Appendix 1

Brief Cases Histories of Selected Sanction Episodes

These brief histories focus on U.S. economic statecraft initiation and continuation since 1960.[1] Providing background information, this chapter pays homage to and derives much from the extensive chronology provided by Hufbauer, Schott, and Elliott (HSE 1990) plus new studies and data. These brief histories provide other information, not emphasized by HSE, concerning certain macroeconomic variables. Other sources are quoted as needed case by case. This appendix provides the reader a taste of these cases' diversity while not substituting for texts with more focus on specific, multiple cases: HSE (1990) remains the encyclopedic work. O'Sullivan (2003) looks at recent cases in outstanding depth and detail; Askari et al. (2004) looks at multilateral cases.

Table A1.1 provides the cases and dates for the examples in this chapter, all with the United States as unilateral sender or a partner in a multilateral policy. Sanction studies have now focused on effectiveness in many different ways, not just a binary success or failure statistic. Appendix 1 presents historic cases and shows differences and similarities in each sanction's political economy, providing background for the empirical work in chapter six. Some of these cases are not mentioned elsewhere in the text qualitatively, but all cases are part of chapter six's empirical analysis. Stated data made in each case, though available from multiple sources, originate with the International Monetary Fund's website, *www.imfstatistics.org*, unless otherwise referenced.

An Isolated Case: North Korea, 1950–Present

Due to extreme data parsimony, North Korea is for now only a qualitative study. Some of the classic sanction issues exist. The sanctions are

Table A1.1 Selected cases

Target country	Sanction dates	Target country	Sanction dates
Argentina	1977–84	Libya	1978–98
Argentina	1978–82	Malawi	1992–94
Brazil	1962–64	Myanmar	1988–90
Brazil	1977–84	Nicaragua	1977–79
Cameroon	1992–98	Nicaragua	1981–88
Chile	1965–66	Nicaragua	1992–95
Chile	1970–90	Nigeria	1993–98
Chile	1973–90	Pakistan	1971–72
China	1989–98	Pakistan	1979–86
China	1991–98	Panama	1987–93
Colombia	1996–98	Paraguay	1977–81
Cuba	1960–Present	Paraguay	1996–96
Egypt	1963–65	Peru	1968–74
El Salvador	1977–81	Peru	1991–95
El Salvador	1987–88	South Africa	1975–82
El Salvador	1993–93	South Africa	1985–92
Ethiopia	1976–92	South Korea	1973–77
Guatemala	1977–86	Sri Lanka	1961–65
Guatemala	1990–93	Sudan	1989–94
Haiti	1987–90	Sudan	1993–Present
Haiti	1991–94	Syria	1986–94
India	1965–67	Taiwan	1976–77
India	1971–72	Thailand	1990–93
India	1978–82	The Gambia	1996–98
India	1998–2005	Togo	1992–94
Indonesia	1963–67	Turkey	1974–78
Indonesia	1993–95	Uruguay	1976–81
Iran	1979–81	USSR	1975–90
Iran	1984–98	USSR	1978–80
Iraq	1980–87	USSR	1980–82
Iraq	1990–2003	USSR	1981–81
Liberia	1992–98	USSR	1983–83
		Zimbabwe	1983–88

Sources: HSE (1990), Drury (1998, 2005), and author's calculations.

long term; in HSE (1990) it was the longest running sanction in their data set and remains so to date.[2] The sanctions changed in 1994, amidst the loss of allies in the former Soviet Bloc and reduced concession trade with China in lieu of hard currency trades. Further, the philosophy of self-reliance, *juche*, drove North Korea toward a nuclear program and profiting from selling arms and weapons systems to belligerent nations in the Middle East. Sanctions that began in 1950 as parallel acts to the Korean War continued as a way of stemming communism's tide during the Cold War. It is likely that the lack of dynamics and data in this episode has led to few studies before 1994.

Recently, authors such as Dreszner (1999), Simons (1999), and Martin (2000) have discussed North Korea at length. HSE (1990) provide extensive background, likely to be repeated in their third edition. Martin suggests that U.S. sanctions against North Korea became driven by incentives rather than aimed at punishment (2000, 107). The carrot–stick idea is also featured in Dreszner (1999), where positive incentives and punishment are discussed as policy options.

> The threat of economic sanctions [rather than positive incentives] was unsuccessful in generating all the desired concessions [concerning nuclear fuel reprocessing] for two reasons. First, North Korea's expectations of future conflict were so extreme that it preferred stalemate to total acquiescence . . . Second, the United States could not compromise its demands due to the normative importance it placed on nonproliferation issues. (283)

This case is unique because of its duration, as coercive policies continue with worsening geopolitics that have forced the United Nations to reassess its sanctions package against Kim Jung Il's regime. North Korea claims economic isolation of its people, save relationships with Japan, China, and South Korea. U.S. sanctions are full sanctions, and deemed a function of national security. Elliott (2003) suggested a lifting of all nonproliferation and non-security related coercion policies (6). Rennack (2003) provides an outstanding overview of the case, stating that sanctions continue because North Korea remains a potential terrorist nation through funding and committing direct acts of terror, a nonmarket state under the Trade Agreement Extension Act of 1951 and the Trade Act of 1954, and engaged in nuclear proliferation (5–11). However, tracking sanction effects outside of the anecdotal is virtually impossible because no acceptable data exist.

In October 2006, as this study was being completed, North Korea conducted an underground nuclear test. This is likely another act of brinksmanship, as were the missile tests of July 2006. North Korea may see the end of sanctions very soon, with full-scale conflict. The following are brief histories of the cases empirically examined in chapter six.

Argentina: 1977–84

Argentina experienced two different, related sanctions between 1977 and 1984. The first was a reaction to human rights abuses, according to UN stipulations. Political murders took place by the score, as Argentina's military government attempted to eliminate its enemies. In February 1977, President Jimmy Carter suspended aid to Argentina; Argentina immediately refused aid from the United States (HSE 1990, v. 2, 445). It decided to finance its military and economy through its domestic capital market. Debt rose steadily, and the human rights problems subsided from 1977 to 1982.

Argentine president Galtieri in 1982, amidst a large military buildup and economic implosion, sent 4, four thousand troops to the Malvinas (Falkland Islands), a British protectorate. Immediately, the United Kingdom and United States began full economic sanctions against Argentina, and Argentina retaliated by beginning a military conflict. The war ended quickly, though the sanctions lasted another full year. By the end of 1983, the Argentine government was overthrown. The economic situation in Argentina from 1975 to 1984 was a roller coaster of mismanaged central banking, large debt excesses for military control purposes, and international policies that restricted many markets (Di Tella and Dornbusch 1988, 311). Economic and military aid from the United States was cut off by 1977, not to return until 1984. In 1982, the United Kingdom cut all its Argentine aid and trade. In 1976, 7 percent of Argentine exports went to America or Britain, while 19 percent of their imports originated in these sender economies. The 1977 sanctions from America were still on during the Malvinas conflict. The decision to invade the Malvinas put additional economic pressure on the Argentine capital markets already suffering from monetary policies that had caused three devaluations in five years (Corradi 1985, 132). The sanctions against Argentina were full sanctions, consisting of both trade and credit. Once the overthrow took place, sanctions were lifted.

Brazil: 1962–64, 1977–84

During the early 1960s, the threat of U.S. financial sanctions cast a cloud over every decision Brazilian president Goulart made. In 1962, Brazil wrote into law a bill limiting the amount of income international firms could derive from their Brazilian subsidiaries and investments. Goulart ordered capital expropriation, petroleum-producing capital in particular, from U.S. firms in 1962 (Wesson 1981, 22). This decision was blamed on pressure from leftist forces within Brazil, forces taking a stand against aggressive capitalists (U.S. investors in specific) invading Brazil. Once the capital was expropriated, the United States formally cut 75 percent of its economic and military aid to Brazil, on the advice of a Brazilian government official that sanctions would have large effects on the Goulart government's ability to retain power (HSE 1990, v. 2, 222). America influenced the International Monetary Fund and UN agencies to delay loans to Brazil. From 1940 to 1965, the United States was the largest supplier of loans to Brazil internationally, a pattern developed between many Latin American nations and America in the postwar era (Salazar-Carrillo and Fendt 1985, 179).

Robert Wesson reported that six hundred million dollars in loans were approved by the United States between 1960 and 1962, but only 20 percent of these loans landed in Brazil (1981, 107). Goulart was ousted in 1964, and the U.S. aid packages returned. The military government that followed Goulart was a human rights disaster, limiting political freedoms and holding no free elections. A purge of communists took place in Brazil, including book-burnings and labor union disintegration. Inflation increased 86.6 percent in 1965, due to monetary expansion and economic stagnation.

In 1977, Brazil's military government refused military aid from the United States after perceived human rights abuses by Brazil's government. America nominally cut aid for the next seven years. In 1984, Reagan established a new military aid relationship with Brazil; these sanctions suppressed Brazil's international capital market by direct intervention. The sanctions restricted only aid and credit directly. The Brazilian economy grew between the first and second sanction episodes; in the 1962 episode, U.S. real GDP was thirty times her Brazilian counterpart, shrinking to twelve times the size by 1977. Brazil's trade dependence fell from 1962 to 1977 also, as exports to the United States fell significantly from 62 to 17 percent of total exports, and Brazil's imports from America fell from 35 to 20 percent.

In the first episode, Goulart was forced out of office in 1964 in a military coup. Burns (1993) saw the U.S. economic sanctions as tantamount to the military overthrow of Goulart, as Goulart became unable to control his leftist government's position after losses of aid and loans. In contrast, Wesson (1981) saw the sanctions as doing little in the face of U.S. military presence and an unprecedented call for military rule in Brazil.[3] The second episode's end came with less excitement, as America simply reversed its position on Brazil's human rights situation, electing to grant aid that the Brazilian government had earlier renounced.

Cameroon: 1992–98

In early 1992, soldiers engaged in summary executions of political demonstrators. Political violence continued to sweep through

Cameroon through 1993, as the Cameroon Democratic Union's vice-president was abducted and killed; this assassination was suggested to be politically motivated (U.S. Dept. of State, 1994a). Constitutional changes took place such that there was less democratic and personal freedom in Cameroon, worse its citizens human rights situation. As a reaction, the United States cut aid and oil imports from Cameroon.

The Cameroon economy remains based on oil as its main export, but it also exports coffee and other agricultural products. Cameroon sold 7.5 percent of its exports in 1990 to the United States, down to 0.4 percent in 1991, while it purchased 6.6 percent of its imports from America in 1991. Cameroon's economy suffered in the early 1990s. Real GDP fell at a rate of 2.9 percent per year from 1991 to 1994 (U.N. Statistical Yearbook 1997). From 1995 to 2000, Cameroon's economy rebounded well, fueled by better politics and economic growth worldwide.

Chile: 1965–66; 1970–90

Chile was the world leader in the copper markets in the early 1960s. In 1965, due to rising international demand for copper, Chile increased the raw copper price from \$0.36 to \$0.38 per pound. The copper price increase was followed by American copper and aluminum companies augmenting their prices, as aluminum and copper were close substitutes on the world market. Copper was Chile's principal export market, making its copper earnings almost entirely dependent on export prices (Corbo and Fischer 1994, 31). The United States restricted imports of Chilean copper, and aid was nominally cut. By 1966, America reinstated aid to Chile, and the raw copper price settled to the pre-sanction price of \$0.36 per pound. Chile's dependence on American sales fell dramatically, possibly a function of the 1965 sanctions; by 1970, the United States made up only 9 percent of Chile's export market, down from 43 percent in 1965. America sold Chile 30 percent of her imports in both 1965 and 1970, however. HSE (1990) suggested that the import restrictions on copper, coupled with aid and loan sanctions, forced Chile to rethink its pricing policies (276–79).

The 1970 sanctions against Chile were much longer in duration. These sanctions focused on ending the presidency of Salvador Allende. Before Allende's government, there was the Chilean Christian Democracy. Unfortunately, both the political right and left (Allende) opposed tax and social reforms. In 1970, by a slim margin, Allende won a parliamentary election. The United States consequently cut loans and aid to Chile, as asset expropriation invoked sanctions via the Hickenlooper Amendment.[4] Allende was killed during a coup d'etat in September 1973. Of the many groups attempting to seize power, the military took control. The sanctions against Chile continued through the 1970s and 1980s, shifting focus to new human rights problems during the new government's regime.

Between 1973 and 1990, a military government ruled Chile, suspending parliament, restricting freedom of press, and participating in other human rights violations. The United States reacted by cutting financial and military aid. Credit sanctions continued into the 1980s, with many battles in the U.S. Senate over aid reinstatement. U.S. sanctions became more nominal over time, and by 1990 were off completely. In certain years, 1976 and 1985 particularly, U.S. restrictions eased, with loans and aid given for "humanitarian" purposes (HSE 1990, v. 2, 360–61). The Chilean dependence on international trade began to slow the economy, leading to currency devaluations and revaluations of debt (Dornbusch and Edwards 1994, 85).

Financial sanctions were the only restrictions used in the 1970 sanctions. Politically, Allende's assassination in 1973 ended his regime, bringing a new government into power. This new government, however, would compile just as bad a human rights record as Allende's. Political goals were achieved, one quickly and the other over a long stretch of time. Chile's imports were 27 percent from the United States in 1973. Chile experienced high inflation and volatility in real GDP growth, though private investment from foreign sources grew between 1977 and 1981 by three billion dollars.

China: 1989–98

China was first sanctioned in 1949, measures that continued through 1970. These sanctions were concerned with the spread of communism along the Pacific Rim, especially after the Korean War began in 1950. Once the Korean War was over in 1953, international participation in the Chinese embargo shrunk to only the United States and United Kingdom; by 1958, Britain retreated as well. The U.S. goal was a blockade of communist expansion (Leyton-Brown 1987, 68). Sanctions ended in 1970 because of changes in U.S. trade strategies (HSE 1990, v. 2, 101). In the 1980s, these fear resurfaced somewhat, culminating in 1989.

