

BY THE U.S. GENERAL ACCOUNTING OFFICE

Report To The Chairman, Committee On Merchant Marine And Fisheries House Of Representatives

Economic Effects Of Cargo Preference Laws

Cargo preference laws mandate that at least 50 percent of all U.S. government-owned or-financed cargo shipped between American and foreign ports be carried on U.S.-flag ships. Using 1980 shipping data, GAO analyzed the dependency of the U.S.-flag fleet on cargo preference laws, the economic effects of cargo preference, and the effect of eliminating the cargo preference requirement for the Public Law No. 480 Food for Peace program. GAO's general conclusions are:

- --The U.S.-flag fleet depends on cargo preference laws for only a portion of the government cargo it carries. The Department of Defense told GAO that it would continue using U.S.-flag ships as much as possible even if no laws required it to do so. In 1980, government cargo carried on U.S.-flag ships because of cargo preference laws was less than 10 percent of total U.S.-flag cargo.
- --Because of cargo preference laws, additional U.S.-flag ships and American crews are employed in transporting government cargo and the government pays more to ship its cargo. In 1980, between 21 and 33 additional ships and from 1,400 to 2,200 shipboard workers were employed, and the additional cost to the government was between \$71 and \$79 million.
- --The Food for Peace program is a major source of cargo dependent on cargo preference, accounting for 60-75 percent of the total dependent cargo in 1980.





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UNITED STATES GENERAL ACCOUNTING OFFICE WASHINGTON, D.C. 20548

B-203314

The Honorable Walter B. Jones, Chairman Committee on Merchant Marine and Fisheries House of Representatives

Dear Mr. Chairman:

At your request, we have analyzed the dependency of the U.S.-flag merchant fleet on cargo preference laws, the economic effects of cargo preference, and the effect of eliminating the preference requirement for Public Law No. 480 "Food for Peace" cargo. We looked at agencies that provide government cargo shipped on foreign trade routes to estimate how much of that cargo that now travels on U.S.-flag ships would travel on foreign-flag ships in the absence of cargo preference. On the basis of that analysis, we estimated the number of ships and workers used to carry the cargo U.S.-flag ships carry because of preference laws and the additional shipping cost to the government due to cargo preference. We also estimated how much of the increased use of U.S.-flag ships and workers and increased government shipping costs due to cargo preference results from the preference requirement for P.L. 480 cargo.

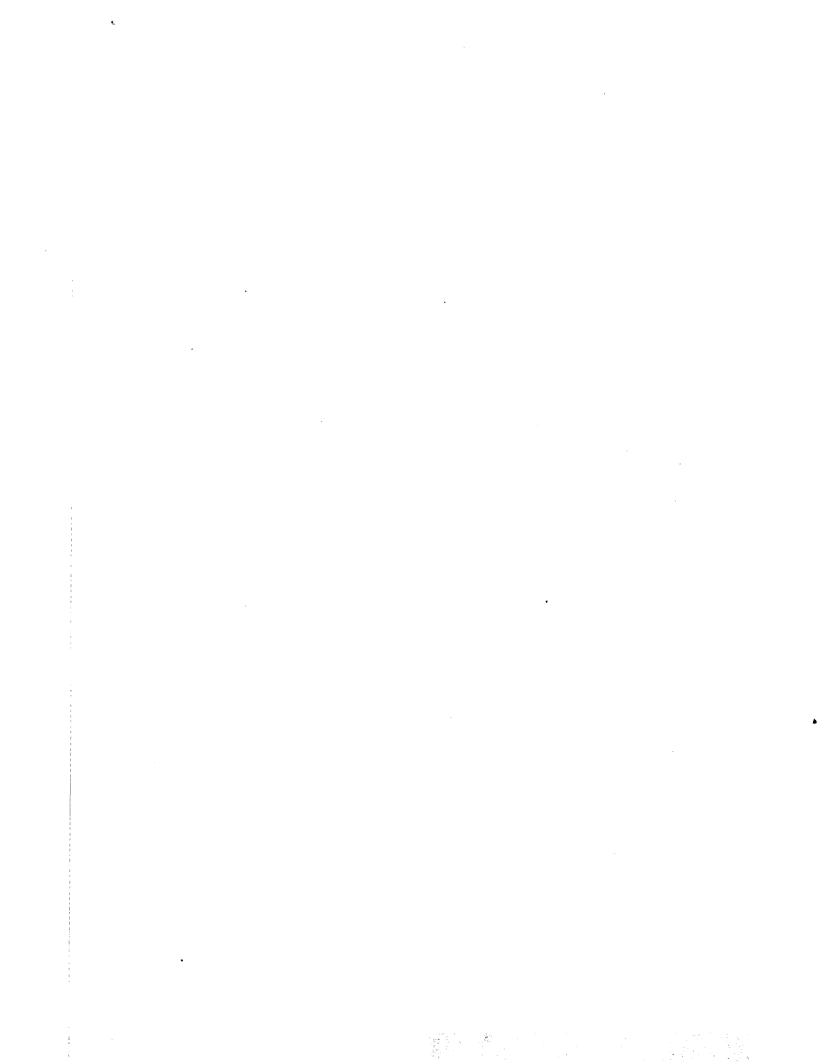
Our analysis is based on 1980 data and our numerical estimates apply to that year only. Our methodology, however, could be used for any other year or years for which data are available, and we believe that the general conclusions we reached will remain valid as long as the assumptions used in analyzing 1980 data remain applicable.

As arranged with your office, we are sending copies of this report to interested parties and we will make copies available to others upon request.

Sincerely yours,

Lawrence H. Thompson Chief Economist

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GENERAL ACCOUNTING OFFICE REPORT TO THE CHAIRMAN, COMMITTEE ON MERCHANT MARINE AND FISHERIES HOUSE OF REPRESENTATIVES

DIGEST

Cargo preference laws require that at least 50 percent of the cargo shipped or financed by the U.S. government travel aboard U.S.—flag vessels. These laws were enacted in part to help ensure adequate sealift capacity in time of national emergency or war. The Chairman of the House Committee on Merchant Marine and Fisheries asked GAO to review the effect of cargo preference laws on the U.S. economy, the extent to which the U.S.—flag fleet depends on cargo preference laws, and the effect of eliminating the preference requirement for Public Law No. 480 "Food for Peace" cargo.

To answer these questions, GAO examined cargo data from 1980. The amount of government cargo carried on U.S.-flag ships varies from year to year. Consequently, although GAO presents specific estimates for 1980, these estimates cannot be projected for other years. However, GAO believes that the following general conclusions regarding the effects of cargo preference laws can be reached and are valid as long as the assumptions used in analyzing 1980 data remain applicable:

- --The maritime industry depends on cargo preference laws for some of the cargo it transports. However, not all government cargo carried on U.S.-flag ships is transported on those ships because of cargo preference laws. In particular, the Department of Defense told GAO that it would continue using U.S.-flag ships as much as possible even if no laws required it to do so.
- --One major economic effect of cargo preference laws is that additional U.S.-flag ships and American crews are employed in transporting government cargo. A second major effect is that the government pays

more to ship its cargo because without cargo preference less expensive foreign-flag ships would sometimes be used.

--The Food for Peace program is a major source of cargo for which the U.S.-flag fleet is dependent on cargo preference laws.

The underlying assumptions for these general conclusions are that the role of cargo preference laws in government agencies' shipping decisions remains the same as it was in 1980, the cost differential between foreign-flag and U.S.-flag charter ships remains large, and the P.L. 480 Food for Peace program remains a relatively large program.

RELATIVE COMPETITIVENESS OF THE U.S.-FLAG FLEET

There are two types of markets for ocean transport services. In one market, liner firms—which offer service on a regular schedule—operate ships designed to attract small lots of cargo. On any one voyage, these ships typically carry cargo from many shippers destined for several different places. In the other market, charter vessels—which have no schedule but offer service on a time or voyage basis to the highest bidder—are designed to carry large lots of cargo. On a single voyage, these ships typically carry cargo from only a few shippers—often just one—to one destination. Because of these differences, shipping rates per ton of cargo are higher for liners.

Both the U.S.-flag liner and charter ships have higher operating costs than foreign-flag ships. To equalize the costs, all liner and some charter firms can receive federal operating subsidies by meeting specified condi-Both also can carry government cargo tions. reserved to them under the preference laws. Liner firms normally carry preference cargo at the same rates as other similar cargo. These rates are established in shipping conferences that set rates for members. Charter firms carry preference cargo at rates that are set without foreign-flag ships competing for the cargo, but in contrast to liner firms, when charter firms do so they are not eligible to receive the operating subsidy.

GOVERNMENT CARGO A MAJOR PART OF U.S.-FLAG FLEET'S BUSINESS

U.S. government-owned or -financed cargo, including Department of Defense (DOD) cargo, was one-third of the U.S.-flag fleet's 37.0 million tons of business in 1980. With the fleet's share of total U.S. oceanborne commerce below 5 percent, this cargo is of particular importance. Government cargo was about 38 percent of the U.S.-flag charter fleet's business and 30 percent of the U.S.-flag liner fleet's business. (See ch. 3.)

U.S.-Flag Cargo in 1980 (million long tons)

| Motal aaraa | Liners | Charters | Total |
|------------------------------|--------|----------|-------|
| Total cargo, U.Sflag | 20.2 | 16.8 | 37.0 |
| Government cargo, U.Sflag | 6.0 | 6.4 | 12.4 |

Five agencies accounted for almost all of the government cargo shipped in 1980. DOD provided 71 percent—by far the largest share of this government cargo. The Department of Agriculture's Food for Peace program (P.L. 480) provided the next largest share, about 18 percent. (See ch. 3, table 4.)

IF NO CARGO PREFERENCE LAWS EXISTED, MOST GOVERNMENT CARGO WOULD STILL BE SHIPPED ON U.S.-FLAG SHIPS

The Department of Defense said that because of national defense program objectives, it would use U.S.-flag ships as much as possible even if there were no laws requiring it to do so. Since DOD provided 71 percent of the liner and charter cargo originated by government agencies, a large share of the government cargo, according to DOD, is therefore on U.S.-flag vessels for reasons other than cargo preference laws.

The civilian agencies have no program objectives requiring them to use U.S.-flag ships in the absence of cargo preference laws. Thus, cost and service factors would be used by the agencies and their clients, as they are used by commercial shippers, to determine which vessels would be used to carry the remaining 28 percent of U.S.-flag government cargo. (See ch. 4.)

The distinction between charter and liner ships is important in analyzing how much of this civilian agency cargo would have switched to foreign-flag ships without cargo preference laws.

Charter

o All civilian agency charter cargo carried on U.S.-flag ships would be carried on foreign-flag ships. The higher cost U.S.flag charters could not compete with foreign-flag charters.

Liners

- o The civilian agency cargo shipped for the P.L. 480, Title I program on U.S.-flag liners would probably be switched to foreign-flag charters. Title I shipments would be generally large enough to warrant charter vessels, and foreign charter rates would be cheaper. (See p. 17.)
- o For the remaining U.S.-flag liner cargo, the shipments would be too small to warrant using a charter vessel. Because U.S.- and foreign-flag liner rates are generally similar, there might be little or no cost saving if this cargo were switched to foreign-flag liners. GAO could not determine whether service factors favor U.S.- or foreign-flag liners and is, therefore, uncertain whether this cargo would be switched if no cargo preference laws existed. (See pp. 18 to 20.)

