

# SHIPBUILDING TRADE REFORM ACT OF 1992: LIKELY ECONOMIC EFFECTS OF ENACTMENT

Report to the Committee on  
Ways and Means, on Investigation  
No. 332-316 Under Section 332(g)  
of the Tariff Act of 1930



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## PREFACE

On November 19, 1991, the Commission<sup>1</sup> instituted investigation No. 332-316, The Shipbuilding Trade Reform Act of 1991: Likely Economic Effects of Enactment,<sup>2</sup> following receipt on October 30, 1991, of a request from the Committee on Ways and Means of the U.S. House of Representatives for an investigation under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)) concerning the likely economic effects of enactment of H.R. 2056, the Shipbuilding Trade and Reform Act of 1991, as amended by the Committee on Ways and Means. The letters of request from the Committee on Ways and Means and the Commission's *Federal Register* notices concerning the investigation are reproduced in appendix A. This report conveys the Commission's findings in that investigation.

As requested by the committee, the Commission seeks to provide in this report:

1. An overview of the issues being addressed in the OECD shipbuilding negotiations and a comparison of the approach being taken in those negotiations with the approach of H.R. 2056, as amended;
2. An overview of conditions in the U.S. shipbuilding and repair industry, including an assessment of Government assistance provided either directly or indirectly to this industry under U.S. law;
3. An overview of conditions in the U.S. carrier industry, including an assessment of Government assistance provided either directly or indirectly to this industry under U.S. law; and
4. An evaluation and comparison of the likely economic effects of H.R. 2056, as amended,<sup>3</sup> with the likely economic effects of an international agreement to eliminate unfair trading practices (modeled after the current OECD discussions), on those sectors affected by the elimination of unfair trading practices in shipbuilding, including the U.S. shipbuilding and repair industry, the U.S. carrier industry, U.S. ports, and U.S. exporters and importers.

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<sup>1</sup> Commissioner Nuzum recused herself from participation in this investigation.

<sup>2</sup> The Commission received a second letter of request on Mar. 24, 1992, requesting that it analyze the effects of H.R. 2056, as amended. Committee on Merchant Marine and Fisheries, letter to the U.S. International Trade Commission, Mar. 24, 1992.

<sup>3</sup> H.R. 2056, as amended, hereinafter will be referred to as H.R. 2056.



## GLOSSARY OF TERMS

**Bare-boat charter:** A charter agreement that stipulates that the charterer provides for all operating expenses including crew, fuel, maintenance, and so forth.

**Breakbulk:** A general, multipurpose cargo ship that carries cargoes of nonuniform sizes, often on pallets, resulting in labor-intensive loading and unloading.

**Bulk:** Cargoes that are shipped unpackaged either dry, such as grain and ore, or liquid, such as petroleum products. Bulk service generally is not provided on a regularly scheduled basis, but rather as needed, on specialized ships, transporting a specific commodity.

**CCF--Capital Construction Fund:** A tax benefit for operators of U.S.-built, U.S.-flag ships in the U.S.-foreign, Great Lakes, or noncontiguous domestic trades, by which taxes may be deferred on income deposited in a fund to be used for the replacement of vessels.

**CDS--construction differential subsidy:** A direct subsidy paid to U.S. shipyards building U.S.-flag ships to offset high construction costs in U.S. shipyards. The amount of subsidy (up to 50 percent) is determined by estimates of construction cost differentials between U.S. and foreign yards. These subsidies were discontinued in 1981.

**CGRT--compensated gross registered tons:** A measure of shipbuilding output that modifies the total

gross tonnage of a vessel or vessels by making allowances for differing levels of complexity in ships being built.

**Cabotage policies:** Reservation of a country's coastal (domestic) shipping for its own flag vessels.

**Cargo preference:** Reserving some portion of a nation's imports and exports for their own flag vessels.

**Carriers:** Owners or operators of vessels providing transportation services to shippers. The term is also used to refer to the vessels.

**Coastwise:** Domestic shipping routes along a single coast.

**Conference:** An international group of ocean carriers serving common trade routes that collectively agree on shipping rates and the types of services offered.

**Container ship:** A vessel designed to carry standard-sized containers thereby enabling the efficient loading, unloading, and transport of cargo to and from the vessel.

**DWT--deadweight tonnage:** The total lifting capacity of a ship, expressed in tons of 2,240 lb. It is the difference between the displacement light and the displacement loaded.

**Domestic offshore trades:** Domestic shipping routes serving Alaska and noncontinental U.S. States and territories.

## GLOSSARY OF TERMS--Continued

**Flag of registry:** The flag representing the nation under whose jurisdiction a ship is registered. Ships are always registered under the laws of one nation but are not always required to establish their home location in that country.

**Flags of convenience:** Sometimes referred to as flags of necessity; denotes the registration of vessels in foreign nations that offer favorable tax structures and regulations.

**GRT--gross registered tons:** A common measurement of the internal volume of a ship with certain spaces excluded. One ton equals 100 cubic feet.

**Government-impelled:** Cargo owned by or subsidized by the Federal Government.

**Intracoastal:** Domestic shipping routes along a single coast.

**Jones Act:** Merchant Marine Act of 1920, section 27, requiring that all U.S. domestic waterborne trade be carried by U.S.-flag, U.S.-built, and U.S.-manned vessels.

**LASH--lighter aboard ship:** A barge carrier designed to act as a shuttle between ports, taking on and discharging barges.

**Liner service:** Vessels operating on fixed itineraries or regular schedules and with established rates available to all shippers.

**ODS--operating differential subsidy:** A direct subsidy paid to U.S.-flag operators to offset the high operating costs of U.S.-flag ships when compared with foreign-flag counterparts.

**Open registry:** A term used in place of "flag of convenience" or "flag of necessity" to denote registry in a country that offers favorable tax, regulatory, and other incentives to shipowners from other nations.

**Roll-on/Roll-off (RO/RO):** Ships designed to allow trucks or other vehicles to be driven on board with or without trailers of cargo.

**TEU--twenty-foot equivalent units:** A measurement of cargo-carrying capacity on a containership, referring to a common container size of 20 feet in length.

**Title XI:** A U.S. ship financing guarantee program, originally established in Title XI of the Merchant Marine Act of 1936, under which the Government guarantees up to 75 percent of the construction cost of vessels built with CDS or up to 87.5 percent of the construction cost of nonsubsidized vessels.

**Tramp service:** Vessels operating without a fixed itinerary, schedule, or charter contract.

**ULCCs--ultra-large crude carriers:** Crude oil tankers of over 400,000 dwt.

## GLOSSARY OF TERMS--Continued

**U.S.-Controlled Fleet:** That fleet of merchant ships owned by U.S. citizens or corporations and registered under flags of "convenience" or "necessity" such as Liberia or Panama. The term is used to emphasize that, while the fleet is not U.S.-flag, it is effectively under U.S. control by virtue of the ship's owners and can be called to serve U.S. interests in time of emergency.

**VLCCs-very large crude carriers:**  
Crude oil tankers between 200,000 and 400,000 dwt.





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## EXECUTIVE SUMMARY

### Background

Shipbuilding is a highly capital-intensive industry, and many shipbuilding companies worldwide are owned by large international corporations. Major commercial ship-producing nations include Japan, Korea, Germany, and several other European countries, such as Finland and Italy. The United States, however, is not a major world producer of commercial ships. Although the U.S. shipbuilding industry produces large numbers of vessels for the U.S. Navy and has produced commercial vessels for the U.S.-flag fleet (including the Jones Act fleet<sup>4</sup>), it has not produced a commercial vessel for export (that is, to be foreign-flagged) since 1960.

For a number of reasons, the U.S. shipbuilding industry lost much of the U.S.-flag market by 1988. The U.S. industry is now facing an additional challenge, as the number of U.S. Navy contracts is expected to decrease. Without the current level of Naval building, the U.S. industry will continue to decline unless it can begin to compete successfully for commercial orders. However, the U.S. shipbuilding industry maintains that to compete in the world market, foreign shipbuilding subsidies must be eliminated, because the U.S. shipbuilding industry has not received the benefit of any direct<sup>5</sup> shipbuilding subsidies since 1981, when the construction differential subsidy (CDS) ceased to be funded.

### Overview of the U.S. Shipbuilding and Repair Industry

In October 1991 there were 16 shipyards in the U.S. Active Shipbuilding Base (ASB), 6 yards fewer than in 1987. The value of U.S. shipbuilding and repair industry shipments in constant (1987) dollars is forecast to decline to \$9.1 billion in 1992 from \$11.0 billion in 1982. The U.S. shipbuilding and repair industry has also experienced a 30-percent decline in industry employment during 1982-91. From January 1, 1981 to January 1, 1991, the number of U.S. shipyards that produced only commercial ships declined from 11 to 1, and the number of U.S. shipyards producing only Naval ships increased from 9 to 13. There were no orders for U.S.-built commercial ships for the years 1988-90. Currently, the production of vessels for defense-related applications accounts for the vast majority of the ongoing activities of U.S. shipyards.

According to the Commission's analysis, U.S. bid prices for commercial vessels average 97 percent more than comparable world bids for similar ships. Actual cost differences are probably less or greater for specific kinds of ships, and the U.S. shipbuilding industry may be closer to being competitive for some types of ships than for others. Factors that contribute to this price differential reportedly include lack of recent U.S. experience in the

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<sup>4</sup> This fleet is required by law to use vessels built in U.S. yards.

<sup>5</sup> The Jones Act, operating differential subsidies (ODS), and various other U.S. programs constitute indirect subsidies by providing certain incentives to build in U.S. yards. These programs are discussed in chapter 3.

production of basic, low-technology ships, overspecialization of U.S. labor (as a result of labor contracts), a lack of supporting domestic shipbuilding infrastructure, and foreign subsidies. In general, U.S. shipyards also tend to lag behind foreign competitors with regard to investments in technologically advanced machinery.

### The U.S. Carrier Industry and Regulatory Practices Affecting Shipbuilding

The demand for shipping and the financial status of carriers (shipowners and operators) has an important effect on the demand for vessels. The U.S.-flag fleet was the traditional commercial market for the U.S. shipbuilding industry. A decline in carrier profitability, and the decline in size of the U.S.-flag fleet, has resulted in the loss of the U.S.-flag market for U.S. shipbuilders.

Few U.S. regulations encourage the U.S. flagging of vessels. The U.S. Government, acting through the Maritime Administration (MARAD), has in the past offered operating differential subsidies to certain U.S. shipowners to offset high U.S. operating costs. However, MARAD has announced that the current administration has no intentions of renewing any ODS contracts. U.S. tax practices also do not offer significant incentives to own/operate a U.S.-flag vessel. For example, according to depreciation schedules set by the Internal Revenue Service, operators get a deduction equal to about 10 percent of the cost of the vessel each year; other nations' practices generally allow accelerated writedowns of 50 percent or more the first year. In addition, U.S. companies cannot use the net income from their foreign-flag vessel operations to upgrade their U.S.-flag fleet without first paying taxes on the money.

The Jones Act fleet has also been an important market for the U.S. shipbuilding industry. This fleet is primarily made up of tankers carrying Alaskan crude oil. However, the Jones Act fleet is not a growing fleet, and, because optimum vessel size has increased over time, the number of new contracts has declined even though the trade carries a relatively constant level of cargo. The demand for vessels in this trade is also cyclical. Jones Act vessels are aging and orders for new contracts will start to increase in the next few years. In addition, the provisions of the Oil Pollution Act of 1990, which require that every tanker operating in U.S. waters must be double-hulled by the year 2015, will significantly affect oil transportation within all navigable waters under the jurisdiction of the United States.

The U.S. shipbuilding industry would greatly benefit if it were able to receive orders for such vessels (or vessel refitting); however, the Jones Act portion of this market is probably not sufficient to sustain the present size of the U.S. shipbuilding industry.

### Overview of Multilateral Negotiations and Legislative Efforts

Under the auspices of the Organization for Economic Cooperation and Development (OECD), the United States entered into negotiations with other major shipbuilding countries to develop an international agreement under which

signatory countries would phase out shipbuilding subsidies. The OECD negotiations include an effort to bring shipbuilding and repair under the coverage of an injurious pricing code modeled after the GATT Antidumping Code. Disagreements remain, however, and parties to the negotiations cannot agree as to whether the shipbuilder or shipowner should pay the remedy when a ship is built with the benefit of a subsidy. As this multilateral approach has, to date, yielded no agreement, on May 13, 1992, the U.S. House of Representatives passed H.R. 2056, as amended, to address the foreign subsidy issue.

The stated purpose of H.R. 2056, The Shipbuilding Trade Reform Act of 1992, is to "ensure fair trade in the commercial shipbuilding and repair industries by providing effective trade remedies against subsidized and dumped foreign commercial ships." This legislation would amend title IV of the Tariff Act of 1930 to require the master of a vessel to present a subsidy certification to the U.S. Customs Service as a condition of entry of the vessel into a U.S. port. If the ship is found to violate the subsidy prohibitions, H.R. 2056 would prohibit that ship from trading in U.S. ports. (Under certain circumstances, the prohibition could extend to an owner's entire fleet.) The bill would also authorize the application of countervailing and antidumping duties to purchases of dumped or subsidized vessels.

### Findings

The elimination of shipbuilding and repair subsidies, or the requirement that they be countervailed, would increase the costs of new ships and repair services for ships that serve U.S. ports. The Commission estimated the value of foreign subsidies, the effects of eliminating the subsidies on shipping costs, and the resulting effects on the U.S. shipbuilding and repair industry, exports and imports, U.S. port operations, and U.S. carriers.

### The Value of Foreign Subsidies

The Commission estimated the average foreign subsidy rate for shipbuilding and repair services based on the subsidies provided by the largest three foreign suppliers. The base year for these estimates and for the Commission's analysis of effects is 1989. Two estimates of the average subsidy rate were made. Using data obtained from the OECD, the Commission estimated an average subsidy rate of 5.9 percent. Using data from the Shipbuilders Council of America (SCA), the Commission estimated a rate of 23.5 percent. Based on these estimates, the Commission made two sets of estimates of the effects of eliminating subsidies.

### Effects on U.S. Shipyards

The Commission estimated the average cost difference between U.S. and foreign-built ships by comparing competitive bids for construction contracts in the period 1989-91. The Commission found that the lowest bid by a U.S. shipbuilder was, on average, 97 percent higher than the lowest bid of a foreign shipbuilder.

Using the OECD data, the Commission estimates that enactment of H.R. 2056 would increase prices of foreign ships serving U.S. ports by 5.9 percent on average and adoption of the draft OECD agreement would increase prices by 4.3 percent on average. Using the SCA data, the Commission estimates that enactment of H.R. 2056 would increase foreign ship prices by 23.5 percent on average and the draft OECD agreement would increase them by 16.9 percent on average. The estimated average price increase under H.R. 2056 is 100 percent of the value of the subsidies that would be eliminated; under the draft OECD agreement the estimated average price increase is 72 percent of the value of the subsidies.

Because the estimated cost difference between U.S.- and foreign-built vessels is substantially greater than the estimated increase in foreign ship prices under H.R. 2056 or the proposed OECD agreement, regardless of whether OECD or SCA subsidy data are used, the Commission concludes that neither enactment of H.R. 2056 nor adoption of the proposed OECD agreement would, by itself, make U.S. shipbuilders competitive with foreign shipbuilders. To become competitive, U.S. shipbuilders would also have to decrease their costs relative to foreign producers by more than one-third.

In addition, the Commission does not expect H.R. 2056 or the proposed OECD agreement to make U.S. shipyards more competitive for ship repair work. Most of the subsidies that would be eliminated are for shipbuilding, not ship repair, and at the present time, foreign yards have a considerable cost advantage in repair work.

#### Trade Effects

The elimination of subsidies would affect U.S. exports and imports directly by increasing the cost of shipping, and indirectly by decreasing the real value of production and U.S. real income. The indirect effect would occur because higher shipping costs would effectively reduce the United States' terms of trade, or the rate at which the United States exchanges exports for imports with the rest of the world. Reduced real income would lower U.S. merchandise imports and exports as U.S. consumers shift toward cheaper domestic goods and U.S. producers shift toward the domestic market and the services export market.

The Commission estimates that enactment of H.R. 2056 would result in a decrease in U.S. exports of merchandise of \$27 million or 0.01 percent, based on the subsidy estimates using OECD data (\$56 million or 0.02 percent based on subsidy estimates using SCA data) and an increase in exports of services of \$46 million or 0.04 percent (\$282 million or 0.23 percent). Exports would increase for durable and nondurable manufactured goods, for which shipping is a relatively small portion of the value, but would decline for agricultural products and certain other bulk commodities for which shipping is a relatively large portion of the value. Under H.R. 2056, merchandise imports would decrease by \$164 million or 0.03 percent (\$1.1 billion or 0.23 percent based on the SCA data) and imports of services would decrease by \$30 million or 0.03 percent (\$184 million or 0.02 percent).



According to the Commission's estimates, adoption of the proposed OECD agreement would decrease U.S. exports of merchandise by \$21 million based on the OECD data or 0.01 percent (\$26 million based on SCA data) and exports of services would increase by \$33 million based on the OECD data or 0.03 percent (\$234 million or 0.19 percent based on SCA data). U.S. imports of merchandise would decrease by \$125 million or 0.03 percent (\$959 million or 0.19 percent), and imports of services would decrease by \$21 million or 0.2 percent (\$154 million or 0.16 percent). Estimates are provided for the effects of H.R. 2056 and the proposed OECD agreement on exports and imports in 4 merchandise sectors of the economy, 5 service sectors, and 17 specific industries in which an increase in shipping costs would be expected to have relatively large effects on trade.

The Commission estimates that the annual reduction in real National Income, resulting from the decline in the U.S. terms of trade under H.R. 2056, would be \$350 million based on the subsidy estimates using OECD data (\$2.5 billion based on subsidy estimates using SCA data). The Commission estimates that under the proposed OECD agreement the annual reduction in real National Income would be \$264 million based on the OECD data (\$2.1 billion based on the SCA data).

The Commission's estimates of effects are made in 1989 prices and are based on 1989 trade levels. All estimates are of long-run effects. Initially, the effects on trade and U.S. ports would be much smaller, but they would gradually increase.

#### Effects on U.S. Ports

The Commission used its estimates of the effects on merchandise trade and estimates of transshipments resulting from H.R. 2056 to estimate the effects of the H.R. 2056 and the proposed OECD agreement on U.S. ports. H.R. 2056 would create an incentive for transshipment because it would increase the cost of shipping through U.S. ports but not through ports in Canada and Mexico. It has been argued that proximity of competing ports and port capacity may limit these effects. However, the experience of Great Lakes and Pacific Northwest ports with recent port-related taxes suggests that some transshipment is likely. The proposed OECD agreement would not create an incentive for transshipment because it would not affect the relative costs of using U.S. and neighboring countries' ports.

The Commission estimates that H.R. 2056 would decrease annual U.S. port activity by \$4.6 billion in cargo value based on OECD data (\$18.7 billion based on SCA data) and would reduce employment in U.S. ports by 633 (2,559) full-time-equivalent persons. This decrease would represent a 0.72 percent (2.92 percent) decline in total merchandise traffic in U.S. ports. The proposed OECD agreement would decrease annual port activity by \$146 million (\$985 million) and would decrease employment by 20 (135) full-time-equivalent persons. This would represent a 0.02 percent (0.15 percent) decline in total merchandise traffic. While the estimated changes are small relative to overall U.S. port traffic, the impact of these changes will likely be concentrated in the Pacific Northwest and Great Lakes ports.

## Effects on U.S. Shipowners

The effects of H.R. 2056 or the proposed OECD agreement on shipowners depend on whether or not the ships in question are new (not yet purchased) or old (already owned) and whether or not the ships are engaged in international cargo trade, trade within the United States, or passenger cruise operations. Neither H.R. 2056 nor the proposed OECD agreement would have a significant effect on shipowners with regard to the operation of new ships. Shipowners would not buy new ships unless it were possible to pass any additional costs either forward to consumers or backwards to shipyards. It is possible, however, for shipowners to gain or lose from their ownership of existing ships, which are a "sunk" cost and can therefore change in terms of their relative value.

If H.R. 2056 is enacted, shipowners engaged in international cargo trade would benefit from an increase in the value of older ships that would result from the higher effective cost of ownership of new ships. Shipowners also might suffer some losses by absorbing certain increased costs imposed by the law, including increased repair and administrative costs.

Shipowners may also suffer if foreign governments retaliate against the United States for enacting H.R. 2056, as some expect. Foreign governments would be parties to an OECD agreement and, therefore, unlikely to retaliate against the United States for any consequences of its adoption.

If the draft OECD agreement were adopted, shipowners might gain or lose with regard to old ships much as they would under H.R. 2056. However, the gains would probably be smaller because shipping costs would increase by less and the potential losses would also be smaller because the costs of the program would not be as great.

Shipowners engaged in trade within the United States are not expected to be affected greatly by either of the programs because they operate under the protection of the Jones Act. They might incur higher costs for repairing ships in foreign yards, but this cost is not expected to be significant.

Shipowners of cruise ships might face increased competition from foreign lines operating outside of U.S. ports if H.R. 2056 is enacted. They may move their operations offshore as well or face a loss of competitiveness.

## CHAPTER 1. INTRODUCTION

In this report, the Commission provides its assessment of the likely economic effects of the enactment of H.R. 2056, the Shipbuilding Trade Reform Act of 1992, and of a comparable OECD agreement to eliminate shipbuilding subsidies. The study is focused on those U.S. sectors and economic activities most affected, such as shipbuilding, shipowners and operators, port facilities, and importers and exporters. The likely effects of H.R. 2056 are compared with those of the current OECD proposal to eliminate shipbuilding subsidies.

Ocean shipping plays an essential role in international trade and the world economy. International trade has become a factor in sustaining economic growth for most industrialized countries. Much of this trade is by sea. The United States remains the world's largest trading nation, engaging in trade with countries around the globe. According to industry sources, over 5 million U.S. workers are directly dependent on foreign trade for their livelihood. Additionally, over 30 percent of the acreage planted by U.S. farmers produces crops for export.<sup>1</sup> In terms of the volume of trade, the United States is a major exporter of dry-bulk commodities, such as grain, coal, soybeans, and forest products. These commodities are typically carried on bulk ships. On the import side, the biggest U.S. import is petroleum, which is carried by tankers. This interdependence between the U.S. economy and the international economy depends on and contributes to the maritime transport industry. For this reason, the Commission's assessment of the direct impact of H.R. 2056 on the maritime sector is linked to an assessment of consequent effects on the volume and direction of trade and, ultimately, on domestic economic activity.

### THE SCOPE OF THE STUDY

The study focuses on the likely economic effects of H.R. 2056 and the prospective OECD agreement on four segments of the U.S. economy: shipbuilding, carriers (shipowners and operators), ports, and foreign trade. The first of these sectors--the U.S. shipbuilding industry--is made up of firms engaged in the construction and repair of various types of sea going vessels. U.S. shipyards have long specialized in the construction of vessels for the U.S. Navy and Military Sealift Command. Until the last decade, U.S. shipbuilders also produced numerous vessels for commercial use by the U.S.-flag fleet. Foreign shipbuilders also build military vessels but primarily specialize in commercial ships such as passenger/cruise, bulk, tanker, and liner vessels. Individual shipyards tend to specialize in the construction of one or a few types of vessels. For commercial vessels, the profitability of shipbuilding operations depends on minimizing production costs and time and maximizing the demand for vessels built by each individual shipbuilder, and on the demand for vessels worldwide (which in turn is dependent on demand for ocean shipping).

Carriers (shipowners/operators) contract with shipbuilders to have ships built either for their own use or for charter and lease. Shipowners/operators

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<sup>1</sup> Office of Technology Assessment, ch. 2 in An Assessment of Maritime Technology (Washington: OTA, 1983), p. 23.

then provide waterborne transportation services for freight or passengers. Shipowner profitability depends on minimizing operating and capital costs and maximizing the use of waterborne transportation by shippers. Shipowner profitability also directly affects the decision to purchase or operate vessels.

Ports deal directly with both the ship and its contents when the ship makes landfall. Ports provide the facilities and services for the transfer of cargo between land and sea. For these reasons, ports would be especially affected by any economic change caused by H.R. 2056 or the proposed OECD agreement. In addition to direct effects on the level of U.S. foreign trade, the level of port activity could also be affected by the proposed legislation should the cost of landing cargo in a U.S. port outweigh the transshipment problems encountered in using non-U.S. (Canadian or Mexican) ports.

Finally, any change in shipping costs consequent to either H.R. 2056 or the proposed OECD agreement will also have a direct effect on the volume and composition of U.S. foreign trade. As stated previously, the United States is a major exporter of dry-bulk commodities, including agricultural products. Such exports are particularly sensitive to changes in transportation costs. The price that the United States must pay for its imports, such as petroleum, is also dependent on transportation costs. H.R. 2056 and the proposed OECD agreement can thus be expected to affect not just the maritime sector, but the overall economy as well, through trade linkages.

#### ORGANIZATION AND APPROACH

The Commission's report is organized as follows. Chapter 1 discusses the scope and organization of the report. Chapter 2 provides background information on the U.S. shipbuilding industry. The chapter focuses on a description of the shipbuilding process and vessels produced and explains how vessel production differs from production of other manufactured goods. It also examines conditions in the U.S. shipbuilding and repair industry. Chapter 3 provides a description and overview of U.S.-flag and U.S.-controlled shipping and assesses the means by which various U.S. practices affect shipping and thus affect shipbuilding and repair, both directly and indirectly.<sup>2</sup> This overview is a qualitative assessment of the interaction and interrelationship between the shipowning and shipbuilding sectors and not a quantitative analysis of the effects of such regulatory practices. Chapter 4 provides an overview of the issues that are being considered in the OECD shipbuilding subsidy negotiations, with a comparison of the current provisions of the OECD approach and the provisions of H.R. 2056, as amended by the Committee on Ways and Means. The chapter also discusses some technical aspects of H.R. 2056 and the OECD agreement that remain unclear. Finally, the likely economic effects of H.R. 2056 and the OECD agreement are presented in chapter 5. Chapter 5 begins with a quantitative assessment of the level of foreign shipbuilding and repair subsidies. The likely economic effects of

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<sup>2</sup> The indirect methods include regulations that directly affect the carrier industry.

their elimination are then examined. Important quantitative differences between the implications of H.R. 2056 and the OECD agreement are also provided.



## CHAPTER 2.

### CONDITIONS IN THE U.S. SHIPBUILDING AND REPAIR INDUSTRY

#### THE U.S. SHIPBUILDING INDUSTRY

Companies in the U.S. shipbuilding and repair industry (Standard Industrial Classification (SIC) 3731) are engaged primarily in building and repairing large barges; cargo vessels; combat and other naval ships; drilling and production platforms for oil and natural gas; and miscellaneous vessels such as ferryboats, fireboats, and fishing vessels. Partially because of a worldwide decline in the demand for commercial vessels, in 1987 the U.S. domestic industry consisted of 585 establishments, 15 percent fewer than the total of 687 recorded in 1982.<sup>3</sup>

Over the last 10 years, there has been a major reduction in industry employment. During 1982-89 there was a steady decline in employment, from approximately 167,000 workers to 119,000 workers, or by 29 percent. Employment rose to an estimated 123,000 in 1990 but then fell to 120,000 in 1991 and is estimated to decline to 118,000 in 1992.<sup>4</sup> The value of industry shipments in constant (1987) dollars increased from \$8.5 billion in 1987 to an estimated \$9.3 billion in 1991, but is forecast to decline to \$9.1 billion in 1992. The industry's new capital expenditures also declined erratically from a historical high of nearly \$440 million in 1982 to \$228 million in 1991.<sup>5</sup> As of October 1, 1991, there were 16 shipyards in the U.S. Active Shipbuilding Base (ASB).<sup>6</sup> This represented a decline of 6 yards since 1987. Shipyards making up the ASB are the only ones on which H.R. 2056 would have any meaningful effect. Few, if any, vessels constructed by shipyards in "second tier" U.S. facilities are ever employed in international trade. Since 1987, shipyards that were once part of the ASB have been closed in Beaumont, TX, Seattle, WA, Los Angeles, CA, Chester, PA, Sturgeon Bay, WI, and Galveston, TX. Approximately 75 percent of total U.S. employment in SIC 3731 is attributable to ASB shipyards. An additional nine U.S. Government-owned shipyards, which are not covered by SIC 3731, are presently engaged in the overhaul and repair of Navy and Coast Guard ships.<sup>7</sup>

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<sup>3</sup> U.S. Department of Commerce, Bureau of the Census, Census of Manufactures 1982 and 1987. The Department of Commerce publishes the Census of Manufactures on a 5-year basis.

<sup>4</sup> Current available employment figures for this industry vary considerably, depending on the source of information. Some of this variation is due to shipyard employment that is engaged in nonshipbuilding activities.

<sup>5</sup> U.S. Department of Commerce, U.S. Industrial Outlook 1992, Jan. 1992, pp. 22-1 to 22-7, and the Census of Manufactures, 1982 and 1987.

<sup>6</sup> The ASB is defined as those privately owned shipyards that are open or are engaged in or actively seeking construction contracts for naval and commercial vessels over 1,000 gross tons. These "first tier" shipyards are full-service facilities, which have the capability to construct, drydock, or make topside repairs to vessels of 400 feet or longer.

<sup>7</sup> U.S. Department of Commerce, U.S. Industrial Outlook 1992, Jan. 1992, p. 22-2.

Although the U.S. shipbuilding and repair industry has experienced an increase in the dollar value of product shipments since 1987, this trend is due primarily to a rise in ship prices that has occurred in response to production cost increases. As of mid-1991 the world orderbook for merchant ships weighing 100 gross tons (gt) or more amounted to 2,424 ships totaling 39.6 million gt, representing a decline of 9 and 1 percent, respectively, from the level of 2,665 ships and 39.9 million gt recorded in mid-1990. Despite the recent increase in U.S. producers' shipments, U.S. shipyards accounted for only 0.7 percent of the total tonnage of outstanding orders for commercial vessels worldwide.<sup>8</sup> Consequently, in mid-1991, the U.S. industry was ranked 27th worldwide in terms of its commercial orderbook.

#### Defense vs. Commercial Production

Since 1960, U.S. shipyards have not produced any commercial, oceangoing, non-Jones Act ships for non-U.S. owners.<sup>9</sup> <sup>10</sup> During the 1980s 82 commercial ships were produced for the U.S.-flag, U.S.-owned fleet (including the Jones Act fleet), with the last being delivered in 1988.<sup>11</sup> There were no orders for U.S.-built commercial ships for the years 1988-90.<sup>12</sup> From January 1, 1981, to January 1, 1991, the number of U.S. shipyards that produced only commercial ships declined from 11 to 1. The number of U.S. shipyards producing only Naval ships increased from 9 to 13, and yards that produced both commercial and Naval ships declined from 2 to 1.<sup>13</sup> Principal reasons for this shift were the elimination of the Construction Differential Subsidy,<sup>14</sup> which decreased demand for U.S.-built commercial ships, and the Administration's goal of a 600-ship Navy.

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<sup>8</sup> U.S. Department of Commerce, U.S. Industrial Outlook 1992, p. 22-2.

<sup>9</sup> Maritime Administration (MARAD) official, conversation with USITC staff, Mar. 12, 1992.

<sup>10</sup> U.S. shipbuilders maintained the only viable shipyards in existence after World War II. Shipyards in Europe and Asia were rebuilt during the late 1940s and early 1950s and began delivering ships to foreign customers in the mid- to late 1950s. U.S. ships initially had the competitive edge, as they were the least expensive on the market during most of the 1950s. However, foreign builders began to build much larger ships outfitted with diesel engines, which were far more economical to operate and could carry larger payloads. (U.S. ships primarily were powered by turbines.) Additionally, at that time, the U.S. Government required that a foreign buyer of a U.S.-built ship put up a bond as a condition of a ship contract, agree that the ship would not go to certain areas of the world, and agree not to sell the ship to citizens of certain countries. The last U.S. ship built for foreign owners and sailing under a foreign flag was delivered in October 1960.

<sup>11</sup> U.S. Department of Transportation, Maritime Administration, Vessel Inventory Report as of January 1, 1991, pp. 1-16.

<sup>12</sup> Shipbuilders Council of America, written submission to the Commission, Nov. 7, 1991, pp. 36-37.

<sup>13</sup> Ibid, pp. 30-31.

<sup>14</sup> A discussion of CDS is included in chapter 3.



During the 1970s, U.S. shipyards had on order or under construction an average of 72 merchant ships a year. During the 1980s this number declined to 21 merchant ships per year.<sup>15</sup> The number of Naval ships produced or on order during the 1970s averaged 79 per year, whereas during the 1980s, production averaged 95 ships per year (figure 2-1).<sup>16</sup> Part of the loss of commercial shipbuilding orders during the 1980s was compensated for by the rise in U.S. orders for Naval ships, which were produced on a cost-plus-fee basis and were only bid on by domestic shipyards.<sup>17</sup>

The U.S. shipbuilding industry does not have a dominant role in the worldwide commercial shipbuilding market (figure 2-2). Since the U.S. industry has been sustained by naval construction, recent Department of Defense announcements of significant cutbacks in U.S. Naval procurement during 1992-97 will soon force U.S. yards to look increasingly to commercial contracts to maintain their employment and yard operations at current levels. The U.S. Navy's procurement plan for 1992-97 calls for the production of an average of less than 10 vessels per year, or a reduction of nearly 50 percent from the average 19 ships produced annually by U.S. yards during the 1980s. The largest U.S. yard, Newport News Shipbuilding and Drydock, has already announced cuts of several thousand employees, reportedly because of the proposed cancellation of the Navy's SSN-21 Seawolf attack submarine program. This program carried a FY 1993 price tag of \$2.5 billion and projected total expenditures of \$17.5 billion through FY 1997.<sup>18</sup>

During 1990-91, a total of approximately \$1.3 billion was budgeted by Congress for the U.S. Navy to begin construction of a fleet of fast sealift vessels. An additional \$1.2 billion was recently authorized for construction over the next 5 years, and further future funding may be forthcoming. Alternative plans for the fast sealift program would provide for the construction of between 5 and 25 vessels. The overall level of financial impact of this program on U.S. shipyards, however, is difficult to assess.

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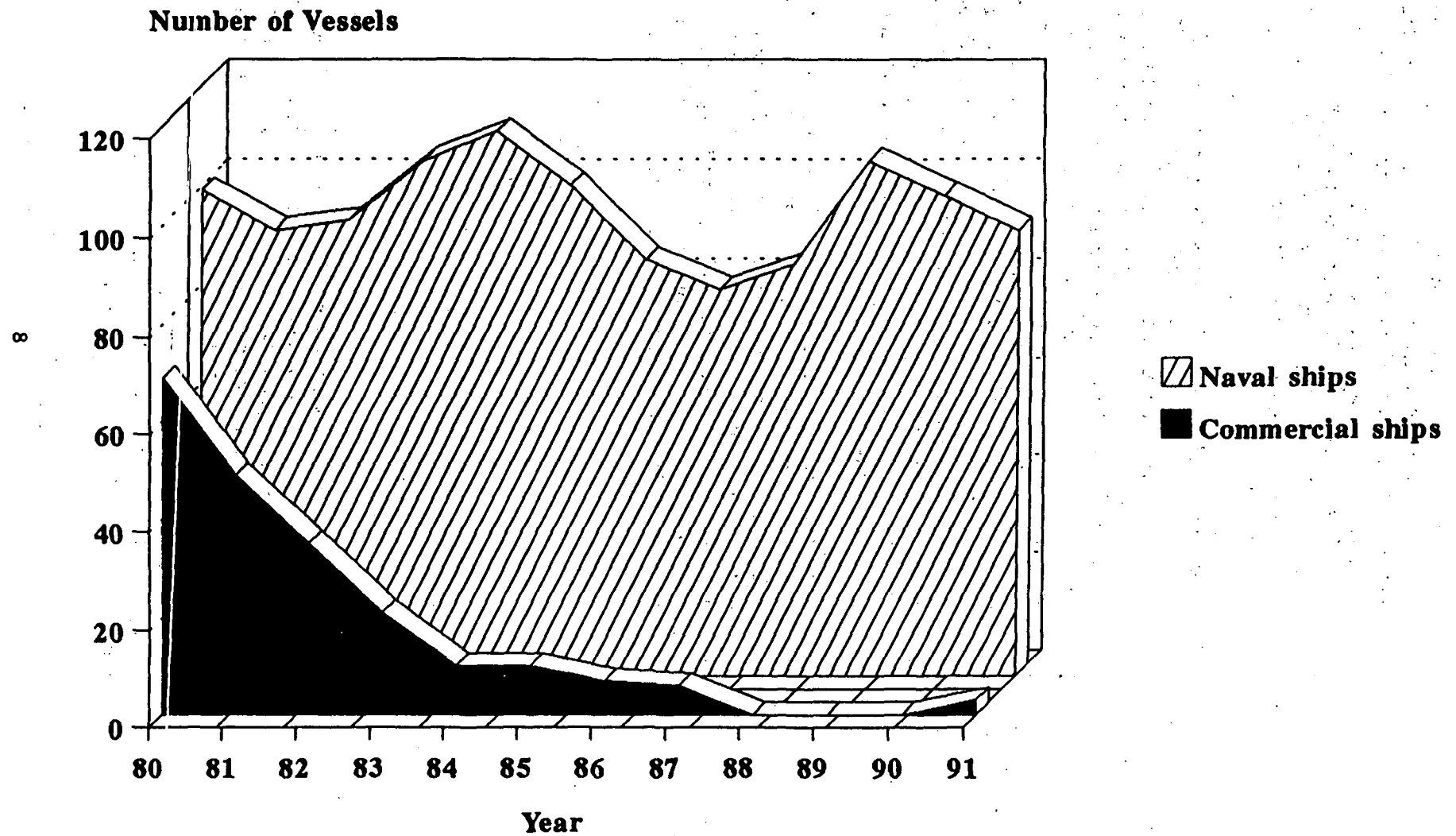
<sup>15</sup> Shipbuilders Council of America, written submission to the Commission, Nov. 7, 1991, p. 35. Two of the last ships built in U.S. yards for U.S.-flag service were the Exxon Long Beach (211,500 dwt), and a containership for Sea-Land, the Anchorage (20,700 dwt). U.S. yards did not build or receive orders to build any commercial ships during 1988-90.