Beijing's Tiananmen Square was the site of student-driven, prodemocracy protests in May 1989. The Chinese government declared martial law in Beijing and moved in troops. Hundreds were killed, hurt, and wounded as troops opened fire on demonstrating crowds. America acted immediately by curtailing all government contract activity, arms flow, and loans to China. Sanctions stiffened to influencing loan activity between China and international agencies and governments. In 1988, the Chinese purchased 12 percent of their imports from the United States and sold 7 percent of their exports to America. Many countries did engage in some form of embargo in 1989, with the United States pressuring some loan deferments, but the Chinese economy was little affected. Over the first five years of sanctions, Chinese real GDP grew at 10.2 percent per year, with slow inflation until 1992. These sanctions were more political reaction than action, a stand the United States felt morally obliged to take.

Chinese sanctions were imposed again in 1994 due to alleged sales of missile systems to Iran and Pakistan, and over goods piracy issues. To try and stop yet another arms race between India and Pakistan, these U.S. sanctions reduced sales of missile technology to China, which the American government saw as going straight through to Pakistan for profit. By the end of 1994, the sanctions were partially lifted due to an accord between the countries on third-party transactions (*Wall Street Journal* 1994). China oscillated politically between selling and not selling the weapons systems to Iran and Pakistan; issues over Chinese piracy of U.S. technology and allowing a huge black market for such things as videos and music exacerbated pressure for larger sanctions (Simons 1999, 160). By 1999, sanction pressure ebbed. While other, tighter sanctions were threatened for alleged human rights abuses, U.S. trade with China has increased in trend since 1994.

Colombia: 1996–98

Colombia has been associated with narcotics trade, specifically cocaine, for decades. In the 1990s, Colombia's president Sampler was associated with drug traffickers and accused by the United States of undermining drug enforcement progress (Dow Jones News Services 1996b). Early in 1996, Colombia's refusal to sign a trade accord with the EU was pressured by U.S. sanctions (Dow Jones News Services 1996a). U.S. aid came to Colombia in many forms in the early 1990s, from financial to military, specifically to reduce the amount of drug trade taking place in the United States. The sanctions were on imports of Colombian coffee, flowers, among Colombia's largest export sectors, as well as aid. Sanctions ended when Andres Pastrana was elected as Colombian president in 1998. The problems of political corruption and drug trafficking continue today, even under Colombia's free-trade agreement with the United States. "The armed insurrections and narcotics trafficking that accompany [the insurrections], are among the most significant threats to the Colombian economy" (Grieco and Schott 2006, 63).

The Colombian economy is a primary products economy. Coffee, roses, and apparel are among their chief exports (CIA Factbook 2000). In 1996, Colombia imported 36.1 percent of its total from the United States, selling America 40.2 percent of its exports. Colombia's economy grew during the Sampler regime at a quick pace. Real GDP grew at an average of 4.28 percent per year from 1991 to 1995 (U.N. Statistical Yearbook 1997). After that regime ended, Colombia fell into a recession for the remainder of the 1990s (ibid.).

Cuba: 1960–Present

Cuban sanctions are among the most heavily studied and debated. Fidel Castro led a communist revolt in Cuba that finally overtook the democratic Cuban government in 1960. The Soviet Union's involvement in both funding and supporting Cuba was perceived as a threat to the United States and the stability of other Latin American nations. In 1962, Soviet missiles deployment to Cuba pushed the Cold War superpowers to the brink of a nuclear exchange. The Soviets acquiesced to U.S. demands, the missiles were removed, and the threat subsided. Beginning in 1960, the U.S reduced its trade with Cuba, and by 1965 the sanctions were as complete as any American measures to date. Throughout the 1970s, the U.S. intelligence network attempted to undermine Castro.

> The regime withstood a continuous campaign of CIA-orchestrated terrorism, military invasion, industrial sabotage, agricultural arson, assassination, threat of assassination, the manipulation of regional bodies, the pressures of the "missile crisis," intimidation of domestic and foreign companies, threats to trading nations, and all the many burdens of the broad economic war being waged by a superpower against a relatively small Caribbean island. (Simons 1999, 127)

These coercion measures became the template for much of American, anticommunist activity in Latin America throughout the 1970s and 1980s. Cuban troops were deployed to other communist revolts in Africa, including Ethiopia and Angola, increasing pressure to increase sanctions. In the late 1980s, pressure built on Cuba, as the Soviet Union began to break down economically and politically.

Through the 1990s, Cuba began to suffer as a result of losing its main trading and financing partner, which increased the potency of U.S. coercion. “U.S. sanctions against the Castro regime have complicated the economic agenda sought by Havana, namely reliance on foreign investment as a substitute for lost Soviet subsidies. U.S. sanctions have cost the regime hard currency” (Fisk 2000, 82).

Cuban sanctions remain in effect based on an anti-Castro stance, and are simply part of everyday events in Washington. The policy’s simple purpose is to punish the Cuban government and people for allowing Fidel to remain in power. The Cuban case is hotly debated but lightly examined quantitatively due to a lack of reliable data. These sanctions are unlikely to end before Castro’s death, and then may depend on his successor.[5] Cuban economic statistics are extremely suspect, though exchange rate and trade data are used in chapter six.

El Salvador: 1977–81; 1987–88; 1990–93

In 1977, the United States was supplying El Salvador with 90 percent of its military aid. Political problems within El Salvador made America leery of continuing a high level of financial support. El Salvador withdrew new requests for military aid to avoid being denied the funding (Russell 1984, 120). U.S. arms sales to El Salvador continued after 1977, though at reduced levels, and there were few economic problems for El Salvador from this first sanction. Coffee is the historic leader in El Salvador’s export market. After 1978, as her real GDP moved up rapidly, the El Salvador economy began to slump as coffee’s value internationally decreased. El Salvador’s real GDP fell almost 33 percent from 1977 to 1983. Her dependence on America increased from the first to the second episode; in 1977, America constituted 33 percent of El Salvador’s exports and 30 percent of her imports. By 1986, these numbers increased to 44 and 39 percent, respectively. American aid to El Salvador never ceased completely in either sanction; U.S. economic aid to El Salvador doubled between 1980 and 1983 (Russell 1984, 122).

In 1987, four U.S. Marines died in a street attack in El Salvador’s capital, San Salvador, and amnesty was granted shortly thereafter to the perpetrators by El Salvador’s highest court (HSE 1990, v. 2, 606). Amnesty was granted because the killings were “purely political” in their nature. The United States threatened to withhold 10 percent of an aid package to be delivered in 1987; President Duarte overturned the amnesty ruling by executive order and the aid arrived. Human rights issues were front and center in the 1990 sanctions on El Salvador. The killing of six Jesuit priests in late 1989 led to another aid cut in 1990. These sanctions lasted until 1993 when human rights were considered to be augmented by the U.S. Congress.

El Salvador experienced 3 percent growth per year of real GDP from 1989 to 1992, while inflation averaged 16.8 percent over the same time period. El Salvador's substantial trade ties to America, its previous experience with sanctions, and its growing external debt stock made this an effective sanction. HSE (1990) claimed the first sanction a failure, as the military government was neither threatened from within nor strongly pressured by America and continued to rule. The second sanction was claimed successful, as the amnesty decision was overturned. In 1990, El Salvador purchased 37.9 percent of its imports from the United States and sold America 34.1 percent of its exports. The late 1980s were a recessionary period for El Salvador, during which time there was much political upheaval. However, the early 1990s were strong economic years for El Salvador, as real GDP grew at an average rate of 6.2 percent per year from 1991 to 1995 (U.N. Statistical Yearbook 1997).

Ethiopia: 1976–92

In 1976, Haile Selassie abdicated his rule under military pressure, and a military junta replaced him. President Mengistu Haile-Mariam's new government immediately nationalized all land and most industrial properties, including U.S. firms and assets. By 1978, with the threat of U.S. aid losses, Ethiopia signed an agreement with the Soviet Union. U.S. military and humanitarian aid was curtailed. Loans were defaulted and, under new legislation and the Hickenlooper Amendment, further sanctions were imposed.

In 1984, bad harvests and a lack of timely aid damaged the Ethiopian economy. The United States did help, but only in humanitarian efforts. By 1986, an agreement was reached for expropriated asset compensation, but human rights abuses continued. Conflicts with Somalia and continuous civil war drove Ethiopia into further domestic problems. By 1990, rebels made large advances; by 1991, Mengistu was overthrown and the U.S. sanctions ended in 1992 as free elections took place in Ethiopia after sixteen years of civil conflict.

Ethiopia's real GDP growth before sanctions in 1976 was slow. Between 1973 and 1976, real GDP increased at 1.89 percent per year; prices climbed 14.5 percent per year. Her government spending deficit was 5 percent of GDP in 1976 and the current account was in surplus. External debt was 18 percent of GDP in 1976. During the sanctions, the current account was in deficit throughout, as expected with droughts and subsequent famine; prices doubled between 1977 and 1987, while real GDP never grew more than 5 percent annually but twice in ten years between 1977 and 1987. In the late 1980s, however, there was a recovery, followed by problems until 1992. Real GDP grew an average 6 percent between 1986 and 1988, then fell 3.3 percent per year between 1990 and 1992.

Guatemala: 1977–86; 1990–93

Sanctions were imposed against Guatemala in 1977 for suspected human rights abuses and alleged mass political killings by both leftists in power and conservatives inside Guatemala attempting to gain power. In 1977, U.S. military aid and loans were reduced; in 1981, the U.S. severed diplomatic ties and canceled all military sales, aid, and loans due to continued poor reports on the Guatemalan civil rights situation. After democratic elections in 1984, the Reagan administration renewed aid and loans; in 1986, Guatemala received aid and military equipment, albeit at levels below pre-1977 agreements.

America purchased 37 percent of Guatemala's exports and provided 36 percent of her imports in 1976. Guatemala also found assistance from the USSR. As its economic situation fluctuated heavily between 1976 and 1986, Guatemala's real GDP increased at 12.2 percent per year from 1976 to 1978, and then fell at an average of 0.63 percent per year from 1979 to 1986. Prices increased 10.7 percent per year from 1976 to 1980; from 1981 until 1986, prices grew at 12.5. In the period between 1982 and 1984, there was 1.5 percent average inflation. Guatemala's debt to GDP ratio doubled from 8.8 percent in 1976 to 17.6 percent in 1986.

In March 1990, the *New York Times* reported that Thomas Strock, the American ambassador to Guatemala, was recalled to protest politically motivated killings of U.S. citizens; the human rights situation in Guatemala was reported as "deplorable" (*New York Times* 1990). In response to political pressure concerning drug trafficking and the aforementioned murders, President Bush threatened to again curtail economic aid unless Guatemala's government resolved these issues overtly. After more killings in the fall, the American Congress suspended $2.8 million in aid. In 1993, aid was resumed after Guatemala had sufficiently improved the human rights situation.[6]

In 1990, the United States accounted for 25 percent of Guatemalan exports and 20 percent of imports, down from the first sanction episode where the United States made up 36 percent of Guatemala's total international trade. Guatemala's inflation rate for 1985 through 1990 averaged 21.9 percent; however, real GDP grew over the same period at a modest 2.33 percent average. Guatemala's external debt was stable over this period, but relatively large; at the end of 1989, their debt was 34 percent of GDP, down from the previous two years. Guatemala's government spending deficit grew between 1985 and 1990, as did their current account deficit, in real terms. Guatemala's chief export was coffee, accounting for one-third of its exports in 1990.

Guatemala was a Latin American success story throughout the 1990s. From 1990 to 1999, real GDP grew at an annual average of 4 percent (U.N. Statistical Yearbook 2001). This was during sanctions, which shows the sanctions were low in their economic effectiveness.

Haiti: 1987–90; 1991–94

The United States suspended aid to Haiti after blatant human rights abuses in November 1987; thirty people were killed attempting to vote (HSE 1990, v. 2, 598). One month later, President Duvalier, blamed for ordering these political murders, went into exile. A military government stepped in and ironically the violations subsided. In 1990, new elections were held, and aid restored somewhat by the countries participating in the sanction.[7] A priest, Jean-Bertrand Aristide, was sworn in as president of Haiti on February 8, 1991.

The external debt of Haiti tripled between 1979 and 1987. Prices in Haiti deflated by 11.4 percent in 1987, and then grew slowly until 1990, at an average of 5.5 percent per year. In 1990, Haitian prices began to soar, and continue to increase throughout the decade. From 1987 to 1990, Haiti's real GDP fell by 1.35 percent per year. This first sanction embargoed loans and aid only, though America claimed 84 percent of Haitian exports and supplied 64 percent of her imports in 1986.

In September 1991, violence erupted in Port-au-Prince with a coup attempt, and President Aristide lost power. America threatened renewed sanctions if the coup leaders did not step down and allow Aristide back into the presidency. The coup leaders did not and Haiti faced both trade and credit sanctions. U.S. oil companies were forbidden to deal with Haiti; Haitian assets and loans were also frozen. The sanctions became an embargo from the United Nations with Security Council Resolution 875; this increased the pressure on the military regime and had an immediate impact (Cortright and Lopez 2000, 90–92). Between 1991 and 1993, sanctions stiffened and eliminated all aid, as the talks between coup leaders and the deposed Aristide stumbled. The United States accounted for over 80 percent of Haitian exports and 65 percent of imports by 1991. On October 17, 1994, Aristide was back in power, and sanctions were lifted soon thereafter.

The 1991 policies against Haiti were punitive. Using both trade and credit sanctions, the United States forced Haiti's small, dependent economy into economic ruin. The Haitian economy of the late 1980s mocked other military economies in the Caribbean and Latin America. From 1991 to 1995, Haiti's real GDP fell 4.1 percent per year. This incredible slowdown was accompanied by 25.1 percent inflation.

India: 1965–67; 1978–82; 1998–99

The Indian sanction episodes are spread over time, imposed for many reasons. Balasubramanyam (1984) suggested sanctions imposed on India in 1965 were to combat agricultural reforms considered problematic by the United States. U.S. food packages, initially meant to help the poor, were perceived to be detrimental to agricultural production in India by 1965; President Johnson food aid packages should stop and force India to prioritize its agricultural planning better (Balasubramanyam 1984). Pakistan then invaded Kashmir, and the U.S. military aid to India was cut. With food and military supplies cut off, the threat of widespread famine increased with a bad harvest. By 1967, India has its food and economic relief packages restored under a new agreement that demanded India's reformation of an agricultural, five-year plan; food supplies from America came in smaller packages over time. America supplied India with 30 percent of its imports, while buying 18 percent of India's exports in 1964.

