their domestic constituents and foreign allies. These propitious conditions arise less often than the leaders of major powers seem to imagine.

Although economic sanctions may be the best or even the only option in some cases where it is politically necessary to "do something," not just any sanction will do: The sanction chosen must be appropriate to the circumstances. Senders usually have multiple goals in mind when they impose sanctions, and coercion is not always at the top of the list. Prudent leaders will carefully analyze the unintended costs and consequences before choosing a particular measure. Like a fine suit, sanctions should be carefully tailored to the shape of the objective. Equally important, prudent leaders should consider, in advance, how they or their successors will discard or refashion the old suit when it no longer serves its original purpose.

APPENDICES

Appendix A Econometric Analysis of Economic Sanctions

The first and second editions of *Economic Sanctions Reconsidered*, authored by Gary Clyde Hufbauer, Jeffrey J. Schott, and Kimberly Ann Elliott (1985, 1990a, 1990b), did not apply advanced econometric analysis to investigate the efficacy of economic sanctions. Apart from simple tabulations of mean values, the authors only used ordinary least squares (OLS) analysis to differentiate "more successful" episodes from "less successful" ones.

Since publication of the second edition in 1990, several researchers have applied advanced econometric techniques to the Hufbauer-Schott-Elliott dataset to investigate the effectiveness of economic sanctions, mainly using methods in so-called categorical data analysis (e.g., Long 1997, Long and Freese 2006).[1] Drawing on the updated and extended database underlying this third edition, this appendix applies basic methods in categorical data analysis to evaluate the success of economic sanctions in achieving foreign policy goals.

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1. A related vein of econometric inquiry, using the so-called gravity model of international trade and ordinary least squares regression analysis, evaluates the trade, employment, and related impacts of economic sanctions on sender and target countries. See appendix B in this book, Hufbauer et al. (1997), and Askari et al. (2003).

Updated Database

The updated Hufbauer-Schott-Elliott-Oegg (2007) database extends the second edition to include sanctions episodes from 1990 to 2000.[2] Some 174 case studies are now identified in the database. Where appropriate, the data and evaluation of previous episodes have been updated and revised. In the sanctions cases involving more than one target country (8 cases) or more than one distinct phase or policy objective (17 cases), multiple entries on the episode are included in the database, for a total of 204 observations. For instance, economic sanctions imposed by the League of Nations in 1932 against Paraguay and Bolivia in an effort to end the Chaco War, although listed as a single sanctions case (Case 32-1 in table 1A.1), are included as two independent observations in the present analysis, the one targeted against Paraguay and the other targeted against Bolivia. Beyond the hypothesized explanatory variables discussed in the main text, some additional explanatory variables have been incorporated in the analysis here to reflect both prominent empirical studies based on previous versions of the Hufbauer-Schott-Elliott database and new research by Hufbauer, Schott, Elliott, and Oegg reported in this third edition.[3]

In the econometric analysis, three alternative dependent variables are considered (box A.1). The first dependent variable is *success*, which has been considered the principal indicator of sanctions outcomes in this and previous editions of *Economic Sanctions Reconsidered.* Recall that *success* is a composite index (1 to 16) of two judgmental indexes: first an index (1 to 4) that attempts to measure the extent to which the foreign policy outcome was achieved (*result*) and second an index (1 to 4) that attempts to measure the positive contribution (*contr*) made by economic sanctions to achieving the outcome (as opposed, for example, to the contribution of covert or military measures). For the analysis reported here, *success* is recalibrated to a range from 1 to 4, following a similar ordered classification of outcomes as *result:*

success = 1 (complete failure of sanctions, score of 1, 2, or 3)
success = 2 (limited failure of sanctions, score of 4, 6, or 8)
success = 3 (limited success of sanctions, score of 9)
success = 4 (extensive success of sanctions, score of 12 or 16)

2. This database is on a companion CD-ROM.

3. For the econometric analysis, 20 sanctions observations were dropped from the updated Hufbauer-Schott-Elliott-Oegg database. Eleven "threat" cases were dropped because the sender country did not apply actual trade controls, financial restrictions, or other economic sanctions against the target country, meaning there is no observed cost to the target. Additionally, three observations relating to sanctions against Iraq (Case 90-1) were dropped because the computed target-country economic costs were outliers, threatening to bias the results. Six other observations had to be dropped because of missing data.

Box A.1 Defining the dependent variable in analyses of economic sanctions effectiveness

The measure of sanctions success used in the main text is a composite variable combining a 4-part measure of the policy *result* multiplied by a 4-part measure of the contribution (*contr*) made by sanctions to the outcome, with the composite indicated by the *success* score (see table A.1). To qualify as a *success* under this definition, sanctions must have contributed modestly or significantly (a 3 or 4 on the contribution index, *contr*) to a positive policy outcome (3 or 4 on the policy *result* index). It is essential to make this distinction to discuss the success rate of sanctions. The proportion of successful outcomes using just the policy *result* index is 54 percent, well above the 34 percent rate estimated for successes attributable to sanctions. Moreover, it is natural for diplomatic practitioners to ask two questions in the same breath: "Can we achieve the outcome we seek?" and "Will sanctions do the trick?" Accordingly, the exposition in the main text largely focuses on "success" and "failure" as the combined outcome of "policy result" and "sanctions contribution."

This two-part definition is potentially problematic, however, when applying statistical techniques, such as those used in this appendix, to analyze the correlates of successful sanctions. For example, Jaleh Dashti-Gibson, Patricia Davis, and Benjamin Radcliff (1997, 611) argue that

> there is simply no theoretical, empirical, or statistical reason for the policy outcome to be multiplied by another variable designed to assess the contribution of sanctions to the observed result. The purpose of statistical estimate is precisely to find generalizable relationships between variables. The contribution of sanctions—or, rather, the components thereof—is precisely what is to be estimated.

Rather than ignoring the information contained in the sanctions contribution measure, we decided to examine how well our independent variables can explain the variation in each of the three parts of our effectiveness measure. An important criticism of using the composite *success* measure as the dependent variable reflects the concern that the explanatory variables are not in fact independent of the sanctions contribution. But it is still a matter of interest whether empirical evidence bears out the importance of factors that we and others believe give economic sanctions their impact, independent of other policy tools (covert action or military force).

But, again, we think that policymakers are primarily interested in the conditions associated with successful outcomes that can be attributed at least in part to the use of economic sanctions (*success*). For those who are not convinced, we also present the results for the policy outcome variable (*result*) alone.

The second and third alternative dependent variables are the two components of *success*, namely *result* and *contr* (see table A.1). Critics argue that the use of *success* as an indicator of sanctions outcomes will bias econometric findings, because the variable *success* directly reflects the variable *contr*, which measures the contribution of sanctions to positive outcomes.[4] This can be a problem for econometric analysis to the extent that *contr* is correlated with some of the explanatory variables on the right-hand side of the regression equation, meaning they are not independently determined. Thus, most of the recent econometric studies using the Hufbauer-Schott-Elliott dataset have diverged from the Hufbauer-Schott-Elliott formulation of the dependent variable, usually substituting *result* for *success* as the preferred dependent variable. The debate is summarized in box A.1. In this appendix, we report the results for three separate dependent variables, *result*, *contr,* and *success*.

The explanatory, or independent, variables used in the analysis are listed with the alternative dependent variables in table A.1. These variables are drawn from the case reports and for the most part are extensively discussed in the main text. One of the explanatory variables, new to this edition, is an interaction term.[5] A. Cooper Drury (1998) argues that support for economic sanctions by regional or international organizations should reinforce international cooperation from individual allies mobilized by the sender country and thereby increase the probability of a successful outcome. Taking up this notion, the interaction term considered here (*coop_io2*) is derived as the product of two individual explanatory variables, international cooperation with the sender country (*coop*) and membership in cooperating international organizations by both the sender and target countries (*iosender2*). This interaction term is formulated to explore the possibility that economic sanctions are more successful when international cooperation is supported by organizations that count both the sender country and the target country as members. In our view, cooperation from an organization that does *not* count the target country as a member would exert a weaker stigmatizing effect, if any.

Regression Models

The outcome of a sanctions episode—the dependent variable in the econometric analysis—may be viewed as either successful or unsuccessful, sometimes by varying degrees. The sanctions outcome is thus considered a qualitative or "categorical" variable.

