

**Maritime Shipping Issues and US Agricultural Exports**

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### Introduction

The importance of agricultural exports to United States agriculture and our position in the international economy has been recognized at least from the 1970's. Consequently maritime shipping issues as they relate to US agricultural trade have received the attention of agricultural economists on several occasions (e.g. Jones, Qu, Casavant & Koo, 1995; Casavant & Wilson, 1991; Makus & Fuller, 1987; Jones, Casavant & Kim, 1986; Binkley, 1983; Binkley and Harrer, 1981; Sharp & McDonald, 1971). At the same time the international maritime community follows US and world agricultural trade trends closely since grains in particular rank along with coal, iron ore, and steel as one of the industry's most important dry bulk cargoes (Drewry).

Several issues involving US maritime shipping are receiving the attention of Congressional personages representing agricultural constituencies. Senator Grassley of Iowa has called for a slate of getting rid of the Jones Act, eliminating shipping conferences' antitrust immunity to set rates, ending all shipbuilding subsidies and stopping cargo preference (Journal of Commerce, December 13, 1994). Representative Walter Jones of North Carolina and other legislators are joining the ranks of critics of current maritime policies. This paper will survey current issues associated with cargo preference and other maritime support measures and maritime deregulation and

liberalization that currently have overlapping policy ramifications regarding maritime shipping policy and US agricultural exports.

The orientation taken in this paper perhaps needs no explanation before an audience of fellow economists, but if it is read by a lay person (particularly one who advocates agriculture as a goal in its own right) a word of clarification about the usage of competitiveness needs to be made. Tweeten distinguishes between *comparative advantage*, *competitive advantage*, and *competitiveness* (p. 27). Comparative advantage strictly speaking is defined in a context of an ideal trading environment with no policy distortions. Competitive advantage applies to the actual world with all its imperfections. In this paper using, social cost/benefit terminology, a nation pursuing its competitive advantage should expand production to expand exports assuming its domestic and foreign factor costs (direct and indirect) are less than the export price at the border. Competitiveness as viewed by the layman refers simply to expanding market share, often with little regard to direct factor costs subsidized by taxpayers and indirect social costs. Writing as an agricultural trade and marketing economist, my orientation will be towards competitive advantage. In this context a navigational improvement or other infrastructural or policy move that reduces the cost of transporting agricultural products will not necessarily be regarded as socially desirable simply because it may increase exports. It also needs to take into account, to the extent possible, the social costs relative to the revenue obtained from the export. Special cases with possible national defense implications will be addressed in the paper as well.

## **Cargo Preference and US Agricultural Exports**

Cargo preference legislation impelling cargo to be carried in US flag registered vessels is perceived to be one of the most pernicious measures restricting US agricultural shippers in their choice of ships and depriving them of free and fair competition among suppliers of ocean transportation services. Cargo preference as mandated is intended to help maintain the US merchant marine industry to assure that in time of war the United States would have a merchant marine fleet of its own to transport material and troops (Mendelowitz). There are several issues that arise in assessing the significance of such legislation. We look at the issue of its significance for the level and distribution (taxpayer versus producer or consumer) of agricultural export shipping costs, but the paper will also address the so-called national security issue as a rationale for cargo mandates reserving shipments for US flagged carriers.

The current case where US cargo preference provisions most affect US agricultural exports is food aid shipments. In the Agricultural Trade Development and Assistance Act otherwise known as the Public Law 480 act of 1954, it was stipulated that 50% of government food aid be shipped on US flag vessels. A provision in the Food Security Act of 1985 raised this percentage to 75%. This was a compromise to ward off a requirement that the 50% provision be extended to Export Enhancement Program shipments and other grain shipments receiving loan guarantees, etc..

Most of the food aid transported under cargo preference provisions is shipped as bulk cargo. During the period 1990-93, of the food aid transported in US flag ships, 84% of the tonnage was bulk commodities such as wheat and corn shipped in bulk carriers and

occasionally in ocean tug/barge tows, or tankers. The balance consisted of processed products such as cans of vegetable oil or bags of flour, rice, pulses, etc. shipped on liner vessels.