India's economy in 1965 was neither large nor industrial. Real output per capita grew over the 1960s, except for 1965 and 1966. The aid that flowed into the Indian economy as foodstuffs was 30 percent of the total value of Indian aid by 1967 (179). In reality, much of the U.S. aid came to promote Indian industry. Consumer prices in India increased 11.4 percent per annum from 1965 to 1967, while real GDP fell in 1965 by 6 percent, growing in 1966 by less than 1 percent. Government expenditure, as a percentage of GDP, rose from 1967 to 1977 steadily. The agricultural sector's dominance in the Indian economy fell over this time, and the manufacturing sector began to grow. Real GDP grew at 4.6 percent per year in those eleven years.

In 1978, the United States passed a bill restricting the flow of high-grade uranium exports to countries not willing to meet new standards and requirements for nuclear testing and use. India's aboveground, "peaceful" nuclear test in 1974 worried many nations about Indian nuclear program safety. India had become much less dependent on America by this time; only 12 percent of imports were American, while India sold 13 percent of its exports to the United States in 1978. In 1980, India refused to meet new UN safeguards and standards, though uranium shipments never completely stopped. When India requested new shipments in 1981, no action was taken on the request. By 1982, however, India was receiving low-grade uranium shipments from France. The Indian economy in 1978 was growing; from 1975 to 1978, India experienced 6.5 percent average growth of real GDP, with 2.2 percent average inflation.[8] India's economy continued to grow, after a downturn in 1979 attributed in HSE to energy prices, and was little affected by sanctions. The key sanctioned good, uranium, was a minuscule part of the Indian economy, with an estimated value in trade of one ten-thousandth of Indian GDP.

This issue continues to be of interest to the United States, especially as border skirmishes are standard practice between Pakistan and India over Kashmir and other issues. India's economy, however, has strengthened dramatically in the last thirty years, especially in the last five. In May 1998, India conducted five, aboveground nuclear tests in stark violation of the 1995 version of the UN Non-Proliferation Treaty. Pakistan began to worry and an arms race ensued. The United States acted immediately to sanction development aid. India felt the wrath of these sanctions quickly. "Faced with slowing foreign investment and widening trade and budget deficits, Indian Finance Ministry officials are eager to see foreign development aid return" (Karp 1999).

India's economy continued its stagnant ways until the end of the 1990s. Through the 1990s, the Indian economy made a decisive turn toward a better export mix of manufacturing and agriculture. In 1993, agriculture was 64.9 percent of exports and manufacturing 34.5 percent. In 1998, those proportions had become 53.8 percent and 45.6 percent, respectively (UN International Trade Yearbook 2000). Real GDP growth in India increased over the 1990s at a historic pace, an annual average of 6.275 percent (UN Statistical Yearbook 2001). Since sanctions were basically focused on weapons technology, they did little to change the Indian economy's direction.

Indonesia: 1963–66; 1993–95

Indonesian rebels pushed for Malaysia's formation in the early 1960s, seeking asylum in this newly formed country. The United States immediately came to the aid of Malaysia, a new state created in a democratic image. Indonesia's refusal to support and recognize Malaysia led to U.S. sanction threats. Malaysia was formed and immediately severed diplomatic and economic ties with Indonesia. Indonesia ceased all trade and openly supported various pro-Indonesia forces in Malaysia. The United States asked and received support for sanctions from the United Nations. Many UN members began to pull investments out of Indonesia in response to Indonesia's "Crush Malaysia" policies; in reaction to U.S. sanctions and capital flight, Indonesia nationalized U.S. oil interests in 1965, bringing more pressure for sanctions (HSE 1990, v. 2, 254–55). Indonesia's consumer prices doubled in 1963, doubled again in 1964, and quadrupled in 1965. In 1966, Indonesia's CPI increased tenfold. Skyrocketing inflation was accompanied by stagnant real GDP growth, averaging 1.7 percent between 1963 and 1966. The United States sold Indonesia 35 percent of its imports.

The 1990s were great times for the Indonesian economy through the Southeast Asian currency crises of 1997. Though the average inflation rate has been 8.5 percent, real GDP growth was 8 percent annually from 1990 to 1997. Government spending deficits were in surplus during the early 1990s. The current account balance was in deficit throughout the 1990s, a by-product of growth, macroeconomic policy, and capital inflows; national debt stock equaled 99 percent of GDP at the end of 1992.

In September 1993, alleged human rights abuses by the Indonesian military caused sanction threats from the United States. Worker rights in East Timor were eroding, and the Clinton administration stopped the sale of Jordanian fighters to Indonesia (Cronin 1994). This news came on the heels of Indonesia's unprecedented economic growth. The United States nominally sanctioned Indonesia over these abuses, and by 1995 the sanctions were lifted. In both cases here, the United States sanctioned credit only, though the United States accounted for approximately 20 percent of both Indonesian exports and imports in 1993.

Iran: 1979–81; 1984–Present

On January 16, 1979, the Shah Pahlavi of Iran abdicated, seeking asylum in the United States. The Ayatollah Khomeini announced his seizing of power and appointed a provisional government. In November 1979, the U.S. embassy was overrun; sixty Americans were among one hundred persons held hostage in protest of the United States granting the Shah asylum. The United States sent in a negotiation team, which was refused. The next day, President Carter ordered the suspension of arms sales and oil purchases with Iran. Iranian assets in the United States were also frozen. Iran nominally announced a suspension of oil shipments to the United States. In January 1981, the hostages were released, but sanctions went away very slowly.

The United States played a modest role in Iran's economy in 1979, supplying Iran with various goods, including rice, wheat, manufactured goods, and military hardware in return for oil. In 1977, 12.8 percent of Iran's exports were sold to the United States (UN Statistical Yearbook 1980). Iran's government spending was in heavy deficit territory; by 1978, Iran's external debt balance was more than 100 percent of GDP. After 1977, real GDP fell 15 percent per year over two years, and prices began to steadily climb. This sanction's effectiveness was a function of the United States closing all its markets to Iran officially; the World Bank also applied pressure for countries to not readily give credit to Iran, which also helped the American cause.

Alleged Iranian involvement in the Beirut car bomb death of two hundred Marines in 1983 led to export sanctions. When it became apparent that the Iran–Iraq conflict of the mid-1980s also involved chemical weapons use, the United States immediately banned all chemical exports to both countries. As Iran became more belligerent, so did the sanctions. There were trade and financial sanctions levied against Iran, attempting to punish their economy for supporting terrorism and war with Iraq. Iran's economy suffered from U.S. pressure on international agencies to cut loans and other UN countries' trade involving Iran. In 1987, the American import embargo was augmented, but the effects were short-lived because of a trade diversification strategy employed by Iran (O'Sullivan 2003, 65).[9] In 1989, Iran and the United States negotiated for the release of over five hundred million dollars in frozen Iranian assets in America; almost one billion dollars worth of assets remained frozen, however. Iran's support of terrorist organizations led to additional sanctions in the mid-1990s, though not as complete as previous sanctions. In 1996, the United States passed the Iran–Libya Sanctions Act (ILSA). This act was meant to not only provide breadth to direct sanctions against Iran but to expand economic and legal punishment to domestic companies and foreign entities that acted as sanction busters.

In 1978, the United States accounted for 28 percent of Iranian imports, and 12 percent of exports; the figures fell to 1 percent and 5 percent, respectively, by 1984. Oil cartel riches eroded as the petroleum price plummeted in the 1980s. The average growth rate of Iranian real GDP between 1983 and 1988 was 0.7 percent. Because of constant tension between Iran and Iraq, government spending was in a deficit from 1976 on, while the current account fluctuated from deficit to surplus as the oil price fell then rose, respectively. One statistic of note: the external debt of Iran fell over the second sanction period, until 1990, when it doubled. Prices in Iran quadrupled between 1983 and 1990. The hostage case can be viewed as a success, as the hostages were released. The 1984 sanctions, as they did not rid the world of Iran's dictatorship or Iranian-funded terrorist activities, are a political failure as Iran has continued to be an open supporter of terrorism and anti-American activity.

Through the 1990s and into this decade, Iran has drawn broader UN attention. With continued terrorist ties and a recent expansion of its nuclear program, Iran has become a rogue nation. With a new authoritarian government in power, it is likely that the current sanctions will remain for some time and possibly expand among UN members. Iran's economy continued to grow through the 1990s and into this decade. On average, real GDP grew in Iran at a 5.8 percent annual average from 1990 to 2001, which is similar to the growth rate of the U.S. economy over the same time period (UN Statistical Yearbook 2003). This is where we need to be careful in generalizing that sanctions have not worked, as the macroeconomic statistics do not necessarily reflect the plight of the common person in Iran (Amuzegar 1997).

Iraq: 1980–87; 1990–2003

Sanctions began in 1980, based on increased terrorism believed to be originating from within Iraq. Also, Iraq expanded its weapons technology, using chemical weapons on Kurdish rebels and Iranian soldiers, a problem that continued through 2003. American opposition to Iran and the continuing conflict between Iraq and Iran helped Iraq's position with the United States during the 1980s. The United States ceased exports of jet engines and nuclear fuel to Iraq from 1980 to 1983. Export sanctions were the only sanctions noted by HSE (1990). In 1983, Iraq was removed from the list of terrorist nations, only to return in 1989. HSE (1990) see this first case as a moderate failure, as terrorist activity originating in Iraq did not cease. In 1990, Iraq began an explicit military campaign in Kuwait, possibly indicating how little Saddam Hussein feared sanctions.

Economic statistics for Iraq are extremely hard to both gather and believe. Some possible sources include the IMF, World Bank, UN, and CIA documents, and some splicing of data series for Iraq through 1991. Between 1981 and 1989, the average real GDP growth in Iraq fell by 2.9 percent; the average inflation rate over the same time was 11.2 percent. Iraq was not dependent on American goods, with only 7 percent of imports coming from the United States, which purchased 3 percent of Iraqi exports in 1980. War debts, from the war with Iran, were large and culminated with the Gulf War buildup in 1990.

The second set of sanctions against Iraq was much different from the first. Iraq invaded Kuwait on August 2, 1990. A long queue of countries formed against Iraq, which made finding substitute markets for exporting oil and importing food difficult. Whereas the 1980 sanctions were export only, the 1990 sanctions were comprehensive, originating with the United Nations. During a time of economic growth in Iraq, trade was closed from the outside and international credit availability was virtually eliminated. During the 1990s, the Iraqi economy was subject to weapons restrictions, surprise inspections, and careful scrutiny by the international community. Iraq's economy became isolated from the major world powers. "In this endeavor, the *universal*, multilateral structure of sanctions also was important. Had a regional body, rather than the United Nations, mandated multilateral sanctions on Iraq, its oil wealth would have enticed other countries not bound by the regional sanctions to trade with Iraq" (O'Sullivan 2003, 155).

Following the terrorist attacks of September 11, 2001, the Bush administration looked at Iraq as a country who funded and harbored the organizations responsible. Sanctions were then remade in complete, originating this time more directly from the United States. Threats of military action began in earnest, made credible by the invasion and takeover of Afghanistan in 2002. The U.S. invasion of Iraq in March 2003 effectively ended economic sanctions. Before the 2003 invasion, according to the United Nations, Iraq's economy was volatile. Real GDP grew at an annual average of 14.8 percent from 1997 to 2001 after falling at an annual average of 13.7 percent from 1991 to 1996 (UN Statistical Yearbook 1997 and 2003). Sanctions were a political failure, but Iraqi economic welfare certainly plummeted as a result of sanctions (Yousef 2004).

Libya: 1978–Present

Moammar Gadhafi, as the leader of Libya, isolated Libya from much of the world. Libya's support of terrorist groups forced the United States to sanction arms sales in 1978. From 1978 to 2004, Libyan belligerency was a constant factor in American–Libyan relations. In 1982, the United States embargoed oil imports from Libya in an attempt to curtail oil profits from becoming terrorist funding. In January 1986, as a reaction to terrorist attacks in Rome and Vienna believed to be funded by Gadhafi, comprehensive U.S. sanctions were imposed. In March 1986, the U.S. military had two events take place in the Mediterranean Sea involving Libya. First, U.S. warships stationed themselves in waters Gadhafi warned would provoke action. This tension led to two Libyan gunboat sinkings and a missile site being destroyed. International reaction to this U.S. retaliatory move, Operation El Dorado Canyon, was poor. "Probably not in twenty years had there been a period of such intense international criticism of the United States as the last two weeks of April 1986" (Davis 1990, 145). As a result, few countries joined in on the U.S. sanctions. By the end of 1986, the only other country involved was France.

However, a Libyan link to the bombing of Pan Am Flight 103 in 1988 strengthened world resolve against Libya, but the United States continued to be the key sender nation. Libya provided asylum for two individuals accused of the bombing, not acquiescing to international appeal for extradition. As a result of that event 270 people died. In 1992, the United Nations voted to uniformly adopt full sanctions on air travel and arms sales to Libya, making the existing sanctions that much stronger (Lewis 1992). These were UN Security Council Resolutions 748 and 883.

In 1996, Libya was named along with Iran in a new U.S. law to penalize both domestic and foreign companies for dealings with these countries (see the section on Iran earlier). The ILSA further isolated Libya's economy. The United States has recently dropped most of its sanctions against Libya, and trade has begun again. The economic damage of these sanctions was significant, especially on inflation, but humanitarian conditions were supported by the regime. "Sanctions on Libya did not precipitate a humanitarian crisis by any standard, although they did significantly diminish the standard of living of most Libyans . . . The main influence of U.N. sanctions on the humanitarian situation in Libya was through the inflation that sanctions encouraged" (O'Sullivan 2003, 211–12). In 1999, Libya finally handed over the terrorists, and there was momentum toward lifting the long-standing sanctions.

