

Freight Shipping and the U.S. Balance of Payments

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Conclusions

1. Ocean freight shipping, which is the principal component of the U.S. international transportation account, has been an important factor in accounting for the large current account surplus in the U.S. balance of payments. In 1946, \$834 million of the current surplus of \$6.9 billion was due to freight shipping. A positive freight shipping balance of somewhat more than \$1 billion is estimated for 1947, as compared with a deficit of \$121 million in 1937.

2. It is calculated that the increase in the freight shipping balance in 1947 over 1937 may be accounted for as follows: 38 per cent by the changes in the volumes of exports and imports; 15 per cent by the changes in the proportions of exports and imports carried in U.S. ships; and 47 per cent by the changes in export and import freight rates. The percentages reflect not only changes in the absolute magnitudes of the various factors, but also the effects of changes in the relationships within each set of factors, e.g., a greater increase in export volume as compared with import volume, and also the inter-action of these various factors.

3. In the prewar period, the volume of imports and exports tended to be close to equilibrium, and export and import rates were also roughly equal. However, the decade between 1937 and 1947 has seen the volume of exports rise by about 90 per cent, while the volume of imports has risen by only about 21 per cent. Similarly, export freight rates have risen by 364 per cent, while import rates have risen by 160 per cent. These prewar relationships of near-equilibrium between export and import volumes and between import and export freight rates have been greatly altered, and, together with the changes in the proportions of trade carried in U.S. ships, have resulted in an entirely transformed freight account in the U.S. balance of payments.

4. The changes in these factors which would be necessary to bring about anything like the prewar situation in the freight balance have been analyzed. It would seem that only a drastic decline in the volume of U.S. exports, together with a sharp fall in export freight rates, could reduce the freight balance to unimportant magnitudes, without substantial changes in the proportion of U.S. foreign trade carried in U.S. ships. Much of the increase in the volume of U.S. exports and export freight rates has been due to essentially abnormal demand by European countries for U.S. fuels and grains. However, assuming the U.S. European Recovery Program will be of the size and character recommended by President Truman, it does not seem likely that a decline in export volume and a softening of export rates would take place in the magnitudes necessary to alter greatly the present picture. In recent months there has been some decline in freight rates, but it remains to be seen whether this is temporary or not.

5. Important changes are taking place in the proportions of the volume of U.S. foreign trade carried in U.S. ships. Before the war, about 20 per cent of the volume of U.S. exports and about 32 per cent of U.S. imports were carried in U.S. ships. During 1946, about 57 per cent of U.S. exports and 66 per cent of U.S. imports were carried in U.S. ships. For the first half of 1947, the respective figures were 52 per cent and 65 per cent. It is estimated that by 1948 the respective figures might well be about 48 per cent and 63 per cent.

These substantial shifts in the proportions of U.S. foreign trade carried in U.S. ships reflect the changes which have been taking place in the position of the U.S. in world shipping. At the end of the war, the United States accounted for about 62 per cent of the world total of shipping tonnage. By the end of 1946, this had declined to about 52 per cent, and by 1948 it is estimated that it might be in the neighborhood of 45 per cent. These changes have resulted in part from the new foreign shipbuilding programs, together with the sharp drop in U.S. shipbuilding; however, the principal cause has been the U.S. Government policy of large-scale transfers to countries abroad of surplus war-built merchant ships. These U.S. Government policies have contributed to the large decline which has taken place in the U.S. inactive fleet. The reserve fleet, which is the largest component of the inactive fleet, amounted to 1,257 merchant vessels totaling 11 million deadweight tons as of November 1, 1947.

As stated by President Truman, the present policy of the Administration is to ask for legislation to extend beyond February 29, 1948, the authority of the Maritime Commission to sell and to enable it to transfer abroad war-built merchant vessels and to reduce the use, under present conditions, of scarce resources in new shipbuilding programs abroad. New shipbuilding is necessarily time-consuming. Although a reduction in the U.S. freight account of a significant amount might be brought about by substantial additional transfers of U.S. merchant ships abroad, say in the magnitudes of 50 per cent or less of the reserve fleet, there would probably still remain a very large positive freight balance in the U.S. international accounts.

6. In brief, assuming a U.S. foreign aid program of the magnitudes being considered, the U.S. freight balance, in 1948 at least, is still likely to be in the magnitudes of \$1 billion, although probably closer to \$750 million if substantial additional transfers of ships abroad are made in the near future. Individual countries may, of course, be able to better their position vis-a-vis the United States in this respect; however, in the aggregate, the U.S. freight balance will continue to be an important source of net demand for U.S. dollars in the coming months. In the longer run, if a further decrease in the proportion of U.S. foreign trade carried in U.S. bottoms is also accompanied by a decline in U.S. export freight rates, particularly as compared with import rates, there might result a reduction in the freight balance to a level of about \$500 million towards the end of 1948 and 1949, even without an important reduction in the volume of U.S. foreign trade. Much will depend upon the amount of new transfers of U.S. ships abroad. Thus, there has been a tendency towards the re-establishment of the prewar situation of approximate equilibrium in the freight account, but this cannot be expected to take place for some years, if at all.

## 2. Introduction

Before World War II, the transportation account in the U.S. balance of payments had tended to offset in part the surplus of the United States on merchandise account. After World War II, the transportation account has augmented the greatly increased U.S. surplus on merchandise account, and in magnitudes of appreciable significance. For example, during 1946 the U.S. surplus on merchandise account amounted to \$6.9 billion, and the balance on transportation account to \$1.1 billion out of a total U.S. balance on current account of \$8.1 billion.

The foregoing change in the U.S. balance on transportation account was primarily due to the altered net position of shipping—the most important source of receipts and payments of foreign exchange in the transportation account. As shown in Table 1, the U.S. paid out to foreign shipping interests \$108 million net in 1937. During 1946, however, U.S. shipping interests received from foreigners \$852 million net, accounting for 76 per cent of the U.S. balance on transportation account, the remainder of which was due to rail and air traffic. The bulk of the U.S. balance on shipping account, \$834 million net in 1946, was due to freight shipping.

TABLE 1

The U. S. Shipping Account  
1937 and 1946  
(millions of dollars)

	<u>1937</u>	<u>1946</u>
Foreign Exchange Receipts		
Freight		
U. S. exports	65	1,080
Charter hire	—	22
Third country trade	4	38
Foreign port expenditures in the U. S.	<u>93</u>	<u>206</u>
Total	162	1,346
Passengers		
Fares <sup>1/</sup>	9	28
Foreign port expenditures in the U. S.	<u>49</u>	<u>16</u>
Total	58	44
TOTAL RECEIPTS	220	1,390
Dollar Exchange Payments		
Freight		
U. S. imports	186	245
Charter hire	—	—
U. S. port expenditures abroad	<u>40</u>	<u>267</u>
Total	226	512
Passengers		
Fares <sup>1/</sup>	97	19
U. S. port expenditures abroad	<u>5</u>	<u>7</u>
Total	102	26
TOTAL PAYMENTS	328	538
U. S. Balance on Shipping Account	-108	+852

<sup>1/</sup> Includes passenger expenditures on board ship.

For the next few years at least, U.S. freight shipping is likely to continue to play a dominant role in the U.S. transportation account. The purpose of this memorandum, therefore, is to describe and analyze the determinants of the U.S. balance of foreign exchange transactions on freight shipping account. Foreign exchange transactions on freight shipping account occur only when payments by Americans to foreigners, or vice-versa, are made. For the purposes of simplification, foreign exchange transactions on freight shipping account resulting from (1) third country trade, (2) charter hire, and (3) vessels in foreign ports are excluded. Hence, only foreign exchange transactions on freight shipping account resulting directly from the movement of U.S. exports and imports are included.

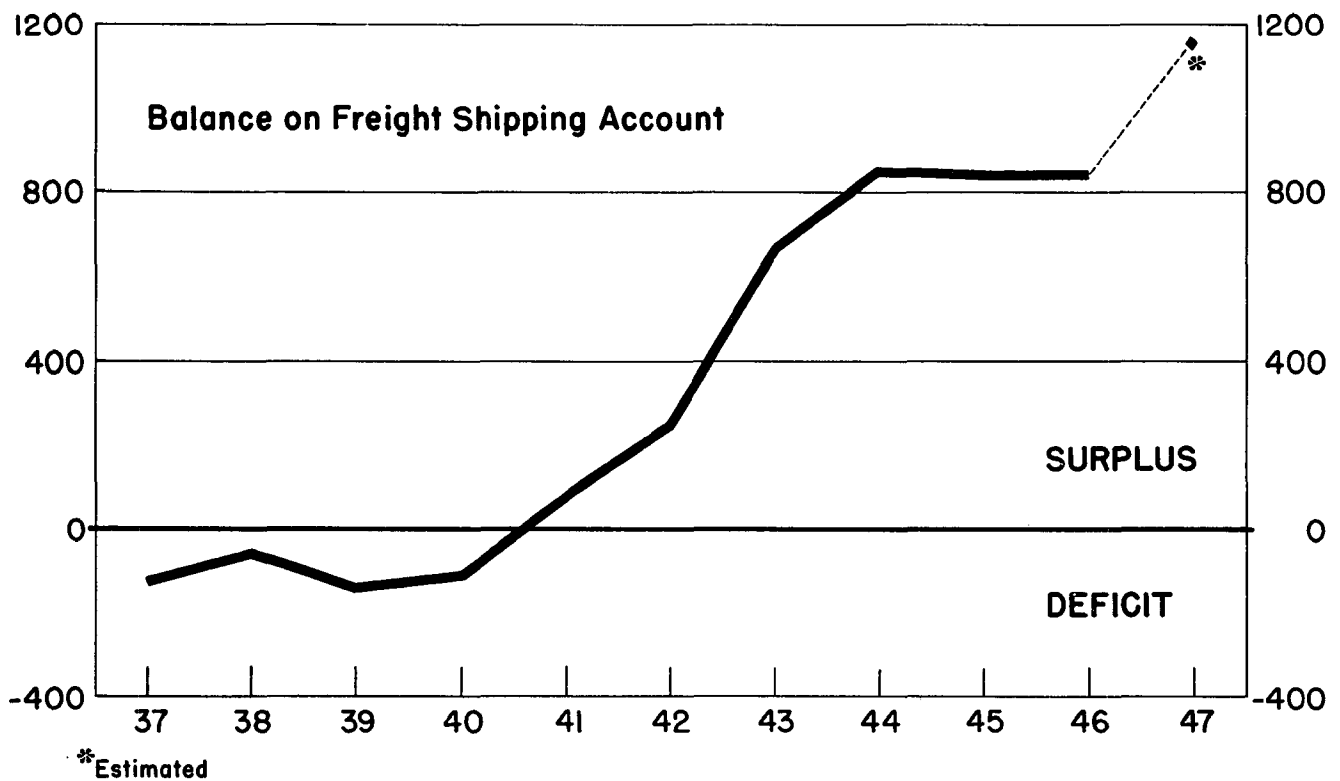
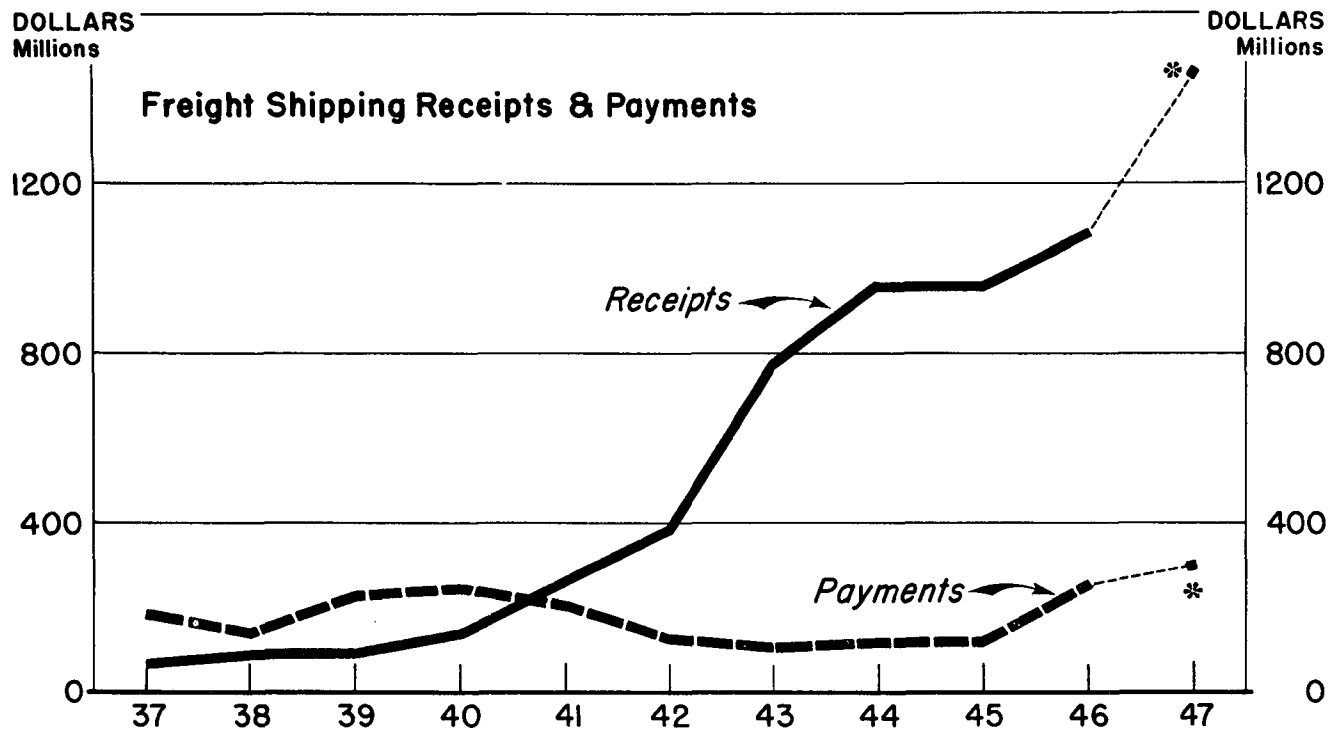
The U.S. balance on freight shipping account (B) equals U.S. freight shipping receipts (R) less U.S. freight shipping payments (P). Since exports and imports are valued on a port-of-departure (f.o.b.) basis for U.S. balance of payments calculations, U.S. flag vessels earn foreign exchange on freight shipping account only in carrying U.S. exports and foreign flag vessels earn U.S. dollars on freight shipping account only in carrying U.S. imports. Freight shipping receipts are determined, therefore, by the volume of U.S. water-borne exports (a) times the proportion carried in U.S. flag vessels (x) times the average freight rate per long ton of U.S. exports carried in U.S. flag vessels (b); payments are determined by the volume of U.S. water-borne imports (a') times the proportion carried in foreign flag vessels (y) times the average freight rate per long ton of U.S. imports carried in foreign flag vessels (b').<sup>1/</sup>