4. See Lam (1990), Dashti-Gibson, Davis, and Radcliff (1997), and Bonetti (1998), among others.

5. For a discussion of interaction effects, see Chan and Drury (2000).

Table A.1 Regression variables

Variable	Definition
Dependent	
result	Policy result, ranging from 1 for failed outcome to 4 for successful outcome. For the logit regression analysis, the variable is recalibrated to take on a value of 1 if the outcome of the sanction policy is 3 or 4 (modest to extensive success), and zero otherwise (unclear or failed outcome)
contr	Contribution of economic sanctions to the policy result, ranging from 1 for a negative contribution to 4 for a decisive contribution. For the logit regression analysis, the variable is recalibrated to take on a value of 1 if the contribution of the sanctions to a positive outcome is 3 or 4 (modest to significant contribution), and zero otherwise (minor, zero, or negative contribution)
success	Success of economic sanctions, calculated as the product of *result* and *contr*, recalibrated to range from 1 for complete failure of sanctions (product of *result* and *contr* equals 1, 2, or 3) to 4 for extensive success (product of *result* and *contr* equals 12 or 16). For the logit regression analysis, the variable is recalibrated to take on a value of 1 if *success* is ranked 3 or 4 (limited or extensive success of sanctions), and zero otherwise (unclear outcome or complete failure of sanctions)
Explanatory	
goal	Dummy variable equal to 1 if the object of the sanction is a modest change in the target country policy; zero otherwise
policies	Dummy variable equal to 1 if the sender country employs companion policies, such as covert or military actions; zero otherwise
coop	Index of the degree of international cooperation with a sanctions effort, ranging from 1 (no cooperation) to 4 (significant cooperation)
iosender2	Dummy variable equal to 1 if both the sender country and target country are members of an international organization supporting the sanctions; zero otherwise
assist	Dummy variable equal to 1 if offsetting assistance is provided to the target country by one or more third countries; zero otherwise
stability	Index of the target country's overall economic health and political stability, scaled from 1 (distressed country) to 3 (strong and stable country)
relations	Index of the degree of warmth in overall relations between the target country and the sender country, scaled from 1 (antagonistic) to 3 (cordial)

(table continues next page)

Table A.1 Regression variables *(continued)*

Variable	Definition
tarcst	Cost of economic sanctions to target country, measured as a percent of GNP
trade	Average of presanction target-country exports to the sender country (as percent of total target-country exports) and imports from the sender country (as percent of total target-country imports)
gnpratio	Ratio of sender country–to–target country GNP
type	Dummy variable equal to 1 if the sanction imposes only financial restrictions on the target country; zero otherwise
sencst	Cost of economic sanctions to sender country, scaled as an index from 1 (net gain to sender) to 4 (major loss to sender)
regime	Index indicating target country's regime type, scaled from 1 (autocracy) to 3 (democracy)
us	Dummy variable equal to 1 if the United States is the primary or secondary sender country; zero otherwise
post-1989	Dummy variable equal to 1 if the sanction is imposed in 1990 or later; zero otherwise
whm	Western Hemisphere. Dummy variable equals 1 if the target country is located in the Western Hemisphere; otherwise the dummy variable equals zero
mena	Middle East and North Africa. Dummy variable equals 1 if the target country is located in the Middle East or North Africa; otherwise the dummy variable equals zero
asia	Asia. Dummy variable equals 1 if the target country is located in Asia; otherwise the dummy variable equals zero
ssa	Sub-Saharan Africa. Dummy variable equals 1 if the target country is located in sub-Saharan Africa; otherwise the dummy variable equals zero
Interaction	
coop_io2	International cooperation. Cooperating international organization interaction term, computed as the product of international cooperation with the sender country (*coop*) and membership of sender and target country in a cooperating international organization (*iosender2*)

The best-known regression models for categorical dependent variables are binary outcome models. These models—typically probit or logit models—estimate the likelihood of a successful outcome based on the values of the independent variables.[6] More general regression models for categorical dependent variables are ordered outcome and multinomial outcome models, which distinguish between degrees of success (ordered models) or different states of success (multinomial models). The independent variables are the same, but the dependent variable can take more than two values. Instead of a simple zero versus one alternative state, the dependent variable can be one, two, three, four, or more alternative states.

Although Drury (1998) finds support for applying an ordered outcome model to the *result* variable using the second edition Hufbauer-Schott-Elliott database, the analysis here is confined to coefficients estimated by applying the simpler binary outcome model. The reason for the present approach is straightforward. Extensive regression analysis using the new Hufbauer-Schott-Elliott-Oegg database, pitting the binary model against both the ordered outcome model and the multinomial outcome model, found that the binary model results were not only more easily interpreted but also in many cases technically superior to those found using more sophisticated models.[7] Thus, the remaining analysis concentrates on findings from the binary model.

In the binary regression model, the dependent variable (y) is strictly dichotomous—it is 0 or 1. The probability (Pr) of a "successful" outcome (y=1) is postulated to be a nonlinear function of a number of explanatory variables, denoted by matrix X, that are either continuous (like the cost to target as a percent of GDP) or discrete (like the dummy for the presence of a "black knight"):

$$Pr(y=1) = F(\alpha + X\beta) \tag{A.1}$$

where

y = the binary (0,1) outcome dependent variable;
X = the matrix of explanatory variables;

6. Such models have been applied to earlier editions of the Hufbauer-Schott-Elliott database by, among others, Van Bergeijk (1989), Lam (1990), Dehejia and Wood (1992), Elliott and Uimonen (1993), and Bonetti (1998). These researchers generally specify a dichotomous (0,1) version of the Hufbauer-Schott-Elliott *result* variable as the dependent variable.

7. Most frequently, the ordered logit model was found to violate the so-called parallel regression assumption using the new Hufbauer-Schott-Elliott-Oegg dataset. Moreover, the more sophisticated logit models, including the generalized ordered logit model and the stereotype logit model, were confusing and difficult to interpret. Thus, we decided to stay with the simpler, more parsimonious binary logit model for the present analysis. For in-depth discussion of appropriate regression models for analyzing categorical variable datasets, see Long and Freese (2006).

α = the regression intercept;
β = the vector of explanatory variable coefficients; and
F = the *normal* cumulative density function (probit model) or the *logistic* cumulative density function (logit model).[8]

Successful economic sanctions in terms of their foreign policy outcomes, or their contributions to the outcome, are defined by setting the level of *result*, *contr*, or *success* at category level 3 or 4. This score corresponds to an original Hufbauer-Schott-Elliott *result* or *contr* score of 3 or 4 and an original Hufbauer-Schott-Elliott *success* score of 9, 12, or 16. In the case of the *success* score, the binary results correspond to the distinction made in the main text between successful and failed episodes.

Empirical Results

Table A.2 presents the results of applying the binary logit model to the new Hufbauer-Schott-Elliott-Oegg database, using the three alternative dependent variables *result*, *contr*, and *success*. The first panel of results in table A.2 constitutes the base regression, namely coefficients for the principal explanatory variables discussed in the text. The second and third panels of results differ from the first panel by the addition, respectively, of the regional indicator variables for the target countries and both the regional indicator variables for the target countries and the interaction variable that measures international cooperation.

The estimation results suggest modest explanatory power for the total array of independent variables for the three specified dependent variables. The likelihood ratio Chi-squared statistic is generally significant, indicating that the explanatory variables on a combined basis are significant. While the R-squared statistic indicates that the binary logit model explains no more than 15 to 24 percent of the difference between success and failure cases, low R-squared statistics are not unusual for cross-section regressions.[9]

8. The choice between the probit and the logit models is dictated by the assumed probability distribution of the error term associated with the regression model in equation (A.1). Practitioners often deem the logit model easier to implement, which is the approach followed here. With a logit model, the precise specification of equation (A.1) becomes

$$Pr(y=1) = \exp(\alpha + X\beta) \; / \; [1 + \exp(\alpha + X\beta)] \qquad \text{(A.1a)}$$

where exp is the exponential operator, $\exp(z)=e^z$ for all z, and e is the natural number, e=2.718.

