

5. Embargoed Countries and Entities (Section 746)

Export Control Program Description and Licensing Policy

The United States maintains comprehensive economic embargoes against Cuba, Iran, Iraq, Libya, North Korea and Sudan. (These are six of the seven countries designated by the Secretary of State as state sponsors of international terrorism.) The President imposed the embargo on Sudan in an Executive Order effective on November 4, 1997. The United States also maintains arms embargoes on Liberia, Rwanda, Somalia and UNITA (in Angola), as well as an embargo on petroleum products to UNITA. The United States will implement a United Nations-mandated embargo on arms and petroleum items to Sierra Leone in early 1998.

The Department of Commerce and the Department of the Treasury jointly administer the trade embargoes against Cuba and North Korea, under the Trading With the Enemy Act of 1917, the Cuban Democracy Act of 1992, the Export Administration Act, and other statutes that will be discussed in this chapter. The Department of Commerce licenses U.S. exports and reexports to both countries; Treasury grants general and/or specific licenses for travel by U.S. persons to Cuba and North Korea, and financial transactions by U.S. persons with those countries.

Treasury's Office of Foreign Assets Control (OFAC) administers the embargoes against Iran, Iraq, Libya, Sudan and UNITA under the International Emergency Economic Powers Act (IEEPA) and, in some cases, the United Nations Participation Act. The President has directed the Department of the Treasury to promulgate implementing regulations to administer the embargo on Sudan. This report does not discuss the provisions of the embargoes against Iran, Iraq, Libya, Sudan and UNITA. Commerce maintains comprehensive export and reexport controls against Libya and exercises licensing responsibility for reexports to Libya. Chapter 6 of this report discusses controls on Libya.

The United States maintains an embargo, administered by the Department of Commerce (Bureau of Export Administration) and the Department of State (Office of Defense Trade Controls) under the United Nations Participation Act and other authorities, on the sale or supply to Rwanda by United States persons or from the United States (including the use of U.S.-registered vessels or aircraft) of arms and related materiel of all types, including weapons and ammunition, military vehicles and equipment, paramilitary police equipment, and spare parts for the aforementioned, regardless of origin. (See 15 CFR 746.8 and 22 CFR 126.1(c).)

The United Nations Security Council imposed an arms embargo on Rwanda on May 17, 1994. In 1995, the Security Council suspended the application of the embargo to the Government of Rwanda through specified points of entry and later terminated, effective September 1, 1996, the application of restrictions on sales or supplies to the Government of Rwanda. The sale or supply of such arms and related materiel to non-governmental forces for use in Rwanda remains prohibited.

In 1992 the United Nations imposed an embargo “on all deliveries of weapons and military equipment to Liberia.” The Department of State implements this embargo under the authority of the Arms Export Control Act. (See Department of State regulations, 22 CFR 126.1(c).) In 1992 the United Nations Security Council imposed an embargo on all deliveries of weapons and military equipment to Somalia. The Department of State implements this embargo under the Arms Export Control Act. (See Department of State regulations, 22 CFR 126.1(c).) These arms embargoes are not further discussed in this report.

On March 3, 1997, Commerce published a rule in the *Federal Register* that implements changes in U.S. export control policy toward Cuba, which President Clinton announced in October 1995. The “Support for the Cuban People” section of the Cuban Democracy Act of 1992 (CDA) serves as the basis for these changes, which are consistent with the Cuban Liberty and Democratic Solidarity (Libertad) Act of 1996, also known as the Helms-Burton Act. This rule amends licensing policy to allow the approval, on a case-by-case basis, of certain exports to human rights organizations, news bureaus, and individuals and non-governmental organizations engaged in activities that promote democracy in Cuba. However, the ban on all U.S. direct flights to Cuba (which President Clinton announced in February 1996) continues to apply. The United States considers exceptions to the ban on a case-by-case basis.

The Bureau of Export Administration (BXA) and other agencies formed an interagency group to consider export requests made in conjunction with the awaited visit to Cuba of Pope John Paul II in January of 1998. Such license requests were considered on a case-by-case basis, consistent with existing regulations and the humanitarian needs of the Cuban people. Exceptions to the Presidential ban on direct flights from the United States to Cuba were also considered on a case-by-case basis if in conjunction with the Pope's visit.

