CARGO PREFERENCE LEGISLATION,
AGRICULTURAL EXPORTS, AND THE FUTURE
OF THE DULUTH-SUPERIOR ECONOMY:
A LEGISLATIVE HISTORY AND ECONOMIC ANALYSIS

Charles S. Gitomer and C. Ford Runge

Research Report 34
CARGO PREFERENCE LEGISLATION, AGRICULTURAL EXPORTS,  
AND THE FUTURE OF THE DULUTH-SUPERIOR ECONOMY:
A LEGISLATIVE HISTORY AND ECONOMIC ANALYSIS

by
Charles S. Gitomer

and
C. Ford Runge

Charles S. Gitomer is a Graduate Research Assistant and C. Ford Runge is an Associate Professor and Director of the Center for International Food and Agricultural Policy in the Department of Agricultural and Applied Economics at the University of Minnesota. This report was prepared under funding from Minnesota Sea Grant Project R/C-14, with additional support from the Northwest Area Foundation, St. Paul, Minnesota.

Research Report Number RR34. This work is the result of research sponsored by the Minnesota Sea Grant Program supported by the NOAA Office of Sea Grant, Department of Commerce, under Grant NOAA-86AA-D-SG112-01, Project R/C-14. The U.S. government is authorized to reproduce and distribute reprints for governmental purposes notwithstanding any copyright notation that may appear hereon.

Minnesota Sea Grant is a statewide program that supports research, extension, and educational programs related to Lake Superior and the Great Lakes. It is part of the National Sea Grant Program, which support research in 31 coastal and Great Lakes States. Sea Grant offices are located on the Duluth and St. Paul campuses of the University of Minnesota. The extension program is part of the Minnesota Extension Service.

Staff Paper P90-26. Department of Agricultural and Applied Economics. Staff Papers are published without a formal review within or the endorsement of the Department of Agricultural and Applied Economics.

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, religion, color, sex, national origin, handicap, age, veteran status, or sexual orientation.

Published April 1990.
EXECUTIVE SUMMARY

Exports are a mainstay of United States agriculture. Long-term disposal of agricultural surpluses at subsidy in the face of increasing subsidization by other surplus producing regions of the world has built a strong constituency for such subsidy. At the same time that this constituency grew in agriculture, the U.S. maritime shipping fleet sought to mandate that a portion of certain U.S. government cargo shipments be handled exclusively by U.S. carriers. This created a separate and competing constituency for protection.

This report examines a policy problem representative of subsidy programs that develop strong constituencies over time: two such subsidies may not only be inconsistent, but in open political conflict. We will describe the effect of conflicting subsidies on two industries involved in international trade, and the effects representative of the damages that "competition for protection", rather than competition for markets, has brought to the Port of Duluth-Superior.

The story of the conflict generated by these subsidy programs is briefly as follows. The Food for Peace Program (PL-480) was initiated in 1954. It mandated donation or sale of surplus stocks of U.S. grain as aid and for market development. Soon afterwards, the Cargo Preference Act of 1954 was passed. It mandated that 50 percent of "U.S. government impelled" cargoes, including Food for Peace shipments, were to be transported on U.S. flag vessels. Over the next 30 years, this was the norm.

In 1982, the Reagan administration introduced a subsidy program to increase the competitiveness of U.S. agricultural exports in the face of a strong dollar and subsidies by competing exporting nations. Maritime interests filed suit when the administration did not apply cargo preference
requirements to this "blended credit" program. On February 21, 1985, Judge June L. Green of the District Court of the District of Columbia ruled on the suit Transportation Institute v. Dole, et al. that blended credit and other similar programs, including some to which cargo preference had never before been applied, were subject to cargo preference regulations. Five days after the ruling, the United States Department of Agriculture (USDA) suspended the blended credit program, since the ruling rendered it uncompetitive.

The day following the Transportation Institute ruling, the Reagan administration's proposal for farm legislation was introduced. The issue of cargo preference would become an important part of the wrangling over the 1985 Farm Bill. Eventually a compromise was reached that was acceptable to both agrarian and maritime interests, where commercial programs like blended credit would be exempted from cargo preference requirements in return for a three-year phased increase from 50 to 75 percent in cargo preference requirements for PL-480 concessional cargoes. An annual guarantee of about 250,000 tons of PL-480 cargo to Great Lakes ports through 1989 and a change in the accounting year were added to the compromise to placate Great Lakes interests.

Great Lakes ports were hurt by this compromise. With fewer U.S. flag vessels capable of carrying PL-480 cargo visiting the Lakes, there is a lesser chance that the required flag vessels will be available, further magnifying the injury. This injury also increased as the regional economy became more dependent on nontraditional port activities such as PL-480.

This report will first explain the legislative history and administrative components of the PL-480 and Cargo Preference laws; second, examine the controversy over USDA blended credit programs and cargo
preference; and third, describe the events leading to the compromise on cargo preference and the Great Lakes. Since the compromise on cargo preference was reached as part of the bargaining over the Food Security Act of 1985 (1985 Farm Bill), the evolution of that legislation as it related to cargo preference is given special emphasis. The politics and interest groups of cargo preference are considered, together with the legislative process in the Congress. Fourth, the economic injury inflicted by these laws on the Port of Duluth-Superior and other Great Lakes ports are examined. Finally, it is suggested that to reduce the injury to Great Lakes ports the Cargo Preference Act of 1954 be repealed and replaced by a direct subsidy program administered by the Maritime Administration.
CARGO PREFERENCE LEGISLATION, AGRICULTURAL EXPORTS, AND THE FUTURE OF
THE DULUTH-SUPERIOR ECONOMY: A LEGISLATIVE HISTORY AND ECONOMIC ANALYSIS

We come up to a point of confrontation of two valid public policy positions. One is maintaining a strong U.S. maritime fleet. The other is maintaining a strong U.S. agricultural sector. If the two are not going to work together, then both are going to be harmed.

James L. Oberstar, M.C.

INTRODUCTION

Exports are a mainstay of United State agriculture. Beginning in the 1950s, the U.S. sought to dispose of its agricultural surpluses at subsidy, and to build long-term export markets in the process. As international competition for markets grew, U.S. commodities faced increasing subsidization by other surplus-producing regions of the world, notably the European Community (EC). It is now widely held that in the face of export subsidy programs by competitors, American farm interests must retain subsidies to compete on an even footing. There is a strong constituency for such subsidies.

At the same time this demand for subsidy was unfolding in agriculture, another American industry was demanding a different type of protection. The U.S. maritime shipping fleet, aging and less competitive than in the past, sought to assure itself a market by mandating that a portion of certain U.S. government cargo shipments be handled exclusively by U.S. carriers. It too created a strong constituency for such protection.

This report examines a policy problem representative of subsidy programs that develop strong constituencies over time: two such subsidies may not only be inconsistent, but in open political conflict. In this
report we will describe the effects of conflicting subsidies on two industries involved in international trade, and the effects of the conflict generated by those subsidies on the Port of Duluth-Superior, caught in the crossfire of these interests. These effects are representative of the damages that "competition for protection," rather than for markets, can bring.

Competition among interest groups rarely involves pure conflict. There are almost always elements of both conflict and commonality (Schelling, 83, 1960). This is the base upon which bargaining and, ultimately, compromise are built. The case of "competition for protection" or "competition for subsidy" that we will examine is typical of such bargaining situations. In this case, both maritime and agrarian interests wished to increase their share of the PL-480 program subsidy. As we shall show, a feasible political solution was reached, but at a cost to overall social efficiency. The relative costs of political compromise will be our central focus, since these costs have not been evenly spread. Particular groups, notably Great Lakes ports, have borne an unusually large proportion of the cost.

While economic theory suggests free markets lead to efficient (low cost) allocations, many such allocations are socially undesirable. Good policy achieves social goals with minimal losses in efficiency. Bad policy may achieve its goals, but only at a cost of greater inefficiency.

Cargo preference is bad policy. It has created perverse incentives, with results that are actually the opposite of those intended. Instead of providing the impetus for ship owners to invest in new, efficient, and safe merchant vessels, it has permitted them in many cases to use inadequate
vessels to haul what in essence is captive cargo. This has actually promoted the decay of the American fleet, which now relies on subsidy to stay afloat. One consideration in examining the cargo preference program and PL-480 is whether alternative policies could reduce the distortions of market signals and thus induce a desired response from ship owners.

The story of the conflict generated by these subsidies is briefly as follows. The Food for Peace program (PL-480) was initiated with the passage of the Agricultural Trade Development and Assistance Act of 1954 on July 10, 1954. It mandated the donation or sale of surplus stocks of U.S. grain as aid and for market development. Within six weeks, on August 25, 1954, the Cargo Preference Act of 1954 was passed. It mandated that 50 percent of "U.S. government impelled" cargoes were to be transported on U.S. flag vessels for the purpose of maintaining a strong merchant marine capable of supporting U.S. ocean-borne commerce and acting as an auxiliary to the military if needed. Fifty percent of Food for Peace cargoes was to be shipped on U.S. flag vessels. Over the next 30 years, this was the norm.

In 1982, the Reagan administration introduced a subsidy program to increase the competitiveness of U.S. agricultural exports in the face of a strong dollar and subsidies by competing exporting nations. Maritime interests filed suit when the Administration did not apply cargo preference requirements to this "blended credit" program. On February 21, 1985, Judge June L. Green of the District Court of the District of Columbia ruled on the suit Transportation Institute v. Dole, et al. that blended credit and other similar programs, including some to which cargo preference had never before been applied, were subject to cargo preference regulations. Five days after the ruling, on February 26, 1985, the United States Department
of Agriculture (USDA) suspended some $536 million of blended credit sales.