9. The pseudo R-squared statistic reported in table A.2 is a common measure of explained variation in binary logit models estimated by the maximum likelihood technique. Sometimes referred to as the "likelihood ratio index," the measure is computed as one minus the ratio of the log likelihood of the model *without* independent variables (analogous to the total

Table A.2 Binary logit model regression results for the probability of "limited success" or better

Explanatory variable	Dependent variable								
	Base regressions			**Base regressions adding regional variables**			**Base regressions adding regional and interaction variables**		
	result	***contr***	***success***	***result***	***contr***	***success***	***result***	***contr***	***success***
goal	0.23	1.62***	1.38***	0.09	1.65***	1.35***	0.12	1.90***	1.45***
policies	–0.07	–0.23	0.03	–0.08	–0.18	0.02	–0.07	–0.12	0.03
coop	–0.05	0.14	0.20	0.00	0.24	0.26	0.02	0.38	0.32
iosender2	0.41	–0.45	–0.34	0.28	–0.92	–0.69	0.58	1.13	0.29
assist	–0.52	–0.49	–0.91	–0.34	–0.36	–0.88	–0.33	–0.32	–0.88
stability	–0.02	–0.46	–0.36	–0.18	–0.64*	–0.54	–0.18	–0.70*	–0.56
relations	0.08	0.68**	0.50*	0.23	0.66**	0.53*	0.23	0.65**	0.53*
tarcst	0.15**	0.13**	0.18***	0.13**	0.13**	0.18**	0.13**	0.13**	0.18**
trade	0.02**	0.01	0.01	0.02**	0.01	0.01	0.02**	0.01	0.02
gnpratio	–0.00	–0.00	–0.00*	–0.00	–0.00	–0.00	–0.00	–0.00	–0.00
type	0.75	0.52	0.61	0.72	0.37	0.52	0.72	0.29	0.49
sencst	0.00	0.00	0.00	–0.03	–0.08	–0.01	–0.03	–0.09	–0.02
regime	0.42*	0.44*	0.68**	0.32	0.36	0.58**	0.31	0.35	0.57**
us	–0.02	0.28	0.07	0.09	0.17	–0.08	0.08	0.15	–0.09
post-1989	–0.83*	–0.76	–1.09**	–0.76	–0.36	–0.87*	–0.76	–0.35	–0.88*
whm	—	—	—	–0.10	–1.56**	–1.00	–0.11	–1.68**	–1.05
mena	—	—	—	–0.58	0.43	0.01	–0.58	0.55	0.05
asia	—	—	—	–1.39***	–1.66***	–1.02*	–1.38***	–1.59***	–0.98*
ssa	—	—	—	–1.69***	–0.93	–1.15*	–1.68***	–0.92	–1.16*
coop_io2	—	—	—	—	—	—	–0.11	–0.81	–0.40
constant	–1.68	–2.89**	–3.68***	–1.00	–1.63	–2.72*	–1.02	–1.75	–2.79*
Observations	184	184	184	184	184	184	184	184	184
Pseudo R–squared	0.09	0.16	0.17	0.15	0.23	0.20	0.15	0.24	0.20
LR Chi–squared	23.59*	39.97***	38.85***	37.93***	55.96***	45.37***	37.98***	58.42***	45.90***

Notes: Asterisks denote statistical significance at the 99 (***), 95 (**), and 90 (*) percent levels. The likelihood ratio (LR) Chi-squared statistic provides a test of whether all coefficient estimates are different from zero.

Sources: Table A.1 and authors' estimates using Stata Statistical Software: Release 9.0 (2005) and Hufbauer, Schott, Elliott, and Oegg (2007) dataset.

All in all, comparatively few explanatory variables are judged statistically significant in table A.2. The importance of key explanatory variables is apparent, however. The most prominent of these are the ambitiousness of the goal sought (*goal*), the cost of sanctions to the target country (*tarcst*), and the degree of target-country democracy (*regime*). As might be expected, higher economic costs of sanctions to the target country increase the likelihood of success, regardless of the dependent variable. Similarly, the more democratic the target-country regime, the more likely is a successful sanctions outcome.

The pursuit of modest foreign policy goals (*goal*) is strongly significant in explaining the contribution of sanctions (*contr*) or the composite measure of success (*success*) but not the policy result (*result*). Though not as strongly significant, cordiality of prior relations between the sender and target countries (*relations*) also contributes positively to successful outcomes when either *contr* or *success* is the dependent variable. The importance of sender-country trade to the target country (*trade*) is a significant positive factor in explaining the policy result (*result*): The more important are sender-country trade links for the target country (holding other factors constant), the more likely is a positive outcome of imposing sanctions.[10] The dummy variable indicating cases where sanctions were imposed after 1989 (*post-1989*) suggests that recent economic sanctions have been less successful than previous episodes (using either *result* or *success* as the dependent variable). In contrast, most other hypothesized explanatory variables, including such widely suggested explanatory variables as sender-country companion policies (*policies*), international cooperation (*coop*), international assistance to the target country (*assist*), and target-country economic and political stability (*stability*) are generally statistically insignificant, regardless of the dependent variable specified.

In the second panel, we control for regional fixed effects by including dummy variables indicating the region where the target country is located.[11] The use of country fixed effects is common in cross-section regressions to control for some of the noise in the data, but we have opted

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sum of squares in ordinary least squares regression) to the log likelihood of the model *with* independent variables (analogous to the residual sum of squares). If the estimated coefficients of the independent explanatory variables are all equal to zero, then the pseudo R-squared measure equals zero. However, as discussed by Long (1997, 104), the measure can never precisely equal unity.

10. The ratio of sender country–to–target country GNP (*gnpratio*) is found to be a barely significant *negative* factor when *success* is the dependent variable, which conflicts with a priori expectations. But the variable is not statistically significant in any other regression reported in table A.2, and the coefficient is close to zero.

11. To avoid collinearity with the constant terms included in the estimation of the binary outcome model, the indicator variables for Europe are dropped in the regressions.

for regional dummies because we have a relatively small number of observations. The inclusion of the regional variables controls for the possibility that there are political or economic conditions that are similar within regions but that vary across regions and are not captured by our other independent variables.

The inclusion of the regional dummy variables appreciably raises the value of the R-squared statistic, especially when either *result* or *contr* is the specified dependent variable. In addition, the variables for three regions—Asia (*asia*), sub-Saharan Africa (*ssa*), and Western Hemisphere (*whm*)—are significantly and negatively correlated with the probability of successful economic sanctions.[12] Among the other hypothesized explanatory variables, target-country costs (*tarcst*), modest foreign policy goals (*goal*), and prior relations (*relations*) continue to be significant positive factors in most cases. The extent of the trade linkage between the sender and target (*trade*) is also a significant positive factor when *result* is the dependent variable.

The key difference between these findings and those in the first panel is the reduced significance of the regime-type variable (*regime*) and the variable indicating post-1989 cases (*post-1989*). This finding probably reflects the fact that these variables are also correlated with the regional dummies, all of which correspond to countries with relatively low (less democratic) average scores on the regime-type variable.[13] In addition, the proportion of cases accounted for by sub-Saharan African countries was only 10 percent until 1989, then rose to 29 percent, which could be driving the coefficient on the *post-1989* variable. Finally, controlling for regional differences leads to the finding that a higher index for health and stability has a marginally significant and negative role in the contribution of sanctions to policy outcomes. In other words, target countries that are economically healthy and politically stable are more resistant to economic sanctions.

Finally, in the last panel of table A.2, inclusion of the interaction variable between international cooperation and joint membership in supporting international organizations by both sender and target countries (*coop_io2*) does not appreciably improve the estimation results, contradicting Drury's (1998) hypothesis that support for economic sanctions by international organizations should be expected to reinforce international cooperation with the sender country.[14]

12. The negative connection is stronger for Asia and sub-Saharan Africa. The regional variable for the Middle East and North Africa (*mena*) shows a positive correlation with success.

13. Recall that many countries in Latin America had military-led governments from the 1960s through much of the 1980s, when many of the sanctions against them were imposed.

14. Joint membership alone in supporting international organizations (*iosender2*) is uniformly insignificant.

Conclusion

The empirical estimates presented here extend previous applications of the model to the new Hufbauer-Schott-Elliott-Oegg database, using a binary outcome approach. Although some basis is found for the power of key individual variables to help explain the effectiveness of economic sanctions, the overarching finding of the analysis mainly concurs with the original findings of Hufbauer, Schott, and Elliott—and most econometricians who have followed their footsteps. Reliably predicting the success or failure of economic sanctions, based on a judicious and parsimonious set of explanatory variables, still lies beyond the grasp not only of modern econometric methods but also of current political and economic theories.

Appendix B
Impact of US Economic Sanctions on Trade

In appendix A we used econometric methods to explain the success or failure of economic sanctions in achieving their foreign policy objectives. In this appendix we examine the impact of US economic sanctions on the trade of target countries, not only with the United States but also with "third countries" (meaning countries that are neither senders nor targets).[1] Although restricting target-country trade is not always the prime objective of US sanctions, it is among the most frequent objectives. Moreover, in contrast to foreign policy objectives, which are often deliberately fuzzy, international trade flows offer a concrete yardstick by which to analyze the direct impact of economic sanctions. Finally, it is of added analytical interest whether economic sanctions imposed by the United States serve to curb target-country trade not just with the United States but also with the world at large.

To isolate the impact of economic sanctions from other factors that influence international trade, we estimate the parameters of a gravity model of world trade in 1999, highlighting US and target-country trade both with one another and with third-country partners. We place special emphasis on the ability of US economic sanctions to restrict target-country trade. In what follows, we outline the core specification of this model, its main data elements, and the principal econometric method of estimating

Dean DeRosa is the principal author of this appendix.

1. For a brief review of the literature on third-country effects of economic sanctions, see Slavov (2004).

the model. Our discussion explains how US-inspired sanctions are accounted for in the model. We use the estimated gravity model parameters to assess the impact of US sanctions in 2000 on the trade of identified target countries, not only with the United States but also with all target-country trading partners including the United States.