Chart I shows U.S. foreign exchange receipts and payments on freight shipping account for the years 1937-1947, based upon the shipping weight data of U.S. exports and imports as recorded by the Bureau of the Census of the U.S. Department of Commerce, and the average freight shipping rates applicable to U.S. exports and imports as recorded by the U.S. Maritime Commission. Estimates have been made for 1947 on the basis of partial data. From Chart I, it may be observed that U.S. freight shipping receipts rose at a quickening pace, while U.S. freight shipping payments remained more on an even keel. Receipts amounted to \$65 million in 1937 as compared with \$1,080 million in 1946 and an estimated \$1,454 million in 1947; payments amounted to \$186 million in 1937 as compared with \$244 million in 1946 and an estimated \$300 million in 1947. Thus, the U.S. balance on freight shipping account turned from a deficit to a surplus as a result of World War II, and, for reasons discussed below, the surplus grew steadily larger after the war. The freight shipping balance for 1947 is estimated at a surplus of \$1,154 million as compared with a surplus of \$835 million for 1946 and a deficit of \$121 million for 1937.

In order to analyze further the conditions set forth in Chart I, the following determinants of the U.S. balance on freight shipping account are explored in this memorandum: (a) the volumes of the U.S. water-borne export and import trade (Section 4); (b) the proportions of the volumes of the U.S. water-borne export and import trade carried in U.S. flag vessels (Section 5); and (c) the average freight rates per ton of U.S.

<sup>1/</sup>  $B = R - P = a \times b - a' \times y \times b'$

# U.S. FREIGHT SHIPPING RECEIPTS, PAYMENTS AND BALANCE ON FREIGHT SHIPPING ACCOUNT, ANNUALLY 1937-1947





water-borne exports and imports (Section 6). Since the supply of merchant shipping plays a significant role in determining all of these factors, it is dealt with in the section immediately following.

### 3. The Supply of Merchant Shipping

As of September 1939, the supply of merchant vessels in the world amounted to roughly 13 thousand ships totaling about 81 million deadweight tons.<sup>1/</sup> At the close of the war, there were roughly 10 thousand vessels, about 92 million deadweight tons. By the end of 1946--the most recent date for which data are available at the time of writing--the number of merchant vessels increased to approximately 12 thousand, or to about 98 million deadweight tons. (See Chart II). While the total existing supply of merchant shipping compares favorably with prewar, there has been, nevertheless, a world wide shortage of tonnage, as might be judged by the height of freight shipping rates, as discussed in Section 6 of this memorandum.

Part of the supply of U.S. merchant shipping has not been available to meet the extraordinary postwar shipping demands. As of September 30, 1946--at the time of writing the only postwar date for which the U.S. Maritime Commission has released complete data--2,332 U.S. merchant vessels, totaling about 25 million deadweight tons, or only 48 per cent of the total number of U.S. merchant vessels, were actively engaged in what might be considered peacetime trade, particularly from a balance of payments viewpoint. (See Table 2). This excludes 519 U.S. ships under foreign registry and lend-lease, "foreign" ships for balance of payments purposes, and ships in reserve, temporarily inactive, or in Army and Navy status. Of the "U.S." ships excluded, there were, first, 1,545 merchant vessels owned by the U.S. Maritime Commission in the reserve fleet, i.e., laid up at permanent anchorage by decision of the U.S. Maritime Commission. In addition, there were 12 privately owned merchant vessels in the reserve fleet, which were yet to be returned to their private owners by the U.S. Maritime Commission. It will be noted from Chart II that as of December 31, 1946, practically all of the increase in the number of vessels over the amount available at the end of the war was accounted for by the U.S. reserve fleet, while in terms of tonnage the total of ocean-going vessels was less on December 31, 1946, than on September 1, 1945, if the reserve fleet is deducted. Through its ability to operate or to charter merchant vessels, which is discussed subsequently in some detail, the U.S. Maritime Commission was able to reduce the reserve fleet to a total of 1,257 merchant vessels totaling 11 million deadweight tons as of November 1, 1947.

Secondly, there were, as of September 30, 1946, 533 merchant vessels in the temporarily inactive fleet. Some of these 533 were intended for scrapping, or were awaiting transfer to the reserve fleet, or charter, or sale, or return to original owners by the U.S. Maritime Commission, while others were out of service for a period of 30 days or more, for reasons of

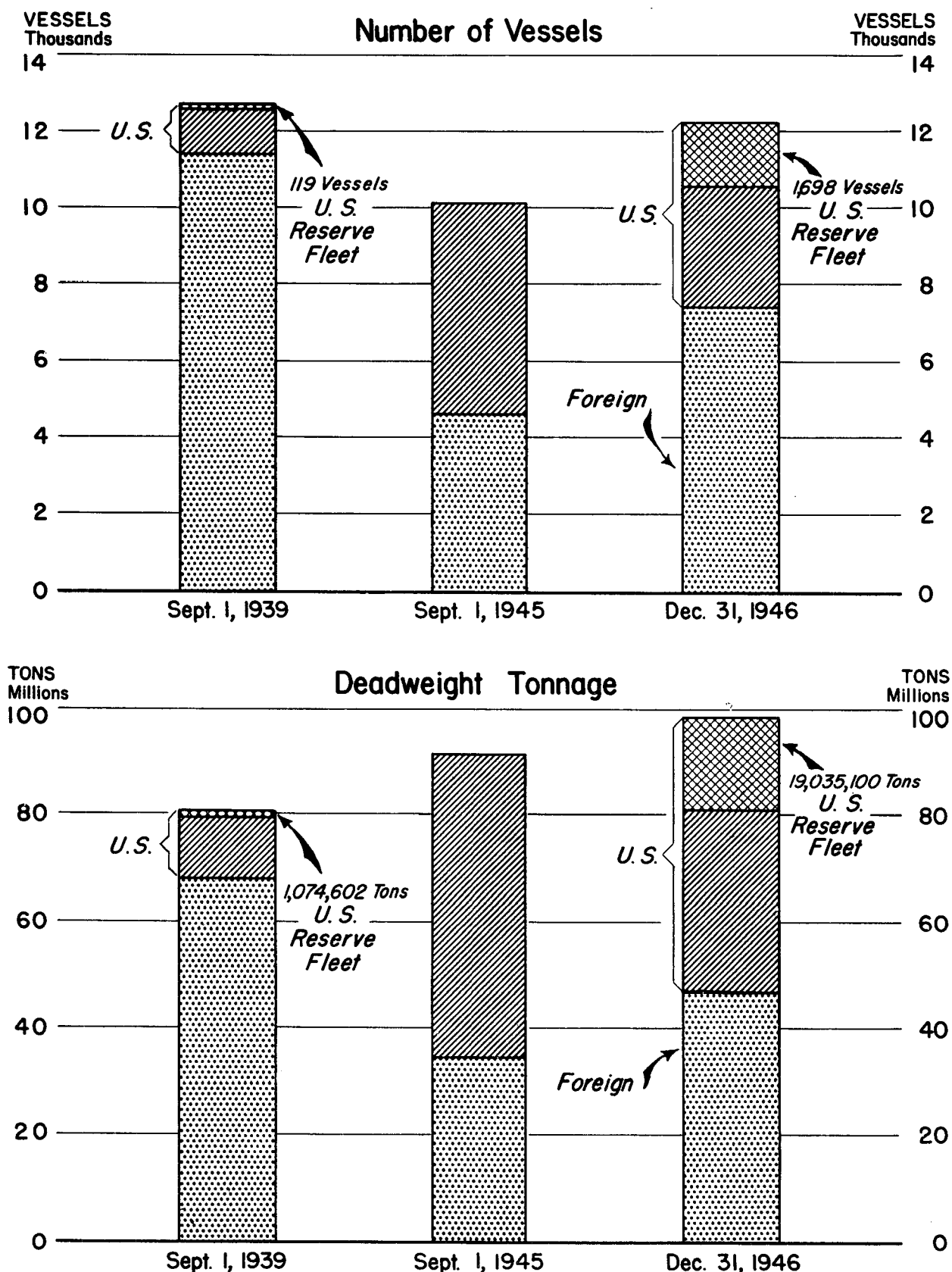
<sup>1/</sup> Merchant vessels include all sea-going steam and motor-driven steel vessels of 1,000 gross tons and over. Excluded are vessels of a strictly military type, such as LST's, aircraft carriers, etc.