The day after the Transportation Institute ruling, on February 22, 1985, Senator Jesse Helms introduced the Reagan administration's proposal for farm legislation. While not immediately apparent, the issue of cargo preference would become an important part of the wrangling over the 1985 Farm Bill. Eventually a compromise was reached that was acceptable to both agrarian and maritime interests. Commercial programs like the blended credit program would be exempted from cargo preference requirements in return for a three-year phased increase from 50 percent to 75 percent in cargo preference requirements for PL-480 cargoes. Also included was a provision to guarantee about 250,000 tons of PL-480 cargo annually to Great Lakes ports through 1989, and a change in the accounting year from calendar year to April 1 to March 31.

This compromise on cargo preference hurt Great Lakes ports, which are a focus of this report. Since there are few U.S. flag vessels capable of carrying PL-480 type cargo that visit the Lakes, there is a lesser chance that the required flag vessels will be available. With greater U.S. flag participation required, the injury was magnified. This injury also increased as the regional economy became more dependent on nontraditional port activities. In the past taconite and coal were important cargoes. As ore quality declined and coal became less expensive elsewhere, PL-480 took on an even more important role in ports such as Duluth-Superior. Its longshoremen are dependent on cargo preference cargoes for as much as half of their aggregate hours of employment on the docks (United States Congress, Hearings, 16 July 1985, 12).

This report will first seek to explain the legislative history and
administrative components of the PL-480 and Cargo Preference laws. Second, the controversy over USDA blended credit programs and cargo preference will be examined. Third, the events leading to the compromise on cargo preference and the Great Lakes will be described. Since the compromise on cargo preference was reached as part of the bargaining over the Food Security Act of 1985 (1985 Farm Bill), the evolution of that legislation as it related to cargo preference will be given special emphasis. The politics and interest groups of cargo preference will be considered, together with the legislative process in the Congress. Fourth, the economic effects of these laws on the Port of Duluth-Superior and other Great Lakes ports will be examined. Finally, some suggestions to improve the conditions in the Twin Ports brought about by this compromise will be made, and some lessons will be drawn for future trade policies.

I.

A BRIEF LEGISLATIVE HISTORY OF CARGO PREFERENCE AND FOOD FOR PEACE

The cargo preference and Food for Peace programs, enacted within six weeks of one another during the 83rd Congress, have been intimately linked for over thirty years. One, cargo preference, explicitly subsidizes maritime interests, while the other, Food for Peace, subsidizes farmers and farm interests. Food for Peace cargoes have become a major constituent of nonmilitary preference cargo. This section provides the basic background required to understand the cargo preference and PL-480 programs. Brief legislative histories of each program are presented to give an understanding of Congressional intent. The examination of cargo preference also includes a review of U.S. maritime policy and a general discussion of government aid to maritime interests.
The Food for Peace Program: PL-480

Public Law 480 was adopted on July 10, 1954 in response to post-World War II changes in the domestic and international agricultural economies. Its purpose was to dispose of surplus production, maintain farm income levels, and to regain lost export markets. During the floor debates in 1953 and 1954, Senator Milton R. Young also noted that:

We are in the position of a nation with agricultural surpluses, when many other nations are starving. When we have such surpluses, we have adverse farm prices, and when we have adverse farm prices, there develops a national economic problem. This bill proposes for the first time, I think, a very feasible and sound method of trying to make our agricultural surpluses available to other nations of the world who are needy and in want of these supplies (Congressional Record, v. 99, pt. 8, July 23, 1953: 10079).

PL-480 thus made a virtue out of necessary efforts to dispose of unwanted agricultural surpluses. The three main thrusts of the legislation were: (1) to reduce the cost of government storage of surplus grain stocks acquired through the price support system; (2) to support farmer incomes; and (3) to use surplus U.S. agricultural commodities to feed hungry nations and develop overseas markets. The primary orientation of the act was domestic: purposes (1) and (2) tended to dominate (3).

In 1966, the Food for Peace Act of 1966 "shifted the purpose of the ...program from surplus disposal to planned production for export to meet world needs." (Epstein, 1986, 19). This amendment to the basic PL-480 legislation transformed it into a food aid program, which it remains today.

---

The Act, as amended, consists of four titles. According to Epstein:

Under title I, the U.S. government is authorized to provide concessional, long-term financing for the commercial sale of U.S. agricultural commodities to friendly nations. Ten percent of the value of this title may be repaid in foreign inconvertible currencies. Loans are made available at a minimum interest rate of two percent during the grace period, two to ten years, and three percent thereafter, and are repayable within ten to 40 years. Initial payment of at least five percent of the purchase price is required. Most agreements include a provision that up to ten percent of the purchase price be repaid on demand in local currency. Those funds are then used by the United States for its expenses in the host country.

Title II authorizes the donation of U.S. agricultural commodities to nations for the purpose of alleviating famine or providing disaster relief, combating malnutrition, and encouraging economic and community development. Commodities are purchased by the Federal Government and donated under government-to-government agreements and through the U.S. World Food Program and nonprofit voluntary relief agencies. Monetization (or the sale of donated commodities) within the recipient country by the commodity distributor (i.e., PVOs, WFP, or a U.S. agency) is allowed if certain criteria regarding use of acquired funds are met.

Title III, along with the barter provisions, authorizes the Food for Development Program, under which eligible nations may have Title I loans forgiven if the local currency generated from Title I program commodity sales is used to finance mutually satisfactory development projects.

Title IV authorizes the farmer-to-farmer program. This program was first implemented as a one year pilot program in 1985 (Epstein, 1986, 52-53).2

In 1985, in the course of the passage of the farm bill and other legislation, several more amendments were made to the Food for Peace program in keeping with administration policy to expand agricultural exports. Title I was amended to allow sales for local currencies. The

---

2Titles I and III are administered by USDA while Title I is under USAID jurisdiction. In many statistical abstracts, such as those prepared by the Maritime Administration of the Department of Transportation, Titles I and III are aggregated. Title IV, the Farmer-to-Farmer program, was instituted in 1966 as part of the Food for Peace Act of 1966. It was to allow "an exchange of individuals from the U.S. agricultural community to teach farmers in developing countries about improved farming methods" (Epstein, 1986, 19-20).
Title II program minimum tonnage requirement for donations was increased from 1.7 to 1.9 million metric tons, with a further requirement that at least 1.425 million metric tons be distributed through private voluntary organizations (PVOs), cooperatives, and the World Food Program. Another provision increased the nonemergency requirement for bagged, processed, or fortified commodities to 75 percent.

The United States Maritime Policy Mandate

The purpose of the United States maritime policy as stated in the Merchant Marine Act of 1936, and little changed from that time, is that:

It is necessary for the national defense and development of its foreign and domestic commerce that the United States shall have a merchant marine (a) sufficient to carry its domestic water-borne commerce and a substantial portion of the water-borne export and import foreign commerce of the United States and to provide shipping service essential for maintaining the flow of such domestic and foreign water-borne commerce at all times, (b) capable of serving as a naval and military auxiliary in time of war or national emergency, (c) owned and operated under the United States flag by citizens of the United States insofar as may be practicable, (d) composed of the best equipped, safest, and most suitable types of vessels, constructed in the United States and manned with a trained and efficient citizen personnel, and (e) supplemented by efficient facilities for shipbuilding and ship repair. It is hereby declared to be the policy of the United States to foster the development and encourage the maintenance of such a merchant marine (Public Law No. 835, 74th Congress, section 101, 49 Stat. 189 (Merchant Marine Act of 1936, Section 101)).

Put simply, U.S. merchant maritime policy should be first concerned with commercial and second with military aspects: a fleet to show the flag abroad that is built at home. Shipbuilding, like auto manufacturing, is an industry of such economic and strategic importance that governments have regularly ignored high domestic costs to assure home-based industrial capacity.
U.S. maritime policy is implemented by providing both nonfiscal and fiscal aid to ship owners as opposed to shipping. Jantscher broadly defines nonfiscal aid as:

...assistance [that] is rendered through the exercise of a government's regulatory powers. No payments flow between government and the private sector, either of money or in kind.... (Jantscher, 1975, 11).

and fiscal aid as:

...[assistance that is] administered through an exercise of the government's taxing or spending powers and therefore usually involv[ing] money flows between the public and private sectors. Occasionally the payments are made for a consideration, ...but for the most part these aids take the form of unrequited payments: taxes if paid from the private to the public sector, subsidies if paid in the opposite direction (Jantscher, 1975, 13).

Practically, there are three methods of aid--cabotage, preference, and subsidy. Cabotage, a nonfiscal aid, reserves domestic, or "coastal," trade for domestic shipping. Subsidy, a fiscal aid, provides payments to ship owners. Cargo preference reserves a certain amount of cargo for domestic vessels in international trade. Its nature is blurred since it has features of both fiscal and nonfiscal aid. Jantscher explains that:

...cargo preference laws...have both fiscal and non-fiscal characteristics. If they only require that public authorities should patronize domestic flag vessels and refrain from using foreign flag carriers, they are fiscal aids, because the benefits are given through an exercise of the government's spending powers. If they only require that certain classes of private shippers should patronize domestic carriers, they constitute a form of non-fiscal assistance. Most preference laws, however, have both requirements (Jantscher, 1975, 13).

Thus cargo preference is a hybrid policy measure with features of both cabotage and subsidy.