Core Gravity Model and Data

The gravity model is the de facto workhorse of modern-day empirical analysis of international trade and investment flows. The popularity of the gravity model follows not only from its robust parameter estimates but also from its relatively compact specification, making the model appealing for the analysis of a wide variety of trade issues, including the impact of economic sanctions.[2]

Econometrically, the gravity model evaluates cross-sectional data on bilateral merchandise trade flows, measured in a common currency,[3] against the gravitational "mass" of explanatory variables describing the characteristics of bilateral trading partners. Three primary "core" variables are distance, joint real GDP, and joint land area. Nearly all gravity models find that two-way trade between countries increases significantly as their combined GDP increases and as the distance between them decreases. The combined land area of trading countries may or may not increase two-way trade.

Additional explanatory variables are often specified as well, and these added variables are of considerable interest because they indicate whether two-way trade rises or falls from the quantity predicted by the basic core variables on account of political and institutional factors and various "trade resistance factors." For instance, trading partners that do not share a common language or colonial history usually engage in significantly less trade with one another; conversely, countries that are adjacent to one another (i.e., share a common border) usually enjoy significantly more trade.

The analysis here employs a variant of the gravity model developed by Andrew K. Rose (2004), formed by joining the elements for 1999 of two large datasets—one constructed by Rose (2004) and the other by Robert C. Feenstra, Robert E. Lipsey, and colleagues (2005). The core explanatory variables, defined in table B.1, are drawn from the Rose dataset as originally compiled from a number of standard sources, including the CIA

2. The origins of the gravity model may be found in early empirical trade studies by Tinbergen (1962), Pöyhönen (1963), and Linnemann (1966). For a discussion of the modern theory and application of gravity models, see Anderson and van Wincoop (2004).

3. Trade figures are adjusted for inflation when panel econometric techniques are used to analyze more than one year of data.

Table B.1 Core gravity model variables

Variable	Definition
Dependent	
Bilateral trade	Real bilateral trade between any two countries *i* and *j*. Trade can be two-way trade or just imports or just exports
Explanatory	
Distance	Distance between countries *i* and *j*
Product real GDP	Product of real GDP in countries *i* and *j*
Common language	Dummy variable equal to 1 if countries *i* and *j* have a common language and zero otherwise
Common border	Dummy variable equal to 1 if countries *i* and *j* share a common border and zero otherwise
Landlocked	Dummy variable equal to the number of land-locked countries in country pair (0, 1, or 2)
Product land area	Product of land area of countries *i* and *j* (in square kilometers)
Common colonizer	Dummy variable equal to 1 if countries *i* and *j* were ever colonies after 1945 with same colonizer and zero otherwise
Colony	Dummy variable equal to 1 if either country *i* or *j* were ever colonized by one another and zero otherwise

Note: Bilateral trade, distance, product real GDP, and product land area are measured in logarithmic terms.

Sources: Rose (2004); Feenstra et al. (2005).

World Factbook, the International Monetary Fund's *International Financial Statistics*, the Penn World Table, and the World Bank's *World Development Indicators*.[4]

Rose's core explanatory variables are then concorded with highly disaggregated bilateral merchandise trade data compiled by Feenstra et al. (2005) from the United Nations Commodity Trade Statistics (Comtrade) database.[5] The Feenstra et al. data separately identify merchandise exports and imports by reporting countries.[6] For our purposes, the Feenstra et al.

4. See www.cia.gov for CIA, *World Factbook*; ifs.apdi.net for IMF, *International Financial Statistics*; pwt.econ.upenn.edu for Penn World Table; and publications.worldbank.org/WDI for World Bank, *World Development Indicators*.

5. The UN Comtrade database is available at unstats.un.org/unsd/comtrade.

6. In his original work, Rose used total two-way trade as the dependent variable.

4-digit US International Trade Commission (USITC) trade data were aggregated to the level of total trade (merchandise exports or imports) and deflated by the US consumer price index (1983 = 100). After transforming these real trade flows to natural logarithmic terms, they were integrated with the Rose data using a concordance between the UN (Feenstra et al.) country codes and the IMF (Rose) country codes.[7] Where the Feenstra et al. data were missing values for US trade with target countries, official US trade statistics and "mirror data" indicating the two-way trade of target countries as reported by partner countries to the UN Statistics Division for the UN Comtrade database were used instead.[8]

The estimation of a gravity model, using a panel of cross-sectional and time-series data, presents thorny econometric problems. However, the present analysis is confined to cross-sectional data solely for 1999 (the most recent year available in the combined Rose-Feenstra et al. dataset). Hence the familiar method of ordinary least squares regression is appropriate here.

Though the US role as international economic hegemon has diminished during the past three decades, the United States remains the major user of economic sanctions, sometimes in concert with other countries or with the support of international organizations. Hence recent US-inspired sanctions are a logical focus for an econometric inquiry into the trade impact of economic sanctions.

As seen in table B.2, the updated Hufbauer, Schott, Elliott, and Oegg (2007) dataset identifies 28 US-inspired economic sanctions in force against 22 individual countries and the Arab League states in 2000, the end year of the new Hufbauer-Schott-Elliott-Oegg dataset. We represent US economic sanctions in the gravity trade model by a series of so-called dummy, or indicator, variables. Analogous to other indicator variables in the Rose gravity model, for each country pair, the dummy variables for US sanctions take on a value of 1 if the United States has imposed sanctions against one of the countries in the pair and a value of zero otherwise.

Three variants of the indicator variables for US-inspired economic sanctions are defined in table B.3 so that we can explore the impact of different types of measures on target-country trade.

The first set of indicator variables refers solely to target-country trade with the United States and separately identifies two-way trade with the

7. As noted in table B.1, several of the gravity model variables are measured in logarithmic terms. This data transformation is commonly used in gravity models because it prevents observations on variables for large countries from dominating those for small countries in the estimation process.

8. See the USITC Interactive Tariff and Trade Dataweb at dataweb.usitc.gov and the UN Comtrade database at unstats.un.org/unsd/comtrade. Where no mirror data could be found for US trade with a target country, a notional value of $10 million was assumed for US two-way trade with the country.

Table B.2 US economic sanctions in effect in 2000

Case	Sender	Target	Start year	End year	Cost to target (percent of GNP)	Type of sanction
50-1	United States, United Nations	North Korea	1950	—	1.2	F,X,M
60-3	United States	Cuba	1990	—	14	F,X,M
76-3	United States	Arab League	1976	—	0.04	F,X
77-2	United States	Guatemala	1977	2005	0.16	F
78-8	United States	Libya	1978	2004	1.7	F,X,M
79-2	United States	Pakistan	1998	2001	1.0	F,X
80-2	United States	Iraq	1980	2003	0.1	X
84-1	United States	Iran	1984	—	0.4	F,X,M
86-1	United States	Syria	1986	—	0.02	F,X
88-1	United States, European Union, Japan	Burma	1988	—	1.7	F,M
88-2	United Nations, United States, United Kingdom	Somalia	1988	—	7.5	F,X
89-2	United States	China	1989	—	negligible	F,X
89-3	United States	Sudan	1989	—	3.7	F
90-1	United Nations, United States	Iraq, postwar	1991	2003	54	F,X,M
91-1	United Nations, United States, European Community	Yugoslavia	1991	2001	13.3	F,X,M
91-2	United States	China	1991	—	negligible	F,X
91-4	United States, Netherlands	Indonesia	1999	2002	0.2	F,X
92-7	United States	Azerbaijan	1992	2002	0.7	F
92-8	United Nations, United States, Germany	Cambodia, Khmer Rouge	1997	—	2.6	F
93-1	United States, United Nations	North Korea	2002	2006	0.57	F,X
93-5	United States	Sudan	1993	—	0.4	F,X,M
96-2	United States, European Union	Niger	1996	2000	4.9	F
97-1	United Nations, ECOWAS	Sierra Leone	1997	2003	5.8	F,X,M
98-1	United States	India	1998	2001	0.2	F,X
98-2	United States, European Union	Yugoslavia, Serbia	1998	2001	8.3	F,X,M

(table continues next page)

Table B.2 US economic sanctions in effect in 2000 *(continued)*

Case	Sender	Target	Start year	End year	Cost to target (percent of GNP)	Type of sanction
99-1	United Nations, United States	Afghanistan	1999	2002	1.1	F,X,M
99-2	United States, European Union, France	Ivory Coast	1999	2002	0.3	F
99-3	United States, Japan	Pakistan	1999	2001	negligible	F

— = ongoing
ECOWAS = Economic Community of West African States
F = financial sanction; X = export sanction; M = import sanction

Source: Hufbauer, Schott, Elliott, and Oegg (2007).