In 2004, UN sanctions were lifted as Libya came out and spoke against international terrorism.[10] Whether Libya continues its stance against international terrorism remains to be seen. The overall effectiveness of over twenty-five years of sanctions is still in question. First, Gadhafi is still in power. Second, terrorism originating out of Libya or funded by Gadhafi continued for decades, and may still exist. However, Libya economically limped through the 1990s, a time where worldwide economic growth should have naturally affected Libya's economy positively. Real GDP fell at an annual average of 0.74 percent from 1991 to 1999 (UN Statistical Yearbook 2001).

Malawi: 1992–94

Military assistance was cut by the United States to Malawi in 1992. This resulted from human rights abuses on the part of the government. Malawi's self-proclaimed, life-president Kamuzu Banda began to arrest opposition leaders and a demonstration over wages turned violent, where twenty-two people were killed by pro-Banda forces. Western Aid Donors had imposed economic aid sanctions on the Malawi government of Dr. Banda beginning in 1991 (Kachala 2002). Reports of prisoner mistreatment, especially those in political opposition to Banda, further turned friendly Western nations and the World Bank against the regime (*Toronto Star*, May 13, 1992). Aid was summarily cut until human rights were augmented. Aid was reinstated in 1994 after elections voted against Banda's regime. Human rights are still in question for Malawi.

In 1991, Malawi exported 15 percent of its foreign sales to the United States, while buying only 3.3 percent of its imports from America. Malawi's economy during the 1990s became one of intense inflation. By 1999, food prices increased thirteen times from their 1990 levels; real GDP grew at a good pace of 4.45 percent, however (UN Statistical Yearbook 2001). Malawi received over sixty-five million dollars in development aid through UN channels in 1994, down to forty-eight million in 1995; industrial production grew from 1993 to 2000 at an average of 4.4 percent per year (ibid.).

Myanmar (Burma): 1988–90

A military coup overthrew the government in 1988, and worries increased that the new government would become a Chinese ally, begin to violate human rights through martial law and suppression of opposition and the press, and be nondemocratic by definition.

These worries ceased in 1990 when elections were held and the financial sanctions imposed were lifted. Japan was likely the most threatened of the three nations involved; sanctions continue from other nations, but the United States and United Kingdom have generally been opposed to major sanctions against Myanmar since this episode (Simons 1999, 3). President Clinton, under the Burma Freedom and Democracy Act, barred new investment originating from the United States in 1997 (Hufbauer and Oegg 2003, 127). However, in 2003, a motorcade ambush forced a switch in the U.S. stance, leading to import and financial sanctions imposition on Myanmar. This latter case is not empirically discussed in chapter six. Myanmar's economy is mainly agricultural. In 1987, Burma sold 8 percent of its exports to Japan, West Germany, and the United States and purchased 30 percent of its imports from the same group (Drury 1998).

Nicaragua: 1977–79; 1981–88; 1992–95

Civil war ravaged Nicaragua in the early 1970s as rebels took aim at President Anastasio Somoza Debayle, who in December 1974 imposed a state of martial law to control the spread of Sandinista rebels. U.S. sales of police equipment and economic aid were suspended to Nicaragua.[11] Pushing to end martial law and nationwide labor stoppages, the United States persuaded the IMF to hold back a debt service loan in 1978 (HSE 1990, v. 2, 452). In July 1979, the Sandinistas overthrew Somoza, and full economic aid was restored. Nicaragua engaged in relatively large government spending in the 1970s to fund its internal conflicts continuing into the 1980s. In 1986, 55 percent of the Nicaraguan government spending was military. Nicaraguan trade dependence on the United States dictated this sanction's focus. In 1977, the United States accounted for 26 percent of Nicaraguan trade; by 1981, it accounted for 35 percent.

The Sandinistas then began to fund leftist groups in El Salvador. In 1981, President Reagan suspended all aid to Nicaragua to combat the Sandinista movement. The problem was exacerbated by the Soviet Union's willingness to make up Nicaraguan losses from U.S. sanctions. Reagan pushed to fund the growing anti-Sandinista (contra) groups in Nicaragua, but found stiff opposition in the U.S. Congress. In 1984, general elections were held in Nicaragua, and a military leader named Daniel Ortega came to power. The United States saw these elections as bunk and completely controlled by the military; Reagan opted to fund a CIA attempt to stabilize the Nicaraguan situation, and the election process in particular (HSE 1990, v. 1, 179). Reagan, in 1985, cut all aid and trade with Nicaragua, seized assets, and deported ambassadors. In 1990, elections were held again and Ortega was voted out of office. The fighting stopped and trade began again, including economic aid packages.

Close (1988) stated that Nicaragua is one of the richest resource countries in Central America, but ranked among the poorest in terms of GDP per capita by 1986. Nicaragua, due to U.S. sanctions, lost approximately $341.8 million dollars in loans from 1981 to 1986 (103). Throughout the embargo period, Nicaragua attempted land-use reforms, completely turning their agricultural policies upside down. The United States, one of the major importers of Nicaraguan goods historically, likely hurt those reforms through sanctions.

By the mid-1980s, the Nicaraguan economy faced stagnation. Inflation in 1985 was 219 percent, followed by 681 percent and 911 percent the next two years. From 1984 to 1990, Nicaraguan real GDP fell by an average 2.8 percent per year. The inability to gain access to cheap development loans, via the IMF or the United States, led to problems. Smith (1992) posited these credit problems led to the end of the Sandinista regime. When Nicaragua was released from sanctions in 1990, the new government attempted to use the country's resources to reform the economy, rather than relying on U.S. technology or foreign loans.

HSE (1990) saw the 1977 sanctions as a success with the end of the Somoza regime. The 1981 sanction is seen by HSE as a failure, with political success but little economic contribution. The lack of assistance Nicaragua found internationally put pressure on the Somaza government to fund its military internally. "[President Ronald] Reagan froze Food for Peace aid to Nicaragua in 1981 and blocked a $9.6 million wheat sale to that country" (Simons 1999, 122). Nicaragua struggled at the macroeconomic level during this sanction, with real GDP falling by an average of 1.5 percent per year during the seven sanction years.

Sanctions in 1992 were again imposed on Nicaragua for human rights violations. After over fifty killings by police officers in Nicaragua, the State Department recommended that the president impose sanctions on specific interest groups to stem the violence (U.S. Dept. of State, 1994b). The Sandinista Popular Army was singled out specifically as one of these groups. In 1995, the Sandinista government was replaced, and sanctions went away; aid still remained far below pre-1990 levels (Haugaard 1997). Nicaragua's economy in 1992 was purchasing 25 percent of its imports from America and selling 26 percent of its exports to American markets (UN Statistical Yearbook 1996). Real GDP growth was negative from 1991 to 1993, but rose to 3.2 percent growth in 1994 (Haugaard 1997).

Nigeria: 1993–98

Nigeria's economy was sanctioned by the United States in 1993, as were other African nations, for human rights violations. A coup also stopped Nigeria's path toward democracy, and imposed a military regime. The coup came after democratic elections, which were Nigeria's first in over a decade. "By the time the current ruler, General Sani Abacha, seized power in November 1993, Washington had canceled the visas of important military personnel, restricted arms sales, halted all U.S. economic and military aid, and cut off Nigeria's access to trade credits and guarantees" (Fadopé 1997). Most international observers felt the best measure against the new regime was to focus on reducing oil importation, as that was said to be the source of funding for suppression.

Human rights activists were also murdered, which led to military aid being cut and an asset freeze by the United States. The sanctions were not universal, which likely hurt their potency. "Many human rights groups and opposition organizations within Nigeria urged an oil embargo and financial sanctions following the cancellation of elections in 1993 and the execution of nine Ogoni activists in 1995, but the United Kingdom and other major powers opposed such action" (Cortright and Lopez 2002, 30). Sanctions eased after elections were held in 1998.

Nigeria's economy is based on oil and mining, as over 95 percent of her exports are in extractive industries (UN International Trade Yearbook 2001). Nigeria experienced strong growth during the 1990s, amidst political strife and being a nation on the brink of civil war. Real GDP grew at an annual average of 6.03 percent from 1991 to 1999; however, food prices increased nine times over the same period (UN Statistical Yearbook 2001). Developmental aid to Nigeria fell precipitously in the 1990s, partially due to sanctions. In 1993, Nigeria received $478 million from international sources, and by 1995 that number was down to $40 million; aid picked back up in 1997 to $200 million and was back down to $149 million by 1999 (ibid.). In 1991, Nigeria purchased 7.9 percent of imports from the United States, and sold America 46.9 percent of its exports, mainly oil.

Pakistan: 1971–72; 1979–90

In 1971, Pakistan was sanctioned for pursuing nuclear arms sales as well (see the section on India earlier). Pakistan, in 1976, agreed to buy reprocessed nuclear fuel from France to begin producing atomic power and nuclear armaments after the 1975 Indian invasion of Kashmir.[12] In 1977, the military overthrow of Premier Bhutto led to more international worries, as the new government under General Mohammed Zia ul-Haq pushed for nuclear energy and weaponry (HSE 1990, v. 2, 505). In 1979, after much delay and worry over the French deal, Pakistan constructed a nuclear power plant and began operations. They refused to follow U.S. safeguards. The United States promptly cut military and economic aid. In one year, Pakistan eased its stand, and the United States became more congenial in terms of financial sanctions; aid was sent again and divided evenly between the economy and military. The obvious fear was a possible arms race between India and Pakistan, which did take place in limited form. Sanctions on nuclear technology and fuel continued throughout the 1980s.

The 1977 military takeover by General Zia began a new phase in the economic history of Pakistan. GDP growth was significant over the sanction period. On average, GDP grew 6.1 percent from 1978 to 1983. In 1984, military expenditure was 28 percent of overall government spending. Between 1978 and 1983, all sectors of the economy, except services and construction, grew above the GDP growth rate (Noman 1990, 181). Through the rest of the 1980s, Pakistan's economy grew at an annual average of 6.03 percent.

Panama: 1987–90

In 1987, Manuel Noriega headed the Panamanian Defense Forces. Acting as dictator, Noriega suspended much of his people's democratic rights. The United States vowed to restore these rights, by force if necessary. Sanction threats led to violent demonstrations against America, causing damage to the U.S. embassy. As an attempt to ruin domestic sentiment toward Noriega, the United States suspended trade preferences, held up international bank transfers, restricted U.S. companies in Panama from paying local taxes, and stopped shipments in Panamanian dollars (Conniff 1992, 159).

The United States accounted for two-thirds of Panamanian exports and 35 percent of imports in 1986. The trade and credit sanctions were swift and comprehensive. In December 1989, Noriega and other major military officers stepped down, giving in to the American military presence in Panama and grassroots dissent toward Noriega. The Noriega-governed economy of Panama was one of increasing debt and military expenditure. Between 1987 and 1990, real GDP fell by 0.65 percent per year while inflation moved at a 0.5 percent average. HSE (1990) cited the economic measures' inability to force a change, supporting evidence that this case was a marginal failure.[13] Panama was somewhat dependent on the United States for its international trade, selling 66 percent of its exports to the United States, and buying 34 percent of its imports from American firms. Panama's external debt before sanctions was over 100 percent of GDP in 1987. The sanctions did not cause new problems, they just exacerbated existing crises.

Paraguay: 1977–81; 1996–98

Human rights abuses in Paraguay stimulated the United States to suspended aid in 1977. Paraguay's problems centered on a tribe of indigenous peoples know as the Ache Indians. Alfredo Stroessner's regime, in power since a 1954 *coup d'etat*, was believed to be killing Ache by the dozen and taking political prisoners, trying to eradicate the Ache from Paraguay. After conflicting evidence on government involvement in these crimes, the United States suspended military aid (HSE 1990, v. 2, 434). The United States also attempted to influence credit flows with limited success. In 1981, the United States reversed its policy after evidence of human rights improvements, and aid was restored (435). Paraguay relied on the United States for about 15 percent of both exports and imports in 1977; sanctions, however, were in financial form only. HSE (1990) felt this case was not a success, as Ache Indians continued to be incarcerated and Stroessner remained in power until 1989. From 1981 to 1990, the Paraguay economy experienced an average of 22 percent inflation per year, and 3.1 percent average growth of real GDP. The United States was able to pressure for curtailed international loans flow and stopped a development loan of $141 million from coming into Paraguay (HSE 1990, v. 2, 435).

The 1996 episode was to prevent a coup attempt by Lino Oviedo, which came on the eve of new elections. The governing body, which had been in place since the time of Stroessner's departure, was led by President Juan Carlos Wamosy. The struggle for power between Oviedo and Wamosy became a failed coup attempt, and Oviedo became defense minister as a compromise (Sonntag 2001, 136). The United States embargoed military and financial aid in an attempt to stop the struggle. Once elections were held in 1998, the sanctions were eased. The Paraguayan economy was stagnant in the 1990s, not taking advantage of global growth. Real GDP grew at an annual rate of 2.24 percent from 1991 to 1999; consumer prices tripled over the same time period (UN Statistical Yearbook 2001). In 1995, developmental assistance to Paraguay was $180.4 million, which fell to $102 million in 1997, and then again to $77.6 million in 1999 (ibid.).

Peru: 1968–74; 1995–98

Military buildup and U.S. asset expropriation led to restrictions of economic and military aid to Peru in 1968. Peru bought French Mirage fighters in 1967, indicating to U.S. president Johnson's administration that Peru was beginning a military buildup. Simultaneously, a Standard Oil subsidiary's assets became disputed ground in Peru. President Fernando Belaunde Terry had negotiated with the United States over the ownership of Peru's northern oil resources in 1963. The subsidiary, International Petroleum Company (IPC), was accused of tax evasion and political meddling (HSE 1990, v. 2, 309–310). In late 1968, an agreement was reached between IPC and Peru; shortly thereafter, Belaunde was overthrown by the military. This military government immediately took control of the oil resources by force. The United States, in response to the expropriation, suspended some economic and military aid. "Predictably enough, given the hostility of the World Bank and the United States government to the brand of radical nationalism displayed by Peru since 1968, there was a price to be paid for ready access to the international capital market" (Thorp 1991, 76).