The nonfiscal aspect of cargo preference--the requirement that certain classes of private shippers patronize domestic carriers--sends
signals that affect the market decisions not only of carriers, but also of shippers, goods sellers, and other in the marketing chain, to a much greater degree than would purely fiscal aid. Purely fiscal aid, in the form of guaranteed government cargoes, or even monetary grants, significantly affect only the government and the carriers, and thus lessens economic distortions and inefficiencies.

**Legislative Basis for Cargo Preference**

Three major pieces of legislation have shaped cargo preference policy in the United States. They are the Military Transportation Act of 1904, Public Resolution 17 of March 1934, and the Cargo Preference Act of 1954. The first, the Military Transportation Act of 1904 (Act of April 28, 1904, 33 Stat. 518, 10 U.S.C. 1970 edition, sec 2631) required that all ocean borne supplies for the U.S. armed forces be carried on U.S. registered or by U.S. government-owned vessels. Exceptions were allowed only when freight rates charged by U.S. vessels were "excessive or otherwise unreasonable" (Jantscher, 1975, 78). The Department of Defense still makes it a point of policy to ship all defense cargoes on U.S. flag vessels.

The second major piece of legislation affecting cargo preference is Public Resolution 17 of March 1934 (Joint Resolution of March 26, 1934, 48 Stat. 500 15 USC 1970 edition, sec. 616 (a)). According to Lawrence, when...

...it was discovered in 1934 that certain foreign buyers were routing purchases financed by U.S. government loans via foreign flag vessels, the Congress passed a resolution expressing its intent that all future government financed exports be routed exclusively via U.S. flag vessels (Lawrence, 1966, 66).

According to Lawrence, the resolution "applies specifically to export shipments financed in whole or part by 'any loans made by... any..."
instrumentality of the government” (Lawrence, 1966, 66n). Jantscher further explains that:

soon after this resolution was approved, a question arose whether it laid down an absolute requirement that products that come within its scope must in all cases be carried in U.S. bottoms. The attorney general expressed the opinion that Congress did not intend to make the resolution mandatory; that Congress intended only “to lay down a rule of guidance” to be followed whenever it was feasible to do so (Official Opinions of the Attorneys General of the United States, vol. 37 [1936], 546, cited in Jantscher, 1975, 78-79, 78n).

This resolution, while not imposing a strict legal requirement, was the "sense of Congress," and effectively demanded that half of government financed exports to be shipped on U.S. flag carriers.3 The intent of the resolution was subsequently incorporated into and affirmed by the Merchant Marine Act of 1936, the definitive statement of U.S. maritime policy, which directed government maritime authorities "to cooperate with ship owners in devising means to induce importers and exporters to use U.S. flag vessels and to work with other government agencies to secure preference for American ships" (Lawrence, 1975, 66, 66n).

The third major piece of legislation, and the most important to this study, is the Cargo Preference Act of 1954 (Act of August 25, 1954, 68 Stat. 832), which added a new subsection 901 (b) to the Merchant Marine Act of 1936 (46 USC 1970 edition, sec. 1241 (b)). The Cargo Preference Act of 1954 was enacted as an amendment to the Merchant Marine Act of 1936. It states in part that:

3Only cargoes financed by the Export-Import Bank of the United States are affected by this measure. According to Jantscher, shortly after World War II, the Maritime Administration granted waivers so that up to 50 percent of cargoes bound for economically damaged, rebuilding nations could be carried on bottoms of that nation (Jantscher, 1975, 78-79, 79n).
Whenever the United States shall procure, contract for, or otherwise obtain for its own account, or shall furnish to or for the account of any foreign nation without provision for reimbursement, any equipment, materials, or commodities, within or without the United States, or shall advance funds or credits or guarantee the convertibility of foreign currencies in connection with the furnishing of such equipment, materials, or commodities, the appropriate agency or agencies shall take such steps as may be necessary and practicable to assure that at least 50 percentum of the gross tonnage of such equipment, materials, or commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers), which may be transported on ocean vessels shall be transported on privately owned United States-flag commercial vessels, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels, in such manner as will insure a fair and reasonable participation of United States-flag commercial vessels in such cargoes by geographic areas: Provided that the provisions of this subsection may be waived whenever the Congress by concurrent resolution or otherwise, or the President of the United States or the Secretary of Defense declares that an emergency exists justifying a temporary waiver of the provisions of [this section] and so notifies the appropriate agency or agencies: And further provided, that the provisions of this section shall not apply to cargoes carried in the vessels of the Panama Canal Company. Nothing herein shall repeal or otherwise modify the provision of Public Resolution Numbered 17, Seventy-third Congress (48 Stat., 500), as amended. For purposes of this section, the term "privately owned United States-flag commercial vessels" shall not be deemed to include any vessel which, subsequent to the date of enactment of this amendment, shall have been either (a) built outside the United States, (b) rebuilt outside the United States, or (c) documented under any foreign registry, until such vessel shall have been documented under the laws of the United States for a period of three years:.... (PL 83-664, 68 Stat. 832, August 26, 1954).

PL 83-664 was proposed in response to the Eisenhower administration's urging that "all aids to ensure a merchant marine adequate to defense requirements be provided by direct means" (Lawrence, 1966, 169). It

4Senator John Marshall Butler (R-MD) originally proposed that all government cargoes, including all military shipments, be shipped by privately owned U.S. bottoms. A compromise was reached to accommodate several interests. Preferences were to apply only to half of the government's nonmilitary shipments because this was thought to be more consistent with the "substantial portion" language of the Merchant Marine Act of 1936. Another compromise was to include the "fair and reasonable rates for U.S. flag commercial vessels" language. This was strongly emphasized during the Senate's debate of the bill (Lawrence, 1966, 169-170).
requires that half of so-called "government impelled cargoes" be transported on U.S. bottoms when such vessels are "available" subject to a definition of availability by the program administrator.

An important component of cargo preference cargoes has been PL-480 grain. As a result of the District Court Transportation Institute v. Dole decision, which applied cargo preference to all subsidized export sales by the USDA, including PL-480, several amendments to the act were made in the 1985 Farm Bill. Those changes are that:

cargo preference requirements do not apply to specific commercial agricultural export programs such as the export credit, credit guarantee, blended credit, and export enhancement programs. However, in 1986 and 1987, 60 percent and 70 percent, respectively, of food aid exports must be shipped on U.S. flag vessels. In 1988 and thereafter, at least 75 percent must be shipped on U.S. flag vessels. The calendar years for complying with these requirements are the 12 month periods beginning April 1, 1986. Through 1989, the Secretary of Transportation must ensure that a specified amount of PL-480 title II commodities is shipped from Great Lakes ports. The minimum tonnage of agricultural commodities to be exported under programs subject to the cargo preference requirements is set by a formula but may be waived by the President.

The Secretary of Transportation must finance any increased ocean freight charges which result from specified changes to cargo preference laws. If ocean freight and differential costs on commodities subject to cargo preference requirement exceed 20 percent of the value of such commodities and such ocean freight and differential costs, then the U.S. Department of Transportation (DOT) must pay the excess. If the DOT lacks funds for the increased costs, then cargo preference requirements will revert to previous law (Glaser, 1985, 44).

To summarize, we have seen that PL-480 and cargo preference are closely related programs. They were considered and passed within six weeks of each other during the 83rd Congress. Since then, they have been intimately linked, with PL-480 cargoes composing a large proportion of preference cargoes. This linkage has generated competition between the beneficiaries of each program for program subsidies, and in so doing has
harmed both groups. American farmers have lost sales abroad directly through cancellation of government export programs and indirectly through the siphoning off of program funds to pay transport costs. Maritime interests have been harmed by cargo preference because they have been given little incentive to invest in modernized vessels that would be competitive in world shipping markets. Perversely, program incentives have led to declining efficiency and competitiveness of the U.S. fleet in world shipping markets under a program that was supposed to make them more competitive. The nonfiscal nature of the aid provided by cargo preference causes greater distortion of market signals than would pure and direct fiscal aid, perhaps characterized by direct monetary subsidy.

II.

CARGO PREFERENCE AND THE FOOD SECURITY ACT OF 1985

This section examines cargo preference and the Food Security Act of 1985 (1985 Farm Bill). It is viewed in the framework of a bargaining situation between agrarian and maritime interests. There are aspects of conflict, exemplified by the fight over the level of PL-480 cargo to be shipped on U.S. bottoms, and aspects of collaboration, exemplified by the compromise struck to exempt commercial USDA programs. Mutual aversion to further damage led to the final compromise.

The 1985 Farm Bill came into being under the Reagan administration environment of free market ideology and deficit reduction. Its stated goal was to overturn 50 years of New Deal farm policy that provided large subsidies to farmers to ensure minimum income levels. The Administration
wanted instead to reduce price supports to induce more market-oriented decision making among farmers (Wehr, 2 March 85, 396). The Congress, divided between a Republican controlled Senate and Democratic controlled House, found it hard to go along with this goal. The House was for continued price supports to maintain income, while the Senate wanted to increase exports through various export subsidy programs. Against this background, the issue of cargo preference was to play an important role.

Cargo preference was not originally an issue to be addressed during the political wrangling over the extension of agricultural support programs in 1985. Instead, the farm bill was to be a vehicle for "Reaganization" of U.S. farm policy entailing market orientation and reduction of government involvement. What happened, however, was quite different from what was expected. In this section we will examine the circumstances that brought cargo preference to the fore as an issue in the passage of the Food Security Act of 1985. To set the stage we will briefly look at the controversy over the applicability of cargo preference to agricultural export promotion programs and its temporary judicial solution. We will discuss the interest groups and bureaucratic politics of cargo preference in the Great Lakes, and the composition and goals of the agrarian and maritime interest groups. While they clashed repeatedly to safeguard their own well-entrenched interests, a mutually acceptable compromise was eventually found.