United States and target-country imports from and exports to the United States. This set of indicators is further differentiated by the intensity of target-country costs that the US sanctions inflict and by the type of US sanctions imposed. High-intensity sanctions occur when the economic burden of the sanctions to the target country is calculated to be greater than 1 percent of the target-country GDP; by contrast, low-intensity sanctions occur when the economic burden to the target country is calculated to be 1 percent or less of the target-country GDP.[9]

The sanctions indicator variables additionally differentiate between combinations of three specific types of US sanctions: financial sanctions, including reduction of aid flows (F); export sanctions (X); and import sanctions (M). The general expectation is that enforcing three types of sanctions (indicated in table B.3 by FXM) will impede target-country trade more than enforcing only one or two types of sanctions (e.g., F or FX).

The second set of indicator variables refers to target-country trade with all partners. Analogous to the first set, it also separately identifies two-way trade with all partners and target-country imports from and exports to all partners. The second set also differentiates sanctions according to the intensity of costs and the type of sanctions.

Finally, the third set of indicators has two additional variables. The first takes on the value of 1 when trading partners are both targets of US-inspired economic sanctions and zero otherwise. This variable is designed to measure whether US sanctions promote bilateral trade between two targeted countries. The second additional variable takes on a value of 1 when target-country trade is also the object of sanctions by the United

9. "Economic burden" is defined as the cost imposed by sanctions on the target country, as estimated in the case studies reported in this third edition.

Table B.3 Indicator variables for US economic sanctions

Indicator	Definition
Target-country trade with the United States	
US	US–target country two-way trade (exports and imports)
US_Low	US–target country two-way trade if sanction is "low intensity" (less than or equal to 1 percent of target-country GDP)
US_High	US–target country two-way trade if sanction is "high intensity" (greater than 1 percent of target-country GDP)
US_F	US–target country two-way trade if sanction is financial sanction only
US_FX	US–target country two-way trade if sanction involves financial and export sanctions only
US_FXM	US–target country two-way trade if sanction involves financial, export, and import sanctions
USexports	US exports to target country
USexports_Low	US exports to target country if sanction is "low intensity" (less than or equal to 1 percent of target-country GDP)
USexports_High	US exports to target country if sanction is "high intensity" (greater than 1 percent of target-country GDP)
USexports_F	US exports to target country if sanction is financial sanction only
USexports_FX	US exports to target country if sanction involves financial and export sanctions only
USexports_FXM	US exports to target country if sanction involves financial, export, and import sanctions
USimports	US imports from target country
USimports_Low	US imports from target country if sanction is "low intensity" (less than or equal to 1 percent of target-country GDP)
USimports_High	US imports from target country if sanction is "high intensity" (greater than 1 percent of target-country GDP)
USimports_F	US imports from target country if sanction is financial sanction only
USimports_FX	US imports from target country if sanction involves financial and export sanctions only
USimports_FXM	US imports to target country if sanction involves financial, export, and import sanctions
Target-country trade with all partners (including the United States)	
ALL	All partners–target country two-way trade (exports and imports)
ALL_Low	All partners-target country two-way trade if sanction is "low intensity" (less than or equal to 1 percent of target-country GDP)

(table continues next page)

Table B.3 Indicator variables for US economic sanctions *(continued)*

Indicator	Definition
ALL_High	All partners–target country two-way trade if sanction is "high intensity" (greater than 1 percent of target-country GDP)
ALL_F	All partners–target country two-way trade if sanction is financial sanction only
ALL_FX	All partners–target country two-way trade if sanction involves financial and export sanctions only
ALL_FXM	All partners–target country two-way trade if sanction involves financial, export and import sanctions
ALLexports	All partners exports to target country
ALLexports_Low	All partners exports to target country if sanction is "low intensity" (less than or equal to 1 percent of target country GDP)
ALLexports_High	All partners exports to target country if sanction is "high intensity" (greater than 1 percent of target country GDP)
ALLexports_F	All partners exports to target country if sanction is financial sanction only
ALLexports_FX	All partners exports to target country if sanction involves financial and export sanctions only
ALLexports_FXM	All partners exports to target country if sanction involves financial, export, and import sanctions
ALLimports	All partners imports from target country
ALLimports_Low	All partners imports from target country if sanction is "low intensity" (less than or equal to 1 percent of target-country GDP)
ALLimports_High	All partners imports from target country if sanction is "high intensity" (greater than 1 percent of target-country GDP)
ALLimports_F	All partners imports from target country if sanction is financial sanction only
ALLimports_FX	All partners imports from target country if sanction involves financial and export sanctions only
ALLimports_FXM	All partners imports to target country if sanction involves financial, export, and import sanctions
Additional indicator variables	
TC_Two	Target-country trade with another target country
SC_UN	Trade covered by UN sanctions in addition to US sanctions

Note: Indicators are dichotomous (0,1) variables that take on the value of 1 if condition(s) described are met and zero otherwise.

Nations and zero otherwise. This variable is designed to measure whether support by the foremost international organization strengthens the impact of US-inspired sanctions.

Estimation Results

The estimation results for our sanctions-focused gravity model are presented in tables B.4 and B.5. The estimation results in table B.4 focus on the impact of US-inspired sanctions on target-country trade solely with the United States and incorporate the first set of indicator variables. The results in table B.5, on the other hand, focus on the impact of US-inspired sanctions on target-country trade with all partners and incorporate the second set of indicator variables. The results in both tables also include the third set of additional indicator variables: trade between pairs of target countries and UN support for US sanctions.

Overall, the gravity model explains about 70 percent of the logarithmic variation in 1999 bilateral trade flows between countries in the world trading system (the R-squared values equal about 0.70). Moreover the estimated coefficients of the explanatory variables are generally statistically significant and bear the expected signs.[10] Thus, among the core explanatory variables, distance, landlocked, and joint land area are estimated to exercise a significant negative impact on bilateral trade between countries, while joint real GDP, common language, adjacency (common border), common colonizer, and colony are all estimated to exercise a significant positive impact on bilateral trade.

Our primary interest is the estimation results for the several indicator variables for US-inspired economic sanctions. Regardless whether the indicator variables refer to target-country trade solely with the United States (table B.4) or with all partners (table B.5), the coefficients for these variables are frequently negative and significant, as expected. However, the surprising result is how often the coefficients are insignificant for US trade with target countries (table B.4) and positive and significant for a target country's trade with all its partners (table B.5).

In table B.4, it is apparent that the coefficient estimates for the indicators of US sanctions with respect to bilateral trade between the target country and the United States are broadly in line with the expectations of US policymakers. The coefficients associated with "all sanctions" are always negative and significant both for two-way trade and US imports (but not significant for US exports). Likewise, in table B.5, the coefficients associated with "all sanctions" are always negative and significant, indicating that

10. The coefficients estimated for the joint land area variable are generally negative (but small) in value. For some observers, this result may be unexpected.

Table B.4 Impact of US economic sanctions on bilateral trade between target countries and the United States

	US–target country imports and exports together			US–target country imports and exports separately		
		Sanctions differentiated by			Sanctions differentiated by	
Variable	All sanctions	Intensity	Type	All sanctions	Intensity	Type
Core gravity model variables						
Distance	–0.91***	–0.91***	–0.92***	–0.91***	–0.91***	–0.92***
Product real GDP	0.92***	0.92***	0.92***	0.92***	0.92***	0.92***
Common language	0.47***	0.47***	0.47***	0.47***	0.47***	0.47***
Common border	1.03***	1.03***	1.02***	1.03***	1.03***	1.02***
Landlocked	–0.53***	–0.52***	–0.53***	–0.53***	–0.52***	–0.53***
Product land area	–0.06***	–0.06***	–0.06***	–0.06***	–0.06***	–0.06***
Common colonizer	0.70***	0.71***	0.71***	0.70***	0.71***	0.71***
Colony	1.06***	1.06***	1.06***	1.06***	1.06***	1.06***
Two-way trade between the United States and target countries						
US	–0.39**					
	(–32.3)					
US_Low		0.10				
		(10.5)				
US_High		–1.81***				
		(–83.7)				
US_F			–0.13			
			(–12.5)			
US_FX			0.36			
			(43.0)			
US_FXM			–2.77***			
			(–93.8)			
US exports to target countries						
USexports				–0.16		
				(–14.7)		
USexports_Low					0.42	
					(51.6)	
USexports_High					–1.86***	
					(–84.4)	
USexports_F						–0.27
						(–23.5)
USexports_FX						0.60*
						(81.4)
USexports_FXM						–2.30***
						(–90.0)

(table continues next page)

Table B.4 Impact of US economic sanctions on bilateral trade between target countries and the United States *(continued)*

	US–target country imports and exports together			US–target country imports and exports separately		
		Sanctions differentiated by			Sanctions differentiated by	
Variable	All sanctions	Intensity	Type	All sanctions	Intensity	Type
US imports from target countries						
USimports				–0.62**		
				(–46.3)		
USimports_Low					–0.22	
					(–19.5)	
USimports_High					–1.77***	
					(–83.0)	
USimports_F						0.00
						(0.1)
USimports_FX						0.12
						(12.8)
USimports_FXM						–3.25***
						(–96.1)
Additional indicator variables						
TC_Two	0.28**	0.26**	0.26**	0.28**	0.26**	0.26**
	(32.0)	(29.6)	(29.9)	(32.0)	(29.6)	(29.9)
SC_UN	0.66***	0.77***	0.77***	0.66***	0.77***	0.77***
	(94.2)	(116.9)	(115.8)	(94.2)	(116.9)	(115.8)
Other metrics						
Constant term	–27.40***	–27.40***	–27.39***	–27.40***	–27.40***	–27.39***
Observations	9,283	9,283	9,283	9,283	9,283	9,283
R-squared	0.69	0.70	0.70	0.69	0.70	0.70
F-statistic	1,915.7***	1,762.6***	1,632.0***	1,756.3***	1,511.0***	1,326.3***

*, **, *** denote statistical significance at the 90, 95, and 99 percent levels, respectively.