ECONOMIC EFFECTS OF CARGO PREFERENCE LAWS

At least 2.3 million tons of cargo moved on U.S.-flag vessels in 1980 because of cargo preference laws. This figure, which represents 6.2 percent of all U.S.-flag cargo, includes 1.7 million tons of charter cargo and 0.6 million tons of U.S.-flag liner cargo. The amount of cargo might have been as high as 3.6 million tons, or 8.4 percent of the total U.S.-flag cargo, if one included the 1.3 million tons of liner cargo about which GAO is uncertain. (See ch. 4)

Additional ships and workers are used to transport cargo dependent on cargo preference laws. When U.S.-flag ships are used in place

of foreign-flag ships because of cargo preference, the costs to the government may increase. The following table presents two GAO estimates for 1980 of the additional resources used and the additional transportation costs to the government due to cargo preference.

Estimates of Economic Effects

| | Lower estimate | Higher estimate |
|--|----------------|-----------------|
| Additional ships Additional workers | 21 1,400 | 33 2,200 |
| Increased transportation costs to government (in millions) | \$71.4 | \$78.6 |

For 1980, P.L. 480 cargo accounted for 60 to 75 percent of the cargo moved on U.S.-flag vessels because of cargo preference and approximately 90 percent of the government's additional transportation costs.

AGENCY COMMENTS AND GAO EVALUATION

GAO sent a draft of this report for review to the Departments of Defense, Transportation, Agriculture, and Energy and the Agency for International Development. The Department of Defense said that it had no objections to the contents of the report. The Departments of Agriculture and Energy and the Agency for International Development pointed out some differences between their cargo records and GAO's cargo data. These differences were reconciled.

These agencies also noted that there are indirect costs of cargo preference that GAO did not estimate. GAO agrees that these indirect costs may exist. However, in calculating the costs of cargo preference, the scope of GAO's analysis was limited to a calculation of the government's additional cost to ship commodities. Furthermore, GAO believes that accurate estimates of these indirect costs would be difficult to develop. The Department of Transportation did not provide comments.

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| | ABBREVIATIONS | |
| AID | Agency for International Development | |
| DOD | Department of Defense | |
| DOE | Department of Energy | |
| Ex-Im | Export-Import Bank | |
| GAO | General Accounting Office | |
| MarAd | Maritime Administration | |
| ODS | operating differential subsidies | |
| SPR | Strategic Petroleum Reserve | |
| IISDA | U.S. Department of Agriculture | |

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CHAPTER 1

INTRODUCTION

The policy of reserving government cargo¹ for U.S.-flag ships, known as cargo preference, provides an important indirect federal subsidy for the U.S. merchant fleet. Proponents of this subsidy usually justify it as necessary to continue to assure adequate sealift capacity in time of war or other national emergency and to carry the nation's foreign commerce.

The amount of civilian and military government cargo on U.S.-flag vessels peaked in the mid to late 1960's and has generally declined since (see fig. 1). An exception is the large increase in U.S.-flag tanker cargoes of crude oil imports for the Strategic Petroleum Reserve (SPR). U.S.-flag vessels carried 4.7 percent of the oceanborne foreign trade of the United States in 1980. Government cargo was about 34 percent of the U.S.-flag business by volume. Some believe that any weakening of the cargo preference requirement would reduce the capacity of the fleet and thereby harm our national security. Others believe that the cargo preference requirement raises transportation costs to the government and adds to the budget deficit without adding to fleet capacity.

BACKGROUND

The United States has required since 1817 that U.S.-flag ships be used for all cargo--commercial and government--that moves between U.S. ports. This cabotage law was consolidated in the Merchant Marine Act of 1920 and is popularly known as the Jones Act. The Military Transportation Act of 1904 was the first cargo preference law to apply to cargo travelling between U.S. and foreign ports. The reasons for sending all supplies to U.S. armed forces overseas on U.S.-flag ships, unless the rates were excessive or unreasonable, included vulnerability of the U.S. Navy during the Spanish-American War and a desire to establish reliable contacts with the Philippines and Puerto Rico.

Public Resolution 17, passed in 1934, required that exports financed by U.S. government loans be transported exclusively on U.S.-flag ships. This resolution arose because U.S.-financed agricultural exports were being shipped on foreign-flag vessels.

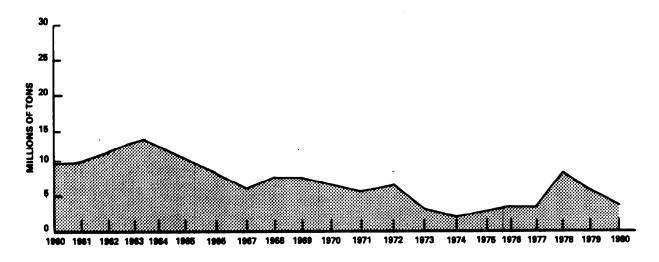
By the 1950's, bulk cargo such as coal and grain dominated international trade, but for various reasons, U.S.-flag bulk ships were noncompetitive in the world market. Due to national security concerns, the federal government extended maritime subsidy coverage to include the bulk segment, but with little

We define government cargo (also known as government-impelled cargo) as that owned or financed by the U.S. government.

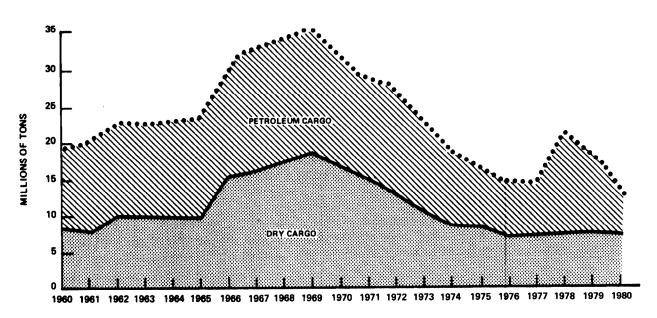
Figure 1

Trends in Shipping Government Cargo on U.S.-Flag Ships

CIVILIAN AGENCY U. S.—FLAG CARGOES
(ALL AGENCIES EXCEPT DOD)



U. S.--FLAG MILITARY CARGOES (TONS)



Source: Maritime Administration and Military Sealift Command

Note: Because much of the oil for SPR is purchased by the Department of Defense for the Department of Energy, the oil shipments appear in both graphs.

success. This situation led to the 1954 Cargo Preference Act (amending the 1936 Merchant Marine Act). This act requires that at least 50 percent of all cargo generated by the government for its own or other nations' use must be transported on U.S.-flag ships. This law, known as P.L. 664, and the 1904 Military Transportation Act form present cargo preference policy as it relates to international trade.

OBJECTIVES, SCOPE, AND METHODOLOGY

We reviewed the effect of cargo preference laws at the request of Representative Walter B. Jones, Chairman, House Committee on Merchant Marine and Fisheries. We estimated how much of the civilian agency and military foreign-trade government cargo shipped in 1980 on U.S.-flag ships can be attributed to cargo preference laws in order to evaluate three specific concerns raised by Chairman Jones:

- o the extent to which the merchant marine is dependent on cargo preference laws
- o the economic effect of these laws
- o the effect of eliminating the preference requirement for P.L. 480 Food for Peace cargo.

At Chairman Jones' request, we did not analyze commercial and government cargo carried in domestic oceanborne trade, 2 nor did we evaluate the effects of bilateral cargo sharing agreements. We did not analyze the effectiveness of the cargo preference programs, so we make no recommendations on continuing, expanding, or eliminating them.

We obtained 1980 data, the most current available at the time we were collecting data, 3 on civilian agency cargo from the Maritime Administration (MarAd), Department of Transportation; the Agency for International Development (AID); the Department of Energy (DOE); and the Department of Agriculture (USDA), all in Washington, D.C. The data on military cargo came from the Military Sealift Command. We combined civilian and military

²This domestic trade has been reserved for U.S.-flag ships since 1817 and is known as Jones Act trade.

³After the initial draft of this report was written, 1981 data became available. We recognize that there are sometimes large year-to-year differences in government cargo movements. The estimates presented in this report should be interpreted only as estimates for 1980. However, the framework we developed in this study can be used for any other year for which data are available. It can also be used over a multiyear period to provide a long-term look at the economic effects of cargo preference.

agency cargo data to construct a data base that includes all government cargo shipped on U.S.-flag vessels. When reconciling agency data, we did not verify each agency's primary data sources, such as individual vessel bills-of-lading. In some cases because actual cost differences were not available, we estimated the extra transportation costs to civilian government agencies of using U.S.-flag ships to comply with cargo preference laws. Our field work was carried out between February and November 1982. We made our review in accordance with generally accepted government auditing standards.

By including data on Department of Defense (DOD) cargo moving on U.S.-flag vessels between U.S. and foreign ports in 1980 and combining it with data for the civilian agencies, we improved on previous efforts to analyze the cargo preference issue. We did not gather and classify DOD cargo data for any other year and DOD data is not included in overall foreign trade statistics. Therefore, when we compare 1980 U.S.-flag cargo data with any other year's data, we adjust the 1980 data by subtracting DOD's information. We note this in the text whenever it occurs.

We met with officials of the ship-operating industry and we developed information on the number of vessels and shipboard employment in the U.S. merchant fleet. In addition, we examined programs in federal civilian agencies that provide the cargo reserved for the U.S. merchant fleet.

We learned that an agency's choice between U.S.-flag and foreign-flag carriers might depend on the agency's program objectives, the relative costs of the carriers, or service considerations. To determine if there were program objectives that called for the use of U.S.-flag ships, we interviewed policy-level officials in the agencies that ship government cargo. If they told us that their objectives would cause them to use U.S.-flag ships even in the absence of cargo preference, then we concluded that the economic effects of using U.S.-flag ships to carry that cargo was not the result of cargo preference. Consequently, we did not attempt to calculate these effects.

When agency officials told us that no program objectives of that agency called for the use of U.S.-flag ships, we then determined whether there would have been cost savings if foreign-flag ships had been substituted for U.S.-flag ships. If there were cost savings, we concluded that in the absence of cargo preference laws foreign-flag ships would have been used. Therefore, U.S.-flag ships were dependent on cargo preference for at least that cargo, and the cost of cargo preference to the government includes at least the additional cost of transporting that cargo. Other costs that have been identified by government agencies include higher costs for SPR oil when it is shipped on U.S.-flag ships (see app. II); we did not attempt to estimate the non-transportation costs of cargo preference.

For cargo for which program objectives were not a factor and for which there might not have been large cost savings from using foreign-flag ships, we could not conclude with certainty whether foreign-flag or U.S.-flag ships would have been used in the absence of cargo preference. Too much subjectivity would have been involved in estimating service differences which include dependability, availability, reputation, facilities at ports of call, etc. As a result, we are uncertain about whether U.S.-flag ships are dependent on cargo preference laws to obtain that cargo and whether any additional costs resulting from using U.S.-flag ships to transport that cargo can be attributed to cargo preference.