The Libertad Act (also known as the “Helms-Burton Act”) was signed by the President in March 1996, after Cuba shot down two U.S. civilian aircraft in February 1996. The Act codifies the embargo against Cuba, including the Export Administration Regulations that provide for the denial of most exports to Cuba. The Act does not prohibit Commerce licensing of humanitarian aid--including medicines and medical supplies--to Cuba as authorized under the CDA.

The following paragraphs outline the licensing policies for Cuba and North Korea:

A. The Department of Commerce requires a license for the export to Cuba and North Korea of virtually all commodities, technology and software, except:

- 1) technology generally available to the public and informational materials;
- 2) some types of personal baggage, crew baggage, vessels and certain aircraft on temporary sojourn, ship stores (except as prohibited by the CDA to Cuba) and plane stores under certain circumstances;
- 3) certain foreign-origin items in transit through the United States;
- 4) shipments for U.S. Government personnel and agencies;

- 5) gift parcels not exceeding \$400 for North Korea of commodities such as food, clothing (non-military), medicines, and other items normally given as gifts by an individual; and
- 6) gift parcels not exceeding \$200 for Cuba limited to food, clothing (non-military), vitamins, seeds, medicines, medical supplies and devices, hospital supplies and equipment, equipment for the handicapped, personal hygiene items, veterinary medicines and supplies, fishing equipment and supplies, soap-making equipment, certain radio equipment, and batteries for such equipment. There are no frequency or dollar value limits on food contained in gift parcels to Cuba.

(NOTE: OFAC licenses cash donations from U.S. citizens for humanitarian assistance, channeled through UN agencies, the International Federation of the Red Cross (IFRC) and U.S. non-governmental organizations; and humanitarian related commodities sourced in third countries and donated to North Korea through the above organizations.)

B. Commerce will generally deny export license applications for exports to Cuba and North Korea; however, Commerce will consider applications for the following on a case-by-case basis:

- 1) non-commercial and commercial exports to meet basic human needs;
- 2) exports to Cuba from foreign countries of non-strategic foreign-made products containing 20 percent or less United States-origin parts, components or materials, provided the exporter is not a United States-owned or controlled subsidiary in a third country;
- 3) exports to Cuba of telecommunications equipment, to the extent permitted as part of a telecommunications project approved by the Federal Communications Commission, necessary to deliver a signal to an international telecommunications gateway in Cuba;
- 4) exports to support projects under the U.S.-North Korea Agreed Framework of 1994 (including Korean Energy Development Organization initiatives).

C. Commerce will review applications for exports of donated and commercially-supplied medicine or medical items to Cuba on a case-by-case basis. The United States will not restrict exports of these items, except in the following cases:

- 1) to the extent Section 5(m) of the Export Administration Act of 1979 or Section 203(b)(2) of the IEEPA would permit such restrictions;
- 2) in a case in which there is a reasonable likelihood that the item to be exported will be used for purposes of torture or other human rights abuses;
- 3) in a case in which there is a reasonable likelihood that the item to be exported will be reexported; or
- 4) in a case in which the item to be exported could be used in the production of any biotechnological product; and
- 5) in a case where the U.S. Government determines that it would be unable to verify, by on-site inspection and other appropriate means, that the item to be exported will

be used for the purpose for which it was intended and only for the use and benefit of the Cuban people. This exception does not apply to donations of medicine for humanitarian purposes to a nongovernmental organization in Cuba.

The following paragraphs outline the licensing policy for Rwanda:

A. The United States requires a license for foreign policy purposes for export to non-governmental forces for use in Rwanda of all arms and related materiel of all types, regardless of origin, including weapons and ammunition, military vehicles and equipment, paramilitary police equipment, and spare parts for these items. This requirement applies to export by any person from U.S. territory or by any U.S. person in any foreign country or other location to Rwanda. The United States also requires a license for the use of any U.S. aircraft or vessel to supply or transport any such items to non-governmental forces for use in Rwanda.

B. Commerce will generally deny applications for export or reexport to Rwanda of crime control and detection commodities.

1. Commerce will generally deny applications for export or reexport to Rwanda of any item with an Export Control Classification Number (ECCN) ending in "18."¹

2. Commerce will generally deny the export of other listed items.²

Analysis of Control as Required by Section 6(f) of The Act

The United States has administered the embargoes on exports to Cuba and North Korea under the Act and other statutes, in a manner consistent with Treasury sanctions adopted under the Trading with the Enemy Act, as amended. The latter authority continues in effect by virtue of Sections 101(b) and (c), and 207, of Public Law 95-223, which the President has extended annually, pursuant to national interest determinations.