Financial sanctions continued until 1974, as the United States and Peru agreed on compensation payments for expropriated property, and aid was restored. The United States also pressured the diversion of international loans. The United States sold Peru 8 percent of exports and purchased 11 percent of its imports. Peru experienced moderate growth from 1966 through 1974, averaging 4.5 percent per year; inflation was also moderate at 8.8 percent per year over the nine years.

Peru and Ecuador engaged in a brief border skirmish and political tension thereafter from 1995 to 1998. The bombardment of a Peruvian military outpost, on the heels of gun battles, put the two countries on the brink of war. To curb hostilities, the United States cut military aid to both countries. The Peruvian economy was little hurt by this outside of higher arms prices. Peru's economy was volatile from the late 1980s through the 1990s. Real GDP fell between 1989 and 1993 by 3.52 percent per annum, growing at 7.7 percent from 1994 to 1997, to then grow from 1998 to 2001 at a paltry average of 0.9 percent per year (UN Statistical Yearbook 2003). Prices in Peru were historically calm during the 1990s.

South Africa: 1975–82; 1985–92

In 1960, South African police massacred sixty-four civilians. Many African nations lobbied for the United Nations to use sanctions in response. Curiously, the United States lobbied against specific sanctions initially, and was not originally a participant in initial UN embargoes against South Africa. In 1964, however, the United States nominally began to sanction South Africa, by voting to restrict EX-IM Bank loans availability. Military hardware sales were also restricted. These sanctions continued until 1975, and then expanded.

In the early 1960s, South Africa lost foreign investment and import markets due to sanctions. As South African domestic policies became more restrictive, so did international economic sanctions. "Inflation was stable, however, up until the late 1970s; South Africa grew at a modest rate, fueled by countries willing to break the sanction lines and a monopoly position in diamonds and gold mines. This market power also gave the United States and United Nations easy-to-detect goods in policing sanction breakers" (Moorsom 1986, 31). By the 1970s, sanction potency was fading, but South Africa was hurt by increasing oil prices.

South African real GDP was growing at 2.9 percent per year between 1958 and 1961; inflation grew at 2.1 percent per annum over the same time. From 1964 to 1976, the South African economy became more dependent on U.S. goods and markets. By 1976, South Africa was importing 21.6 percent of its goods from America, and selling the United States 10.2 percent of its goods. In 1964, the percentages were 18.9 percent of imports and 8.6 percent of exports. South African real GDP growth was an annual average of 3.68 percent from 1971 to 1975 (UN Statistical Yearbook 1978).

As a reaction to India's 1974 nuclear test, the United States set major restrictions on countries looking to buy raw uranium from American sources. South Africa did not meet these new requirements and uranium shipments were curtailed. The nuclear possibility, coupled with South African sanction-busting for Rhodesia, expanded sanctions already against apartheid. In 1986, sanctions were further strengthened. An antiapartheid movement grew within South Africa, as a reaction to a 1984 law stating "mixed" race and indigenous South

Africans would receive parliamentary representation, but the majority, black African population would not be represented (Lipton 1988, 5). The international protests, led by such activists as Desmond Tutu, furthered UN sanctions. Augmented sanctions called for banning both nuclear collaboration and new U.S. investment, prohibiting bank loans and computer sales to the South African government, and stopping Krugerrands purchases (Orkin 1989, 135–36).

South African support and participation in Angola's civil war led to further cuts in military hardware sales to South Africa. After some worsening domestic violence, South Africa began to turn around politically. By 1992, free elections were held. Nelson Mandela (long imprisoned for his opposition to apartheid) was freed, and the world saw South Africa slowly reform. Nelson Mandela was later elected president of South Africa in 1994.

The sanctions restricted South Africa from finding inexpensive substitute markets for oil. By the 1980s, fewer economies were coming to South Africa's rescue, as the world moved uniformly against human rights abuses. Helping Rhodesia during U.K. sanctions in the 1960s and 1970s showed South Africa's initial lack of fear over international embargoes. The United States took many years to join the original sanctions, as U.S. business interests seemed to outweigh the political rationale for sanctions.[14]

From 1985 to 1992, South Africa's real GDP grew at 0.5 percent per year, while inflation averaged 15.3 percent over the same time. These numbers are worse than any eight-year span in postwar South Africa. Some authors, like Lewis (1990), Lundahl (1992), and Hazlett (1992), tried predicting effects on apartheid directly. They all claimed the end was near and were correct. These sanctions initially struggled to achieve the goal of dissolving apartheid. In hindsight, it is likely that the 1985 strengthening of sanctions put pressure on apartheid to end.

South Korea: 1973–77

Nuclear safeguards, proliferation, and international security, similar to recent measures against their northern neighbor, were reasons for these sanctions against South Korea (ROK). Another reason was human rights violations. Political challenges and fear of another conflict with North Korea (PRK) sparked restrictions of political freedom from fear that PRK was trying to undermine the current ROK government from within; these internal measures were enforced by ROK troops. Aid reduction, specifically military assistance, was initiated in

August 1973 by the United States; there will still American troops in South Korea, however, as part of a long-term peacekeeping effort.

Related to these reductions was the U.S. reaction to ROK seeking to purchase weapons-grade nuclear materials or technology to reprocess nuclear fuel for weapons from France. ROK's transactions began to stir international interest, especially after India's above-ground weapons tests in 1974. Dreszner (1999) suggests that the U.S. reaction was a threat to reduce aid and trade if ROK went through with the reprocessing plant purchase (257). In 1975, ROK ratified the 1968 Non-Proliferation Treaty and America slowly backed away from sanction threats. The human rights violations also eased as did tensions by 1977.

The South Korean economy in the 1970s was a developing economy, moving quickly to become an industrialized one. In 1972, the United States purchased 46.7 percent of ROK exports and sold ROK 25.7 percent of its imports. South Korea's real GDP grew at a rate of 9.78 percent per year between 1969 and 1973, while inflation grew at 8.7 percent over the same time (UN Statistical Yearbook 1975).

Sri Lanka: 1961–65

Oil asset expropriation led to U.S. financial sanctions against Sri Lanka (Ceylon at the time). In 1961, the Sri Lanka government alleged that the level of foreign investment did not reflect profits generated by foreign oil companies there (Karunatilake 1971, 270). America purchased 9 percent of Sri Lankan exports; 3 percent of Sri Lanka's imports were purchased from the United States. In 1962, the United States passed the Hickenlooper Amendment, legally restricting aid of any country that expropriated U.S. assets. Sri Lanka lost more economic and military aid due to this legislation. Sri Lanka also found no friends at the International Bank of Reconstruction and Development (IBRD). The IBRD declared that the World Bank would grant no loans to Sri Lanka because of the inadequacy of compensation proposed for nationalized foreign assets (Kodikara 1982, 123). In 1965, the government of Prime Minister Bandaranaike was voted out of office, and the new government quickly agreed to compensate oil companies for their losses. Economic aid, the only sanctioned good, resumed shortly thereafter.

The Sri Lankan economy was based on rubber, coconut, and rice at the time. Sri Lanka experienced 3.9 percent average growth, accompanied by 1.1 percent average inflation during the 1950s. HSE (1990) felt these sanctions were incredibly successful, perceiving the aid lost stimulated governmental change and subsequent compensation for seized assets. With little external debt before 1961, and relative little trade dependence on the United States, the financial sanctions working alone did little to affect the Sri Lankan economy.

The Sudan: 1989–Present

Human rights problems, including mass starvation caused by civil unrest and war, led the United States to look at the Sudan as a place in need of assistance. However, when the Sudan was unable to repay a U.S. loan in 1989, America cut all economic and military aid, except for food. This sanction continued for six months, and the loan was summarily forgiven. The Sudan was not largely dependent on American markets, buying 11 percent of her imports from and selling 3 percent of her exports to the United States. After a military overthrow of a democratically elected government, the civil war ended poorly from the U.S. view and all aid was cut in mid-1989. In 1991, amidst famine and dissolving political situation, the Sudan received humanitarian relief. The allocation of those goods, however, was under a multinational UN force to make sure they were used to feed the hungry.

The 1980s were particularly harsh on the Sudan as a result of civil unrest. Prices rose from 1986 to 1990 by 500 percent, and rose 2500 percent between 1990 and 1993. Fixed investment plummeted after 1989; real GDP was highly volatile between 1984 and 1992. Debt moved up during sanctions to 90 percent of GDP by 1992. The current account moved deep into deficit territory over the sanction years. The Sudan forged agreements with Cuba, Libya, and other international undesirables for military hardware (HSE 1990, v. 2, 634). The United States still provided humanitarian relief, in large quantities, as did the United Kingdom. O'Sullivan (2003), in an expansive case study, suggests that a more positive approach with the Sudan be taken; in 2002, the Sudanese Peace Act in the United States began such a process. "U.S. policy also needs to underscore how positive changes in Khartoum's behavior will result in improvements in its relationship with the United States" (O'Sullivan 2003, 279). The Sudanese economy is agriculturally based. Real GDP grew at an average of 5.75 percent from 1992 to 2000, which was as strong as any Western nation (UN Statistical Yearbook 1997 and 2003). However, prices soared over the 1990s, increasing tenfold between 1990 and 1995.

Syria: 1986–94

In 1980, Syria found herself on a list of countries that the United States believed to directly support and fund international terrorist activities. In 1985, Syria helped the release of hostages from an airplane hijacking. The United States subsequently loosened export controls on Syria and purchased more oil. In 1986, however, Syria was accused of developing chemical weapons. America accounted for only 6 percent of Syrian imports in 1986. The U.S. ban on chemical sales to Syria for weapons production also included limited military hardware sales. After Syria was linked to a group taking responsibility for an attempted airline bombing in 1986, many European countries cut aid; the U.K. cuts were the most severe, also cutting diplomatic ties with Syria. From 1984 to 1989, Syria's real GDP grew an average of 0.4 percent per year.

The 1986 sanctions were eased when Syria spoke out against Iraq's invasion of Kuwait. Syria's diplomatic role in the Gulf War, denouncing Iraq's actions, renewed a positive status with the West and sanctions became less restrictive after 1990. The stance against Syria lightened further when she agreed to the Arab–Israeli peace conference in 1991. However, due to Syria being named as a country funding terrorist groups and a recent reversal to speak out against the West, the United States has imposed full sanctions again. Syria's international relations worsened during the 2006 conflict between Hezbollah and Israel, where Israel blamed Syria and Iran of using Lebanon as a puppet state to fund anti-Israeli activities.

The Syrian economy is based on oil, though cotton and olives are also large agricultural industries. Real GDP grew at a pace of 7.57 percent from 1990 to 1998; between 1999 and 2001, this growth rate was under 0.2 percent per year (UN Statistical Yearbook 1997 and 2003). Prices in Syria, one of the major concerns with comprehensive sanctions, were held stable through the late 1990s after rising about 80 percent from 1990 to 1995 (ibid.).

Taiwan: 1976

U.S. sanctions against Taiwan in 1976 were similar to those against India, Pakistan, and South Korea discussed earlier. The omnipresent issue of nuclear proliferation, especially with the threat of its immediate use against an assumed aggressor by new nuclear powers, has made even a modicum of evidence enough to initiate economic coercion. Based on intelligence reports that Taiwan wanted to develop nuclear weapons, licenses for Taiwan to buy U.S. nuclear reactors were stalled, effectively acting as an export sanction. "Nuclear exports to Taiwan were not cut off, but export licenses were deliberately delayed" (HSE 1990, v. 2, 424). The Taiwanese economy, much like the South Korean economy, was a market economy breaking out of its development shell in the 1970s. Taiwan's trade with the United States increased quickly throughout the decade. Taiwan purchased 22 percent of its imports from the United States and sold America 41 percent of its exports in 1975. These sanctions ended when Taiwan agreed to shut down its reactor program in 1977.

The Gambia: 1994–98

A bloodless coup took place in the Gambia in 1994, putting in a non-democratic government and ousting then president Dawda Jawara. Sanctions were imposed immediately on the Gambia to coerce the new government, under Colonel Yahya Jammeh, to restore democracy. A combination of international economic sanctions and domestic protests impelled Jammeh to announce a two-year schedule for returning the country to "civilian" rule (Saine 2002). Military and financial aid was embargoed until the United States was assured that free elections were restored and human rights protected. After free elections and a clean bill of human rights health, sanctions ended in 1998.

The Gambia has a small, agriculture-based economy. Real GDP grew at an annual pace of 5.68 percent from 1997 to 2001, with prices remaining stable over the same time period (UN Statistical Yearbook 2003). The United States purchased approximately $100,000 in Gambian exports in 1998, exporting $12.9 million in goods and services to the small nation (UN International Trade Yearbook 2001). The credible threat of damage to the Gambia came in the form of aid restrictions. Developmental assistance drop from $40 million in 1997 to $38 million in 1998 to $32 million in 1999; by 2001, aid was back up to $48 million (UN Statistical Yearbook 2003).

Thailand: 1990–93

A military government ruled in Thailand from 1976 to 1988. In August 1988, Chatichai Choonhavan was voted prime minister. In 1990, political killings and some civil unrest raised eyebrows internationally. U.S. aid was restricted, but in trivial amounts. Ultimately, measures against Thailand between 1990 and 1994 were a mix of the 1974 Trade Act's Section 301 sanctions and anti-proliferation measures. Many U.S. firms lobbied for financial sanctions against Thailand, complaining about the Thai government's subsidies to pirating firms. In late 1990, the U.S. Pharmaceutical Manufacturers Association filed a formal trade complaint against pharmaceutical imports from Thailand, and importation was curtailed under Section 301 due to unfair trade practices and patent violations. After both patent and human rights problems seem to settle down during 1993, America reinstated aid. Recently, Thailand has experienced a military overthrow, though no UN resolutions have flowed to initiate sanctions.

Thailand, with real GDP growing from 1988 to 1994 at an average 10 percent per year, with inflation averaging 5 percent, quickly became an Asian financial center, competing directly with Hong Kong until the Asian currency crises of 1997. Thailand was an industrial economy in 1990, with 79.8 percent of her exports in manufacturing, specifically food and textiles. Industrial supplies and machinery dominated Thailand's imports. Thailand was relatively dependent on America for 30 percent of its trade in 1989.