The Cargo Preference Controversy

The cargo preference controversy was based on differing interpretations of ambiguous administrative procedures and Congressional intent for the PL-480 program. Agrarian interests maintained an
interpretation that was advantageous to them, and maritime interests did the same. Here we will examine compliance with cargo preference requirements by the USDA in its blended credit programs, using what we have learned about its legislative history.

Compliance with Cargo Preference

The Maritime Administration (MARAD) of the Department of Transportation reviews government agency compliance in the administration of cargo preference laws. If an agency fails to meet the 50 percent requirement in a given year, MARAD may certify that failure was due to "non-availability of U.S. flag vessels." However, if MARAD finds a violation of cargo preference laws because that agency has fallen below the 50 percent requirement when U.S. flag vessels were available, it can do nothing. MARAD has no enforcement mechanism available. An example follows.

USDA and USAID PL-480 cargoes are presented in Table 1. As shown, USAID complied with cargo preference requirements for Titles I / III in 1982 and USDA for Title II in 1980-1982. MARAD certified "non-availability" for Titles I / III in 1980 and 1981, so USAID was in compliance. In 1983, however, neither program was found to be in compliance. Lacking enforcement mechanisms, MARAD could do nothing to ensure future compliance.

---

5The Merchant Marine Act of 1970 amended the Merchant Marine Act of 1936 to require each government agency to administer its programs in accordance with regulations promulgated by the Secretary of Transportation.

### Title I & III

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S. Flag Revenue ($1,000)</th>
<th>Tonnage:</th>
<th>U.S. Flag</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>119,842</td>
<td>3,544,373</td>
<td>1,452,217</td>
<td>41</td>
</tr>
<tr>
<td>1981</td>
<td>166,467</td>
<td>3,659,828</td>
<td>1,550,275</td>
<td>42</td>
</tr>
<tr>
<td>1982</td>
<td>172,387</td>
<td>3,915,939</td>
<td>2,036,581</td>
<td>52</td>
</tr>
<tr>
<td>1983</td>
<td>123,328</td>
<td>3,674,699</td>
<td>1,772,069</td>
<td>48 (b)</td>
</tr>
<tr>
<td>1984</td>
<td>141,642</td>
<td>4,507,224</td>
<td>2,296,547</td>
<td>51</td>
</tr>
<tr>
<td>1985</td>
<td>162,443</td>
<td>5,205,067</td>
<td>2,600,054</td>
<td>50</td>
</tr>
<tr>
<td>TQ (a)</td>
<td>42,789</td>
<td>1,059,067</td>
<td>525,135</td>
<td>49 (b)</td>
</tr>
<tr>
<td>1986</td>
<td>176,774</td>
<td>5,445,077</td>
<td>3,219,860</td>
<td>59</td>
</tr>
</tbody>
</table>

### Title II

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S. Flag Revenue ($1,000)</th>
<th>Tonnage:</th>
<th>U.S. Flag</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>127,797</td>
<td>1,595,504</td>
<td>861,404</td>
<td>54</td>
</tr>
<tr>
<td>1981</td>
<td>142,092</td>
<td>1,568,003</td>
<td>929,801</td>
<td>59</td>
</tr>
<tr>
<td>1982</td>
<td>120,311</td>
<td>1,660,464</td>
<td>908,186</td>
<td>55</td>
</tr>
<tr>
<td>1983</td>
<td>102,417</td>
<td>1,869,604</td>
<td>902,961</td>
<td>48 (b)</td>
</tr>
<tr>
<td>1984</td>
<td>118,864</td>
<td>2,011,132</td>
<td>1,177,378</td>
<td>58</td>
</tr>
<tr>
<td>1985</td>
<td>151,965</td>
<td>2,724,137</td>
<td>1,398,545</td>
<td>51</td>
</tr>
<tr>
<td>TQ (a)</td>
<td>31,736</td>
<td>614,798</td>
<td>343,515</td>
<td>56</td>
</tr>
<tr>
<td>1986</td>
<td>112,354</td>
<td>1,670,668</td>
<td>1,085,959</td>
<td>65</td>
</tr>
</tbody>
</table>

Notes:

(a) 1986 represented a change from calendar year to 12 month period from April 1 to March 31. The transition quarter (TQ) statistics for the period from January 1 to March 31, 1986 are presented, followed by those for the fiscal year period from April 1, 1986 to March 31, 1987.

(b) Cargo preference requirements were not met for these periods.

Sources: United States Department of Transportation, Maritime Administration. MARAD '81 and subsequent years.
The blended credit program was announced in 1982 as an export credit measure to increase depressed commodity prices (Jaroslovsky, 1982). It combined, or "blended," two Government Services Manager (GSM) export credit programs to provide competitive interest rates to foreign buyers of U.S. agricultural commodities. The two programs, GSM-5 and GSM-102, are administered by USDA. The GSM-5 program "provides credit at market interest rates to importers of agricultural commodities. For purposes of the blended credit program, the credit terms are at no interest for a period of up to three years" (Majority and Minority Staff, 1985, 65). In the GSM-102 program, "the Commodity Credit Corporation (CCC) guarantees the obligations of a foreign purchaser who buys U.S. agricultural commodities on a deferred payment basis not exceeding three years. In a typical transaction, a U.S. exporter sells agricultural commodities to a foreign buyer on a deferred payment basis. The foreign buyer arranges for a letter of credit drawn on a foreign bank in favor of a U.S. bank willing to accept deferred payment. The U.S. bank pays the exporter. In the interim, the U.S. exporter registers the sale with the CCC and pays a guarantee fee. If the sale arrangement is approved, the CCC guarantees the obligations of the foreign bank to pay the U.S. bank for a period not exceeding three years" (Majority and Minority Staff, 1985, 65-66).

In the blended credit transaction, CCC finances 20 percent of an export sale of agricultural commodities at no interest under the GSM-5 program. The foreign buyer obtains private financing for the remaining 80 percent of the purchase, and utilizing the GSM-102 program, the CCC guarantees the obligations of the foreign entity to pay. The foreign buyer
arranges and pays for transportation of the commodities. Overall, the transaction results in the reduction of the effective interest rate paid by foreign purchasers of U.S. agricultural commodities (Majority and Minority Staff, 1985, 66).

Over the years USDA maintained that cargo preference did not apply to GSM-5 or GSM-102. Maritime interests raised no "serious objections" (Majority and Minority Staff, 1985, 66). Once the two programs were combined in the blended credit program, the maritime industry changed its position, maintaining that the program should be subject to preference requirements. MARAD concurred, but, realizing that enforcement of preference requirement would render the program inoperative for several reasons, chose not to enforce those requirements.

As a result, the Transportation Institute filed suit against Elizabeth H. Dole, et al., in District of Columbia District Court (No. 83-3048). The Transportation Institute and Plaintiff Interveners, the Joint Maritime Congress, sought to have the court declare that the Preference Act was applicable to the blended credit program, and that failure to comply was unlawful. On February 21, 1985, the court found that the defendants violated the Preference Act by failing to apply the Act to the blended credit program. The decision further stated that failure to comply was unlawful and beyond the scope of defendants' legal authority and, therefore, was "arbitrary, capricious, and an abuse of discretion" (Majority and Minority Staff, 1985, 66). USDA suspended the program five days later.

Since an important part of the Reagan Administration's, soon to be introduced, Farm Bill package was a series of export subsidies to ease
farmers through the shock of support price reductions, this ruling caused some concern in the Administration.\(^6\) Farm state legislators were outraged at the District Court decision. This confrontation set the stage for the fight and eventual compromise over cargo preference and agricultural exports in the 1985 Farm Bill.

**Interest Groups and the Bureaucratic Politics of Cargo Preference**

Thomas Schelling (1960) has argued that all "bargaining problems" involve elements of both conflict and cooperation. Conflict provides the motive force for change, "the dramatic interest," while collaboration provides for stability. In situations where common purposes outweigh conflicting ones, society expects collaboration among opponents, whether the society is a corporate, Congressional, or general social entity. Not to do so "carries the pain of conspicuousness" and approbation (Schelling, 91, 1960). The expectation that adversaries with common interests can reach a mutually acceptable compromise can often be self-fulfilling, no matter how "dramatic" the conflict.

The key contending interest groups over cargo preference were agrarian and maritime. But these labels do not fit the interest groups exactly. Due to the nature of the conflict, there were also certain maritime groups siding with the agrarian interests. The agrarian interests, identified by opposition to the District Court ruling, included producers, USDA, USAID, agribusiness, exporters, shippers, processors, the Reagan Administration,

---

\(^6\)David A. Stockman, Director of the Office of Management and Budget, wrote to Senator John Danforth (R-MO) explaining the administration position. The letter included draft legislation to exempt GSM-5, GSM-102, blended credit, and other commercial export sales made using the CCC to reduce effective commodity prices. PL-480 sales were specifically not included in the exemption (Stockman, 18 June 1985).

20
and Great Lakes ports and maritime interests. The maritime interests, identified by support for the ruling, included MARAD, ship owners, some maritime unions, and Atlantic, Gulf, and Pacific coastal range ports.

Maritime interests, having been handed a resounding victory by the judiciary, were not about to return to the former situation. Agricultural interests, on the other hand, were determined to overturn a judicial decision that would render competitive export programs uncompetitive and would, in essence, act as an export tax to support shipping interests. The interest groups presented here are those testifying before the House of Representatives' Merchant Marine Subcommittee of the Committee on Merchant Marine and Fisheries during legislative hearings on the Farm Bill.