In the past cargo preference provisions were also tied to a third of US grain shipments to the former Soviet Union. This was a part of the long term grain agreement of 1975. At a time when foreign flag carriers would lift grain from US Gulf ports to Black Sea ports for about \$8 per ton, the Soviets agreed to pay US carriers \$16 per ton. Since the long term grain agreement has expired this formula requiring a third of commercial grain exports be carried in US flag vessels no longer applies. In a more recent announcement from the Secretary of Agriculture it was stated that cargo preference provisions cited above for food aid would apply to food aid shipments to the former Soviet Union (GAO, June 17,1993). Thus cargo preference legislation, as it currently affects US agricultural exports overseas, primarily involves only concessional food aid shipments.

Domestic waterborne movements of all cargoes are reserved for US constructed, owned, and operated shallow draft and deep draft vessels. The Jones Act, or more accurately, the Merchant Marine Act of 1920, is a cabotage law requiring that waterborne commerce on domestic waterways and intercoastal US transits be carried in vessels produced, owned and crewed in the US. It impacts US agricultural exports through its effect on inland or intercoastal shipping costs rather than overseas ocean costs. One of the ways that the Jones Act does influence overseas rates is that it prevents foreign owned shipping lines from providing competitive feeder service between secondary US ports and

emerging "load center" ports which are forecast to increase their role as megacontainer vessels are introduced into major world fleets during the next few years.

Estimates of how much more expensive it is to ship grain in US flag vessels as opposed to foreign flag registries range from 72% (Waters, p. 127) to more than twice as much according to US General Accounting Office (GAO) estimates. The years of comparison are as important as the source in explaining variations in the estimated cost differential between foreign and domestic shipping rates. Foreign ocean freight rates are subject to volatile fluctuations much like commodity prices. On the other hand ocean freight differentials paid as subsidies to US carriers are paid as the difference between estimated long term costs of operation and current market rates. The higher cost factor of domestic over foreign flag shipping cost as reported by GAO was a little under 100% in 1990 and 150% in 1992 because of variations in competitive world freight rates.

The US Department of Agriculture pays the differential cost on the first 50 percent of tonnage shipped on US vessels and the Maritime Administration pays the differential cost of the remaining 25%. Taxpayer funds that could be used for additional food aid shipments are diverted instead to US maritime assistance. However the burden on the agricultural community would be much more onerous if the legislation required using higher cost US registered vessels on commercial shipments without provision for a taxpayer subsidy to cover that cost. The actual burden of current cargo protection legislation falls primarily upon US taxpayers in the form of ocean freight differential subsidies to cover these extra costs.

The US General Accounting Office, in a study released in 1994, found that cargo preference laws requiring a percentage of all government owned or controlled cargo be shipped in US flag vessels cost the federal government about \$3.5 billion over the previous five year period. The agency estimated this saved about 6000 seafaring jobs at an annualized cost of \$116,000 per seaman. Over two thirds of this was Department of Defense expenditures, but about \$1.13 billion was spent shipping US agricultural products as food aid. The cost to the government for extra transportation charges on food aid shipments from 1991 to 1994 was about \$600 million. In spite of this assistance GAO has noted that the number of US merchant marine vessels and personnel have continued to decline

US flag carriers hauled less than 5% of US Grain export tonnage over the period 1990-93 (GAO, September, 1994). . Approximately 18 bulkers have carried over 80% of this tonnage. While cargo preference in fact is a relatively small item in its present form, calls for more ambitious preference programs have been made so that scenarios for more stringent programs are very appropriate as research exercises. The United Nations Conference on Trade and Development has long advocated a program restricting 40 % of all liner cargo to domestic flag carriers and in the Manila conference a call to extend this to bulk cargoes was also made. The Boggs bill in the 1980s proposed mandating that ultimately 20% of all bulk cargoes trade be carried on US vessels. A spatial equilibrium modeling exercise at the time by this author and colleagues (Jones, Casavant, and Chong Kim) estimated the proposal would increase the cost of shipping wheat from the West coast approximately 8 to 16 cents per bushel. In another study utilizing a similar model,

assuming 40% of US exports were carried in US registered vessels, the Gulf price declined by 5.61%, and 17.19% if all exports were impelled to move in US vessels with no ocean freight differential subsidy (Qu).

Aside from cargo preference forcing shippers to use higher cost vessels due to their being built in higher cost shipyards and/or crewed by higher cost crews, at least two other factors also increase the cost of shipping under cargo reservation. Because of delays in port waiting for the availability of a flag carrier, transit times are potentially longer for the shipper. In addition the possibilities for triangulation and backhauling are constricted when US vessels have to be used ( see E.G. Frankel, Inc.). Flexible itineraries permitting the triangulation of vessel services are essential to efficiency in tramp bulk service trades. Cargo-preference measures rigidify geographically inefficient route structures and situations where ballast voyages can easily constitute half the total steaming time (Fleming, p.257).