Because of this uncertainty, we present two estimates of the dependency of U.S.-flag ships on cargo preference and the economic effects of cargo preference. Our lower estimates are based on only the cargo for which program objectives are not important, and cost differences clearly suggest that in the absence of cargo preference foreign-flag ships would have been used to reduce costs. Our higher estimates assume that cargo preference is also the reason that U.S.-flag ships are used to carry the cargo about which we are uncertain. Some of this cargo would most likely have remained on U.S.-flag ships in the absence of cargo preference, so the actual cost of cargo preference in 1980 would fall somewhere between the lower and higher estimates.

Our examination of the benefits of cargo preference laws was limited to estimates of the direct employment of U.S.-flag ships and shipboard workers. The economic resources used because of cargo preference laws are interpreted in this report as the direct economic effect of these laws. We recognize that the employment of this additional sealift and seafaring capacity not only has a commercial interest, but also is considered necessary to ensure adequate maritime capacity in time of war or other national emergency. We did not attempt to quantify benefits obtained in this way.

To consider the economic effect of cargo preference in perspective, we examined liner and charter services in the merchant fleet. U.S.-flag ships offering liner service usually have the same rates as foreign-flag ships, while U.S.-flag ships offering charter service usually have higher rates than foreign-flag ships. We also identified those trade routes where U.S.-flag qovernment cargo is concentrated.

We submitted a draft of this report for review and comment to the Departments of Agriculture, Defense, and Energy and the Agency for International Development because these agencies are the major shippers of government cargo subject to cargo preference laws. These agencies' comments are included as appendixes I, II, III, and IV. We also submitted a draft of the report to the Department of Transportation because of the Maritime Administration's role in monitoring cargo preference compliance, but that Department did not respond.

CHAPTER 2

DIFFERENCES BETWEEN U.S.-FLAG

LINER AND CHARTER SERVICES

The U.S.-flag fleet carried less than 5 percent of the total U.S. oceanborne trade in 1980. Between 1970 and 1980, the U.S.-flag liner fleet increased its amount of annual cargo by 37 percent, while the charter fleet lost about 10 percent of its annual foreign trade cargo.

U.S.-FLAG LINER SERVICE HAS GAINED MARKET SHARE

Liner service is like bus service. Liners sail regularly at fixed freight rates over the same routes, whether full or half empty. Liners are designed to carry cargo that is shipped in small lot sizes for many different shippers. Shippers typically pay higher rates per ton of cargo for small shipments than if they were shipping enough cargo at one time to employ an entire vessel. About 175 U.S.-flag vessels owned by eight companies were in the liner business in 1980. The following table highlights liner cargo shipments over 10 years.

Shipments on U.S.- and Foreign-Flag Liners, 1970 and 1980 (millions of long tons)

| | 1970 | 1980 | (<u>change</u>) |
|---------|------|------|-------------------|
| U.S. | 11.8 | 16.2 | +37.3% |
| Foreign | 38.6 | 43.1 | +11.7% |
| Total | 50.4 | 59.3 | +17.7% |

Source: Maritime Administration, Office of Trade Studies and Statistics (does not include DOD statistics).

Between 1970 and 1980, U.S.-flag liners increased their market much faster than did foreign-flag liners. In 1970, U.S. liners transported 23.4 percent of all liner cargo moving to and from the United States; in 1980, 27.3 percent. During this decade, the U.S.-flag liner fleet was able to capture a larger share of all U.S.-foreign trade liner cargo while reducing the total

¹All but 37 ships of one company received operating subsidies.

number of vessels and ship-operating companies.² U.S.-flag liner companies substituted capital for labor through widespread use of containerized vessels. Using this technology vastly increases the productivity of a vessel by reducing the amount of cargo handling, and thus the turnaround time, in port.

Operating subsidies vital to competition

In fiscal year 1980, the federal government provided U.S.-flag liners with \$313 million in operating differential subsidies (ODS)--over \$2.3 million for each of the 138 ships in the subsidized liner fleet. These subsidies support the U.S.-flag liner fleet in certain foreign trade routes by offsetting the higher operating costs experienced by U.S.-flag ship operators competing for foreign trade cargo. U.S.-flag ship operating costs are much higher than foreign-flag operating costs because U.S.-flag ships must use U.S. crews--the world's most expensive3--and manning levels on U.S.-flag ships are higher than on comparable foreign-flag ships. However, in 1980, one major U.S.-flag liner firm--highly containerized and operating between industrialized nations--carried cargo without federal operating subsidies.

Shipping conferences ease competitive pressures

Most U.S.- and foreign-flag liner companies in the U.S.foreign trade belong to shipping conferences. Members cooperate
in various matters, including deciding on rates. On a particular
trade route, such as from the U.S. Gulf coast to West Africa,
liner companies agree on freight rates and must then file a tariff with the Federal Maritime Commission. U.S. maritime laws
regulate the activities of the conferences to prevent antitrust
practices, but basically a conference is a cartel system designed
to minimize price competition. Limiting this competition is particularly important for U.S.-flag operators, whose operating
costs are so high. Some liner companies operate independently of
these shipping conferences, however. To some extent, the existence of these independents restricts the ability of conferences
to limit price competition.

²Changes in Federal Maritime Regulation Can Increase Efficiency and Reduce Costs in the Ocean Liner Shipping Industry (GAO/PAD-82-11, July 2, 1982).

Maritime Subsidy Requirements Hinder U.S.-Flag Operators' Competitive Position (CED-82-2, Nov. 30, 1981). Data include such costs as base wages, vacation pay, overtime, and other fringe benefits.

U.S.-FLAG CHARTER SERVICE HAS LOST MARKET SHARE

If liner service is analogous to bus service, charter service is like taxi service. The firm or person who wants to ship cargo to a particular place hires all or part of a vessel. Once the chartered ship arrives at the destination, it is available to other shippers in that location. There are, however, no conferences to set prices, and competition for cargo in the charter arena is fierce. Charters carry many types of cargo, but in general they carry large lots of cargo for a small number of shippers. The rates per ton of cargo are typically lower than rates on liners.

Because of this competition and the high cost of operating U.S.-flag ships, little, if any, cargo is transported on U.S.-flag ships without federal assistance. One form of assistance is an operating differential subsidy made available under the Merchant Marine Act of 1970; another is reserving cargo for U.S.-flag ships (the subject of this report). Unlike subsidized firms in the liner industry, charter vessels cannot carry preference cargo and receive operating subsidies at the same time.

Even with protected government cargo and the possibility of building ships that could receive operating subsidies, the U.S.-flag charter fleet has lost 10 percent of its annual cargo over the last 10 years. In relative terms, the loss is much more--from 3.2 percent of the total volume of charter shipments in 1970 to 1.7 percent in 1980 (see table 2).

When we talk about charter service, we consider its broad meaning. More specific descriptions of the different types of charter service are available. MarAd distinguishes between non-liner and tanker service in reporting statistics on cargo movements in the U.S.-foreign trade. Nonliner service includes dry cargo bulk ships that carry large loads of bulk cargo, such as wheat, coal, and ore, and smaller, breakbulk ships that carry general dry cargo (these ships are often called tramps). Tankers are specialized ships that generally carry liquid cargo, usually petroleum.

Shipments on U.S.- and Foreign-Flag Charters,

1970 and 1980
(millions of long tons)

| | 1970 | 1980 | (<u>change</u>) |
|---------|-------|-------|-------------------|
| U.S. | 13.4 | 12.0 | -10.4% |
| Foreign | 409.4 | 701.0 | +71.2% |
| Total | 422.8 | 713.0 | +68.6% |

Source: Maritime Administration, Office of Trade Studies and Statistics (does not include DOD shipments).

CHAPTER 3

IMPORTANCE OF GOVERNMENT CARGO TO THE U.S.-FLAG FLEET

In 1980, U.S.-flag vessels carried 12.4 million tons of government cargo (see table 3), which was 33.6 percent of all U.S.-flag cargo shipped between U.S. and foreign ports (see table 5). Thus, this type of cargo is an important market for the U.S.-flag fleet.

<u>Table 3</u>

Oceanborne Cargo in U.S. Foreign Trade, 1980

(millions of long tons)

| | Total, all ships | Carried U.Sflag | | Governi cargo carrieo U.Sflag | d by |
|---------|------------------|--------------------|-------|--|------|
| Liner | 63.3 | 20.2 | 31.9% | 6.0 | 9.5% |
| Charter | 717.7 | 16.8 | 2.3% | 6.4 | 0.9% |
| Tota | 1 781.0 | 37.0 | 4.7% | 12.4 | 1.6% |

Source: MarAd, Military Sealift Command.

Note: The U.S.-flag tonnages, and therefore the share of total market, differ between tables 1 and 2 and this table

because table 3 includes DOD cargo.

FIVE AGENCIES PROVIDED 99 PERCENT OF GOVERNMENT CARGO IN 1980

A few government agencies (the Department of Defense, the Department of Agriculture, the Agency for International Development, the Export-Import Bank, and the Department of Energy) provide virtually all of the government cargo shipped on foreign trade routes. DOD alone shipped 71 percent of the 12.4 million tons of this cargo--almost four times the amount of cargo shipped in the P.L. 480 programs (see table 4).

The Department of Defense total--8.8 million tons--does not include all the cargo shipped by the military in 1980. DOD also shipped 4.1 million tons on U.S.-flag ships between U.S. ports. This cargo falls under the domestic cabotage laws and is not included in our study. Another 4.7 million tons of DOD cargo moved aboard U.S.-flag ships, mostly tankers, between foreign ports. This cargo is subject to cargo preference laws, but we excluded it from the overall data because the other cargo data from MarAd covers only ocean shipments between U.S. and foreign ports.

Government Cargo, U.S.-Flag Vessels,

By Source and Service, 1980
(thousands of long tons)

| | Total | Agency share (percent) | Liner | Charter | • |
|---------------------|--------------|------------------------|-------|------------|-----------|
| DOD | 8,804 | 71 | 4,038 | 4,766 | |
| P.L. 480 | 2,276 | 18 | 1,454 | 822 | |
| Title I Title II | 1,42° 849 | | | 640 814 | 787 35 |
| AID | 670 | 5 | 303 | 367 | |
| DOE (SPR) | 452 | . 4 | - | 452 | |
| Ex-Im Bank | 119 | 1 | 100 | 19 | |
| Other | 97 | 1 | 93 | 4 | |
| Total | 12,418 | 100 | 5,988 | 6,430 | |

Source: Maritime Administration and Military Sealift Command.

Another agency--DOE--is now a much larger source of cargo than indicated by 1980 data. The Strategic Petroleum Reserve program had only 0.5 million tons of oil delivered by U.S.-flag tankers in 1980 due to a lengthy interruption in the program. In 1981, when the program fully resumed, U.S.-flag tankers delivered 6.5 million tons of foreign-source crude oil. The SPR program will continue as an important source of cargo in the future for U.S.-flag tankers until the reserve is filled.