Note: Bilateral trade regressed on core gravity model variables and indicators differentiated by sanctions intensity and type, plus additional variables. Figures in parentheses are in percent.

Sources: Authors' calculations based on ordinary least squares estimation of a Rose (2004)–type gravity model, using a combined version of the Rose (2004) and the Feenstra et al. (2005) datasets for 1999 and US economic sanctions data for 2000 from the Hufbauer, Schott, Elliott, and Oegg (2007) dataset.

US-inspired sanctions diminish the trade of target countries with all partners, not just with the United States. These results are comforting in that they bear out the expectations of scholars as well as practitioners.

However, the coefficient estimates for sanctions indicators differentiated by intensity and type of sanction are not uniformly negative and

Table B.5 Impact of US economic sanctions on bilateral trade between target countries and all partners

	Target-country imports and exports together			Target-country imports and exports separately		
		Sanctions differentiated by			Sanctions differentiated by	
Variable	All sanctions	Intensity	Type	All sanctions	Intensity	Type
Core gravity model variables						
Distance	–0.92***	–0.92***	–0.92***	–0.92***	–0.92***	–0.91***
Product real GDP	0.91***	0.92***	0.91***	0.91***	0.92***	0.91***
Common language	0.46***	0.46***	0.47***	0.46***	0.46***	0.46***
Common border	1.01***	1.02***	1.01***	1.01***	1.01***	1.01***
Landlocked	–0.55***	–0.54***	–0.53***	–0.55***	–0.55***	–0.53***
Product land area	–0.06***	–0.06***	–0.06***	–0.06***	–0.06***	–0.06***
Common colonizer	0.74***	0.73***	0.75***	0.74***	0.74***	0.75***
Colony	1.06***	1.05***	1.07***	1.06***	1.05***	1.07***
Two-way trade between all partners and target countries						
ALL	–0.18***					
	(–16.6)					
ALL_Low		–0.12***				
		(–11.0)				
ALL_High		0.33**				
		(39.1)				
ALL_F			–0.36***			
			(–30.3)			
ALL_FX			–0.08*			
			(–7.5)			
ALL_FXM			0.18*			
			(19.7)			
Exports by all partners to target countries						
ALLexports				–0.14***		
				(–13.1)		
ALLexports_Low					–0.07	
					(–6.6)	
ALLexports_High					0.44***	
					(55.4)	
ALLexports_F						–0.33***
						(–28.3)
ALLexports_FX						–0.08
						(–7.2)
ALLexports_FXM						0.37***
						(44.8)

(table continues next page)

Table B.5 Impact of US economic sanctions on bilateral trade between target countries and all partners *(continued)*

Variable	Target-country imports and exports together			Target-country imports and exports separately		
	All sanctions	Sanctions differentiated by: Intensity	Type	All sanctions	Sanctions differentiated by: Intensity	Type
Imports by all partners from target countries						
ALLimports				−0.22***		
				(−20.1)		
ALLimports_Low					−0.17***	
					(−15.3)	
ALLimports_High					0.65***	
					(92.2)	
ALLimports_F						−0.31***
						(−26.8)
ALLimports_FX						−0.08
						(−7.9)
ALLimports_FXM						−0.04
						(−4.3)
Additional indicator variables						
TC_Two	0.38***	0.34***	0.39***	0.56***	0.35***	0.54***
	(46.1)	(40.5)	(47.7)	(75.3)	(41.2)	(70.9)
SC_UN	0.74***	0.33*	0.69***	0.75***	0.02	0.66***
	(110.0)	(39.0)	(99.2)	(110.7)	(1.5)	(94.4)
Other metrics						
Constant term	−27.26***	−27.31***	−27.20***	−27.27***	−27.36***	−27.21***
Observations	9,283	9,283	9,283	9,283	9,283	9,283
R-squared	0.70	0.69	0.70	0.70	0.70	0.70
F-statistic	1,920.7***	1,758.1***	1,629.5***	1,760.9***	1,510.3***	1,324.8***

*, **, *** denote statistical significance at the 90, 95, and 99 percent levels, respectively.

Note: Bilateral trade regressed on core gravity model variables and indicators differentiated by sanctions intensity and type, plus additional variables. Figures in parentheses are in percent.

Sources: Authors' calculations based on ordinary least squares estimation of a Rose (2004)–type gravity model, using a combined version of the Rose (2004) and the Feenstra et al. (2005) datasets for 1999 and US economic sanctions data for 2000 from the Hufbauer, Schott, Elliott, and Oegg (2007) dataset.

significant, whether the perspective is target-country trade with the United States alone or with all partners. To be sure, the coefficients in table B.4 representing high-intensity and comprehensive US sanctions are predominantly negative and significant for US trade alone. According to these estimates, high-intensity and comprehensive US sanctions exert a

powerful negative impact on bilateral US trade with target countries. In percentage terms, high-intensity US sanctions reduce US–target country trade by about 84 percent (coefficient estimates of –1.77 to –1.86), while comprehensive US sanctions reduce US-target country trade by 90 to 96 percent (coefficient estimates of –2.30 to –3.25).[11] In other words, the gravity model results suggest that severe US sanctions are highly effective in restricting recorded US bilateral trade with target countries.

By contrast with these findings for severe US sanctions, the coefficients in table B.4 suggest that restrictions limited to US financial flows and merchandise exports actually increase US exports to target countries. This seems doubtful. But, it is not surprising that mild US sanctions could have no significant effect on US trade. Several of the less severe cases identified in table B.2 date from distant diplomatic battles and might not have much effect on bilateral trade in 1999. This characterization applies, for example, to residual sanctions applied against China in the wake of the Tiananmen Square repression of 1989 or the antiboycott measures applied against the Arab League back in the 1970s.

The estimation results in table B.4 also suggest that, in the presence of US-inspired sanctions, trade between pairs of target countries increases. This makes sense. However, the results suggest that UN support for US-inspired sanctions actually enlarges target-country trade with the United States. This seems doubtful. The authors as well as policymakers believe that UN support serves to reduce target-country trade. The positive and significant coefficients (0.66 for two-way trade) perhaps reflect the idiosyncratic nature of countries that are subject to UN sanctions (see table B.2). In most of these cases, typically involving small target countries, either war or reconstruction was under way at the same time UN sanctions were imposed. Adverse events could have boosted target-country imports, in an effort to acquire military weapons or reconstruction material.

We turn now to the gravity model results for the sanctions indicator variables in table B.5, namely coefficients that assess target-country trade with all partners (including the United States). As before, the estimates for the two additional indicator variables—trade between pairs of target countries and UN support for US-inspired sanctions—are almost always

11. In tables B.4 and B.5, the percentage impacts on real bilateral trade flows, holding all other factors constant, are indicated in parentheses beneath each coefficient estimate for the sanctions indicator variables. Given the log-linear specification of the gravity model, the dependent bilateral trade variable is expressed in logarithmic terms while the indicator variables are expressed simply as linear numbers (namely 0 or 1). Hence the trade impact of each sanctions indicator variable is computed in percentage terms as $100*[exp(b_s) - 1.00]$. In this expression, b_s is the estimated coefficient for the dummy variable representing the presence of an economic sanction and $exp(b_s)$ is the value of the natural number e raised to the exponent b_s. In the present case, if the coefficient b_s is minus 1.81, then the value of $exp(b_s)$ is 0.16, and the percentage compression in trade is estimated as 100*[0.16 – 1.00], which equals minus 84 percent.

positive and significant. However, the estimates for the sanctions indicator variables differentiated by intensity and type of sanctions are much different in character for trade with all partners than the parallel coefficients reported in table B.4 for US trade alone.