The US flag merchant fleet has declined from over 5000 ships at the end of world war II , to less than 400 ocean going vessels of all types in the 1990's according to a recent General Accounting Office (GAO) report. Mariner employment has shrunk from an estimated 110,000 level in 1945 to 27,000 people filling less than half that number of actual seafaring positions. However these numbers mean very little when looking at the role of US flagged carriers in the US security framework. First modern ships deployed today are more productive and larger and employ much smaller crews than at the end of World War II.. During Operation Desert Shield/Storm, seven Department of Defense (DOD) owned sealift vessels provided the same carrying capacity as 116 of the breakbulk



vessels employed during World War II (GAO/NSIAD-94-177 Strategic Sealift).

Moreover, all seven of these vessels were of the Roll on/Roll off variety that are not used to carry US grain and agricultural exports. The bulk vessels that carry agricultural products are over 25 years in average age, and the US Department of Defense has testified to GAO that they frankly view the vessels as having no significant role in the country's defense requirements (GAO, September, 1994, p. 42.).

To the extent that the national security of the country is reinforced by maintaining a fleet of flag vessels, the argument could be made that this objective could be more equitably met by using construction and/or operating differential subsidies financed by general tax revenues. However the situation as it exists is not that simple. At this point in time all such programs are either phased out or in the process of being discontinued. So far neither the Administration nor maritime advocates in Congress have been able to find an acceptable package in a time of stringent budgetary restrictions that can gain passage to continue subsidizing operation or construction of US vessels. A proposal initiated unsuccessfully by the Administration to employ a cargo tonnage tax would share some of the same features found objectionable in cargo sharing provisions.

In fairness to maritime interests, they point out a certain hypocrisy on the part of agricultural interests for objecting to their receiving assistance when even more taxpayer moneys are expended in various agricultural subsidy programs such as agricultural export enhancement payments. The case that exporting agricultural products at less than world market prices is motivated by national defense need considerations is so preposterous that

this is not even purported as a rationale. The argument here is that foreigners do it so we must do it too. The maritime sector can certainly make the same argument!

### **Deregulation and the Maritime Reform Bill**

Deregulation in the form of abolishing the Federal Maritime Commission (FMC) is a hot and tumultuous issue that may give rise to many future research issues. The Ocean Shipping Reform Act of 1995 approved by the House Transportation and Infrastructure Committee in August (Journal of Commerce) contains many controversial features. The term "deregulation" describes the bill in terms of it abolishing the FMC and ending public tariff filings by ocean carriers. However it leaves antitrust immunity intact for ocean carrier conferences to collectively set rates. While initially calling for an end to rate fixing for domestic carriers, the legislation requires foreign flag carriers to submit rate information to the Department of Transportation if they are suspected of offering rates that undercut domestic shipping lines. In its initial "controlled carrier" language so called anti-predatory pricing by government controlled and conglomerate diversified shipping lines provisions placed foreign carriers under stricter rate and tariff scrutiny than domestic carriers. This has since been extended to foreign carriers as well to avoid the charge of discriminatory treatment. Now apparently the Transportation Department would be empowered to investigate rates of any carrier deemed to be predatory.

Industrial organization and trade oriented economists in our profession may find a rich research and education field of action as a result of this round of so-called

deregulatory reform legislation as it unfolds! Regulatory reform legislation as described above could lead to a system of stronger closed conferences or cartels exempted from antitrust laws, or it could be perceived as so outrageously stacked in favor of such cartel activity as to generate a subsequent call for an end of such immunity.

### **Liberalization of Maritime Policy**

The granting of maritime supports and other protective measures that distort international competitiveness is perhaps as widely practiced in maritime transportation as in the agricultural sectors of most nations. Protectionism in international shipping policies comprises many forms including operating and construction subsidies to domestic vessels and operators, special tax depreciation alternatives, cabotage laws and legislation favoring nationally flagged vessels, and a host of other instruments.