A. The Purpose of the Control

Originally, the United States imposed embargoes on each of these countries for foreign policy purposes, among other reasons. Although the original circumstances that prompted the United States to impose controls have changed, the present situation requires that these controls continue. These embargoes demonstrate the unwillingness of the United States to maintain normal trade with these countries until they take steps to change their policies to conform to recognized international standards of human rights, thereby changing their relations with the United States.

Cuba. This embargo came at a time when Cuban actions seriously threatened the stability of the Western hemisphere, and the Cuban Government had expropriated property from U.S. citizens without compensation. Because of its support for insurgent groups that have engaged in

terrorism, the Secretary of State designated Cuba as a state sponsor of terrorism under Section 6(j) of the Act in March 1982. The United States would only reduce sanctions against Cuba in carefully calibrated ways in response to positive steps by Cuba toward political and economic reform.

North Korea. North Korea continues to maintain an offensive military capability and to suppress human rights. The planting of a bomb aboard a South Korean airliner by North Korean agents in November 1987 prompted the Secretary of State to designate North Korea as a state sponsor of international terrorism, under Section 6(j) of the Act, in January 1988. This designation has not been revoked.

Rwanda. The controls remain in place to prevent any U.S. contribution to potential conflict in that country and to conform to United Nations-mandated sanctions.

B. Considerations and/or Determinations of the Secretary of Commerce:

1. Probability of Achieving Intended Foreign Policy Purpose. The embargoes have denied these nations the substantial benefits of normal trade relations with the United States. The controls continue to put pressure on the governments of these countries to modify their policies, since the United States will not lift these embargoes without a general improvement in relations. For Rwanda, the applicable controls serve to reduce the potential for conflict.
2. Compatibility with Foreign Policy Objectives. The controls complement U.S. foreign policy in other aspects of U.S. relations with these countries. They encourage the governments to modify their policies, thereby improving their relations with the United States. For Rwanda, these controls are consistent with U.S. foreign policy goals of promoting peace and stability and preventing human rights abuses.
3. Reaction of Other Countries. Although most countries recognize the right of the United States to determine its own foreign policy and security concerns, many countries, particularly the European Union, Canada and Mexico opposed the Cuban Liberty and Democratic Solidarity (Libertad) Act of 1996 (Helms-Burton). Most countries respect U.S. unilateral controls toward North Korea in light of the unresolved situation on the Korean peninsula and the aggressive nature of North Korean support for international terrorism and the proliferation of weapons of mass destruction. The U.S. arms embargo to non-governmental forces for use in Rwanda is consistent with the objectives of the United Nations; the United States has received no significant objections to these controls.
4. Economic Impact on United States Industry.

Cuba. Commerce requires a license for the export and reexport of virtually all U.S.-origin commodities, technology and software to Cuba. In FY1997 the Bureau of Export Administration (BXA) approved 87 license applications (85 exports and 2 reexports), worth over \$493 million. Excluding licenses for certain aircraft on temporary sojourn to Cuba (which require export

licenses), BXA approved licenses for shipments to Cuba totaling almost \$483 million for humanitarian aid in the form of food, medicine, and medical supplies (82 licenses) and three consolidated shipments of gift parcels.

BXA returned two export applications and six reexport applications, worth \$43.6 million, without action. BXA denied five export license applications worth \$2.5 million.

Table 1. Export License Applications Approved for Cuba, FY 1997

Type of Export	No. of Applications	Dollar Value
Humanitarian Aid	68	\$452,435,328
Gift parcels	3	30,000,000
Aircraft and turbine engines on temporary sojourn in Cuba	1	10,617,906
Other	13	361,585
Total:	85	\$493,414,819

Cuba's economy remains in a severe depression as a result of the loss of economic aid from the former Soviet Bloc. In 1989-93, GDP declined by about 35 percent and imports fell by about 80 percent. However, this slide seems to have halted in 1994, as Cuban officials claim that GDP actually increased by 2.5 percent in 1995.