In a number of instances, the coefficient estimates in table B.5 for the sanctions indicator variables are negative and significant, as expected. However, in an almost equal number of instances, the coefficient estimates of the sanctions indicator variables are positive and significant. Most interesting is the finding that positive and significant coefficients correspond to more severe US sanctions. This pattern, in conjunction with the coefficients reported in table B.4, suggests that more severe US-inspired sanctions encourage target countries not only to redirect their trade away from the United States and toward third-countries but also to enlarge their commerce with the world at large.

Trade Losses

In a similar vein as Hufbauer et al. (1997), we apply the "all sanctions" gravity model coefficients in tables B.4 and B.5 to calculate the extent of losses (or gains) in US–target country trade and in target-country trade with all partners, expressed in US dollar terms. Specifically, the gravity model coefficients are used to predict US and world trade with the target countries, assuming first the absence of sanctions and then the presence of sanctions. For these exercises, we use every coefficient reported in tables B.4 and B.5 under the "all sanctions" columns, even though the negative coefficient for US exports to target countries is not statistically significant. Hence, the predicted loss of US exports might be exaggerated.

After conversion from logarithmic to dollar terms, the difference between the two sets of predicted bilateral trade flows yields the computed trade losses in constant (1999) US dollar terms presented in table B.6 (US trade) and table B.7 (all partner trade). To repeat, the calculations are based on the gravity model estimates for US-inspired sanctions using the "all sanctions" coefficients. We do not report the calculated trade impact of sanctions differentiated by intensity and type; however, such calculations would often show trade *gains* rather than trade *losses,* because several of the differentiated coefficients are positive rather than negative.

In table B.6, separate calculations are done for US two-way trade, US exports, and US imports. Since all three sets of coefficients are separately estimated, the calculated impact on two-way trade is not exactly equivalent to the sum of the calculated impact on US exports and US imports. In table B.7, separate calculations are reported for all partner two-way trade, all partner exports, and all partner imports. Again, the calculation for two-way trade losses does not exactly correspond to combined export and import losses.

Table B.6 US trade losses owing to US economic sanctions in effect in 2000 (millions of US dollars)

Target country	Actual US trade with target country, 1999			Calculated reduction in US trade with target country on account of US sanctions		
	Two-way trade	Exports	Imports	Two-way trade	Exports	Imports
Afghanistan	28	18	10	7	7	0
Algeria*	2,688	764	1,924	–346	–79	–248
Azerbaijan	60	45	15	–21	–5	–15
Bahrain*	590	348	241	–31	–7	–22
Cambodia	652	18	634	24	25	2
China	**107,252**	**19,484**	**87,769**	**–4,000**	**–908**	**–2,866**
Côte D'Ivoire	467	94	372	–107	–24	–76
Cuba	5	5	1	–270	–61	–193
Djibouti*	27	27	0	–2	–1	–2
Egypt*	3,658	3,003	655	–747	–170	–535
Former Yugoslavia	64	59	5	41	43	3
Guatemala	4,132	1,729	2,404	–518	–118	–371
India	**13,146**	**3,562**	**9,584**	**–2,959**	**–672**	**–2,120**
Indonesia	**13,159**	**2,835**	**10,324**	**–834**	**–189**	**–598**
Iran	62	60	2	–556	–126	–399
Iraq*	4,526	10	4,516	87	91	6
Jordan*	292	262	30	–107	–24	–77
North Korea	21	11	10	40	42	3
Kuwait*	2,487	909	1,578	–167	–38	–119
Lebanon*	410	356	54	–107	–24	–76
Libya*	93	83	10	–85	–19	–61
Mauritania*	23	23	1	–14	–3	–10
Morocco*	1,114	699	415	–352	–80	–252
Myanmar (Burma)	259	9	251	–18	–4	–13
Niger	27	16	12	–11	–3	–8
Oman*	418	188	231	–44	–10	–32
Pakistan	2,515	646	1,869	–626	–142	–449
Qatar*	445	146	299	–72	–16	–52
Saudi Arabia*	**14,166**	**5,305**	**8,862**	**–710**	**–161**	**–509**
Somalia*	3	3	0	6	6	0
Sudan*	9	9	0	–26	–6	–19
Syria*	265	166	99	–154	–35	–110
Tunisia*	431	354	77	–209	–47	–150
United Arab Emirates*	3,469	2,713	756	–153	–35	–110
Total	176,965	43,957	133,009	–13,039	–2,794	–9,476
				(7.4)	(6.4)	(7.1)

Notes: Asterisks denote Arab League states. Target countries whose 1999 trade with the United States is particularly large (greater than $10 billion) in the gravity model dataset are highlighted in boldface. Positive values denote trade gains; negative values denote trade losses. Percentages in parentheses are total trade losses (in absolute value) relative to the overall levels of 1999 trade in the first three columns of the table.

Source: Authors' calculations using the gravity model dataset and coefficient estimates for US–target country two-way trade (column 1 of table B.4) and for US exports to and imports from target countries (column 4 of table B.4).

Table B.7 All partner trade losses owing to US economic sanctions in effect in 2000 (millions of US dollars)

Target country	Actual all partner trade with target country, 1999			Calculated reduction in all partner trade with target country on account of US sanctions		
	Two-way trade	Exports	Imports	Two-way trade	Exports	Imports
Afghanistan	28	18	10	7	7	0
Afghanistan	28	18	10	18	10	8
Algeria*	22,359	8,907	13,452	–1,604	–593	–1,000
Azerbaijan	1,566	850	716	–82	–33	–48
Bahrain*	590	348	241	–16	–6	–10
Cambodia	2,293	1,133	1,161	708	392	321
China	**456,836**	**140,373**	**316,463**	**–17,809**	**–6,559**	**–11,196**
Côte D'Ivoire	6,561	2,959	3,602	–431	–168	–262
Cuba	49	14	36	–147	–58	–89
Djibouti*	27	27	0	–1	0	–1
Egypt*	22,675	17,253	5,422	–3,031	–1,195	–1,827
Former Yugoslavia	152	147	5	105	60	47
Guatemala	7,288	3,954	3,334	–715	–282	–430
India	**81,654**	**44,121**	**37,533**	**–7,301**	**–2,458**	**–4,829**
Indonesia	**79,756**	**21,994**	**57,762**	**–3,197**	**–1,205**	**–1,985**
Iran	**26,709**	**11,276**	**15,433**	**–1,876**	**–744**	**–1,126**
Iraq*	12,290	1,638	10,652	1,557	964	609
Jordan*	4,001	2,994	1,008	–758	–297	–459
North Korea	1,854	1,078	776	1,484	510	950
Kuwait*	2,487	909	1,578	–88	–35	–53
Lebanon*	443	389	54	–56	–22	–34
Libya*	10,883	4,857	6,026	–322	–129	–189
Mauritania*	915	407	508	–48	–19	–28
Morocco*	18,209	10,211	7,998	–2,506	–952	–1,545
Myanmar (Burma)	259	9	251	–5	–4	–6
Niger	495	203	292	–47	–20	–24
Oman*	418	188	231	–24	–9	–14
Pakistan	15,324	8,033	7,291	–315	85	–400
Qatar*	445	146	299	–38	–15	–23
Saudi Arabia*	**71,868**	**26,032**	**45,837**	**–2,534**	**–930**	**–1,584**
Somalia*	3	3	0	15	8	7
Sudan*	9	9	0	–14	–6	–9
Syria*	6,622	3,368	3,254	–850	–336	–511
Tunisia*	14,261	8,071	6,190	–1,286	–484	–796
United Arab* Emirates	3,529	2,713	816	–52	–32	–19
Total	872,861	324,630	548,230	–41,268 (4.7)	–14,562 (4.5)	–26,557 (4.8)

Notes: Asterisks denote Arab League states. Non-US bilateral trade for a number of target countries is incomplete in the gravity model dataset. Target countries whose 1999 two-way trade with all partners is particularly large (greater than $25 billion) are highlighted in boldface. Positive values denote trade gains; negative values denote trade losses. Percentages in parentheses are total trade losses (in absolute value) relative to the overall levels of 1999 trade in the first three columns of the table.

Source: Authors' calculations using the gravity model dataset and coefficient estimates for target-country two-way trade with all partners (column 1 of table B.5) and for target-country exports to and imports from all partners (column 4 of table B.5).

The calculated two-way US trade losses in table B.6 are modest, some $13 billion overall, or about 7 percent of actual US two-way trade with all target countries in 2000. US export and import losses are calculated to be $3 billion and $9 billion, respectively. Recall that the negative "all sanctions" coefficient for US export losses is not statistically significant, so the impact on US exports might be exaggerated.