A third government program causes cargo to be shipped on U.S.-flag ships, though it is not subject to cargo preference laws and thus does not appear in table 4. This is the "cashtransfer" program between AID and Israel, which replaced an AID commodity import program, under which wheat and other grains were shipped from the United States. The Israeli government can use the money grant to buy whatever it wants and is not limited to spending the money on U.S. goods and services, although it must spend no less on U.S. goods and services than it did under the previous program. As determined by the Comptroller General, the cargo preference law does not apply to these shipments.

¹ Comptroller General decision <u>Transportation-Cargo Preference</u> Act-Nonapplicability-Cash Transfer Program for Israel (B-194528, Mar. 3, 1980).

However, each year, AID negotiates an agreement with the Israeli government that calls for 50 percent of the commodities to be shipped on U.S.-flag ships. In 1980, this added over 400,000 tons to the U.S.-flag fleet's market.

GOVERNMENT CARGO ALMOST EVENLY DIVIDED BETWEEN LINER AND CHARTER SERVICES

In 1980, 48 percent of government cargo was shipped by liner service and 52 percent by charter service. Table 5 shows each service's ratio of government cargo to the total U.S.-flag market. As we mentioned in chapter 2, the U.S.-flag charter fleet is not competitive in the international market without government assistance.

U.S.-Flag and Government Cargo--Relative Cargo Shares By Service, 1980 (thousands of tons)

| Service | Total U.Sflag cargo | U.Sflag government cargo | Percentage of total <u>cargo</u> | |
|----------|---------------------------|--------------------------------|--|--|
| Liner | 20,185 | 5,988 | 29.7 | |
| Charter | 16,797 | 6,430 | 38.3 | |
| Nonliner | 6,292 | 3,412 | 54.2 | |
| Tanker | 10,335 | 3,018 | 29.2 | |
| | | | | |
| Total | 36,982 | 12,418 | 33.6 | |

Source: Maritime Administration and Military Sealift Command.

U.S.-flag charter vessels carrying nongovernment cargo in 1980 were paid an operating subsidy by MarAd so that they could operate in the international market. These vessels, almost all oil tankers, carried 9.6 million tons under direct subsidy in 1980. Another source of cargo, about 0.4 million tons in 1980, was the cash grant to Israel.

AMOUNT OF GOVERNMENT CARGO VARIES BY TRADE ROUTE

Examining trade routes helps to understand shipping activity. All ships in liner service are required by the Federal Maritime Commission to operate regularly on the same trade routes, so liner companies' markets are described by the trade route system. The ships offering charter service--nonliners and

tankers--operate wherever they can find cargo, so they move in and out of various trade routes. Generally, however, the markets tend to concentrate in particular trades.

As shown in table 6, of the top eight trade routes listed (ranked according to the amount of U.S.-flag cargo they carry), government cargo accounted for between 26 percent and 62 percent of the total cargo shipped on each trade route. DOD cargo accounted for between 0.1 percent and 48 percent shipped on the eight trade routes.

These top trade routes for U.S.-flag cargo were also the leading routes for government cargo; 90 percent of U.S.-flag government cargo moved over these routes during 1980. Other routes have high shares of government cargo on U.S.-flag ships, but the markets are fairly small.

Table 6 Leading Trade Routes for U.S.-Flag Ships, 1980 (thousands of long tons)

| | Cargo | | | | | | |
|-------------|--------------|--------------|-----------------|-------------|-----------------|--|--|
| Trade route | U.Sflag | All Gov't | % of U.Sflag | DOD only | % of U.Sflag | | |
| 5-9,11 | 6,421 | 3,077 | 47.9 | 3,070 | 47.8 | | |
| 29 | 5,410 | 1,830 | 33.8 | 1,743 | 32.2 | | |
| 10,13 | 4,705 | 1,976 | 42.0 | 664 | 14.1 | | |
| 17,18,28 | 3,006 | 855 | 28.4 | 113 | 3.8 | | |
| 4 | 3,035 | 1,139 | 37.5 | 1,132 | 37.3 | | |
| 19 | 2,885 | 1,384 | 48.0 | 788 | 27.3 | | |
| 21 | 2,038 | 533 | 26.2 | 529 | 26.0 | | |
| 14-2,15-B | 695 | 431 | 62.0 | 1 | 0.1 | | |
| Where trade | routes go: | | | | | | |
| 5-9,11 A | tlantic to U | nited K | ingdom and E | ırope | , . | | |

| 5-9,11 | Atlantic to United Kingdom and Europe |
|-----------|---|
| 29 | Pacific, Hawaii, and Alaska to Far East |
| 10,13 | Atlantic and Gulf to Mediterranean, Black Sea, and Portugal |
| 17,18,28 | Atlantic, Gulf, and Pacific to Indonesia, Malaysia, Singapore, India, Persian Gulf, and Red Sea |
| 4 | Atlantic to Caribbean and East Coast of Mexico |
| 19 | Gulf to Caribbean and East Coast of Mexico |
| 21 | Gulf to United Kingdom and continental Europe |
| 14-2,15-B | Gulf to Africa |

CHAPTER 4

AGENCY SHIPPING ARRANGEMENTS--

DO CARGO PREFERENCE LAWS MAKE A DIFFERENCE?

We found that cargo preference laws sometimes affect agencies' shipping arrangements but that most government cargo would continue to be carried on U.S.-flag ships even without those The Department of Defense told us that even without cargo preference laws it would continue to use U.S.-flag ships to help ensure that the U.S.-flag fleet is available to provide adequate sealift capability in time of war or other national emergency. The major shippers of civilian government cargo maintained that in the absence of cargo preference they would use foreign-flag charter vessels when their shipments were large enough to warrant a charter ship. For their shipments that are best suited to liners, service considerations and other nonprice factors would probably determine the extent to which U.S.-flag and foreign-flag ships are used. This distinction between charters and liners arises because although foreign-flag charter ships charge rates below those set by similar U.S.-flag ships, there is often little if any price difference between U.S.- and foreign-flag liner rates.

Most of the cargo that is carried on U.S.-flag ships because of cargo preference travels to the Indian subcontinent, Africa, and countries around the Mediterranean and the Caribbean. Most of this cargo is shipped as part of the P.L. 480 Food for Peace Program.

Table 7 summarizes the agencies' probable shipping decisions about cargo now going on U.S.-flag shipments if cargo preference laws did not exist.

DEPARTMENT OF DEFENSE SHIPS
MAINLY ON U.S.-FLAG VESSELS,
BUT NOT BECAUSE OF CARGO PREFERENCE

The Department of Defense has a longstanding policy, as part of DOD's program objectives, to support the U.S.-flag fleet so that adequate sealift capacity will be available in time of war or other national emergency. Thus, whether cargo preference laws exist or not, DOD officials in the Office of the Secretary of Defense said that they would use the U.S.-flag fleet. This does not mean that DOD opposes cargo preference laws, or that DOD does not find them useful in achieving its objective of adequate reserve sealift capacity. It simply means that a DOD objective coincides with one of the objectives of cargo preference. We have no reason to anticipate that DOD would change its objective if cargo preference requirements were dropped.

¹This is also true of the military cargo that moves on U.S.-flag vessels between foreign ports. (See p. 10.)

Expected Flag of Vessel for Government Cargo Now on U.S.-Flag
Ships if Cargo Preference Laws Did Not Exist

| Agency/ progr a m | (mi | Tons, 1980 llion tons) | U.S flag | Foreign flag | Uncertain | Reason |
|----------------------------------|---------|------------------------------|-------------------|-----------------|-------------------|-------------------|
| DOD liner charter | (2 . | 8.8 4.0 4.8 | <u>х</u> х | <u>-</u> - | - - | Program objective |
| P.L. 480: T: liner charter | itle I | 1.4 0.6 0.8 | - | <u>х</u> х | <u>-</u> - | Cost Cost |
| P.L. 480: Tiner charter | itle II | 0.8 0.8 neg | - - | - x | <u>x</u> | Service Cost |
| AID liner charter | | 0.7 0.3 0.4 | <u>-</u> - | <u>x</u> _ x | <u>x</u> | Service Cost |
| DOE charter | | 0.5 | - | x | - | Cost |
| Ex-Im Bank liner charter | | 0.1 0.1 neg | | <u>x</u> | <u>x</u> | Service Cost |
| Other liner charter | | 0.1 0.1 neg | - - | <u>x</u> | <u>x</u> | Service Cost |

The military is important as a source of cargo for the U.S.-flag fleet. For example, in 1980, the military shipped almost 4 million tons on U.S.-flag liners, about 20 percent of U.S.-flag liner cargo. Military charter cargo totalled 4.8 million tons in 1980, about 28 percent of U.S.-flag charter cargo that moved between U.S. and foreign ports.

DOD is also studying ways to better use containerships in military emergencies. The number of containerships in the U.S.-flag fleet is increasing, although containerships are not completely suitable for wartime supply purposes without extensive modification. DOD is currently developing special cargo-handling techniques to unload commercial containerships in areas lacking port facilities. This program will enable the military to use the U.S.-flag fleet as it exists for commercial markets more easily under wartime conditions.

CIVILIAN AGENCY CARGO GENERALLY SHIPPED ON U.S.-FLAG VESSELS BECAUSE OF CARGO PREFERENCE

None of the civilian agencies' program objectives are served by using U.S.-flag ships instead of foreign-flag ships. In the absence of cargo preference laws, cost- and service-related factors would be used to determine which ships carry government cargo. Charter cargo that moved on U.S.-flag charter vessels in 1980 always cost more than if it had been moved on foreign-flag vessels. Thus, U.S.-flag charter ships depended on cargo preference laws for all the government cargo they carried in 1980. Liner cargo that moved on U.S.-flag liners in 1980, except for P.L. 480, Title I, cost the same or nearly the same to transport as it would have on foreign-flag liners. Therefore, service considerations would probably have determined whether U.S.-flag or foreign-flag liners were used. Accordingly, we are uncertain about the extent to which U.S.-flag liners were dependent on cargo preference laws for their 1980 government cargo.

Title I, P.L. 480

About 800,000 tons of Title I cargo² were shipped on U.S.-flag charter vessels in 1980 and much of the 640,000 tons of Title I cargo on U.S.-flag liners was competed for by foreign charter vessels because the shipments were large enough for it to be economical for charter vessels to carry them. Although USDA follows procedures to ensure getting the lowest rates possible from charters and liners, shipments are often awarded to higher priced U.S.-flag ships instead of foreign-flag ships to meet cargo preference requirements.

Transportation officials from the U.S. Department of Agriculture said that there was no reason other than cargo preference laws that would have them paying \$30 to \$80 per ton extra to use U.S.-flag ships for cargo that could be transported more economically on foreign-flag charters. Therefore, U.S.-flag ships were dependent on cargo preference laws for 1.4 million tons of Title I cargo.

²The Agricultural Trade Development and Assistance Act of 1954 (P.L. 83-480). Surplus agricultural commodities held by USDA's Commodity Credit Corporation are available for export through programs authorized by P.L. 480. Under Title I of P.L. 480, food is sold to foreign governments on lenient financing terms.