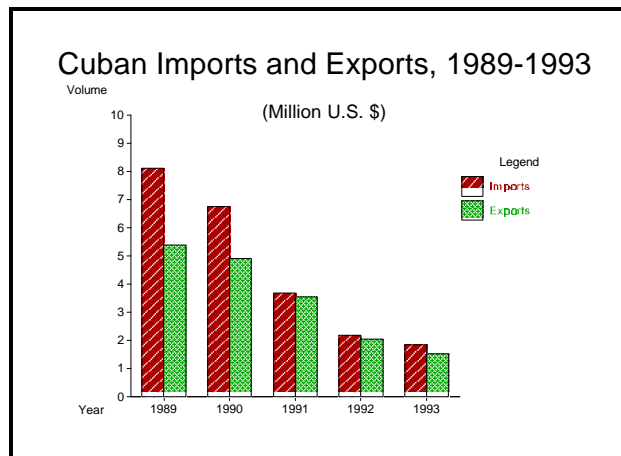


Figure 1

Source: The World Factbook 1994, Central Intelligence Agency

Cuba's leaders pin their hopes for economic recovery on generating foreign investment, which Cuba actively courts, with the goal of developing indigenous production of as many

import-substituting products as possible. As such, Cuba liberalized foreign investment laws in September 1995 and has signed investment guarantee treaties with a number of countries, including Mexico, Canada, Spain, Italy, Britain, and Russia. Cuba plans to sign agreements with France and the 13-member Caribbean Community (Caricom). According to Cuban government figures, there are 212 joint ventures underway, worth about \$2 billion. U.S. sources estimate that Cuba has announced \$4.9 billion in foreign investment, of which \$556 million has been formally committed.³ Much of this investment is in long-term infrastructure projects that commit Cuba to import supporting equipment and supplies from the foreign partners for years to come.

Cuban imports from most major exporting nations have declined in recent years because of the Cuban economy's declining ability to produce goods for export and generate foreign exchange reserves. Among major trading partners, only Mexico, Spain and France exported more to Cuba in 1994 than in 1989. Canadian and Chinese exports rose sharply in 1990 but have since declined steadily. However, French exports to Cuba have more than doubled since 1989. Since 1992, French exports to Cuba have consisted primarily of foodstuffs, which comprised 83 percent of total French exports to Cuba in 1993. Grains alone comprised 62 percent of the 1993 total.

Cuba's steadily decreasing import potential diminishes the effects of the U.S. embargo. A chronically depressed economy, limited currency reserves, and a limited capacity to generate hard currency severely curtail Cuba's ability to import foreign products.

In general, the U.S. regions and economic sectors most affected by the trade embargo are southern Florida (particularly the port area of Tampa), producers of agricultural products and exports of other products that benefit from the cost advantages of U.S.-Cuba proximity (e.g., perishable agricultural products).

North Korea. U.S. export sanctions have had a minimal effect on U.S. industry. North Korea remains a rigid socialized economy, with a strong emphasis on self-reliance. The agricultural land is collectivized, and state-owned industry produces 95% of the manufactured goods. North Korea emphasizes the manufacture of heavy industry, including arms production, at the expense of consumer goods. North Korea is not self-sufficient in food production; indeed, various factors have resulted in a food crisis. Increasing shortages of fuels and electric power have resulted in idle factories, fewer exportable items, and less hard currency to buy food and other critical items.

The political ideology of national self-reliance and independence has resulted in an international trade share (exports plus imports) of only 10 percent of the GDP, well below the figure of 50 to 55 percent observed in neighboring South Korea. Traditionally, North Korea has conducted foreign trade mainly to obtain essential imports, not for economic gains in employment or income.⁴ North Korea's total imports average about \$1-2 billion per year.

In FY 1997, Commerce approved 47 validated licenses for exports to North Korea, totaling \$393,281,396. (Commerce denied four licenses, worth \$85,342.) This is an increase of about \$100 million over FY 1996, but still more than one billion dollars less than FY 1995. In FY

1995, BXA approved licenses for larger grain shipments of \$1 billion or more. Such large grain and seed shipments--which have been replaced by smaller, more numerous shipments--skewed the trade data for FY 1994 and FY 1995. The commodities involved are almost entirely humanitarian items, such as milk and grains, for use in relieving increasing famine; and assorted medicinal supplies to aid victims from widespread flood damage.

Because of North Korea's strong political ideology emphasizing self-reliance, U.S. export sanctions have generally had a minimal effect on U.S. exports. In the absence of the U.S. embargo, some U.S. industries (vehicles, machinery, chemicals) could have potential export sales of up to \$50 million per year, inferring from North Korea's current trade with European suppliers. Following the signing of the October 21, 1994, U.S.-North Korean Agreed Framework, some opportunities for limited economic activity by some U.S. companies might have occurred. However, in 1996 and 1997, provocative North Korean military activity, including border incursions, and its reluctance to participate in Four-Power talks aimed at formally ending the Korean War, reduced prospects for these activities. The United States has liberalized restrictions on travel to North Korea and per diem expenditure limits. The United States has granted permission to purchase certain strategic minerals from North Korea, and will grant special licenses in connection with the light water reactor project, ranging from technology and equipment for the reactors to the sale and transportation of oil on an interim basis. The potential for some profit exists, but the sanctions regime and the inherent risks of doing business with a government in default to major creditors have discouraged most U.S. firms from doing business there.