Some progress in the direction of liberalization and restraining further trade distorting activities in maritime shipping is argued to have occurred under the recent Uruguay Round of GATT negotiations. The Round broadened the scope of GATT to include services under a legal framework of the General Agreement on Trade in Services (GATS) which has inherited the main features of GATT regarding the process of liberalization of services (Organization for Economic Cooperation and Development). An assessment regarding how well the negotiators performed by the Institute for International Trade (Schott) gave services the same B+ rating as was given to the overall accord and to the agricultural sector in particular. Unfortunately progress on liberalizing maritime transport services which fall within this broad category received an I (Incomplete).

Although general negotiations under the Uruguay round were initiated in September, 1986, discussions on maritime transport issues did not commence until 1990, the year that negotiators were initially to finalize the agreement. Largely because of EC recalcitrance on agricultural sector issues, the negotiations dragged on a further three years to December of 1993 and the agreement was signed in April of 1994 by the major negotiating partners including the US. Commitments for international transportation liberalization were not completed and the latest deadline for commitments in this sector were delayed to June, 1996. Moreover MFN obligation for this sector is abolished during this negotiation period.

In spite of the US position that we favor trade liberalization in general, our government demonstrated little enthusiasm for inclusion of our national shipping laws in the Uruguay GATT negotiations. The Jones Act has become one of the points of contention in the international negotiations. The European Union negotiators' stance is that the Jones Act is an indirect subsidy to shipbuilding interests in the US. Our unwillingness to negotiate has been alleged to be one of the reasons no agreement was reached on shipbuilding subsidies in the Uruguay negotiations. To increase their leverage, European negotiators are insisting that we be willing to put such maritime issues as the Jones Act on the table parallel to negotiations on telecommunications market access liberalization in Europe (JOC, October 6, 1995, pp. 1a-1b.). In the mean time our domestic maritime and shipbuilding interests argue for protection on the grounds that other countries are granting protection to their domestic shipbuilding interests and implore our government to impose penalties against other countries because of their

subsidies. Does this sound like US and Canadian or European agricultural trade war rhetoric?

**Conclusion:**

US Maritime shipping policy is in a crisis that arguably could threaten US security in the future. Going in the direction of halting the decline of the US fleet by even more restrictive cargo preference legislation could be very harmful to US agricultural exports. Existing cargo preference legislation as it applies to US food aid shipments, while more of an irritant than a major impediment to US export volume and prices, has not averted the decline in the US merchant marine. While a significant portion of this fleet would probably leave US registry without such legislation, the bulk of US vessels carrying such cargo is declared by the Department of Defense to be irrelevant to its needs. Baring a radical protectionist or nationalistic swing in US policy, advocates of added cargo preference restrictions have probably met their Nemesis in agricultural and other sector opposition since they lack endorsement from the Defense establishment.

Economic efficiency and equity criteria would argue in favor of construction and operating subsidies funded from general revenues over cargo sharing as a way of protecting activities of the US fleet that have legitimate national defense ramifications. However these subsidies were not renewed in the early 1980's and will phase out on all remaining US vessels by 1998, at which time more vessels are expected to abandon the US flag. The Clinton Administration attempted to subsidize the US fleet by imposing a tonnage tax on shipments leaving and entering US ports and harbors. This would have placed a National Defense burden on exports and imports, including US agricultural

exports, rather than spreading the costs among general revenue sources. The same legal objection that has threatened the Harbor Maintenance Fee program, namely that taxing exports is explicitly prohibited in the US Constitution, could also become an issue. Also to renew such subsidies would complicate reaching agreement with OECD negotiators to aim at terminating all shipping subsidies, a position that the Clinton Administration endorsed as an objective for the 1996 GATS negotiations. Given the trade ramifications of subsidizing a US merchant fleet it seems that moving responsibility for providing US shipping needs for defense purposes might best be transferred from MARAD to DOD.

One interesting policy compromise would be to eliminate cargo preference requirements on food aid shipments and simultaneously cut back agricultural export subsidy outlays by an equivalent amount. If the funds currently used to subsidize the shipments carried in US vessels were directed toward additional food aid shipments; Export Enhancements payments could be cut back equivalently with a washout effect on US agricultural shipments. Or the savings could be added to budgetary cuts currently being sought by both the Congress and the Administration. Another option would be to simultaneously reduce US budgetary outlays for EEP and directly transfer the funds used to subsidize shipments in US vessels to the Department of Defense to provide for more ready reserve vessels specifically designed to meet defense needs. This could be a revenue neutral and trade neutral way of dealing with assuring a fleet to meet US security needs.

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