<sup>16</sup> Ibid., p. 32.

<sup>17</sup> U.S. shipbuilder, conversation with USITC staff, Feb. 1992.

<sup>18</sup> "Naval Aviation Spared Big Cuts, but AX Program Funding Halved," Aviation Week and Space Technology, Feb. 3, 1992, p. 21.

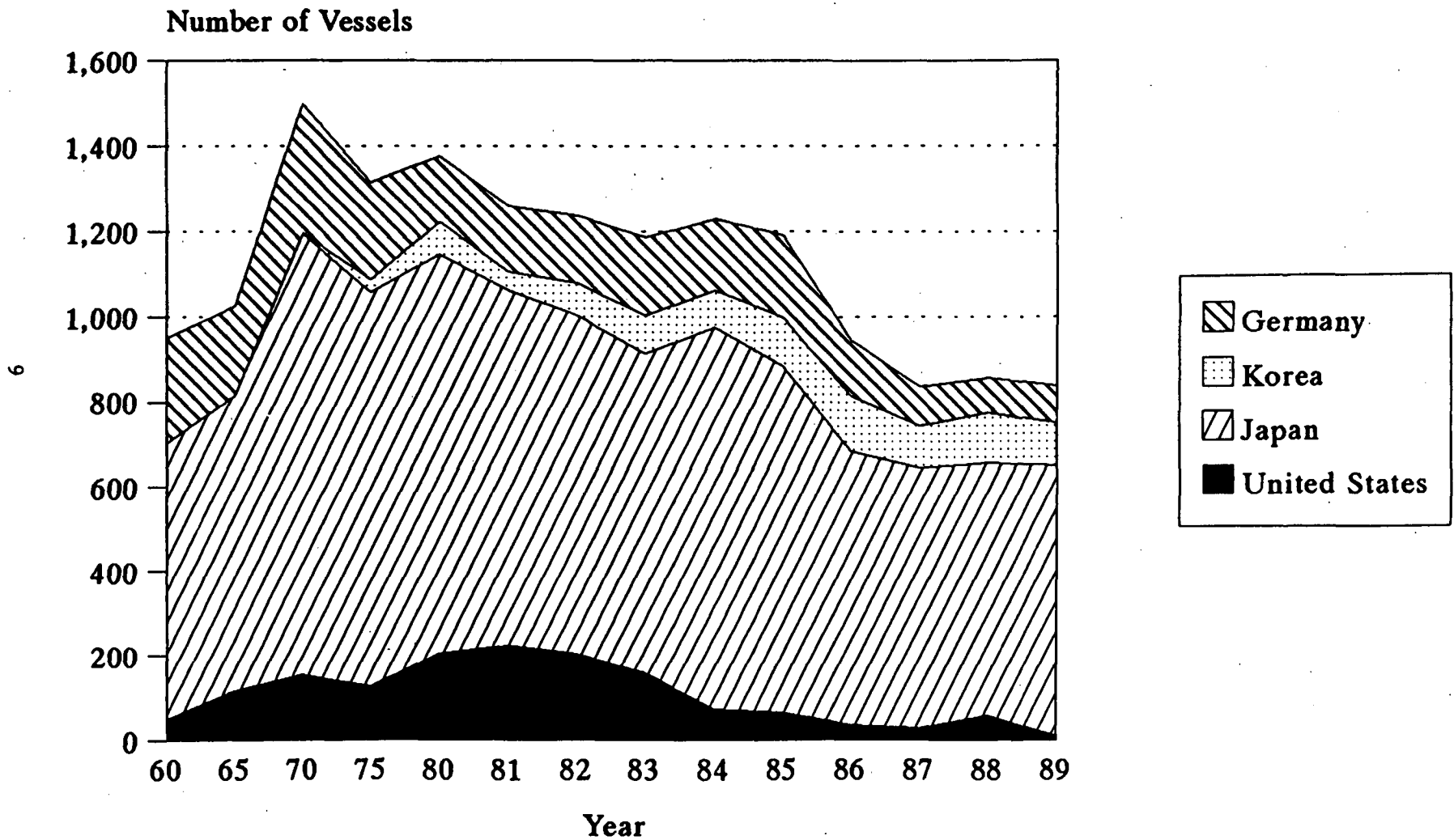
**Figure 2 - 1**  
**New U.S. vessels on order or under**  
**construction, 1980-91**



Source: Shipbuilders Council of America

**Figure 2 - 2**

**Merchant Ships: Completions of 100 Gross Tons or Larger,  
by Country of Build for Selected Years**



Source: Institute of Shipping Economics and Logistics

## The U.S. Ship Repair Industry

Ship repairs can range from a minor emergency repair, completed quickly and costing a few thousand dollars, to a major repair, which may closely approximate a complete rebuild of a ship. The latter category of such repairs may be difficult to differentiate from rebuilding, may take many months to complete, and may cost millions of dollars. Emergency repairs generally are completed at the nearest yard. Certain major repairs may be scheduled far in advance. Yard cost considerations, though important, do not matter as much for vessel repair as they do for construction of new vessels. Vessel owners will often schedule repairs at the most convenient location, since rerouting or removing a vessel from service can cost much more than the cost savings from using a particular low-cost or subsidized yard. According to industry sources, the major determinants affecting the choice of a repair yard are--

1. The price charged for the repair;
2. The location of various shipyards in relation to where the ship is trading;
3. The competency of the yard; and
4. The owner's past history with the shipyard.<sup>19</sup>

There are presently 94 U.S. shipyards engaged in the repair of ocean-going vessels.<sup>20</sup> Forty-two of these yards have drydock capability, which allows the bottom of the vessel to be repaired. The remaining 52 yards perform only topside repair,<sup>21</sup> which refers to the repair of the top, side, and interior of a vessel. In addition, industry sources have noted that there are at least 100 yards engaged in the repair of smaller vessels (those under 400 feet long). Largely because of the decline in commercial new construction activity over the last 15 years, many of the larger U.S. yards that are capable of performing both new construction and repair have increased the share of their work that involves repair; thus, some of the smaller repair yards have been forced out of business.<sup>22</sup> The majority of the larger U.S. repair yards repair both military and commercial vessels, whereas many of the smaller yards tend to specialize in one area. Industry sources also indicate that ship repair capacity in the United States is substantially underutilized and therefore operates in an extremely competitive environment.<sup>23</sup>

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<sup>19</sup> Thomas Winslow, American President Lines, conversation with USITC staff, Mar. 5, 1992.

<sup>20</sup> Edward Karlson, chief, Office of Production, U.S. Department of Transportation, Maritime Administration, Office of Ship Construction, interview by USITC staff, Mar. 11, 1992. The Maritime Administration defines oceangoing vessels as those at least 400 feet long.

<sup>21</sup> Ibid.

<sup>22</sup> David McQuery, president, Ship Repair Association, interview by USITC staff, Mar. 11, 1992.

<sup>23</sup> U.S. Department of Commerce, U.S. Industrial Outlook 1991, p. 23-3.

## Role of Military Repair

U.S. repair yards are very concerned about recent announcements by the U.S. Navy that it intends to reduce the size of its budgets for both new construction and ship repair, since the U.S. Navy has provided the bulk of ship repair work in recent years.<sup>24</sup> Many U.S. repair yards claim that without Naval work they would go out of business. In 1991, the Secretary of the Navy told Congress that the current Navy ship procurement program, along with the schedule of decommissionings, would result in the decline of the active U.S. Naval fleet from its 545 ships at the end of FY 1990 to 451 ships by the end of FY 1995. Industry sources report that the amount of ship repair work will decrease as the size of the Naval fleet declines.<sup>25</sup> The amount requested by the U.S. Navy for repair and fleet modernization for active and reserve ships totaled \$3.3 billion, representing a decrease of 8 percent from the FY 1991 appropriation and 28 percent below the 1990 appropriation.<sup>26</sup>

However, MARAD's Ready Reserve Force (RRF) is expected to provide a steady source of income for U.S. repair yards during the 1990s. MARAD provides funds for the procurement and maintenance of this fleet of 98 ships, which is in a state of 5-day, 10- or 20-day alert readiness. MARAD estimates that an average of \$1 million per vessel per year will be expended from FY 1992 through FY 1995 to maintain the RRF over the next 3 years. Seventy-eight of these ships were sent to the Persian Gulf in 1991 and will need to be deactivated in the next several years, totaling approximately \$330 million in work for about 25 U.S. shipyards. All repair, conversion, and layup work on these vessels is required to be done at U.S. facilities. In addition, MARAD is expected to add 15 ships to its fleet over the next 3 years and estimates that \$60 million of additional activation, conversion, and maintenance work per year will be necessary. Thus, work on the RRF should increase the repair workload for U.S. private shipyards through the 1990s.<sup>27</sup>

## Role of Commercial Repair

As U.S. Naval repair work declines, U.S. repair yards will be looking increasingly to commercial repair work as a means of survival. In recent years commercial ship repair work has expanded, owing in part to the aging of the world fleet. For example, by the year 2000, more than 45 percent of the current world tanker fleet will be more than 25 years old and more than 20 percent will be at least 30 years old.<sup>28</sup> In recent years U.S. yards also have reported an increased volume of repairs to cruise ships. It is expected that demand for commercial ship repair will remain strong as world demand for commercial vessels increases and the increasing prices of new vessels drive owners/operators to attempt to extend the life of existing vessels.

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<sup>24</sup> Ibid.

<sup>25</sup> See chapter 3, discussion entitled "Defense Contracting."

<sup>26</sup> U.S. Department of Commerce, U.S. Industrial Outlook 1992, p. 22-3.

<sup>27</sup> Ibid.

<sup>28</sup> Ibid., p. 22-7.

In the future, U.S. repair yards may also get a boost from the Oil Pollution Act of 1990 (OPA '90) (see chapter 3). OPA '90 requires all tankers entering U.S. waters to eventually be outfitted with double hulls to prevent oil spills. According to industry sources, two oil companies have already solicited bids from U.S. repair yards for the addition of double hulls for up to seven tankers.<sup>29</sup> Likewise, certain amendments to the Clean Air Act of 1990, which require retrofitting of vapor recovery systems to existing vessels, should provide some additional shipyard work.

## COMPARATIVE OVERVIEW OF SHIPBUILDING

### Introduction to the Shipbuilding Process

Large shipyards typically cover several hundred acres extended over two miles or more of waterfront property. These shipyards are in close proximity to deep water rivers, harbors, or protected bays, many of which have been further improved by seawalls, breakwaters, and dredged channels.

Shipyard production facilities are set up to ease the flow of materials from point of disembarkation (usually rail head or pier)<sup>30</sup> through various processing and fabrication shops in which steel plate, piping, and other components undergo surface treatment, cutting, bending, welding, and assembly. In most of the world's major shipyards, these operations are controlled by sophisticated computer-aided design/computer-aided manufacturing (CAD/CAM), computer-controlled inventory, and work-in-process systems, which are linked directly (e.g., commands to numerically-controlled machine tools) or indirectly (e.g., shop diagrams and work schedules) to the applicable production process area.

Large oceangoing vessels are commonly constructed by a process in which individual steel plates are first either bent (if they are to become an element of the ship's hull) or cut (to provide access ways for internal plumbing, electrical, or structural components). Following these operations, structural stiffeners and related components are welded to the plates to form a structural element of the vessel. These elements, in turn, are welded together into larger subassemblies until they reach a critical maximum size (usually dictated by the lifting capacity of the cranes and transport systems of each individual yard). The weight of each subassembly can be as much as 900 tons. These subassemblies are then outfitted with the assorted plumbing, electrical wiring, pumps, motors, lighting fixtures, and other apparatus that are to be in place in each particular area of the completed vessel. The

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<sup>29</sup> Currently, other U.S. petroleum companies are having such ships built in Japanese or Korean yards.

<sup>30</sup> Shipyards in the United States are generally supplied with raw materials through access to rail lines, whereas those in Japan and Korea are principally supplied by waterborne vessels. European yards are supplied by both methods.

subassemblies are called "modules" or "blocks"; thus, the term "modular construction" is often applied to this production process.<sup>31</sup>

Whereas the general manufacturing process for all types of vessels is similar, the building, outfitting, and appearance of the end product can differ significantly depending on the type of vessel being built. There are many types of commercial vessels. Some are "series built", meaning the design is the same for several ships, and other vessels are more customized. The high level of capital investment and specific applications for any vessel ensures that only a limited number of ships may be substantially alike.

#### Defense Production

The production of vessels for defense-related applications, which currently accounts for the vast majority of the ongoing activities of U.S. shipyards, is quite different from that associated with most ships employed in commercial operations. To begin with, the competition for military vessels is typically limited to a few yards in a single country, and competition often centers more on the reputation and capabilities of competing yards than on price. In addition, many defense contracts often allow for some flexibility in the final delivered price of a vessel based on the design changes and system modifications that are quite common during the construction of these ships. As the result of such changes, and efforts to incorporate the most up-to-date technology, each vessel is, to some extent, "one of a kind."

The complexity and sophistication of military vessels is typically far beyond anything associated with commercial vessels. Military vessels often accommodate a significantly larger crew complement than commercial vessels do and have advanced electronics for radar, sonar, communications equipment, and weaponry. In addition, complex propulsion systems are often unique to military vessels. Because military vessels are designed to maintain their operational integrity under the most adverse environmental conditions, they are built to more exacting standards and with higher cost materials than are most commercial ships.

#### Commercial Production

In contrast to the production of vessels for defense applications, the production of the major types of commercial vessels (VLCCs, ULCCs, container carriers, bulk product carriers, ro-ros, and similar product carriers) is much less technologically sophisticated and labor intensive. Major contracts for these vessels are most often awarded on the basis of price and delivery considerations. Because a number of yards in more than one country may be

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<sup>31</sup> This system is considered more efficient than the original method of constructing vessels, in which the hull of the ship was first constructed on an inclined platform, and the internal outfitting of the vessel was subsequently completely from the bottom up, then end to end (in the case of plumbing and electrical wiring).

involved in bidding on the same contract, commercial competition is often quite intense.<sup>32</sup>

With the possible exception of cruise ships,<sup>33</sup> the production of a series of similar commercial vessels involves far fewer design and production modifications than a comparable generation of military ships. Thus, it is typically possible to take advantage of considerably greater learning curve efficiencies and economies of scale when building many types of commercial ships as opposed to building vessels for defense applications.<sup>34</sup> Also, foreign shipyards specializing in commercial work typically receive orders for a number of ships of the same basic design and specification. This similarity reduces the cost of nonrecurring design changes.<sup>35</sup> Commercial customers are typically much less involved in the ongoing production of a vessel, which differs drastically from the hands-on approach of military vessel customers in the United States.

### Production Technology

In general, U.S. shipyards tend to lag behind their foreign competitors<sup>36</sup> with regard to investments in new, technologically advanced machinery, claiming that they do not have the necessary funds to invest in such equipment.<sup>37</sup> (A more in-depth discussion of world shipbuilding is found in appendix D.) This situation is also due, to some extent, to the difference in flexibility required in the construction of Naval vessels and commercial ships. Because of their complexity and uniqueness, Naval vessels require a more flexible approach to construction than do commercial ships. Commercial ships may be constructed using more automated processes, because these processes may be used in the construction of similar ships. The machinery

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<sup>32</sup> Japanese and Korean shipbuilding officials, conversations with USITC staff, Feb. 12-19, 1992.

<sup>33</sup> Outfitting a cruise vessel is more akin to building a large, luxury hotel than to shipbuilding. On average, 50 percent of the production cost of such a vessel is attributable to the labor and materials associated with outfitting. The proper scheduling of the vessel's outfitting must be maintained, because timely delivery is especially important for cruise vessels. When the construction contract is signed, the prospective owner starts advertising, making advance bookings and selling tickets, publishing itineraries, and determining berthing requirements. In addition, entertainment and employment contracts are also signed; with a large cruise vessel, the crew size can normally be over 1,000.

<sup>34</sup> U.S. shipbuilding officials, conversations with USITC staff, Feb. 3-6, 1992.

<sup>35</sup> Ibid.

<sup>36</sup> Japan, Korea, and Germany are major competitors. European builders other than Germany are also important producers.

<sup>37</sup> Richard Vortmann, chairman and chief executive officer, National Steel and Shipbuilding Co. (NASSCO), interview by USITC staff, Feb. 19, 1992, and Ron McAlear, vice president of advanced programs and marketing, Avondale Industries, interview by USITC staff, Feb. 21, 1992.



used in U.S. yards tends to be older and less automated than that used in foreign yards. However, certain U.S. shipyards are planning to make new investments in capital equipment, including a new, technologically advanced drydock and automatic cutting, sandblasting, and painting machines. Certain yards are also planning to upgrade their crane-lifting capacities.<sup>38</sup>

Few U.S. yards employ robotics in commercial ship production, whereas Asian shipyards use robotics extensively in their production process, particularly in their welding operations.<sup>39</sup> European yards also employ robotics to a significant degree, especially in the cutting of steel profiles.<sup>40</sup> Some robotics systems are more advanced than others (i.e., able to examine steel and discriminate between usable and unusable steel plates), but most are self-correcting, technologically advanced production tools.<sup>41</sup>

Industry observers claim that the majority of U.S. yards employ many of the same labor-saving techniques as their foreign competitors do, such as modular construction, process-lane technology,<sup>42</sup> and preoutfitting,<sup>43</sup> but not to the same extent as their foreign competitors. Several company officials of U.S. shipyards noted that they have worked with Japanese shipbuilders during the last decade to gain greater knowledge of modular construction techniques.<sup>44</sup> One U.S. shipbuilder indicated that it would like to further apply the principles of modular construction but currently is unable to do so because the lifting capacity of cranes in its yard is inadequate. U.S. yards have argued repeatedly that they would be able to further invest in new capital equipment if they could obtain production orders for a series of one-design commercial ships. They maintain that production costs become lower with each additional ship, as fixed costs, such as design engineering, can be spread over a larger number of vessels.<sup>45</sup> Ostensibly, this added profit would be invested in new capital equipment. Some European yards exploit the unique aspects of their operations to lower production costs. For example, Kvaerner Masa-Yards in Finland has the facilities to build large sections (up to 600

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<sup>38</sup> Officials of Atlantic Marine, interview by USITC staff, Feb. 24, 1992.

<sup>39</sup> USITC staff visits to Japanese and Korean shipyards, Feb. 12-20, 1992.

<sup>40</sup> Plasma cutting of steel plates is another automated system employed by a number of European yards. Plates are immersed in a water bath while being laser cut in order to reduce the high temperatures caused by laser cutting. The welding of profiles to steel plates is also highly automated, with laser systems that provide for exact placement and welding of profiles to plates.

<sup>41</sup> USITC staff visits to European shipyards, Feb. 17-21, 1992.

<sup>42</sup> A process lane is a series of fixed workstations with appropriate tooling and jigs to produce certain subassemblies, the fabrication and assembly of which involve the application of a sequence of production processes that concentrate on a common set of manufacturing problems.

<sup>43</sup> Preoutfitting, as it applies to shipbuilding, involves the preassembly of selected subcomponents (such as motors, pumps, electrical wiring and lighting, and plumbing) within a modular section prior to the welding together of these major subassemblies to form a structurally intact vessel.

<sup>44</sup> USITC staff visits to U.S. shipyards, Feb. 3-6, 1991.

<sup>45</sup> NASSCO, interview by USITC staff, Feb. 19, 1992.

tons) of ships indoors.<sup>46</sup> Schichau Seebeckwerft (one of the yards owned by Bremer Vulkan) in Germany emphasizes the strategic placement of its production buildings to minimize the distance that ship sections must travel from point of origin to final assembly area at the dock.

Another difference between U.S. and Japanese, Korean, or European production methods is that foreign shipyards tend to specialize in one or two types of vessels. For example, Japanese yards typically specialize in tankers or container ships, and some European yards specialize in passenger ships or gas carriers, so that the equipment in each yard can be tailored to particular types of vessels, thereby decreasing producers' overhead.<sup>47</sup> In comparison, the majority of U.S. yards have typically produced a wide variety of vessels in each yard--a diversity that renders U.S. producers less efficient. U.S. shipyards also attribute their inability to compete globally to the large amount of Navy work that they have been performing.<sup>48</sup>

### Labor Productivity and Workforce Flexibility

The majority of U.S. yards tend to be unionized, with workers having narrow job classifications. According to one U.S. yard, there can be as many as 71 different job classifications for shipworkers in a unionized U.S. yard.<sup>49</sup> This situation lends itself to production inefficiency and higher production costs than those of Asian and European yards.<sup>50</sup>

Labor flexibility is an important advantage in European yards. In general, European shipyards have just two labor unions: steel workers and electricians. Steel workers are trained in various steelworking jobs. This flexibility helps to obtain maximum utilization of the workforce. Although additional costs are incurred in terms of the broader training that each employee receives and in negotiating the sharing of skills with the labor unions, this approach is believed to be more economical for the foreign yard overall.

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<sup>46</sup> Primarily because of weather considerations.

<sup>47</sup> USITC staff visits to European and Japanese shipyards, Feb. 12-21, 1992.

<sup>48</sup> See chapter 3, discussion entitled "Defense Contracting."

<sup>49</sup> USITC staff visits to U.S. shipyards, Feb. 3-7, 1992.

<sup>50</sup> One U.S. shipyard visited by USITC staff did not fit the standard profile of U.S. yards. The company is nonunionized, and workers are flexible in the types of jobs that they can, and do, undertake. The company has only 11 job classifications for its workers. In addition, the yard does not pay overtime to its employees; rather it operates 7 days a week and maintains several shifts. (According to industry sources, the standard U.S. shipyard work week consists of five 8-hour days in shifts, and overtime is common.) The firm stated that it prefers its own method since it reduces overhead costs per job and enables the company to bid on more work.

U.S. shipyards claim that U.S. labor costs tend to be lower than those of northern Europe and Japan and only slightly higher than those of Korea.<sup>51</sup> U.S. yards also assert that the Governments of Japan and Korea have persuaded their indigenous shipbuilding firms to raise wages because workers are demanding a higher standard of living and, in Korea, to compensate workers for escalating inflation.

European sources report that labor productivity varies greatly among the United States, Europe, Japan, and Korea. Although productivity estimates are not consistent, sources indicate that the productivity of U.S. and European shipbuilders may be up to 25 percent lower than that of Far Eastern shipbuilders.<sup>52</sup> European sources acknowledge this productivity deficiency, along with the practice of giving shipyard workers up to 4 more weeks's vacation per year than do Far Eastern yards, but are reluctant to take steps to change this situation. They maintain that these are, in part, cultural distinctions that they would prefer to retain.

For the most part, there appears to be more interaction between workers and management in foreign yards than in U.S. yards. Unlike foreign firms, most U.S. production workers generally have little input into the planning of their jobs. More importantly, in most foreign yards, workers are required to oversee the quality of their individual tasks. Conversely, quality control is often a separate function in U.S. yards. This separation may be partially the result of many years of doing business with the U.S. Navy, whose personnel are heavily involved in the oversight of quality control and overall management of the project. This distinct separation of the workforce, between those who perform production tasks and those who do quality control of those tasks, generally results in less efficient production and a less efficient mechanism to ensure a quality product.

#### Factors Affecting Demand for Vessels

##### Prices

U.S. bid prices average 97-percent higher than comparable world bids for similar ships.<sup>53</sup> Factors that may contribute to this price differential reportedly include:

1. Lack of recent U.S. experience in the production of essentially basic, low-technology ships;

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<sup>51</sup> Officials of Avondale Industries, interview by USITC staff, Feb. 21, 1992, and Shipbuilders Council of America, transcript of the hearing, Jan. 24, 1992, p. 12.

<sup>52</sup> European shipbuilding official, interview by USITC staff, Feb. 18, 1992. This variation in productivity is not necessarily a function of the skills, training, or willingness of the worker. Often, productivity disparities may be related to the strict division of labor among different types of workers and to a lack of the most modern production technologies.

<sup>53</sup> Information developed by USITC staff.

2. Specialization of U.S. labor by skill because of labor contracts;
3. Lack of supporting domestic shipbuilding infrastructure; and
4. Direct foreign government shipbuilding assistance.

Because U.S. shipbuilders do not receive any direct shipbuilding assistance from the U.S. Government, direct foreign assistance puts U.S. shipbuilders at a competitive disadvantage with the rest of the shipbuilding nations of the world.

Higher U.S. ship prices may be partially attributable to the level of labor content per ship as a production input. In the U.S. shipbuilding industry, labor content per ship is significantly higher than in the Asian shipbuilding industries and somewhat higher than in the European industries. The higher U.S. labor content per ship may be due to the comparatively higher level of automation present in foreign yards and the lack of recent experience among U.S. yards in building commercial ships. U.S. industry officials estimate that the ratio of labor to material in the total cost of a U.S.-constructed commercial ship is 50:50.<sup>54</sup> Asian industry officials generally indicated a 30:70 split.<sup>55</sup> Japanese yard workers currently earn up to approximately \$52 per hour in wages and benefits, whereas U.S. yard workers earn up to \$26 per hour in wages and benefits. At the same time, material costs are approximately equal in Japan and the United States. (European material costs are currently as high, and in some cases higher, than U.S. and Japanese costs.)<sup>56</sup>

Korean shipbuilders generally consider price to be the most important factor in a purchaser's decision to buy a Korean ship, whereas Japanese and European shipbuilders do not feel this to be true for the majority of their ships. Korean firms tend to build the least complex and therefore the least expensive ships (primarily tankers). European shipbuilding industry representatives generally agree that in terms of the relative importance of the factors affecting the purchase decision of its customers, price is ranked after quality and delivery time.

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<sup>54</sup> Domestic industry officials, interview by USITC staff, Feb. 3-6, 1992, and European industry officials, interview by USITC staff, Feb. 17-21, 1992.

<sup>55</sup> Japanese and Korean industry officials, interview by USITC staff, Feb. 12-20, 1992.

<sup>56</sup> Japanese officials, interview by USITC staff, Feb. 12-14, 1992.

## Delivery time

According to Japanese industry officials, the on-time delivery record of Japanese yards was the most important factor in the customer's decision to purchase a Japanese ship. Japanese representatives felt that price was a secondary issue and that Japanese quality was top rated among the world's purchasers. On-time delivery vied with quality for the second most important issue for the Korean industry<sup>57</sup> and also ranked second for European yards.<sup>58</sup> Foreign industry officials generally expressed the belief that because U.S. yards have had little experience operating in a commercial environment during the last 8 to 10 years, their defense experience has made them accustomed to significant leeway in meeting delivery dates.

## Quality

According to foreign industry sources and certain U.S. shipowners, not all U.S. shipbuilders enjoy a reputation for high-quality production.<sup>59</sup> However, according to shipowners, Japanese and Korean builders also have experienced periods when the quality of their ships was in question, although not recently. According to European shipbuilders, quality is the most important market advantage of their yards. Vessel purchasers have stated that U.S. builders must overcome a reputation for inconsistent product quality before they can be competitive in an added-value market where price considerations are less important.<sup>60</sup>

## Financing

Worldwide there are a variety of shipbuilding incentive schemes that provide favorable financing terms. However, few foreign builders believe that financing is at present an important competitive factor in selling a ship. Reportedly, few countries offer interest rates lower than the OECD model. (Appendix E contains a summary of the OECD standard scheme, and the additional incentives offered by certain important shipbuilding nations.) Most foreign shipbuilders indicated that shipowners generally come to them with financing already secured through commercial or other means. The purchase of a ship is,

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<sup>57</sup> Korean shipbuilding officials, conversation with USITC staff, Feb. 17-20, 1992. Korea produces engines at one of its three major shipbuilding yards, thereby eliminating delivery problems of this major component.

<sup>58</sup> European shipbuilding officials, conversation with USITC staff, Feb. 17-21, 1992. Shipowners stated that a number of U.S. shipbuilders have had problems with on-time delivery.

<sup>59</sup> Just as variation in yard productivity may be due to many factors outside the control of individual workers, the same is true for product quality. The method(s) of ensuring quality control, the degree of production automation, and the quality and age of the equipment used by production workers all contribute to variation in product quality.

<sup>60</sup> Officials of the European shipbuilding industry, interview by USITC staff, Feb. 17-21, 1992.

therefore, for most foreign shipyards, a cash transaction.<sup>61</sup> (However, the Japanese Government recently announced that it would directly support a shipbuilding contract under the guise of development aid. This decision was in response to Germany's direct support of a similar contract for the same purchaser.)<sup>62</sup> U.S. industry officials indicate that all ship purchasers routinely ask for financing from the shipyard, although it seems that shipyard financing generally is used solely as a benchmark for the purchaser's evaluation of outside financing.

#### Other Factors

All U.S. and foreign industry sources indicated that the OPA '90 legislation<sup>63</sup> has depressed new orders for U.S. ships by increasing the price of the ship and unilaterally imposing a shipping standard for double-hulled vessels. Most industry officials indicated that they felt the shipowners were waiting for the International Maritime Organization (IMO) to rule on the necessity of double-hulled ships before making substantive plans for their fleets. Foreign industry officials have indicated that they felt U.S. shipbuilders and shipowners would be united in their opposition to the unlimited-liability aspects of the bill and saw this aspect as counterproductive. Foreign industry sources believe that when both issues are resolved U.S. shipyards will begin to receive orders for Jones Act ships.

An increase in demand for more complex ships may aid U.S. shipbuilders. The United States, Europe, and Japan all have built complex ships such as passenger liners and LNG carriers. Traditionally, Europe has been the clear market leader in high technology commercial vessels. Because demand for these types of ships is expected to increase, the market may support a resumption of U.S. production of these types of ships. U.S. shipyards are technologically capable of producing complex ships such as LNGs, as the U.S. shipyard infrastructure and engineering expertise are very competitive for these types of ships. In addition, with the development of subcontracting industries and necessary intra-industry relationships, U.S. builders may be able to capitalize on expanding demand for cruise vessels.

With respect to replacement of the world VLCC fleet, it is unlikely that U.S. yards could successfully compete today with Asian shipyards for a share of the VLCC market, due to the competitive advantage of foreign yards in the production of these ships. Asian shipyards have been the source of the majority of these ships for the last 10 years and as such have the skill, infrastructure, and incentive to service this market. However, if existing foreign capacity for this type of vessel cannot satisfy market demand, it is conceivable that U.S. yards may be approached for bids on VLCCs.

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<sup>61</sup> One Japanese yard was receiving payments in Yen, thereby eliminating the yard's foreign exchange risk. Others received their payments in U.S. dollars.

<sup>62</sup> "Foreign Shipbuilding Subsidies Escalate as 'Development Aid'," Shipyard Chronicle, Feb. 27, 1992, p. 4.

<sup>63</sup> See chapter 3 for a full discussion of the implications of OPA '90.

CHAPTER 3. CONDITIONS IN THE U.S. CARRIER INDUSTRY AND U.S. REGULATORY  
PRACTICES AFFECTING SHIPBUILDING

SCOPE OF THE U.S. CARRIER INDUSTRY

The U.S. carrier (ship owning/operating) industry is divided by flag of operation and into the domestic and international trades. The U.S. merchant fleet is usually considered to consist of U.S.-flag, privately owned, self-propelled vessels of more than 1,000 gross tons. (This definition excludes inland waterway barge systems, small ships, and most service craft such as fishing boats, pleasure boats, or crew boats.) The definition does include practically all U.S.-flag ships engaged in international trades and major ships in the domestic coastal and offshore trades.<sup>64</sup>

U.S.-Control Fleet

The U.S.-control fleet includes vessels owned by U.S. corporations but registered in other countries. These vessels consist principally of tankers and dry-bulk carriers, and they are operated under a "flag of convenience" by U.S. companies that own, operate, manage, charter, finance, or otherwise utilize open registry vessels. These ships are so operated because of the ease of registration and the minimum of taxes and regulations governing their operation in the country in which they are registered. Owners of flag of convenience ships may use crews of any nationality and have the ability to operate outside the framework of U.S. maritime law. These ships are nevertheless under U.S. "effective control."<sup>65</sup> These vessels may be considered part of the U.S. industry if the owning company is incorporated in the United States and pays taxes under U.S. law. The U.S.-control fleet also includes the U.S.-controlled cruise fleet.<sup>66</sup>

The Passenger Industry

The international passenger cruise ship industry includes U.S.-owned vessels of foreign registry (U.S.-control) as well as ships of foreign-owned firms. Of the 161 passenger ships currently in existence, approximately 75 percent serve the North American market<sup>67</sup> and 80 percent of passengers are U.S. citizens. The domestic deep-sea cruise market expanded at an annual rate of 10 percent throughout the 1980s, and in 1990 the industry carried nearly 5 million U.S. cruise passengers. According to recent industry studies, the market potential during the next 5 years is forecast to total between \$50

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<sup>64</sup> Office of Technology Assessment, An Assessment of Maritime Trade and Technology, Oct. 1983, p. 57.

<sup>65</sup> Ibid.

<sup>66</sup> Foreign-controlled vessels also serve U.S. industry and U.S. ports and would be affected by H.R. 2056 and the OECD proposal.

<sup>67</sup> The International Council of Cruise Lines, Preliminary Statement Before the USITC Regarding H.R. 2056, Jan. 6, 1992.

billion and \$80 billion. By the year 2000, it is expected that the cruise industry will carry 10 million passengers annually.<sup>68</sup>

### The Cargo-Carrying Industry

The U.S. carrier industry consists of two clearly separate cargo sectors: liner and bulk (or common carriers and contract carriers). Liner companies operate containerships, ro-ros, and other general cargo ships in regularly scheduled service carrying diverse cargoes from port to port at set rates. The bulk shipping business usually handles large tonnages of single commodities or types of commodities by operating one or a fleet of ships especially designed for one cargo. Bulk companies include the shipping departments of major petroleum corporations that operate tanker fleets as well as independent bulk ship operators that may operate their vessels under various long- and short-term leases and charters.<sup>69</sup> The U.S.-owned bulk carrier fleet in the international trades carries significantly more cargo by weight than the U.S.-flag liner fleet.<sup>70</sup> Dry-bulk ships principally carry iron ore, coal, and grain, whereas liquid-bulk ships (tankers) carry primarily petroleum and petroleum products.

### U.S.-FLAG FLEET

#### The Domestic or Jones Act Fleet

Like many other industrialized nations, the United States has marine cabotage laws governing the transportation of passengers and cargo between two domestic points. The most widely known are the Jones Act and the Passenger Act. These laws require that merchandise or passengers transported entirely or partly by water between U.S. points be carried in nonsubsidized, U.S.-built, U.S.-owned, and U.S.-documented vessels.<sup>71</sup> These vessels

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<sup>68</sup> U.S. House, Statement Before the House Merchant Marine Subcommittee, by the International Council of Cruise Lines, 102d Cong., 2d sess. (Washington, DC, Feb. 19, 1992).

<sup>69</sup> Office of Technology Assessment, An Assessment of Maritime Trade and Technology, Oct. 1983, p. 57.

<sup>70</sup> The 1970 Merchant Marine Act allowed payment of construction differential subsidy (CDS) for bulk ships in hopes of enlarging the U.S.-flag bulk fleet. Thirty tankers and a few dry-bulk ships were built under the program, but no funds have been appropriated since 1980. Even when CDS was available, it was limited to 50 percent of the U.S. cost of the vessel. Since foreign vessel prices tended to be less than half of U.S. prices, owners and operators generally considered it less costly to buy ships abroad than from U.S. yards even with the CDS.

<sup>71</sup> Waivers occasionally are granted by the U.S. Government when Jones Act vessels are not available to transport cargo. Typically such waivers are either granted to U.S.-flag, CDS-built tankers to allow them to participate in the carriage of Alaskan crude or to U.S.-flag liner vessels covered under an  
(continued...)



collectively are known as the domestic trade or the Jones Act fleet. Other laws exist that generally require that dredging, towing, or fishing in U.S. waters be performed by U.S.-built vessels.

The Jones Act fleet currently accounts for more than 40 percent of the privately owned, oceangoing, U.S.-flag fleet, and about half of the deadweight ton capacity (table 3-1). The Jones Act fleet carried about 330 million short tons of cargo each year during 1987-89 (table 3-2), about 80 percent of which was petroleum and petroleum products. During the same time, the remainder of the U.S.-flag fleet, which was engaged in U.S.-to-foreign or foreign-to-foreign trades, carried no more than 40 million short tons per year.<sup>72</sup>

The active privately owned Jones Act fleet has decreased from 257 vessels of 11,259,000 deadweight tons (DWT) as of September 30, 1980, to 155 vessels of 8,762,000 DWT as of August 1, 1991 (table 3-1). Decreases were across the board, as the number of liner (typically container) vessels, dry-bulk, and liquid-bulk vessels (tanker) all declined.

Consistent with the decrease in the number of U.S.-flag privately owned vessels afloat has been the steady decrease in the construction of new vessels. Only a handful of new vessels were delivered yearly after 1983, and none were delivered during 1989-91 (table 3-3). As a result, the average age of the Jones Act fleet has been increasing steadily. Approximately two-thirds of the Jones Act tanker fleet (which accounts for about 80 percent of the entire fleet) is now at least 17 years old, and about half of the fleet is at least 23 years old. The useful economic life of a ship is typically between 25 and 30 years.

There has been considerable debate recently about whether the Jones Act should be repealed. Briefly, opponents of the Jones Act claim that it promotes inefficiency and increased cargo costs and proponents claim that it provides a stable shipping and shipbuilding base. Recently, however, the Maritime Administration publicly announced that the present Administration supports the legislation; thus, there is currently little chance of its repeal. Beyond the economic arguments for or against the Jones Act is the fact that the U.S. Government has \$2.21 billion in outstanding loan guarantee commitments on vessels built for or used exclusively or primarily in the domestic (Jones Act) trade. Therefore, if the act were ever repealed, any phaseout would probably be gradual.

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<sup>71</sup> (...continued)

operating differential subsidy (ODS) to allow them to carry domestic cargo to ports in Hawaii, Guam, and Puerto Rico. However, other exemptions/waivers have been granted. For instance, a 6-month waiver was recently granted allowing a foreign-flag vessel to take the place of a specialized U.S.-flag sulfur carrier that was badly damaged in a grounding.