The Congress. In the House of Representatives, the Merchant Marine Subcommittee of the Committee on Merchant Marine and Fisheries provides a good representation of the division of interests within the Congress. Broadly speaking, this division was between farm state and maritime state legislators.

The most vocal proponents of increased cargo preference requirements were East Coast representatives. Chairman Mario Biaggi's (D-NY) district included large dock areas in New York City, and he derived much of his support from the local unions. Helen Delich Bentley (R-MD), a former member and chair of the Federal Maritime Commission and a defender of cargo preference, represented southern parts of the Port of Baltimore and the area around Annapolis, and so had a very strong maritime and national defense position. Barbara Mikulski (D-MD), who also represented part of the Port of Baltimore, was concerned with the welfare of her port-dependent constituents. Less vocal was Norman Lent (R-NY), who saw cargo preference
as an easy way to provide assistance to the merchant marine.

Representing agrarian interests were Representatives from the Midwest. James L. Oberstar (D-MN) was from a district with both agricultural and maritime interests, representing northeastern Minnesota and the Port of Duluth. He was a strong advocate of both agriculture and the maritime industry. Oberstar saw Great Lakes ports as squeezed by circumstances beyond their control. Only one U.S. flag company called regularly on the Great Lakes, so opportunities to fulfill cargo preference requirements were few. He maintained that it was difficult to convince other carriers to call on the Lakes. He had no qualms with the cargo preference program itself; rather, he was disappointed with the way the program was administered. Gerald D. Kleczka (D-WI) represented a district including the Port of Milwaukee that derived more than $16 million in wages for more than 1,000 workers from shipping. Title II cargoes were crucial to attracting ships to the port. He found, however, that "subsidizing one set of American workers (maritime workers) at the expense of another (port workers) is unacceptable" (United States Congress, Hearings, 31 October 1985, 116). Dennis A. Hertel (D-MI) felt that the Great Lakes did not receive the consideration that ought to be accorded a fourth sea coast, particularly by the Administration.

Subcommittee members Thomas M. Foglietta (D-PA) and Robert W. Davis (R-MI) were noncommittal. It is interesting to note that party affiliation played no part in this division of members of Congress, suggesting that this was a regional rather than a partisan issue.

Now we will look at the interest groups.
Great Lakes Maritime Interests. These were represented by three groups—the International Longshoremen's Association (ILA) of the AFL-CIO; Meehan Seaway Service, a stevedore and terminal operator; and the Great Lakes Commission, a Great Lakes commerce advocacy group.

The ILA position as stated by Ray Sierra, was that U.S. flag ships avoided the Great Lakes, much to the detriment of union members, and despite the proximity to the home of production and processing of industrial and agricultural commodities. He maintained that "our fourth seacoast is fast becoming our forgotten seacoast" (United States Congress, Hearings, 31 October 1985, 132). ILA proposals included using fiscal year accounting for preference cargoes and waiving the three year restriction on foreign built reflagged vessels to carry preference cargo. The fiscal year basis would allow more efficient allocation of Title II cargoes, and the shortened restricted period after reflagging was thought to have the potential to increase Lakes traffic.

The stevedore and terminal operators were represented by Tom Pfeil. His company, the Meehan Seaway Service, opposed cargo preference because: "It does not take into account the realities that have evolved [since PL-664 was adopted]" (United States Congress, Hearings, 31 October 1985, 123). He also opposed changes in USAID policy related to lowest landed cost. Strong support for a lowest landed cost policy was evident among Great

---

7Lowest landed cost includes three components—commodity cost, inland transportation to port of exit, and ocean transportation. This takes PL-480 cargoes from their places of origin to the docks of the importing countries. The costs of transportation are relatively competitive, and so fairly fixed, but inland transportation costs vary widely depending on the locations of production and exit. USDA and USAID look to put 50 percent of cargo on lowest landed cost U.S. flag shipping, and then look to lowest landed cost for the other 50 percent as a matter of policy.
Lakes advocates, since the Lakes are closest to the areas of production. Another common thread in testimony from many Great Lakes advocates, mentioned by Pfeil, was the question of the meaning of "availability" in the cargo preference laws. There was some debate over whether it includes intermodal and related forms of transportation (United States Congress, Hearings, 31 October 1985, 123).

The Great Lakes Commission held that cargo preference should be "coastal range neutral," but because of the vagueness of the definition of availability, it was seen to handicap the Great Lakes coast. Commission policy stated that cargo preference "was meant to support the merchant marine, not a specific set of ports" (United States Congress, Hearings, 31 October 1985, 126). Since cargo preference predates the St. Lawrence Seaway, there was no way for the Congress to have forecast its negative effects on the ports of the Great Lakes. The Commission also supported the principle of lowest landed cost and a legislative definition of the "availability" language in the cargo preference laws (United States Congress, Hearings, 31 October 1985, 127-128).

Port Authorities of the Great Lakes. These were represented by their respective heads or their deputy heads. The consensus was support for cargo preference as a concept, but not as it was then implemented, and certainly not as Judge Green would have had it enforced. There was some concern over cargo preference language, specifically about "fair and reasonable participation by geographic area." Title II cargoes were the life blood of the ports, even those that did not actually handle it, because of the power of such cargo to attract ships to the Lakes. They shared a desire for: fiscal year accounting for cargo preference
compliance, adherence to lowest landed cost, a clear definition of
availability of vessels, and an end to administrative diversion of cargoes
already contracted. It was noted that competition from the Great Lakes
ports helped "keep the lid on costs" by forcing the three other coastal
areas to compete, at least during the Lakes navigation season (United

The Reagan Administration preferred the 50 percent preference level to
the increased requirements since it adversely affected proposed farm
legislation. The President also preferred an exemption for export
promotion cargoes (Stockman, 18 June 1985).

The United States Department of Agriculture felt that export
enhancement programs were not subject to cargo preference, pointing to the
opinion of Attorney General Robert Kennedy which exempted commercial
cargoes from cargo preference requirements (Boren, 1985, S3332). The USDA
felt that since a similar program had been operated from 1949 to 1972
without being subject to cargo preference, the blended credit program also
should not be subject to it. Finally, USDA wanted clarification of the
cargo preference status of GSM-5 and GSM-102 (United States Congress,
Hearings, 16 July 1985, 5-7).

United States Agency for International Development (USAID) was opposed
to the expansion of cargo preference requirements on the grounds that: "It
would be expensive to the taxpayer, limit program flexibility, and increase
the administrative burden for program implementation" (United States
Congress, Hearings, 5 December 1985, 198).
Commodity Producer representatives were amenable to increased cargo preference if commercial export programs were exempt. They were concerned that subsidies meant for food aid used instead to subsidize maritime interests could mean "a 'life-or-death' situation for needy and starving people around the world" (United States Congress, Hearings, 5 December 1985, 237).

Agribusiness, Shippers, and Processors agreed that since higher costs associated with cargo preference shipping reduced the amount of commodity to be sold, and thus the profit to be made, that cargo preference should not be expanded (United States Congress, Hearings, 5 December 1985, 289-292).

Private Voluntary Organizations. CARE, as representative of U.S. private voluntary organizations, was particularly concerned about the higher cost of U.S. flag shipping which would otherwise be used to buy food, and were thus opposed to expanded preference requirements. CARE policy was to look first to U.S. flag ships, but there were serious problems since many such U.S. ships are below international standards. CARE's testimony included these complaints:

With specific respect to the application of these standards to food aid shipments and their compatibility with current cargo preference law, we have encountered serious constraints:
1. In order to comply with cargo preference, aging, sub-standard vessels destined for salvage have been put into service: inappropriate tug and barge modalities have been used on long haul voyages.
2. Some U.S. ships, inappropriately designed and outfitted for the movement and evacuation of food commodities, have been put into use to comply with cargo preference.
3. Costs of U.S. liner service have to increase sharply vis-a-vis foreign vessels.
4. The timing and scheduling of deliveries of food aid are sometimes relegated to the need to meet cargo preference requirements (United States Congress, Hearings, 5 December 1985, 294).
These interest groups, while seemingly dissimilar in goals, found a common opposition to increasing cargo preference requirements sufficient to bind them together into a cohesive bargaining unit. It is not common to see entities as diverse as CARE and Cargill on the same side of an issue. Their common ground was based on potential economic losses if the Transportation Institute v. Dole decision was not reversed legislatively.

**Maritime Interests**

On the other side were groups that had a common support for the cargo preference requirements. If the new requirements were rolled back at all, the group members would all lose economically, and still be in danger of further cutbacks in their subsidies.

The Maritime Administration, Department of Transportation (MARAD) is charged with enforcing cargo preference. MARAD also tries to expand opportunities for U.S. flag shipping. Thus MARAD supported expanded cargo preference.

**Tidewater Coast Ports.** These ports opposed any attempt to regulate the ports through which PL-480 cargo moved. Any exception made for the Great Lakes ports would adversely affect the flow of PL-480 cargoes through the tidewater port ranges, resulting in a loss of port income. The Port Authority of New York and New Jersey stated that it opposed "any attempts to shift cargo from Atlantic, Gulf, and Pacific coasts to the Great Lakes ports through government regulations." The South Atlantic and Caribbean Ports Authority noted that the Constitution prohibits favoring one port over another, and opposed changes in cargo preference that would favor the Great Lakes over any other range. The California Association of Port
Authorities stated that it "has opposed and continues to oppose any legislation that provides cargo preference which allocated cargo to a given port or port region" (United States Congress, Hearings, 31 October 1985, 177-182).