Full implementation of the Agreed Framework would facilitate a possible broadening of bilateral relationships, possibly leading to a reduction in current restrictions on U.S. trade with North Korea. In addition, the U.S. role as a founding member of the Korean Peninsula Energy Development Organization (KEDO) could foreshadow increasing trade with North Korea. KEDO is the international organization established in March 1995 to implement the Agreed Framework. Under the Agreed Framework, North Korea agreed to freeze and eventually dismantle its existing graphite-moderated nuclear program. In return, KEDO will provide North Korea with two light water reactors (LWRs) developed from U.S. technology and supplied by foreign sources. In addition, KEDO is providing 500,000 metric tons of heavy fuel oil to North Korea annually until the first LWR plant goes on line. Further implementation of the provisions of the Agreed Framework should also broaden North Korea's economic contacts with the international community in general.

In a limited effort to tap world markets to satisfy critical economic needs, North Korea established the Rajin-Sonbong Free Trade zone to promote trade with other countries. However, the trade zone has too little infrastructure and remains in a high-security area, limiting its effectiveness. At present, the United States does not recognize this zone. However, if the trade zone is at all successful, U.S. firms could be at a disadvantage vis-à-vis other nations due to U.S. economic sanctions.

North Korea's primary imports include petroleum, grain, coking coal, machinery and equipment, and consumer goods. As reported by the Korea Trade Promotion Corporation

(KOTRA), North Korea's four major trading partners are China, Russia, Japan and South Korea, which account for almost 70 percent of its total trade (exports plus imports). Other sources (1992 World Trade Database, Major Economic Indicators for North Korea, 1993) indicate Iran and Hong Kong are also major contributors in import trade. Russian imports, once a large portion of North Korean trade, have continued to decline as Russia focuses on its own economic difficulties, and China has supplanted Russia as North Korea's economic lifeline. China's importance in North Korea's trade is probably underestimated in available statistics, as observers note that a high volume (\$100 millions) of smuggling occurs between the two countries.⁵

Table 2 illustrates the most current trade figures available:⁶

Table 2. North Korean Trade 1994
(in US\$ millions)

Country	Imports	Exports	Total
China	\$425	\$199	\$624
Japan	\$170	\$323	\$493
South Korea	\$174*	\$ 21*	\$195
Russia	\$115*	\$ 15*	\$140
World Totals	\$1,269	\$ 839	\$2,108

(* KOTRA trade figures at this time do not give import/export values for these countries. These figures are derived from other sources)

Trade statistics from the United Nations provide more detailed information on North Korean imports from many developed countries (unfortunately many countries, including Russia, do not report trade to the United Nations). The top five exporters to North Korea in 1993 (the most recent available year) according to U.N. data were China (\$602 million), Japan (\$217 million), India (\$61 million), Germany (\$47 million), and Singapore (\$38 million). Other major exporters were Italy, Ireland, the Netherlands, Brazil, and Thailand. China supplies most of North Korea's needs for grains and petroleum, while North Korea's imports from European countries predominantly consist of chemicals and machinery, and, in the case of Germany, motor vehicles. From Japan, North Korea imported mostly textile goods and vehicles; many of the textiles were apparently re-exported back to Japan in the form of finished goods. Many Japanese companies maintain a presence in North Korea awaiting the possibility of a normalization in North Korean-Japanese relations, which is dependent on the payment of war reparations.

Rwanda. The arms embargo has had very little impact on U.S. industries.

5. Enforcement of Control. Detecting unauthorized exports to embargoed countries is more difficult than with other export controls, because the controls on exports to embargoed countries

cover virtually all U.S.-origin goods, including consumer items that do not attract enforcement attention, either in the United States or overseas. However, in the case of direct exports, an embargo against a small number of countries is easier to enforce, because the concept of a total embargo is generally understood and supported by the public. BXA can count on voluntary cooperation from most U.S. exporters. Further, a total embargo requires little expertise to differentiate between those goods that are and those that are not subject to control.