# OCEAN-GOING MERCHANT VESSELS OF THE WORLD

Number and Deadweight Tonnage, Prewar and Postwar



See Table 3 for data and notes

Chart II



TABLE 2

Merchant Fleet of the United States as of September 30, 1946  
(Seagoing Steel Vessels of 1,000 Gross Tons and Over)

Ownership and Status	Total - All Types			Cargo Ships and Combination			Tankers		
	Number	Gross Tons	Deadweight Tons	Passenger Number	Gross Tons	Deadweight Tons	Number	Gross Tons	Deadweight Tons
U.S. MARITIME COMMISSION OWNED									
Total . . . . .	4,724	34,060,125	47,972,200	4,040	28,079,573	38,477,500	684	5,980,552	9,494,700
In Merchant Service . . . . .	3,775	27,499,310	39,531,200	3,141	21,841,992	30,547,000	634	5,657,318	8,894,200
In Active Service . . . . .	1,796	13,182,641	19,148,400	1,570	10,946,320	15,563,900	226	2,236,321	3,584,500
Temporarily Inactive . . . . .	434	3,005,000	4,340,600	390	2,658,228	3,792,900	44	346,772	547,700
In Reserve Fleet . . . . .	1,545	11,311,669	16,042,200	1,181	8,237,444	11,190,200	364	3,074,225	4,852,000
Under Foreign Registry-Bare Boat and Lend-Lease . . . 1/	519	3,242,879	4,713,600	481	3,034,047	4,386,200	38	208,832	327,400
Bare Boat and Loaned to Army and Navy . . . . .	430	3,317,936	3,727,400	418	3,203,534	3,544,300	12	114,402	183,100
PRIVATELY OWNED									
Total . . . . .	652	4,668,803	7,027,500	392	2,431,784	3,406,600	260	2,237,019	3,620,900
In Active Service . . . . .	536	4,057,366	6,252,600	288	1,871,620	2,713,800	248	2,185,746	3,528,800
Temporarily Inactive . . . . .	99	519,239	659,500	88	470,668	581,700	11	48,571	77,800
In Reserve Fleet . . . . .	12	71,639	97,000	11	68,937	92,700	1	2,702	4,300
Bare Boat to Army and Navy.	5	20,559	18,400	5	20,559	18,400	—	—	—
Total Fleet . . . . .	5,376	38,728,928	54,999,700	4,432	30,511,357	41,884,100	944	8,217,571	13,115,600

1/ For purposes of analysis in memorandum, these ships are considered "foreign".



repairs, overhauling, etc. Lastly, there were 435 merchant vessels requisitioned by or loaned to the Army and Navy, supplying Army and Navy bases in the occupied areas and in other parts of the world.

The effective supply of shipping has also been limited by the fact that ocean-going shipping in the postwar period has not been as efficient as in prewar. While U.S. vessels increased their efficiency--i.e., their carrying capacity per deadweight ton--by an estimated 50 per cent, foreign fleets deteriorated severely under the stress of war. Old foreign vessels generally were not replaced. They were not kept up properly and many suffered from battle damage. New foreign ships were more efficient than prewar or war-constructed ships, but still formed a relatively small proportion of existing tonnage.

The exceptional number of ballast voyages due to the dislocation of world trade, and the increased ship turnaround time as compared with prewar because of inadequate port facilities, poor labor performance and a greater number of labor disputes made for less effective utilization of the existing supply of tonnage. Many more ships were required to perform the same amount of work than was the case in the prewar period.

The Allocation of Shipping: Whereas in September 1939, the U.S. merchant fleet accounted for only 15 per cent of the world ocean-going deadweight tonnage total, it was responsible for 62 per cent in September 1945 and 52 per cent at the end of 1946. As is shown in Table 3, the U.S. emerged from World War II with about 57 million deadweight tons of ocean-going shipping, or about 5 times the 1939 level of tonnage. Foreign nations, which had some 69 million deadweight tons of shipping in 1939, came out of the war with only about 35 million deadweight tons, the bulk of which was British. By the end of 1946, the situation was considerably changed, however, as foreign fleets increased to approximately 47 million deadweight tons, while the U.S. deadweight tonnage declined to about 51 million.

At the end of the war, the U.S. had the newest merchant fleet afloat. According to a survey by the National Federation of American Shipping, a private organization of American shippers, the United States was far ahead of all other major maritime nations in the proportion of new to old vessels. Over 90 per cent of the vessels in the U.S. merchant marine at the end of 1946 were less than 15 years old. This compared with a world average of 70 per cent, the British average of 78.8 per cent, and an average among "major continental Allies" of 15.5 per cent. Nevertheless, the lack of large-scale new ship construction in the U.S. since the end of the war, together with the large shipbuilding programs in other countries, the transfers of U.S. ships abroad, and U.S. building for foreign account, presaged a relative ageing of the U.S. merchant fleet as well as a further decline in the proportion of the U.S. merchant fleet to the world total.

TABLE 3

Ocean-going Merchant Vessels of the World<sup>1/</sup>  
Prewar and Postwar

	<u>Number</u>	<u>Gross Tons</u>	<u>Deadweight Tons</u>
September 1, 1939			
Total, All Flags	12,798	58,270,374	80,600,600
United States <u>2/</u>	1,379	8,125,756	11,681,700
Foreign	11,419	50,144,618	68,918,900
September 1, 1945			
Total, All Flags	10,175	65,859,204	91,663,500
United States <u>2/</u>	5,529	40,080,002	56,797,700
Foreign	4,646	25,779,202	34,865,800
December 31, 1946			
Total, All Flags	12,297	69,806,500	98,026,000
United States <u>2/</u>	4,888	35,235,500	50,820,000
Foreign	7,409	34,571,000	47,206,000

1/ Included as "foreign" and excluded from "United States" are merchant vessels owned by the United States but under foreign registry. (See Table 2.)

2/ Data for 1939 and 1946 cover U.S. merchant vessels of 1,000 gross tons and over, except vessels on the Great Lakes. Data for 1945 cover all U.S. merchant vessels of 1,600 gross tons and over.

Ship Construction Abroad: Out of the total world new shipbuilding programs under way as of December 31, 1946, about 94 per cent was under way at non-U.S. shipyards. As shown in Table 4, this percentage increased slightly in the first two quarters of 1947. The bulk of the new shipbuilding was accounted for by European shipyards, and, for example, as of the end of June 1947, 54 per cent of the total was underway at British shipyards. Furthermore, an increasing proportion of U.S. shipbuilding was for foreign account: 16 per cent of the number in the last quarter of 1946, 28 per cent in the first quarter, and 48 per cent in the second quarter of 1947.

U.S. Shipbuilding for Foreign Account: During 1946, a total of 20 ships with a gross tonnage of 78,342 tons built for foreign account were launched in the United States. Holland accounted for 15 ships (gross tonnage 74,936 tons); Honduras, 2 ships (gross tonnage 3,114 tons); and the U.S.S.R., 2 ships (gross tonnage 292 tons). Data of launchings are not available for 1947; however, as is shown in Table 5, the bulk of new U.S. ships under construction for foreign account in the first half of 1947 was for Brazil.

TABLE 4

Ocean-going Merchant Tonnage of the World<sup>1/</sup>  
Under Construction as of Last Quarter of 1946, First Quarter  
of 1947 and Second Quarter of 1947

(Steam and motor vessels of 100 gross tons and over)

Country of Construction	Quarter Ended Dec. 31, 1946		Quarter Ended Mar. 31, 1947		Quarter Ended June 30, 1947	
	No.	Gross Tonnage	No.	Gross Tonnage	No.	Gross Tonnage
Argentina	1	730	1	730	1	730
Belgium	41	84,298	48	85,844	55	98,146
British Dominions, Colonies, etc.	58	167,799	67	177,159	90	221,494
China			2	1,450		
Denmark	34	158,143	37	161,863	30	139,992
Egypt			1	500	1	500
France	58 <sup>2/</sup>	196,459 <sup>2/</sup>	80 <sup>2/</sup>	232,949 <sup>2/</sup>	84	236,678
Great Britain and Ireland	429	1,928,857	456	2,031,715	439	2,054,376
Holland	91	196,358	97	213,426	101	224,428
Italy	87	162,390	78	163,917	77	191,342
Norway	62	77,838	67	87,950	68	80,906
Portugal	5	12,250	5	12,250	8	15,090
Spain	47	107,760	49	111,998	55	112,524
Sweden	66	248,205	65	244,205	70	266,905
U.S.	64	326,753	37	214,923	34	183,236
Uruguay	6	2,436	6	2,436	6	2,436
Yugoslavia					3	9,300
TOTAL	1,049 <sup>3/</sup>	3,670,276 <sup>3/</sup>	1,096 <sup>4/</sup>	3,743,315 <sup>4/</sup>	1,122 <sup>5/</sup>	3,838,083 <sup>5/</sup>

<sup>1/</sup> Returns not available for Germany, Japan, and U.S.S.R.

<sup>2/</sup> Returns incomplete.

<sup>3/</sup> Includes 44 vessels of 89,506 tons on which work was suspended.

<sup>4/</sup> Includes 36 vessels of 72,521 tons on which work was suspended.

<sup>5/</sup> Includes 7 vessels of 4,136 tons under construction in Great Britain and Ireland on which work was suspended.

TABLE 5

Ships Under Construction in the United States for Foreign Account  
For the Quarters Ended December 31, 1946,  
March 31, 1947, and June 30, 1947

(Steam and Motor Vessels of 100 Tons and Over)

Country of Registration	Quarter Ended Dec. 31, 1946		Quarter Ended Mar. 31, 1947		Quarter Ended June 30, 1947	
	No.	Gross Tonnage	No.	Gross Tonnage	No.	Gross Tonnage
Argentina	-	-	-	-	2	506
Brazil	6	42,000	7	42,700	10	61,000
British Dominions	-	-	1	150	-	-
France	-	-	-	-	2	800
Holland	2	15,842	-	-	-	-
Mexico	-	-	-	-	1	450
Panama	2	14,000	2	14,000	-	-
Sweden	-	-	-	-	1	1,300
TOTAL	10	71,842	10	56,850	16	64,056

Foreign Purchases of U.S. Surplus Ships: The authority for the transfer to countries abroad of surplus war-built merchant vessels was granted to the U.S. Maritime Commission by Congress in the U.S. Merchant Ship Sales Act of 1946. Through the operation of this Act, there occurred a significant redistribution in the world's ocean-going fleet. Transfers of surplus ships from the U.S. Government fleet to foreign flag operators began in August 1946 and are due to end on February 29, 1948, unless Congress extends the U.S. Maritime Commission's authority. On December 1, 1947, the President of the United States recommended to the U.S. Congress that it extend the Maritime Commission's authority to sell surplus ships until June 30, 1949. In his message of December 19, 1947, on the European Recovery Program, President Truman stated:

"The interest of the United States will be served best by permitting the sale or temporary transfer of some of our war-built merchant ships to the European countries. Because of world steel shortages, the sale or temporary transfer of ships should be linked with a reduction or deferment of the projected shipbuilding schedules of the participating countries. These arrangements should be consistent with their long-range merchant marine requirements. They should also be consistent with our long-range objectives of maintaining an adequate merchant marine and shipbuilding industry for the United States."

Since the war, U.S.-flag operators have been able to purchase or charter surplus ships, but foreign-flag operators have been able to acquire surplus ships from the U.S. Government fleet by purchase only. They have been eligible to buy such ships from the U.S. Maritime Commission for cash or on credit:

1/ See, however, the previous paragraph. The Bill submitted by the President would permit the charter to countries participating in the European Recovery Program of merchant vessels "owned by the United States which the United States Maritime Commission certifies as excess to its current requirements."



- 1) Subject to a prior claim by U.S.-flag operators against any or all ships,
- 2) Provided any ship in question is not essential to the long-run needs of the U.S. merchant marine,
- 3) Apart from certain craft barred from foreign transfer because of national defense considerations.