<sup>72</sup> U.S. Department of Transportation, Maritime Administration, Annual Reports for fiscal years 1980-90.

Table 3-1

U.S.-flag privately owned oceangoing fleet, as of September 30, 1980-91

Fiscal year	Total fleet		Vessels involved in domestic trade--							
			Total--		Liner--		Dry bulk--		Tankers--	
	No.	DWT	No.	DWT	No.	DWT	No.	DWT	No.	DWT
1980.....	532	18,917	257	11,259	46	713	( <sup>1</sup> )	( <sup>1</sup> )	211	10,546
1981.....	522	18,412	235	10,951	40	667	( <sup>1</sup> )	( <sup>1</sup> )	195	10,284
1982.....	483	18,312	224	11,308	42	651	( <sup>1</sup> )	( <sup>1</sup> )	182	10,657
1983.....	448	17,447	204	10,335	40	660	( <sup>1</sup> )	( <sup>1</sup> )	164	9,675
1984.....	397	16,374	183	9,606	28	425	13	388	142	8,793
1985.....	393	16,607	171	9,568	27	430	9	229	135	8,909
1986.....	381	16,473	168	9,474	27	445	10	320	131	8,699
1987.....	365	16,220	177	10,397	25	441	10	290	142	9,666
1988.....	397	19,122	177	10,339	33	603	9	272	135	9,464
1989.....	375	17,648	158	8,967	25	487	7	210	126	8,270
1990.....	368	17,329	158	8,624	30	587	7	187	121	7,850
1991.....	370	17,801	155	8,762	28	578	6	163	121	8,021

<sup>1</sup> During the period 1980-83, these vessels were included in tankers.

Source: U.S. Department of Transportation, Maritime Administration, Annual Reports for fiscal years 1980-91.

Table 3-2

U.S. domestic ocean-borne commerce and U.S. ocean-borne foreign trade, 1980-89

(1,000 short tons)			
Fiscal year	U.S. domestic total	U.S. foreign	
		Total	U.S.-flag carriage
1980.....	<sup>1</sup> 370,205	772,200	28,200
1981.....	<sup>1</sup> 337,473	760,000	34,200
1982.....	<sup>1</sup> 324,997	675,500	31,100
1983.....	<sup>1</sup> 321,867	630,400	36,700
1984.....	<sup>1</sup> 328,680	676,800	29,400
1985.....	<sup>1</sup> 324,084	640,900	27,300
1986.....	<sup>1</sup> 348,136	674,800	28,500
1987.....	333,220	718,700	28,800
1988.....	335,322	786,000	30,700
1989.....	328,680	836,300	36,400

<sup>1</sup> These data are probably overstated because Alaskan crude transshipped via Panama has been triple-counted.

Source: U.S. Department of Transportation, Maritime Administration, Domestic Waterborne Trade of the United States, 1980-89, and Annual Reports of the Maritime Administration for fiscal years 1980-89.

Table 3-3

Privately owned U.S.-flag vessels, fiscal years 1980-91

Fiscal year	Total-- No. DWT		Vessels eligible for domestic trade No. DWT		Vessels built with CDS--			
					For subsidized service--		For non-subsidized service--	
					No.	DWT	No.	DWT
1980...	16	1,260	8	642	3	83	5	535
1981...	18	551	11	330	3	100	4	121
1982...	11	310	8	270	1	36	2	4
1983...	16	569	8	331	4	133	4	105
1984...	8	277	7	243	0	0	1	34
1985...	3	64	3	64	0	0	0	0
1986...	4	95	4	95	0	0	0	0
1987...	5	467	5	467	0	0	0	0
1988...	1	21	1	21	0	0	0	0
1989...	0	0	0	0	0	0	0	0
1990...	0	0	0	0	0	0	0	0
1991...	0	0	0	0	0	0	0	0

Source: U.S. Department of Transportation, Maritime Administration, Annual Reports of the Maritime Administration for fiscal years 1980-91.

Of note is the effect that OPA '90 will have on the Jones Act fleet. Some industry experts have estimated that 40 to 50 Jones Act tankers will be forced into retirement between 1995 and 1998 as a result of the double-hull requirements of OPA '90. Major oil companies have already solicited bids from U.S. shipyards for the possible construction of several double-hull tankers, and at least one other major U.S. shipping company has actively been seeking bids and financing for several such tankers.

## The International Trades

### Unsubsidized U.S.-Flag Fleet

The nonsubsidized, privately owned, U.S.-flag fleet engaged in foreign trade has shrunken from 86 vessels in 1988 to only 49 vessels in 1991 (table 3-4). As is generally true of the subsidized fleet,<sup>73</sup> the unsubsidized fleet is dominated by three operators--CSX (Sea-Land, a liner operator), OMI Corp. (a dry- and liquid-bulk operator), and Overseas Shipbuilding Group (a dry- and liquid-bulk operator). All three companies operate substantial numbers of foreign-flag vessels in addition to U.S.-flag tonnage. Like other portions of the U.S.-flag fleet, virtually no new tonnage has been introduced in the past several years (table 3-3).

The principal reasons that these operators have retained U.S.-flag vessels over the years have been their participation in the carriage of premium-rated preference cargoes, the charter of ships to the U.S. military, and the domestic carriage of crude from Alaska. However, as these inducements begin to disappear, operators reportedly are seriously considering switching to foreign registry. For instance, the downsizing of the military is resulting in the closing of overseas bases and therefore reduced cargo requirements. U.S. military shipments, which accounted for over \$500 million in preference cargo revenue in 1991, are expected to decrease to about \$300 million by 1995 and result in a decreased need for the military to charter vessels. In addition, there is a general view that the existing tanker fleet is adequate to handle the carriage of Alaskan oil. It therefore appears unlikely that U.S. operators will be able to justify reinvestment in U.S.-flag ships.

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<sup>73</sup> The subsidized fleet is described in the following section.

Table 3-4

Privately owned U.S.-flag vessels: Vessels not covered under operating-differential subsidy agreements engaged in U.S.-foreign trade and on charter to the military, fiscal years 1980-91

Fiscal year	Not covered under ODSA's and engaged in U.S.-foreign trade	On charter to the military
1980.....	62	48
1981.....	51	71
1982.....	29	62
1983.....	20	60
1984.....	24	54
1985.....	43	61
1986.....	47	57
1987.....	33	54
1988.....	86	50
1989.....	80	53
1990.....	62	54
1991.....	49	72

Source: U.S. Department of Transportation, Maritime Administration, Annual Reports of the Maritime Administration for fiscal years 1980-91.

U.S.-flag liner operators urge consideration of changes in the following areas to prevent further erosion of the U.S.-flag fleet:

- o Taxation--The companies want liberalized depreciation schedules for new vessels to match those of foreign governments. They also want the 50-percent ad valorem duty on repairs in foreign yards repealed, and the use of Capital Construction Funds (CCF) extended to foreign shipyards.
- o Military cargoes--The companies want the Department of Defense to shift from short-term (6-month) contracts to more permanent agreements.
- o Cargo preference requirements--U.S.-flag liner operators have proposed a reduction of the 3-year waiting period that a U.S.-flag foreign-built vessel must endure before it can carry preference cargoes.
- o Coast Guard regulations--Although all vessels in international commerce are governed by uniform standards by the International Maritime Organization, the U.S. Coast Guard imposes higher standards on vessels operating in U.S. waters. The operators want U.S.-flag standards similar to those of the rest of the world.

Industry sources hope that these proposals receive attention soon, claiming that some changes must be made if there is to remain any U.S.-flag fleet beyond the Jones Act fleet.

H.R. 2056 (as amended) would address two of the points above. The bill calls for U.S.-flag ships built in unsubsidized foreign yards to have immediate access to preference cargoes and for the use of CCF monies in unsubsidized foreign yards. Whereas industry sources indicate that expanded use of CCF monies will probably result in an increase in the number of shipyards eligible to build U.S.-flag ships, they state that any actual increase in the number of newbuildings will still depend on price. Industry sources believe that if the price differential (assuming there is one) between unsubsidized yards and domestic yards is substantial enough to warrant newbuilding, then operators will contract for new vessels. Presumably, though, the increase in the number of yards competing for the work will, by itself, result in reduced prices.

Although H.R. 2056 may give domestic fleet operators more options with respect to contracting for new vessel construction, it does not give them an underlying economic justification to build. Operators are going to be hesitant to build new U.S.-flag ships unless they are certain they will have sufficient cargoes at remunerative rates.

#### **Subsidized U.S.-Flag Fleet**

One of the principal promotional programs offered by the Government to U.S.-flag shipowners has been the operating differential subsidy (ODS).<sup>74</sup> Acting through MARAD, the U.S. Government, has offered ODS to certain U.S. shipowners since 1937. The premise behind ODS was that since U.S. operating costs are much higher than those in any other nation<sup>75</sup> and the Government wanted a strong merchant marine in case of a national emergency, the Government would therefore offer a subsidy for certain expenses in connection with ship operation. To be eligible, the shipowner must--

- o employ U.S.-built, U.S.-flag vessels,
- o operate a certain level of service on a specific foreign trade route or routes that have been determined to be essential to U.S. foreign commerce by the U.S. Government,
- o agree to replace vessels at the end of their economic life (25 years),
- o agree to have certain national defense features built into its vessels (these features are paid for by the U.S. Government), and
- o agree to make the vessels available to the U.S. Government in the event of a military emergency.

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<sup>74</sup> See the following section entitled "Operating Differential Subsidies" for a complete description of the program.

<sup>75</sup> Maritime Administration sources, conversation with USITC staff, Feb., 1992.

An operator could be found eligible for ODS for three separate cost items--wages, maintenance, and repair; insurance (hull and machinery); and protection and indemnity. ODS contracts, originally reserved for liner operators, were subsequently opened to bulk operators in the 1970s. Contracts typically have a 20-year term, and since most of the current contracts were signed in the mid-to-late-1970s, they will expire by the year 2000.<sup>76</sup>

From 1937 to 1990, about \$8.89 billion was paid out under the ODS program. The program has involved 26 U.S. liner operators and 15 bulk operators. Over the past 10 years, however, the number of ships covered under the ODS has fallen sharply (table 3-5). In addition, the number of beneficiary liner companies and vessels has decreased sharply from a high of 8 companies and 144 vessels in 1982 to only 4 companies and 59 vessels in 1990. The number of beneficiary bulk vessels, on the other hand, remained fairly constant from 1980 to 1989. The increase in the number of bulk vessels from 1989 to 1990 was not because of newbuilding but rather because of terminations of outside charters. The amount of ODS paid (accrued) per year was also down sharply from 1980 to 1990, and the net income of ODS operators fluctuated widely from year to year (table 3-6).

Table 3-5

U.S.-flag vessels and companies covered under operating-differential subsidy agreements, fiscal years 1980-90

Fiscal year	<u>Total number of--</u>		<u>Liner operators--</u>		<u>Bulk operators--</u>	
	Companies	Vessels	Companies	Vessels	Companies	Vessels
1980.....	22	165	7	138	15	27
1981.....	22	165	8	139	14	26
1982.....	24	168	8	144	16	24
1983.....	23	164	7	139	16	25
1984.....	22	136	7	112	15	24
1985.....	21	118	6	95	15	23
1986.....	21	109	6	86	15	23
1987.....	21	101	6	78	15	23
1988.....	20	83	5	60	15	23
1989.....	20	84	5	60	15	24
1990.....	19	94	4	59	15	35

Source: U.S. Department of Transportation, Maritime Administration, Annual Reports of the Maritime Administration for fiscal years 1980-90.

<sup>76</sup> Maritime Administration sources, conversation with USITC staff, Jan. 1992.

Table 3-6

Operating-differential subsidy accruals and selected income statement items of companies with operating differential subsidy agreements, fiscal years 1980-90

(In 1,000 dollars)			
Fiscal year	ODS accrued	Shipping operations revenue	Net income or (loss) before taxes
1980.....	386,309	2,353,110	107,216
1981.....	352,061	3,135,418	88,629
1982.....	366,655	3,262,330	122,719
1983.....	278,716	3,133,229	4,102
1984.....	342,757	3,162,445	176,635
1985.....	367,369	3,342,941	(50,953)
1986.....	318,295	2,413,586	(206,955)
1987.....	180,779	2,198,024	99,342
1988.....	218,491	2,330,272	27,558
1989.....	220,409	2,194,816	104,197
1990.....	225,870	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup>Not available.

Source: U.S. Department of Transportation, Maritime Administration, Annual Reports of the Maritime Administration for fiscal years 1980-90.

#### THE MEANS BY WHICH U.S. GOVERNMENT PRACTICES AFFECT SHIPBUILDING AND REPAIR<sup>77</sup>

##### Operating Differential Subsidies

The ODS program began to deteriorate in 1981, when the Reagan administration announced the end of the CDS program. As vessels covered under an ODS contract approached 25 years of age, the operator would contract for a new vessel in a U.S. yard and CDS would defray the cost. After CDS ceased, shipowners found it economically impossible to have vessels constructed in the United States due to the comparatively high price of domestically produced vessels. To provide some relief, legislation was approved to give ODS operators a limited opportunity to contract for foreign-built replacement vessels. Although some vessels were built under the new legislation, only a few new vessels have been introduced into the ODS fleet in the past several years. As a result, the ODS fleet is quite old.

Operators and administration officials alike have devised proposals designed both to help replace the current aging fleet and to provide operators the freedom to operate in the geographic areas where the most cargo is located. These proposals include--

<sup>77</sup> Except the provisions of the Jones Act, discussed in detail earlier in this chapter.



- o allowing ODS-subsidized operators to build or acquire tonnage abroad to replace current ODS-subsidized tonnage,
- o allowing the operation of foreign-flag vessels without previous waivers, and
- o allowing ODS operators to operate in areas beyond those defined in their respective ODS contracts.

Whereas these proposals may seem modest, according to industry sources, they are a first step in adjusting to the apparent termination of ODS and steps must be taken to ensure that some U.S.-flag fleet remains.

The ability to build or acquire tonnage abroad is a controversial topic for U.S. shipbuilders and operators. H.R. 2056 was amended to allow subsidized operators to contract for replacement vessels in unsubsidized foreign shipyards and still receive ODS. This amendment could address one of the subsidized operator's biggest problems: although the exact levels of shipbuilding subsidies have not yet been determined, it is generally held that even without subsidies or other Government benefits, foreign yards could still build ships at lower cost than domestic yards.

If this belief is true, if H.R. 2056 is enacted and the price differential between unsubsidized foreign yards and domestic yards is still substantial, U.S. subsidized operators would have a significant new option when contracting for new ships. At a minimum, expanding the number of shipyards eligible to build ships for operators with ODS contracts should promote price competition and result in reduced prices.

However, there is no guarantee that subsidized U.S.-flag operators would be willing to place contracts for U.S.-flag ships, for the following reasons:

- o Most ODS contracts will have expired by the end of 1997. Assuming that it takes 2 years from the beginning of contract negotiations to vessel delivery, any vessels flagged under U.S. registry and operated under an ODS contract would get a maximum of 2-1/2 years of subsidy.
- o There is no guarantee that the Government would allow operators to flag their vessels foreign at the expiration of their ODS contracts.
- o The Coast Guard places higher standards on U.S.-flag vessels than other countries do, resulting in a higher cost. It is unlikely that owners will pay these additional costs if the vessels might remain U.S.-flag for only a few years.

In conclusion, operators will have to weigh the benefits of receiving a few years of ODS benefits against the possibility that they may endure higher U.S.-flag costs without ODS. It is not clear how many operators would be willing to do so. Absent ODS, the only economic benefits of having a U.S.-flag vessel stem from the Jones Act trade and Government-impelled preference cargo. However, since the current ODS fleet was either constructed with CDS

or built overseas, it is not eligible for employment in the Jones Act trade. As profitable as the preference trades may have been, if a large number of vessels suddenly entered the preference trades, freight rates and profitability would decrease.

### Cargo Preference Requirements

Various public laws require that at least 50 percent (and sometimes as much as 75 percent) of U.S. Government-generated cargo be shipped in U.S.-flag vessels when they are available at fair and reasonable rates. The principal U.S. departments and agencies that generate the cargoes, the cargo types, and the amounts of cargo generated are shown in table 3-7.

Table 3-7

U.S. Government-sponsored cargoes, by program and Federal entity, Fiscal year 1989

(Metric tons)		
Program or law and Federal entity	Total tonnage	U.S.-flag tonnage
Public Law 664 cargoes:		
Agency for International Development..	3,998,520	2,948,254
Department of Agriculture.....	2,503,196	1,888,166
Department of Defense.....	287,421	257,435
Department of Energy.....	2,720,980	1,514,747
All other.....	54,348	44,895
Public Resolution 17 cargoes:		
Export-Import Bank.....	132,983	73,378
1904 Cargo Preference Act cargoes:		
Department of Defense.....	6,371,582	6,004,978
Cash transfer cargoes:		
Agency for International Development....	1,339,772	704,389
Total.....	17,408,802	13,436,242

Source: U.S. Department of Transportation, Maritime Administration, Annual Reports of the Maritime Administration for fiscal years 1980-90.

Preference cargoes have historically been a good source of revenue for the non-ODS fleet. Although vessels under ODS contracts are supposed to be engaged in foreign trade and must repay ODS whenever preference cargo revenues exceed 50 percent of overall revenues, they regularly engage in the preference cargo trade. In fact, operators can elect to suspend their ODS agreements if they find it economically lucrative to enter the preference trade full-time. Competition for the carriage of preference cargoes is expected to increase in the next few years, principally due to--

- o the expiration of ODS contracts (absent the financial incentive to carry low-rate cargoes, operators will likely seek the most lucrative cargoes available), and
- o the down-sizing of the military (cargo volumes are likely to decrease, as is the number of ships on full-time charter to the military, thereby adding additional tonnage for the preference cargo trades).

As competition for preference cargoes increases, rates should decrease, perhaps to the point where the trade can no longer support the number of vessels engaged in the preference trades. Faced with the prospect of decreased cargoes, shipowners have been proposing changes to the system. One of the proposals deals specifically with military cargoes. At present the carriage of such cargoes is currently governed by short-term contracts, which are rebid every 6 months. American President Lines and Sea Land, the two largest and most integrated U.S. containership operators, have proposed that the military establish "more permanent partnerships" with sophisticated intermodal operators. Were such a proposal approved, it would affect U.S. shipbuilding only to the extent that long-term freight rates could support the additional costs.

Another proposal suggests the removal of the current rules that (1) require a foreign built or registered ship to be U.S.-flagged for 3 years before it can carry preference cargoes, and (2) require that preference be given to all U.S.-flag water service even if a combination of U.S. line-haul and foreign-flag feeder service would be faster and less expensive. This proposal would probably hurt the U.S. shipbuilding industry. Recent amendments to H.R. 2056 propose to allow U.S.-flag ships built in unsubsidized foreign yards to have immediate access to preference cargoes. If this amendment gives U.S. ship operators the opportunity to operate vessels (whether domestic or foreign built) that can support their construction cost, then new vessels will be built and operated. However, immediate access to preference cargo alone is unlikely to satisfy U.S.-flag operators, as these operators indicate that there must be comprehensive reforms of the numerous regulations that affect the cost of operating under the U.S. flag.

#### **Financing, Including Loans and Interest on Loans**

The principal U.S. Government program for the financing of vessels is the Title XI program.<sup>78</sup> As amended in 1972, the program provides the lender with direct Government guarantees of the unpaid principal and accrued interest of the mortgage obligation in the event of default by the vessel owners. Participants in the program pay yearly guarantee fees into a revolving fund that is used to pay the expenses of the program, including defaults.

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<sup>78</sup> The program is authorized by Title XI of the Merchant Marine Act of 1936, as amended, and is also referred to as the Federal Ship Financing Guarantee Program.

The program has had a cap of \$12 billion since about 1981, with \$9.5 billion allocated to MARAD for use in the financing of commercial vessels, \$1.65 billion reserved for ocean thermal energy conversion vessels, and \$850 million authorized for use in the financing of fishing vessels. The principal benefits of the program have been (1) fixed interest rates, (2) below-market interest rates (no risk due to Government guarantee), and (3) long-term financing (20 to 25 years). These benefits were significant when contrasted with common commercial banking practices such as floating (prime plus) interest rates and much shorter terms.

The program did, however, have higher "up front" costs than bank financing, because debt was issued in the form of bonds sold in the open bond markets; therefore, the shipowner had to pay the substantial commissions, fees, and other costs associated with such transactions. Also, when shipowners were having difficulty servicing the debt, the program was not as flexible as commercial banking practices would have been. Commercial bankers can and do postpone or forgive interest and principal payments, renegotiate interest rates, and allow nonperforming loans to stay on the books. Shipowners in the Title XI program had to at least pay interest on the debt every 6 months, and restructurings needed the approval of all bondholders.

During the late 1970s and early 1980s, there was a worldwide boom in shipbuilding. Since Title XI was used to finance a significant portion of this newbuilding, the guarantees in force grew to over \$8 billion at the end of fiscal 1982 (table 3-8).

Table 3-8

Title XI ship financing guarantee program activity: New commitments, defaults, and guarantees in force, fiscal years 1980-91

(In 1,000 dollars)			
Fiscal year	New commitments placed	Defaults	Guarantees in force on March 31
1980.....	1,085,443	0	7,214,984
1981.....	1,047,296	0	7,935,637
1982.....	635,762	0	8,123,616
1983.....	321,966	91,200	7,841,459
1984.....	177,254	101,300	7,303,204
1985.....	20,250	320,800	6,518,895
1986.....	47,561	1,200,000	5,030,324
1987.....	0	430,900	4,278,971
1988.....	26,500	183,300	3,872,955
1989.....	0	0	3,602,312
1990.....	0	0	3,013,588
1991.....	0	0	2,850,000

Source: U.S. Department of Transportation, Maritime Administration, Annual Reports of the Maritime Administration for fiscal years 1980-91.

The shipbuilding boom particularly applied to energy-related vessels, such as drill rigs, oilfield supply boats, and oil and LNG tankers. When oil prices fell, there was a dramatic decrease in the demand for exploration. Simultaneously, as a result of the shipbuilding boom, the world's fleet began to feel the effects of global overcapacity. Freight rates declined in all sectors as supply exceeded demand. As a result shipowners began to default on their obligations.

MARAD was initially able to pay the defaulted amounts from the revolving fund but was eventually forced to borrow from the U.S. Treasury. As the defaults mounted, the outstanding Title XI balance declined, since there was very little commercial activity in U.S. yards after the mid-1980s. After allowing the program to borrow about \$2 billion from the Treasury, the administration tightened the program's requirements to the point where no new guarantees were foreseeable. The program received another blow in fiscal year (FY) 1992, when it became a requirement that new Title XI guarantees must either (1) receive an appropriation from Congress or (2) be able to be paid from amounts in the revolving fund. It is doubtful whether the program will consider new applications at this time.

Aside from Title XI the only other Government financing program is the Capital Construction Fund (CCF). (See "Tax Considerations, Including Leasing.") If U.S. ship purchasers do not use either the Title XI program or the CCF, they must finance vessels the same way they finance any other capital acquisition, generally through commercial banks utilizing lines of credit or permanent financing.

#### **Tax Considerations, Including Leasing**

Three major tax considerations affect carriers: depreciation schedules, the CCF, and taxes on foreign-source income. Depreciation<sup>79</sup> schedules are, for tax purposes, set principally by statute. Over the past several years, the Internal Revenue Service, which administers the tax laws, has held that the cost of marine equipment must be amortized over 10.5 years. Therefore, operators are allowed a deduction equal to about 10 percent of the cost of the vessel per year (higher in the earlier years and lower in the later years using accelerated or modified accelerated depreciation schedules). These lower allowable expenses lead to higher income and therefore higher income taxes.

This policy is in contrast with the practices of other nations with large fleets, many of which allow accelerated writedowns of 50 percent or more the first year and allow the entire cost of the vessel to be amortized over a much shorter time. Although depreciation expense under such a scheme will be much less, if not zero, in later years, the shipowner benefits from reducing taxes to the minimum up front. Further, excess losses can be carried forward

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<sup>79</sup> Depreciation refers to the amount of time over which the cost of an asset may be amortized.

for 15 years, so the benefit is not lost if not used immediately. Shipowners have been lobbying for a change in this area for years.

The second area of consideration is the CCF. The CCF is a program whereby Federal income taxes on earnings from the operation, sale, and depreciation of vessels are deferred if such earnings are set aside to build, acquire, reconstruct, or service debt on U.S.-built, U.S.-flag vessels employed in foreign trade, the Great Lakes, or noncontiguous domestic trade. The CCF has a direct bearing on depreciation, since the basis (depreciable cost) of any vessel built, acquired, reconstructed, or paid for with the use of CCF funds is decreased by the amount of funds used. As of December 31, 1989, 86 companies were parties to CCF agreements and the fund had a balance of about \$1.3 billion.

H.R. 2056 (as amended) would allow CCF monies to be used on U.S.-flag ships built at unsubsidized foreign yards. As discussed in other parts of this report, providing operators with increased flexibility such as this would likely result in increased ship deliveries if ships can be purchased at competitive prices and if the cargo forecast is good.

Most of the major U.S. shipping companies have substantial foreign-flag fleets. Effective January 1, 1987, the earnings of foreign-flag vessels became subject to U.S. taxation. Income prior to that date was generally excluded from tax to the extent that it was reinvested in foreign shipping operations or not distributed to a U.S. parent company. In other words, U.S. companies cannot use the net income from their foreign-flag vessel operations to upgrade their U.S.-flag fleet without first paying taxes on the money. In practical terms this means that U.S. shipowners will reinvest the earnings of foreign-flag vessels (which can be substantial) in their foreign-flag fleet and will not spend it in U.S. shipyards.

Depreciation and interest expenses on new vessels are sizeable, and it is possible that the owner may have insufficient taxable income to take full advantage of them (i.e., the company is in a loss position). To transfer the tax benefits of vessel ownership to a company that can utilize them, a shipowner might engage in a finance lease transaction. If the vessel is sold to a company that can use the benefits and then is leased back, the original owner should receive a corresponding benefit in the effective finance cost (lease rate is lower than financing costs). The original owner never gives up effective control of the vessel, since such transactions are structured over the life of the vessel.

A shipowner might also engage in a finance lease transaction to increase the equity portion of the cost of the vessel. Lenders will typically finance no more than 80 percent of the cost of a vessel, and often less. Leveraged lease arrangements are entered into to raise the remaining 20 percent or more. In such transactions (which are arranged as the vessel is being constructed and go into place upon delivery), the original shipowner finds an equity participant willing to put up the necessary equity and the balance of the cost is financed. The original shipowner will then make lease payments that typically cover debt-service requirements and provide a return to the equity participant in either cash or tax benefits. (See following discussion.) It is

also possible that a portion of the return may be the residual value of the vessel at the end of the lease.

Leveraged lease transactions such as those described immediately above are common today worldwide and were common in the United States in the late 1970s to early 1980s. At that time financing on vessels under construction was provided by the Title XI program. (See discussion on loans and interest rates.) Generally speaking, in such leases the nationality of the equity and the flag of the vessel are the same. Tax benefits are usually available only for "domestic" investments.

#### Defense Contracting (MSC, Navy)<sup>80</sup>

From 1955 through 1985 the U.S. shipbuilding industry delivered just over 17 Navy ships annually. The growth of Navy shipbuilding in the early 1980s replaced the U.S. industry's lost domestic commercial business. Navy backlog through the 1980s averaged over 90 ships as the Navy moved toward its goal of a 600-ship fleet, and U.S. yards delivered an average of 95 Naval ships per year.<sup>81</sup> The end of the Cold War occurred at a time when many Navy shipbuilding program objectives had been fully funded by the Congress and few new starts were planned. Of these objectives, the remainder of the ships to be delivered provide the current declining backlog of Navy work for the U.S. industry (table 3-9). The expected addition of 20 sealift ships will not halt the decline in Navy backlog. During 1992-95 private sector yards are scheduled to deliver 77 ships to the Navy. For the near term, industry sources anticipate that the Navy will order approximately 5 to 6 ships a year. At this rate, by 1998, the Navy backlog would be reduced to 20 ships.<sup>82</sup>

The Navy shipbuilding appropriation, which traditionally has constituted 3 to 4 percent of the total annual Department of Defense budget, faces funding reductions amounting to 36 percent of the \$50.4 billion that has been cut from defense spending for the period 1992-97. This reduction includes the cessation of production of the SSN-21, the LSD-41 Cargo Variant, and cancellation of a proposed new class of salvage and rescue ships.

The 6-year Navy Shipbuilding Plan submitted with the President's FY 1992 budget calls for the construction of approximately 10 ships per year. The FY 1993 budget requests 6 ships, and industry sources report that in FY 1994 only 5 ships will be requested.<sup>83</sup> In July 1990 the Navy presented a briefing to the Congress that expressed the belief that a 10 ship-per-year Navy construction program would sustain only 2 or 3 large shipyards and 2 or 3

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<sup>80</sup> Shipbuilders Council of America, Mar. 13, 1992.

<sup>81</sup> Shipbuilders Council of America, presentation to the USITC, Nov. 7, 1991, p. 32.

<sup>82</sup> However, an increase to a 34-ship backlog by year 2004 is projected by industry sources, based on continued production of the DDG-51 and the start of new submarine, amphibious, and auxiliary production lines.

<sup>83</sup> Some U.S. industry sources anticipate that by 1995 the Navy demand for ship repair and modernization work will decrease by about one-third.

Table 3-9

Recent schedule for completion of major defense programs

Ship program	Total funded	Last FY of procurement
CG-47.....	27	1988
T-AO.....	18	1989
Trident.....	18	1990
MCM.....	14	1990
AO (Jumbo) Conversion.....	5	1990
SSN 688.....	62	1991
LHD 1.....	5	1991
LSD/LSD (CV).....	11	1991
AOE 6.....	4	1992
LCAC.....	84	1992
MHC.....	12	1993

Source: Shipbuilders Council of America.

smaller yards. The Navy estimated that the construction of 30 commercial ships a year would be required to sustain the industry at its 1990 level of employment. U.S. shipbuilding sources believe that a 5-to-6 ship-per-year Navy construction program would sustain only one or two major shipyards and one or two smaller yards. To survive the downturn in U.S. Navy contracts, the U.S. industry reportedly will have to make a much larger effort to sell U.S.-built military ships to friendly foreign nations through the Navy International Program Office (NIPO).

#### Oil Pollution Act of 1990 (OPA '90)

The provisions of the OPA '90 affect oil transportation, handling, and storage within all navigable waters under the jurisdiction of the United States, out to the limits of the Exclusive Economic Zone (EEZ). Although the law will clearly impact on virtually all aspects of shipping, the primary area of interest from a shipbuilding point of view is the double-hull requirement. As the law currently stands, every tanker entering U.S. waters by the year 2015 must be double hulled.<sup>84</sup> Existing single-hulled tonnage would either be reconfigured with a double hull or become subject to a phaseout period.

<sup>84</sup> Although OPA '90 specifically calls for tankers to be double hulled, there is a possibility that this might be changed to conform with some other International Maritime Organization standard, such as the mid-deck design. Industry experts point to the facts that such designs are technically unproven, that keeping the space between the hulls gas-free is difficult, and that salvage would be harder if the inner hull was breached. The mid-deck design is being championed by Japanese and European shipyards, who assert that the double-hulled design is not necessary to prevent most marine accidents.



Despite early protests from some shipowners that they would no longer call at U.S. ports if OPA '90 is implemented, it is now apparent that the major oil companies have committed themselves to continued shipments to the United States and to paying the estimated 20-percent cost differential between a single- and double-hulled tanker. Mobil, Amoco, Chevron, and Conoco are all building double-hulled tankers, and British Petroleum and Exxon are arranging long-term charters for such vessels. An indication of the acceptance of double-hulled tankers' by the shipping industry is the fact that these tankers account for about half of all new orders placed. Most of these orders have been placed by independent owners. This acceptance is not surprising given the enormous quantities of oil the United States consumes (in 1990, about one-third of the world petroleum fleet entered the United States).

U.S. shipyards are currently attempting to determine how much double-hull construction business they will receive. If past patterns are an accurate gauge of future orders, U.S. yards will only receive orders to work on Jones Act vessels. By some estimates between 40 and 50 coastal tankers will be forced into retirement between 1995 and 1998 as a result of OPA '90. If this estimate is accurate and given the leadtime between negotiating a construction contract and delivery, it is possible that orders for these ships could be placed shortly. Replacement orders for the large crude carriers employed in the Alaskan trade are more distant prospects.

#### **Ship Repair Tariff**

To protect the U.S. shipyard repair capability for national defense purposes, the U.S. Customs Service is authorized to levy a 50-percent tariff on the costs of repairs made to U.S.-flag vessels in foreign shipyards. The tariff was first imposed in 1866 on U.S.-flag vessels engaged in domestic or foreign trade with Canada, although repairs necessary to ensure the safety of the vessel were exempt. The Tariff Act of 1922 broadened the scope of the tariff to include U.S.-flag vessels engaged in foreign trade anywhere in the world.

However, succeeding amendments expanded the list of types of repairs excluded from the tariff. For instance, the Tariff Act of 1930 excluded repairs necessary for the seaworthiness of the vessel. Also, in 1971 and again in 1984 the tariff was revised by Congress to exempt certain types of vessels and repairs from duty. Additionally, exemptions have been established as a result of court decisions. Currently, the following costs are exempt from the tariff:

- o Repairs to all vessels, regardless of their purpose, remaining outside the United States for a period of 2 years, except for those repairs occurring during the first 6 months after departure;
- o Repairs necessary for the safety and seaworthiness of the vessel;
- o Repairs for a damaged vessel when the damage is due to some extraordinary event, i.e., "stress of weather or other casualty";

- o Drydocking expenses while the vessel is undergoing repairs;
- o The cost of inspections, if such inspections do not result in repairs being made; and
- o Charges for transportation of materials.

Maintenance and repair costs for a U.S.-flag vessel typically total \$1 million per year. As of August 1, 1991, about 150 U.S.-flag vessels were employed in either U.S.-to-foreign or foreign-to-foreign trade. Therefore, 1991 maintenance and repair expenses for the U.S.-flag fleet engaged in foreign trade should approximate \$150 million. Although this amount appears small in comparison to U.S. Navy expenditures for fleet repair and modernization, it is nonetheless substantial.

Tariff collections on vessel repair have risen from \$2.8 million in 1980 to \$26.9 million in 1989 (table 3-10). Despite the significant tariff, ship operators are increasingly going to foreign yards for repairs. Among the reasons they do so are--

- o Despite the 50-percent tariff, foreign shipyards are still less expensive than U.S. yards;
- o From an operational point of view, an operator may choose to get repairs done in a foreign yard and pay the tariff if it means the vessel can maintain its schedule;
- o The maintenance and repair portion of MARAD's ODS program has been cut back, and therefore operators have less incentive to have maintenance and repair work done in more costly U.S. yards;
- o There are increasingly more diesel engine ships in the U.S. fleet, and foreign yards have considerably more experience with such engines.

In summary, the decision is an economic one. Operators will choose the yard--domestic or foreign--that can provide quality work at the lowest cost (including, if necessary, the duty) and still accommodate the vessel's operating schedule.

Table 3-10

Tariffs collected for foreign repairs of U.S.-flag vessels, fiscal years 1980-91<sup>1</sup>

Fiscal year	Amount
1980.....	2,821,094
1981.....	7,490,397
1982.....	11,958,332
1983.....	9,856,261
1984.....	9,816,598
1985.....	5,398,984
1986.....	8,617,922
1987.....	7,118,547
1988.....	14,576,465
1989.....	26,934,016
1990.....	16,682,424
1991.....	21,103,298

<sup>1</sup> The tariff collected is 50 percent of the dutiable repairs--actual repair expenses are generally 3+ times higher than the tariff. Also, there may be as much as a 3-year time lag between the dutiable repair and a final ruling, so a large increase in duties may not reflect current period activity.

Source: U.S. Customs Service.



## CHAPTER 4. BACKGROUND ON NEGOTIATIONS AND LEGISLATIVE EFFORTS

### OVERVIEW OF THE OECD SHIPBUILDING SUBSIDY NEGOTIATIONS AND H.R. 2056

#### The OECD Approach

Under the auspices of the Organization for Economic Cooperation and Development (OECD) the United States has entered into negotiations with other shipbuilding countries to develop an international agreement under which signatory countries would phase out shipbuilding subsidies. These OECD negotiations include an effort to bring shipbuilding and ship repair under the coverage of injurious pricing actions modeled after the General Agreement on Tariffs and Trade (GATT) Antidumping Code (Antidumping Code).<sup>85</sup> Ships have not been covered by the Antidumping Code in the past because they are not technically "imported." The U.S. delegation to the OECD negotiations has indicated a preference to provide only those deviations from the existing Antidumping Code in the injurious pricing provisions of the draft agreement as are absolutely necessary to cover ships and to resist all other proposed exceptions.<sup>86</sup>

The working party of the OECD that is addressing shipbuilding subsidies in these negotiations is composed of the United States, the European Community (EC),<sup>87</sup> Sweden, Finland, Norway, Japan, and Korea.<sup>88</sup>

The OECD negotiations have not yet produced an agreement among the member countries, although there is a working party Chairman's draft text. At this time it is unknown whether agreement will be reached or how the final draft will read. Until a text is agreed to by all parties to the negotiations, it is difficult to estimate the impact of any OECD agreement. This report analyzes provisions in the proposal presented by the chairman<sup>89</sup> of the Council Working Party on Shipbuilding of the OECD, as amended (the

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<sup>85</sup> Known formally as "Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade," 31 U.S.T. 4919, T.I.A.S. No. 9650.

<sup>86</sup> This aspect of the agreement is reflected in "Agreement Respecting Normal Competitive Conditions in the Commercial Shipbuilding and Repair Industry," annex III, art. 1, subpar. 2, Nov. 9, 1991, draft incorporated into the Council Working Party on Shipbuilding, Chairman's Proposal (hereinafter "OECD Agreement").

<sup>87</sup> EC countries that are reportedly participating in the negotiations include Belgium, Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, Spain, Portugal, and the United Kingdom.