Title II, P.L. 480

In 1980, over 800,000 tons of Title II cargo³ were shipped on U.S.-flag liners. Cost differences are less important between U.S.- and foreign-flag ships for Title II cargo, since cargo is often shipped in small lots not sought after by bulk vessels. Nonprice factors such as the frequency of service assume more relevance in choosing between U.S.-flag and foreign-flag liners. USDA arranges for less than one-half of the Title II shipping. Most shipping arrangements are handled by private relief organizations such as CARE. It is unclear how much these organizations would continue to use U.S.-flag liners if cargo preference laws were dropped, but many knowledgeable observers said that these organizations would use fewer U.S.-flag liners, even though there is little, if any, cost advantage in foreign-flag liners.

The above is a good example of the uncertainty of the effect of nonprice or service factors on shipping decisions noted in chapter 1 (see p. 5). Because of this uncertainty, we present two estimates of the amount of cargo that U.S.-flag liners depend on cargo preference to carry. In the lower estimate, we assume that P.L. 480 Title II liner cargo would have remained on U.S.-flag liners if cargo preference were eliminated. For the higher estimate we assume that all this cargo in 1980 would have been switched to foreign-flag ships. Under this latter assumption, U.S.-flag liners would have been dependent on cargo preference laws for that amount of cargo. If some but not all of the Title II U.S.-flag liner cargo would have switched to foreign-flag ships, then the dependency of U.S.-flag ships on preference laws would fall between our two estimates.

Agency for International Development

AID makes grants and low-interest loans (effective rate of 2.55 percent) to countries for purchasing goods for various development projects. In 1980, 65 percent of AID cargo carried by liners, about 303,000 tons, was shipped on U.S.-flag liners. AID officials told us that some, perhaps a large portion, of this liner cargo would have remained on U.S.-flag liners even without cargo preference laws. This is partly because AID funds can always be used to pay the cost of U.S.-flag shipping, but can only sometimes be used to pay for foreign-flag costs. Another reason

³Under Title II, food is donated to countries in time of famine and other emergencies and for development purposes. USDA arranges the shipping for some of the food exported under Titles I and II. A large share of the Title II program is handled and shipped by the United Nations World Food Program and private voluntary relief organizations. The Agency for International Development has overall administrative authority of these latter efforts and monitors the shipments for compliance with cargo preference laws.

is that U.S.-flag liner firms sometimes provide better service. When cost differences are small, as they often are between U.S.-and foreign-flag liners, service considerations may be more important than cost in selecting a vessel.

AID officials declined to estimate the share of U.S.-flag liner cargo that would remain on U.S.-flag liners in the absence of cargo preference laws. Because of the wide variance among agreements with respect to the use of loans and grants to pay shipping costs, and the difficulties in making service comparisons, we have not estimated this share either. Instead, in our lower estimates of the amount of cargo for which the U.S.-flag fleet is dependent on cargo preference laws, we do not include any AID liner cargo. In our higher estimate, which includes the cargo about which we are uncertain as to whether it would switch to foreign-flag ships without cargo preference laws, we include all AID cargo now carried on U.S.-flag liners. The actual share of AID liner cargo carried by U.S.-flag liners without cargo preference laws would fall somewhere between these two estimates.

AID officials report that since U.S.-flag charters are so much more expensive than foreign-flag charters, it would be unlikely that the loan recipient would choose a U.S.-flag charter even with the subsidized financing from AID. Comparing shipments of corn, coal, and sulfur on U.S.- and foreign-flag charters in 1980, we found that U.S.-flag charters cost between \$23 and \$67 more per ton to use. Almost 370,000 tons were transported on U.S.-flag charters in 1980, which was all dependent on the cargo preference laws.

Export-Import Bank

This independent corporate agency finances and facilitates exports of U.S. goods and services. Foreign governments that receive Export-Import (Ex-Im) Bank direct loans, related financial guarantees, and cooperative financing facility loans are asked by Ex-Im to abide by the provisions of Public Resolution 17, which calls for 100 percent shipment of U.S.-flag vessels, unless a waiver is obtained from MarAd. For 1980, MarAd reports that about 120,000 tons of Ex-Im financed cargo was shipped on U.S.-flag vessels, mainly liners. Our conversations with Ex-Im officials disclosed that they have no program goals that would be met by using U.S.-flag ships and that the borrower or recipient of the financial support makes the shipping arrangements. Ex-Im officials think that foreign borrowers use U.S.-flag ships only because of the law.

⁴Cargo Preference Programs for Government-Financed Ocean Shipments Could Be Improved (CED-78-116, June 8, 1978)

Again, to reflect the uncertainty of the role of service factors in the choice of carrier when price differences are small, we rely on two estimates of the dependency of U.S.-flag liners on cargo preference. In our lower estimate we assume that none of the 0.1 million tons of Ex-Im cargo shipped on U.S.-flag liners would have been shipped on foreign-flag ships even without cargo preference. In our higher estimate, we assume that all of it would have traveled on foreign-flag ships except for cargo preference.

For the small amount of Ex-Im cargo shipped on U.S.-flag charter ships (19,000 tons), price differences between U.S.-flag and foreign-flag charter ships are important. Therefore, we believe that U.S.-flag charter ships are dependent on cargo preference for this cargo.

Department of Energy's Strategic Petroleum Reserve

The Department of Energy is charged with filling the Strategic Petroleum Reserve and must adhere to the 50 percent cargo preference requirement. Oil is bought primarily from foreign sources and is shipped to terminals in the Gulf of Mexico for storage in salt domes. DOE officials told us that the higher priced U.S.-flag tankers were used to ship SPR oil because of the cargo preference laws, not because of any of their program needs. In 1980, 452,492 tons were delivered on U.S.-flag tankers for this program, and this was all dependent on cargo preference laws (see p. 11). In 1981, however, with this program in full gear, 6.5 million tons were delivered on U.S. tankers.

⁵In 1977, MarAd and DOE agreed to measure cargo preference compliance by long-ton-mile instead of by weight alone.

⁶Much of the oil has come from a domestic source--the Alaska North Slope--which is subject to the Jones Act (see p. 12). We are not including these shipments in our analysis since they are outside of the U.S.-foreign trade route statistics.

⁷Estimating SPR tonnage in terms compatible to other government programs is difficult because often more than one tanker is used to carry oil from country of production to country of use. Oil is often stored in tank farms and can be transferred from very large crude carriers (VLCC) to small tankers prior to final unloading. Our methodology counted only the ships that actually delivered oil to Gulf coast terminals. To the extent that U.S.-flag tankers were used on intermediate legs, our cargo estimates are understated.

TRADE ROUTES

The cargo carried on U.S.-flag ships because of the cargo preference laws is not evenly spread over the geographic regions where U.S.-flag ships trade. We found that these dependent cargoes are quite concentrated (see table 8).

The trade routes in table 8 contain 1.6 million tons of the 1.9 million tons of the dependent liner cargo noted in this chapter when all U.S.-flag civilian liner cargo is assumed to be dependent. The charter cargo dependent on cargo preference laws is even more concentrated as 1.5 million tons of 1.7 million tons moved over these four trade route combinations.

Trade Routes with Concentrations of
Cargo Dependent on Cargo Preference Laws, 1980
(millions of tons)

| | Trade routes | | | | |
|---|--------------|----------|-----------|-------|--|
| | 10/13 | 17/18/28 | 14-2/15-B | 19 | |
| Dependent cargo, liner tof U.Sflag liner | 0.5 | 0.7 | 0.4 | (a) | |
| | 20.1% | 41.8% | 65.7% | 6.1% | |
| Dependent cargo, charter % of U.Sflag charter | 0.8 | 0.1 | (a) | 0.6 | |
| | 35.7% | 3.9% | 35.7% | 23.5% | |
| Dependent cargo, totalb | 1.3 | 0.7 | 0.4 | 0.6 | |
| % of U.Sflag, total | 27.9% | 24.7% | 61.9% | 20.7% | |

aLess than 50,000 tons.

bTotals do not add due to rounding.

Source: GAO analysis.

One conclusion that can be drawn from this table is that because most of the cargo for which U.S.-flag carriers are dependent on cargo preference travels to the Indian subcontinent (trade routes 17, 18, 28), Africa (14-2, 15-B), the Mediterranean (10/13), and the Caribbean (19), cargo preference laws are probably more important for firms carrying cargo to those places than for firms in business on other trade routes.

Summary of Agencies' U.S.-Flag Cargo
by Probable Flag if No Cargo Preference Laws Existed, 1980
(millions of long tons)

| DOD | U.Sflag 8.8 | Foreign-flag | Uncertain - |
|---|----------------|--------------|-------------|
| USDA P.L. 480, Title I P.L. 480, Title II | <u>-</u> | 1.4 (a) | 0.8 |
| AID | - | 0.4 | 0.3 |
| DOE | - | 0.5 | - |
| Ex-Im Bank | - | (a) | 0.1 |
| Other | - | (a) | 0.1 |
| Total | 8.8 | 2.3 | 1.3 |

aLess than 50,000 tons.

Source: GAO analysis.

CONCLUSIONS

As a result of cargo preference laws, U.S.-flag ships carry more cargo than they otherwise would carry. For 1980, of the 12.4 million tons of government-owned or -financed U.S.-flag cargo shipped that year, at least 2.3 million and perhaps as much as 3.6 million tons of civilian agency cargo traveled on U.S.-flag ships because of cargo preference laws (see table 8). The P.L. 480 program accounted for 1.4 million (61 percent) of our lower estimate of 2.3 million tons, and 2.3 million (64 percent) of the 3.6 million tons that represents our higher estimate. According to DOD officials, DOD cargo-8.8 million tons-would continue to travel on U.S.-flag ships even if cargo preference were eliminated.

AGENCY COMMENTS AND OUR EVALUATION

In its comments on a draft of this report, AID questioned our treatment of liner cargo purchased by recipients of AID loans and grants. On the basis of those comments and subsequent discussions we held with AID officials, we revised our report. AID agrees with us that the availability of subsidized financing when using U.S.-flag liners is a reason that U.S.-flag liners might continue to be used to carry AID cargo in the absence of cargo preference laws. However, because subsidized financing is sometimes also available for foreign-flag vessels, we cannot be

certain whether this cargo would have been carried by the U.S.-flag ships if cargo preference laws did not exist. Therefore, we revised our estimates to include this cargo in our higher estimate of the cargo for which the U.S.-flag fleet depends on cargo preference, but not in our lower estimate.

In its comments on a draft of this report, DOE questioned both our use of 1980 data and our exclusion of DOD cargo that moved between foreign ports. We agree with DOE that 1980 was not a typical year for SPR shipments (see p. 11). However, as stated in chapter 1, we used 1980 data because they were the most recent data available at the time we were gathering data. We do not believe that recalculating our estimates on the basis of 1981 data, which are now available, would produce specific results different enough to warrant any change in our general conclusions.

We did not include DOD cargo that moved between foreign ports because the Census Bureau does not include any data for such shipments in its overall cargo report. We disagree that including this cargo is important in assessing the U.S.-flag fleet's dependency on cargo preference. Since DOD officials told us that they would continue to use U.S.-flag ships even in the absence of cargo preference, the additional cost of using U.S.-flag ships to carry DOD's shipments between foreign ports would not be considered a cost of cargo preference in any event. We do agree that, because of DOD's practice of using U.S.-flag ships instead of foreign-flag ships, movements of cargo between foreign ports on U.S.-flag vessels are another dimension of the importance of government cargo to the U.S.-flag fleet.