In accord with its policy of encouraging a U.S. merchant marine, the U.S. Maritime Commission's policy permits U.S. operators to have a prior claim to the war surplus fleet, which includes Liberties, Victories, coastal freighters, and other relatively desirable cargo vessels. As a consequence, the less desirable ships have bulked large among the foreign purchases.

Foreign shipowners have paid the same sales price for a given vessel as an American purchaser would have had to pay if he had exercised his priority. The sales price formula has varied by class of vessel, particularly as between freighters and tankers, while making special allowances, on individual ships, for wear-and-tear, depreciation, and conversion expenses. In practice, the U.S. Government is getting back in general only about a third of what it spent to build the freighters, and only half of what it spent to build the tankers. On the basis of the building cost differential discussed below, it may be surmised that the foreign purchaser bought his ship at a price which approximates the pre-war cost of constructing a comparable vessel in the shipyards of the "most favorable" country abroad.

Progress in selling the surplus fleet has been relatively slow. The Maritime Commission confronted a series of problems in administering the Ship Sales Act. Considerable time was required to evolve the standards by which the Commission would be guided in carrying out the sales program. Sales to foreign purchasers were delayed as the result of disagreements over payment for repairs, and for a variety of other reasons. There was also reportedly some opposition from private U.S. operators to the sale of any considerable number of ships to foreign interests.

The sale of U.S. ships to foreign flag operators to the end of 1947, was expected to approximate 1,000 merchant vessels aggregating 10 million deadweight tons, or about a tenth of the total world ocean-going shipping currently afloat. As is shown in Table 6, up to July 31, 1947, deliveries to foreign-flag operators amounted to almost 85 per cent of the total--i.e., 848 vessels aggregating about 8.5 million deadweight tons, or close to 9 per cent of the world ocean-going fleet. Of the total of 848 ships, 191 were transferred during August-December 1946 and 657 during January-July 1947.

These figures, however, are somewhat misleading. They include 109 ships going to the Panama-Honduras fleets. Since the bulk of the Panama-Honduras transfers represented purchases by U.S. nationals operating ships under a foreign flag, it is questionable how far they should be regarded as having increased the supply of the rest of the world at the expense of the U.S. supply of shipping. Moreover, part of the transferred vessels were U.S. Lend-Lease ships already operating under European flags, payment for which was now settled. In mid-1946, apart from a Soviet and Polish quota of 100 ships, British, Belgian, French, Greek, Dutch, and Norwegian shipowners were operating 404 U.S. Lend-Lease craft, part of which, in the case of the British, may not be purchased and, therefore, may be returned to the U.S. around March 1948. <sup>1/</sup>

<sup>1/</sup> Statistics are not available as to the part of transferred vessels representing U.S. Lend-Lease ships, or as to the projected return of U.S. Lend-Lease ships by foreign countries to the U.S. Government.

TABLE 6

- 12 -

Merchant Vessels Sold by United States Maritime Commission  
Under Terms of Merchant Ship Sales Act of 1946,  
August 1st, 1946 to July 31st, 1947

## Type, Number, and Tonnage, by Registry

Type and Flag	No.	Gross Tons	Deadweight Tons
United States			
Tanker	60	611,073	972,226
Cargo	252	1,758,300	2,520,129
Totals	312	2,369,373	3,552,355
Argentina			
Tanker	1	3,950	3,925
Cargo	19	143,681	201,507
Totals	20	146,841	205,432
Belgium			
Tanker	1	10,296	16,287
Cargo	14	104,806	149,269
Totals	15	115,102	165,556
Brazil			
Cargo	12	45,676	63,534
Canada			
Tanker	4	41,205	65,250
Chile			
Cargo	4	24,856	34,923
China			
Cargo	18	86,921	127,818
Colombia			
Cargo	8	30,434	43,188

Merchant Vessels Sold by United States Maritime Commission  
Under Terms of Merchant Ship Sales Act of 1946,  
August 1st, 1946 to July 31st, 1947

Type, Number, and Tonnage, by Registry

Denmark			
Cargo	19	129,344	177,601
Egypt			
Transport	2	14,354	4,732
Finland			
Cargo	2	14,352	21,000
France			
Tanker	7	71,328	115,256
Cargo	76	543,012	801,992
Totals	83	614,340	917,248
Great Britain			
Tanker	20	204,925	326,935
Cargo	151	927,273	1,384,343
Totals	171	1,132,098	1,711,278
Greece			
Cargo	100	712,457	1,044,595
Honduras			
Cargo	23	165,473	244,517
India			
Cargo	11	81,600	116,337
Italy			
Tanker	4	40,757	65,682
Cargo	87	625,186	917,773
Totals	91	665,943	983,455

Merchant Vessels Sold by United States Maritime Commission  
Under Terms of Merchant Ship Sales Act of 1946,  
August 1st, 1946 to July 31st, 1947

Type, Number, and Tonnage, by Registry

Type and Flag	No.	Gross Tons	Deadweight Tons
Netherlands			
Tanker	3	16,766	24,139
Cargo	<u>67</u>	<u>460,504</u>	<u>657,614</u>
Totals	70	477,270	681,753
New Zealand			
Cargo	1	5,158	7,312
Norway			
Tanker	8	81,372	130,946
Cargo	<u>72</u>	<u>422,474</u>	<u>606,934</u>
Totals	80	504,346	737,880
Panama			
Tanker	20	197,565	315,463
Cargo	<u>66</u>	<u>453,731</u>	<u>665,386</u>
Totals	86	651,296	980,849
Peru			
Cargo	8	34,187	49,792
Philippines			
Cargo	2	13,422	17,841
Poland			
Cargo	1	7,612	10,719
Sweden			
Cargo	5	25,836	36,156

Merchant Vessels Sold by United States Maritime Commission  
 Under Terms of Merchant Ship Sales Act of 1946,  
August 1st, 1946 to July 31st, 1947

## Type, Number, and Tonnage, by Registry

Type and Flag	No.	Gross Tons	Deadweight Tons
Turkey			
Cargo	6	18,960	25,627
Union of South Africa			
Cargo	3	22,918	31,752
Uruguay			
Tanker	2	20,592	32,586
Venezuela			
Tanker	1	3,160	3,925
GRAND TOTALS	1,160	8,175,026	12,095,011
Totals - American Flag	312	2,369,373	3,552,355
Foreign Flag	848	5,805,653	8,542,656

In view of President's Truman's statements on transfers of ships to countries obtaining U.S. aid, noted above, the present tendency for the U.S. proportion in the world supply of shipping to decline may continue, even if the rate of new construction abroad is slackened. A greater use than might otherwise be expected of the U.S. reserve fleet might more than offset a decline in new shipbuilding abroad.

It is against this supply picture that the determinants of the U.S. freight shipping balance, discussed below, are to be considered. The first set of determinants is the volume of U.S. exports and imports.

#### 4. Volume of U.S. Export and Import Trade <sup>1/</sup>

The volume of water-borne trade is determined by a complex of factors, such as the level of economic activity both in the United States and abroad, the commodity composition of foreign trade, etc. Before the war, the volumes of U.S. water-borne export and import trade tended close to equilibrium. The volume of U.S. exports varied between 51 and 56 per cent of the total volume of U.S. foreign trade during the period of 1929-1937. As a consequence of post-war demands for relief and rehabilitation goods, particularly for grain and coal, the volume of U.S. water-borne exports rose sharply relative to the volume of U.S. water-borne imports. This tended, along with other factors, to increase freight shipping receipts sharply relative to freight shipping expenditures.

As shown in appended Table 13, U.S. water-borne exports to all countries amounted to 77 million long tons in 1946 as compared with about 55 million long tons in 1937. Before the war, the United States had exported a proportionately small amount of grain and coal. In 1946, exports of grain and coal—the principal tramp shipments—amounted to about 28 million long tons, or about one-half of the total volume of water-borne exports to all countries, except Canada and Mexico. <sup>2/</sup> In the first half of 1947, the shipping weight of U.S. water-borne exports to all countries rose further, reaching the annual rate of 104 million long tons, including Canada and Mexico. During the same period, U.S. exports of grain and coal attained the annual rate of 46 million long tons, or over 50 per cent of the total to all countries, except Canada and Mexico. Data on value of exports for subsequent months indicate a probable slight decline in the volume of water-borne exports during the second half of the year. (See RD-398.)

Meanwhile, the volume of U.S. water-borne imports remained much closer to pre-war levels. During 1946, U.S. water-borne imports amounted to about 44 million long tons as compared with 42 million tons in the pre-war period. In

<sup>1/</sup> For purposes of this analysis, volume of trade refers to unweighted tonnage figures.

<sup>2/</sup> Canada and Mexico were excluded since there were no statistics available for grain and coal exports by mode of transportation, and the bulk of total exports to both countries was shipped via rail.

the first half of 1947 the shipping weight of U.S. water-borne imports rose further, reaching the annual rate of 51 million long tons. Such imports probably have remained at about this level during the second half of the year.

The effect of changes in the volumes of U.S. water-borne exports and imports on the U.S. freight shipping balance is shown in Table 7 on the assumption of (a) constant proportions of the volumes of exports and imports carried in U.S. flag vessels, and (b) constant average freight shipping rates per cargo ton, both based on data for January-June 1947. <sup>1/</sup> It is estimated that with the January-June 1947 volumes of water-borne exports and imports (annual rate), i.e., exports of 104 million tons and imports of 51 million tons, the U.S. freight shipping balance equalled \$1,154 million. If the volume of exports, however, had amounted to the 1937 level of 55 million long tons, and the volume of imports to 42 million long tons, the U.S. freight shipping balance would have equalled \$544 million.

In using the table, for forecasting purposes, however, it should be noted that, other things being equal, large percentage variations in the levels of U.S. exports and imports probably would induce significant changes in the proportions of the volumes of exports and imports carried in U.S. flag vessels, and in the average freight shipping rates per cargo ton, hence substantially affecting the results. With the relative scarcity of foreign shipping in the post-war period, a greater percentage reduction in the levels of U.S. exports and imports probably could take place than before the war without inducing significant changes in the other variables. <sup>2/</sup> Assuming that a change in the volume of total U.S. foreign trade of 10-15 per cent would not significantly affect the other factors, if the volume of U.S. exports declined from the January-June 1947 level (annual rate) of 103.6 million long tons to 90 million long tons, while imports remained at 51 million long tons, the U.S. freight shipping balance would decline to about \$990 million. (See Table 7.) Hence, a 13 per cent decline in the volume of U.S. exports would be accompanied by a 17 per cent decline in the freight shipping balance. In other words, the U.S. freight shipping balance would fall at a faster rate than the decline in the volume of U.S. water-borne exports. If both the volume of U.S. exports and imports declined by the same percentage, the freight shipping balance would decline proportionately.

In brief, the importance of changes in the volume of foreign trade on the shipping balance is seen in the fact that about 38 per cent of the rise in the balance between 1937 and 1947 has been calculated to be attributable to the changes which took place in the volumes of exports and imports. Furthermore, the other factors accounting for the increase, namely the changes in the proportions of trade carried in U.S. bottoms and the changes in freight shipping rates were in large measure brought about by the changes in the volumes of exports and imports.

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<sup>1/</sup> See footnote 1, page 27.

<sup>2/</sup> Sharp changes in the composition or direction of U.S. trade, of course, may alter this situation.