<sup>88</sup> U.S. House, Committee on Merchant Marine and Fisheries, Hearings on H.R. 2056, The Shipbuilding Trade Reform Act of 1991, 102d Cong., 2d sess. (Washington, DC, Feb. 19, 1992) (Statement of Donald Phillips, Assistant United States Trade Representative) (hereinafter "Hearings Before Subcomm. on Merchant Marine"); H. Rept. 284, 102d Cong., 1st sess., 1991, pt. 1, p. 4 (hereinafter "H. Rept. 284, pt. 1"). A delegate from Turkey has also attended the OECD negotiations. Council Working Party on Shipbuilding, Aide-Memoire of the 81st Session (held in Paris Dec. 17-20, 1991), drafted Jan. 7, 1992.

<sup>89</sup> Ambassador G. Lennkh, Permanent Representative, Austria.

"Chairman's Proposal"), dated November 19, 1991, which incorporates many of the agreed provisions of the negotiating parties and was the version of the agreement that all parties had agreed to work with in their negotiations.<sup>90</sup>

The Chairman's Proposal contains a draft text of the agreement and four annexes thereto. The draft text of the agreement, which includes the "Preamble" and its articles, describes the agreement's objectives, breadth, and procedures for dispute resolution and enforcement and contains the basic principles or by laws for organizing activities under the agreement. Annex I of the agreement defines the subsidies and practices that the agreement prohibits. For example, aid to be prohibited includes: (1) Government provided direct grants for shipbuilding; (2) shipyard debt forgiveness; (3) shipyard restructuring support not tied to permanent closures; (4) tax policies/practices that indirectly or directly benefit domestic yards; (5) domestic build/repair requirements and other "discriminatory" regulations/practices; (6) cargo reservation schemes linked directly with domestic shipbuilding or repair requirements; and (7) export subsidies prohibited under the GATT. Annex II provides the timeframe for phasing out proscribed practices. Annex III provides procedures for bringing and concluding injurious pricing charges by nationals of parties to the agreement, extending, when possible, the antidumping provisions of GATT to vessels. Annex IV describes the procedures for dispute-panel proceedings, which constitute the enforcement mechanism of the agreement.

#### Status of the OECD Negotiations

The current OECD shipbuilding subsidy negotiations are an outgrowth of the OECD's work concerning the "Revised General Arrangement for the Progressive Removal of Obstacles to Normal Competitive Conditions in the Shipbuilding Industry" (RGA), the "Understanding on Export Credits for Ships," and the "Revised Guidelines for Government Policies in the Shipbuilding Industry," all of which represent past OECD efforts to address unfair or

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<sup>90</sup> Since the Commission instituted this investigation, several changes have been made to the draft agreement. However, discussions with the U.S. negotiators concerning these changes indicate that the changes would not invalidate the Commission's analysis of the draft OECD agreement. Negotiators indicate that most changes were clarifications of provisions or additions to technical provisions to the Chairman's Proposal and annexes adopted thereto. It is likely that changes to the subsidy practices proscribed by the most recent draft of the OECD Agreement and the phaseout schedule for them would not affect the quantitative analysis presented in this report. This report analyzes the draft agreement, along with the status of the negotiations as they existed after the most recent meeting of the parties, in April 1992. These meetings were initially scheduled for March 11-13, 1992. However, Japan requested more time to explore the most recent U.S. proposal, which seeks to avoid the legal and constitutional hurdles with respect to injurious-pricing proceedings covered in the agreement. Member of the U.S. delegation to OECD negotiations, interview by USITC staff, Mar. 5, 1992.

market-distorting practices in shipbuilding on a multilateral basis.<sup>91</sup> The United States entered into the current negotiations under the auspices of the OECD as a result of a section 301 petition filed by the Shipbuilders Council of America.<sup>92</sup>

Although virtually all negotiating parties had previously indicated that they were optimistic that an agreement could be reached, serious differences in approach with respect to the content of an agreement have caused delays in the formulation of a consensus draft. Some countries' representatives to the negotiations have raised disputes concerning what practices must be phased out as provided for in annex I and the phaseout schedule to be followed in annex II of the draft agreement, including differences over crucial terms and the timing and inclusion of certain practices (e.g., home credit schemes or, with respect to U.S. practices, the Jones Act).<sup>93</sup> The United States reportedly is attempting to impose strict provisions on "aid financing, restructuring subsidies, indirect subsidies, and measures taken during the phase-out period [of subsidy practices] that could have a long-term impact."<sup>94</sup> Negotiators

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<sup>91</sup> Draft OECD Agreement, preamble.

<sup>92</sup> On June 8, 1989, the Shipbuilders Council of America ("Shipbuilders Council" or "SCA") filed a petition under section 301 of the Trade Act of 1974 requesting the United States Trade Representative (USTR) to initiate an investigation of the subsidies and other measures of assistance granted to shipbuilders by the Governments of Japan, South Korea, Germany, and Norway. During discussions with the petitioners, Ambassador Hills suggested multilateral negotiations as a preferable alternative to action under section 301 and offered prompt pursuit of a multilateral agreement if the 301 petition were withdrawn. The Shipbuilders Council agreed to withdraw the petition temporarily to allow the USTR to pursue a multilateral agreement to end shipbuilding subsidies under the auspices of the OECD and the Uruguay Round negotiations of the GATT. In turn Ambassador Hills agreed to invite the Shipbuilders Council to resubmit its section 301 petition if sufficient progress was not made in the negotiations by Mar. 31, 1990. Although this deadline and other, self-imposed deadlines have passed, an agreement has yet to be reached. H. Rept. 284, pt. 1, p. 4; H. Rept. 284, 102d Cong., 2d sess., 1992, pt. 2, p. 14 (hereinafter "H. Rept. 284, pt. 2").

<sup>93</sup> Hearings Before Subcomm. on Merchant Marine (Statement of Donald Phillips, Assistant USTR). Ambassador S. Linn Williams stated on July 9, 1991, that "[i]t is more than conceivable that we could reach agreement on a text and on unfair pricing, but find ourselves unable to conclude a final agreement because the amounts of subsidies to be paid during the phaseout periods are so large that our industry would remain at a competitive disadvantage for too long, perhaps permanently." U.S. House, Hearings on H.R. 2056 Before the Subcommittee on Trade of the House Committee on Ways and Means, 102d Cong., 1st sess., July 9, 1991 (statement of Ambassador S. Linn Williams, Deputy USTR) (hereinafter "Hearings Before Subcomm. on Trade").

<sup>94</sup> B. Casassus, "U.S. Official Is Optimistic on Shipyard Subsidy Accord," Journal of Commerce, Dec. 17, 1991.

report that they also are unable to agree on whether binding arbitration will be used to resolve disputes.<sup>95</sup>

Parties cannot agree whether the shipbuilder or shipowner should pay the remedy when a ship is built with the benefit of a subsidy or practice in violation of the agreement. Moreover, although all negotiating countries have agreed that an injurious pricing remedy should be included in the agreement and should parallel the existing framework under the GATT Antidumping Code, there is disagreement over how to implement this objective due to the unique characteristics of shipping and the existing GATT Code, which does not easily accommodate cases concerning ships.<sup>96</sup> The injurious pricing issue has proven to be a major stumbling block in the negotiations.<sup>97</sup>

Korea and Japan have argued in the past that the shipowner should pay for violations under the agreement, whereas the other parties to the negotiations, particularly the United States, have argued that the shipbuilder should pay. Delegations from Korea and Japan have indicated that their respective constitutions and legal systems prohibit their Governments from enforcing a penalty on shipbuilders in the manner prescribed by the mechanisms in the OECD draft agreement (e.g., in a manner that circumvents their judicial systems).<sup>98</sup>

In early November 1991 the U.S. delegation to the negotiations met with the EC delegation with the goal of reaching an agreed text that the United States could present to the Japanese and Korean Governments before the full working party meetings of the OECD that were to be held in December.<sup>99</sup> In mid-November 1991, the U.S. delegation met with delegations from Japan and Korea to obtain agreement on the draft U.S./EC text but failed to obtain Japanese and Korean acceptance.<sup>100</sup>

In their OECD meetings in December 1991, the OECD working party narrowed its focus on the Chairman's Proposal. The working party reported that although progress was made with respect to the treatment of export credits, direct support, aid to research and development, and public ownership, the differences with respect to how home credit schemes and the Jones Act should

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<sup>95</sup> Hearings Before Subcomm. on Merchant Marine (Statement of Donald Phillips, Assistant USTR).

<sup>96</sup> Hearings Before Subcomm. on Merchant Marine (Statement of Donald Phillips, Assistant USTR; Members of the U.S. delegation to the OECD shipbuilding subsidy negotiations, interviews by USITC staff, Oct. 21, 1991).

<sup>97</sup> Hearings Before Subcomm. on Merchant Marine (Statement of Donald Phillips, Assistant USTR; Staff of the USTR and U.S. State Department, interviews by USITC staff, Feb. 25, 1992).

<sup>98</sup> Hearings Before Subcomm. on Merchant Marine (Statement of Donald Phillips, Assistant USTR).

<sup>99</sup> Member of the U.S. delegation to OECD negotiations, interview by USITC staff, Mar. 5, 1992.

<sup>100</sup> Ibid.



be treated caused a slowdown in the formulation of an agreed text.<sup>101</sup> After the December meetings the U.S. negotiators reported that the OECD negotiations "have made substantial progress in defining the terms of an effective agreement and in securing substantial support for it" but that "the pace of negotiations and [their] inability thus far to conclude them has been disappointing."<sup>102</sup> The negotiators report that to date, the draft text and annex I, which details the proscribed subsidy practices, has been "virtually accepted by all parties."<sup>103</sup> The U.S. negotiators report that these sections of the agreement address issues such as coverage, dispute-resolution procedures, and definitions of important terms, such as subsidies. The Delegation of the Commission of the European Communities has informed the U.S. State Department in a note verbale that all parties engaged in the negotiations are "negotiating in a cooperative and serious manner" and that the EC hopes that "a successful conclusion to these negotiations can be reached rapidly."<sup>104</sup> The EC also indicated that progress was made at the December meetings, particularly concerning measures to combat injurious pricing, which has been a "key demand" from the EC throughout the negotiations.<sup>105</sup>

On the issue of injurious pricing disciplines at the December OECD meetings, the Koreans and Japanese still objected to certain proposals, based on their own political and constitutional difficulties.<sup>106</sup> To eliminate this key stumbling block to the negotiations, the U.S. delegation in February 1992 announced its intention to introduce an alternative enforcement mechanism to

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<sup>101</sup> Council Working Party on Shipbuilding, Aide-Memoire of the 81st Session (held in Paris Dec. 17-20, 1991), drafted Jan. 7, 1992, p. 3.

<sup>102</sup> Ibid.; Janet G. Mullins, Assistant Secretary, Legislative Affairs, U.S. Department of State, letter to Walter B. Jones, Chairman, House Committee on Merchant Marine and Fisheries, Feb. 18, 1992, reprinted in H. Rept. 284, pt. 2, pp. 37-38 (Mullins letter); also B. Casassus, "OECD Pact Near on Ending Subsidies in Shipbuilding," Journal of Commerce, Mar. 31, 1992.

<sup>103</sup> Hearings Before Subcomm. on Merchant Marine (statement of Donald Phillips, Assistant USTR).

<sup>104</sup> Francisco T. Knopfli, Ambassador of Portugal (in his capacity as a pending EC presidential representative) and Andreas van Agt, Head of Delegation, Delegation of the Commission of the European Communities, letter to Robert B. Zoellick, Under Secretary for Economic and Agricultural Affairs and Counselor, U.S. Department of State, Jan. 27, 1992 (Knopfli letter), reprinted in Richard E. Hecklinger, Acting Assistant Secretary for Economic and Business Affairs, U.S. Department of State, letter to Secretary, USITC, received Jan. 31, 1992 (filed in USITC investigation No. 332-316) (Hecklinger letter). The Governments of Finland, Norway, Sweden, and Japan have also associated themselves with this démarche.

<sup>105</sup> Ibid. The EC also claims that it has decreased the maximum permissible aid that can be granted within the EC from 26 percent of total cost at the beginning of the OECD negotiations to 9 percent now, and that the EC "stands ready . . . to phase out the remaining aid within the context of an acceptable international agreement." Ibid.

<sup>106</sup> Council Working Party on Shipbuilding, Aide-Memoire of the 81st Session p. 2.

ensure that shipbuilders and shipyards pay for any violations of the agreement. This alternative mechanism will comply with Japan's and Korea's constitutional and legal requirements.<sup>107</sup> However, these proposals by the U.S. delegation and meetings in April 1992 were not successful in bringing parties closer to an agreement.<sup>108</sup>

#### Industry Views on the Likely Direction of Negotiations

Members of both the Subcommittee on Trade of the House Committee on Ways and Means and Members of the House Merchant Marine and Fisheries Committee have expressed frustration at the pace of the negotiations.<sup>109</sup> Also, the Shipbuilders Council of America announced that it was "no longer willing to support continued attempts to negotiate a multilateral trade agreement" due to the continued delays in coming to an agreement among OECD countries to eliminate shipbuilding subsidies.<sup>110</sup> The SCA indicated that--

[t]here is no chance for a trade agreement to be achieved. At the last meeting in December 1991, the Japanese Government made it very clear that it was not interested in signing an agreement that included an improved antidumping provision. At a meeting last week of an OECD subcommittee on the antidumping provision, the Japanese refused to reconsider their position.<sup>111</sup>

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<sup>107</sup> At press time for this report the U.S. proposal sought to remove completely the national government and court system of the shipbuilder from the enforcement process. Under this proposal, petitions could still be filed in the United States against a foreign shipbuilder. The current U.S. proposal would provide three options to the foreign shipbuilder if the United States finds in the affirmative on injurious pricing: either (1) pay a charge to the U.S. Government; (2) void the contract in question, if permitted to do so by the terms of the contract with the ship buyer; or (3) appeal to a panel for review, in which case, the shipbuilder agrees to accept binding arbitration, including payment to the U.S. Government.

If a party failed to accept all of these three proposals, the parties to the multilateral agreement could prohibit their nationals from purchasing ships from the offending foreign country unless the parties agree by consensus to a more limited action. Other action could be taken by all parties by consensus to require the offending foreign government to place restrictions on the offending shipbuilder's access either to government procurement, subsidies permitted under annex II, or home credit schemes.

<sup>108</sup> Members of the U.S. delegation to OECD negotiations, interview by USITC staff, May 12 and 14, 1992.

<sup>109</sup> H. Rept. 284, pt. 1, pp. 4-6; Hearings Before Subcomm. on Trade, and H. Rept. 284, pt. 2; Hearings Before Subcomm. on Merchant Marine; U.S. House, Markup Session on H.R. 2056 Before the House Committee on Merchant Marine and Fisheries, 102d Cong., 2d sess., Feb. 27, 1992.

<sup>110</sup> Hearings Before Subcomm. on Merchant Marine (Statement of John J. Stocker, president, SCA.)

<sup>111</sup> Ibid.

However, the American Institute of Merchant Shipping, the Federation of American Controlled Shipping, and the International Council of Cruise Lines continued to support the multilateral approach taken in the OECD negotiations and reported that progress, although gradual, is being made.<sup>112</sup> Many of these parties, including the SCA, made submissions to similar effect to the Commission in the course of this investigation.

### The Approach in H.R. 2056

H.R. 2056, the Shipbuilding Trade Reform Act of 1992, is divided into two parts. Title I of the bill relates to trade in shipbuilding and repair, the subject of this report. Title II of the bill provides for the phased elimination of U.S. Coast Guard user fees on recreational vessels and certain related matters<sup>113</sup> and does not involve issues covered by this report.

The purpose of Title I of the bill is to "ensure fair trade in the commercial shipbuilding and repair industry by providing effective trade remedies against subsidized and dumped foreign commercial ships."<sup>114</sup> Title I has five main sections. The first part would amend title IV of the Tariff Act of 1930<sup>115</sup> by calling for the Secretary of Commerce to establish and maintain a list (i.e., a "warning list") of all foreign shipyards that receive or benefit from a subsidy for the construction or repair of vessels.<sup>116</sup> Until the Secretary of Commerce compiles the "warning list" all yards are assumed to be on the list, including those in countries participating in the OECD shipbuilding negotiations, unless "the foreign country in which the yard is

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<sup>112</sup> Ibid. (Statements of representatives from the American Institute of Merchant Shipping, the Federation of American Controlled Shipping, and the International Council of Cruise Lines.)

<sup>113</sup> H. Rept. 284, pt. 2, p. 13.

<sup>114</sup> H.R. 2056, 102d Cong., 2d sess., 1992, sec. 102(b) (hereinafter "H.R. 2056"); H. Rept. 284, pt. 1, p. 3; H. Rept. 284, pt. 2, pp. 12-13.

<sup>115</sup> 19 U.S.C. 1431, et seq. Title IV addresses, among other things, the rules and procedures for the report, entry, and unloading of vessels and vehicles.

<sup>116</sup> H.R. 2056, sec. 103, adding sec. 435A to the Tariff Act of 1930 ("Tariff Act"). This list is to act as a "warning list," providing advance notice to shipowners that ships from such yards will be scrutinized and may fail to satisfy the bill's certification requirements. This provision provides another option to satisfy the certification requirement and, thus, could make it easier for ships not produced at "warning listed" foreign yards to receive certification. Thus the bill may have less of an impact on shipping companies or shipowners than the original version of the bill. The current version provides increased options to receive certification and makes it less likely that a shipyard or shipowner will have to repay a subsidy to a foreign government or have its trade disrupted, thereby avoiding an increase in their operating costs. Likewise, this provision could also lessen the impact of the bill on other U.S. industries that might otherwise bear the burden of operating costs of shipbuilders, shipowners, or shippers.

located signs a trade agreement with the United States that provides for the immediate elimination of subsidies for that shipyard."<sup>117</sup>

The second part of title I of H.R. 2056, in order to deter foreign shipbuilding and ship repair subsidies, would amend the Tariff Act of 1930 to require subsidy information as a condition of entry of the vessel.<sup>118</sup> The bill would require the master of a vessel to present a subsidy certification to the U.S. Customs Service attesting that any construction carried out with respect to the vessel meets one of the following requirements:

- (a) No subsidy was granted or otherwise provided.
- (b) All subsidies provided were provided before the enactment date of H.R. 2056.
- (c) Construction was carried out pursuant to a specific contract entered into before October 16, 1991.
- (d) One or more subsidies were provided during the 2-year period beginning on date of enactment, but an amount equal to the value of such subsidy was repaid to the agency that provided the subsidy.
- (e) One or more subsidies were provided on or after date of enactment, but an amount equal to the value of such subsidy (reduced by any amount repaid under (d)) has been paid to the U.S. Treasury.
- (f) The vessel was constructed in a foreign country, which is signatory to a trade agreement with the United States providing for the elimination of construction subsidies for vessels.
- (g) The construction was carried out in a shipyard that, at the time of contracting for construction of the vessel, was not on the "warning list" established by the Secretary of Commerce under section 435A(a).<sup>119</sup>

Thus, a shipowner could receive certification under section 435B and thereby call on a U.S. port if the shipyard in which its ship is built is not on the Secretary's "warning list" at the time a contract is entered into. Subsidies to shipyards would have to be repaid with respect to ships built pursuant to contracts entered into after October 16, 1991, or with respect to ships constructed in a shipyard on the "warning list." The bill provides that the foreign shipyard is primarily responsible for repaying the subsidy.

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<sup>117</sup> Ibid., sec. 103, adding sec. 435D(b)(1)(B) to the Tariff Act [note that with regard to this citation, the bill appears to mislabel the sequence of its subparagraphs--the final version of the bill may cite this subparagraph differently].

<sup>118</sup> Ibid., sec. 103, adding sec. 435B(a), (b) to the Tariff Act; see also H. Rept. 284, pt. 1, p. 9.

<sup>119</sup> H.R. 2056, sec. 103, adding sec. 435B(b)(2) to the Tariff Act.

A shipowner who purchases a ship from a shipyard not on the "warning list" and receives certification under section 435B would not be subject to a penalty at a later date if a challenge is made to that certification and Commerce determines that the yard actually received a proscribed subsidy. Rather, if such a violation is found, the onus would be on the shipyard; it would be placed on the "warning list" thereafter. Placing such a foreign shipyard on the "warning list" would not affect ships that were under contract before the shipyard was placed on the "warning list"; therefore, ships already constructed in that yard and receiving certification prior to the listing change would also be "grandfathered in" and would maintain their certification status.

The legislation provides procedures for application to the Secretary of Commerce for certifications and for investigations to ascertain whether a subsidy in the context of this certification requirement has been improperly granted or provided to a particular vessel. The U.S. Customs Service would collect the certification from the master of a vessel at the time of formal entry. False certification could lead to civil and criminal penalties under section 436 of the Tariff Act, as well as payment to the U.S. Treasury for the amount of subsidies received.

The third part of title I of H.R. 2056 would require repair subsidy certification separate from construction subsidy certification. The bill approaches repairs differently than construction because repairs are made to vessels already engaged in commerce, and speed of repair is often critical to minimize the period that the vessel is out of service. The administrative delays of a repair determination could prove disruptive to commerce, whereas actions during the longer construction period of vessels, which have not yet entered into commerce, are less likely to prove disruptive.<sup>120</sup> The bill requires ship operators calling on U.S. ports to certify the repairs made to their ships since their last entry into the United States.<sup>121</sup> If a ship received repairs in a shipyard on the "warning list" prepared by Commerce, the bill would require the shipowner or ship master to post a surety bond, proof of insurance, or other surety equal to at least two times the dollar value of the repairs.<sup>122</sup> After the posting of surety, the vessel may leave the port and continue on its route. If the Department of Commerce later determines that the vessel's repairs benefitted from a proscribed subsidy, the vessel owner would be required to pay to the U.S. Government an amount equal to any repair subsidy from which the vessel has benefitted.<sup>123</sup>

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<sup>120</sup> The House Merchant Marine Committee stated that "[b]onding, insurance, and surety requirements are very common in the maritime industry, and the Committee does not believe that this requirement will pose a significant burden on vessel owners." H. Rept. 284, 102d Cong., 2d sess., 1992, pt. 2, p. 19.

<sup>121</sup> H.R. 2056, sec. 103, adding sec. 435C to the Tariff Act.

<sup>122</sup> Ibid., adding sec. 435C(a)(3) to the Tariff Act.

<sup>123</sup> Ibid., adding sec. 435C(c) to the Tariff Act. If the vessel owner does not make the payment, the proceeds would be taken from the surety posted upon entry. If these proceeds do not cover the amount of the subsidy determined to  
(continued...)

The fourth part of title I of the bill would authorize application of countervailing and antidumping laws to dumped or subsidized vessels purchased by U.S. persons. Oceangoing vessels docking at U.S. ports currently are not "imports" subject to the antidumping and countervailing-duty laws. The bill would not seek to amend title VII other than to make ships amenable to antidumping and countervailing-duty investigations.<sup>124</sup>

The final part of title I would amend the Merchant Marine Act of 1936, extending the benefits of U.S. ship construction programs to the purchase of ships from nonsubsidized foreign shipyards and would eliminate the cargo preference 3-year waiting rule for U.S. reflagged, foreign-built, nonsubsidized vessels to be eligible to carry preference cargoes in U.S. waters.<sup>125</sup> The bill would alter the Operating Differential Subsidy Program (ODS),<sup>126</sup> extending the benefits of the program to operators that build their ships in nonsubsidized foreign yards under contracts entered into after October 16, 1991. The amendments would extend the benefits of the trade-in of obsolete vessels for credit for construction of new vessels<sup>127</sup> to vessels built in nonsubsidized foreign yards under contracts entered into after October 16, 1991.<sup>128</sup> The amendments would also eliminate the U.S. build and reconstruction requirements of withdrawals from the Capital Construction Fund (CCF),<sup>129</sup> the Construction Reserve Fund (CRF),<sup>130</sup> and Loan Guarantee Program under title XI<sup>131</sup> with respect to foreign ships built in nonsubsidized yards under a contract entered into after October 16, 1991.<sup>132</sup> These programs currently apply only to the construction of ships in U.S. yards. The amendments to the Loan Guarantee Program of title XI would retain a "priority" for loan guarantees for Jones Act vessels.<sup>133</sup> The amendments would also alter the Government-impelled cargo restrictions of section 901(b) of the Merchant Marine Act of 1936 (46 App.

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<sup>123</sup> (...continued)

have been received associated with the repair, the vessel and any other vessel owned by that owner would not be permitted to enter or clear the United States until the full amount of the repair subsidy is paid to the U.S. Government. Ibid., adding sec. 435C(f) to the Tariff Act.

<sup>124</sup> Ibid., adding sec. 771C to the Tariff Act; see also H. Rept. 284, pt. 1, pp. 14-15.

<sup>125</sup> Before this amendment, these programs were available only for the purchase of ships from U.S. yards.

<sup>126</sup> Merchant Marine Act of 1936, title VI, 46 U.S.C. 117(a)(a) [sic].

<sup>127</sup> Merchant Marine Act of 1936, sec. 510, 46 App. U.S.C. 1160(a)(2)(B).

<sup>128</sup> H.R. 2056, sec. 106(g).

<sup>129</sup> Merchant Marine Act of 1936, sec. 607(K), 46 App. U.S.C. 1177; 26 U.S.C. 7518(i).

<sup>130</sup> Merchant Marine Act of 1936, sec. 511(a), 46 App. U.S.C. 1161(a).

<sup>131</sup> Merchant Marine Act of 1936, title XI.

<sup>132</sup> H.R. 2056, sec. 106(b)(1), (2).

<sup>133</sup> H.R. 2056, sec. 106(e), (f). The House Merchant Marine Committee Report states, "[t]his amendment relates only to commercial merchant vessels and in no way affects the program administered by the Secretary of Commerce with respect to fishing vessels and fishing facilities." H. Rept. 284, pt. 2, p. 22.

U.S.C. 1241(b)), thereby eliminating the 3-year waiting period for reflagged U.S. vessels to be eligible for cargo preferences.<sup>134</sup>

The EC has informed the U.S. State Department that passage of H.R. 2056 "would be deleterious to EC shipping and shipbuilding interests, and would undermine the negotiations under way in the Organization for Economic Cooperation and Development (OECD)".<sup>135</sup> The EC has reported that the approach taken in the OECD negotiations would "avoid the negative effects on shipping markets, shipbuilding contracts and U.S. external trade which the unilateral approach of H.R. 2056 would entail."<sup>136</sup> The EC claims that because H.R. 2056 "allows penalties to be assessed on shipowners," it "could have the opposite effect from that intended and would encourage foreign countries to initiate direct countermeasures."<sup>137</sup> The EC also noted that U.S. trading partners would be encouraged by H.R. 2056 to "adapt their own laws to seek redress from U.S. practices which are trade distruptive and unfair (e.g. the Jones Act's provisions concerning national preference)."<sup>138</sup>

Likewise, the administration and certain parties have stated that they do not support H.R. 2056 because they do not perceive the approach taken in the bill to be "the most effective means of eliminating the trade distorting practices in the shipbuilding sector, in part, because of the unique characteristics of trade in ships."<sup>139</sup>

However, certain parties appearing at the Commission's hearing in this investigation<sup>140</sup> and several members of Congress<sup>141</sup> have stated that passage of H.R. 2056 is necessary to apply appropriate leverage on other countries to come to an agreement in the OECD negotiations.

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<sup>134</sup> H.R. 2056, sec. 106(a)(2) (as amended by the House Committee on Merchant Marine).

<sup>135</sup> Hecklinger letter., letter to Secretary, USITC International Trade Commission, received Jan. 31, 1992 (filed in investigation No. 332-316).

<sup>136</sup> Knopfli letter. The Governments of Finland, Norway, Sweden, and Japan have also associated themselves with this démarche.

<sup>137</sup> Ibid.

<sup>138</sup> Ibid.

<sup>139</sup> Hearings Before Subcomm. on Merchant Marine (Statement of Donald Phillips, Assistant USTR).

<sup>140</sup> USITC, hearing on investigation No. 332-316, The Shipbuilding Trade Reform Act of 1991: Likely Economic Effects of Enactment, Washington, DC, Jan. 24, 1992 (Statement of John J. Stocker, president, SCA).

<sup>141</sup> H. Rept. 284, pt. 1, pp. 14-16; Hearings Before Subcomm. on Merchant Marine.

**COMPARISON OF THE APPROACH TAKEN IN THE OECD NEGOTIATIONS  
AND THE APPROACH OF H.R. 2056, AS AMENDED**

**Overview**

H.R. 2056 is patterned after the approach taken in the OECD draft agreement. Both approaches contain an enforcement mechanism, definitions of shipbuilding promotional practices that are prohibited, and mechanisms to initiate injurious pricing (e.g., antidumping) cases associated with vessels. Whereas the proponents of the bill have testified that it differs from the draft OECD agreement only in the type of enforcement mechanism used, opponents have testified that the bill is more far reaching than the draft agreement and places the onus for enforcement of the bill on the wrong parties--shipowners and ship operators whose ships call on U.S. ports.

H.R. 2056 adopts the existing title VII requirements for preliminary and final determinations by the U.S. International Trade Commission and U.S. Department of Commerce in antidumping and countervailing-duty investigations conducted concerning the sale of a vessel. The OECD draft agreement attempts to adopt, when possible, the GATT Antidumping Code with respect to determinations on injurious pricing charges.

**Applicability, Scope, and Related Issues**

**Applicability and Scope**

Unlike the OECD approach, the certification provisions of H.R. 2056 would apply only to vessels that call at U.S. ports. Both approaches apply to any subsidy for construction, reconstruction, or repair of a vessel. Both the OECD draft agreement and H.R. 2056 apply to vessels of 100 gross tons and above.<sup>142</sup> Military vessels are excluded by both approaches.<sup>143</sup> The draft OECD agreement applies to tugs of 365 kilowatts (Text, art. 2, par. 1), whereas the bill's certification provisions exclude them by reference in that tugs also are not required to make entry under section 441 of the Tariff Act.

The draft agreement would bind only signatory countries. However, the "major shipbuilding countries of the world,"<sup>144</sup> including the United States; the EC (including Belgium, Denmark, France, Germany, Greece, Ireland, Italy,

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<sup>142</sup> The bill applies to vessels that are currently required to make formal entry under title IV of the Tariff Act of 1930.

<sup>143</sup> The draft agreement, with a specific provision (Text, art. 2, par. 2) and the bill, by reference. Vessels of war are not required to make entry under section 441 of the Tariff Act of 1930, as amended, and warships are classified under HTS heading 8906, which does not include the types of vessels covered by the bill. H.R. 2056, secs. 103 (adding sec. 435D(a)(6) to the Tariff Act) and 105 (adding sec. 771C(b) to the Tariff Act). The bill covers vessels under HTS headings 8901 and 8902.00.00.

<sup>144</sup> Hearings Before Subcomm. on Merchant Marine (Statement of Donald Phillips, Assistant USTR).



the Netherlands, Spain, the United Kingdom, and Portugal); Sweden; Finland; Norway; Japan; and Korea; are parties to the OECD shipbuilding negotiations. Moreover, article 10 of the draft agreement provides that "if the market in terms of world production represented by the parties to the Agreement falls below 72 per cent," the parties will "review" the agreement. The OECD draft agreement also contains provisions for a country that is not a party to the negotiations to become a party to the agreement at a later date.

Under article 13 of the OECD draft agreement parties may withdraw from the requirements of the agreement by giving written notice of their intention to do so to the Depository, the Secretary General of the OECD. Withdrawal is to become effective 1 year after such notice is received.<sup>145</sup> No such escape clause exists in H.R. 2056.

#### Responsibility for Enforcement

The bill provides that the foreign shipyard is primarily responsible for repaying any proscribed subsidy. Indeed, the advance certification provisions and the creation of the shipyard "warning list" appear to be intended to encourage a foreign shipyard to repay its government any subsidy it received in the construction of a vessel for which it or the vessel buyer seeks certification.

The legislative proposal contemplates a reimbursement/indemnification clause issue. The Shipbuilders Council of America argues that no shipowner will purchase a ship without the full agreement of the builder that any certification costs or fines imposed by the U.S. Government must be refunded to the shipowner by the builder.<sup>146</sup> If the bill is successful in creating

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<sup>145</sup> At least one commentator has indicated that, among other things, allowing a party to withdraw has rendered "ineffective" the Revised General Arrangement for the Progressive Removal of Obstacles to Normal Competitive Conditions in the Shipbuilding Industry (RGA), which is the precursor to the draft OECD shipbuilding subsidy agreement. L. Hadley, "The Fifty Percent Ad Valorem Duty on Foreign Ship Repairs: Scope of Application and Proposals for Elimination," Geo. Wash. J. Int'l L. & Econ., vol. 24, No. 415 (1990), p. 451. The same result might be argued with respect to the draft OECD shipbuilding subsidy agreement because it contains a similar withdrawal provision applicable to all signatories.

<sup>146</sup> SCA, Presentation to the International Trade Commission, Nov. 7, 1991. Furthermore, at least one other commentator might agree with this assessment. Before the OECD draft negotiators agreed to place the responsibility for violation of the agreement on shipbuilders, a commentator indicated that if the onus of a multilateral agreement were on the shipowners, they would "protect themselves against such sanctions by inserting an indemnity clause in all shipyard building and repair contracts." L. Hadley, "The Fifty Percent Ad Valorem Duty on Foreign Ship Repairs."

Any such indemnification, however, could not be applicable to an antidumping duty imposed after such a proceeding because reimbursement of antidumping duties is inconsistent with 19 C.F.R. 353.26, which generally

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such a reimbursement/indemnification situation, the practical effects of the bill may be similar to the approach taken in the OECD shipbuilding subsidy negotiations; the shipbuilder would be responsible for payment of any violations of proscribed subsidy practices.

However, opponents of the legislation testified that H.R. 2056 will not result in foreign shipyards' repaying subsidies they receive and that shipowners will bear the onus for repaying them. These parties argue, moreover, that if a foreign shipyard does seek to repay its government for subsidies it received, it will do so only with respect to subsidies that are associated with the construction of vessels that are likely to call on U.S. ports. Thus, the bill would not have as direct an impact on worldwide ship prices or U.S. shipping trade as would a successfully negotiated OECD or multilateral agreement.

Some parties participating in this investigation argue that the bill may create a situation in which shipping companies have two tiers of vessels: those that call on U.S. ports because they can satisfy the certification requirements and those that avoid U.S. ports because they may not be able to satisfy the certification requirements. Thus, for instance, the bill may encourage older, "grandfathered" vessels to call on U.S. ports more frequently than the OECD agreement would, even though these ships may be unsafe or less environmentally sound.

The administration argues that because the certification provisions of the bill apply only to vessels that call on U.S. ports, U.S. shipowners will face a disproportionate share of the liabilities of foreign governments that subsidize their shipyards. The administration argues that placing the onus on ships that call only on U.S. ports will raise the cost of U.S. imports and exports and that U.S. consumers and U.S. exporting industries, not the foreign shipyards, will pay for the foreign subsidies.<sup>147</sup> The administration also argues that the bill will deter foreign ships from entering U.S. ports (e.g., diversion to neighboring ports in Canada or Mexico) and will disrupt U.S. foreign trade.<sup>148</sup>

#### **Subsidies and Practices Affected**

The legislative proposal provides a broad definition of a subsidy and includes eight types of policies and practices that are considered directly or indirectly to support shipbuilding and ship repair activities. Like the OECD draft agreement, the bill's certification provisions apply to all subsidies "identified in the Illustrative List of Export Subsidies in the Annex to the Agreement on Interpretation and Application of Articles VI, XVI, and XXIII of

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<sup>146</sup> (...continued)

deducts from the calculation of U.S. price any amount reimbursed by the foreign producer for the payment of an antidumping duty, thereby increasing the antidumping duty imposed on any importer commensurate with any reimbursement the importer receives.

<sup>147</sup> Mullins letter.

<sup>148</sup> Ibid.

the General Agreement on Tariffs and Trade or any other export subsidy that may be prohibited as a result of the Uruguay Round of trade negotiations."<sup>149</sup> The report issued by the House Committee on Ways and Means on H.R. 2056 states that the bill's definition of a subsidy "parallels (in a more abbreviated fashion) the definition of the term used in the OECD Fourth Revised Draft Agreement (dated February 1991)."<sup>150</sup> Thus, this report assumes that the subsidy definitions in the two approaches are parallel.<sup>151</sup>

The draft agreement specifies that the assistance programs outlined are proscribed "whether they exist in law or in fact"; thus, U.S. negotiators

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<sup>149</sup> H.R. 2056, sec. 103, adding sec. 435D(a)(5)(H) to the Tariff Act; see also OECD Agreement, annex I.

<sup>150</sup> H. Rept. 284, pt. 1, pp. 13-14; see also H. Rept. 284, pt. 2, p. 1 (stating that at least one purpose of the bill is to eliminate "direct grants, preferential financing, equity infusions, research and development assistance, restructuring aid, special tax concessions, debt forgiveness, and other direct and indirect assistance"--all of which appear to parallel the scope of the OECD draft agreement).

Many opponents of the bill have testified that the bill is vague or ambiguous in its definition of the subsidy practices covered, or that the bill's provisions are more vague or ambiguous than the approach taken in the OECD draft agreement. Others have testified that the bill's definition of a subsidy is too broad or that the bill's provisions are broader than the approach taken in the OECD draft agreement. However, if the bill's definition of a subsidy is meant to parallel the term used in the OECD draft agreement, as stated in the report by the House Ways and Means Committee, these arguments by opponents of the bill are not correct. H. Rept. 284, pt. 1, pp. 13-14.