The Maritime Coalition is composed of the Joint Maritime Congress, the Maritime Institute for Research and Industrial Development, the Seafarers International Union, the Council of American-Flag Ship Operators, and the Transportation Institute. The coalition, composed of labor and management from tidewater ocean ports, was for expanded cargo preference because costs were only a small portion of the total bill for agricultural subsidies. They saw nothing wrong with getting their piece of the pie from funding devoted to agriculture. In reality, they were only trying to defend what they thought they had gained from the Transportation Institute v. Dole ruling (United States Congress, Hearings, 5 December 1985, 266-289).

The Exporters. Represented by the North American Export Grain Association, exporters were against expanding cargo preference, but they were also against the status quo. Since they shipped about 90 percent of U.S. grain exports, they were in a good position to know the state of the maritime industry. They found only 45 vessels available to handle PL-480 cargoes, many of which were ill-equipped. The Association was also against the compromise on cargo preference because they found it weak. There were no mechanisms by which the U.S. fleet would improve efficiency or expand availability, and no impetus for developing the U.S. merchant marine industry into a viable, competitive fleet (United States Congress, Hearings, 5 December 1985, 289-290).
The 1985 Farm Bill and Cargo Preference

The culmination of the struggle over cargo preference took place during the fight over the 1985 Farm Bill. Each group, agrarian and maritime, pleaded its case before Congress. Members of the House and Senate, themselves unable to find a suitable solution, had the interest groups hammer out their own compromise to be incorporated in the farm legislation package. This is what happened.

The Reagan Administration's draft farm bill was introduced by request in the Senate by Jesse Helms (R-NC), chair of the Agriculture Committee and in the House, also by request, by Edward R. Madigan (R-IL), ranking minority member of the Agriculture Committee (Wehr, 2 March 85, 397). 8

Since virtually all agricultural cargoes financed by the government, whether on commercial or concessional terms, were now considered subject to cargo preference, a key part of the Reagan Administration's farm legislation package was in jeopardy. The price advantage of subsidized commercial agricultural exports would be removed in the judicial climate. The administration and farm state legislators were forced to develop a legislative remedy. Various proposals were introduced, all of which eventually failed in the face of the powerful maritime lobby. They are shown in Table 2. From this flurry of proposals beginning in March, 9 the maritime interests knew that the gains handed to them by Judge Green in February would not be kept without a fight from agrarian interests.

---

8 Introduction "by request" of a piece of legislation means that the bill sponsor does not support the administration measure.

9 Except for the Inouye proposal, which was made in January.
Table 2. Sponsor and Anti-Cargo Preference Legislation Introduced during the Debate on the 1985 Farm Bill.

- **HR 1464 (C. Evans)** To prohibit use of CCC funds to finance ocean freight differential required for cargo preference compliance. Department of Defense liable for increased charges.
- **HR 1465 (C. Evans)** To prohibit use of CCC funds to finance ocean freight differential required for cargo preference compliance. MARAD liable for increased charges.
- **HR 1466 (C. Evans)** To exempt blended credit program from cargo preference requirements.
- **HR 1517 (V. Smith)** To prohibit application of cargo preference to CCC or USDA export expansion programs.
- **HR 1617 (English)** To amend CCC charter to exempt export promotion activities of CCC and USDA from certain cargo preference requirements.
- **HR 1760 (Bereuter)/ S 930 (Nickles)** To exempt all agricultural export programs, including PL-480, from cargo preference.
- **HR 1965 (Emerson)/ S 908 (McConnell)** To exempt PL-480 and CCC financed export credit programs from cargo preference.
- **HR 2357 (H. Brown)** To exempt all government assisted agricultural export programs, including PL-480, from cargo preference.
- **HR 2538 (Leach)** To exempt all agricultural export and foreign assistance programs from cargo preference.
- **S 187 (Inouye)** To grant the Secretary of Transportation sole responsibility for determining and designating programs subject to cargo preference.
- **S 616 (Helms)** A provision would exempt export PIK and blended credit programs and emergency food aid from cargo preference.
- **S 664 (Nickles)** To prohibit application of cargo preference to CCC or USDA export expansion programs.
- **S 721 (Boren)** To amend the CCC Act to provide that agricultural exports, except PL-480, not be subject to cargo preference.

At the end of March, the maritime interests had cargo preference required on 50 percent of blended credit export cargoes as well as on PL-480. But, farm state senators and representatives launched an onslaught of legislation to take back the lost ground. Proposals ranged from fairly reasonable, like S 616 and S 664 to outrightly belligerent, like HR 1760 / S 930 (see Table 2).

At the same time, Senators Pressler, Boschwitz, and Boren prepared to introduce a bill to limit cargo preference requirements to PL-480 and USAID programs to which they had been historically applied. Senator Pressler noted in preparatory remarks that:

the 15 to 30 percent increase in shipping costs will more than negate the two percent interest reduction under the Blended Credit Program. If the current ruling stands, the government will either have to provide additional funds to pay for shipping the grain or the export sales will not be made. With the huge federal deficit problem we face today, we cannot afford to provide such additional funds. Yet our record trade deficit and depressed farm economy desperately require those exports. It is clear that we need to limit the costly cargo preference provision to the Public Law 480 program and AID export sales (Pressler, Congressional Record, 18 March 1985, S3010).

On May 14, the Senate Agriculture Committee reported favorably on S 721. Senator Dole and seven other senators urged that it be passed in response to the District Court ruling of February 21. But on June 19, the Senate Commerce Committee voted 9-7 to report unfavorably on S 721. David Stockman, director of OMB, said the administration would accept an exemption for commercial farm exports. Dole, unsure of the outcome of what would have been a difficult floor fight, withheld the legislation from the Senate floor.

In September in the House, the Rules Committee included a provision from the Merchant Marine and Fisheries Committee requiring application of
cargo preference to government generated farm export programs. At the same time, several Agriculture Committee members planned "to introduce an amendment exempting virtually all government sponsored export programs from cargo preference requirements" (Rapp, 21 September 1985, 1895).

On October 3 in the House, maritime interests prevailed handily over farm interests in amendments to the Farm Bill. The first of two measures defeated would have exempted all agricultural exports, including PL-480, from cargo preference requirements. Introduced by Glenn English (D-OK), it failed 179-245 and was subsequently defeated by voice vote. The second measure, that would have required MARAD to pay for cargo preference subsidy costs for agricultural export programs, was rejected even more resoundingly, 151-269 (Rapp, 5 October 1985, 1971 and 2028).

Finally, on October 8, the House passed HR 2100, its farm bill, by 282-141 (Rapp, 12 October 1985, 2055). Cargo preference provisions of the bill were that:

government sponsored financing programs for agricultural export sales, except certain Food for Peace programs and other grant programs specifically exempted by law (PL 95-501), must abide by cargo preference requirements that half of specified cargoes must be shipped on U.S. flag vessels. Exemptions would not be allowed for new activity resulting directly from the expansion of the intermediate export credit program (Provisions of the House-passed..., 12 October 1985, 2059).

The Senate floor debate on its version of the farm bill began October 25 (Senate opens debate..., 26 October 1985, 2184). After the House rejection of the English amendment, Senator Thad Cochran (R-MS) "renegotiated a previous agreement between farm and maritime groups that would exempt all government generated commercial sales, such as those in the blended credit program; but in exchange, U.S. merchant marine companies" would get cargo preference requirements on PL-480 and related
programs expanded to 75 percent. The Department of Transportation was to pay the excess cost of the expanded requirements. Tentative approval was granted October 29 by a vote of 70-30 on amendments by Cochran, Ted Stevens (R-AK), and Daniel Inouye (D-HI), but Senators Alan J. Dixon (D-IL), Rudy Boschwitz (R-MN), and other midwestern senators were enraged because they realized the plan would further limit shipping opportunities out of Great Lakes ports. They launched a fusillade of six amendments to protect Lakes shipping interests and market share, but were soundly defeated on all. However, Dixon and Boschwitz "forced a compromise encouraging the government to maintain the level of export traffic in Great Lakes ports that PL-480 shipments generated in 1984" (Rapp, 2 November 1985, 2195). Stevens and Inouye agreed to this compromise and it was approved by the full Senate 53-43. The Senate passed its farm bill on November 23 (Rapp, 30 November 1985, 2513).

There was some difference between the House and Senate cargo preference provisions. The Joint Maritime Congress had announced its support for the Senate compromise on November 25 (Rapp, 30 November 1985, 2514). The bill taken to conference, which began on 5 December 1985, however, was the House bill. By December 13, no compromise had been reached on the cargo preference provisions. There was disagreement among House conferees on adopting the Senate language, particularly two with agricultural interests—Glenn English (D-OK) and Doug Bereuter (R-NE) (Rapp, 14 December 1985, 2657). The problems were eventually solved, however, and both houses passed the bill, the Food Security Act of 1985, on December 18 (Rapp, 21 December 1985, 2673). A summary of the cargo preference compromise follows:
Cargo preference requirements do not apply to specific commercial agricultural export programs such as the export credit, credit guarantee, blended credit, and export enhancement programs. However, in 1986 and 1987, 60 percent and 70 percent, respectively, of food aid exports must be shipped on U.S. flag vessels. In 1988 and thereafter, at least 75 percent must be shipped on U.S. flag vessels. The calendar years for complying with these requirements are the 12-month periods beginning April 1, 1986. Through 1989, the Secretary of Transportation must ensure that a specified amount of PL-480 Title II commodities is shipped from Great Lakes ports. The minimum tonnage of agricultural commodities to be exported under programs subject to the cargo preference requirements is set by a formula but may be waived by the President.