TABLE 7  
Estimated Range of the Balance on U.S. Freight Account <sup>1/</sup> as Determined  
by Varying the Volume of Foreign Trade <sup>2/</sup>  
(millions of dollars)

Per Cent	U.S. Imports (millions of long tons)										
	10	20	30	35	40	45	50	55	60	65	70
30	370	313	257	228	200	172	144	115	87	59	30
35	441	385	328	300	271	243	215	186	158	130	101
40	512	456	399	371	342	314	286	257	229	201	172
45	583	527	470	442	413	385	357	329	300	272	244
50	654	598	541	513	485	456	428	400	371	343	315
55	725	669	612	584	555	526	498	469	440	411	382
60	797	740	683	655	627	598	570	542	514	485	457
65	868	811	754	726	697	668	640	611	582	553	524
70	939	882	826	797	769	741	712	684	656	627	599
75	1,010	953	896	868	839	810	781	752	723	694	665
80	1,081	1,024	968	940	911	883	855	826	798	770	741
85	1,152	1,095	1,039	1,011	982	953	924	895	866	837	808
90	1,223	1,167	1,110	1,082	1,053	1,025	997	969	940	912	884
95	1,294	1,238	1,181	1,153	1,124	1,095	1,066	1,037	1,008	979	950
100	1,366	1,309	1,252	1,224	1,196	1,167	1,139	1,111	1,082	1,054	1,026
105	1,437	1,380	1,323	1,295	1,266	1,237	1,208	1,179	1,150	1,121	1,092
110	1,508	1,451	1,395	1,366	1,338	1,310	1,281	1,253	1,225	1,196	1,168
115	1,579	1,522	1,466	1,437	1,408	1,379	1,350	1,321	1,292	1,263	1,234
120	1,650	1,593	1,537	1,508	1,480	1,452	1,423	1,395	1,367	1,339	1,310

U.S. Exports (millions of long tons)

U.S. Exports (millions of long tons)

<sup>1/</sup> In favor of foreign countries (-)  
<sup>2/</sup> Held constant in the computation of the balances are the following factors based on data for January-June 1947:  
Proportion of U.S. exports carried in U.S. bottoms - .52  
Proportion of U.S. imports carried in foreign bottoms - .35  
Estimated average freight rate per long ton of U.S. exports - \$27.35  
Estimated average freight rate per long ton of U.S. imports - \$16.18



## 5. The Proportion of U.S. Foreign Trade Carried in U.S. Bottoms

The U.S. freight balance in its international accounts is also greatly influenced by the proportion of U.S. shipping weight carried in U.S. vessels, which is, of course, a function of military and institutional as well as economic circumstances. It is determined by tacit agreements in International Shipping Conferences, and by Governmental shipping policies as well as by the free market forces of demand for and supply of shipping. International Shipping Conferences, in effect, have allocated the trade to be carried in the vessels of the various member nations by agreeing to the routes to be served by, and the sailing dates for, ships of particular countries. Before analyzing the data with regard to the proportion of U.S. foreign trade carried in U.S. bottoms, the U.S. Governmental shipping policies which influence these proportions are discussed.

In order to maintain an effective U.S. merchant marine, the U.S. Government had pursued shipping policies which were aimed at securing a "substantial portion" of U.S. foreign commerce for U.S. flag vessels. During World War II, this situation changed drastically. With the developing relative shortage of non-U.S. tonnage, the relative strength of the United States increased greatly and many of the U.S. shipping "protectionist" policies were suspended or relaxed.

U.S. Government shipping policy is based largely on the Merchant Marine Act of 1936. This Act prescribes a fleet sufficient to carry all of U.S. ~~water-borne~~ domestic commerce and a "substantial portion" of U.S. foreign commerce. The Act also prescribes a merchant marine "capable of serving as a naval and military auxiliary in time of war or national emergency". The Maritime Commission has ample legal authority, under the 1936 Act, to get additional tonnage put into any trade where, in its opinion, U.S. needs are not being adequately served. During the postwar period many ship operators, particularly U.S. operators of tramp vessels, forewent the benefits they might have received under the provisions of the Act in order to be free to operate on trade routes of their own choosing.

In fulfillment of its objectives, the U.S. Government provides for subsidization of the U.S. merchant marine and "tied loans", i.e., governmental loans requiring the use of U.S. flag vessels for the transport of goods purchased under the terms of the loan in the United States. Both of these methods, when applied, tend to bolster the proportion of U.S. foreign trade carried in U.S. vessels.

To achieve these aims, the Maritime Commission has been granted the following powers:

- (a) To aid citizens to construct vessels through the grants of construction-differential subsidies.
- (b) To grant operating-differential subsidies.
- (c) To charter vessels with option to purchase.
- (d) To operate vessels itself.

The Commission is authorized to use the above methods whenever they are necessary to accomplish the purposes of the Merchant Marine Act. However, to

safeguard the rights of privately owned and operated American-flag steamship lines and "to preclude unnecessary competition between American-flag services", the Commission may establish services on essential routes through the sale, charter, or operation of its own vessels only when trade and national defense needs are not being adequately served by existing services. Essentially the same safeguard is set up in connection with grants of operating differential subsidies.

The construction differential subsidy is paid by having the Maritime Commission absorb the difference between what it costs to build new vessels, or additions to existing ships in the United States, and what it would cost (as nearly as this can be determined) to build similar vessels or additions to existing ships in the "most favorable" foreign shipyard. During the war, as high as 50 per cent of the total cost of construction was paid in the form of subsidies. No subsidies on new ship construction have been paid in the postwar period.

With a view to future policy, the President's Advisory Committee on the Merchant Marine recently recommended amendments to the construction differential subsidy provisions of the 1936 Act to foster the progressive replacement of war-built tonnage. Among the recommendations of the Committee in this regard were: (1) during the next three years, at least, the maximum construction differential subsidy of 50 per cent permitted by the 1936 Act should be granted; and (2) the minimum age limit at which vessels may be classed as "obsolete vessels" by the U.S. Maritime Commission for purposes of exchange or for an allowance of credit on the construction of new tonnage should be reduced from 17 years, as now provided in the 1936 Act, to 12 years until July 1, 1957.

Operating differential subsidies, which were suspended in 1942 and are expected to recommence at the beginning of 1948, are based on five items: the wages of seagoing personnel, subsistence, maintenance, repairs, and insurance. In the past, wages have been by far the largest item, accounting for more than a third of the total operating differential subsidy payments. The wages of American seamen tend to be higher than those paid foreign seamen. (See Table 8). Hence, the practice of hiring American seagoing personnel only, as specified by the 1936 Act, had caused greater operating differential subsidy payments to be made than otherwise would have been incurred. After deducting tankers, which were not subsidized, vessels receiving operating differential subsidies as of September 30, 1939, were 59 per cent of the existing U.S. foreign-going fleet of 319 merchant vessels.

In addition to the foregoing benefits, the 1936 Act also provides for Government assistance to facilitate the private financing of new construction, for trade-in allowances on old vessels, and for a system of tax exemptions and tax deferments designed to channel profits into the acquisition of new tonnage. In these regards, the President's Advisory Committee on the Merchant Marine recommended the following: (1) the restoration of the U.S. Maritime Commission's construction revolving fund, which Congress in the Supplemental Appropriation Act for 1948 withdrew and put into the Treasury as "Miscellaneous receipts", except for moneys required for limited 1948 expenditures and obligations; and (2) the liberalization of trade-in allowances, depreciation and reserve funds allowances.

TABLE 8

Monthly Wages of Able Seamen  
(Expressed in U.S. dollars)

Country	1938	1946		1947	
	Basic Wage	Basic Wage	Estimated Total Pay	Basic Wage	Estimated Total Pay
United States	73	173	286	192	290
Great Britain	48	—	—	96	103
Denmark	42	—	—	85	90
France	35	—	—	79	92
Germany	50	—	—	—	—
Italy	27	—	—	—	—
Japan	14	—	—	—	—
Netherlands	50	74	100	74	80
Norway	42	51.60	113	101	108
Sweden	44	—	—	86	115
Canada	—	—	—	150	170
Greece	—	—	—	112	117
Yugoslavia	—	—	—	84	87
Belgium	—	50	102	—	—

The Maritime Commission's authority to operate, or to charter to private U.S. shipping companies, merchant vessels from the government-owned temporarily inactive or reserve fleets makes for a substantial degree of elasticity in the size of the active U.S. merchant fleet. As of May 31, 1947, there were 9 dry cargo vessels and 260 tanker vessels actively engaged in foreign trade which were operated by private shipping agents for the U.S. Maritime Commission. There were 1,000 chartered vessels engaged in foreign trade as of November 15, 1947, a decline of about one-third from the number in July, 1947, reflecting the peak level of trade in the second quarter of the year. Since charters need run only 60 days before cancellation notice to the Maritime Commission may be given by the shipping company involved, changes in the volume of trade may be rather quickly reflected in the number of vessels chartered by private U.S. shipping operators.

The Maritime Commission's authority to operate and charter, as well as to sell, Government-owned war-built vessels expires February 29, 1948. As indicated earlier, the President of the United States has recommended to Congress that the Maritime Commission's authority in these regards be continued until June 30, 1949. Without an extension of the cut-off date of February 29, 1948, the Maritime Commission would have to place chartered war-built merchant vessels in the Government-owned reserve fleet, thus significantly reducing the world supply of merchant shipping.

Tied Loans: Before the war, all of the goods purchased in the United States with the proceeds of loans made by the Export-Import Bank had to be carried in American-flag vessels. Exceptions occurred only when the Shipping Board certified that U.S. ships were not available in sufficient number, on time, or at reasonable rates. In the spring of 1947, the Export-Import Bank ruled that only a "substantial proportion" or "50 per cent" of the goods purchased in the United States with the proceeds of loans made by the Export-Import Bank had to be carried in American-flag vessels. This ruling represented a compromise in a controversy between Norway and the Export-Import Bank as to the shipping stipulations attached to the Norwegian loan made many months earlier. The Norwegians argued that Norwegian ships were available at lower rates, and, hence, that the dollar expenditures would be excessive in relation to the shipping services received from the United States.

The "50 per cent" tonnage clause has not been of great significance in the immediate postwar period. Since V-J Day, distressed countries generally have been unable, except in special cases, to provide the necessary shipping to carry as much as 50 per cent of their imports from the United States in their own bottoms. Moreover, disbursements by the Export-Import Bank in the period of July, 1945-June, 1947, accounted for only about 10 per cent of the value of U.S. merchandise exports in that period. In addition, much of the disbursements were in the form of reconstruction loans, involving the purchase of machinery and other industrial materials in the United States. Shipping freight costs for such manufactures formed a relatively small proportion of the total value of such shipments. Hence, the "50 per cent" tonnage clause affected less than 10 per cent of the total freight revenues of the United States in that period.

The Proportions Carried in U.S. Bottoms: The shipping policies of the U.S. Government can thus be largely understood as an attempt to influence the proportion of U.S. foreign trade carried in American bottoms. Part of the explanation for these policies may probably be found in the outstanding importance in the prewar years of the proportions of U.S. foreign trade carried in U.S. bottoms in determining the freight balances of the United States. As has been shown in the preceding section, the volumes of U.S. water-borne exports and imports had been close to equilibrium before the war. As shown below (Section 6), the average freight rates per long ton of U.S. exports and imports also were roughly equal. Under these circumstances, the excess of the proportion of U.S. imports carried in foreign bottoms over the proportion of U.S. exports carried in U.S. bottoms caused, in the main, the deficit on U.S. freight shipping account.<sup>1/</sup> The proportion of U.S.

<sup>1/</sup> In other words, the U.S. freight shipping balance was, assuming export volume = import volume and export and import freight rates at the same level, directly proportional to the difference between the proportion of U.S. exports carried in U.S. flag vessels and the proportion of U.S. imports carried in foreign flag vessels. Symbolically,  $B = ab[x - (1-x')]$ , where:

- B = the freight shipping balance
- a = volume of U.S. exports = volume of U.S. imports
- b = average freight shipping rate per long ton of U.S. exports carried in U.S. bottoms = average freight shipping rate per long ton of U.S. imports carried in foreign bottoms.
- x = the proportion of U.S. exports carried in U.S. flag vessels.
- x' = the proportion of U.S. imports carried in U.S. flag vessels.