Turkey: 1974–78

A political problem in Cyprus led to economic sanctions against Turkey in 1974. After a Greek takeover, defying a U.S. warning, Turkish troops invaded Cyprus in 1974. Problems began when Turks living on Cyprus lost many of their rights in 1964, as the government revoked any rights Turkish national and descendants had on the island. In 1974, a power struggle took place, and the Greek government attempted to seize control. In the name of protecting their citizens, Turkey moved against Cyprus' government.

Reacting to this invasion, the United States cut military aid. Turkey renounced this sanction, claiming that the military aid and sales were essential elements of the NATO Treaty (Denktash 1982, 78–79). The largest failure of U.S. sanctions against Turkey was not preventing the United Kingdom, Italy, and West Germany from acting as substitutes arms suppliers. Also, the sanction's concentration was on the military, not the economy. The United States told Turkey not to use U.S. weaponry on Cyprus, and to negotiate a settlement. The strain in Turkish–American relations also led the USSR to Turkey's rescue, though military aid never completely ceased between the United States and Turkey. The Turks also found friends in Libya, Saudi

Arabia, and Iraq. Fighting a bloodless war for the next three years, Cyprus' Greek government, for reasons other than this crisis, fell apart. A new, Turk-friendly government took over Cyprus by September 1978. The United States subsequently lifted the arms and aid embargoes.

During the 1960s and early 1970s, Turkey had impressive economic growth. Real GDP grew between 1963 and 1978 at a 6.5 percent average; the numbers are even larger for the time period between 1970 and 1973. Foreign aid, in conjunction with agricultural and industrial policy reforms, fueled the Turkish economy prior to 1973 (Harris 1985, 76). Turkey had rapid government spending and money creation, increasing inflation after 1973. Turkey's balance of payments situation deteriorated so bad as a result of the 1973 oil crisis, as their dependence on foreign oil mounted, the international capital market stopped lending to Turkey (80). America claimed 12 percent of Turkish trade in 1973. Over the sanction period, real growth fell sharply, government spending and debt and prices and unemployment all rose.

Uruguay: 1976–81

Uruguay's military regime was accused of holding political prisoners in deplorable conditions in 1976. The United States reacted by banning arms shipments to Uruguay, followed two years later by economic aid restrictions. During this sanction, domestic price instability led to poor economic growth, furthering a need for economic aid (Rottenberg 1993, 305). In 1980, America sent an aid package to Uruguay, though most international agencies claimed human rights abuses continued afterward. In 1981, U.S. military sales resumed, to the chagrin of many human rights organizations and Uruguay's political moderates.

Uruguay's economy is an agriculture-based economy. America bought 11 percent of Uruguay's exports and provided 8.3 percent of her imports in 1976. Cattle and sheep herding and processing were Uruguay's largest industries. Government spending was rapid over the sanction period. Increased debt service pressured Uruguay exports, which fell after 1980 in real terms (Harris 1985, 80). The United States also provided Uruguay with military and economic aid in small amounts.[15] HSE (1990) felt that Uruguay's human rights situation was not resolved by sanctions, and deemed these embargoes a failure, as evidence provided by Uruguay of better social conditions was unconvincing.

Union of Soviet Socialist Republics (USSR): 1975–83

These U.S. sanctions were Cold War sanctions, reactions to the threat of communism spreading through Soviet funding and trade support of new governments, or rhetorical moves to posture on the world stage. There were numerous episodes identified by HSE (1990), the most of important of which was the grain embargo of 1981.[16] Many of these measures were small in their magnitudes. In 1975, the United States finalized the Trade Act of 1974. In 1972, the USSR imposed a tax on the emigration of educated citizens, which threatened the Most Favored Nation (MFN) status of the USSR being discussed; the MFN label for the USSR was a key issue for the 1974 Trade Act (HSE 1990, v. 2, 386–87). In 1975, U.S. imports to and financial flows with the USSR were restricted due to the delay in MFN status. This continued nominally for years. In 1978, alleged U.S. intelligence activity in the USSR was thwarted, and the spies were put on trial. As a result, the United States restricted technology exports to the Soviet Union. This sanction was also somewhat nominal.

In 1980, U.S. sanctions began to have more substance. The Soviet invasion of Afghanistan initiated worldwide reactions, and U.S. sanctions were an immediate policy reaction. American exports of grain to the USSR were sanctioned in 1980, as diplomacy to remove Soviet troops from Afghanistan fell apart. The decision by President Carter for the United States to not participate in the 1980 summer Olympiad in Moscow can be seen as an import sanction. The grain embargoes are an important case for two reasons. First, the measures are seen as a grand example of why sanctions do not work between major economic and political powers, and may have cost U.S. workers and farmers dearly due to sales reductions. Second, this episode continued American statecraft's use of an economic tool as diplomatic reputation; if a country acts as an aggressor against an otherwise innocent nation, U.S. economic sanctions flow immediately thereafter. "The U.S. decision to implement the grain embargo was framed in terms of the concern for relative gains [the economic and political benefits would exceed their costs] and reputation" (Dreszner 1999, 76).

Sanctions were imposed again in 1981 due to the Soviet support of martial law in Poland. This is another important episode illustrating the immediacy of U.S. economic statecraft due to international human rights violations. These sanctions included travel, grain, and technology exports that lasted only until 1982, as a new trade agreement began new negotiations (HSE 1990, v. 1, 209). A South Korean airliner was shot down in 1983 by the USSR, Korean Air Lines Flight 007, for crossing into Soviet air space and allegedly not reacting to warnings to turn back across the border. It took seven days for the Soviet Union to admit to the downing of Flight 007; U.S. travel sanctions were augmented as a result.

Trade between the Cold War superpowers fluctuated in the early 1970s, but was relatively low as a percentage of the nations' overall trade. The United States purchased a negligible amount of Soviet exports in 1974 and sold the USSR 3 percent of Soviet imports. Soviet statistics on their domestic economy are parsimonious and suspect during this time. Real GDP growth in the USSR from 1970 to 1975 is reported by the United Nations at an average of 5.33 percent per year, where inflation was negligible over the same timeframe (UN Statistical Yearbook 1977).

Zimbabwe: 1983–88

Zimbabwe was no stranger to economic sanctions when the United States cut aid and credit in 1983. Zimbabwe was the white-ruled part of Rhodesia (Southern Rhodesia) between 1965 and 1980; Zimbabwe is adjacent to South Africa. The Rhodesian economy was heavily sanctioned throughout the late 1960s and 1970s by the United Kingdom and United Nations for its repression of blacks and its foreign policies. The right-wing, white government of Ian Smith declared independence unilaterally from the United Kingdom in 1965, and sanctions were swift, comprehensive, and punitive. These sanctions continued through the 1970s; South Africa became Rhodesia's trade station, hoping the lack of success in Rhodesian sanctions would ease sanctions against apartheid (Renwick 1981, 51–52). Petroleum purchases and sales for Rhodesia would have the opposite effect on both countries. In 1976, South Africa ironically imposed its own sanctions on Rhodesia, where sanction continuation was based on a turnover to majority (black) rule of Rhodesia in two years. In 1978, the Rhodesian government planned to hold elections, elections that in 1979 voted in a black prime minister. By April 1979, the old government was gone, and Rhodesia became majority-ruled. A violent power struggle ensued, and the United Kingdom negotiated a cease-fire in December 1979. In 1980, Zimbabwe became independent.

America and Zimbabwe disagreed on some key foreign policy issues in the early 1980s. Zimbabwe disagreed with the U.S. accusation that the Soviet Union deliberately downed a Korean Air jetliner and further believed that the Grenada invasion was unnecessary (HSE

1990, v. 2, 568). Also, there was some civil unrest in Matabeleland, Zimbabwe's western frontier, as President Robert Mugabe alleged South Africa was supplying rebel forces there with weapons and fuel. In 1983, the United States cut aid and credit to Zimbabwe as a reaction to anti-American statements made to the United Nations and world press.

More aid was embargoed in 1984 because America felt that distributing aid would not happen efficiently in Matabeleland. In 1986, after another verbal attack from Zimbabwe, U.S. aid was further cut. In 1988, aid was restored in the hopes that the failing Zimbabwe economy would be stimulated. The United Kingdom disagreed with the U.S. reaction to Zimbabwe's complaints, continuing to provide assistance and trading goods.

Agriculture industries account for over 70 percent of Zimbabwe's labor force in 1985 (UN Statistical Yearbook 1990). From 1981 and 1986, real GDP per capita fell from $484 in 1980 U.S. dollars to $454. Inflation averaged 15.2 percent per year between 1981 and 1986. HSE felt this sanction was a failure as sanctions hurt those who needed food, and did not deter the Zimbabwe government from speaking out on international matters.

Summary

This chapter provides brief case histories to springboard further case-specific analyses. Chapter six investigates these cases empirically in an attempt to see how economic effectiveness compares not only to the measures by HSE (1990) and others, but how it may drive sanctions along the Sanction Effectiveness Continuum. The case studies provided us with a historical picture of the political and economic situation in each of the selected cases.

Notes

Chapter 1 To Sanction or Not to Sanction?

1. See Sharp (2006) and his collaborators for an in-depth investigation of the 2006 events in Palestine.
2. The situation has both worsened and eased since a North Korean underground nuclear test in October 2006.
3. Hufbauer, Schott, and Elliott (1990) put together the most comprehensive summary of sanction cases to date. This study is mentioned in almost every article and book in the literature, and will be often mentioned in this text. The third edition of that study is imminent.
4. Because this text focuses on tracking the economic effects rather than the legality of sanctions or the diplomatic aspects of using embargoes, the differences between tools of statecraft and coercion are seen as negligible. Sanction nomenclature leads to confusion over terms and tedium in reading and writing about these policies. However, this confusion among sanctions, economic coercion, economic statecraft, embargos, and so on is discussed in Drezner (1999), Bonetti (1997a, b), and Drury (2005), e.g., and is a substantive issue in some disciplines.
5. The public choice literature suggests that the target populace is never completely innocent in a target's deviance, as interest groups are made up of target citizens. However, it is a matter of perspective. The target, acting rationally, engages in policy to better itself; the sender reacts for the same reasons.

Chapter 2 Basic Sanction Analysis

1. See Bolks and Al-Sowayel (2000) concerning an empirical assessment of sanction duration.
2. This is case 65–3 in Hufbauer, Schott, and Elliott (1990). There one will find more details than in Galtung (1967).
3. See Gaisford and Sood (1996) for more on trade sanction optimality.
4. See Pugel (2003), chapter nine, for a textbook exposition of barriers to trade versus free trade outcomes. Also see Carbaugh and Wassink (1988).

5. The South African case is the most-often quoted and referenced case in this literature. It is also one of the longest in duration and had three different incarnations seeking multiple goals over time. See Crawford and Klots (1999) and Drury and Chan (2000) for edited volumes on South African sanctions.
6. Hufbauer, Schott, and Elliott's (1990) two-volume treatise on sanctions is said to be updated in 2007.
7. The classic result of a quota is a "deadweight" loss of welfare. If the sender government imposes an import sanction, sender citizens experience higher prices and lower quantities for target goods, and thus lose some of their consumer surplus gained under unrestricted free trade. This loss is more than sender producers' gain from higher sales of domestic substitutes for the target's goods. The result is a net national loss, a reduction in national welfare. In the target's export market, there is a loss of producer surplus greater than the target consumer's gain as a result of lower prices and higher quantities available in their domestic markets.
8. In chapter four, public choice theory provides some more similarities between import sanctions and import quotas.
9. The idea of smart sanctions is expanded upon in chapter four of this text, and is gaining steam in this literature. Arms sanctions, however, like any other sanction, fall under the umbrella of trade sanctions in theory. See Cortright and Lopez (2002) for a broad, edited volume on smart sanctions, specifically arms embargoes.
10. The dichotomy of real versus financial sanctions is a large one in the capital markets. Financial sanctions are capital market sanctions, but affect entitlements directly rather than physical capital directly. This is important because instead of the target losing a rate of return on a physical asset, they lose the ability to financially invest in the sender economy. Also, through the balance of payments, financial sanctions have trade balance effects and vice-versa.
11. The financial sanction is much like credit rationing. If the sender acts as a major target creditor, the sender merely rations credit, much like a bank would to certain markets domestically.
12. The United Nations Charter is on the web: Chapter 7 is located at *http://www.un.org/aboutun/charter/chapter7.htm.*
13. This case is briefly discussed in Appendix 1 under Zimbabwe's case, the current name for Southern Rhodesia. A reviewer suggested that my treatment of Baldwin's text here understates the broad scope of Baldwin's work. It is important to note the timing of Baldwin's (1985) book. The first edition of Hufbauer, Schott, and Elliott (1990) came out the same year, and was subsequently updated. While many authors have cited Baldwin, as I do here, Hufbauer Schott, and Elliott (1985 and 1990) has dominated the literature because of the empirical dimension in each edition. Baldwin's text is seminal beyond doubt, and actually acts as a comprehensive theoretical and literature review to 1985 on sanction topics.

14. This rally-around-the-flag effect of sanctions is discussed in more detail in chapter four, as public choice models have assumed that certain target political systems are impenetrable due to the ruling class' ability to make the sender the bad guy in citizens' eyes. See Baldwin (1985, 183) for more.
15. A. Cooper Drury, one of the foremost political scientists in this field, has written extensively about the HSE study, its power and pitfalls. See Drury (1998, 2005) and Chan and Drury (2000) for multiple angles on the HSE (1990) data, hypotheses, and conclusions.
16. The product of the economic and political scores is also highly debated because it lacks continuity. See Drezner (2003) and Drury (2005) for more. This is an ad hoc measure in any case. If a sanction receives a "nine," this comes from one possible combination of political and economic scores: three and three. If the score is an eight, there are two possible combinations: four for political and two for economic, or vice-versa.
17. Studies complain about the subjectivity of HSE's conclusions, but these data are used to not only refute the HSE claims, but to also enhance other episodes' analyses. Lam (1990) and Drury (2002) are good example of specification changes in an attempt to enhance the robustness of the HSE conclusions.
18. The GNP–GDP debate in this literature has not really begun, and I believe that it is due to HSE's continued use of GNP as the main measure of both the cost of sanctions and the nation's relative size. Some of this use comes from gravity equation theory, where GNP is used to measure relative size and includes all trade. Gravity equations, and their role in this literature, are discussed briefly in chapter six. The literature should update to GDP for future studies and case analysis and break the foreign flows away from the other economic measures.
19. See Galtung (1967) for the beginning of this idea.
20. See Drury (2005), chapter nine, for conclusions on this, and Martin (1992) for counterpoint to Galtung (1967).
21. This statistical procedure is utilized in chapter six of this study. All these conclusions flow from Drury (1998) and are basically repeated in Drury (2005), which is in many ways a follow-up and expansion of the 1998 study.
22. In HSE (1990), the nine policy recommendations are stated in volume 1 on page 94.