Controls on exports under the Cuban Democracy Act (CDA) of non-U.S.-origin goods from foreign subsidiaries of U.S. firms present certain enforcement difficulties. Foreign governments have shown little inclination to cooperate with, and indeed some hostility to, U.S. enforcement efforts. On the other hand, the Department has the authority to deny export privileges of firms and individuals overseas who violate U.S. controls. While a denial order can prove very effective, use of that enforcement tool against a violator of CDA-based controls may provoke strong reaction from the home country of the firm or individual who is the object of the order.

Commerce has experienced no significant problems enforcing the export controls on Rwanda, nor does it foresee any.

C. Consultation with Industry

The Department of Commerce received no specific comments on its licensing policies toward Cuba and North Korea from its request in the *Federal Register* on October 8, 1997. However, several reports published in 1997 (summarized in Appendix I) examined the issues of whether U.S. unilateral sanctions weaken U.S. competitiveness or achieve their desired outcome.

In 1997, Commerce approved its first license for the temporary export of medical items to Cuba for demonstration and sales purposes, which is permitted under the humanitarian exceptions to the embargo. The U.S.-Cuba Trade and Economic Council has expressed that some of its member companies are interested in exploring this option as a way to conduct business in Cuba. The Department of Commerce has made fact sheets on exporting medical items to Cuba available on its Internet site.

D. Consultation with Other Countries

The Administration has worked hard to garner support from other countries for the objectives of the Libertad Act and resolve any disputes that arise from its implementation.

Friction between the United States and the European Union (EU) over policy toward Cuba has diminished substantially with adoption by the Europeans of a binding policy that links expanded ties to Cuba to improvements in human rights conditions and advances toward democracy by President Fidel Castro's communist government. The United States viewed the announcement that EU members would evaluate future relations with Cuba according to the

ratification and observance of international human rights conventions as an affirmation of the international community's commitment to fostering human rights and democracy in Cuba.

E. Alternative Means

The United States imposes comprehensive embargoes only in an effort to make the strongest possible statement against a particular country's policies by imposing the harshest trade conditions available.

Restrictions on exports supplement other actions that the United States has taken to change the behavior of the target countries. Among the more prominent other actions that the United States can and has taken include the severing of diplomatic relations, banning imports into the United States, seeking United Nations denunciations and curtailing or discouraging bilateral educational, scientific, or cultural exchanges.

F. Foreign Availability

Since Cuba and North Korea are also designated terrorism-supporting countries, as well as embargoed destinations, the foreign availability provision does not apply to items determined by the Secretary of State to require control under Section 6(j) of the Act.⁷ Cognizant of the value of such controls in emphasizing the U.S. position toward countries supporting international terrorism, Congress specifically excluded them from foreign availability assessments otherwise required by the Act.

For Rwanda, the U.S. human rights policies and concerns about the situation in that country outweigh foreign availability considerations.

ENDNOTES

1. *Items on the Commerce Control List with Export Control Classification Numbers (ECCNs) ending in "18" are those items on the International Munitions List that the Department of State previously controlled on the U.S. Munitions List, but now fall under the licensing jurisdiction of the Department of Commerce.*
2. *Section 746.8(b)(1)(ii) of the Export Administration Regulations lists these items as those on the Commerce Control List with the following ECCNs: 1A988; 2B985; 5A980; 6A002.a1, .a2, .a3; 6A002.c; 6A003.b3 and b.4; 6D102; 6E001; 6E002; 9A115; 9A991.a; 0A984; 0A986; and 0A988.*
3. *"Foreign Investors Finding Cuba More Comfortable--with U.S. Away," The Washington Post, September 12, 1995.*

4. *Hohn, Y.T. Kuark, "A Comparative Study of Foreign Trade in North and South Korea," University of Denver, March 1992, p. 21.*
5. *Noland, Marcus, "The North Korean Economy," Institute for International Economics, July 1995, p. 26.*
6. *Flake, L. Gordon, "International Economic Linkages of North Korea," Korea Economic Institute of America, May 26, 1995, p. 2.*
7. *Provisions pertaining to foreign availability do not apply to export controls in effect before July 12, 1985, under sections 6(i) (International Obligations), 6(j) (Countries Supporting International Terrorism), and 6(n) (Crime Control Instruments). See the Export Administration Amendments Act of 1985, Public Law No. 99-64, section 108(g)(2), 99 Stat. 120, 134-35. Moreover, sections 6(i), 6(j), and 6(n) require that controls be implemented under certain conditions without consideration of foreign availability.*