On the basis of the formula, the percentage deviation of the calculated value from the actual value of the freight shipping balance for 1937 amounted to 19.8 per cent.

exports carried in U.S. bottoms equaled 20 per cent in 1937; the proportion of U.S. imports carried in foreign bottoms, 68 per cent. These proportions were roughly in accord, as shown in Section 3, with the prewar distribution of ocean-going tonnage between the United States and the rest of the world.

The importance of the proportion of foreign trade carried in U.S. bottoms in determining the U.S. freight balance can be seen from an examination of Chart III. Assuming the 1937 average of the volumes of water-borne exports and imports multiplied by the existing average freight rate, and the relationship of the proportion of U.S. exports carried in U.S. bottoms to the proportion of U.S. imports carried in U.S. bottoms which existed during 1929-1938, the hypothetical values of the U.S. freight shipping balance corresponding to various levels of the proportion of the volume of U.S. exports carried in U.S. flag vessels are shown.<sup>1/</sup> From Chart III, it may be observed that the proportion of the volume of U.S. exports carried in U.S. flag vessels would have had to equal 39 per cent (i.e., the point of intersection of the line and the X axis) in order to have made the U.S. freight shipping account balance. If the proportion of the volume of U.S. exports carried in U.S. flag vessels had equaled more than 39 per cent there would have occurred a surplus on U.S. freight shipping account. If, in 1937, the U.S. had carried in its own ships the same proportion of its foreign trade as at present, and assuming other factors had remained the same, it would have had a freight shipping surplus of close to \$100 million instead of a deficit of about the same amount.

In the postwar, however, the proportion of foreign trade carried in U.S. bottoms has been much less important in determining the actual freight balance. Only about 15 per cent in the rise in the freight shipping balance between 1937 and 1947 may be attributed, on the basis of computations, to the change in proportions carried in U.S. bottoms during that period. As developed in other sections, the explanation for this is that the percentage changes in the volume of foreign trade and freight rates were much greater than the changes in proportions carried in U.S. bottoms coupled with the fact that export volumes and export freight rates have increased much more than import volumes and import rates.

The lack of foreign tonnage in relation to the postwar shipping demands caused considerable rises as compared to prewar in the proportions of U.S. foreign trade carried in American bottoms. As is shown in appended Table 13, the proportion of exports carried in U.S. flag vessels in 1946 amounted to 57 per cent; the proportion of imports carried in U.S. flag vessels to 66 per cent.

Between 1946 and the first half of 1947, despite the rise in the volume of U.S. water-borne exports, the proportion of exports carried in U.S. flag vessels declined from 57 per cent to 52 per cent. In the prewar period, on the other hand, a rise in the volume of water-borne trade and freight rates tended to cause an increase in the proportions carried in U.S. bottoms. U.S. shipping operators would find it profitable to put marginal U.S. ships into active foreign service. These ships could be drawn from the U.S. reserve fleet. Under boom conditions, therefore, the active U.S. merchant fleet was able to expand rather quickly. Foreign fleets expanded far more slowly, of course, since there were no reserve fleets at their disposal. Some time

<sup>1/</sup>  $B = 694.56 X - 270.46$ , which was derived by substituting  $X' = 1.34 \times .09$ , as shown in Chart IV, into the formula given in footnote on the preceding page, where  $a = 48.5$  million long tons and  $b = \$6.12$  per long ton.



# THE RELATIONSHIP BETWEEN THE U.S. FREIGHT SHIPPING BALANCE AND THE PROPORTION OF U.S. EXPORTS CARRIED IN U.S. FLAG VESSELS\*

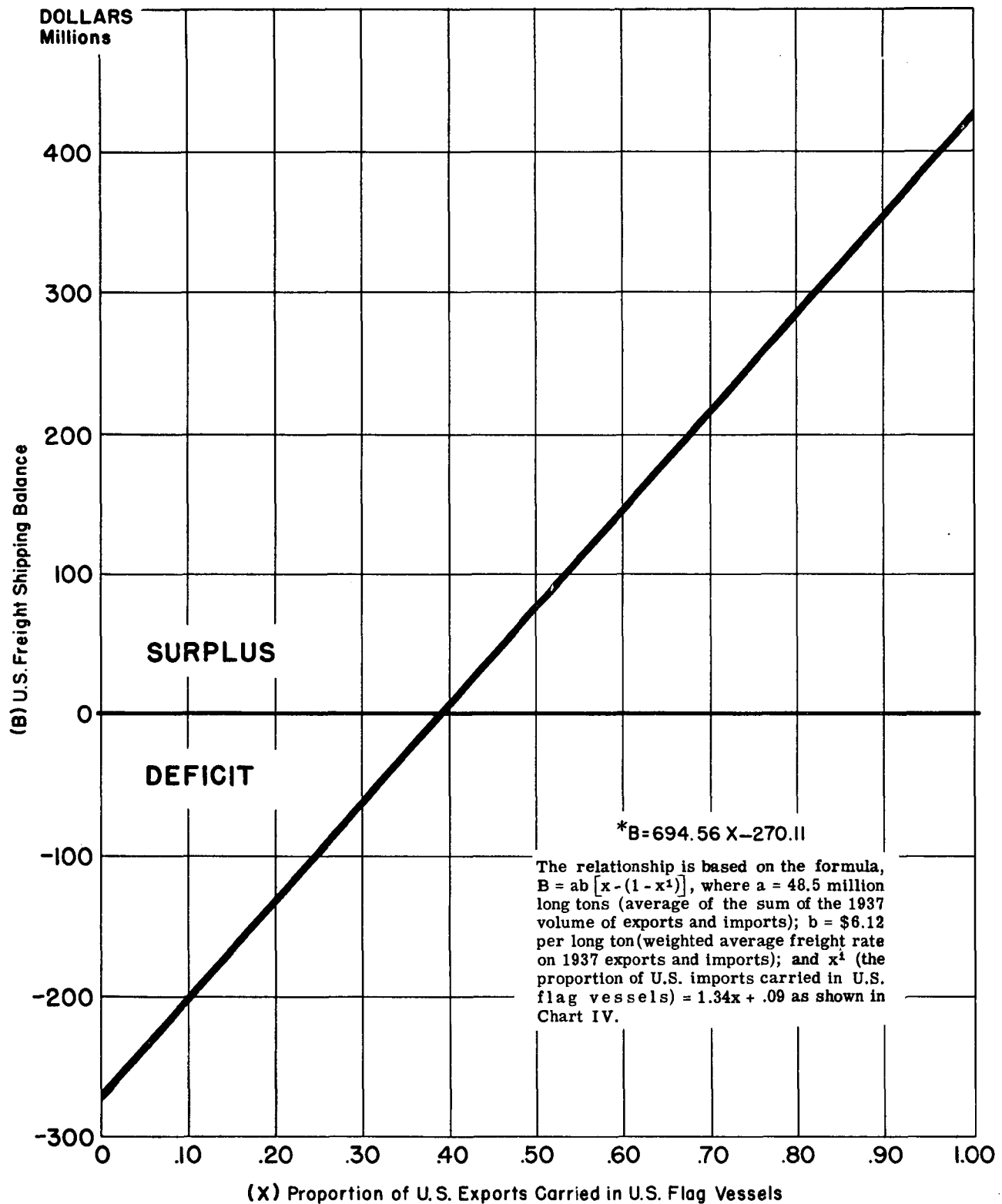


Chart III





elapsed before foreigners decided the boom was going to continue for a sufficient period as to justify the construction of new merchant vessels. Then, it took considerably more time to plan, build, and launch these vessels. Hence, substantial additions to foreign merchant fleets did not materialize until the top of the boom actually had been reached or passed.

The decline between 1946 and the first half of 1947 resulted from the relative increase in ocean-going shipping of foreign countries in the first two years after the war, as previously described in Section 3 dealing with the supply of shipping. With the increase of European merchant shipping, a larger and larger proportion of the volume of U.S. exports -- particularly grain and coal -- to Europe was carried in European merchant vessels. For example, the proportion of the volume of U.S. exports to the United Kingdom and Eire declined from 44 percent in 1946 to 40 percent in the first half of 1947; the proportion to the Bayonne-Hamburg range, i.e., to France and the Low Countries, from 73 per cent to 62 per cent, and, the proportion to the Mediterranean area from 88 per cent to 61 per cent. (See appended Table 9.)

Another factor in explaining the relative smaller importance in the post-war of the proportions carried in U.S. bottoms in determining the U.S. freight balance is to be found in the changed relationship between the proportion of U.S. imports and exports carried in U.S. bottoms. On the basis of data for 1929-38, the proportion of U.S. imports carried in U.S. bottoms characteristically was found to exceed the proportion of U.S. exports carried in U.S. bottoms. (See Chart IV.) As may be seen from appended Table 9, the bulk of the volume of U.S. exports in 1937 flowed to Europe, i.e., to countries, such as the United Kingdom, which were well able to carry in their own ships most of their imports from this country. A substantial proportion of the volume of U.S. imports in 1937 came, however, from Latin America. (See appended Table 10.) The important place of U.S. business and the lack of ocean-going shipping on a large scale in this region, and the nearness to U.S. ports made Latin America largely dependent upon U.S. shipping services.

From Chart IV, it may be observed that the proportion of the volume of U.S. imports carried in U.S. bottoms which might have been expected from the pre-war experience, in 1946 was 85 per cent as compared with the actual 66 percent. The difference between the expected proportion and the actual proportion, i.e. 85 and 66 per cent, is probably due to a multiplicity of factors, including the abnormal character of the U.S. export movement, particularly the higher proportion of fuels and grains to Europe and the more normal character of the U.S. import movement.

As is shown in Chart IV, the proportion of imports carried in US bottoms declined slightly to 65 per cent in the first six months of 1947, bringing it closer to the pre-war relationship. While the volume of U.S. imports from the United Kingdom and Eire, France, the Low Countries, and the Baltic and Scandinavian countries roughly doubled their 1946 level, the volume of total U.S. water-borne imports in the first half of 1947 (annual rate) increased only about 15 per cent above 1946. Between 1946 and the first half



# RELATIONSHIP OF PROPORTION OF U.S. IMPORTS CARRIED IN U.S. BOTTOMS TO PROPORTION OF U. S. EXPORTS CARRIED IN U. S. BOTTOMS, 1937-1947