<sup>151</sup> It is difficult to determine whether the bill's definition of a subsidy is legally parallel to the definition in the OECD agreement, because the former lacks the specificity detailed in the latter. For example, the OECD draft agreement indicates that proscribed export credits would include the OECD Understanding on Export Credits for Ships, which "comprises the provisions of the Annex to the OECD Council Resolution C(81)103(Final), the associated definitions and administrative procedures set out in OECD documents C/WP6(84)3 and C/WP6(89)45." It is unclear whether the bill is meant to adopt this specific definition when it merely states in section 103 (sec. 435D(a)(5)(A) of the Tariff Act) that the term "subsidy" includes "[o]fficially supported export credits and development assistance." Annex I of the draft agreement in section B covering domestic support, paragraph 3, is similarly specific with respect to exceptions to proscribed programs aimed at enhancing shipbuilding research and development, while the provisions of the bill amending section 435D(a)(5)(D) of the Tariff Act are silent on any such exceptions for research and development support. Indeed, the bill does not define what is considered research and development, and it is unclear whether the bill seeks to adopt the detailed definition provided in the Accompanying Notes to Annex I, paragraph 3 of the draft agreement. Moreover, whereas both approaches seek to eliminate programs that are directed at parties "related" to shipbuilders in order to indirectly assist shipbuilders, only the agreement in the Accompanying Notes to Annex I, paragraph 1, defines what is considered a "related party."

state that these provisions are broader than existing disciplines in the GATT for trade in any other product.<sup>152</sup> Presumably, assistance programs outlined by the bill's certification requirements would receive similar treatment.

### Other Differences

Certain approaches taken in H.R. 2056 that are slightly different than approaches taken in the OECD draft agreement are difficult to quantify. It is difficult to determine the differences in likely economic effect with respect to the different approaches detailed below.

### Injurious Pricing and Antidumping Duty Proceedings

Neither the certification provisions of H.R. 2056 nor the Dispute Panel mechanisms of the OECD draft agreement require a showing of injury before practices of a foreign government or shipyard may be challenged thereunder. However, a showing of injury is an element of both the bill's title VII provisions and the draft OECD agreement's injurious-pricing provisions.<sup>153</sup>

With regard to title VII, the bill authorizes application of countervailing and antidumping duties to purchases of subsidized or dumped vessels by U.S. nationals. The bill would add a new section 771C to the antidumping and countervailing-duty provisions of title VII of the Tariff Act of 1930 so as to include vessels in the definition of "merchandise" for purposes of countervailing-duty and antidumping actions. Under section 771C of the bill, a vessel would be considered "sold for importation into the United States" under title VII when a "United States person" enters into a contract for the construction, reconstruction, repair, or purchase of a vessel from the builder. A vessel sold for importation into the United States would be considered "offered for entry for consumption under the tariff laws" at the time of its first arrival at a port or place in the United States--regardless of its country of registry.

Because the draft agreement's injurious-pricing actions parallel aspects of the GATT Antidumping Code, they are similar to U.S. antidumping law. The draft agreement would require that a party bringing an injurious-pricing

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<sup>152</sup> Hearings Before Subcomm. on Trade (statement of Ambassador S. Linn Williams, Deputy USTR); Hearings Before Subcomm. on Merchant Marine (Statement of Donald Phillips, Assistant USTR).

<sup>153</sup> The approach taken in the bill would require a finding of material injury in a countervailing-duty investigation when it is called for under existing law. The OECD working party has included an "injurious pricing" element into the draft agreement. Thus under the "injurious pricing" provision of the draft OECD agreement, a showing of injury would be necessary to impose sanctions on shipbuilders who receive proscribed subsidies. In general, antidumping and countervailing laws require a finding of injury to a domestic industry in addition to a finding of dumping or a subsidy before an antidumping duty or countervailing duty can be imposed.

charge in the United States be a U.S. national;<sup>154</sup> however, the draft agreement does not require that a vessel call on a U.S. port to be amenable to such a charge. Thus the vessel need not call on a U.S. port for a charge to be brought under the injurious-pricing procedures of the OECD agreement, but the vessel must call on a U.S. port for an antidumping or countervailing-duty charge to be brought under the bill.<sup>155</sup>

The bill does not amend title VII other than to make ships amenable to antidumping and countervailing-duty actions. Therefore, the eight generalized subsidy practices proscribed in the certification provisions of the bill<sup>156</sup> (which parallel the OECD draft agreement) do not necessarily apply to proposed section 771C of the Tariff Act. If passed, the bill would adopt current USITC and Commerce practice in conducting countervailing-duty investigations.

There are other differences between the bill and the OECD draft agreement in the definition of certain terms concerning injurious-pricing charges and dumping allegations. For example, the draft agreement addresses certain issues that are not included in existing antidumping law and, thus, are not incorporated into the bill, such as--

- suspending an injurious-pricing action if a pending investigation in another signatory country is already proceeding;
- a "hidden injurious pricing" provision;
- "multiple currency practices" as a form of injurious pricing;
- a requirement that for entities to bring charges, they must have tendered a bid that substantially met bid specifications or that they prove demonstrable efforts to conclude a sale; and
- inclusion of so-called "third-party dumping" cases.

#### Phase out Periods

The bill specifies that the date of enactment is the date after which any granted subsidies may be challenged under the bill's certification provisions. Section 105 of the bill, which amends the antidumping and

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<sup>154</sup> Annex III, art. 5, par. 4. The bill also requires that a sale be made to a "United States person" under 46 U.S.C. 12102, whereas the draft agreement addresses sales to entities with an "ownership interest" or "controlling interest" in the ship buyer.

<sup>155</sup> Indeed, the agreement specifies that an injurious-pricing charge must be initiated within 1 year of the date the shipbuilder delivers the vessel presumably regardless of whether that vessel has called on the port of the party initiating the charge. Annex III, art. 2, par. 1.

<sup>156</sup> H.R. 2056, sec. 103, adding sec. 435D(a)(5)(A)-(H) of the Tariff Act.

countervailing-duty laws, also becomes effective upon date of enactment.<sup>157</sup> The OECD draft agreement will become effective when it enters into force. All proscribed measures and practices listed in annex I of the draft agreement are to be eliminated when the agreement enters into force. However, specific dates for the phasing out of some particular assistance schemes by certain signatory countries are noted in annex II of the draft agreement. Many of the phaseout dates for particular programs of each signatory are staggered, thereby potentially lessening the disruptive impact of eliminating subsidy practices abruptly.

#### Effect on U.S. Programs

Whereas H.R. 2056 implements a unilateral approach, the OECD negotiations rely on a multilateral approach. Thus, to secure an agreement, U.S. negotiators may have to concede that certain U.S. programs that stimulate domestic shipbuilding will be prohibited. Although the U.S. delegation to the OECD negotiations has indicated its unwillingness to eliminate the domestic-build requirements of the Jones Act (including the Anti-Reflagging Act),<sup>158</sup> a final agreement might require elimination of certain domestic programs. The draft agreement specifically indicates that all U.S. domestic build, rebuild, reconstruction, or repair requirements will be prohibited under annexes I and II of the agreement.<sup>159</sup> In an attempt to parallel these requirements of the

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<sup>157</sup> Some interested parties have testified that it is unclear whether the countervailing-duty provisions of the bill are prospective only and are not retroactive. They point out that the Department of Commerce could amortize the cost advantages and subsidy benefits of subsidized capital goods with long useful lives well beyond the enactment date of the bill to make it retroactive with respect to a particular case. USITC, hearing on investigation No. 332-316, Washington, DC, Jan. 24, 1992 (prehearing statement of the Transportation Institute).

The House Committee on Merchant Marine and Fisheries ended any possibility of a retroactive application of the bill by applying the title VII provisions only to vessels "built or repaired under a contract entered into after the date of enactment." H.R. 2056, sec. 105, adding sec. 771C(b) to the Tariff Act.

<sup>158</sup> Hearings Before Subcomm. on Merchant Marine (Statement of Donald Phillips, Assistant USTR).

<sup>159</sup> The annexes to the draft agreement specifically mention the Home Building requirement of title XI of the Merchant Marine Act of 1936 (the "act"); the U.S. build and reconstruction requirements for the Capital Construction Fund in section 607 of the act (46 App. U.S.C. 1177; and 26 U.S.C. 7518(i)); the U.S. build requirements for the Capital Reserve Fund in section 511 of the act (46 App. U.S.C. 1161); the Cargo preference, 3-year waiting rule for U.S.-reflagged, foreign-built vessels to be eligible to carry preference cargoes in section 901(b) of the act (46 App. U.S.C. 1241); dredges dredging in the U.S. waters (46 App. U.S.C. 292); trade-in of obsolete vessels for credit for construction of new vessels in section 510(b) of the act (46 App. U.S.C. 1160(b)); trade-in of vessels for the National Defense Reserve Fleet in section 510(i) of the act (46 U.S.C. 1160(i)); operating differential  
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draft agreement, H.R. 2056 makes similar changes to U.S. ship construction subsidy programs.<sup>160</sup> Chapter 3 of this report describes in more detail the operation of these programs.

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<sup>159</sup> (...continued)

subsidy in section 601 of the act (46 U.S.C. 1171); and nonemergency repairs for ODS vessels in section 606(6) of the act (46 App. U.S.C. 1176(6)). OECD Agreement, note on U.S. Domestic Build, Rebuild, Repair attached to annexes I and II. The delegation from Norway has also requested that the U.S. delegation clarify that the Anti-Reflagging Act is included within these measures. Ibid.

<sup>160</sup> H.R. 2056, sec. 106, amending the Merchant Marine Act of 1936.





## CHAPTER 5. THE EFFECTS OF H.R. 2056 AND THE OECD DRAFT AGREEMENT

The elimination of shipbuilding and repair subsidies or the requirement that they be countervailed would increase the costs of new ships and repair services for ships that serve U.S. ports. These higher costs would result in higher costs of shipping and higher delivered prices for U.S. exports and imports. The Commission estimated the effects that enactment of H.R. 2056 and adoption of the draft OECD agreement are likely to have on the U.S. shipbuilding and repair industry, on U.S. exports and imports, on U.S. port operations, and on U.S. shipowners. The estimated effects on exports and imports, port operations, and shipowners are long-run effects for a representative year when H.R. 2056 or the draft OECD agreement applies to all ships serving U.S. ports. The methodology used to estimate these effects is described in appendix C.

### THE VALUE OF FOREIGN SUBSIDIES

The Commission estimated the value of subsidies provided by foreign governments using a methodology similar to that used by the U.S. Department of Commerce in U.S. countervailing-duty investigations.<sup>161</sup> In making this calculation, the Commission did not seek to identify possible subsidies on its own but instead based its calculation on practices identified as subsidies by the OECD and the Shipbuilders Council of America (Shipbuilders Council or SCA).<sup>162</sup>

A monetary value was estimated for each identified subsidy provided by the three leading ship producers--Japan, Germany, and Korea--in 1989, the base year for this analysis. These subsidies include export and home credits, research and development aid, restructuring investment aid, and certain direct subsidies. The total value of subsidies provided by each country was then divided by the total value of ships produced and repairs made in order to determine a subsidy rate. The rates for the three representative countries were subsequently averaged with value weights to estimate an average subsidy rate for foreign suppliers.

The Commission made two estimates of the average subsidy rate. One estimate is based on data obtained from the OECD,<sup>163</sup> which form the basis of the current negotiations for an international agreement. The other is based on data obtained from the Shipbuilders Council. The Shipbuilders Council data overstates the value of some of the subsidies, as explained in appendix C. Using the OECD data the Commission estimated an average subsidy rate of 5.9

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<sup>161</sup> 54 F.R. 2336 (1989).

<sup>162</sup> Nothing in this chapter should be construed to indicate what the Commission believes might be a countervailable subsidy under current U.S. law or under U.S. law if H.R. 2056 is enacted or to indicate what the Commission believes the U.S. Department of Commerce would find to be a countervailable subsidy or the amount of any such subsidy.

<sup>163</sup> OECD, "Measures of Assistance to Shipbuilding," 1991.

percent. Using the Shipbuilders Council data the Commission estimated an average subsidy rate of 23.5 percent.<sup>164</sup> These estimates are roughly comparable to the range of estimates of subsidy values presented by witnesses at the Commission's public hearing.<sup>165</sup>

Based on the two subsidy estimates, the Commission made two sets of estimates of the effects of eliminating subsidies under H.R. 2056 and the OECD draft agreement. Estimates based on the 5.9-percent rate are referred to as "OECD-based estimates" and those based on the rate of 23.5 percent are referred to as "SCA-based estimates."

#### EFFECTS ON U.S. SHIPYARDS

The elimination of foreign subsidies would benefit U.S. shipyards if the resulting increase in prices for foreign ships or repair services is sufficient to offset the current cost disadvantage of U.S. shipyards. The Commission estimated the average cost differential between U.S.- and foreign-built ships by comparing competitive bids for ship construction contracts of the type covered by H.R. 2056 and the proposed agreement. The bids analyzed were from the period 1989-91. Among them, the lowest bid by a U.S. shipbuilder was, on average, 97 percent higher than the lowest bid by a foreign shipbuilder. The lowest U.S. bid price was above the lowest foreign bid price in every case.<sup>166</sup>

Because H.R. 2056 would eliminate subsidies only on ships serving U.S. ports, it would result in an increase in effective prices for ships and repair services. The Commission estimates that, for ships serving U.S. ports, ship prices and repair costs would increase by an amount comparable to the full value of the subsidies that are eliminated. Because the draft OECD agreement would eliminate subsidies worldwide, it would reduce world demand for ships and repair services. With lower world demand, some of the cost of lost subsidies would be absorbed by foreign shipyards, thus mitigating the increase in prices for ships serving U.S. ports. The Commission estimates that under the OECD draft agreement the cost of ships and repair services would increase

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<sup>164</sup> SCA, "Update on World Shipbuilding Subsidies," Mar. 1991.

<sup>165</sup> USITC, hearing on investigation No. 332-316, The Shipbuilding Trade Reform Act of 1991: Likely Economic Effects of Enactment, Washington DC, Jan. 24, 1992.

<sup>166</sup> The Commission encouraged all interested persons to submit information on competitive bids for contracts to construct ships that would be covered by H.R. 2056. The Commission received information on bids for 15 such ships from the American Institute of Merchant Shipping and the Federation of American Controlled Shipping, which formed the basis for this analysis. Information on bids for two contracts was also received from the Shipbuilders Council but pertained to ships that would not be covered under H.R. 2056. The 15 ships covered a range of sizes and values. The Commission believes that an estimation of the average difference between U.S. and foreign ship construction costs based on them is not biased against U.S. shipbuilders.

by an amount equal to 72 percent of the value of the subsidies that would be eliminated.

Based on this analysis and using the SCA data, the Commission estimates that enactment of H.R. 2056 would increase prices for foreign ships that serve U.S. ports by 23.5 percent on average and adoption of the draft OECD agreement would raise foreign ship prices by 16.9 percent on average. Because the SCA subsidy estimates overstate the actual benefits from the subsidy programs, the actual price increases are likely to be somewhat less than these amounts. Using the OECD data, the Commission estimates that H.R. 2056 would increase foreign ship prices on average by 5.9 percent and the OECD agreement would increase them by 4.3 percent.

Because the estimated increase in foreign prices is substantially less than the estimated U.S. cost disadvantage, the Commission concludes that neither enactment of H.R. 2056 nor adoption of the draft agreement would, by itself, make U.S. shipbuilders competitive with foreign shipbuilders. To become competitive, U.S. shipbuilders would also have to decrease their costs relative to foreign producers by more than one-third, even in the most generous estimation of the benefits of subsidy elimination.

One qualification should be noted. The Commission's analysis of cost differences is based on averages. Actual cost differences are probably less or greater for specific kinds of ships. Consequently, the U.S. shipbuilding industry may be closer to being competitive for some ships than for others and some yards may be closer to being competitive than others.<sup>167</sup>

In addition, neither the provisions of H.R. 2056 nor the OECD draft agreement would likely make the United States internationally competitive in ship repairing. Most foreign subsidies are for ship building and not for ship repairs. Consequently, the elimination of subsidies would cause a smaller increase in foreign costs for repairs than for building ships. Furthermore, emergency repairs would be excluded from the nonsubsidization provisions of H.R. 2056 and the OECD agreement. U.S. yards are substantially more expensive than foreign yards for repair work. Even with the 50-percent tariff on repairs to U.S.-flag vessels already in force, the U.S. fleet (including Jones Act vessels) is maintained substantially in foreign yards.<sup>168</sup>

#### THE EFFECTS OF ELIMINATING SUBSIDIES ON SHIPPING COSTS

The increase in ship prices and repair costs would increase the cost of shipping goods to and from the United States. The Commission produced three estimates of the higher shipping costs based on the estimated increases in ship and repair costs and on the value added of ships and repairs in shipping services. Information on the value added was obtained from the U.S. Maritime

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<sup>167</sup> Industry officials have indicated to USITC staff that they believe they are nearly competitive for certain ships at the present time.

<sup>168</sup> USITC staff conversation with representative of a U.S. oil company operating Jones Act vessels, May 1992.

Administration. The Commission estimates that H.R. 2056 would increase shipping costs by between 1.1 and 4.2 percent for goods transported in liners, by 2.7 to 10.6 percent for liquid bulk, and by 1.8 to 7.0 percent for dry bulk.

### TRADE EFFECTS

The Commission estimated the effects of increased shipping costs on U.S. exports and imports based on both the direct effects of higher costs and the indirect effects from the economy's adjustment to these costs. The most important indirect effect is a loss in the real value of production and income resulting from an effective reduction in the United States' "terms of trade" with the rest of the world.

The "terms of trade" is the rate at which U.S. exports exchange for imports with the rest of the world. Put another way, it is the average price of exports divided by the average price of imports. Increased shipping costs would reduce the pre-delivered prices (f.o.b.) of U.S. exports and would increase the delivered prices (c.i.f.) of U.S. imports, effectively reducing the U.S. terms of trade. U.S. consumers would pay more for imports, and U.S. producers would pay more for imported inputs and receive less for exports.

Through direct and indirect effects, higher shipping costs would reduce U.S. merchandise imports and exports. Consumers would shift towards cheaper goods produced domestically. U.S. producers would shift their marketing towards the more lucrative domestic market and the services export market.

The Commission's estimates of effects on exports and imports and the operations of U.S. ports are given in tables 5-1 to 5-4. These estimates are divided into effects on trade in merchandise and trade in services. This division was made because shipping costs would increase for merchandise trade, which requires physical transport, but not for services, which do not. The Commission estimated effects for four merchandise sectors and five service sectors. It also estimated effects for 17 narrowly defined, or "detail" industries, in which shipping is an especially large portion of delivered value and, therefore, the effects of higher shipping costs are likely to be greatest in relative terms. The 17 detail industries were removed from the 4 merchandise sectors for this analysis. Collectively, the 17 detail industries, 4 merchandise sectors, and 5 service sectors represent the entire U.S. economy. The estimates are reported in 1989 dollars and are based on 1989 trade levels. They represent quantities valued at base period prices.<sup>169</sup>

#### H.R. 2056

The Commission estimates that the enactment of H.R. 2056 would decrease U.S. exports of merchandise by \$27 million based on the OECD data (\$56 million

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<sup>169</sup> Because prices are likely to change under either H.R. 2056 or the draft OECD agreement, the sum change in the estimated effects on exports and imports does not correspond to the effects on the nominal trade balance.

based on the SCA data). This decrease would represent 0.01 percent (0.02 percent) of total U.S. merchandise exports. Exports of services, however, would be expected to increase by \$46 million (\$282 million), representing 0.04 percent (0.23 percent) of total U.S. service exports. In specific sectors and industries, exports of most merchandise categories would be expected to decline if H.R. 2056 is enacted, especially exports of bulk commodities for which shipping is an especially high share of total value. Exports of durable manufactures, for which shipping is generally a low share of value,<sup>170</sup> would be expected to increase by \$70 million (\$251 million). Nondurable manufacturing exports would likely rise by \$14 million (\$46 million) under H.R. 2056. Exports of agriculture, fishing, and forestry products would be expected to decrease by \$56 million (\$163 million), of coal by \$25 million (\$87 million), refined petroleum products by \$9 million (\$36 million), animal or vegetable fats and oils by \$7 million (\$25 million), and edible fruits and nuts by \$6 million (\$24 million).

The effect of enactment of H.R. 2056 on U.S. imports would be unambiguously negative. According to the Commission's estimates, U.S. imports of merchandise would decrease by \$164 million (\$1.1 billion), representing 0.03 percent (0.23 percent) of total U.S. merchandise imports. Imports of services would decrease by \$30 million (\$184 million), representing 0.03 percent (0.20 percent) of total U.S. service imports. Imports would decrease in durable manufactures by \$68 million (\$582 million), in nondurable manufactures by \$26 million (\$234 million), in crude petroleum by \$13 million (\$69 million), in refined petroleum products by \$14 million (\$53 million), and in transportation, communications, and utilities by \$15 million (\$96 million).

### The Proposed OECD Agreement

The effects of eliminating subsidies under the proposed OECD agreement would be similar to those under H.R. 2056 but would generally be smaller. U.S. exports of merchandise would decrease by \$21 million according to the OECD-based estimates (\$26 million according to the SCA-based estimates). This decrease would represent 0.01 percent of total U.S. merchandise exports. Exports of services would increase by \$33 million (\$234 million), representing 0.03 percent (0.19 percent) of total service exports. Imports of merchandise would decrease by \$125 million (\$959 million), representing 0.03 percent (0.19 percent) of merchandise imports. Imports of services would decrease by \$21 million (\$154 million), representing 0.2 percent (0.16 percent) of service imports.

In the specific sectors and industries, the Commission estimates that exports would increase or remain unchanged in the five traded service sectors studied. Exports would increase in durable manufactures by \$51 million (\$174 million) and in nondurable manufactures by \$10 million (\$31 million). Exports

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<sup>170</sup> Because manufactured goods have been processed, they have no excess weight and tend to have high value relative to their bulk.

Table 5-1

Effects of H.R. 2056 on U.S. exports, by sectors, SCA- and OECD-based estimates

Sector	<u>SCA-based estimate<sup>1</sup></u>		<u>OECD-based estimate<sup>2</sup></u>	
	Million dollars	Percent	Million dollars	Percent
Merchandise:				
Industry sectors: <sup>3</sup>				
Agriculture, fishing, & forestry...	-163.00	-0.74	-56.00	-0.25
Mining.....	0.65	0.03	-0.34	-0.02
Nondurable manufacturing.....	46.00	0.06	14.00	0.02
Durable manufacturing.....	251.00	0.11	70.00	0.03
Detail industries:				
Edible fruits & nuts.....	-24.00	-1.81	-6.00	-0.44
Coal.....	-87.00	-1.73	-25.00	-0.49
Crude petroleum & natural gas.....	-0.29	-0.21	-0.07	-0.05
Meat.....	-10.00	-0.19	-3.00	-0.06
Flour & other grain mill products..	-1.00	-0.34	-0.43	-0.10
Sugar & sugar products.....	-1.00	-0.28	-0.43	-0.08
Chocolate & cocoa products.....	-0.26	-0.10	-0.09	-0.03
Animal or vegetable fats & oils....	-25.00	-0.82	-7.00	-0.23
Oilseeds.....	-8.00	-0.17	-4.00	-0.08
Coffee.....	0.19	0.09	0.73	0.36
Furniture & lamps.....	-0.05	-0.00	-0.02	-0.00
Fertilizers.....	-0.09	-0.25	-0.02	-0.06
Refined petroleum products.....	-36.00	-0.61	-9.00	-0.16
Rubber products.....	-0.41	-0.03	-0.13	-0.01
Stone, ceramic, & glass products...	0.60	0.02	-0.10	-0.00
Steel & steel products.....	2.00	0.06	-0.25	-0.01
Toys & athletic goods.....	0.02	0.00	-0.14	-0.01
Total, U.S. merchandise exports..	-55.63	-0.02	-27.28	-0.01
Services:				
Transportation, communications, & utilities.....	130.00	0.24	20.00	0.04
Wholesale & retail trade.....	0.00	0.00	0.00	0.00
Finance, insurance, & real estate....	27.00	0.23	5.00	0.04
Construction.....	0.00	0.00	0.00	0.00
Other services.....	125.00	0.23	21.00	0.04
Total, U.S. services exports.....	282.00	0.23	46.00	0.04

<sup>1</sup> Based on data provided by the Shipbuilders Council of America.<sup>2</sup> Based on OECD data.<sup>3</sup> Detail industries not included.

Note.--All estimates are in 1989 dollars and are based on 1989 export levels.

Source: Estimated by the staff of the U.S. International Trade Commission.

Table 5-2

Effects of H.R. 2056 on U.S. imports, by sectors, SCA- and OECD-based estimates

Sector	SCA-based estimate <sup>1</sup>		OECD-based estimate <sup>2</sup>	
	Million dollars	Percent	Million dollars	Percent
Merchandise:				
Industry sectors: <sup>3</sup>				
Agriculture, fishing, & forestry...	-26.00	-0.32	-6.00	-0.07
Mining.....	-12.00	-0.48	-3.00	-0.10
Nondurable manufacturing.....	-234.00	-0.23	-26.00	-0.03
Durable manufacturing.....	-582.00	-0.21	-68.00	-0.03
Detail industries:				
Edible fruits & nuts.....	-14.00	-0.47	-3.00	-0.10
Coal.....	-0.26	-0.22	-0.07	-0.06
Crude petroleum & natural gas.....	-69.00	-0.18	-13.00	-0.04
Meat.....	-30.00	-0.92	-6.00	-0.20
Flour & other grain mill products..	-3.00	-0.91	-0.69	-0.24
Sugar & sugar products.....	0.00	0.00	0.00	0.00
Chocolate & cocoa products.....	-0.85	-0.14	-0.24	-0.04
Animal or vegetable fats & oils....	-5.00	-0.68	-1.00	-0.15
Oilseeds.....	-0.34	-0.32	-0.09	-0.09
Coffee.....	-1.00	-0.76	-0.27	-0.15
Furniture & lamps.....	-8.00	-0.11	-2.00	-0.03
Fertilizers.....	-3.00	-0.30	-0.69	-0.06
Refined petroleum products.....	-53.00	-0.33	-14.00	-0.09
Rubber products.....	-5.00	-0.08	-1.00	-0.02
Stone, ceramic, & glass products...	-37.00	-0.51	-7.00	-0.10
Steel & steel products.....	-32.00	-0.25	-9.00	-0.07
Toys & athletic goods.....	-28.00	-0.33	-3.00	-0.03
Total, U.S. merchandise exports..	-1,143.45	-0.23	-164.05	-0.03
Services:				
Transportation, communications, & utilities.....	-96.00	-0.19	-15.00	-0.03
Wholesale & retail trade.....	0.00	0.00	0.00	0.00
Finance, insurance, & real estate....	-9.00	-0.23	-2.00	-0.04
Construction.....	0.00	0.00	0.00	0.00
Other services.....	-79.00	-0.21	-13.00	-0.03
Total, U.S. services exports.....	-184.00	-0.20	-30.00	-0.03

<sup>1</sup> Based on data provided by the Shipbuilders Council of America.<sup>2</sup> Based on OECD data.<sup>3</sup> Detail industries not included.

Note.--All estimates are in 1989 dollars and are based on 1989 export levels.

Source: Estimated by the staff of the U.S. International Trade Commission.

Table 5-3

Effects of the draft OECD agreement on U.S. exports, by sectors, SCA- and OECD-based estimates

Sector	SCA-based estimate <sup>1</sup>		OECD-based estimate <sup>2</sup>	
	Million dollars	Percent	Million dollars	Percent
Merchandise:				
Industry sectors: <sup>3</sup>				
Agriculture, fishing, & forestry...	-101.00	-0.46	-40.00	-0.18
Mining.....	0.90	0.04	-0.58	-0.03
Nondurable manufacturing.....	31.00	0.04	10.00	0.01
Durable manufacturing.....	174.00	0.08	51.00	0.02
Detail industries:				
Edible fruits & nuts.....	-15.00	-1.13	-6.00	-0.46
Coal.....	-62.00	-1.24	-19.00	-0.37
Crude petroleum & natural gas.....	-0.22	-0.16	-0.08	-0.06
Meat.....	-7.00	-0.13	-3.00	-0.07
Flour & other grain mill products..	-0.97	-0.22	-0.35	-0.08
Sugar & sugar products.....	-0.97	-0.19	-0.28	-0.05
Chocolate & cocoa products.....	-0.17	-0.06	-0.05	-0.02
Animal or vegetable fats & oils....	-18.00	-0.59	-3.00	-0.11
Oilseeds.....	-3.00	-0.06	-3.00	-0.05
Coffee.....	0.43	0.21	0.82	0.41
Furniture & lamps.....	0.01	0.00	-0.03	-0.00
Fertilizers.....	-0.05	-0.15	-0.02	-0.05
Refined petroleum products.....	-26.00	-0.44	-7.00	-0.12
Rubber products.....	-0.28	-0.02	-0.07	-0.01
Stone, ceramic, & glass products...	0.47	0.02	-0.01	-0.00
Steel & steel products.....	2.00	0.06	-0.50	-0.01
Toys & athletic goods.....	0.03	0.00	-0.07	-0.00
Total, U.S. merchandise exports..	-25.83	-0.01	-21.21	-0.01
Services:				
Transportation, communications, & utilities.....	108.00	0.20	15.00	0.03
Wholesale & retail trade.....	0.00	0.00	0.00	0.00
Finance, insurance, & real estate....	23.00	0.19	3.00	0.03
Construction.....	0.00	0.00	0.00	0.00
Other services.....	103.00	0.19	15.00	0.03
Total, U.S. services exports.....	234.00	0.19	33.00	0.03

<sup>1</sup> Based on data provided by the Shipbuilders Council of America.<sup>2</sup> Based on OECD data.<sup>3</sup> Detail industries not included.

Note.--All estimates are in 1989 dollars and are based on 1989 export levels.

Source: Estimated by the staff of the U.S. International Trade Commission.



Table 5-4

Effects of the draft OECD agreement on U.S. imports, by sectors, SCA- and OECD-based estimates

Sector	SCA-based estimate <sup>1</sup>		OECD-based estimate <sup>2</sup>	
	Million dollars	Percent	Million dollars	Percent
Merchandise:				
Industry sectors: <sup>3</sup>				
Agriculture, fishing, & forestry...	-20.00	-0.25	-5.00	-0.07
Mining.....	-10.00	-0.38	-2.00	-0.09
Nondurable manufacturing.....	-205.00	-0.20	-19.00	-0.02
Durable manufacturing.....	-508.00	-0.18	-50.00	-0.02
Detail industries:				
Edible fruits & nuts.....	-10.00	-0.34	-3.00	-0.09
Coal.....	-0.19	-0.16	-0.05	-0.04
Crude petroleum & natural gas.....	-55.00	-0.14	-13.00	-0.03
Meat.....	-24.00	-0.72	-6.00	-0.18
Flour & other grain mill products..	-2.00	-0.68	-0.36	-0.12
Sugar & sugar products.....	0.00	0.00	0.00	0.00
Chocolate & cocoa products.....	-0.61	-0.10	-0.13	-0.02
Animal or vegetable fats & oils....	-4.00	-0.52	-0.63	-0.08
Oilseeds.....	-0.25	-0.23	-0.02	-0.02
Coffee.....	-1.00	-0.62	-0.25	-0.14
Furniture & lamps.....	-6.00	-0.08	-0.38	-0.01
Fertilizers.....	-2.00	-0.20	-0.58	-0.05
Refined petroleum products.....	-40.00	-0.25	-7.00	-0.05
Rubber products.....	-4.00	-0.06	-0.24	-0.00
Stone, ceramic, & glass products...	-24.00	-0.34	-6.00	-0.09
Steel & steel products.....	-23.00	-0.18	-9.00	-0.07
Toys & athletic goods.....	-20.00	-0.23	-2.00	-0.02
Total, U.S. merchandise exports..	-959.05	-0.19	-124.63	-0.03
Services:				
Transportation, communications, & utilities.....	-80.00	-0.15	-11.00	-0.02
Wholesale & retail trade.....	0.00	0.00	0.00	0.00
Finance, insurance, & real estate....	-8.00	-0.19	-1.00	-0.03
Construction.....	0.00	0.00	0.00	0.00
Other services.....	-66.00	-0.17	-9.00	-0.03
Total, U.S. services exports.....	-154.00	-0.16	-21.00	-0.02

<sup>1</sup> Based on data provided by the Shipbuilders Council of America.<sup>2</sup> Based on OECD data.<sup>3</sup> Detail industries not included.

Note.--All estimates are in 1989 dollars and are based on 1989 export levels.

Source: Estimated by the staff of the U.S. International Trade Commission.

would decrease in agriculture, fishing, and forestry by \$40 million (\$101 million), in coal by \$19 million (\$62 million), refined petroleum products by \$7 million (\$26 million), animal or vegetable fats and oils by \$3 million (\$18 million), and edible fruit and nuts by \$6 million (\$15 million).

The effect on imports would be negative in nearly all sectors. Imports would decrease in durable manufactures by \$50 million (\$508 million), nondurable manufactures by \$19 million (\$205 million), crude petroleum by \$13 million (\$55 million), and refined petroleum products by \$7 million (\$40 million).

Overall, the Commission estimates that the reduction in real National Income resulting from the decline in the U.S. terms of trade under H.R. 2056 would be \$350 million annually by the OECD-based estimate and \$2.5 billion by the SCA-based estimate. If the draft OECD agreement were adopted, the reduction in real National Income would be \$264 million annually by the OECD-based estimate and \$2.1 billion by the SCA-based estimate.<sup>171</sup> All estimates are in 1989 dollars.

All of the Commission's estimates are of long-term effects for a representative year in which H.R. 2056 or the draft OECD agreement would apply to all ships that serve U.S. ports. Initially the effects would be much smaller because of the "grandfather" provisions that exempt from countervailing measures ships built and repairs made before a specified date. As the exempted fleet ages and new ships replace old ones and new repairs are made, the effects can be expected to increase and eventually reach the levels estimated.

#### EFFECTS ON U.S. PORTS

The effects of H.R. 2056 and the draft OECD agreement on U.S. trade provide a basis for estimating the likely effects on U.S. ports, whose prosperity depends on the volume of exports and imports passing through them. The higher costs of foreign ships and repair services would decrease port traffic under either program. The ports would potentially lose traffic for two reasons. One is the reduction in U.S. trade; the other is the transshipment of traded goods through third countries.

H.R. 2056 would create an incentive for possible transshipment by raising the costs of shipping through U.S. ports but not through ports in Canada, Mexico, or other countries. The draft OECD agreement would not create this incentive, because it would raise the costs of shipping through ports in other countries as well as in the United States.

U.S. ports have already lost competitiveness because of taxes recently imposed on vessels entering them, including the harbor maintenance tax, vessel tonnage tax, and direct and indirect U.S. Coast Guard user fees. The U.S. Maritime Administration indicated in a recent report that around \$10 billion of U.S.-bound trade with third countries is shipped through Canadian ports annually; that in 1989, 5.2 million tons of U.S.-destined cargo were shipped through Canadian ports; and that these Canadian transshipments accounted for more than 5.2 percent of the total estimated movements of

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<sup>171</sup> The reduction in real National Income is measured in what is known technically as the equivalent variation.

liner services, up from about 3.0 percent in 1985. Given the apparent substitutability of ports, U.S. port operators have been concerned about additional diversions that might result from the enactment of H.R. 2056.<sup>172</sup> Transshipments might be made through Mexico as well. According to industry sources, the Government of Mexico is encouraging millions of dollars of investment to modernize its ports and make them more accessible for U.S. bound or originated cargo.

The extent to which transshipment would occur depends on the proximity of competing ports and on port capacity. It has been argued that these factors may limit transshipment. However, the experience of the Great Lakes and Pacific Northwest ports with the recent port-related taxes suggests that some transshipment is likely. According to testimony of various U.S. port representatives, because certain commodities such as agricultural products are extremely price sensitive, a slight difference in price attributable to fees and taxes can divert business away from certain U.S. ports. One representative suggested that exports from his port declined dramatically in 1991 following the imposition of new trade taxes, and that the exports of Thunder Bay, a competing Canadian port, rose significantly.<sup>173</sup>

The Commission made a rough estimate of the value of trade that would be transshipped through non-U.S. ports under H.R. 2056 using the methodology described in appendix C. Combining these estimates with the estimates of the effects of eliminating subsidies on U.S. merchandise trade, the Commission estimated the effects of H.R. 2056 and the OECD draft agreement on U.S. ports. The results are shown in tables 5-5 and 5-6.

According to the Commission's estimates, enactment of H.R. 2056 would decrease annual U.S. port activity by \$4.6 billion (\$18.6 billion) when fully effective. Employment in U.S. ports would decrease by 633 (2,559) full-time-equivalent persons. This decrease would represent a 0.72 percent (2.92 percent) decline in total merchandise traffic in U.S. ports. Adoption of the draft OECD agreement would decrease annual U.S. port activity by \$146 million (\$985 million) when fully effective and would lead to a decrease in employment of 20 (135) full-time-equivalent persons. This would represent a 0.02 percent (0.15 percent) decline in total merchandise traffic. While the estimated changes are small relative to overall U.S. port traffic, the impact of these changes will likely be concentrated in the Pacific Northwest and Great Lakes ports.

In addition to diverting cargo to foreign ports, H.R. 2056 might decrease the number of cruise ships that call at U.S. ports. U.S. cruise ports are close to foreign ports that also offer cruise passenger services. For example, cruise passengers that might otherwise fly to Florida or Washington State for embarkation could easily fly to a Caribbean or Canadian port. Cruise passengers destined for cruises that call at Alaskan ports are already diverted through Vancouver for embarkation because of Jones Act restrictions, which also apply to the passenger

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<sup>172</sup> Jean Godwin, American Association of Port Authorities, transcript of the USITC hearing, p. 2.

<sup>173</sup> Hearings on the Impact of User Fees on the Maritime Industry Before the Subcomm. on Oversight and Investigations, House Comm. on Merchant Marine and Fisheries, May 23, 1991 (Statements of representatives from the Seaway Port Authority of Duluth, and the National Association of Maritime Organizations).

trade. The loss of the cruise trade business in U.S. ports would have a significant economic impact on the South Florida region in particular.

Table 5-5

Reduction in merchandise traffic in U.S. ports expected from H.R. 2056 and the draft OECD agreement, OECD- and SCA-based estimates

(In million 1989 dollars)

Program	SCA-based estimate	OECD-based estimate
H.R. 2056.....	18,639	4,611
OECD draft agreement.....	985	146

Source: Estimated by staff of the U.S. International Trade Commission

Table 5-6

Reduced employment in U.S. ports expected from H.R. 2056 and the draft OECD agreement, OECD- and SCA-based estimates

(In full-time-equivalent employees)

Program	SCA-based estimate	OECD-based estimate
H.R. 2056.....	2,559	633
OECD draft Agreement.....	135	20

Source: Estimated by staff of the U.S. International Trade Commission

## EFFECTS ON U.S. SHIPOWNERS

### Shipowners Engaged in International Trade

To analyze the effects of H.R. 2056 on shipowners, it is necessary to distinguish between new ships, which would be subject to the law's countervailing provisions, and existing, or "old," ships. Because of the competitiveness of the shipping industry, shipowners would not buy new ships unless the additional costs for ships, countervailing duties, and administration could be passed either forward to consumers or backwards to shipyards. The revenues of shipowners would be reduced by any reduction in trade volume resulting from H.R. 2056 or the proposed OECD agreement.