CHAPTER 5

THE ECONOMIC EFFECT OF CARGO PREFERENCE LAWS

The dependency of U.S.-flag ships on the existence of cargo preference laws turns on the extent to which they receive shipments solely because of such laws. In the previous chapter, we showed that U.S.-flag ships in 1980 depended on cargo preference for at least 2.3 million tons of civilian cargo--0.6 million tons on liners and 1.7 million tons on charter ships--for which using foreign-flag ships would have reduced the government's transportation costs. P.L. 480 accounted for 1.4 million tons of this cargo. We are uncertain about whether cargo preference is the reason that U.S.-flag liners carried an additional 1.3 million tons of cargo for which there would have been little, if any, cost advantage to using foreign-flag liners. P.L. 480 accounted for 0.8 million tons of this additional cargo.

The major economic effects of cargo preference laws pertain to the additional economic resources needed to carry the dependent cargo and the additional transportation costs to the government when U.S.-flag vessels are more expensive to use than foreign-flag vessels. We estimate that in 1980, approximately 21 extra U.S.-flag ships and 1,400 additional shipboard workers were employed to carry the 2.3 million tons of cargo for which we can attribute cargo preference laws as the reason U.S.-flag ships were used. If cargo preference was the reason that the additional 1.3 million tons of liner cargo traveled on U.S.-flag ships, then cargo preference is responsible for employing approximately a total of 33 additional ships and 2,200 additional shipboard workers. From 15 to 22 of these additional ships and between 950 and 1,550 of these workers were used to carry P.L. 480 cargo. We estimate that cargo preference laws cost the U.S. government at least \$72 million for higher ocean transport costs in These transport costs may have been as much as \$79 million higher if the additional 1.3 million tons were also shipped on U.S.-flag liners because of cargo preference laws. P.L. 480 cargo accounted for \$60 to \$67 million of this cost.

ECONOMIC EFFECTS

Liner fleet

We estimated in chapter 4 that the U.S.-flag liner fleet depended on cargo preference laws in 1980 for at least 0.6 million tons (P.L. 480, Title I) and for at most 1.9 million tons of cargo (P.L. 480, Titles I and II, AID, Ex-Im Bank, and miscellaneous agencies). The direct economic resources needed to move 0.6 million tons of liner cargo were six liner vessels and 390 shipboard

employees. To move 1.9 million tons of liner cargo, of which 1.4 million tons was P.L. 480 cargo, 18 liner vessels and about 1,200 employees were needed.

Most of the P.L 480 liner cargo was sent to countries in the Mediterranean and Caribbean areas, Africa, and around the Indian subcontinent. For example, in the trade from the Gulf to Africa, U.S.-flag liners depended on P.L. 480 cargo for up to 66 percent of their business in 1980. Without the law guaranteeing this cargo, U.S. liner operators on this route would be more vulnerable to competition. If any liners were to cease operation on a particular route because of the loss of P.L. 480 cargoes, they might be switched to other routes, sold to other operators, scrapped, or laid up. Loss of U.S. participation in any trade route would reduce the amount of nonpreference cargo carried by U.S.-flag ships.

We could not estimate the effect of cargo preference laws on U.S. liners' profits in 1980 because the information was proprietary. Only one liner firm operates exclusively over the trade routes with the most dependent civilian agency cargoes; this firm may be relatively more dependent than the others.

Charter fleet

We estimate that in 1980, 14 charter vessels employing about 950 shipboard workers completely depended on cargo preference laws. These vessels carried most of the 1.2 million tons of dry cargo for the P.L. 480 and AID programs that were suited for charter ships. Although charter ships carrying P.L. 480 cargo also carried other dry cargo, on the basis that P.L. 480 cargo represented about 68 percent of the 1.2 million tons, one could say that about nine ships and 650 shipboard workers were used to carry dependent P.L. 480 cargo. The U.S.-flag charter trade was concentrated in shipments to the Mediterranean area, primarily to Israel and Egypt. This dependent government cargo was 93 percent of U.S.-flag dry cargo charter trade in that region that year.

Another two ore/bulk/oil ships and a few tankers were employed part of 1980 shipping the 0.5 million tons of SPR oil, but the rest of their business was commercial shipments subsidized with ODS payments. Therefore, we have estimated that one tanker (45,000 tons with 25 crew) could have been employed during 1980 carrying SPR oil because of cargo preference laws.

In calculating the number of liners and people employed that are dependent on cargo preference laws, we used a representative liner of 14,500 deadweight tons, a crew of 40, and 1.7 shipboard employees per crew berth. The number of sailings was determined to be nine a year. We assumed, based on industry and MarAd data, that an 85-percent load factor was representative.

Shipbuilding

A secondary economic effect of cargo preference laws is the potential effect on investments in new ships built by the U.S. shipbuilding industry. It is not clear, however, from the shipbuilders' record over the last 10 years if American ship-operating companies bought new vessels specifically for moving government cargo. We can identify only two dry bulk ships built since 1970 for use in the U.S.-foreign trade. These two ships are eligible for ODS, which allows them to compete for commercial cargo as long as they do not carry government cargo. In addition, 19 U.S.-flag tankers built after 1970 with construction subsidies are eligible for ODS to compete for commercial cargo. Although we found no liner ship built solely to carry preference cargo, we estimated that between 6 and 18 liners were needed to carry this cargo in 1980.

COSTS OF CARGO PREFERENCE LAWS TO THE FEDERAL GOVERNMENT

In general, cargo preference laws add to a federal agency's costs if those laws are the reason that a U.S.-flag vessel is used to carry government cargo and that vessel's rates are higher than a foreign-flag ship. Therefore, the 2.3 million to 3.6 million tons of cargo carried on U.S.-flag ships because of the cargo preference laws added to the costs of the federal agencies when the rates for carrying this cargo exceeded the rates available on foreign-flag ships.

We estimated the additional shipping cost due to cargo preference for each agency that used U.S.-flag ships when both no program objectives were served by doing so and less expensive foreign-flag ships were available. Even though 8.8 million to 10.1 million tons of government cargo were carried on U.S.-flag ships for reasons other than complying with cargo preference laws (see table 9), and even though using these U.S.-flag ships may have cost the government extra, such costs should not be considered costs of cargo preference. Because defense program objectives favor U.S. flag ships, any extra cost for using them should be considered part of DOD costs.

P.L. 480 Title I program

USDA must pay the difference between foreign-flag and U.S.-flag costs if U.S.-flag ships are used to transport Title I goods just to comply with cargo preference laws. The total payment for this ocean freight difference in 1980 was \$58 million and covers both charter and liner services--about 1.4 million tons. This is the most accurate accounting of the cost of complying with cargo preference that exists for government agencies. Each time a higher priced U.S.-flag ship is booked, the foreign-flag offer that was bypassed because of cargo preference

for the U.S. flag ship is recorded. This ocean freight difference is calculated by comparing foreign-flag and U.S.-flag bids for the cargo. This difference was as much as \$100 a ton for some cargoes in 1980.

Other civilian agency program costs harder to estimate

For the other civilian agency programs, the agencies either pay all ocean freight costs-U.S.- and foreign-flag--or else the recipients pay the freight costs with U.S. loans or their own funds. Accordingly, there is no voyage- or cargo-specific accounting for the higher costs of U.S.-flag ships. This portion of total costs due to cargo preference must be estimated.

Some agencies use the annual average difference in cost per ton between U.S.- and foreign-flag ships to represent the extra transportation costs. This is a rough approximation which may not reflect the realities of ocean shipping rates. The annual per-ton average suffers as an accurate estimate of the cost difference because no allowance is made for differences in voyage distance, type of cargo carried, or size of the shipments (discounts are given for larger shipments). On the other hand, it is well known within the industry that U.S.-flag charter rates are higher, so the direction of the difference is not at issue, just the magnitude of the cost difference. Foreign-flag conference liner firms may offer better rates on some cargo, and independent liners often underbid conference vessels, but the actual magnitude of cost differences, if they exist, is much smaller and much harder to accurately analyze than differences in charter rates.

P.L. 480 Title II program

According to AID records, actual differences between foreign- and U.S.-flag charters carrying Title II cargo ranged between \$30 and \$80 a ton in 1980. An average difference cited in our earlier report was about \$60 a ton.² Based on that figure, we calculated that the 35,000 tons of charter cargo carried on U.S.-flag ships in 1980 (see table 4) cost the federal government an extra \$2.1 million.

The cost of cargo preference for U.S.-flag liner cargoes in this program depends on estimates of the actual cost differences between U.S.- and foreign-flag liners. There is the possibility that the conference system resulted in the same rates for foreign- and U.S.-flag liners, in which case there would be no costs attributable to cargo preference laws. If, however, we use the estimate from our earlier report that on average U.S.-flag

²Cargo Preference Requirements Add to Costs of Title II Food for Peace Programs (GAO/PAD-82-31, Aug. 2, 1982).

liners cost \$0.73 a ton more than foreign-flag liners, the 814,000 tons of Title II cargo carried on U.S.-flag liners in 1980 cost the federal government an extra \$0.6 million. If that cargo was carried on U.S.-flag liners only because of the cargo preference laws, then that sum can be considered to be part of the cost of the laws.

Our previous report also raised the possibility that some of the cargo that was sent on liners could have been consolidated into shipments large enough to travel on inexpensive foreign-flag charter vessels. If this is true, and if 10 percent of the liner shipments could have been consolidated for 1980--as was estimated in our earlier report for 1981--then an additional \$6.3 million could be said to be a cost of the cargo preference laws.⁴

AID loans and grants

In chapter 4, we concluded that we could not say for sure how much, if any, of the AID liner cargo on U.S.-flag liners in 1980 would have been shipped on foreign-flag liners in the absence of cargo preference laws. If all the cargo would have remained on U.S.-flag liners, then there would have been no extra cost due to cargo preference because some other factors, probably service considerations, would have kept the cargo on U.S.-flag liners. If, however, the cargo would have been shipped on foreign-flag liners in the absence of cargo preference laws, and if the foreign-flag liners were less expensive, then the extra cost of U.S.-flag liners is the cost of cargo preference for AID programs. Because we have no direct measure of average cost differences just for the AID program, we used the average difference of \$0.73 a ton for P.L. 480 Title II in 1980. In this way, we estimated that the maximum cost of cargo preference for AID liner cargo was \$0.2 million.

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³The estimate of \$0.73 per ton average cost difference is for 1980 only. Our earlier report (GAO/PAD-82-31) estimated an annual average difference of \$6.49 per ton in 1981. We do not know which estimate is likely to be closer to the actual cost difference for similar cargoes over the same routes for these or other years.

These calculations have been simplified from those performed in our earlier report. For example, the transportation costs of some World Food Program shipments are paid by them directly. Therefore, a small portion of the costs estimated above are actually paid by the World Food Program rather than by the federal government. In addition, we have not adjusted our estimates to take into account that cargoes shifted from U.S.-flag liners to foreign-flag charter vessels can not also be shifted onto foreign-flag liners. However, based on our earlier report, we know that any adjustment to the estimate of Title II costs of cargo preference would be small relative to the overall total for all programs and would not materially affect our findings.