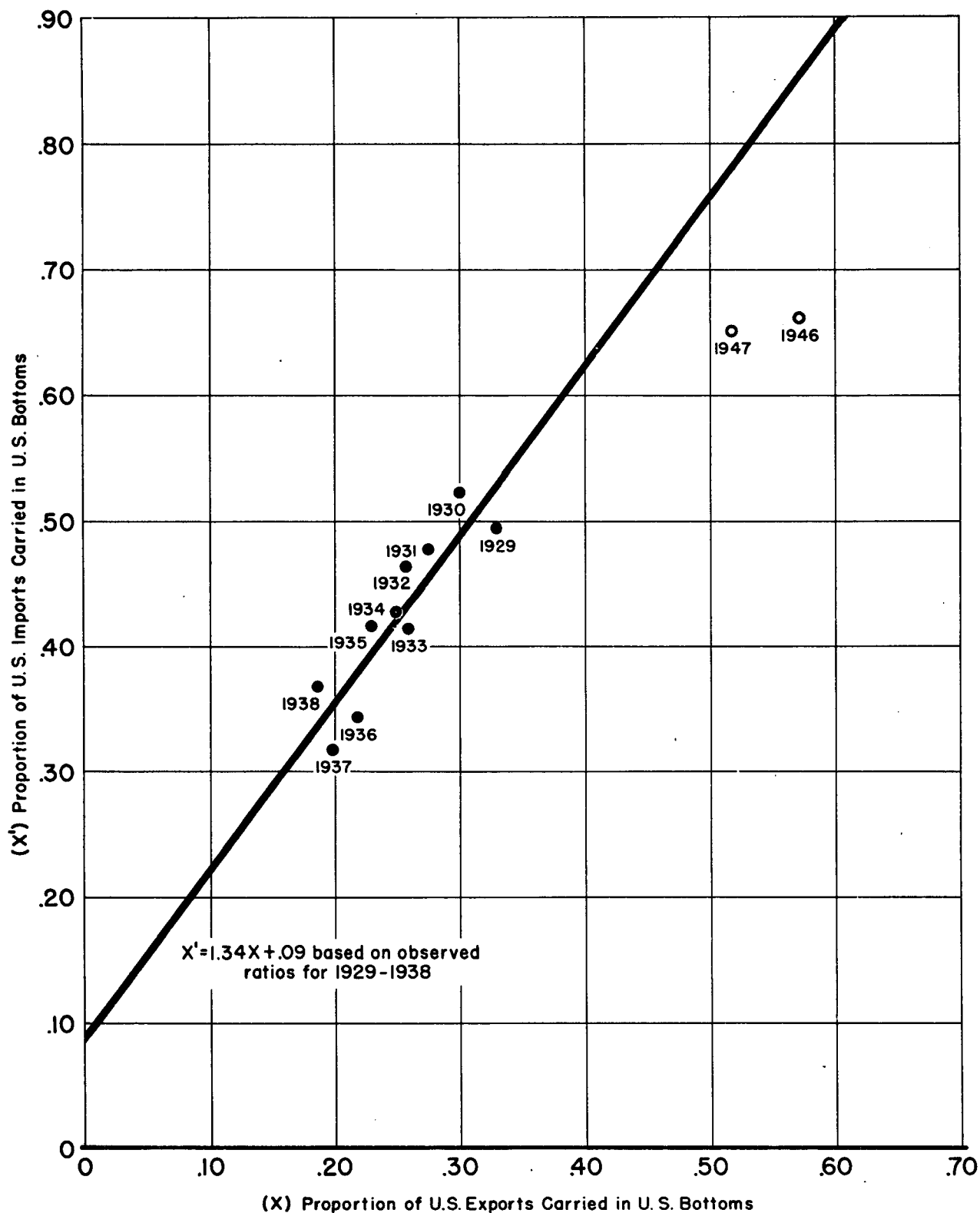


Chart IV



of 1947, therefore, an increased share of the volume of U.S. water-borne imports was accounted for by Western European countries, which carried the bulk of their exports to the United States in their own vessels. The proportions carried in U.S. flag vessels in the first half of 1947 were only 32 per cent in the case of the United Kingdom and Eire; only 39 per cent in the case of France and the Low Countries; and only 32 per cent in the case of the Baltic and Scandinavian countries. (See appended Table 10).

In the pre-war years changes in the proportion of foreign trade carried in U.S. bottoms was usually the most important factor in determining the freight balance. The significance of possible changes in the proportions of the volume of U.S. exports and imports carried in U.S. bottoms on the U.S. freight balance in the post-war period is shown in Table 11 on the assumption of (a) constant volumes of U.S. waterborne exports and imports, and (b) constant average freight shipping rates per cargo ton, both based on data for January-June 1947. 1/

If the proportion of exports carried in U.S. bottoms decreased from the recent level of 52 per cent to 40 per cent, while the proportion of imports carried in foreign bottoms increased from the recent level of 35 per cent to 40 per cent, the U.S. freight shipping balance would contract to \$803 million, or by 30 per cent. Given equal percentage declines in the proportions of U.S. exports and imports carried in U.S. flag vessels, there would occur a greater percentage decline in the U.S. freight shipping balance.

In using the table for forecasting purposes, however, it should be noted that a large percentage decline in the proportions of the volume of trade carried in U.S. bottoms -- say by more than 10 per cent -- probably would induce a significant change in average freight shipping rates per cargo ton, which would affect the validity of the computations in the foregoing table.

#### 6. Average Freight Shipping Rates

Having reviewed the importance of changes in the volume of foreign trade and in the proportions carried in U.S. bottoms in determining the U.S. freight balance, there remains the other set of factors -- the export and import shipping rates.

The average freight shipping rate per long ton depends on freight shipping rates proper for "equivalent voyages," i.e., irrespective of whether considered "exports" or "imports," and other factors associated with the movement of goods, such as the commodity composition, the distances travelled, etc. Freight shipping rates proper for "equivalent voyages" were roughly 150 per cent higher in 1946 and 175 per cent higher in the first half of 1947 than in 1937, chiefly in response to the extraordinary shipping demands and the increasing costs of ship operation. Not only was the volume of U.S. water-borne trade at an unusually high level, but tonnage was in short supply. In addition, increased costs in the form of higher wages, and higher fuel, maintenance and repair costs caused freight shipping rates to move generally upward.

1/ See footnote 1, page 27.

Table 11

Estimated Range of the Balance on U.S. Freight Account 1/ as Determined  
by Varying the proportion of Cargoes Carried in U.S. or Foreign Vessels 2/

(millions of dollars)

Proportion of Exports Carried in U.S. Bottoms											
Per- cent	Proportion of Imports Carried in Foreign Bottoms										
	0	10	20	30	40	50	60	70	80	90	100
0	0	- 83	- 165	- 248	- 330	- 413	- 495	- 578	- 660	- 743	- 825
10	283	201	118	36	- 47	- 129	- 212	- 294	- 377	- 459	- 542
20	567	484	402	319	237	154	72	- 11	- 93	- 176	- 258
30	850	768	685	602	520	437	355	272	190	107	25
40	1,133	1,051	968	886	803	721	638	556	473	391	308
50	1,417	1,334	1,252	1,169	1,087	1,004	922	839	757	674	592
60	1,700	1,618	1,535	1,453	1,370	1,287	1,205	1,122	1,040	957	875
70	1,983	1,901	1,818	1,736	1,653	1,571	1,488	1,406	1,323	1,241	1,158
80	2,267	2,184	2,102	2,019	1,937	1,854	1,772	1,689	1,607	1,524	1,442
90	2,550	2,468	2,385	2,303	2,220	2,138	2,055	1,972	1,890	1,807	1,725
100	2,833	2,751	2,668	2,586	2,503	2,421	2,338	2,256	2,173	2,091	2,008

Proportion of Exports Carried in U.S. Bottoms

1/ In favor of foreign countries (-)  
2/ Held constant in the computation of the balance are the following factors based on data for January-June 1947 (annual rate):

U.S. exports (in millions of long tons) = 103.6  
U.S. imports (in millions of long tons) = 51.0  
Estimated average freight rate per long ton of U.S. imports = \$16.18  
Estimated average freight rate per long ton of US exports = \$27.35

Average freight rates on U.S. exports have risen much more than rates on U.S. imports. As is shown in appended Table 13, the average freight per cargo ton on U.S. exports carried in U.S. bottoms was \$24.55 in 1946 as compared with \$5.91 in 1937. In the first half of 1947 it rose to an estimated \$27.43, a percentage increase of 364 per cent over 1937. Meanwhile, the average freight per cargo ton on U.S. imports carried in foreign vessels was \$16.27 in 1946 as compared with \$6.41 before the war. In the first half of 1947 it rose to \$16.67, a percentage increase of 160 per cent over 1937. <sup>1/</sup> (See appended Table 13.) This situation tended, along with other previously mentioned factors, to increase freight shipping receipts sharply relative to freight shipping payments. About 47 per cent of the rise in the freight shipping balance between 1937 and 1947 was attributable, on the basis of computations, to the changes in average freight shipping rates.

The increases in average freight shipping rates on exports over and above the increases in freight shipping rates proper for "equivalent voyages", or in import rates, may be attributed to a number of factors, including the much larger volume of exports as compared with imports, as well as the unusual and emergency character of the exports. More particularly, the rates applicable to, as well as the shipping weight of exports carried in, U.S. dry cargo vessels have increased relative to exports carried in U.S. tanker vessels. This reflected, in the main, the relative increase in water-borne export shipments of grain and coal abroad in U.S. tramp vessels. On the other hand, U.S. dry cargo vessels have been hauling for shorter distances, while U.S. tanker vessels have been hauling for longer distances than before the war. The increases in average freight shipping rates on imports were only about half as much as the increases applicable to U.S. exports, primarily because imports carried in foreign tankers have increased relative to imports carried in foreign dry cargo vessels; and foreign dry cargo vessels have been hauling for shorter distances, while foreign tanker vessels have been hauling for longer distances than before the war.

Tramp Freight Rates: Tramp freight rates have risen sharply. Tramp operators carry any bulk cargo, such as grain and coal, anywhere at a mutually agreed charter rate. Because of the nature of their activities, the supply of tramp vessels tends at any one time to be inflexible, while the demand varies considerably. As a result of these conditions, tramp freight rates tend to fluctuate widely. Tramp freight rates proper for "equivalent voyages", -- applicable principally to grain and coal shipments -- were roughly 250 per cent higher in 1946 than in prewar. The increase in tramp freight rates reflected the greatly increased costs of operation resulting from an exceptional number of ballast voyages and increased ship turnaround time, in addition to the cost and other factors enumerated previously. If demand from abroad for U.S. grain and coal shipments were to slacken, and U.S. foreign trade were to resume a more normal pattern, tramp freight rates might tend to fall fairly sharply. As noted below, some decline (which may, of course, be temporary) has already occurred.

The rates established on the Government-controlled dry cargo vessels have served to set the level of freight rates for much of U.S. export commerce.

<sup>1/</sup> A slight discrepancy exists between rates given here and in footnote 2 of Tables 7 and 10. The rates given in the text were based on the period ending June, 1947, data for ~~which~~ *June* were not available at the time the tables were computed.

Maritime Commission vessels have been furnished to meet spot requirements for ships to haul coal or grain to Europe and occasionally to other areas. European purchasers have requested more Maritime Commission vessels when they have been unable to charter ships in the open market at rates equal or below those officially set by the Commission for the Government-controlled fleet. Thus, in effect, the freight rates established on the Maritime Commission boats have represented a ceiling beyond which charter rates for bulk cargoes have not normally gone so long as Government-controlled vessels have been available.

In this connection, the trend in coal rates to Europe is indicative. During most of 1946 and the early months of 1947, private charter rates on coal were within \$1.00 per ton of the official U.S. War Shipping Administration or U.S. Maritime Commission rates of, e.g., \$13.97 a ton to Germany and \$14.25 a ton to Italy. At the time of the coal strike in the spring of 1947, a temporary surplus of ships caused a sharp break in charter rates, with some charters being concluded at \$3.00 or \$4.00 per ton below the official scale. As soon as the coal strike ended, the demand for tonnage resumed and private charter rates again approached the official U.S. Maritime Commission rates. During the first months of 1947, because of the withdrawal of most of the Government-controlled ships, rates on both grain and coal actually exceeded in some cases the original rate scale fixed by the Commission, although rates as of May 31 were again slightly below the official scale and have reportedly declined further in the last quarter, e.g., to \$9.20 per ton to Italy in October. Because of the substantial size of the U.S. reserve fleet, it may be assumed that the U.S. Maritime Commission could still greatly influence the rates charged by private U.S. shippers, although, of course, there may be some lag in time between the demand for more shipping at the Commission's rates and the forthcoming of additional ships from the reserve fleet.

Conference Freight Rates: Conference freight rates usually are more stable than tramp freight rates. Decisions as to changes in conference freight rates must await the calling of special or regular conference meetings. Moreover, the demand for conference vessels has been relatively small. As a result of the higher level of utilization of shipping space on conference vessels as compared with prewar, the pressure of rising costs has been somewhat less than otherwise would be the case. As shown by appended Table 14, conference freight rates, which are applicable to dry cargo shipments except grain and coal, and other bulk cargoes of a similar character, were roughly 100 per cent higher in 1946 than in prewar.