Chapter 3 Sanction Initiation and Continuance: Enter Game Theory

1. McCain (2004) is an amazing introductory text on game theory and serves as general background for this primer. Osbourne (2004) is a more technical but still approachable text, as is Watson (2003).

2. See Drezner (1999), chapter two, for a simple model and background on political game theory. Drezner (2003, 646) also provides a simple example in the sanction context.
3. See Drury (2005), chapter three, for a recent use of such a variable empirically as an update to HSE (1990) and its use of the prior relationship.
4. The public choice framework in chapter four extends this basic idea.
5. The Sanction Effectiveness Continuum provides the insight that sanction decisions have multiple stages and payoffs, which stretch across economic, humanitarian, and political efficacy.
6. See Eaton and Engers (1992) concerning the target's toughness, and Eaton and Engers (1999) concerning the sender's resolve. These are expanded upon later.
7. See McCain (2004), chapter twelve, concerning commitment. The commitment game lies between the competitive and cooperative games because its outcome hinges on the commitment's credibility.
8. See Lisa Martin (1992, 1993). Her work is the game theory pillar in this literature. Her studies are aimed at identifying cooperative games played between the sender and other countries deciding to join the sender or assist the target. Much of her work is on strong versus weak leadership, discussed in more detail later.
9. See Drezner (1999, 38), chapter two, note 22, for another definition of Nash Equilibrium.
10. Steil and Litan (2006) discuss a real-world analog of this example in chapter six of their text. The real-world example concerns PetroChina and the Sudanese government seeking funding for oil exploration and production in 1999 through an initial public offering in the U.S. equity markets.
11. See Bonetti (1997b) for a discussion of game theory and other models in the context of sanctions, leading up to public choice models, in an outstanding survey article.
12. See Kaempfer and Mertens (2004) for more on dictator sanctions and theoretical issues specific to these cases.
13. Pape (1997) and Drezner (2003) are both excellent investigations as to the credibility and power of threats versus their omission in the HSE (1990) data and from the literature otherwise.
14. The Israeli blockade of Lebanon in July and August 2006 may be clairvoyant of future sanctions. The naval blockade took place parallel to a military invasion of southern Lebanon. As a result, Lebanon pleaded with the United Nations to order a cessation of military activity and an immediate lift of the blockade. The effects on the Lebanese economy, coupled with the military action, had a devastating trajectory.
15. See Jack (1940) and Pigou (1941) for more on economic warfare, Pape (1996) for the use of strategic bombing as a means of coercion, and Pape (2005) for a role reversal concerning terrorist suicides acting as coercive measures.

16. HSE (1990) include some sanctions with military conflict alongside of sanctions. The bias in these episodes toward the military victor makes statistical analyses imprudent. These sanctions are eliminated from the set of those analyzed in chapter six for this reason. See Pape (1997) for a breakdown of these cases from the HSE (1990) data.
17. Thailand recently experienced a bloodless coup of its democratic system in favor of military rule with allegiance to a monarchy. It is likely that the September 2006 coup will become yet another sanction case.
18. This is typical of the bargaining literature; Rubinstein (1982) is a seminal work.
19. The existence of subgame equilibria (given perfect knowledge, the player will choose a Nash Equilibrium when making a decision) is guaranteed under a finite and perfect information game. Information is assumed both symmetric and perfect; future models are likely to expand on the theme of information asymmetry.
20. The Iraqi sanctions of 1990–2003 when the United States invaded Iraq are now a famous case study. See Askari et al. (2003, 48) for a brief history, as well as Appendix 1 in this text. Also see Cortright and Lopez (2000), chapter three.
21. Cartels are illegal in the United States, when prosecuted and proven to be so in a court of law, on either side. However, implicit cartels exist within the United States and explicit cartels exist internationally. Regardless, the lessons to be learned from price theory are enlightening.
22. Also from microeconomics, the Bertrand model is the Cournot model application where price instead of quantity is controlled. However, they have the same outcome if competition is allowed. The Cournot model suggests that the quantity at which profit maximization takes place, and indirectly price, is where the firms in the oligopoly choose a cooperative strategy rather than take market share via expansion of supply; the Bertrand model focuses on price, indirectly affecting quantity. See Varian (2002) for an accessible version of each of these models in the context of microeconomic theory.
23. See Haass (1998) for a strong argument against the proliferation of sanction use in terms of the United States using sanctions as default diplomacy.
24. Individual countries have brought international cartels to trial and punished them for their price-fixing activities in domestic courts, but international enforcement is a major issue. See Connor (2004) for recent legal actions and successes against international cartels.
25. Looking at the target's openness, exports and imports summed as a percentage of Gross Domestic Product (GDP) may provide insight here.
26. The following website has the basic details and background on this Act, where some updating is needed, given recent relaxation of

sanctions against Libya. See *http://www.fas.org/irp/congress/1996_cr/h960618b.htm* for the Congressional record.

27. The "carrot–stick" approach of economic statecraft is discussed extensively in Drezner (1999).
28. Martin (1993) extends her 1992 study, but the conclusions are very similar. There is a larger discussion of audience costs and sender credibility in the 1993 study.
29. This makes the question of sanction duration large, as time not only naturally erodes sanction effects due to diminishing returns (if sanction effectiveness is a function of time) but also provides more opportunities for cheating and new markets to emerge, reducing the present value of economic statecraft's benefits in both the numerator (net benefits) and the denominator (the present value discount factor). More studies on sanction duration are needed in this literature.
30. Pape (1997) argues strongly that sanctions may have no future beyond this economic damage.
31. These countries are simply the longest episodes currently in place. Iraq, Iran, Libya, and South Africa are all veterans of long-term sanctions.
32. Recently, the United States softened its stance against Libya in response to her supposed disassociation with al-Qaeda and her leader expounding the tenets of "liberal internationalism." See Hurd (2005) for more.
33. See Pape (1997, 99–100), tables 1 and 2, for a breakdown of the HSE (1990) cases, where "Political Destabilization" is analogous to such a goal.
34. See Lam (1990), Drury in multiple studies (1998, 2005), Drezner (2003), and Sobel (1998). There is some debate that the previous trade relations between sender and target have little to do with sanction effectiveness, where Lam and Drury have explicitly included the trade flows as independent variables in a regression.
35. See Dunning (2005) for a recent paper on this connection.
36. See the brief history of Haitian sanctions in Appendix 1 and in Askari et al. (2004) and HSE (1990), case 87–1.
37. Hazard functions have been used to test for a sanction's optimal duration. See Bonetti (1994) for a technical analysis of sanction duration.

Chapter 4 Public Choice Theory and Smart Sanctions

1. See Pape (1997) for one of the most critical works on whether sanctions are a good policy choice at all, and Craven (2002) for the use of smart sanctions.
2. Craven (2002) discusses the flaws of smart sanctions at length. This study is informative on the aspects of international law, but is not

preachy about the need for all sanction regimes to turn and focus strictly on humanitarian factors and effects.

3. See Buchanan and Tullock (1962) for what is considered the seminal work in public choice theory, as well Tullock (1987) for a brief history and summary. Becker (1983) is seen as the father of modern public choice, and is the springboard for most of Kaempfer and Lowenberg's works.
4. William Kaempfer and Anton Lowenberg are leaders in the sanction literature and have applied public choice theory in many studies. Their 1992 text on economic sanctions is not only a treatise on public choice theory generally, but on political economy in statecraft as well.
5. See Bonetti (1997b) for a review of Kaempfer and Lowenberg (1992) and others. Bonetti is critical in this survey about public choice theory and its inability to easily test its hypotheses empirically (340).
6. Kaempfer and Mertens (2004) examine sanction imposition against a dictator, which has many real-world applications.
7. The trade linkage signifies the percentage of the target's total trade with the sender before the sanction is imposed. This is more or less a measure of openness with the sender. Bonetti (1997a) empirically investigates the HSE (1990) data using openness as the focal independent variable. Chapter six's empirical investigations of sanction effectiveness will discuss the use of openness and trade linkages as explanatory variables in more detail.
8. See Kaempfer and Mertens (2004).
9. Drury (2005) is one of the best texts in this literature in its breadth on political economy and empirical analyses. His models are the foundation of the humanitarian and political models in chapter six. See Drury (2005), especially chapters four, five, and six, for his examination of U.S. presidential sanctions.
10. An example of this is the current sanction package on Iran as a result of its funding terrorist organizations such as Hezbollah. However, this policy package is one of many the United States currently has in play concerning international terrorists. The point is that governments such as those in Iran and Syria choose to pursue policies that are guaranteed an economic statecraft reaction from the United States in the least, and possibly the United Nations as well. A target may continue a deviant policy simply because the economic and political pressure specific to certain groups in these countries is not strong or focused enough to act as a credible threat. Thus, the target government continues and the sender's policies become more like rhetoric, but damage the populace.
11. This analysis is slightly different than the classic public choice model of economic statecraft. Refer to Kaempfer and Lowenberg (1992) for a full exposition.
12. USA Engage has more than that number listed on their website, *www.usaengage.org*, and remains fairly current on any new episodes.

13. This recent work is an outstanding study of public choice theory, along with microeconomics applied to sanctions, but (like many other public choice papers on sanctions) circumvents empirical work.
14. A reviewer suggested these sanctions are not focal, but in fact aimed to dismantle apartheid directly while minimizing the damage to South Africa's black citizens. This is a root problem with many studies on South Africa. Starting with Porter (1979) on through Major and McCann (2005), the belief that South African consumers and businesses were irreplaceable because of either the diamond industry or financial investments in the Kruggerand is hyperbole. South African sanctions finally worked because there was a general consensus in the United Nations that institutions such as apartheid were detrimental to worldwide movements toward economic amnesty and democracy for all. Regardless of the study or model, a true international consensus was needed for South African sanctions to become effective, and part of that effectiveness was over a decade of economic stagnation, which hurt the poor that the sanctions were attempting to help more than the elite they were seeking to depose. This is the classic sanction paradox when dealing with human rights.
15. Of course, there was a lack of conclusive evidence concerning the stockpiling of such weapons by the Iraqi government as alluded to on many occasions by President George W. Bush as the cause for Iraq's invasion. Iraq's constant and protracted problems with facilitating UN inspectors did not help their cause.
16. In 1996, the United States passed legislation allowing firms within its borders and without to be economically punished as a result of not complying with sanctions. The Iran–Libya Sanctions Act of 1996 prohibited investment from flowing to Iran and Libya from U.S. firms, and also set the conditions under which firms in other countries could also be sanctioned for their financial involvement in these countries. Libya was dropped in this act's renewal on April 23, 2004, as it finally conformed to the conditions of UN sanctions after the downing of Pan Am Flight 103.
17. See the OFAC website for more details on this agency inside the U.S. Treasury Department: *www.treas.gov/offices/enforcement/ofac*.
18. The black knight idea was first applied in Galtung (1967) implicitly as a sanction buster; HSE (1990) used it as the name for the former Soviet Union and its satellite nations when helping a communist country or government during U.S. sanctions against new governments and rebellious forces in Central America and elsewhere during the 1970s and 1980s. In many empirical studies, the existence of a black knight is a control variable, as discussed in chapter six.
19. The carrot–stick approach also applies here, as it does when examining smart sanctions. See Drezner (1999) for more on this approach, its pitfalls and possibilities.

20. See the Stockholm Process' website, *http://www.smartsanctions.se/* under the link "UN Sanctions." There are regular updates at this site. Bondi (2002) also lists recent arms embargoes (111).
21. See Naylor (1999), chapter sixteen, for an interesting and disturbing history of the relationship between Iran and U.S. arms manufacturers leading up to the Iran-Contra Affair.
22. See Goldstein and Turner (2004) for more. This text is regarded as the best on currency crises. See Stein and Litan (2006) for a detailed overview of the conclusions and their perceived pitfalls of this text.

Chapter 5 Open Economy Macroeconomics and Sanctions

1. The NOEM model appears in many forms and forums as the initial study. The textbook version in Obstfeld and Rogoff's model (1996) is somewhat accessible; Mark (2001) is more accessible.
2. The IS-LM model and its components can be found in a low-tech form in many intermediate macroeconomics texts. See Blanchard (2002), chapter six, as a good intermediate example, whereas Romer (2005), chapter five, has a more advanced explanation.
3. In certain cases, I will refer to equations in chapter five A. However, for the non-economist, the layout of this chapter is meant to mix intuition directly with the mathematics to focus on the conclusions for purposes of policy making.
4. Since 1990, the United States has engaged in many financial sanctions. Asset seizures are default sanctions for the United States through the Office of Foreign Asset Control (OFAC).
5. Throughout the analysis here, it is important that the non-sanction world collapse to the baseline model for reasons of consistency.
6. The public choice theorist may argue that the income of special interest groups may outweigh the deadweight losses of sanctions. Following Bonetti (1997b) and his arguments, the public choice framework is intuitively sound, its lack of an empirical model makes it difficult to leap from macroeconomic theory where sources and uses of income are explicit or just do not exist.
7. For more on Lerner symmetry, see Bhagwati (1999), chapter twelve.
8. It may be more aesthetically pleasing to sanction scholars to have the target as the domestic economy, especially since the focus of almost every model to date is on the target's dynamics. However, this model begins with policy initiation, and thus with the sender.
9. Recent advances in the NOEM change this assumption to allow differentiation between the countries and their view of import substitution for the domestic good. See Bergin (2003) for more.
10. The distinction between nominal bonds denominated in the sender's currency and *real* bonds denominated in local goods is a big one.