The cargo shipped on U.S.-flag charter ships (367,000 tons) did depend on the cargo preference laws; cheaper foreign-flag ships would have been used in the absence of cargo preference. We used shipping data for similar cargoes to the two countries that received AID charter cargoes and found that the extra cost to the U.S. government was \$9 million in 1980, an average of about \$30 a ton. AID officials told us that the 1980 cost difference of about \$30 per ton was not representative of AID charter costs in other years. Much of the 1980 charter cargo was coal for Egypt. Cost differences between U.S.-flag and foreignflag charter vessels are much less for coal than for other major AID charter cargoes. Data made available to us for 1981, when coal shipments were not so high a proportion of total U.S.-flag charter cargoes, show that in that year the cost differences between U.S.-flag and foreign-flag charter ships were higher than in 1980.

Department of Energy, Strategic Petroleum Reserve

As noted in chapter 3, the Department of Energy filled the SPR for just 3 months during 1980. U.S.-flag tankers delivered 452,491 tons of oil to terminals on the Gulf coast from foreign sources that year. We estimate that this cost about \$800,000 more than using foreign-flag tankers. In 1981, however, the program was in full operation and U.S.-flag tankers delivered 6.5 million tons of oil. We estimate the extra cost in 1981 to be \$13.4 million.

Export-Import Bank and other agencies

In 1980, the Export-Import Bank financed 19,000 tons of cargo that went on U.S.-flag charter ships, and 4,000 tons of cargo for other agencies went on U.S.-flag charters. If we use the same estimate we used in calculating the cost of cargo preference for P.L. 480 Title II, that U.S.-flag charters cost \$60 per ton more for this cargo, then the extra cost of cargo preference was \$1.3 million (\$1.1 million and \$0.2 million, respectively). For the liner cargo, Ex-Im Bank financed 100,000 tons that went on U.S.-flag vessels and other agencies shipped 93,000 tons.

⁵Estimating an exact cost for U.S. tankers is difficult because the oil is often shipped on several tankers before reaching the terminal. We used DOE's cost estimates for foreign and U.S. tankers with our trade route statistics of actual shipments. For 1981, we found that 50 percent of the U.S. tanker shipments was lightered from large foreign tankers in the Gulf of Mexico, 43 percent was shipped from tank farms in the Caribbean, and 7 percent was shipped from Libya and the British North Sea. The extra cost to lighter via U.S. tankers was \$1.14 per ton, and \$2.52, \$6.03, and \$6.76 extra per ton to ship from the Caribbean, Libya, and the North Sea, respectively. For 1980, 55 percent was lightered and 45 percent came from the Caribbean.

Because we have no direct measure of the cost difference between U.S.-flag and foreign-flag liners for these cargoes, we used the average \$0.73 per ton saving from using foreign-flag liners for P.L. 480 Title II liner cargo to estimate the maximum the government spent shipping these cargoes because of cargo preference. In this way we estimated that the cost of cargo preference was a maximum of \$0.1 million for the Ex-Im Bank financed cargo and \$0.1 million for other agencies' cargo. We included these costs in our higher estimate of cargo preference costs. However, we cannot be certain that without cargo preference these cargoes would have switched from U.S.-flag to foreign-flag liners. The cost differences may have been small enough to have been more than offset by service considerations. Because of this uncertainty, we did not include these costs in our lower estimate of cargo preference costs.

Summary of costs to civilian agencies

In 1980, the estimated extra cost of shipping cargo on U.S.-flag ships that would have gone on foreign-flag ships in the absence of the cargo preference laws was at least \$71 million. It may have been as high as \$79 million. The two estimates result from uncertainty about whether savings would have been possible from switching some--mostly P.L. 480 Title II--U.S.-flag liner cargo to foreign-flag ships. All but \$11 million of either estimate is for P.L. 480 cargo (see table 10).

Summary of the Costs of Cargo Preference, 1980
(\$ millions)

| | Minimum | Maximum |
|---|----------------------|---------|
| USDA | \$60.3 | \$67.2 |
| P.L. 480, Title I P.L. 480, Title II | 58.2 58.2 2.1 9.0 | |
| AID | 9.0 | 9.2 |
| DOE | 0.8 | 0.8 |
| Ex-Im Bank | 1.1 | 1.2 |
| Other | 0.2 | 0.3 |
| Total | \$71.4 | \$78.6 |

Source: GAO analysis.

NOTE: This table does not include estimates of either nontransportation costs or costs associated with programs not technically subject to cargo preference laws, such as the cash transfer program between AID and Israel. AID estimates that in 1980, an additional \$15.9 million was spent to use U.S.-flag ships in this program.

CONCLUSIONS

In this chapter we highlighted our findings in chapter 4 about the 1980 level of dependency of the maritime industry on cargo preference laws, we presented our estimates for 1980 of the direct economic effects of cargo preference and we showed how much P.L. 480 cargo contributed to these effects. Because these estimates are based on data only for 1980, the numerical results are valid only for that year. However, because the framework for our analysis is general, we believe that our analysis of 1980 data suggests several general conclusions that remain valid as long as the assumptions used in analyzing 1980 data remain appli-The key assumptions are that DOD, but not the civilian agencies, maintains program objectives that call for using U.S.flag ships regardless of cost, the cost differential between U.S.-flag and foreign-flag charter ships remains large, and the P.L. 480 Food for Peace program remains a relatively large program.

In general,

- --The maritime industry depends on cargo preference laws for some of the cargo it transports. As long as DOD is the major shipper of government cargo on U.S.-flag vessels, and as long as national defense program objectives of auxilliary sealift capacity can be met by civilian ships, the level of dependency will be much less than one might deduce from simply adding up government cargo that is transported on U.S.-flag vessels. As the government programs that give rise to this dependent cargo fluctuate in size from year to year, no specific projections about how dependent the industry is on cargo preference laws or on a single agency's cargo can be made from just 1 year's data.
- --Because of cargo preference laws, additional U.S.-flag ships and American crews are employed in transporting government cargo. This benefit to the maritime industry and its workers, and the expected benefit to the nation in time of emergency, has a cost to the government when using U.S.-flag ships increases the government's transportation costs beyond what it would pay to use foreign-flag ships that are not used because of cargo preference laws. The economic effects will fluctuate from year-to-year because both the amount of government cargo carried on U.S.-flag ships because of cargo preference and the cost differential between U.S.- and foreign-flag ships will vary. Bo the cost of cargo preference laws to the government and the effect of those laws on the employment of U.S.-flag ships and American workers are less than one might deduce from calculating the government's total shipping cost and the resources used to transport all government cargo because of DOD's stated intention to use U.S.-flag ships for national defense reasons even if there were no cargo preference laws.

--The P.L. 480 program has been a major source of cargo carried on U.S.-flag ships because of cargo preference laws. In particular, most U.S.-flag dry-bulk charter ships that were built before 1970 carry P.L. 480 cargo. For 1980, P.L. 480 cargo accounted for 60-75 percent of the total cargo carried on U.S.-flag ships because of cargo preference laws and approximately 90 percent of the government's additional transportation costs. These numbers will change from year-to-year in accordance with changes in the relative size of the P.L. 480 program and the other programs that ship cargo subject to cargo preference laws. For example, since 1981 the SPR program has become a more important source of dependent cargo than it was in 1980.

AGENCY COMMENTS AND OUR EVALUATION

In its comments on a draft of this report, USDA agreed in general with our measurement of direct budgetary costs of preference, but indicated that it believes that cargo preference also imposes additional costs, such as sub-optimal use of available U.S.-flag vessels and reduced exports from the Unites States. In its comments, DOE also pointed out indirect costs to the government of cargo preference beyond additional shipping costs, such as higher purchase prices for SPR oil. We agree that these additional indirect costs of cargo preference probably exist. However, in calculating the costs of cargo preference, we limited our scope to a calculation of the government's additional cost to ship commodities. Furthermore, we believe that accurate estimates of these indirect costs would be difficult to develop.

In their comments, both USDA and AID questioned the accuracy of our estimates of the cost differential between U.S.-flag and foreign-flag ships. USDA questioned our use of a \$0.73 per ton differential between foreign-flag and U.S.-flag liners for P.L. 480 Title II cargo, saying that in their experience the differential was at least \$10 per ton on many P.L. 480 Title II cargoes. We found that it is very difficult to compare liner costs voyage-Therefore, we used the average 1980 difference in costs between foreign-flag and U.S.-flag liners, as reported by Because that figure is an average of all voyages, it may be affected by differences between foreign-flag and U.S.-flag liners in average trip length, shipment size, or type of commodity. Differences for some voyages of \$10 per ton could be consistent with a much smaller average difference. Also, we have added information (p. 28) showing that in 1981, on average, the difference was \$6.49 per ton, nearly nine times higher than it was in 1980.

USDA also noted that in the absence of cargo preference, foreign-flag liner competition might increase, with more foreign operators perhaps offering rates below those specified in conference agreements. We agree that this might occur. But we have

not taken this possibility into account in estimating the cost of cargo preference because there is no way to quantify this effect. If the government would rely more heavily on foreign-flag liners if there were no cargo preference laws, and if the government's shipping costs on foreign-flag liners in the absence of cargo preference would be less than currently available foreign-flag liner rates, then the cost to the government in 1980 of cargo preference exceeds the estimates we present in this report.

AID indicated that it believes we underestimated its cost of cargo preference for 1980. In the draft that AID reviewed, we did not attribute to cargo preference any additional costs incurred by using U.S.-flag liners to carry AID cargo because at that time we believed that all AID liner cargo would continue to travel on U.S.-flag ships to take advantage of subsidized financing even if there were no cargo preference laws. On the basis of AID's comments and subsequent meetings with AID officials, we now place AID liner cargo in the uncertain category. Therefore, we now include our estimate of the additional \$0.2 million cost of using U.S.-flag ships to carry this cargo in our higher estimate of the total cost of cargo preference. This estimate is still substantially below AID's estimate of \$8.9 million, which would imply a differential between U.S. and foreign-flag liners of approximately \$30 per ton.

In its comments, AID said that we underestimated AID's cost of cargo preference for charter cargo by understating both the amount of cargo AID shipped on U.S.-flag charter vessels in 1980 and the average cost per ton difference between foreign-flag and U.S.-flag charter ships. However, in meetings we held with AID officials to reconcile differences between our charter estimates and the figures AID used in its letter, AID officials acknowledged that our data were accurate.

AID also said that the additional cost of using U.S.-flag ships in the cash transfer program to Israel should be included as a cost to AID of cargo preference, even though AID agrees with our position that the cargo preference law does not apply to these shipments. AID's position is based on the belief that if there were no cargo preference laws, there would be no negotiated agreement between Israel and the United States for cash-transfer goods, and no U.S.-flag ships would be used to carry this cargo. However, that does not imply that the additional cost of using U.S.-flag ships is a cost to the government. If Israel were not required to use U.S.-flag ships, it still might receive the same cash grant and purchase more commodities. In that case, the cost of using U.S.-flag ships should be interpreted as a cost to Israel, not the United States. This cost can be interpreted as a cost to the United States only if ending cargo preference led to a reduction in Israel's grant equal to the additional cost it now pays to use U.S.-flag ships. Because of this uncertainty, we do not agree that costs incurred by compliance with a year-to-year agreement to use U.S.-flag ships when cargo preference laws do

not legally apply should be counted equally with costs directly attributable to those laws. We have noted in table 10 AID's estimate of the additional cost of using U.S.-ships in this program in 1980.