The Secretary of Transportation must finance any increased ocean freight charges which result from specified changes to cargo preference laws. If ocean freight and ocean freight differential costs on commodities subject to cargo preference requirement exceed 20 percent of the value of such commodities and such ocean freight and differential costs, then the U.S. Department of Transportation (DOT) must pay the excess. If the DOT lacks funds for the increased costs, then cargo preference requirements will revert to previous law (Glaser, 1985, 44).

It was this compromise which became part of the law. As is common in bargaining situations, the common interests of the opposing agrarian and maritime groups finally outweighed and overcame the conflicts. While the compromise was politically and economically feasible, we question its economic efficiency.

**PL-480 AND CARGO PREFERENCE IN DULUTH: ECONOMIC EFFECTS**

Duluth has several important natural advantages as a port. It is the most westerly American port with an outlet at the Atlantic Ocean. It is close to the centers of production of American industry and agriculture. It is centrally located and has easy access to inland rail and river transportation. It also has two major drawbacks. The first is the limited navigation season. The port is only operational eight or nine months out of the year. The other is the fragility of its link to the Atlantic. The
St. Lawrence Seaway has exhibited an alarming tendency to break down recently, causing the loss of valuable time and money while ships sit idly waiting for Seaway repairs. For this reason, and several others, only one U.S. flag steamship company -- Lykes Brothers of New Orleans -- provides regular service to the Great Lakes.

The PL-480 program is of great importance to the Port of Duluth. According to Davis Helberg, Director of the Seaway Port Authority of Duluth: "Approximately 85 percent of annual general cargo exports and more than 50 percent of our longshoremen's man-hours are directly attributable to PL-480, Title II. In given years, the level of PL-480, Title II, cargo has approached 95 percent of all the port's general cargo exports" (United States Congress, Hearings, 31 October 1985, 160).

Government cargoes have a great effect on the economic well being of Great Lakes ports, and Duluth in particular. According to a 1985 report by the Center for the Great Lakes, increased shipping of government cargoes through the Great Lakes would have significant effects on increasing income and employment in the region. Of government programs, the most important is PL-480 Title II. This may be seen in Table 3, which details PL-480 Title II shipments by port of exit and longshoremen hours worked. The hypothesis of stevedore employment matching PL-480 Title II exports fits available data fairly well. This is particularly true in Duluth. Milwaukee and Chicago are larger ports with a more diverse cargo base, so they may not be as dependent as Duluth is on PL-480 for stevedoring work. Thus we see that PL-480 Title II

10 See the Appendix for the quantitative results of this study.

11 The time series is relatively short, so these results should be taken as tentative.
provides employment both directly and indirectly, and it generates more income as the volume of cargo increases.

What are the effects of cargo preference, specifically the expanded PL-480 Title II requirements? Increased cargo preference requirements with virtually no U.S. flag vessels available means Duluth is competing for only that 25 percent of cargoes eligible to be carried on foreign flag vessels. In the past, Duluth was competing for at least the 50 percent allowed to be hauled on such ships. To compensate for this, the cargo preference compromise in the 1985 Farm Bill provided for a minimum guarantee of about 250,000 tons of PL-480 Title II cargo for the Great Lakes from 1986 to 1989. However, according to Davis Helberg (personal communication, May 22, 1989), about 100,000 tons of that cargo is loaded on barges in Chicago and shipped down the Mississippi River to New Orleans and other Gulf Coast ports. That leaves only about 150,000 tons of this cargo for the other Lake ports, which is far below historical levels (see Table 4).

To examine the effects of the cargo preference compromise, Hanson (1987) applied a model by Paarlberg used to predict the effects of cargo preference. Details are found in the Appendix.

Hanson concluded that, given the limitations of his model, a higher preference requirement would result in "a small shift from PL-480 sales and donations to commercial sales." This is not likely to be a welcome conclusion at Duluth, since it is less competitive handling commercial shipments.\(^\text{12}\)

Thus, the major effects of increased cargo preference on Duluth are twofold. The port loses cargo because more PL-480 grain must be shipped on U.S. flag vessels that do not often call at Duluth. Then, since the port gets less labor intensive cargo, longshoremen lose wages. These lost wages echo through the local economy, causing further economic injury.

\(^{12}\)Scott Hanson, unpublished manuscript, 1987.
Table 3. PL-480 Title II Tonnage by Port of Exit and Longshoremen’s Hours Worked, 1979-1984.

<table>
<thead>
<tr>
<th>Year</th>
<th>Duluth PL-480 Title II Tonnage</th>
<th>Milwaukee PL-480 Title II Tonnage</th>
<th>Chicago PL-480 Title II Tonnage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Longshoremen Hours Worked</td>
<td>Longshoremen Hours Worked</td>
<td>Longshoremen Hours Worked</td>
</tr>
<tr>
<td>1979</td>
<td>25,647</td>
<td>55,222</td>
<td>27,953</td>
</tr>
<tr>
<td>1980</td>
<td>17,107</td>
<td>72,065</td>
<td>30,082</td>
</tr>
<tr>
<td>1981</td>
<td>38,829</td>
<td>82,595</td>
<td>46,104</td>
</tr>
<tr>
<td></td>
<td>96,883</td>
<td>116,798</td>
<td>269,006</td>
</tr>
<tr>
<td>1982</td>
<td>25,335</td>
<td>102,942</td>
<td>52,432</td>
</tr>
<tr>
<td></td>
<td>82,943</td>
<td>116,076</td>
<td>229,655</td>
</tr>
<tr>
<td>1983</td>
<td>26,652</td>
<td>143,402</td>
<td>6,388</td>
</tr>
<tr>
<td></td>
<td>86,900</td>
<td>216,549</td>
<td>240,345</td>
</tr>
</tbody>
</table>


Table 4. Historical Levels of PL-480 Title II Cargo Shipped from Selected Port Ranges and Ports, 1978-1986 (in tons).

<table>
<thead>
<tr>
<th>Year</th>
<th>Atlantic</th>
<th>Coastal Range</th>
<th>Port Customs District</th>
<th>Chicago</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Atlantic</td>
<td>Gulf</td>
<td>Pacific</td>
</tr>
<tr>
<td>1978</td>
<td>41,594</td>
<td>718,380</td>
<td>343,395</td>
<td>147,628</td>
</tr>
<tr>
<td>1980</td>
<td>65,372</td>
<td>713,854</td>
<td>272,170</td>
<td>180,117</td>
</tr>
<tr>
<td>1981</td>
<td>150,164</td>
<td>612,584</td>
<td>229,827</td>
<td>270,373</td>
</tr>
<tr>
<td>1982</td>
<td>198,033</td>
<td>575,359</td>
<td>133,187</td>
<td>332,507</td>
</tr>
<tr>
<td>1983</td>
<td>170,530</td>
<td>914,681</td>
<td>95,856</td>
<td>355,966</td>
</tr>
<tr>
<td>1984</td>
<td>189,951</td>
<td>1,131,673</td>
<td>118,257</td>
<td>277,579</td>
</tr>
<tr>
<td>1985</td>
<td>257,235</td>
<td>1,436,666</td>
<td>252,571</td>
<td>321,446</td>
</tr>
<tr>
<td>1986</td>
<td>172,913</td>
<td>1,072,125</td>
<td>170,503</td>
<td>264,112</td>
</tr>
<tr>
<td>Mean</td>
<td>138,357</td>
<td>842,040</td>
<td>227,196</td>
<td>261,416</td>
</tr>
</tbody>
</table>

Notes: Atlantic total is the aggregate of north and south Atlantic totals. Gulf totals include inland cargoes.

Source: *Scott Hanson, unpublished manuscript, 1987.*
SUMMARY AND CONCLUSIONS

In this report we have examined the changing relation between the Food for Peace program and the Cargo Preference program and some possible effects of those changes on the Port of Duluth. We have seen how disparate political interests joined to reach an acceptable compromise over a divisive issue. We conclude with some comments on this "competition for subsidy." When a program produces friction between groups with some common interests, the conflict wastes competitive energy, just as physical friction wastes energy as heat. To remove some of the friction between interest groups with common ground, we propose an economically attractive, yet politically feasible alternative.

The 1985 Farm Bill increased cargo preference requirements for cargoes vital to the economic health of the Port of Duluth-Superior and the Great Lakes as a whole. As a concession, the Lakes ports were given a special temporary cargo allotment. The extension of that cargo allotment is now the subject of negotiation. This points to a basic weakness in cargo preference programs; they are claimed to be coast range neutral, but in fact, they are not. Perhaps range neutrality is not a desirable goal. It is possible cargo preference does not disadvantage U.S. ports overall, just Great Lakes ports. It may be the aggregate effect of cargo preference on U.S. ports is positive, and Great Lakes ports are simply not competitive.

How can range neutrality be introduced to the preference cargo allocation process? Many suggestions were made by interest groups testifying before Congress during the debates on cargo preference and the 1985 Farm Bill. Most were satisfied with one form or another of the status quo. Some proposed some modifications here and there, but the guts of the
program were almost never challenged. That would be fine if the cargo preference program had given us a modern, secure, competitive fleet. It has not.

Cargo preference legislation stated that in the event of a national emergency, the merchant marine should be capable of supporting military action through logistical support. This has not been achieved. Had cargo preference achieved this goal, there would be no need for the U.S. Navy to maintain its own Rapid Reserve Force of support merchant ships. Yet, since the technological needs of naval sealift are generally different than those of bulk cargo transport, we have a merchant marine that is, for the most part, unsuited to the supporting role it is supposed to play. Instead, the government has subsidized a fleet that is unable to fulfill its obligation for receiving that subsidy.