However, H.R. 2056 might have both positive and negative effects on shipowners through their ownership of old ships. Because the effective cost of new ships that serve U.S. ports would increase, the value of old ships would also increase, thereby benefiting shipowners. However, because these ships represent a "sunk cost" that cannot be recovered beyond their resale

value, the shipowners might absorb some of the costs imposed by H.R. 2056. In particular, the additional costs of repairing old ships, and the administrative costs of documenting their status with respect to H.R. 2056, could be absorbed by shipowners. Therefore, shipowners might absorb some of the increased costs resulting from H.R. 2056, which would tend to offset the gain from the higher value of old ships.

If the proposed OECD agreement were adopted instead, the value of shipowners' old ships would increase, but probably not by as much as under H.R. 2056 because the increase in the cost of new ships would not be as great. Old ships would probably cost owners more in repair costs but not in administrative costs, because none would be imposed.

Although H.R. 2056 would apply to all ships serving U.S. ports and the draft OECD agreement would apply to virtually all ships worldwide, both programs would tend to put U.S. shipowners and operators at a disadvantage in relation to foreign shipowners. The increase in the value of old ships will depend on the extent of resulting higher repair costs. A disadvantage would result from the fact that the U.S. cargo fleet is significantly older, on average, than most foreign fleets and will need these repairs sooner. In addition, because U.S. owners are likely to have a greater concentration of their operations serving U.S. ports they are likely to have less flexibility to shift operations away from the United States to avoid the costs imposed by H.R. 2056 than would foreign shipowners.

U.S. shipowners also maintain that because of its unilateral nature, enactment of H.R. 2056 might provoke foreign governments to retaliate against U.S. carriers but that no retaliation would be provoked by adoption of the proposed OECD agreement, because it would be a multilateral action.

#### **Shipowners Engaged in Trade Within the United States**

Shipowners engaged in trade within the United States are not expected to be affected greatly under either H.R. 2056 or the proposed OECD agreement. These shipowners currently operate under the provisions of the Jones Act. They have bought and will continue to buy ships from U.S. shipbuilders and are protected from competition from foreign-built ships with or without H.R. 2056 or the proposed OECD agreement. The increase in foreign ship costs therefore would not affect them.

H.R. 2056 or the proposed OECD agreement could, however, affect these shipowners through repair costs. Jones Act ships are sometimes repaired in foreign shipyards. At least part of the additional costs would probably be passed on to consumers because the law would affect all Jones Act shipowners in the same way. Overall, it is expected that the effects of either H.R. 2056 or the proposed OECD agreement on shipowners engaged in trade within the United States would be small.

## Owners of Cruise Ships

Most cruise vessels are foreign flag and foreign built. Since the majority of these types of highly specialized vessels are built in European yards that operate with the aid of various subsidy programs, replaced or newly built vessels in these trades will be affected by H.R. 2056. Because the industry is expanding rapidly, more vessels will be affected by H.R. 2056 than replacement rates alone would indicate. Cruise vessels also have the ability to relocate their home port in order to avoid the restrictions of H.R. 2056. It is not necessary for cruise vessels to dock at U.S. ports to pick up passengers. They could simply relocate their home port, and passengers would fly to the port of embarkation. If some foreign cruise lines were to do this, competing U.S. shipowners (foreign flag but U.S. owned) would have to do the same or suffer a loss in competitiveness because of higher costs.

APPENDIX A

LETTERS OF REQUEST AND FEDERAL REGISTER NOTICES OF  
INSTITUTION OF INVESTIGATION

ONE HUNDRED SECOND CONGRESS  
SEN. ROBERT C. BYRD, CHAIRMAN

SAM W. COCHRAN, FLORIDA  
J. J. PICKLE, TEXAS  
CHARLES E. RANGEL, NEW YORK  
ROBERT BYRD, SEN. CHAIRMAN  
ANDY JACOBS, AL. MISSISSIPPI  
HAROLD E. FORD, TENNESSEE  
ED JENKINS, GEORGIA  
THOMAS J. DUNN, NEW YORK  
FRANK J. CANNON, NEW JERSEY  
WALLY BLISS, ALABAMA  
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ROBERT T. MATSUDA, CALIFORNIA  
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MICHAEL A. ARNOLD, TEXAS  
SANDOR H. LEVY, MICHIGAN  
JIM MOODY, WISCONSIN  
BERNARD L. CLEGG, MARYLAND  
JIM BROWDER, WASHINGTON

ROBERT J. LEONARD, CHIEF COUNSEL AND STAFF DIRECTOR

PHILIP D. MOSELEY, MINORITY CHIEF OF STAFF

COMMITTEE ON WAYS AND MEANS

U.S. HOUSE OF REPRESENTATIVES  
WASHINGTON, DC 20515

October 29, 1991

The Honorable Anne E. Brunsdale  
Acting Chairman  
U.S. International Trade Commission  
500 E Street, S.W.  
Washington, D.C. 20436

Dear Madam Chairman:

The Committee on Ways and Means recently ordered favorably reported, with amendments, H.R. 2056, the Shipbuilding Trade Reform Act of 1991. The legislation was developed in response to the failure of negotiations underway in the Organization for Economic Cooperation and Development (OECD) to conclude an international agreement to eliminate unfair trade practices in the shipbuilding and repair industries. The bill, as amended, is intended not to impede the flow of trade to or from the United States, but rather to ensure fair trade in commercial shipbuilding and ship repair by providing effective trade remedies against subsidized and dumped foreign commercial ships.

The Subcommittee on Trade, of course, did hold a public hearing on the legislation on July 9, 1991, and also received numerous written comments on the legislative proposal. Nevertheless, at the time of the Committee's consideration of H.R. 2056, some Members of the Committee expressed reservations about the likely impact of the legislation (for example, on U.S. ports).

In light of the continued concern of certain Members about the likely impact of this legislation, the Committee on Ways and Means hereby requests the International Trade Commission to conduct an investigation, pursuant to section 332(g) of the Tariff Act of 1930, as amended, on the likely economic effects of enactment of H.R. 2056, as amended by the Committee on Ways and Means.

This study should consist of:

- (1) an overview of the issues being addressed in the OECD shipbuilding negotiations, and a comparison of the differences between the approach being taken in the negotiations and the approach of H.R. 2056, as amended:



The Honorable Anne E. Brunsdale  
October 29, 1991  
Page Two

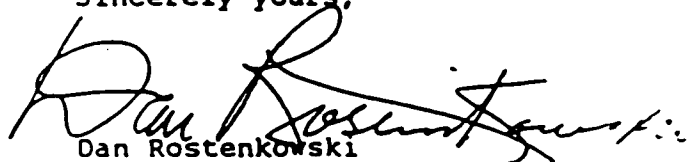
- (2) an overview of conditions in the U.S. shipbuilding and repair industry, including an assessment of government assistance provided, either directly or indirectly, to this industry under U.S. law;
- (3) an overview of conditions in the U.S. carrier industry, including an assessment of government assistance provided, either directly or indirectly, to this industry under U.S. law;
- (4) an evaluation and comparison of the likely economic effects of H.R. 2056, as amended, with the likely economic effects of an international agreement to eliminate unfair trading practices (modeled after the current OECD discussions), on those sectors affected by the elimination of unfair trading practices in shipbuilding, including:
  - the shipbuilding and repair industry
  - the carrier industry
  - U.S. ports
  - U.S. exporters and importers

This request for a section 332 investigation is separate and apart from the legislative schedule for H.R. 2056. The Committee on Ways and Means, as you know, has completed its consideration of the bill. Unless the OECD negotiations produce a satisfactory international agreement within the immediate future, the Committee intends to pursue consideration of the legislation by the full House. We will not seek any delay pending receipt of this study.

However, in light of the uncertainty of the ultimate fate of the legislation, I believe the ITC study will be of significant value to the Congress and the public. The Committee would appreciate receiving the study by April 27, 1992.

Thank you for your cooperation.

Sincerely yours,

  
Dan Rostenkowski  
Chairman

DR/jnj

economy-wide, multi-sector macroeconomic models. The research should take into account the effects of a NAFTA or FTA with Mexico on production, income, trade, employment, and prices.

(2) The papers must be transparent about technical methods employed to obtain the results presented. Papers must provide technical details about the methods employed and data employed to obtain results. This requirement is critical because the purpose of the symposium is to submit the methods and data to peer review.

Because scheduling will be tight, parties interested in presenting papers or participating as discussants should submit a curriculum vitae and description of the relevant research to Joseph Francois (202-205-3223) or Clinton Shiells (202-205-3223), Research Division, Office of Economics, U.S. International Trade Commission, before December 20, 1991. Funding has been made available for reimbursement of travel expenses and per diem, contingent on demonstrated need.

Discussants will be contracted with to provide detailed, written critiques of the papers reviewed. Papers must meet recognized academic standards for state of the art economy-wide policy modelling. It is also required that all papers be technically transparent, and provide technical details about the methods and data employed to obtain results. The final scheduling of papers and discussants will be made by Commission staff and will be published in a subsequent Federal Register notice. All papers must be provided to the Commission in a form ready for distribution 45 days prior to the symposium, and must meet the criteria outlined above.

**SYMPOSIUM:** The symposium will be held on February 24 and 25, 1992, at the U.S. International Trade Commission, 500 E Street, SW., Washington, DC. Members of the public may attend the symposium and there will be an opportunity for brief technical comments on the papers from the audience.

**PUBLIC HEARING:** Following the symposium, the Commission will hold a public hearing. The hearing will be held approximately 30 days after the symposium. The hearing date will be published in the Federal Register notice. The hearing will be held at the U.S. International Trade Commission, 500 E Street, SW., Washington, DC. The symposium is meant to provide a technical assessment of economy-wide modelling of a NAFTA or FTA with Mexico. The purpose of the hearing is to allow the public and discussants

additional opportunity to provide technical comments on the papers that have been discussed at the symposium. These papers will be contained in a preliminary report to be issued by the Commission prior to the symposium. Public submissions on the papers contained in the preliminary report should be received prior to the hearing.

**FOR FURTHER INFORMATION CONTACT:** Edward Carroll (202-205-1819), Office of Public Affairs, U.S. International Trade Commission.

Hearing impaired person may obtain information on this investigation by contacting the Commission's TDD terminal on (202-205-1810).

Issued: November 20, 1991.

By order of the Commission.

Edward G. Carroll,

Acting Secretary.

[FR Doc. 91-28535 Filed 11-27-91; 8:45 am]

BILLING CODE 7020-02-M

### [332-316]

#### **Shipbuilding Trade Reform Act of 1991; Likely Economic Effects of Enactment**

**AGENCY:** United States International Trade Commission.

**ACTION:** Institution of investigation and scheduling of public hearing.

**EFFECTIVE DATE:** November 19, 1991.

**FOR FURTHER INFORMATION CONTACT:** Ms. Kathleen Lahey, Office of Industries (202-205-3409), or Mr. Gerald Berg, Office of Economics (202-205-3233), U.S. International Trade Commission, Washington, DC 20436.

#### **Background and Scope of Investigation**

On November 19, 1991, the Commission instituted investigation No. 332-316, following receipt on October 30, 1991, of a request from the Committee on Ways and Means of the U.S. House of Representatives for an investigation under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)) concerning the likely economic effects of enactment of H.R. 2056, the Shipbuilding Trade and Reform Act of 1991, as amended by the Committee on Ways and Means.

As requested by the Committee, the Commission will seek to provide in its report:

- (1) An overview of the issues being addressed in the OECD shipbuilding negotiations, and a comparison of the differences between the approach being taken in the negotiations and the approach of H.R. 2056, as amended;
- (2) An overview of conditions in U.S. shipbuilding and repair industry including an assessment of government

assistance provided, either directly or indirectly, to this industry under U.S. law;

(3) An overview of conditions in the U.S. carrier industry, including an assessment of government assistance provided, either directly or indirectly, to this industry under U.S. law; and

(4) An evaluation and comparison of the likely economic effects of H.R. 2056, as amended, with the likely economic effects of an international agreement to eliminate unfair trading practices (modeled after the current OECD discussions), on those sectors affected by the elimination of unfair trading practices in shipbuilding, including the shipbuilding and repair industry, the carrier industry, U.S. ports, and U.S. exporters and importers.

As requested by the Committee, the Commission intends to submit its report no later than April 27, 1992.

#### **Public Hearing**

A public hearing in connection with this investigation will be held in the Commission Hearing Room, 500 E Street, SW., Washington, DC 20436, beginning at 9:30 a.m. on January 24, 1992. All persons will have the right to appear by counsel or in person, to present testimony, and to be heard. Requests to appear at the public hearing should be filed with the Secretary, United States International Trade Commission, 500 E Street, SW., Washington, DC, 20436, no later than noon, January 6, 1992. Persons testifying at the hearing are encouraged to file prehearing briefs or statements; the deadline for filing such briefs or statements (a signed original and 14 copies) is January 6, 1992; and the deadline for filing posthearing briefs or statements is February 4, 1992. Any confidential business information included in such briefs or statements must be filed in accordance with the procedures outlined in the next paragraph.

#### **Written Submissions**

In lieu of or in addition to participating in the hearing, interested persons are invited to submit written statements concerning the matters to be addressed in the report. Commercial or financial information that a party desires the Commission to treat as confidential must be submitted on separate sheets of paper, each clearly marked "Confidential Business Information" at the top. (Generally, submission of separate confidential and public versions of the submission would be appropriate.) All submissions requesting confidential treatment must conform with the requirements of § 201.6

of the Commission's Rules of Practice and Procedure (19 CFR 201.6). All written submissions, except for confidential business information, will be made available in the Office of the Secretary of the commission for inspection by interested persons. To be assured of consideration by the Commission, written statements and posthearing briefs should be submitted to the Commission at the earliest practical date and should be received no later than February 4, 1992. All submissions should be addressed to the Secretary to the Commission at the Commission's Office in Washington, DC.

Hearing-impaired persons are advised that information on this investigation can be obtained by contacting the Commission's TDD terminal on 202-205-2648.

Issued: November 20, 1991.

By order of the Commission.

Edward G. Carroll,

Acting Secretary.

[FR Doc. 91-28536 Filed 11-27-91, 8:45 am]

BILLING CODE 7030-02-M

(Investigation No. 731-TA-538 (Preliminary))

#### Sulfanilic Acid From the People's Republic of China

##### Determination

On the basis of the record<sup>1</sup> developed in the subject investigation, the Commission determines, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)), that there is a reasonable indication that an industry in the United States is materially injured<sup>2</sup> or threatened with material injury<sup>3</sup> by reason of imports from the People's Republic of China of sulfanilic acid and sodium sulfanilate, provided for in subheading 2921.42.24 and 2921.42.70 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than value (LTFV).

##### Background

On October 3, 1991, a petition was filed with the Commission and the Department of Commerce by R-M Industries, Inc., Fort Mill, SC, alleging

<sup>1</sup> The record is defined in 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(f)).

<sup>2</sup> Acting Chairman Brunedale and Commissioner Lodwick determine that there is a reasonable indication that an industry in the United States is materially injured by reason of the subject of the imports from the People's Republic of China.

<sup>3</sup> Commissioner Rohr and Commissioner Newquist determine that there is a reasonable indication that an industry in the United States is threatened with material injury by the subject imports.

that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of sulfanilic acid from the People's Republic of China. Accordingly, effective October 3, 1991, the Commission instituted antidumping investigation No. 731-TA-538 (Preliminary).

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of October 10, 1991 (56 FR 51236). The conference was held in Washington DC, on October 24, 1991, and all persons who requested the opportunity were permitted to appear in person or by counsel.

The Commission transmitted its determination in this investigation to the Secretary of Commerce on November 18, 1991. The views of the Commission are contained in USITC Publication 2457 (November 1991), entitled "Sulfanilic Acid from the People's Republic of China: Determination of Commission in Investigation No. 731-TA-538 (Preliminary) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigation."

Issued: November 19, 1991.

By Order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 91-28537 Filed 11-27-91, 8:45am]

BILLING CODE 7030-02-M

#### INTERSTATE COMMERCE COMMISSION

##### Notice of Intent To Engage In Compensated Intercorporate Hauling Operations

This is to provide notice as required by 49 U.S.C. 10524(b)(1) that the named corporations intend to provide or use compensated intercorporate hauling operations as authorized in 49 U.S.C. 10524(b).

1. Parent corporation and address of principal office: Kennedy Manufacturing Company, 520 East Sycamore Street, Van Wert, Ohio 45891.

2. Wholly owned subsidiary which will participate in the operations, and State of incorporation. Markhon Incorporated, 200 Bond Street, Wabash, Indiana 46992.

Incorporated in the State of Indiana.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 91-28634 Filed 11-27-91, 8:45 am]

BILLING CODE 7035-01-M

#### DEPARTMENT OF JUSTICE

##### Lodging a Final Judgment by Consent Under the Clean Air Act

Notice is hereby given that on November 15, 1991, a proposed consent decree in *United States v. Economy Muffler & Tire Center, Inc.*, was lodged with the United States District Court for the Eastern District of Virginia. The suit was brought pursuant to sections 203(a)(3)(B) and 205 of the Clean Air Act, 42 U.S.C. 7522(a)(3)(B) and 7524. The suit sought civil penalties for the defendant's removal and rendering inoperative catalytic converters in violation of section 203(a)(3)(B). In addition to providing for payment of civil penalties, the consent decree requires the defendant to take certain steps to remedy the violations at issue.

The Department of Justice will receive comments relating to the proposed consent decree for a period of thirty days from the date of publication of this notice. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, Department of Justice, Washington, DC, 20530, and should refer to *United States v. Economy Muffler & Tire Center, Inc.*, (E.D. Va.) and DOJ Ref. No. 90-S-2-1-1506. The proposed consent decree may be examined at the office of the United States Attorney, suite 1800, Main Street centre, Richmond, Virginia; or at the Environmental Enforcement Section Document Center, 601 Pennsylvania Avenue Building, NW., Washington, DC 20004 (202-347-2072). A copy of the proposed consent decree may be obtained in person or by mail from the Environmental Enforcement Section Document Center, 601 Pennsylvania Avenue, NW., Box 1097, Washington, DC 20004. In requesting a copy please enclose a check in the amount of \$2.50 (25 cents per page reproduction costs) payable to "Consent Decree Library". John C. Cruden,

Chief, Environmental Enforcement Section,  
Environment and Natural Resources Division

[FR Doc. 91-28546 Filed 11-27-91, 8:45 am]

BILLING CODE 4110-01-M



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COMMITTEE ON WAYS AND MEANS

U.S. HOUSE OF REPRESENTATIVES

WASHINGTON, DC 20515

March 24, 1992

ROBERT J. LEONARD, CHIEF COUNSEL AND STAFF DIRECTOR

PHILLIP D. MOSELEY, MINORITY CHIEF OF STAFF

The Honorable Don E. Newquist  
Chairman  
U.S. International Trade Commission  
500 E Street, S.W.  
Washington, D.C. 20436

Dear Mr. Chairman:

In response to a request of the Committee on Ways and Means of October 29, 1991, the U.S. International Trade Commission is currently conducting an investigation, pursuant to section 332(g) of the Tariff Act of 1930, as amended, on the likely economic effects of enactment of H.R. 2056, as amended by the Committee. In its request, the Committee asked that the results of the investigation be forwarded to it on April 27, 1992.

After the Committee made its original request for this investigation, H.R. 2056 was sequentially referred to the Committee on Merchant Marine and Fisheries. The Committee on Merchant Marine and Fisheries held hearings on the bill and reported it favorably with amendments on March 6, 1992.

In light of these subsequent legislative developments with respect to H.R. 2056, the Committee now believes that the ongoing investigation with respect to the bill will be of most value to the Congress and the public if it is expanded to take into account the amendments to the underlying bill recommended by the Committee on Merchant Marine and Fisheries. Accordingly, the Committee on Ways and Means hereby requests that this ongoing investigation be expanded to take into account these amendments. Due to the additional work this will entail, the Committee would now like to receive the study by June 1, 1992.

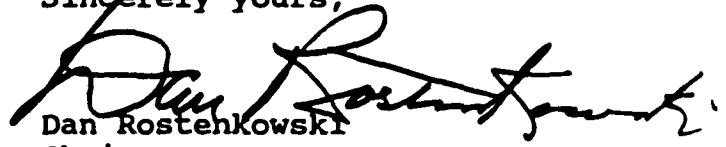
As noted in our previous letter, our request for this section 332 investigation is separate and apart from the legislative schedule for H.R. 2056. Both the Committee on Ways and Means and the Committee on Merchant Marine and Fisheries have completed their consideration of the bill and intend to pursue expeditious

The Honorable Don E. Newquist  
March 24, 1992  
Page 2

consideration of the legislation by the full House. We will not seek any delay pending receipt of this study. However, in light of the continued uncertainty still surrounding this legislation due largely to the ongoing OECD negotiations, we continue to believe that the ITC study will be of significant value to the Congress and the public.

Thank you for your cooperation.

Sincerely yours,

  
Dan Rostenkowski  
Chairman

DR/bwj

Investigation No. 701-TA-313  
(Preliminary) Under the Tariff Act of  
1930, Together With the Information  
Obtained in the Investigation."

Issued: March 31, 1992.

By Order of the Commission:

Kenneth R. Mason,  
Secretary.

[FR Doc. 92-8073 Filed 4-7-92; 8:45 am]  
BILLING CODE 7020-02-M

[Investigation No. 337-TA-302; Ancillary  
Proceeding]

**Certain Self-Inflating Mattresses;  
Commission Decision To Adopt a  
Recommended Determination of No  
Violation of Commission Interim Rule  
210.5(b)**

**AGENCY:** U.S. International Trade  
Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that  
the Commission has determined to  
adopt the recommended determination  
(RD) of the presiding administrative law  
judge (ALJ) in the above-captioned  
proceeding, thereby determining that  
neither complainant Cascade Designs,  
Inc., nor its counsel has violated  
Commission interim rule 210.5(b).

**FOR FURTHER INFORMATION CONTACT:**  
Katherine M. Jones, Esq., Office of the  
General Counsel, U.S. International  
Trade Commission, telephone 202-205-  
3097.

**SUPPLEMENTARY INFORMATION:** The  
authority for the Commission's  
determination is contained in section  
337 of the Tariff Act of 1930 (19 U.S.C.  
1337).

On August 29, 1990 the Commission  
instituted this ancillary proceeding to  
investigate the allegations of  
respondents Goodway Corporation and  
Gymwell Corporation that complainant  
Cascade Designs, Inc. and its counsel  
had violated rule 210.5 of the  
Commission's Interim Rules of Practice  
and Procedure. 19 CFR 210.5. The record  
in this proceeding was closed after an  
evidentiary hearing held before the  
presiding ALJ on December 5-8, 1990.  
On March 14, 1991, the ALJ issued his  
RD finding that neither complainant nor  
its counsel had violated interim rule  
210.5, and certified the RD and the  
record to the Commission.

In order to allow the parties to  
express their views concerning the RD  
prior to Commission disposition of the  
proceeding, the Commission provided

the parties with the opportunity to file  
exceptions to the RD, and proposed  
alternative findings of fact and  
conclusions of law. Exceptions and  
proposed alternative findings of fact and  
conclusions of law were filed by  
respondents.

Having considered the RD, the  
exceptions thereto, and the proposed  
alternative findings of fact and  
conclusions of law, as well as the entire  
record in this proceeding, the  
Commission determined to adopt the RD  
finding that neither complainant nor its  
counsel had violated Commission  
interim rule 210.5 as the final  
Commission determination in this  
investigation.

Notice of the original investigation  
was published in the Federal Register of  
August 16, 1989 (54 FR 157). Notice of  
the institution of the ancillary  
proceeding was published in the Federal  
Register of August 29, 1992. (55 FR 188).

Copies of the Commission's Order and  
all other nonconfidential documents filed  
in connection with this investigation are  
available for inspection during official  
business hours (8:45 a.m. to 5:15 p.m.) in  
the Office of the Secretary, U.S.  
International Trade Commission, 500 E  
Street SW., Washington, DC 20438,  
telephone 202-205-2000. Hearing-  
impaired persons are advised that  
information on the matter can be  
obtained by contacting the  
Commission's TTD terminal on 202-205-  
2848.

Issued: April 1, 1992.

By order of the Commission.

Kenneth R. Mason,  
Secretary.

[FR Doc. 92-8070 Filed 4-7-92; 8:45 am]  
BILLING CODE 7020-02-M

[332-316]

**Shipbuilding Trade Reform Act of  
1992; Likely Economic Effects of  
Enactment**

**AGENCY:** United States International  
Trade Commission.

**ACTION:** Change in scope and title of  
investigation and extension of deadline  
for submission of comments.

**FOR FURTHER INFORMATION CONTACT:**  
Ms. Kathleen Lahay, Office of Industries  
(202-205-3409), or Mr. Gerald Berg,  
Office of Economics (202-205-3233), U.S.  
International Trade Commission,  
Washington, DC 20438.

**SUMMARY:** On March 25, 1992, the  
Commission received a letter from the  
House Committee on Ways and Means  
requesting that the Commission expand

the scope of its investigation to take into  
account amendments made to H.R. 2056,  
the Shipbuilding Trade and Reform Act  
of 1992, by the House Committee on  
Merchant Marine and Fisheries. The  
Committee on Ways and Means  
requested that the Commission delay  
the submission of its report to June 1,  
1992, in order that it might have  
sufficient time to undertake the  
additional evaluation and analysis.

**Background**

The Commission received the initial  
request from the Committee on Ways  
and Means for an investigation under  
section 332(g) of the Tariff Act of 1930  
(19 U.S.C. 1332(g)) on October 30, 1991.  
The Commission instituted the  
requested investigation on November 19,  
1991. After requesting the Commission  
investigation and report, the Committee  
on Ways and Means referred H.R. 2056  
to the House Committee on Merchant  
Marine and Fisheries. The Committee on  
Merchant Marine and Fisheries held  
hearings on the bill and reported it  
favorably with amendments on March 8,  
1992, retitled as the "Shipbuilding Trade  
Reform Act of 1992."

The new letter from the Committee on  
Ways and Means stated that both  
committees had completed their  
consideration of the bill and "intend to  
pursue expeditious consideration of the  
legislation by the full House." The letter  
stated that the Committee on Ways and  
Means would not seek any delay  
pending receipt of the Commission's  
study. The letter further stated that, "in  
light of the continued uncertainty still  
surrounding this legislation due largely  
to the ongoing OECD negotiations," the  
Commission's study "will be of  
significant value to the Congress and the  
public."

The Commission's notice of institution  
of an investigation and the scheduling of  
a public hearing was published in the  
Federal Register of November 29, 1991  
(56 FR 61049). A public hearing was held  
on January 24, 1992, and interested  
persons were given until February 4,  
1992, to file any posthearing briefs or  
other written statements. The  
Commission has retitled its investigation  
to reflect the fact that the bill is now  
titled the "Shipbuilding Trade Reform  
Act of 1992" (rather than "1991").

**New Deadline for Written Statements**

Interested persons are invited to  
submit written statements concerning  
the matters to be addressed in the  
report. Such statements should focus on  
the amendments made to the H.R. 2056  
by the Committee on Merchant Marines  
and Fisheries. To be assured of

consideration by the Commission, any such statements must be submitted to the Commission at the earliest practical date, but not later than April 20, 1992. All submissions should be addressed to the Secretary to the Commission at the Commission's Office in Washington, DC.

Any commercial or financial information that a submitter desires the Commission to treat as confidential must be submitted on separate sheets of paper, each clearly marked "Confidential Business Information" at the top. (Generally, submission of separate confidential and public versions of the submission would be appropriate.) All submissions requesting confidential treatment must conform with the requirements of § 201.8 of the Commission's Rules of Practice and Procedure (19 CFR 201.8). All written submissions, except for confidential business information, will be made available in the Office of the Secretary to the Commission for inspection by interested persons.

Hearing impaired persons are advised that information on this investigation can be obtained by contacting the Commission's TDD terminal on 202-205-2648.

Issued: April 1, 1992.

By order of the Commission.

Kenneth R. Mason,  
Secretary.

[FR Doc. 92-8071 Filed 4-7-92; 8:45 am]  
BILLING CODE 7020-02-M

#### [Investigation 337-TA-336]

#### **Certain Single In-Line Memory Modules and Products Containing Same; Initial Determination Terminating Respondent on the Basis of Settlement Agreement**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice is hereby given that the Commission has received an initial determination from the presiding officer in the above captioned investigation terminating the following respondent on the basis of a settlement agreement: Fujitsu Limited and Fujitsu Microelectronics, Inc.

**SUPPLEMENTARY INFORMATION:** This investigation is being conducted pursuant to section 337 of the Tariff Act of 1930 (19 U.S.C. 1337). Under the Commission's rules, the presiding officer's initial determination will become the determination of the Commission thirty (30) days after the date of its service upon the parties,

unless the Commission orders review of the initial determination. The initial determination in this matter was served upon parties on March 30, 1992.

Copies of the initial determination, the settlement agreement, and all other nonconfidential documents filed in connection with this investigation are available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436, telephone (202) 205-2000. Hearing impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

**WRITTEN COMMENTS:** Interested persons may file written comments with the Commission concerning termination of the aforementioned respondents. The original and 14 copies of all such documents must be filed with the Secretary to the Commission, 500 E Street, SW., Washington, DC 20436, no later than 10 days after publication of this notice in the Federal Register. Any person desiring to submit a document (or portions thereof) to the Commission in confidence must request confidential treatment. Such requests should be directed to the Secretary to the Commission and must include a full statement of the reasons why confidential treatment should be granted. The Commission will either accept the submission in confidence or return it.

**FOR FURTHER INFORMATION CONTACT:** Ruby J. Dionne, Office of the Secretary, U.S. International Trade Commission, Telephone (202) 205-1802.

Issued: March 30, 1992.

By order of the Commission.

Kenneth R. Mason,  
Secretary.

[FR Doc. 92-8068 Filed 4-7-92; 8:45 am]  
BILLING CODE 7020-02-M

#### [Investigation 337-TA-336]

#### **Certain Single In-Line Memory Modules and Products Containing Same; Initial Determination Terminating Respondents on the Basis of Settlement Agreement**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice is hereby given that the Commission has received an initial determination from the presiding officer in the above captioned investigation terminating the following respondents

on the basis of a settlement: OKI America, Inc. and OKI Electric Industry Company, LTD.

**SUPPLEMENTARY INFORMATION:** This investigation is being conducted pursuant to section 337 of the Tariff Act of 1930 (19 U.S.C. 1337). Under the Commission's rules, the presiding officer's initial determination will become the determination of the Commission thirty (30) days after the date of its service upon the parties, unless the Commission orders review of the initial determination. The initial determination in this matter was served upon parties on April 1, 1992.

Copies of the initial determination, the settlement agreement, and all other nonconfidential documents filed in connection with this investigation are available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436, telephone (202) 205-2000. Hearing impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

**WRITTEN COMMENTS:** Interested persons may file written comments with the Commission concerning termination of the aforementioned respondents. The original and 14 copies of all such documents must be filed with the Secretary of the Commission, 500 E Street, SW., Washington, DC 20436, no later than 10 days after publication of this notice in the Federal Register. Any person desiring to submit a document (or portions thereof) to the Commission in confidence must request confidential treatment. Such requests should be directed to the Secretary to the Commission and must include a full statement of the reasons why confidential treatment should be granted. The Commission will either accept the submission in confidence or return it.

**FOR FURTHER INFORMATION CONTACT:** Ruby J. Dionne, Office of the Secretary, U.S. International Trade Commission, Telephone (202) 205-1802.

Issued: April 1, 1992.

By order of the Commission.

Kenneth R. Mason,  
Secretary.

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APPENDIX B  
CALENDAR OF PUBLIC HEARING

## CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject	:	SHIPBUILDING TRADE REFORM ACT OF 1991: LIKELY ECONOMIC EFFECTS OF ENACTMENT
Inv. No.	:	332-316
Date and Time	:	January 24, 1992 - 9:30 a.m.

Sessions were held in connection with the investigation in the main Hearing Room 101, United States International Trade Commission, 500 E Street, S.W., Washington, D. C.

### WITNESS AND ORGANIZATION:

1. Shipbuilders Council of America  
Arlington, VA

John Stocker, President

2. Lake Carriers' Association  
Cleveland, Ohio

George J. Ryan, President

3. American Institute of Merchant Shipping  
Washington, D.C.

Peter J. Finnerty, Vice President  
Public Affairs, Sea-Land Service, Inc.

4. Federation of American Controlled Shipping  
New York, NY

Philip J. Loree, Chairman

5. American Association of Port Authorities  
Alexandria, VA

Jean C. Godwin, Director, Government Relations

- MORE -

WITNESS AND ORGANIZATION:

6. International Council of Cruise Lines  
Washington, D.C.

John T. Estes, President

Patton, Boggs & Blow  
Washington, D.C.  
On behalf of

7. OSG Bulkships, Inc.

Kaj Areskoug, Chief Economist

Joseph A. Klausner

Michael D. Esch )--OF COUNSEL

8. Matson Navigation Company  
Washington, D.C.

Willis R. Deming, Senior Vice President

Philip M. Grill, Vice President, Government Relations

- END -



**APPENDIX C**  
**METHODOLOGY**

In this appendix we provide a detailed explanation of the methodology used in this study to estimate the trade effects of H.R. 2056 and the proposed OECD Agreement. The explanation follows the sequential order that was used to construct the estimates of the trade effects.

### ESTIMATION OF THE VALUE OF SUBSIDIES

The Commission staff estimated the value of subsidies using a method similar to that used by the U.S. Department of Commerce (DOC) in title VII subsidy cases.<sup>1</sup> In making this calculation, the Commission did not seek to independently identify possible subsidies but instead based its calculation on practices identified as subsidies by the Organization for Economic Cooperation and Development (OECD) and the Shipbuilders Council of America (SCA).<sup>2</sup>

The subsidies provided by the three largest supplying nations--Japan, Germany, and Korea--were evaluated and monetary values were estimated where possible. To arrive at an ad valorem rate, the estimated subsidy values were then summed up for each country and divided by the total value of ships and ship repair services sold by the country in the base year for this analysis, 1989.<sup>3</sup> These subsidy rates for the three supplying nations were then converted to a weighted average value based on the value of ships and repair services produced (analogous to DOC's "all other rate").

The Commission staff made two sets of estimates of the average subsidy rate and used both in subsequent estimates of effects. The first set of estimates was based primarily on data of the OECD.<sup>4</sup> The second set of estimates was based on data provided by the SCA.<sup>5</sup> Based on OECD data, the weighted average estimate of the value of subsidies was 5.9 percent. Based on SCA data, the weighted average estimate was 23.5 percent.

The SCA estimated subsidy values for five types of programs: (1) export credits, (2) direct subsidies, (3) restructuring investment aid, (4) home credits, and (5) research & development (R&D) aid. The SCA estimated the value of the direct subsidies to shipbuilders and R&D aid, mostly in the form of grants, by totaling government expenditures on these categories. The home and

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<sup>1</sup> 54 F.R. 23366 (1989).

<sup>2</sup> Nothing in this appendix should be construed to indicate what the Commission believes might be a countervailable subsidy under current U.S. law or under U.S. law if H.R. 2056 is enacted, or to indicate what the Commission believes the Department of Commerce would find to be a countervailable subsidy or the amount of any such subsidy.

<sup>3</sup> The total value of ships and ship repair services were constructed from data in Industrial Statistics Yearbook, 1988 (New York: United Nations Statistical Office, 1990).

<sup>4</sup> OECD, Measures of Assistance to Shipbuilding: A Description of the Measures of Assistance to the Shipbuilding Industry in Force in 15 Member Countries of the OECD and the Republic of Korea (Paris: OECD, 1991).

<sup>5</sup> SCA, "Update on World Shipbuilding Subsidies," Mar. 1991, submitted Jan. 1992 with prehearing brief for investigation 332-316.

export credits described by the SCA usually included government loans, loan guarantees, or both for the purchase of vessels by foreign (export credits) or domestic consumers (home credits). Restructuring and investment aid to shipbuilders were usually some form of government-sponsored loan packages or equity investment.<sup>6</sup> To estimate the benefit from home credits, export credits, and restructuring and investment aid, the SCA took the total amount of the financing provided by governments of shipbuilding countries. Because the actual benefit amount depends on interest terms and payback provisions, this approach overstates the actual benefits these programs provide. (See, for example, the discussion of equation 1 below.) The estimates made by the SCA are shown in table C-1.

Using the OECD data, the Commission staff estimated the cash-flow benefit to ship consumers and shipbuilders of the subsidy programs. Staff divided the information in the OECD's catalog of aid to shipbuilding into five subsidy program categories: (1) direct aid to shipbuilders and consumers, (2) grants, loans, and loan guarantees to shipbuilders for restructuring, (3) R&D grants, (4) home credits to consumers, and (5) export credits to consumers. The estimates made by the Commission staff are shown in table C-1. As with the SCA estimates, staff calculated the benefit of the direct consumption and production aid, the restructuring grants, and the R&D grants by totaling government expenditures on these categories.<sup>7</sup>

However, to calculate the benefits of export credits, home credits, and loans to shipbuilders, a different approach was taken from the one employed by the SCA. Rather than equate the benefit of these particular programs to the total value of government loans and guarantees, staff followed the Commerce Department's lead and estimated the present value of the financing incentives. In general, the incentives included combinations of interest subsidies, preferential interest rates, or "grace periods" on interest payments. In some instances the amount of the interest subsidy was specifically defined in the OECD catalog. In other cases, especially for most of the export credits, the value of the interest subsidy was estimated by taking the difference between the building country's lending rate<sup>8</sup> (the benchmark rate) and the program rate. In most instances, the program rate was the interest floor placed on ship-financing aid by the OECD.<sup>9</sup> Indeed, in title VII countervailing duty cases, DOC uses a similar method of comparison to benchmark rates to estimate the value of unfair credit incentives and interest subsidies provided by foreign governments.<sup>10</sup>

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<sup>6</sup> See *ibid.* for further discussion.