Foreign Agricultural Service Washington, D.C. 20250

JUN 2 1 1983

Mr. J. Dexter Peach
Director
Resources, Community and
Economic Development Division
U.S. General Accounting Office
Washington, D. C. 20548

Dear Mr. Peach:

We would like to offer our comments on GAO Draft Report PAD-83-11, "Economic Effects of Cargo Preference Laws."

In general, we believe the report correctly identifies the direct budgetary costs of the Cargo Preference Law. However, indirect costs of cargo preference should also be acknowledged, although it would be difficult to quantify all of them. For example, the availability of U.S. flag bulk carriers is limited, resulting in the use of tankers and tween-deckers for bulk grain. The higher cost of loading such vessels (reflected in higher commodity prices) is a part of the cost of cargo preference. Also, the limited number of U.S. flag vessels causes higher costs on those occasions when contracted vessels cannot perform as scheduled, and substitute U.S.-flag vessels are not readily available.

Although the study addressed the cost of cargo preference legislation to the U.S. Government, it should be recognized that costs are also raised for PL 480 recipient countries. At times a recipient is unable to use the most economical foreign flag vessel because of the need to move 50 percent of the cargo on U.S. flag vessels. Such additional costs reduce the availability of foreign exchange to importing countries and thus their ability to import commercially from the United States.

As for specifics, the report states on page 1-7, that "U.S.-flag ships offering liner service usually have the same rates as foreign-flag ships,..."; similar references to liner rate equality are made on several other pages. We disagree with the assertion that foreign-flag liner rates are generally the same as or only \$.73 per ton higher (page 5-7) than U.S. flag liner rates. Our experience would indicate the existence of a differential of at least \$10.00 per ton on many Title II, PL 480 cargoes. Also, it should be considered that if U.S. flag liner carriers were not able to rely on cargo preference, foreign flag competition might be expected to increase. More foreign operators might choose to operate outside of conference (equal rate) agreements, the result being lower foreign-flag rates.

Sincerely,

Richard A SHAIL Administrator

APPENDIX II APPENDIX II



Department of Energy Washington, D.C. 20585

JUN ; ; 1983

Mr. J. Dexter Peach
Director, Resources, Community and
Economic Development Division
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Peach:

The Department of Energy (DOE) appreciates the opportunity to review and comment on the General Accounting Office (GAO) draft report entitled "Economic Effects of Cargo Preference Laws." DOE believes the issuance of a report on this subject would be timely in view of the current concerns with the declining size of the U.S.-flag vessel fleet and Congressional initiatives to revise the existing cargo preference laws, e.g., H.R. 2692, the Government-Impelled Cargo Act of 1983.

The GAO draft report's analysis and conclusions concerning the effect of cargo preference laws on the Government agencies and the U.S. economy, and the dependence of the U.S.-flag vessel fleet on such laws, are based on shipments of Government cargo during calendar year 1980. It is suggested that in order to make the report more timely and truly reflective of current trends, the most recent data, preferably for 1982, be used as the basis for the report. This is considered of particular importance to the DOE since 1980 was not a typical year for cargo shipments made by the Strategic Petroleum Reserve (SPR). As indicated in the report, shipments of crude oil to the SPR during 1981 were substantially greater than 1980, thus having a more significant impact on U.S.-flag tanker usage.

The DOE questions the validity of the exclusion from the report of 4.7 million tons of Department of Defense (DOD) cargo moved between foreign ports in U.S.-flag ships under cargo preference laws. This would appear to provide Congress with an incomplete review on the various aspects of cargo preference. Since the report indicates that DOD would continue to utilize U.S.-flag vessels without cargo preference, these cargoes between foreign ports would seem to be important in assessing the U.S.-flag fleet's dependency on cargo preference as well as the impact on the U.S. economy.

The draft report in several places makes reference to the use of foreign flag vessels due to cost or service factors. It is not clear whether the service factor pertains only to the quality and scope of service provided or whether it also includes the provision of ocean transport service when U.S.-flag vessels are not available to provide timely movement of a given cargo. The nonavailability of U.S.-flag vessels should be addressed in the draft report as another consideration for using foreign flag vessels.

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The data portraying tonnage shipments would be more meaningful for displaying the true extent of U.S.-flag ship utilization if tonnages shipped were equated to the distances carried, i.e., ton-miles. If this could be accomplished, it could result in different conclusions as to the extent of the economic effects and ship utilization caused by cargo preference, e.g., a full cargo load of 30,000 tons shipped over a distance of 6,000 miles employs a ship for twice as long as it would if the distance were 3,000 miles.

In its discussion of the costs to the Federal Government of cargo preference laws, the draft report neglects potential indirect costs incurred by an agency in structuring its procurements to allow for U.S.-flag vessel participation. DOE has found that the cargo preference requirement frequently limits competition in the purchase of crude oil for the SPR, and prevents DOE from acquiring crude oil at the lowest prices.

During the past two years, with oil prices declining, DOE has made substantial purchases of crude oil from foreign sources on the spot market. This market has been noted for providing surplus quantities of crude oil at lower than official contract prices due to the world's crude oil over-supply situation. Unfortunately, DOE has not always been able to take advantage of these lower prices because of the nature of the market and of cargo preference obligations. DOE's crude oil solicitations, in order to maximize U.S.-flag vessel participation, must give preference to offers for delivery on either an f.o.b. destination, U.S.-flag tanker basis, or on an f.o.b. origin basis which allows for the Government to charter U.S.-flag shipping. The number of offers qualifying for the preference is limited because industry routinely uses foreign flag vessels to import crude oil into this country. Since industry does not routinely use U.S.-flag vessels, oil already at sea that is available for SPR purchase invariably is on a foreign flag vessel. Furthermore, U.S.-flag vessels are rarely in position to lift foreign oil and must first steam to the producing country. Many spot market cargoes must be loaded on such a schedule as to preclude a U.S.-flag vessel from arriving in a timely fashion. Some of these, referred to as distressed cargoes, are often available at favorable prices. Because the SPR often does not deal directly with the producing country, but rather through traders, its ability to negotiate terms which permit the use of U.S.-flag vessels is limited. Therefore, the fifty percent cargo preference requirement sometimes limits DOE's ability to take advantage of the possible sources of crude offering the most favorable prices.

Comments of an editorial nature are being provided directly to members of the GAO audit staff. DOE appreciates the opportunity to comment on this draft report and trusts that GAO will consider the comments in preparing the final report.

Sincerely,

Martha O. Hesse Assistant Secretary

Management and Administration

APPENDIX III APPENDIX III

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY AGENCY FOR INTERNATIONAL DEVELOPMENT WASHINGTON. D.C. 20523

OFFICE OF THE ADMINISTRATOR

27 JUN 1983

Mr. Frank C. Conahan Director International Division General Accounting Office 441 G Street, N.W. Washington, D.C. 20548

Dear Mr. Conahan:

We have reviewed the GAO Draft Report, "Economic Effects of Cargo Preference Laws" (GAO/PAD-83-11). The information and data furnished in the draft are at wide variance with such data compiled by the Agency for International Development (A.I.D.) and contain numerous questionable assumptions and errors. Several of these points are discussed below.

Table No. 10, Summary of the Costs of Cargo Preference, 1980, page 5-11 of the Draft, notes that the cost of cargo preference to this Agency was \$9 million only. In an analysis of this subject made by A.I.D. in March 1982, with a copy furnished to GAO at that time, we calculated that the cost for A.I.D.-financed cargoes, shipped in 1980, had amounted to more than \$39.4 million, of which \$30.5 million were attributable to chartered shipping and \$8.9 million resulted from liner shipments.

As stated in the draft, the \$9 million cost to A.I.D. represents the U.S. flag differential cost on A.I.D.-financed charter vessels. Page 5-8 of the draft report indicates the data on similar cargo to two countries were utilized to determine that the U.S. flag differential amounted to about \$30.00 per ton, and applied this to cargo shipped on U.S. flag charters to arrive at the \$9 million total. Our analysis of March 1982 was based on a greater quantity of cargo shipped on U.S. flag charters, from numerous U.S. ports to many different overseas ports, and established that the average differential was \$44.43 per ton.

The significant differences noted above may be attributed to several statements and conclusions incorporated into the Draft. The report assumes that A.I.D.'s liner shipments would be on U.S. flag liners because "A.I.D. subsidizes U.S. flag rates...." This statement is supported on pages 4-6 and 4-7 by a discussion of the low interest rates applicable to A.I.D. loans and an erroneous statement that foreign flag freight costs may not be financed by A.I.D.'s loans and grants. The same paragraph asserts also that U.S. and foreign flag liner rates are very similar, with little price advantage available from using the foreign flag liner. This last statement is a common fallacy, as non-conference flag liners typically offer service at lower rates. Even in conference service, the foreign flag members may offer lower rates than the U.S. flag members when the conference tariff lists the rate for a commodity as "open". Because of these erroneous conclusions, the report does not consider that cargo preference imposes any additional costs on A.I.D.'s

APPENDIX III APPENDIX III

liner shipments and, therefore, incorporates no costs for them to A.I.D. in Table 10.

Additionally, we note that page 3-3 of the draft refers to the cash transfer program between A.I.D. and the Government of Israel and that approximately 400,000 tons of commodities were shipped on U.S. flag charter vessels because of the side letter agreement. The draft correctly states that the Cargo Preference Act does not, of itself, apply to these shipments. However, when the draft fails to report that the Israeli Government incurred a U.S. flag freight differential of \$15.9 million in 1980 and neglects to reflect this amount as a cost to A.I.D. in Table 10, the draft omits a significant cost attributable to cargo preference. (In 1982 this differential amounted to \$29.1 million.) The Government of Israel has objected to this additional cost since it negates the primary purpose and value of the cash transfer agreement to that extent. Thus the U.S. flag freight differential of \$15.9 million should be shown as a cost to A.I.D., attributable to cargo preference.

In view of the wide variance between A.I.D.'s data and those used in the draft it does not appear practicable to attempt to resolve them completely by written comments. We do not recall any substantive discussion of this subject but we would welcome the opportunity to participate in such a discussion inasmuch as the report is in draft and subject to revision. Indeed a substantive discussion would be most desirable in order to clarify the issues and make available the correct information for the report.

R. T. Rollis, Jr.

Assistant to the Administrator

for Management



ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

2 8 JUL 1983

Mr. Morton A. Myers
Resources, Community and Economic
Development Division
United States General Accounting Office
Washington, D.C. 20458

Dear Mr. Myers:

This responds to your May 25, 1983 letter requesting our review of your draft report, "Economic Effects of Cargo Preference Laws," dated May 25, 1983 (GAO Code No. 971899) - OSD Case No. 6267.

We have reviewed the draft report and have no objections to its content.

Sincerely,

Lawrence J. Korb

Assistant Secretary of Defense

((Manpower, Reserve Affairs, and Logistics)

(971899)

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