In CARE's testimony before Congress, merchant marine vessels that haul PL-480 cargoes were described as old ships that do not meet world shipping standards. This is not a fleet "composed of the best equipped, safest, and most suitable types of vessels, constructed in the United States and manned with a trained and efficient citizen personnel" that is mandated in the Merchant Marine Act of 1936. Further, the increase in preference cargo levels from 50 percent to 75 percent is likely to bring even less suitable vessels out of mothballs and into the trades. Something is very wrong with this program.

There are many alternatives. One is doing nothing. The status quo has the advantage that it is already in place. One extreme measure is to remove all subsidies and allow the fleet to compete in the world market. This would be an almost certain death knell of the merchant fleet. While
having a certain economic attraction, it is not politically feasible. The strong constituencies of maritime subsidies would not allow it. Another radical measure is to nationalize the fleet. Rather than have the government pay for shipping indirectly, allow the government to pay the entire cost of shipping directly. This would eliminate distortions embodied in nonfiscal aid and reduce transaction costs in fiscal aid programs. This is also not politically feasible.

These, naturally, are three unacceptable courses. A more reasonable solution is for the government to subsidize the merchant marine directly, rather than take the subsidy out of funds meant to support agricultural programs. Let the maritime industry have its subsidies in the budget explicitly rather than piggy-backing on agriculture's funding. As Representative Kleczka of Milwaukee said, "Subsidizing one set of American workers at the expense of another is unacceptable."

The bureaucratic morass of this interdepartmental program is so well entrenched that it is virtually impossible to change it due to institutional inertia. The administration of PL-480 and cargo preference makes it nearly impossible for American farmers and carriers to respond in a timely fashion to market opportunities abroad. And when they try, there is friction. These two industries, both facing hard times, need to cooperate. How might that be accomplished? A first step would be to remove sources of competition for the same funding. It is this competition for subsidy, rather than competition for markets, which harms both parties. The solution may be to disqualify one of the groups from eligibility and give it its own subsidy program. Then both parties would be able to do their respective jobs instead of protecting their subsidy from each other.
A reasonable compromise proposal was made in the House Merchant Marine Subcommittee hearings of December 5, 1985 by Myron Laserson of the National Agricultural Export Grain Association. It bears repeating:

The [cargo preference] compromise proposal has no mechanism by which the U.S. flag fleet will improve efficiencies or expand availability and no impetus for developing the U.S. merchant marine industry into a viable, competitive fleet.

The maritime subsidy needs to be redesigned to promote a safe and efficient fleet. The new program should be based on incentives and competitiveness and should not sap the funding from the U.S. agricultural export program.

The U.S. agricultural sector will sell less commodities under the Public Law 480 and section 416 programs because inflated freight rates will absorb more of that funding under the 50 percent cargo preference paid by USDA. Those programs exempted under the compromise, the commercial export programs, will be held hostage subject to the full appropriation of funding to MarAd to cover the additional 25 percent.

In other words, agriculture will lose tonnage under the concessional programs and only gain uncertainty in the commercial export programs.

...We recommend the issue be thoroughly examined and studied, leading toward a new comprehensive maritime subsidy policy which will foster growth and development in both the maritime industry and U.S. agriculture (United States Congress, Hearings, 5 December 1985, 289-290).

The United States needs to find an efficient, market oriented system to support the redevelopment of a modern, safe merchant fleet. Repealing the Cargo Preference Act of 1954 would be a start. In its place, a direct subsidy program similar to or an extension of the existing Operating Differential Subsidy program administered within the Department of Transportation's Maritime Administration would be more economically efficient, allow more flexibility in response to market conditions by maritime interests, and promote cooperation rather than competition between the natural allies -- farmers and shippers. It will not be easy, and it certainly will not be popular, but it needs to be done for the sake of the American fleet and of American competitiveness in world trade.


"Navy, Marine, Coast Guard." *The Officer.* April 1989, 22-23.


David Rapp. "Trying to rewrite agricultural policy: conflicting objectives prevent farm programs from adding up." Congressional Quarterly Weekly Review, 17 August 1985, 1637-1640.


"Senate opens debate on farm bill." Congressional Quarterly Weekly Review, 26 October 1985, 2184.


Elizabeth Wehr. "What to do about farm programs? Administration plan to cut aid leaves Congress divided, farm groups in disagreement." Congressional Quarterly Weekly Report, 26 January 1985, pp. 135-140.

APPENDIX

This appendix presents the quantitative results of two studies relevant to the debate over cargo preference and the Great Lakes. The quantitative results should be viewed with some skepticism, but the qualitative results and policy recommendations are substantially reliable.

The first study is by the Center for the Great Lakes, a Great Lakes advocacy group. The report is based on an econometric model of cargo flow through Great Lakes port. The germane part of the model predicts the levels of income and employment generated both directly and indirectly by increased government cargo shipments through the Great Lakes. Those results are presented in Table A-1.

According to the model, about 110 jobs and $2.7 million in income are created directly, and between 250 and 375 jobs and about $8 million in income are created indirectly for each five percent share increase of government cargo shipments flowing through Great Lakes ports. Qualitatively it says that there are significant positive effects on Great Lakes ports from increased flow of government cargoes.

The second study is an unpublished report by Scott Hanson of the University of Minnesota. He altered Paarlberg's differentiated products model to analyze the effects of changing cargo preference requirements on U.S. wheat exports. Using the world wheat market as a model of all markets of PL-480 agricultural commodities, Paarlberg's model was found useful for

---


predicting the effects of increased cargo preference requirements for PL-480.

Paarlberg, using data from 1977 to 1981, found the effect on the world wheat market of an increase of cargo preference requirements from 50 percent to 100 percent. Hanson found it possible to modify the model to accommodate the increase in cargo preference requirements to 75 percent for PL-480 shipments. Hanson extrapolated the Paarlberg results to predict the effect of the cargo preference compromise increase from 50 percent to 75 percent. The results of the simulation are shown in Table A-2.

Paarlberg found that higher preference requirements brought about a shift from concessional to commercial sales. During Paarlberg's study period, commercial sales accounted for 90 percent of the market and concessional sales for ten percent. The net effect was to increase exports. According to Hanson's modified model, at the 75 percent preference level, concessional sales would fall 2.72 percent, or about 100,000 tons while commercial sales would rise 2.37 percent, or about 750,000 tons. Prices at home and abroad would increase.

Hanson noted three problems with the model. First, the model refers to concessional sales, not the donations with which we are most concerned. This may be explained by assuming that donations are sales where the concession is equal to the market price. Paarlberg included donations in the definition of concessional sales, but it is difficult to conclude that subsidized sales and donations will change proportionally with changes in cargo preference requirements. Second, the allocation of donations under

15 Hanson suggested that this is possible because the model is linear with only one variable parameter.
Title II is made partly for political reasons, which may be wholly uneconomic. Hanson felt it would be better not to model this. Third, Congress sets Title II donation levels. Hanson noted there is no neo-classical market for these donations, as was assumed in the model. He further stated that Title II shipments had never reached Congressionally mandated levels, and that market forces played a role in the commodity and shipping costs. USDA's program budget is fixed, so it may only donate as much food as the budget allows, no matter what the program volume goals are.

Changes predicted by Paarlberg's model include a fall in concessional sales of 2.72 percent (about 100,000 tons) with a concurrent increase in commercial sales of 2.37 percent (about 750,000 tons). The decrease in concessional sales, or of Title II donations, would hit hard at employment and income in Duluth. Crudely, this would mean the direct loss of between 2,400 and 3,100 hours of longshoremen's labor.\textsuperscript{16} This does not consider possible increases in exports due to the increase in commercial sales.

\textsuperscript{16}This is based on the following assumptions: that the mean level of PL-480 Title II cargoes of 35,152 tons per year would be reduced by 2.72 percent from Table 4 above, and that the mean hours of labor generated per ton of PL-480 Title II cargo is between 2.5 and 3.2, based on historical labor and PL-480 tonnage patterns in Duluth.
Table A-1. Direct and Indirect Employment and Income Creation by Increased Great Lakes Share of Overseas Government Cargo.

<table>
<thead>
<tr>
<th>Share Increase (%)</th>
<th>Jobs Created</th>
<th>Direct Income ($mn)</th>
<th>Total Direct and Indirect Income Created ($mn)</th>
<th>Jobs Income ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>222</td>
<td>5.2</td>
<td>511</td>
<td>16.0</td>
</tr>
<tr>
<td>25</td>
<td>552</td>
<td>13.6</td>
<td>1,342</td>
<td>28.2</td>
</tr>
<tr>
<td>50</td>
<td>1,102</td>
<td>27.2</td>
<td>3,779</td>
<td>83.5</td>
</tr>
<tr>
<td>100</td>
<td>2,199</td>
<td>54.0</td>
<td>7,545</td>
<td>166.0</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Change to: Cargo Preference</th>
<th>100 percent cargo preference</th>
<th>75 percent cargo preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resulting change in:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Destination prices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>2.22</td>
<td>1.11</td>
</tr>
<tr>
<td>Concessional</td>
<td>11.94</td>
<td>5.97</td>
</tr>
<tr>
<td>U.S. Domestic Price</td>
<td>2.81</td>
<td>1.90</td>
</tr>
<tr>
<td>Quantities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>4.74</td>
<td>2.37</td>
</tr>
<tr>
<td>Concessional</td>
<td>-5.44</td>
<td>-2.72</td>
</tr>
</tbody>
</table>

Source: Scott Hanson, unpublished manuscript, 1987.