<sup>7</sup> We acknowledge that, to the extent that restructuring credits are for closure of redundant yards, we have overestimated the subsidy amount to shipbuilding and repair.

<sup>8</sup> Lending rates were taken from the IMF, International Financial Statistics.

<sup>9</sup> Under the credit terms of the OECD's "Understanding on Export Credits for Ships," governments are allowed to offer 80-percent financing over 8-1/2 years at 8 percent interest.

<sup>10</sup> 54 F.R. 23366 (1989).

The benefit of a preferential interest rate or interest subsidy was calculated from the following present value formula,

$$(1) \quad B = sL \sum_{i=1}^n \frac{1}{(1+r)^i}$$

where B was the value of the benefit of the loan to the ship consumer, s was the interest subsidy rate, L was the nominal value of the loan or loan guarantee, r was the building country's benchmark lending rate, used for discounting purposes, and n was the number of years in the life of the loan. This represents an upper bound and corresponds to the case in which principal is paid in a lump sum at the end of the loan. Normally, principal would be paid off through the life of the loan, thus reducing the actual benefit. The benefit received from a "grace period" on interest payments was calculated by using the same present value formula where s=r and where n was the number of years in the grace period for the loan.

#### PRICE EFFECTS OF H.R. 2056 AND THE PROPOSED OECD AGREEMENT

In considering the world market for shipyard services, a distinction must be made between demand for construction and repair of ships serving the U.S. market and demand for those ships serving the rest of the world (ROW) market. H.R. 2056 specifically targets subsidies of ships that serve the U.S. market, whereas the proposed OECD Agreement would affect ships that serve both the U.S. and ROW markets. Commission staff analyzed the effects of both programs.

Several qualifications are necessary. First, much of the available data on shipyard subsidies are highly aggregated, as are the data on shipyard revenues. (See "Estimation of the Value of Subsidies," above.) For this reason, staff used subsidy rates expressed as a share of total revenues for shipbuilding and repair services. In addition, while shipyard subsidies affect the cost of ships (a stock), the resulting effect on shipping activities depends on the effect on the cost of shipping services embodied in ships (a flow). All estimates of effects in this analysis are based on the belief that in the long run an increase in the cost of shipbuilding and repair leads to a proportionate increase in the cost of the flow of services embodied in a ship.<sup>11</sup> Finally, for reasons discussed in chapter 4, it is not expected that the U.S. industry will become competitive under either H.R. 2056 or the proposed OECD Agreement. Consequently, this analysis focuses on the effects of remedying subsidies in non-U.S. yards.

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<sup>11</sup> A similar approach has been taken, in the past, to measure the change in the price of housing services (a flow) provided by the stock of housing in the U.S. for price index estimation. See A. Dougherty and R. Van Order, "Inflation, Housing Costs, and the Consumer Price Index," American Economic Review, vol. 72, No. 1 (1982), pp. 154-164. We recognize that there are limitations inherent in this approach, especially for short-term price movements. However, for long-term price effects, this is a reasonable approach (especially given data limitations).



### Graphical Presentation

An illustration of the effects of the bill and the proposed agreement is provided in figure C-1. Panel a illustrates the ROW demand for foreign-built ships that serve non-U.S. ports,  $D_{row}$ , and the world supply of foreign-built and repaired ships that serve both U.S. and non-U.S. ports,  $S_w$ . Panel b illustrates the demand,  $D_{us}$ , and supply,  $X_{us}$ , for foreign-built ships that serve U.S. ports only.<sup>12</sup>  $X_{us}$  is the excess-supply curve derived from ROW demand and world supply in panel a. Under the status quo, U.S. and world prices are identical,  $P_0^{us} = P_0^w$ . For modeling simplicity, we assume that all ships are perfect substitutes. In addition, the U.S. and world prices are the buyer's price of the ship with the foreign subsidies in place.

Under H.R. 2056, the United States would either impose a duty unilaterally on foreign-built ships entering U.S. ports to offset foreign shipbuilding subsidies or induce foreign governments to eliminate the subsidies. Analytically, these actions are identical. The duty, which would be paid once, the first time the ship entered a U.S. port, is equal to the full subsidy rate. This is illustrated by an upward shift in the excess supply curve in panel b from  $X_{us}$  to  $X_{us}'$  by the amount of the subsidy rate. The U.S. price increases to  $P_1^{us}$ , and the world price falls to  $P_1^w$ . The quantity demanded in the U.S. market falls to  $Q_1^{us}$  while the quantity demanded by the ROW increases to  $Q_1^{row}$ .

Under the proposed OECD Agreement, all countries would agree to eliminate shipbuilding subsidies. This is illustrated by an upward shift in the world supply curve in panel a from  $S_w$  to  $S_w'$  by the amount of the subsidy rates. The proposed agreement also causes the excess supply curve in panel b to shift upward from  $X_{us}$  to  $X_{us}''$ . The excess supply curve,  $X_{us}$ , will shift up by less under the proposed OECD Agreement than under H.R. 2056 unless  $D_{row}$  is vertical. The U.S. and world price both increase to  $P_2^w$ . The quantities demanded by ROW and U.S. consumers decline to  $Q_2^{row}$  and  $Q_2^{us}$ , respectively. Consequently, the elimination of subsidies of shipbuilding and repair that would occur under either H.R. 2056 or the proposed OECD Agreement would have the effect of raising the price of ships and the repair of ships that serve U.S. markets, but not by the same amounts. The difference in the price effects is derived below.

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<sup>12</sup> Foreign-built ships are not allowed to serve the U.S. cabotage market. Therefore, the cabotage segment of the U.S. market is not included in this analysis. Panel b represents the market for ships that serve U.S. oceanborne foreign trade.

## The Algebra of Price Effects

Formally, the supply of commercial shipyard services is specified as

$$\begin{aligned}
 (2) \quad Q_S &= (k_S P^{\epsilon_s})(1+s)^{\epsilon_s} \\
 (3) \quad Q_{D,ROW} &= (k_{D,ROW} P^{\eta_{D,ROW}}) \\
 (4) \quad Q_{S,US} &= Q_S - Q_{D,ROW} \\
 (5) \quad Q_{D,US} &= (k_{D,US} P^{\eta_{D,US}})(1+\tau)^{\eta_{D,US}}
 \end{aligned}$$

where  $Q_S$  represents supply,  $Q_{D,ROW}$  and  $Q_{D,US}$  represent demand in the ROW and U.S. markets,  $\epsilon_s$  is the elasticity of supply,  $s$  is the ad valorem subsidy rate,  $\tau$  is the countervailing duty to be applied under H.R. 2056 against the subsidy rate  $s$ , and  $\eta_{D,ROW}$  and  $\eta_{D,US}$  are demand elasticities.  $k_{D,US}$  and  $k_{D,ROW}$  embody all other factors that influence U.S. and ROW demand. Since ROW markets clear when the U.S. market clears, we can focus our analysis on the U.S. market.<sup>13</sup>

H.R. 2056 involves direct countervailing action against the subsidy  $s$  as identified in the system of equations (2)-(5) above. As currently contemplated, this action will entail either the direct application of a countervailing duty as determined by the DOC, or equivalently a countervailing action taken by the producing country, at a rate of  $\tau=s$ . In contrast, under the proposed OECD Agreement, the subsidies will be eliminated directly. It can be shown that the effect will be identical to the application of a duty at rate  $\tau_{OECD}$ , where:

$$(6) \quad \tau_{OECD} = \left[ \frac{1}{1 + \theta} \right] s$$

$$\text{where} \quad \theta = \text{abs} \left[ \left( \frac{Q_{D,ROW}}{Q_S} \right) \left( \frac{\eta_{D,ROW}}{\epsilon_s} \right) \right]$$

The rate  $\tau_{OECD}$  measures the duty rate needed to countervail the effects of subsidies on the U.S. market under H.R. 2056. The rate  $\tau_{OECD}$  is derived by noting that, for any subsidy rate  $s$  defined as a share of total revenue, there is a targeted export subsidy that will have the same effect on the U.S. market as the more general subsidy  $s$ . This targeted export subsidy rate, which is equivalent to the duty rate needed to countervail the effects of such a subsidy, will be

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<sup>13</sup> The conditions derived in this section also apply to more general functional specifications, at least as log-linear approximations of effects. However, the algebra is more straightforward with constant elasticity functions like those used here.

$\tau_{OECD}$  as defined above.<sup>14</sup> Elimination of the subsidy at rate  $s$  has the same effect on the U.S. market as the application of a duty at rate  $\tau_{OECD}$ .  $\tau_{OECD}$  is thus a measure of the price effect of the proposed OECD Agreement, which can be contrasted with the price effect of H.R. 2056 as measured by  $\tau$ .

The Commission staff estimated that under H.R. 2056, the U.S. price would increase by approximately the full average value of subsidies<sup>15</sup> and under the proposed OECD Agreement it would increase by 72 percent of that. From equation (6),  $\theta=.39$  and  $\tau_{OECD}=(.719)s$  given the following ratios:  $\eta_{D,ROW}/\epsilon_s = .5$  and  $Q_{D,ROW}/Q_s = .78$ . SCA-based and OECD-based estimates of the percentage change to the U.S. price that could result from H.R. 2056 or the proposed OECD Agreement are presented in table C-2.

#### ESTIMATION OF SHIPPING COSTS AS A PERCENT OF EXPORT AND IMPORT PRICES

Increases in the price of foreign-built ships will result in increases in the cost of shipping services. Commission staff multiplied the estimated increases in capital costs, which include ship costs plus maintenance and repair costs, under H.R. 2056 and the proposed OECD Agreement by the capital cost shares for various kinds of ships to arrive at an estimate for the increase in shipping costs.<sup>16</sup> The capital cost shares and estimated shipping-cost increases by type of ship are presented in table C-3.

Staff then multiplied the estimated shipping cost increases by the shipping cost shares for the trade sectors to arrive at an estimate of the increased cost of importing and exporting, measured as an ad valorem markup on the price of traded goods.<sup>17</sup> The shipping cost shares in table C-4 represent the portion of a traded good's delivered value that can be attributed to shipping costs. The increase in these costs can thus be interpreted as trade-tax equivalents. For example, 22.0 percent of the delivered cost of coal is accounted for by shipping costs, whereas 4.7 percent of the cost of crude petroleum products is accounted

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<sup>14</sup> The derivation of export-subsidy equivalents of domestic subsidies, and hence of the duty rate needed to counter their effects, can be found in J. F. Francois, "Countervailing the Effects of Subsidies: An Economic Analysis," Journal of World Trade, vol. 26, No. 1 (Feb. 1992), pp. 12-13.

<sup>15</sup> The full passthrough of the offsetting duty under H.R. 2056 would occur if the U.S. supply curve,  $Q_{s,us}$ , is perfectly elastic. Assuming full passthrough of the offsetting duty  $\tau_{OECD}$  gives upper bound estimates of the effects of H.R. 2056.

<sup>16</sup> Both OECD-based and SCA-based estimates of  $s$  and  $\tau_{OECD}$  are presented in table C-2.

<sup>17</sup> The sectors included nine broad industry sectors, roughly corresponding to the reference sectors of the National Income and Product Accounts. These include five merchandise sectors and four service sectors. The staff also include 17 detailed industries, generally some combination of six-digit Bureau of Economic Analysis categories, in which shipping constituted a relatively large portion of final value. All of the detail industries are merchandise industries and were subtracted out from the corresponding merchandise sectors. Table C-4 lists the 9 industry sectors and the 17 detailed industries.

for by shipping costs. The delivered ad valorem impact of an increase in shipping costs on the delivered price of coal will thus be greater than the impact on the price of crude petroleum. The effect will be as if a greater trade tax had been placed on coal than on crude petroleum. If more than one type of ship is used to transport the goods in a sector, staff used a weighted average for the increase in shipping costs.<sup>18</sup>

The estimated increase in the cost of shipping for each sector is equivalent to the simultaneous imposition of an export and an import tariff on that sector. (However, the revenues from such a tax are never actually recovered.) Therefore, in each sector, export demand and import supply both decrease. These shifts reflect an effective change in the terms of trade for each sector. In brief, Commission staff estimated the trade effects of H.R. 2056 and the proposed OECD Agreement by shifting the import supply curves and the export demand curves for each sector to reflect these changes within the broader framework of a computable general equilibrium (CGE) model of the U.S. economy.<sup>19</sup>

#### ECONOMYWIDE MODELING OF H.R. 2056 AND THE PROPOSED OECD AGREEMENT

The effects of increased shipping costs discussed in the previous section are explicitly modeled by incorporating a Samuelson iceberg model of transportation costs<sup>20</sup> into a standard de Melo and Robinson-style computable general equilibrium model of the U.S. economy.<sup>21</sup>

The trade effects of the increase in transportation costs are presented in figure C-2. The basket of U.S. exports and imports are represented on the axes of the figure as X and M. In the figure, the U.S. offer curve is represented by offer curve O. The offer curve maps U.S. "offers" of exports in exchange for imports from the rest of the world. Before the increase in

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<sup>18</sup> For example, crude petroleum is carried by liquid bulk carriers, whereas products in the steel products sector could be carried by both liners and dry bulk carriers.

<sup>19</sup> For an explanation of computable general equilibrium models for trade policy analysis, see USITC, An Introduction to the ITC Computable General Equilibrium Model, (investigation No. 2423) USITC publication 2423, Sept. 1991.

<sup>20</sup> P.A. Samuelson, "Theoretical Notes on Trade Problems," Review of Economics and Statistics, vol. 46, No. 2 (1964), pp. 145-154; and J.N. Bhagwati and T.N. Srinivasan, "Some Extensions of Ricardian Theory: Transportation Costs," in Bhagwati and Srinivasan eds., Lectures on International Trade (Cambridge: MIT Press, 1983).

<sup>21</sup> J. de Melo and S. Robinson, "Product Differentiation and the Treatment of Foreign Trade in Computable General Equilibrium Models of Small Economies," Journal of International Economics, vol. 27, No. 1/2 (Aug. 1989), pp. 46-67.

transportation costs, the U.S. trades at terms-of-trade line P, importing M and exporting X.<sup>22</sup>

The increase in transportation costs means the U.S. now trades at line P' instead of P. If the U.S. offer curve is relatively inelastic, as in the left panel, we see a shift of trade from point A to point A'. Imports fall and exports rise, the U.S. is left relatively poorer, and welfare falls. If the U.S. offer curve is relatively elastic, as shown in the right panel, we see a shift from trade at point B to point B'. Imports fall and exports fall, the U.S. is again left relatively poorer, and welfare again falls. The actual shift in the composition of imports and exports depends on the underlying preference and production structure of the U.S. economy, which determine the shape of the offer curve. Whether panel a or panel b of figure C-2 applies depends on the sizes of the elasticities of substitution between imports and domestic competing goods. Elasticities of less than one tend to create the situation in panel a, whereas elasticities of greater than one tend to create the situation in panel b.<sup>23</sup> The elasticities of substitution between imports and domestic competing goods used by the Commission are taken from a paper by Reinert and Roland-Holst.<sup>24</sup> Most of these elasticities are less than one; some are greater.

The estimated effects are the annual changes in exports and imports expected when all ships serving U.S. ports are subject to the law or the proposed agreement. Neither would apply to ships constructed or ship repairs made before a specified date--October 16, 1991, under the current proposal. Consequently, the estimated annual effects should be regarded as estimated long-run effects. The immediate effects would be very small. Over time, the annual effects would increase and would gradually approach the long-run values as older ships pass out of service or incur substantial repair costs. The estimated effects are based on export and import levels and the overall structure of the U.S. economy in 1989.

#### METHODOLOGY FOR ESTIMATES OF SHIPMENT THROUGH THIRD COUNTRIES

H.R. 2056 creates an incentive for transshipment through Canadian and Mexican ports. It does this by raising the costs of shipping through U.S. ports but not through Canadian or Mexican ports. The proposed OECD Agreement does not create an incentive to ship through third countries because the proposed Agreement would affect costs for shipment through Canadian and Mexican ports as well as those for U.S. ports.

To estimate these effects, Commission staff worked with the framework described below. The demand for water transportation through U.S. ports is

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<sup>22</sup> For a more detailed discussion of offer curves, see R.E. Caves and R.W. Jones, World Trade and Payments: An Introduction (Boston: Little, Brown and Co., 1985).

<sup>23</sup> de Melo and Robinson, "Product Differentiation," p. 60.

<sup>24</sup> K. A. Reinert and D. W. Roland-Holst, "Disaggregated Armington Elasticities for the Mining and Manufacturing Sectors of the United States," Journal of Policy Modeling, vol. 14, No. 5 (1992).

assumed to depend on, in addition to other factors, the effective price of shipping to and from U.S. ports,  $P_{US}$ . We formally express this relationship as

$$(7) \quad T_{US} = (k_{US})(P_{US})^{-e_{US}}$$

The value  $T_{US}$  represents the volume of merchandise traffic through U.S. ports,  $e_{US}$  measures the sensitivity of traffic volume to price changes (measured in absolute value terms), and  $k_{US}$  embodies all other factors that influence this traffic. If the price of shipping increases by  $\gamma$  (measured as a share of the original price level), the resulting change in the level of traffic from the old level  $T_{US,0}$  to the new level  $T_{US,1}$  will be

$$(8) \quad \frac{T_{US,1} - T_{US,0}}{T_{US,0}} = (1+\gamma)^{-e_{US}} - 1$$

Estimated changes in employment were based on applying the proportional reduction in traffic directly to base-level employment in Standard Industrial Classifications 4491 (Marine cargo handling), 4492 (Towing and tugboat services), and 4499 (Water transportation services n.e.c). Employment and trade data are all drawn from official data of the U.S. Department of Commerce. The staff is unaware of existing empirical estimates of the parameter  $e_{US}$ . The value used was based on a number of factors. In particular, we note that in table C-4, the cost share of transportation services in delivered price for tradables is relatively small. In addition, there are a number of other factors, such as the geographic location of demand, that are expected to have a much greater influence on shipping location. Also, as discussed in chapter 4, the U.S. Maritime Administration (MARAD) estimates that \$10 billion of U.S. trade with third countries goes through Canadian ports per year. This is a small share of the total U.S. port traffic and embodies market responses to changes made in recent years to U.S. port fees such as the harbor maintenance fee and the vessel tonnage tax.<sup>25</sup> Commission staff also examined the statistical relationship between U.S. port traffic and shipping rates. This relationship was highly suggestive of an inelastic demand for shipping services to U.S. ports and of relatively elastic supply. (Based on all these factors, staff qualitatively estimated a low value of  $e_{US}=0.5$  for this analysis.)

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<sup>25</sup> Testimony of Jean Godwin, American Association of Port Authorities, January 24, 1992, p. 2.

Table C-1

Subsidy estimates based on data provided by the SCA and the OECD, 1989

Item	Japan	Korea	Germany
Total subsidies (million dollars):			
SCA-based estimates .....	761.0	1,246.3	1,963.6
OECD-based estimates .....	41.8	426.3	535.0
Shipbuilding revenue <sup>1</sup> .....	10,491.4	3,568.3	2,872.3
Subsidy rates (percent):			
SCA-based rates (percent).....	7.25	34.9	68.4
OECD-based rates (percent).....	0.40	12.0	18.6

<sup>1</sup> Includes shipbuilding, maintenance, and repair revenue.

Source: Estimated by the staff of the USITC from statistics of the Shipbuilders Council of America, the Organization for Economic Co-operation and Development, the International Monetary Fund, and the United Nations.

Table C-2

Percentage increases in the price of foreign-built ships that serve U.S. ports resulting from H.R. 2056 and the draft OECD Agreement

Item	Change under H.R. 2056 <sup>1</sup>	Change under draft OECD Agreement <sup>2</sup>
OECD-based estimate.....	5.9	4.3
SCA-based estimate.....	23.5	16.9

<sup>1</sup> Full passthrough case where the percentage change in the U.S. price equals the full average value of the subsidy rate.

<sup>2</sup> Percentage change is equal to 72 percent of the average value of the subsidy rate.

Source: Estimated by the staff of the USITC.

Table C-3

Capital cost share and shipping cost increase by types of ship

(In percent)					
Ship type	Capital cost share	Shipping cost increase			
		H.R. 2056		Draft OECD Agreement	
		SCA- based	OECD- based	SCA- based	OECD- based
Liners.....	18.0	4.2	1.1	3.0	0.8
Liquid bulk.....	45.0	10.6	2.7	7.6	1.9
Dry bulk.....	30.0	7.0	1.8	5.1	1.3
Weighted average..	24.4	5.7	1.4	4.1	1.0

Source: MARAD and estimated by the staff of the U.S. International Trade Commission.



Table C-4  
Shipping cost share by industries

(In percent)	
Sector	Shipping cost share
Merchandise industries:	
Agriculture, fishing, & forestry.....	7.2
Mining.....	5.8
Construction.....	0.0
Nondurable manufacturing.....	2.9
Durable manufacturing.....	1.9
Service industries:	
Transportation, communication, & utilities.....	0.0
Wholesale & retail trade.....	0.0
Finance, insurance, & real estate.....	0.0
Services.....	0.0
Detail industries:	
Edible fruits & nuts.....	21.2
Coal.....	22.0
Crude petroleum & natural gas.....	4.7
Meat.....	8.4
Flour & other grain mill products.....	10.4
Sugar & sugar products.....	9.8
Chocolate & cocoa products.....	8.5
Animal or vegetable fats & oils.....	7.8
Oilseeds.....	3.8
Coffee.....	7.6
Furniture & lamps.....	6.0
Fertilizers.....	8.1
Refined petroleum products.....	7.0
Rubber products.....	6.0
Stone, ceramic, & glass products.....	6.4
Steel & steel products.....	6.7
Toys & athletic goods.....	4.1

Source: Estimated by the staff of the U.S. International Trade Commission.

Figure C-1  
Price effects of subsidy eliminations under H.R. 2056 and the proposed OECD Agreement

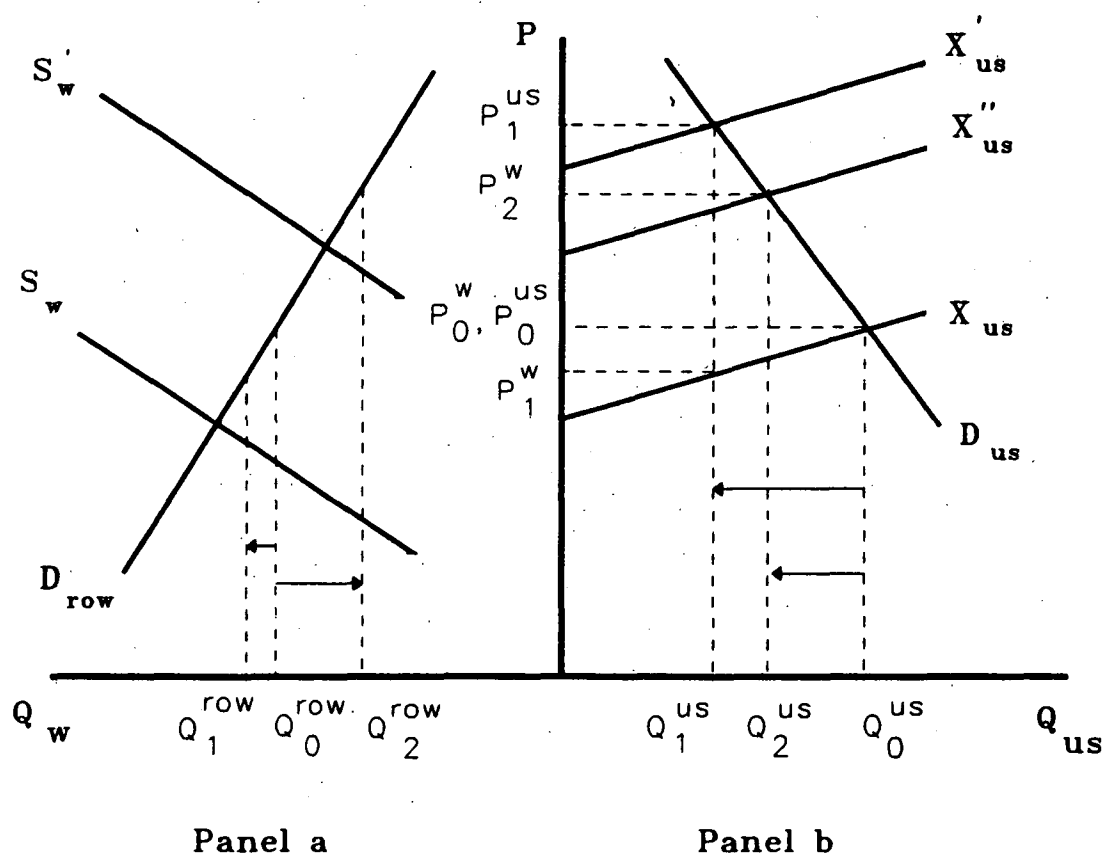
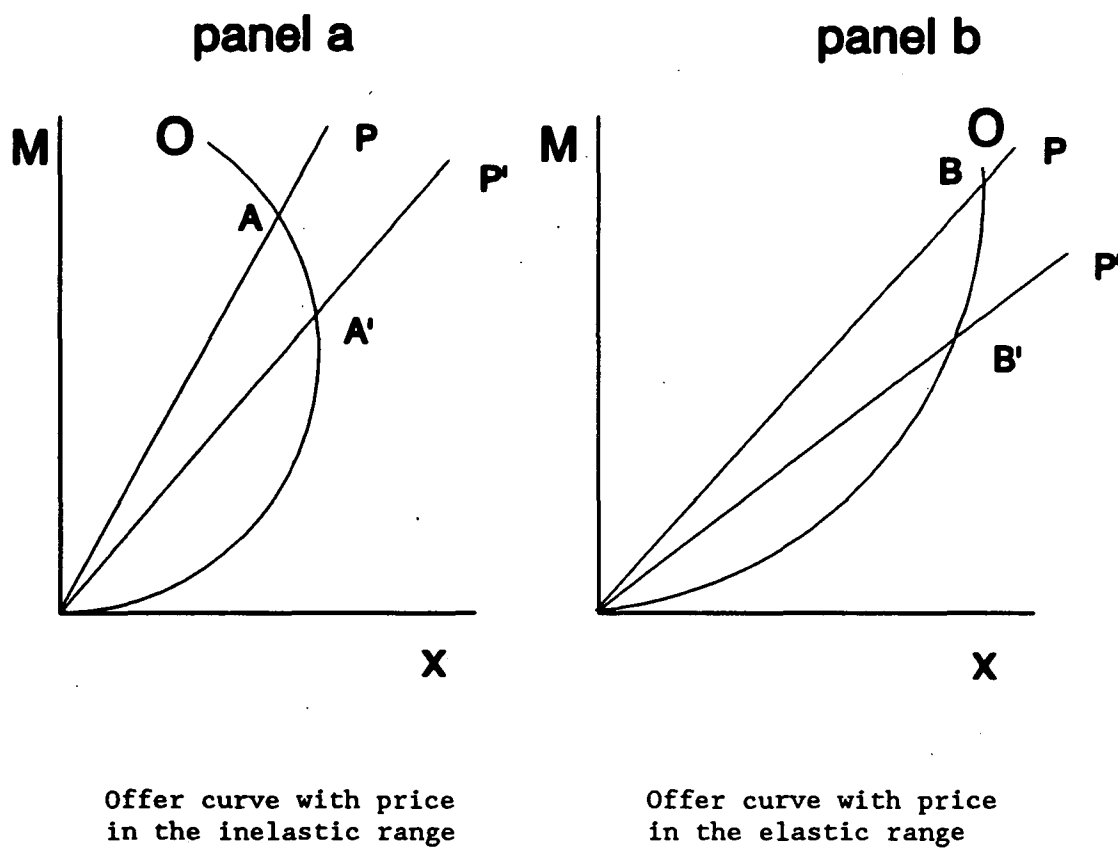


Figure C-2  
The trade effects of increased transportation costs on U.S. imports and exports





APPENDIX D  
PROFILE OF WORLD SHIPBUILDING

## BACKGROUND

Shipyards in Japan, Korea, and Western Europe,<sup>1</sup> the top three commercial shipbuilding areas in the world, accounted for approximately 80 percent of all orders and completions during 1983-90 (figures D-1 and D-2). During the period, global orders for new ships bottomed out at 11.8 million gross tons (gt) in 1988 and rose to a peak of 24.1 million gt in 1990. The year 1990 began with high order activity for large tankers during the first two quarters; however, Iraq's invasion of Kuwait caused shipowners to postpone orders, thus reducing demand during the latter part of the year. During 1990 Japanese shipyards received orders for 11.1 million gt, capturing a 46.1 percent share of world orders. Korea's shipyards received the highest new-order volume in their history with 5.7 million gt, and Korea's share of the global market increased to 23.7 percent.<sup>2</sup> Shipyards in Association of West European Shipbuilders (AWES) countries booked new orders of 4.2 million gt in 1990, representing a 32-percent increase in orders over 1989, and accounted for 17.4 percent of the global market.<sup>3</sup> The shipbuilding industries of Japan, Korea, and the AWES countries dominated global production of ships as well during 1989-90 (table D-1)<sup>4</sup> and accounted for 70 to 80 percent of the global backlog of oceangoing ships during 1983-90, reflecting their dominant commercial shipbuilding position in the world (figure D-3).

## ASIA

### Overview

As discussed Japan and Korea are the two principal shipbuilding countries in Asia. The shipbuilding capabilities of other countries in Asia, notably Taiwan and China, are significantly less developed. U.S. shipbuilding industry sources allege that the shipbuilding industry in China has received a high level of assistance from the Chinese Government and therefore could become a significant force in the international marketplace in the very near future. Industry sources in Japan and Korea currently downplay the ability of

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<sup>1</sup>The Association of West European Shipbuilders (AWES) represents firms in Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, and the United Kingdom.

<sup>2</sup>Lloyd's Register of Shipping, Statistical Tables 1991, London, 1991.

<sup>3</sup>Most of the information on the Japanese shipbuilding industry contained in this section was compiled from Shipbuilding in Japan 1990-91, which is jointly published by the Japan Ship Exporters' Association and the Shipbuilders' Association of Japan in cooperation with the Japan Shipbuilding Industry Foundation.

<sup>4</sup>Table D-1, though for 1989-90 only, generally reflects market share trends during 1980-90.

Chinese shipyards to develop any significant capacity or capabilities in commercial shipbuilding in the next 5 to 10 years.<sup>5</sup>

Table D-1

World shipbuilding production,<sup>1</sup> world market share, 1989-90

Country	Gross tons	1990		1989	
		Compensated		Compensated	
		gross tons (cgt)	Cgt mkt share Percent	gross tons (cgt)	Cgt mkt share Percent
Japan.....	6,824	4,460	38.3	3,660	37.1
AWES.....	2,849	3,290	28.2	2,780	28.1
Korea.....	3,459	1,560	13.4	1,390	14.1
Other Countries....	2,753	2,350	20.1	2,050	20.7
Total.....	15,885	11,660	100.0	9,880	100.0

<sup>1</sup> Gross tonnage taken from Lloyd's Register.

Source: The Association of West European Shipbuilders (AWES), Annual Report 90-91.

In the Japanese fiscal year 1990 (April 1, 1989-March 31, 1990), orders for the construction of new vessels in Japanese shipyards increased by 24 percent over FY 1989, to 10.7 million gt.<sup>6</sup> It was the first time that newly ordered tonnage in Japanese yards exceeded 10 million gt since 1983, when new orders amounted to 12.4 million gt. Approximately 9 percent (985,000 gt) of FY 1990 orders were for domestic vessels; the remaining 91 percent (9.7 million gt) were for the export market.<sup>7</sup>

In FY 1990 the 18 members of the Shipbuilders' Association of Japan recorded total sales of approximately \$45.6 billion, or about 11 percent higher than FY 1989 sales. The portion of these sales relating directly to new shipbuildings, ship conversions, and ship repairs amounted to approximately \$7.1 billion, which was about 16 percent higher than FY 1989 sales. Most of the seven major Japanese shipbuilders are part of large, diversified, multiproduct companies, similar to large shipyards in the United

<sup>5</sup>Seatrade Weekly reported that Hyundai Heavy Industries of Korea has been contemplating the construction of a shipyard and automobile assembly plant in Shanghai Province, China. Seatrade Weekly, Jan. 10-16, 1992, p. 10.

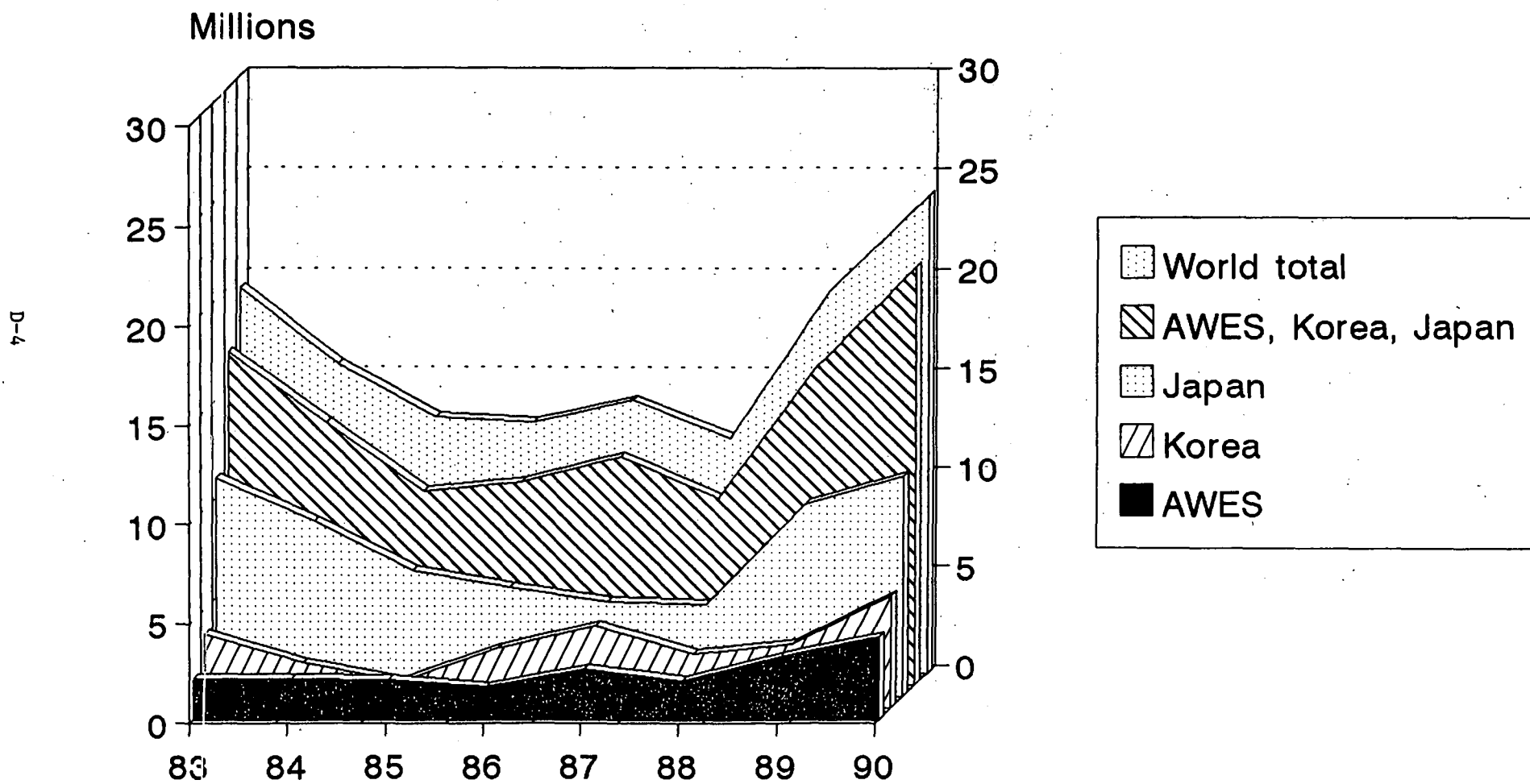
<sup>6</sup>Japan Ship Exporters' Association (JSEA) and the Shipbuilders' Association of Japan (SAJ), Shipbuilding in Japan 1990-91.

<sup>7</sup>Of total FY 1990 orders, 69 percent were for tankers, of which 60 percent were crude oil tankers, 30 percent were for cargo vessels, and the remaining orders were for miscellaneous vessels.