The calculated losses in all partner two-way trade with the target countries are reported in table B.7. These losses are substantially larger than losses for US two-way trade alone. As discussed earlier, the implication is that US-inspired sanctions adversely affect target-country trade with not only the United States but also third countries. Total two-way trade losses by all partners with the target countries are calculated at $41 billion in 2000, or about 5 percent of actual trade. Total exports of all partners to target countries are estimated to be $15 billion lower, and total imports are estimated to be $27 billion lower. These calculations for all partner trade, as well as the calculations for US trade alone, indicate that sanctions diminish imports from target countries much more than exports to target countries.

To repeat a caution made earlier, the calculated trade losses would drop dramatically if the calculations were made using the coefficients estimated by sanctions intensity and type rather than the "all sanctions" coefficients. We have relied on the "all sanctions" coefficients, because we regard them as most plausible and least subject to idiosyncratic error. The reported losses in tables B.6 and B.7, however, may exaggerate the impact of sanctions in curtailing target-country trade.

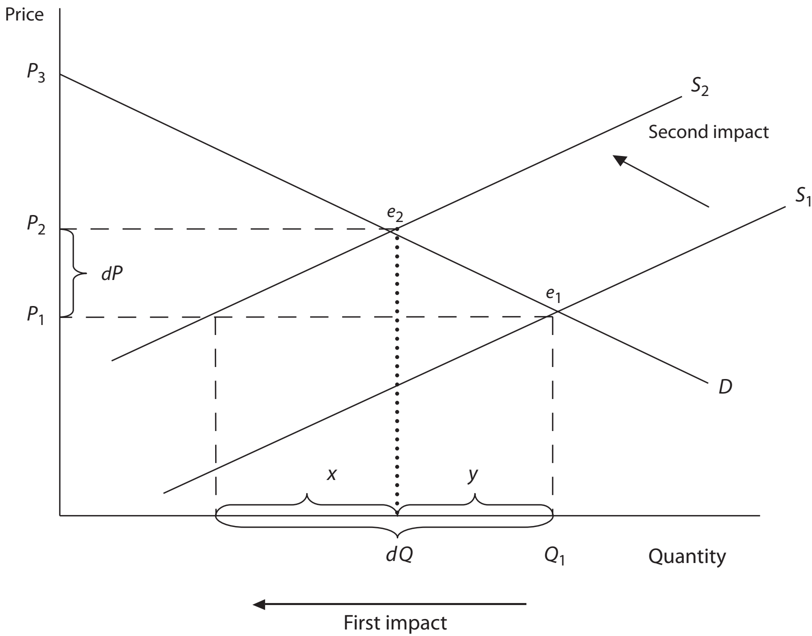
Appendix C
Methodology Used to Estimate the Cost of Sanctions to the Target Country

This appendix sets forth the basic analytical model we have used to guide our efforts to estimate the costs of sanctions to target countries.

Figure C.1 shows supply and demand curves for a hypothetical good or service (e.g., bank credit) exported from the sender to the target country. The presanction equilibrium price P_1 and quantity Q_1 are shown by the intersection of the supply and demand schedules at point e_1. In the first instance, the sender and its allies deprive the target country of supplies of the good or service in the amount dQ. Since the sender country and its allies are ordinarily not the only suppliers of the good or service, overall supply does not decline by the full amount dQ. Instead the supply curve facing the target country shifts from S_1 to S_2. This horizontal shift corresponds to the removal of the amount dQ from the pool of supplies available to the target country. Other suppliers, responding to the abandoned market and potentially higher prices, provide an additional quantity indicated by x to the target country. As a result, the net quantity supplied to the target country declines by the amount y. The post-sanctions equilibrium price and quantity are shown by point e_2. The post-sanctions price is P_2, which is higher than the initial P_1 by the amount dP.

How much does the target country lose from this sequence of events? In economic terms, the answer depends on the loss in consumer surplus—that is, the reduction in the gains that purchasers enjoy from engaging in market transactions. Consumer surplus is measured by the difference

Figure C.1 Welfare loss from the imposition of export sanctions



between the total amount actually paid for the quantity consumed (price times quantity) and the total amount that consumers would pay if the market could be segregated and each consumer were charged the maximum price he or she is willing to pay. Note that the concept of consumer surplus applies with equal force to spare parts, capital goods, and food. It therefore might better be called "purchaser surplus" than consumer surplus.

In figure C.1, the level of consumer surplus before the imposition of sanctions is shown by the triangular area bound by P_1, P_3, and e_1. When sanctions are imposed, shifting the supply curve from S_1 to S_2, the trapezoidal area bound by P_1, P_2, e_1, and e_2 is subtracted from the previous level of consumer surplus. This loss to consumers represents the cost that export sanctions impose on the target country. By inspection, it is intuitively obvious that the steeper the slope of the demand curve in the neighborhood of the initial equilibrium price (i.e., the more "essential" the item to the target country and the smaller the range of substitute products) and the steeper the slope of the supply curve (i.e., the greater the constraints on expanding supply in response to higher prices), the greater will be the deprivation experienced by the target country.

The loss of consumer surplus is customarily referred to as welfare loss. The area of the trapezoid representing lost consumer surplus approxi-

mately equals the rectangle denoted by $Q_1 dP$. Hence, as a first approximation, we may write:

$$Q_1 dP = \text{welfare loss} \tag{C.1}$$

Using some algebra, the change in price dP can be expressed in terms of the elasticity of supply E_s and the elasticity of demand E_d. The elasticity of supply is defined as the ratio between the percentage change in quantity supplied, to a rough approximation denoted as x/Q_1, and the percentage change in price, denoted as dP/P_1. Similarly, the elasticity of demand is defined as the ratio of the percentage change in the quantity demanded, denoted as y/Q_1, and the percentage change in price, denoted as dP/P_1. These elasticities can be represented by the following equations:

$$(x / Q_1) / (dP / P_1) = E_s. \tag{C.2}$$

$$(y / Q_1) / (dP / P_1) = E_d. \tag{C.3}$$

As noted earlier, supply and demand curves that are more steeply sloped in the neighborhood of the initial equilibrium price are characterized by smaller elasticities of supply and demand.

We may note further that

$$x + y = dQ. \tag{C.4}$$

We thus have three equations, (C.2), (C.3), and (C.4), and three unknowns, x, y, and dP. By solving these three equations algebraically it can be shown that

$$dP = [P_1 dQ] / [(E_d + E_s)(Q_1)]. \tag{C.5}$$

Substituting this expression for dP in equation (C.1), we obtain the following result:

$$Q_1 dP = P_1 dQ / (E_d + E_s) = \text{welfare loss}. \tag{C.6}$$

In equation (C.6), $P_1 d$Q represents the face value of the reduction in supply from the sender and its allies, before the price paid by the target country rises and other suppliers partly fill the gap.

To summarize, in this simple construct, the welfare loss inflicted on the target country depends on the size of the initial deprivation, namely $P_1 dQ$, and the elasticity of demand plus the elasticity of supply. Table C.1 gives some hypothetical values of demand and supply elasticities and the resulting values of the expression $[1 / (E_d + E_s)]$. This expression may be thought of as the "sanctions multiplier:" the coefficient applied to the ini-

Table C.1 Combined elasticity and the sanctions multiplier

Pair values of elasticity	Sanctions multiplier
$E_d = 0.10; E_s = 0.10$	5.00
$E_d = 0.25; E_s = 0.25$	2.00
$E_d = 0.50; E_s = 0.50$	1.00
$E_d = 0.50; E_s = 1.00$	0.67
$E_d = 1.00; E_s = 1.00$	0.50
$E_d = 2.00; E_s = 1.50$	0.29
$E_d = 2.50; E_s = 2.50$	0.20

tial deprivation of supplies experienced by the target country in order to calculate the welfare loss.

By a similar analysis, it can be shown that equation (C.6) also describes the welfare loss imposed when the sender country closes its markets and the target country initially loses sales in the amount dQ. In this case, however, the welfare loss represents a reduction in producer surplus, not consumer surplus. That is to say, the welfare loss represents a burden on the producers in the target country—a deduction of part of the difference between the market price they actually receive for the product and the price they would receive if the market could be segregated and each producer were paid the lowest price he or she would be willing to accept.

In order to calculate the cost of each sanctions episode to the target country, we first estimate the initial deprivation of markets or supplies, expressed on an annualized basis in current US dollars. We then use our own judgment to estimate the "sanctions multiplier" that should be applied in the particular episode. As a general proposition, we have tried to err on the side of overestimating the "sanctions multiplier." To illustrate, we apply a multiplier of near 1.00 to most reductions in aid and a multiplier between 0.10 and 0.50 to most reductions in the supply or demand for goods. In a war context, we apply a multiplier as high as 2.00. The estimates are generous because, in most contexts, the combined supply and demand elasticities would ordinarily exceed 5.0, because the target country is likely to be a small player in world markets. A combined elasticity greater than 5.0 would correspond to a sanctions multiplier of less than 0.2.

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