However, in the case of sanction analysis, it seems more appropriate to use nominal bonds, as the sender sanctions income and the market for new loanable funds. The effects on the model are trivial given other simplifications made here. See Mark (2001), chapter nine, for more on this distinction in NOEM models.

11. Since 1990, the United States has engaged in many financial sanctions. Asset seizures are default sanctions for the United States through the Office of Foreign Asset Control (OFAC).
12. There are recent studies in the NOEM literature that include capital costs. See Kollmann (2001).
13. The logarithmic utility function is a special case of the class of utility functions called "Constant Relative Risk Aversion" or CRRA, where $C = C1 - \gamma/(1 - \gamma)$, and the logarithmic case is when $\gamma = 1$. Many other studies have generalized and allowed γ to vary from 1. See Blanchard and Fischer (1989, 43–44) for a great overview.
14. Seminal models include Cagan (1956) and others. The money demand function here is a "Cagan-style" model, similar to the CRRA models of consumption.
15. This comparison of utility is important for thinking about sanctions in the context of public choice models from chapter four.
16. We should expect that, much like other "labor supply" conditions, the individual will only work a maximum number of hours, regardless of those conditions. The labor supply curve will bend backward at some number of hours. We will assume that in the log-linear form given later, the backward bend is not a concern.
17. The terms of trade and their effects on the economy when changing are generally the centerpiece in arguing against trade barriers. See Pugel (2003) for an accessible approach to this issue. Equations 5A.70 and 5A.71 derive the terms of trade.
18. See HSE (1990) for more data and details.

Chapter 5A Mathematical Derivations of NOEM Sanctions Model

1. Chapter six uses exchange rate data to estimate the sanction shock econometrically. In that estimation, the target is the focus, as the exchange rate shock is used to observe human and political changes from economic coercion.
2. While it is more intuitive to think of the exchange rate in terms of the sender currency, since most of the NOEM studies and model versions followed for this text use an exchange rate in terms of the foreign country, sender currency per target here, the same convention is used. In chapter six, this definition is reversed because it is more intuitive.

3. It is likely a version is imminent. See Cavallo and Ghironi (2002) for a version of the NOEM model with productivity shocks, alluding to a need for capital accumulation to be added in future research.
4. By choosing bond holdings, the household is really choosing how it intends to trade off current consumption for future consumption once the levels of work effort and money demand are determined. Once bond holdings are decided, they imply an optimal consumption level, derived in equation 5A.16.
5. This assumption is later relaxed, as in other pricing-to-market models. See Mark (2001), chapter nine, for more details.
6. I used MathCad based on Maple™ technology to solve for these systems instead of doing the algebra by hand.
7. The amount of money held by the household is a clearinghouse for non-interest bearing asset demand after consumption and work effort are determined. This allows a focus on the real versus nominal variables in this analysis. See Obstfeld and Rogoff (1996), chapter ten, for more.

Chapter 6 Empirical Analyses of Sanction Effectiveness

1. See Kim and Pagan (1995) for basic calibration techniques, especially for those followed in Eyler (1998).
2. Eyler (1998) was based on the target economy and did not provide any estimates of effects on senders.
3. See Rose and Speigel (2004) for a recent addition to the literature. While their model concentrates more on the reaction of lending economies to sovereign default, the use of gravity models is well showcased in their work.
4. A simple sanction model using gravity equations is shown here, for countries i and j and taking natural logarithms: $\ln(\text{Trade}_{ij}) = \alpha + \beta_1 \cdot \ln(\text{GDP}_i \times \text{GDP}_j) + \beta_2 \cdot \ln(\text{distance}_{ij}) + \beta_3 \cdot \text{Sanction}_{ij}$, where β_1 is expected to be positive and both β_2 and β_3 are expected to be negative. Financial flows and the effects of smart sanctions or other financial curtailments can be tested in similar ways. Askari et al. (2004, 123–90) provides an expansive look at gravity modeling and sanction efficacy.
5. Rose and Speigel suggest that common borders are not a determining factor in the level of international financial flows between adjacent nations (2004, 55).
6. Using the exchange rate as the initial signal of sanction effects, as both this text and Sobel (1998) do, brings with it some possible empirical issues. First, the exchange rate must be floating at the time of the sanction to provide the necessary independent variation to make an econometric exercise worth doing. Second, we assume that the U.S. exchange rate with the target is simply a reflection of sanctions. If the

United States is sanctioning a country, and therefore by choice changing specific balance of payments with the target, there may be exchange rate effects. Sobel (1998) does not attempt any impulse response estimations for the U.S. economy.

7. Sobel (1998) acknowledges the importance of this distinction, and suggests that whether the sanction causes permanent or temporary shocks to the exchange rate is important in assessing the effectiveness of sanctions. As a larger connection to our discussions in chapter four, Sobel claims that the lack of permanent effects on the exchange rate suggests that the United Nations was driven more by special interest groups, a la public choice theory, to ramp up sanctions against South Africa rather than trying to impose sanctions for human rights violations.
8. In an autoregressive model with p lags, the lagged dependent variable represents feedback, or how much the past explains the dependent variable's contemporaneous outcomes. See Dickey and Fuller (1979) for the original unit root test methodology and Hamilton (1994, 501) for an advanced but general discussion.
9. See Sims (1980). His idea was simple. Is there a way to forecast how a monetary shock, which may or may not be anticipated, affects certain macroeconomic variables? Using the past of each policy variable as the exogenous variables, multiple equations are used to connect a change in each variable to contemporaneous values. In the Sims model, the natural logarithm of the money supply and real GDP in the U.S. economy was used to show how a percentage change in money supply may affect real GDP growth. Sims also hypothesized a feedback loop, where real GDP growth may influence monetary policy. Engel and Granger (1987) is seen as the seminal article on cointegration and uses linear combinations of variables with similar time series properties to defeat potential unit root problems. Also see Studenmund (2003), chapter twelve, for a less technically intensive explanation.
10. Drezner (2003) and Drury (2005) discuss the problems in the success score used by HSE (1990). However, it is important to note that the economic and political success scores, respectively, suffer from subjectivity problems, but no one can blame HSE for making logical claims with an ordinal variable.
11. Bergin (2003) provides the latest work in econometrically testing the claims of the general NOEM framework. However, because of the VAR model's flexibility, it is possible to envision other models using the BOP directly, through the current and capital accounts. The terms of trade, as discussed at the end of chapter five, is also an important component of exchange-rate pass through measurement in NOEM models. Examining Gross Domestic Product (GDP) in per capita terms or in growth rates also may be illustrative of economic damage caused by sanctions. What any variation on this theme must do is link economic shocks to humanitarian and political effects from economic

statecraft. Using the exchange rate, as shown in previous chapters and suggested by Sobel (1998, 6), encompasses a large amount of macroeconomic information.

12. The impulse response idea takes previous information into account naturally through the autoregressive process.
13. This is done by visualizing the autoregressive portion of the VAR as a relationship simply between the current values of the exchange rate and its lags. The estimated coefficients in this regression provide a weighting structure from each successive lag. For example, suppose Γ is the matrix of coefficient estimates from the autoregression. The weights are multiplied by the VAR coefficients to provide a moving average. In period one, the weight is full. In period two, the weight is distributed between the period one and period two coefficients. Since the autoregression is simply an error process, this error process is now weighted to distribute the amount of lagged period weights as a moving average.
14. Mark (2001), chapter two, provides a great background on the transition from a VAR to an impulse response function. Greene (2003) provides a statistical theory breakdown that is somewhat less intuitive than Mark's summary.
15. IASC 2004 discusses causal models at length. There are few, robust causal models in economics, as most relationships are correlative rather than causal due to endogenity problems that cannot be easily resolved. This Handbook should be viewed as an empirical foundation of the smart sanction literature to come. See *http://www.humanitarianinfo.org/sanctions/handbook/docs_handbook/iascsanchb.pdf* for the handbook.
16. See Garfield (2000) for another source beyond the IASC study concerned with measuring the sociopolitical and socioeconomic impacts of sanctions. Much of the IASC study is drawn from Garfield's work.
17. Jorge Luis Borges, the famous Argentine poet and author, gave this quote as his assessment of the Falkland Islands war and subsequent embargoes of 1982 between the United Kingdom and Argentina. I cannot take credit for that beautiful description.
18. The economic conditions are changed by the sanction shock. In IASC 2004, they recommend only one data set, "Proportion of households with access to secure tenure" (55), which was not available in the latest version of the *World Development Indicators* (2006) data.
19. See IASC 2004 (55) for more, from which these labels are drawn directly. The data on the governance and education indicators, as shown in table 6.3, were few and far between. The final indicator is really the sum of the assessed changes in the first four indicators.
20. The *World Development Indicators* (2006) data did not list Taiwan separately from mainland China or at all. Since these sanctions last only one year, it seems unlikely there would be much change in social conditions unless anomalous. In this way, short-term sanctions can be

seen as "effective" in maintaining human conditions. The only case that has all missing data is Taiwan, which has a final result of zero.

21. The logit and probit models of discrete choice analysis are predicated upon the same basic idea: defeat the pitfalls of the linear probability model predicting values outside the bounds of probability space. The small differences are concerned with the assumption that the error term is normally distributed (probit) versus logistically distributed (logit). In each regression, the data have been adjusted to eliminate heteroskedasticity, or potential non-constancy of the error term's variance, which leads to inconsistent estimators. See Studenmund (2003), chapter nine, for an accessible explanation of heteroskedasticity. See Greene (2003), chapter sixteen, for more advanced details or Studenmund (2003), chapter thirteen, for an accessible approach for the non-statistician on probit and logit models of ordered choice.
22. IASC 2004 makes some strange choices concerning defining causality. See Studenmund (2003) for a simple causality explanation linked to VAR analysis.
23. In ordered probit models such as this, the global statistic of choice is the likelihood ratio, which is the family of statistics concerned with "goodness-of-fit" in regression. The F-statistic and R2 summarize the global properties of linear regression, analysis-of-variance (ANOVA) results. When we leave linear models behind, as in the ordered probit, classic ANOVA no longer is summarized by the F-stat and R2, and is replaced by likelihood ratio (LR) statistic. For more on these issues, see Kennedy (2004).
24. Others, such as Drury (2005), Martin (1992, 1993), and Drezner (1999, 2003), use either the same dependent variable or an ordinal (multinomial) measure instead. The major difference is a probability prediction of a specific level of effectiveness among ordinal values, rather than a binary prediction of either success or failure. Lam (1990) suggest that HSE (1990) has selection bias within the success variable as well as arbitrariness. However, the HSE (1990) data is still as good a data set as this literature is likely to ever see concerning sanction episodes to 1990.
25. These results are free of heteroskedasticity. Specification tests provided evidence to use the probit initially and the logit for the cumulative model using the AIC.

Chapter 7 Conclusions and Policy Recommendations

1. Fidel Castro has been out of the public eye in 2006 due to an illness. Many speculated that his condition was worse than the Cuban government was willing to divulge and has reportedly worsened. This began a flurry of reports about sanction's end with his death and "new" government, likely run by Fidel's brother, Raul.

Appendix 1 Brief Cases Histories of Selected Sanction Episodes

1. Some cases stated here have not been written yet by HSE, though their third edition is to be released in 2007. I have tried, using their previous methodology and tendencies, to forecast what they would conclude about each case they have yet to publish. Many thanks go to them in readily supplying newly identified cases before they were published at the Institute for International Economics (IIE) website in the past: *www.iie.com*.
2. This is HSE (1990) case 50–1, a case that has been downplayed in the literature for the most part, but is likely to get a lot more attention in the years to come.
3. The United States was politically opposed to military rule in Brazil; unfortunately, that is exactly what America received after Goulart was overthrown.
4. The Hickenlooper Amendment effectively made sanctions mandatory for any country that attempted to expropriate American assets.
5. See *http://www.treas.gov/offices/enforcement/ofac/programs/cuba/cuba.shtml* for the latest statement of U.S. restrictions on trade, financial and travel restrictions with Cuba. Recent events in Cuba may lead to the end of sanctions, as Fidel's health is reportedly waning. Until a plebiscite takes place in Cuba, regardless of her leader, the sanctions are likely to stay put.
6. In many sanction cases involving human rights abuses, the United States and United Nations imposed sanctions due to pressure from international lobby groups, such as Amnesty International. When these groups brought reports of changes in human rights, the United States and United Nations historically reacted by ending or reducing sanctions.
7. The Haitian sanctions were UN devised and pursued, with America as the key sender economy. This is a recurring theme in cases involving the United Nations.
8. These numbers are comparable to the U.S. growth and inflation numbers of the mid-1990s.
9. Meghan O'Sullivan (2003) assembled exhaustive case studies on Iran, Iraq, Libya, and the Sudan. Her analyses are among the best to date.
10. HSE (1990) claim that the movements in the oil price at the end of the 1970s helped Libya over the initial problems, and Libya's economy is directly related to oil price movements. The United States abstained from the 2004 UN vote on lifting these measures.
11. HSE (1990) cites a similar sanction case in Poland in 1981. Martial law seemed to be the only reason for the sanction's imposition.
12. Military problems and nuclear threats have continued between Pakistan and India since the mid-1970s, and look nowhere near resolution as of 2006.

13. This is, however, an atypical case. HSE gave the sanctions an overall score of four, which derived from a political result of four (Noriega's regime crumbling) and an economic success score of one (economically, the sanctions contributed very little). See HSE (1990, v. 2, 249–67) for details.
14. South Africa is the focus of many public choice studies on sanctions. See Kaempfer and Lowenberg (1986) for the first explicit study linking South African sanctions and interest groups within South Africa and the United States.
15. This amount of aid was 1/1000 of GDP in military aid in 1975 according to HSE (1990).
16. For an expansive case study of the U.S. grain embargo, see Lundborg (1987).

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