# Figure D - 1

Orders for oceangoing ships, 1983-90

Millions of gross tons

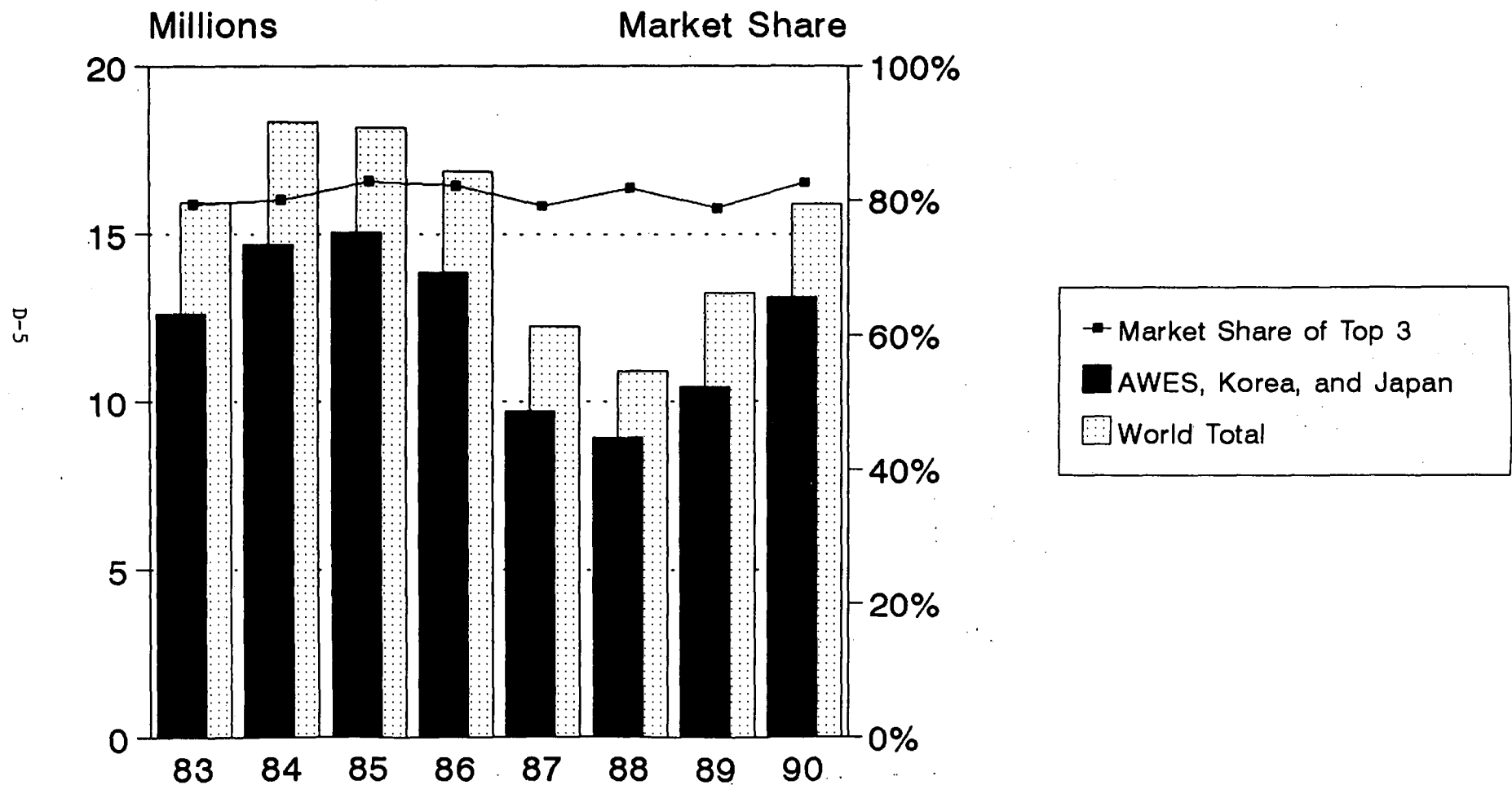


Source: Lloyd's Register



**Figure D - 2**

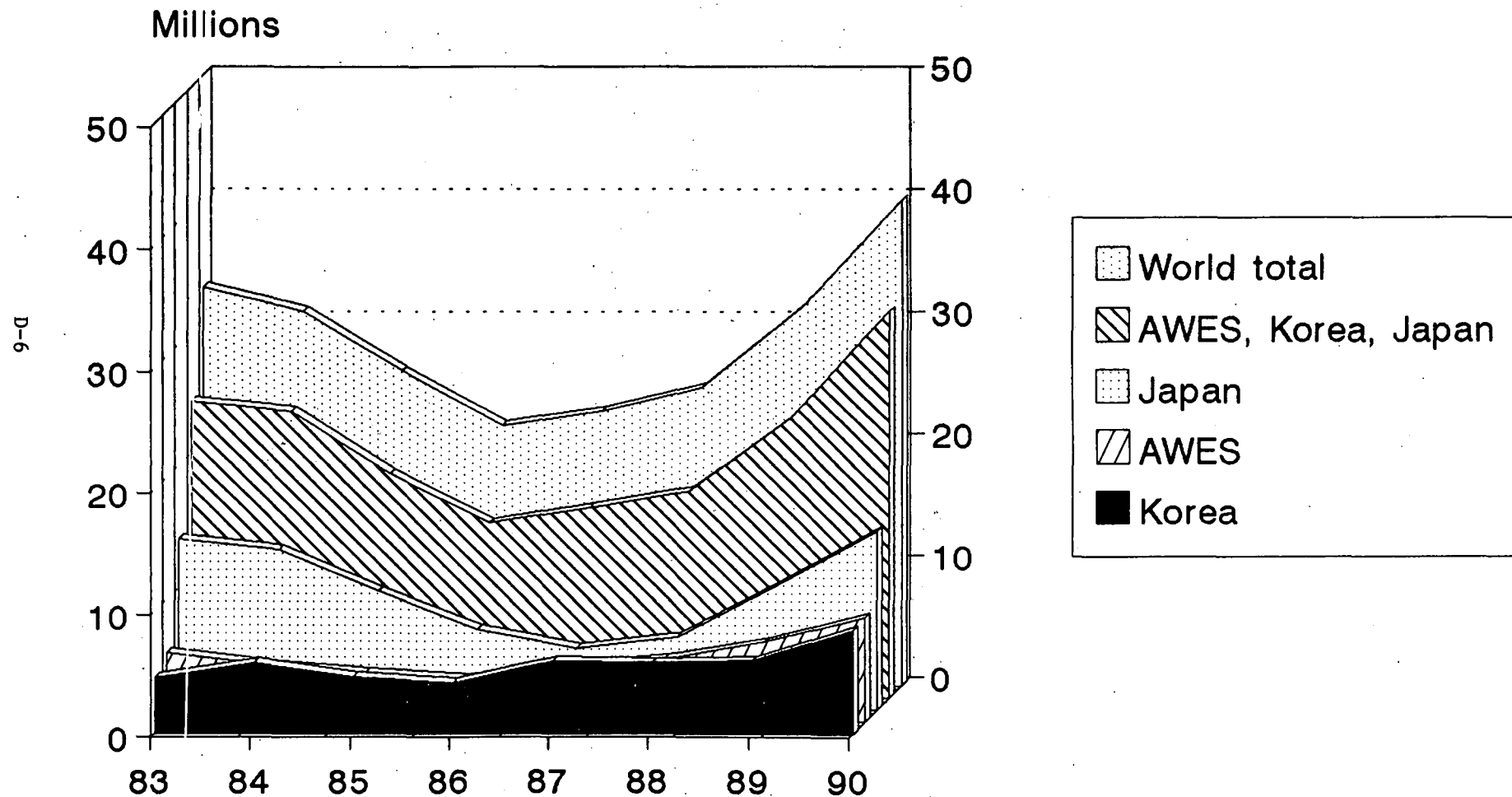
**Completions of oceangoing ships, 1983-90**  
**Millions of gross tons**



Source: Lloyd's Register

## Figure D - 3

Backlog of oceangoing ships, 1983-90  
Millions of gross tons



Source: Lloyd's Register

States.<sup>8</sup> The revenues of the shipbuilding departments of these Japanese companies averaged only 10 percent of total corporate sales. In contrast, the revenues attributable to the shipbuilding operations of the next 11 medium-sized Japanese yards accounted for an average of nearly 85 percent of the total revenues of these companies. Ship repair revenues of the 18-member Shipbuilders' Association of Japan averaged 17 percent (\$1.2 billion) of the total FY 1990 sales of these companies.

### Asian Shipbuilding Industry Restructuring

The Japanese shipbuilding industry was forced in FY 1979 and again in FY 1987 to reduce significantly its production capacity primarily as the result of the two oil shocks of 1973 and 1978, excess worldwide shipbuilding capacity, and the longevity of vessels built during the 1960s and 1970s. The number of shipbuilding companies capable of building a 5,000 gt ship or larger was reduced from 44 to 26, and the number of dry docks declined from 21 to 8 during this period. Japan reached its highest level in available shipbuilding capacity at 9.0 million cgt in 1975. By 1990 available capacity was reduced to 5.5 million cgt, or by 39 percent. Japan's shipyard and subcontractor workforce stood at 361,000 as of December 31, 1974. It declined by nearly 65 percent, to 126,000 as of December 31, 1990. The Japanese shipyard workforce at yearend 1990 comprised 55,000 workers involved in shipbuilding, 34,000 subcontractors, and 37,000 workers in related industries.<sup>9</sup> Japan utilizes subcontractors as a means to expand more easily and to contract its shipbuilding capability according to the demand of the global market.<sup>10</sup> The use of subcontractors has been cited by the U.S. shipbuilding industry as a competitive advantage enjoyed by the Japanese shipyards, and it is a factor overlooked in comparisons of productivity between Japan and other world shipbuilders.<sup>11</sup>

The restructuring of the Japanese shipbuilding industry was done with the help of the Japanese Government. The Government encouraged shipyards to reduce their capacity, buying some of the yards outright and providing some funds for the retraining of displaced shipyard workers. U.S. industry sources indicate that though some yards in Japan are no longer producing ships, they could be reactivated should the market demand additional capacity. When asked about this assertion, each Japanese firm interviewed indicated that it would not be possible to reactivate closed yards, for both economic and political

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<sup>8</sup>The top eight Japanese shipyards in terms of nominal production capacity as of April 1991 were: Mitsubishi Heavy Industries, Ltd. (MHI); Kawasaki Heavy Industries, Ltd. (KHI); Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI); Hitachi Zosen Corp. (Hitachi); Sumitomo Heavy Industries, Ltd. (SHI); Shin Kurushima Dockyard Co., Ltd.; Tsuneishi Shipbuilding Co., Ltd.; and Mitsui Engineering & Shipbuilding Co., Ltd. (Mitsui).

<sup>9</sup>JSEA and SAJ, Shipbuilding in Japan 1990-91.

<sup>10</sup>Japanese industry officials, interviews by USITC staff, Feb. 10-14, 1992.

<sup>11</sup>U.S. shipbuilding industry officials, interviews by USITC staff, Feb. 4-6, 1992.

reasons. Nevertheless available capacity is expected to rise from 5.5 million cgt to 6.5 million cgt, or by 18 percent, during 1990-95.<sup>12</sup>

In contrast to most other countries that had existing oceangoing shipbuilding capabilities, Korea was a relative newcomer to the global shipbuilding market. The Government of Korea targeted shipbuilding in order to generate foreign exchange earnings in the early 1970s.<sup>13</sup> Subsequently Korean shipbuilders increased their available capacity fivefold during 1975-90, from 0.4 million cgt to 1.8 million cgt, in order to establish a global presence and provide a new industry for its people. The increase coincided with declining global ship prices, which Korean industry officials claim to have further pressured downward by their desire to become a global player.<sup>14</sup> Korea has begun to follow the lead of Japan in raising prices on its ships; Korean ships are now highly competitive with those of other shipbuilding nations on the bases of price, quality, and delivery dates. A further rise in Korean capacity, to 2.4 million cgt, is expected during 1990-95.<sup>15</sup>

## EUROPE

### Overview

European yards generally specialize in vessels with a high value-added content, such as passenger/cruise vessels, containerhips, reefers, naval vessels, liquid natural gas and liquid propane gas (LNG and LPG) carriers, and, in the case of northern European yards such as Kvaerner Masa-Yards in Finland, ice breakers. European yards are not competitive in low value-added vessel markets, such as bulkers and tankers, primarily because of labor and materials costs. Cruise vessels are a very important market for the European yards. These yards attribute a portion of their success in this market to the "European touch," which they define as superior craftsmanship and style.<sup>16</sup>

Western Europe's shipbuilding production was 37.5 percent of world output in 1976. It declined from this point, to 20.1 percent of world production in 1986, and rose again to 24.7 percent in 1988.<sup>17</sup> Germany alone was responsible for over 30 percent of the total compensated gross tonnage of ships completed by EC member states in 1988; in 1990, it was the third-

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<sup>12</sup>AWES, Annual Report, 1990-91.

<sup>13</sup>Korean shipbuilding industry officials, interviews by USITC staff, Feb. 17-19, 1992.

<sup>14</sup>Ibid.

<sup>15</sup>AWES, Annual Report, 1990-91.

<sup>16</sup>Ibid. and European industry officials, interviews by USITC staff, Feb. 16-19, 1992.

<sup>17</sup>Panorama of EC Industry 1990, p. 13-25.

largest shipbuilding nation after Japan and Korea, building 5.4 percent of total world gross tonnage.<sup>18</sup>

During the last 20 years, European shipbuilders have continuously lost global market share to Asian shipyards. European industry sources feel that two important reasons account for this decline:

1. Overcapacity in Japan and in Korea, which was created by the recommendations or mandates of the Japanese and Korean Governments to expand shipbuilding capacity. This effort drove the prices of ships downward; and
2. Japan, though the largest shipbuilding exporter in the world, has not imported any commercial ships in the last 40 years. According to European industry officials, this is because of soft home credit schemes and the Government of Japan's administrative guidance, both of which encourage domestic purchases.<sup>19</sup>

### European Shipbuilding Industry Restructuring

The policy of the EC Commission has been to encourage the restructuring and reduction of capacity. Industry sources state that any increases in Western European shipbuilding capacity during the coming years will be primarily the result of the ongoing efforts to improve productivity, mainly through improved work planning, standardization, and automation of production. During 1975-90, available capacity in West European yards decreased by 63.5 percent, from 8.5 million cgt to 3.1 million cgt.<sup>20</sup> European shipyards that had specialized in building large tankers and bulk carriers reduced capacity by as much as 75 percent during the period. Many firms are still consolidating operations and downsizing via shipyard closures, workforce reductions, and shifting of production to other upmarket sectors. In 1990 the overall workforce size in AWES countries stabilized at 174,099 employees. However, since 1975, the number of AWES employees has declined by 62 percent (table D-2).<sup>21</sup> Medium-sized and smaller AWES shipbuilders are currently suffering from insufficient orders and a small workload, whereas larger shipyards have contracts through 1992 or 1993. (Table D-3 lists large European shipyards.) In spite of these conditions, both shipbuilding production and available capacity are expected to increase by 10 percent during the period 1990-95.<sup>22</sup>

European countries felt that domestic direct subsidies granted to their shipbuilding industries were the way to deal with the problems of Asian

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<sup>18</sup>Ibid., p. 13-26. Also, AWES, Annual Report, 1990-91.

<sup>19</sup>AWES, Annual Report, 1990-91.

<sup>20</sup>Ibid.

<sup>21</sup>Ibid.

<sup>22</sup>Ibid.

underpricing and a closed Japanese market.<sup>23</sup> In 1986 the EC Commission adopted a twofold strategy: to start capacity reduction negotiations with Japan and Korea and to introduce the Sixth Directive on Shipbuilding Aid. This directive, part of which formally provided for subsidies, was intended to preserve the EC shipbuilding industries in the face of market dominance by Asian countries. The industry regards such assistance not as assistance given in order to overcome any industry shortcomings, but rather as a negative common external tariff. As such the European shipbuilding industry believes that shipbuilding subsidies should not be lowered without a corresponding alteration in the market behavior of its Asian competitors.<sup>24</sup>

Table D-2  
Workforce in AWES countries, 1990

	1975		1990	
	Total	New building	Total	New building
Belgium.....	10,245	6,586	2,638	2,517
Denmark.....	18,900	15,300	8,560	6,780
Finland.....	18,000	17,000	7,254	6,748
France.....	40,354	24,938	8,008	6,084
Germany, West....	73,172	47,413	31,878	<sup>1</sup> 15,297
Germany, East....	32,816	24,185	27,332	19,187
Greece.....	10,519	2,316	8,355	550
Ireland.....	1,633	1,427	( <sup>2</sup> )	( <sup>2</sup> )
Italy.....	36,260	21,460	17,870	<sup>1</sup> 11,714
Netherlands.....	39,850	20,850	10,400	3,900
Norway.....	29,000	16,500	13,800	<sup>1</sup> 11,910
Portugal.....	17,100	7,000	10,000	4,070
Spain.....	47,000	27,800	17,559	13,387
Sweden.....	31,500	25,000	1,254	553
United Kingdom...	55,999	48,272	9,191	6,125
Total.....	462,348	306,047	174,099	108,822

<sup>1</sup> Includes workers involved in production of new offshore drilling platforms.

<sup>2</sup> Data are not available.

Source: AWES, Annual Report, 1990-91.

The EC-mandated upper limit for governmental support has gradually been reduced during recent years, from 28 percent in 1986 to 26 percent in 1987 and from 20 percent to 13 percent in 1991. The 1992 upper limit is set at 9 percent, which is being challenged by some of the AWES members.<sup>25</sup> From the

<sup>23</sup> CENSA, Mar. 17, 1989.

<sup>24</sup> Ibid.

<sup>25</sup> Germany, Spain, and Italy have publicly expressed their displeasure with the 9-percent cap on subsidization of shipbuilding.

European shipbuilders' perspective, a continuation of this policy of gradual reduction is only justified if other countries follow similar policies and, in particular, if the proposed OECD multilateral agreement will provide for the "elimination of distortions of competition," or unfair pricing practices by Asian competitors.<sup>26</sup>

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<sup>26</sup> AWES, Annual Report, 1990-91.

Table D-3  
Selected data on Europe's large shipyards, 1992

Name	Building sites	Workforce	Main activities	Shareholder of reference
Bremer Vulkan (German).....	4	7,500	Naval, passenger reefers, containerships.	State of Bremen.
Howaldtswerke (German).....	2	4,800	Containerships, Naval, Subs.	Preussag.
Chantiers de l'Atlantique (France).....	1	4,500	Passenger, LNG, Naval.	GEC Alsthom.
Fincantiere (Italy).....	8	14,000	Passenger, LPG.	IRI (Italian State).
Astilleros Espanoles (Spain).....	6	11,500	Crude carriers	INI (Spanish State).
Harland & Wolff (United Kingdom)..	1	2,800	OBO carriers	Fred Olsen.
Odense (Denmark)..	1	2,100	VLCC, containerships.	A.P. Moller.
Masa-Yards (Finland).....	2	4,000	Passenger, ice breakers.	Kvaerner (Norway).

Source: USITC staff interviews with European industry officials, Feb. 16-19, 1992, and information provided by Chantiers de l'Atlantique.



**APPENDIX E**  
**SHIPBUILDING INCENTIVE SCHEMES**

## SHIPBUILDING INCENTIVE SCHEMES

**OECD STANDARD SCHEME:** Participants in the understanding include Australia, Canada, the EC, Finland, Japan, Norway, and Sweden.

### I. TERMS:

- A. 80 percent of the building cost is provided,
- B. 8.5 year\* period of amortization with repayments at regular intervals of (normally) 6 months or a maximum of 12 months, commencing 6 months after delivery,
- C. 8 percent interest rate fixed for the period of the loan, net of all charges. (The interest rate, as far as the EC is concerned, means a minimum interest rate of 8 percent, which may include some charges, as long as the interest rate net of all charges is not less than 7.5 percent.)

\*Given the special nature of the transactions for vessels transporting liquified natural gas, the duration of authorized credit for this type of ship is increased to 10 years.

### II. AVAILABILITY:

The scheme is available for the construction or completion and equipment of:

- A. A ship other than a tug of at least 100 GRT, or
- B. A tug of not less than 500 BHP, or
- C. A mobile offshore installation weighing more than 100 tons, or

The scheme is also available for the radical alteration of:

- A. A ship of at least 1,000 GRT, or
- B. A mobile offshore installation weighing more than 5,000 tons.

### DENMARK:

I., The Ship Credit Fund of Denmark may grant loans to finance the following:

- A. The newbuilding and rebuilding\* of ships for Danish shipowners at a Danish or foreign shipyard,
- B. The newbuilding and rebuilding\* of ships for foreign shipowners at a Danish shipyard,
- C. The purchase of Danish or foreign ships to be registered in Denmark,
- D. The sale of ships by Danish shipowners to foreign shipowners.

\*Rebuildings are financed only if they substantially increase the tonnage of a ship or substantially alter its cargo-carrying capacity.

### II. LOANS AVAILABLE:

NEWBUILDING			
	OECD Loan	Combination Loan	Market Loan
Danish Owner:			
Danish yard	Yes	Yes	Yes
Foreign yard	No	No	Yes
Other EC Owner:			
Danish yard	Yes	Yes	Yes
Foreign yard	No	No	No
Non-EC Owner:			
Danish yard	Yes	No	Yes
Foreign yard	No	No	No
REBUILDING			
Danish Owner:			
Danish yard	Yes	Yes	Yes
Foreign yard	No	No	Yes
Other EC Owner:			
Danish yard	Yes	Yes	Yes
Foreign yard	No	No	No
Non-EC Owner:			
Danish yard	Yes	No	Yes
Foreign yard	No	No	No

Permitted newbuildings are:

- A. Merchant ships of at least 100 GT for the transport of passengers and/or cargo,
- B. Fishing vessels of at least 100 GT,
- C. Tugs with an engine power of at least 365 KW,
- D. Other vessels for work at sea of at least 100 GT, except oil rigs and offshore material.

Permitted rebuildings are:

- A. The rebuilding of sea-going ships of at least 1,000 GT on condition that the work carried out thoroughly alters the cargo-carrying capability, the hull, the propelling system or the passenger conditions of the ship. (For Danish shipowners and non-Danish shipowners at Danish yards: If a rebuilding project does not meet this condition, finance may be offered only on market terms.)

### III. TYPES OF LOANS:

- A. Interest-subsidized loans: may be offered to finance ships contracted at Danish yards. Interest-subsidized loans are cash loans granted as OECD loans or as combination loans.
- B. OECD loans: may be offered to all shipowners for 80 percent of the contract sum with a repayment period of 8.5 years at an interest rate of 8 percent p.a. Normally denominated in DKr, loans may with permission of the Danish Central Bank be denominated in US\$, DM, NLG, SwF, or JY.
- C. Combination loans: are subject to prior approval by the Ministry of Industry. May be offered to EC shipowners to finance ships contracted in Danish yards, subject to the following conditions:
  - i. Financing for contracts entered into before the end of 1989 for delivery before the end of 1991 may be offered as an indexed loan for 60 percent of the contract sum and an OECD loan for the remaining 20 percent of the contract sum.
  - ii. For contracts entered into before the end of 1990 for delivery before the end of 1992, financing may be offered as 45 percent indexed loan and 35 percent OECD loan.
  - iii. For contracts entered into before the end of 1991 for delivery before the end of 1993, financing may be offered as 30 percent indexed loan and 50 percent OECD loan.

Indexed loans must be denominated in DKr. The loan life is 14 years, including a 4-year grace period. Nominal interest paid is either 2.5 percent p.a. or 4 percent p.a., at the discretion of the borrower. The borrower will be obliged to pay interest and installments on an indexation equal to an annual inflation of either 3 percent for 2.5 percent bonds or 1.5 percent for 4 percent bonds. The Danish government will pay any indexation exceeding 3 percent and 1.5 percent, respectively.

IV. LOANS ON MARKET TERMS: Market term loans are available to shipowners who qualify for financing according to the Fund's by-laws, but who do not meet conditions to obtain interest subsidies.

V. MATCHING LOANS: Matching loans, available only to foreign shipowners, are granted in the event a shipyard faces risk of losing an export order because the foreign owner is offered government-subsidized financing by a non-OECD country on terms more favorable than OECD terms. In addition, OECD member states agree that normal financing terms and conditions may be eased where a vessel is exported to a developing country, providing the contract includes a grant from the exporting country of not less than 35 percent of the total construction cost.

VI. PRE-FINANCING LOANS: The scheme established in 1975 remains effective. Under the scheme, up to 75 percent of the final loan offered to the shipowner, or 75 percent of the final loan the owner could have obtained with the Fund, may be paid to the shipyard while the vessel is under construction. Pre-financing loans may be offered only for newbuilding purposes. The loan is made to the shipyard in 3 to 6 equal installments. Payment is made only when the shipyard has invested an amount corresponding to the proportional share of the pre-financing loan to the total final loan. The interest rate at present is 9.5 percent p.a., subject to changes from time to time. With the Danish Central Bank's consent, the loan may be in foreign currency.

### FINLAND:

In general, Finland operates within the standard OECD scheme for shipbuilding incentive schemes. Recently, however, credit terms available to domestic owners placing orders with local shipbuilders have been eased. The Metal Industry Association, now representing the Finnish Shipbuilders' Association, said the extra subsidy would have little effect.

### FRANCE:

French shipbuilding incentives are governed by the EC directive of January 1987. Public subsidies are granted to shipyards which make a specific request to the Minister of Industry on a case-by-case basis, and not automatically. The subsidies are provided if certain criteria are met; these criteria include the economic condition of the French shipbuilding industry, the geographic location of the shipyard, and the financial and "social" condition of the shipyard itself. According to Barclays Bank SA, Paris, 6 companies benefitted from state support in 1990, receiving in total FF 100m. The financial support was provided as part of the state's efforts to support and modernize the merchant marine.

### GERMANY:

I. PURPOSE OF THE DOCKYARD ASSISTANCE: In order to enable German dockyards to adapt to the artificially competitive conditions in the international shipbuilding market and to facilitate measures for structural improvement carried out by them, dockyard shipbuilding subsidies with (West) Germany can be granted to them according to these directions using funds from the federal budget. A legal claim does not exist for this dockyard aid (i.e., there is no automatic right to such assistance).

## II. CONDITIONS FOR THE GRANTING OF DOCKYARD ASSISTANCE:

A. Within the range of available means, help in the form of interest subsidies with loans for the ordering of shipbuilding with delivery dates from 1/1/90 to 12/31/92 is granted as long as the loan agreed with the orderer to finance the contract price contains no more favorable conditions than the following: (These conditions correspond to the current valid OECD agreement concerning export credit for ships in respect of the current valid EEC directives concerning shipbuilding subsidies.)

i. Repayment in 17 equal semi-annual installments (20 for LNG tankers) commencing 6 months after delivery.

ii. Advance payment of 20 percent of the purchase price (i.e., 80 percent financing).

iii. Net interest rate of 8 percent p.a.

B. Shipbuilding, according to these directions, is: (This definition corresponds with the current valid directive of the EEC's council regarding the subsidies for shipbuilding.)

i. The construction of sea vessels of 100 GRT and above in a dockyard in (West) Germany with the following features:

(a) ships transporting people and/or goods.

(b) ships with special roles (e.g., fishing vessels, fish-processing ships, ice breakers, and dredgers).

(c) the building of trawlers with 365 KW and above.

(d) floating docks and mobile drilling platforms are excluded.

ii. The conversion/alteration of sea vessels of 1,000GRT and above in a shipyard in (West) Germany as long as the reconstruction leads to a radical change in the way loading is carried out in the ship's hull, or in the main propulsion system of these ships.

iii. In exceptional cases, dockyard subsidies can also be granted with the agreement of the Federal Ministry for the Economy for loans with more favorable conditions than those detailed in Part A, items i. through iii. above, if this appears justified for political reasons. In this respect, the corresponding regulations of the current valid OECD agreement concerning export credit for ships apply.

## III. TYPE AND RANGE OF DOCKYARD ASSISTANCE:

A. Dockyard aid will be granted in the form of non-repayable subsidies in connection with the furtherance of such projects.

B. The dockyard subsidies are used in connection with suppliers of financial loans in order to lower the interest rate fixed by the credit institutions to the interest rate agreed with the orderer. This lowering of the interest rate, however, may not exceed the difference between the average capital market interest rate and the rate named in Section II, Part A, item iii. (The difference being calculated at the time of the final agreement of the dockyard aid), and is limited to 2 percent at the most for DM loans. A limit of 4 percent may be applied to foreign currency loans. NOTE: These limitations are not valid for the exceptional cases in Section II, Part B, item iii. Within the framework of these directions, the calculation of the amount of dockyard aid is based upon the loan agreed with the orderers and as a maximum limit the maturities of its repayment.

C. The KfW (Kreditanstalt für Wiederaufbau) decides whether dockyard aid is granted for suppliers credit or financial loans.

## IV. PROCEDURE FOR APPLICATION: Those entitled to apply are enterprises from the dockyard industry in (West) Germany (applicants).

## V. PAYMENT:

A. Interest subsidies are made available half-yearly at the time of the interest maturity for the loan agreed with the orderer - if the delivery of the vessel at the appropriate time is proved to the KfW.

B. Dockyard help is to be carried out solely by domestic credit institutions.

C. The KfW pays out the dockyard subsidy into an account at a domestic credit institution named by the applicant.

## VI. PROOF OF UTILIZATION: The use of the dockyard aid is to be proved to the KfW within one month after the expiry date of the loan granted and after the last payment of the interest subsidy. Proof is to be in the form of a declaration that the dockyard aid has been used for the purpose indicated in the contract between KfW and the dockyard. This declaration is to be made by an authorized credit institution and is to be confirmed by the applicant in the case of a delivery credit. The recipient of the subsidies must assure at the time of application that - without detriment to the confidentiality of the business' private matters - he/she agrees to the fact that in particular cases the Federal Government informs the Budget Committee of the German Federal Diet of the name of the applicant, amount and purpose of the subsidies if requested. Once this information has been received, the Federal Government is also authorized to pass on this information in confidence to other responsible committees of the German Federal Diet. These directives came into force on 1/1/90 and exist until 12/31/92. NOTE: In December 1990, the EC adopted legislation extending the transitional arrangements for Spain and Portugal to the former German Democratic Republic's shipyards. This arrangement allows the yards operating aid for shipbuilding and concessions, providing they adopt a restructuring plan leading to capacity reductions, and enabling them to compete competitively with a progressive reduction of state aid.

**JAPAN:** According to the Exim Bank and The Development Bank, two incentive schemes exist in Japan to encourage shipbuilding:

I. For Non-resident Buyers of Ships: The Exim Bank of Japan supports a scheme identical to the standard OECD scheme, i.e., as follows:

- A. Financing period: Up to 8.5 years
- B. Amount to be financed: Up to 80 percent of the total cost
- C. Interest rate: 8 percent, net of all charges

II. For Resident Operators: An original incentive scheme is supported by The Development Bank of Japan.

- A. Financing period: Up to 13-15 years
- B. Amount to be financed: Up to 50-60 percent of the contracted price of the ship (in case of repair, up to 30 percent of the cost)
- C. Interest rate: 7.2 percent (7.4 percent for passenger ships)

These figures may change, depending on the type of ship concerned.

**KOREA:** In Korea, there are no specific financial schemes; as such, to encourage shipbuilding, other than the standard export finance supported by The Export-Import Bank of Korea, which is similar to that operated by the OECD countries. This scheme is briefly outlined below:

- A. Interest - 8 percent p.a.
- B. Maximum repayment period - up to 8.5 years
- C. Financing ratio - up to 80 percent of the contract amount less minimum cash payment
- D. Minimum cash payment - not less than 20 percent of the contract amount
- E. Repayment guarantees for deferred payment - L/G or L/c issued or confirmed by first-class international banking institutions
- F. Repayment - equal semi-annual installments beginning 6 months from the date of delivery
- G. Foreign content (materials and equipment to be imported for export) ratio - lower than 25 percent

In addition, as a special government financial institution which aims to promote the Korean economy and to place Korean exporters on an equal basis with foreign competitors, Eximbank offers a number of different schemes:

I. **EXPORT CREDIT:** This can be in the form of a Supplier Credit (loans to domestic firms) or Buyer Credit (loans to foreign entities).

A. The Supplier Credit - is granted to Korean manufacturers, in order to provide them with the required funds to finance the exports of designated capital goods such as ships and other forms of heavy engineering. The credit covers medium- and long-term (6 months to 10 years) transactions, and is usually on a cooperative financing basis with commercial banks which may require Eximbank's unconditional guarantee in order to be protected against possible causes of loss, including export default. This credit is divided into pre-delivery financing and post-delivery financing. Pre-delivery financing is provided by Eximbank at up to 90 percent of the export contract value less a cash payment on the contract. Eximbank extends financing for the local portion only, while the co-financing commercial bank extends financing for the materials and equipment to be imported. Post-delivery financing is available in foreign currencies at 85 percent of the export contract value less a minimum 20 percent cash payment. The balance of the credit is to be co-financed by commercial banks. A fixed interest rate is charged for the financing by Eximbank, while the prevailing market interest rate is applied by the co-financing commercial bank.

B. The Buyer Credit - is provided by Eximbank as a Direct Loan to foreign entities in order to finance the purchases of the same capital goods eligible for Export Credit. The loans are available for medium- and long-term transactions. Eximbank finances a maximum of 85 percent of the export contract less a minimum 20 percent cash payment at a fixed interest rate, with the balance co-financed by a commercial bank at the prevailing market interest rates. The contract value must be in excess of US\$ 1 million and the loan must be unconditionally guaranteed by the buyer's government, central bank, or first-class commercial bank.

Other schemes are available, but these have less direct relevance to shipbuilding facilities.

II. **GUARANTEES:** Eximbank provides guarantees to Korean commercial banks, local branches of foreign banks (including Barclays Bank PLC, Seoul) and foreign banks that participate in transactions at least partially financed by Eximbank. Eximbank also directly guarantees foreign importers that Korean firms will perform as contracted. These guarantees include:

- A. Financial Guarantees - Eximbank provides a 100 percent guarantee of principal and interest to co-financing banks for transactions of usually up to 5 years.
- B. Advanced Payment Guarantees - Eximbank also provides a foreign importer a 100 percent to refund the cash payment for medium- to long-term transactions when it becomes impossible for the domestic exporter to perform as contracted.
- C. Performance Guarantees - Eximbank provides a foreign importer a 100 percent guarantee that a domestic exporter will perform as guaranteed.

UNITED STATES: There are currently 2 programs in the United States that encourage shipbuilding - the Title XI Program and the Capital Construction Fund. They are both administered by the Office of Ships Financing, part of the Maritime Administration - Department of Commerce.

#### I. FEDERAL SHIP FINANCING PROGRAM - TITLE XI

- A. Introduction: The Federal Ship Financing Program, established under Title XI of the Merchant Marine Act of 1936, provides a full credit guarantee from the U.S. Government of debt obligation issued by U.S. citizen shipowners for the purpose of financing or refinancing U.S. flag vessels constructed or reconstructed in U.S. shipyards. Prompt payment in full of the interest and the unpaid principal of any guaranteed obligation is provided for under this program. This is guaranteed by the U.S. Government in the event of default by the shipowner in the payment of any principal and interest on the obligations when due or for any other specified defaults.
- B. Purpose: This program enables owners of eligible vessels to obtain long-term financing on favorable terms and conditions and at interest rates that are comparable to those available to large and financially strong corporations.
- C. Eligibility Requirements: Vessels eligible for Title XI assistance generally include vessels designed for research or commercial use, and over five tons. The shipowner must be a U.S. citizen and have sufficient operating experience and the ability to operate the vessel on an economically sound basis. He must also meet certain financial requirements with respect to working capital and net worth. No guarantee can be legally entered into unless the project is determined by the Secretary to be commercially sound.
- D. Procedure: Approval of the application will be contingent upon the determination by the Secretary as to whether the vessel(s) and the project meet all the applicable requirements of the existing statutes and regulations. Final approval is accomplished after the formal documentation of the transaction and all the conditions in the letter are satisfied.
- E. Amount Guaranteed: The amount of the obligation guaranteed by the Government is based on the "actual cost" of the vessel as determined by the Secretary. The Secretary is authorized to guarantee an obligation not exceeding 75 percent of the actual cost of most eligible vessels. This can be increased to a maximum of 87.5 percent of various categories of vessels, including passenger ships over 1,000 GRT, other vessels above 3,500 GRT and capable of sustained speed of 10 knots and other larger/higher power vessels.
- F. Source of Funds: As the Federal Ship Financing Program is a guarantee program, funds secured by the guarantee debt obligations and used for financing of the vessel(s) are obtained in the private sector, i.e., banks.
- G. Amortization and Interest Rate: The maximum guarantee period is 25 years from the date of delivery, though for reconstructed vessels, this may be extended to include the remaining useful years of the vessel as determined by the Secretary. Amortization in equal payments of principal is usually required, though level debt is also possible under certain circumstances. The interest rate of the obligation guaranteed for both new and refinanced vessels must be within the range of interest rates prevailing in the private market for similar loans and risks and must be determined to be fair and reasonable by the Secretary.
- H. Annual Guarantee Fees: The fee for the guarantee for a delivered vessel will not be less than 1/2 percent or more than 1 percent p.a. of the average principal amount outstanding, payable in advance.
- I. Refinancing: Amounts outstanding on existing Title XI obligations or on loans not previously insured or guaranteed may be refinanced under the Title XI program up to the amount of the depreciated actual cost of the vessel(s). Vessels purchased second hand are not eligible under this provision.

#### II. CAPITAL CONSTRUCTION FUND

- A. Introduction: The Capital Construction Fund (CCF) program was created within Section 607 of the Merchant Marine Act of 1936, to assist owners and operators of U.S. flag vessels in accumulating the large amounts of capital necessary for the modernization and expansion of the U.S. merchant marine. The program encourages construction, reconstruction or acquisition of vessels through the deferral of Federal income taxes on certain deposits of money or other property placed into a CCF. Operators of U.S. flag vessels are faced with a competitive disadvantage in the construction and replacement of their vessels relative to foreign-flag operators whose vessels are registered in countries that do not tax shipping income. The CCF program helps to counter-balance this situation through its tax deferral privileges. Owners using the CCF program can lower the effective cost to a company of replacing or adding vessels, significantly accelerate the time frame for accumulating capital for such purposes and utilize it to pay existing indebtedness on vessels if it is part of an overall building program.
- B. Eligibility Requirements: To qualify for the program, a party must be a citizen (individual or corporate) of the United States and own or lease one or more eligible vessels. An applicant must have a program which provides for the construction, reconstruction or acquisition of vessels and possess the financial capability to accomplish the program.
- C. Eligible and Qualified Vessels: Eligible vessels are those which produce income which may be deposited into the Fund and qualified vessels are those new, reconstructed or acquired vessels for which withdrawals may be made from the Fund. Eligible vessels are unlimited as to where they may operate, but qualified vessels are subject to geographic trading limitations.

D. Deposits: The Act provides for the deferment of Federal income taxes on certain deposit monies under certain allowable subceilings.

- i. Income attributable to the operation of agreement vessels.
- ii. Depreciation, provided it is with respect to agreement vessels.
- iii. Net proceeds from sale attributable to agreement vessels.
- iv. Earnings from investment of amounts on deposit in the Fund.

When the funds are deposited, the Federal tax which would otherwise be paid on those earnings is deferred. A "qualified withdrawal" is one made in accordance with the Act for the purpose of constructing, reconstructing, or acquiring a qualified vessel. A "non-qualified withdrawal" requires written permission before being approved and will be taxed as ordinary income.