Tanker Freight Rates: Tanker freight rates have seemingly been relatively stable. Tanker freight rates proper for "equivalent voyages" were in 1946 only about 30 per cent higher than in prewar. This was attributable to (1) Government operation of about 260 tankers at rates determined by the Maritime Commission through means of which a ceiling was set on the upward surge of privately determined tank rates; and (2) oil company operation of the bulk of the vast privately owned tanker fleet, the cost of which is not always separated out from the price of the product, except for export accounting purposes.

Effects of Changes in Rates: The importance of changes in average import and export freight shipping rates per cargo ton on the U.S. freight balance assuming (a) constant volume of exports and imports, and (b) constant



proportions of the volumes of exports and imports carried in U.S. flag vessels, based on data for January-June 1947, is shown in Table 12. If the average freight shipping rate per long ton of U.S. exports decreased from the level of \$27.35 to \$23.00, or by 15 per cent, and if the rate on U.S. imports decreased from \$16.18 to \$15.00, or by 7 per cent, the balance would shrink to \$971 million, or by 16 per cent. Given equal percentage declines in the average export and import freight shipping rates, there would result a proportionate decline in the freight shipping balance; a percentage decline in the export rate greater than the percentage decline in the import rate would cause a percentage decline in the balance even greater than that in the export rate. In using the table for forecasting purposes it should be noted, however, that large rate declines -- say more than 20 per cent -- probably would reflect, in the short run at least, significant changes in demand for and supply of shipping space, hence affecting the validity of the underlying assumptions upon which the calculations in Table 12 were based.

It was noted above that 47 per cent of the rise in the freight shipping balance between 1937 and 1947 may be attributed to the changes in shipping rates, as compared with 38 per cent attributed to changes in the volumes of exports and imports, and 15 per cent attributed to changes in proportions carried in U.S. bottoms. However, it is to be stressed that the changes in the freight rates are largely the result of changes in the volumes of trade and in the proportions carried in U.S. ships.

Table 12

Estimated Range of the Balance on U.S. Freight Account<sup>1/</sup> as Determined  
by Varying the Average Freight Rates Per Long Ton<sup>2/</sup>  
(millions of dollars)

	Average Freight Rate per Long Ton of U.S. Imports (dollars)										Average Rate Per Long Ton of U.S. Exports (dollars)			
	5	7	9	11	13	15	17	19	21	23	25	27	29	31
5	180	144	109	73	37	16	- 34	- 70	- 105	- 142	- 177			
7	288	252	216	181	145	109	74	37	23	- 33	- 69			
9	396	360	324	288	253	217	181	146	110	74	39			
11	503	468	432	396	361	325	289	253	218	182	146			
15	719	683	647	612	576	540	505	469	433	398	362			
19	934	899	863	827	792	756	720	684	649	613	577			
23	1,150	1,114	1,078	1,043	1,007	971	936	900	864	829	793			
27	1,365	1,330	1,294	1,258	1,222	1,187	1,151	1,115	1,080	1,044	1,008			
31	1,581	1,545	1,509	1,474	1,438	1,402	1,367	1,331	1,295	1,259	1,224			
35	1,796	1,761	1,725	1,689	1,653	1,618	1,582	1,546	1,511	1,475	1,439			
39	2,012	1,976	1,940	1,905	1,869	1,833	1,798	1,762	1,726	1,690	1,655			

<sup>1/</sup> In favor of foreign countries (-)  
<sup>2/</sup> Held constant in the computation of the balance are the following factors based on data for  
January-June 1947 (annual rate):

Proportion of U.S. exports carried in U.S. bottoms = .52  
Proportion of U.S. imports carried in foreign bottoms = .35  
U.S. exports (millions of long tons) = 103.6  
U.S. imports (millions of long tons) = 51.0

TABLE 9

Shipping Weight of U.S. Exports of Domestic and Foreign Merchandise on Dry Cargo and Tanker Vessels by Trade Area and Flag of Vessel, 1937, 1946 & 1947 <sup>1/</sup>  
 (in millions of lbs.)

Trade Area	1937		1946				1947						
	Shipping Weight	Shipping Weight			Percent Carried in U.S. Ships		Shipping Weight			Percent Carried in U.S. Ships			
		Total	Dry Cargo	Tanker	Total	Dry Cargo	Tanker	Total	Dry Cargo	Tanker	Total	Dry Cargo	Tanker
TRADE AREAS GRAND TOTAL	122,209.3	173,834.5	143,474.1	30,360.4	57.2	60.9	39.9	231,969.6	203,073.8	28,895.8	51.7	53.2	41.5
Foreign Trade Areas except Canadian	89,977.8	129,547.5	107,097.8	22,449.7	65.2	70.9	38.2	193,380.4	171,405.2	21,925.2	55.8	58.2	37.4
Caribbean	11,929.7 <sup>2/</sup>	8,136.4	6,929.7	1,206.7	67.8	72.3	42.1	12,728.2	11,182.4	1,545.8	67.2	70.8	41.4
East Coast South America	3,938.4	8,681.1	8,067.4	613.7	61.7	63.7	45.0	13,426.2	12,893.2	533.0	52.4	52.7	44.5
West Coast South America	1,973.0	1,784.5	1,717.2	67.3	73.1	75.9	0.1	2,639.6	2,460.4	179.2	65.7	70.4	—
West Coast Central America and Mexico		642.0	319.5	322.5	69.6	86.6	52.8	1,480.6	559.6	921.0	50.5	79.3	32.9
Gulf Coast Mexico		814.3	812.2	2.1	28.8	28.9	0.0	1,138.4	1,132.8	5.6	32.1	32.2	—
United Kingdom and Eire	13,026.1	15,556.4	6,274.4	9,282.0	44.0	40.1	46.5	19,109.8	11,220.8	7,889.0	40.2	39.2	41.6
Baltic, Scandinavia, Iceland, and Greenland	4,549.6	13,446.8	11,218.0	2,228.8	38.0	43.6	10.8	21,392.0	19,281.8	2,110.2	44.2	48.3	7.0
Bayonne-Hamburg Range	18,127.8	33,553.3	28,982.6	4,570.7	73.3	79.0	36.8	55,503.8	51,824.0	3,679.8	61.9	63.7	37.4
Portugal and Spanish Atlantic	908.5	2,147.5	1,821.5	326.0	44.5	52.4	—	3,739.8	3,332.0	407.8	48.5	54.5	—
Azores, Mediterranean, and Black Sea	6,199.2	26,977.2	25,836.4	1,140.8	87.8	89.9	41.5	39,124.0	37,646.0	1,478.0	61.1	62.0	37.2
West Coast Africa	438.6	1,515.6	1,116.6	399.0	55.5	61.0	40.0	2,558.4	1,894.2	364.2	30.2	27.5	69.2
South and East Africa	1,821.9	1,813.0	1,475.6	337.4	61.1	61.3	60.2	2,344.6	2,344.6	—	68.8	68.8	—
Australasia	2,169.0	2,397.7	1,440.7	957.0	30.5	19.3	47.3	3,520.6	2,094.0	1,426.6	37.5	28.7	50.5
India, Persian Gulf, and Red Sea	749.7	2,801.3	2,800.9	0.4	58.8	58.8	100.0	5,160.0	5,094.6	65.4	53.6	54.2	.3
Straits Settlements and Netherlands East Indies	700.6	507.3	505.4	1.9	32.3	32.3	47.4	1,645.2	1,643.2	2.0	33.3	33.3	—
South China, Formosa, and Philippines	(23,443.5)	2,748.8	2,705.5	43.3	76.3	76.8	44.3	4,173.4	3,620.8	552.6	61.8	63.0	53.5
North China, including Shanghai and Japan	( )	4,024.0	3,074.3	949.7	95.2	72.7	14.6	3,995.0	3,180.8	814.2	68.3	72.8	50.7

(Table 9 continued on next page)

Table 9 continued

1 Shipping Weight of U.S. Exports of Domestic and Foreign Merchandise on Dry Cargo and Tanker Vessels by Trade Area and Flag of Vessel, 1937, 1946 & 1947 <sup>1/</sup>  
 2/ (in millions of lbs.)

		1946		1947 <sup>1/</sup>										
Trade Area	1937	Percent Carried in U.S. Ships		Percent Carried in U.S. Ships										
	Shipping Weight	Shipping Weight		Shipping Weight										
		Dry Cargo	Tanker	Dry Cargo	Tanker									
<u>Canadian Trade Areas</u>		<u>32,231.5</u>	<u>44,286.9</u>	<u>36,376.3</u>	<u>7,910.6</u>	<u>34.0</u>	<u>31.7</u>	<u>44.6</u>	<u>38,590.4</u>	<u>31,669.4</u>	<u>6,921.0</u>	<u>31.0</u>	<u>25.8</u>	<u>54.6</u>
Pacific Canada	2,489.8	3,135.8	187.5	2,948.3	73.9	20.5	77.3	3,973.0	376.4	3,596.6	58.6	30.6	61.6	
Great Lakes Canada	25,074.8	34,655.5	30,460.8	4,194.7	34.2	36.8	15.2	7,417.2	25,323.2	2,094.0	28.5	29.5	17.5	
Atlantic Canada and Newfoundland	4,666.8	6,495.3	5,727.7	767.6	13.6	4.8	79.2	7,200.0	5,969.8	1,230.2	25.1	10.2	97.6	

Note: Totals represents the sums of unrounded figures, hence may vary slightly from the sums of the rounded amounts.

<sup>1/</sup> Annual rate based on January-June 1947.

<sup>2/</sup> Includes West Coast Central America and Mexico and Gulf Coast Mexico.

TABLE 10

Shipping Weight of U.S. Imports on Dry Cargo and Tanker Vessels, By Trade Area and Flag of Vessel, 1937, 1946 and 1947  
(in millions of lbs.)

	1937	1946				1947							
Trade Area	Shipping Weight	Shipping Weight		Percent Carried in U.S. Ships		Shipping Weight		Percent Carried in U.S. Ships					
		Total	Dry Cargo	Total	Dry Cargo	Total	Dry Cargo	Total	Dry Cargo				
TRADE AREAS GRAND TOTAL	94,220.7	98,382.6	50,703.4	47,679.2	65.8	56.3	75.8	114,253.8	57,302.8	56,951.0	65.0	56.5	73.5
Foreign Trade Areas Except Canadian	80,020.7	85,012.7	37,390.2	47,622.5	71.2	65.4	75.8	105,142.8	48,346.6	56,796.2	68.7	63.0	73.5
Caribbean	34,680.6 <sup>2/</sup>	56,234.4	11,695.7	44,538.7	74.4	67.1	76.3	71,022.4	17,606.4	53,416.0	72.9	67.3	74.8
East Coast South America	7,088.1	4,492.9	4,437.1	55.8	61.1	60.5	39.4	3,346.6	3,265.4	81.2	55.9	57.0	55.4
West Coast South America	5,690.9	5,861.2	5,810.1	51.1	90.1	90.0	100.0	7,051.0	7,019.6	31.4	88.3	88.7	—
West Coast Central America and Mexico	2/	790.4	780.7	9.7	50.0	50.6	—	1,142.4	1,124.0	18.4	74.8	76.0	—
Gulf Coast Mexico	2/	2,909.9	670.1	2,239.8	50.1	15.0	60.6	3,712.8	778.4	2,934.4	52.8	35.0	57.5
United Kingdom and Eire	2,158.9	724.6	707.3	17.3	51.0	52.3	0.0	1,525.2	1,241.4	283.8	32.1	36.1	14.7
Baltic, Scandinavia, Iceland, and Greenland	4,825.3	2,156.5	2,156.5	*	26.6	26.6	—	4,156.8	4,144.6	12.2	31.9	32.0	—
Bayonne-Hamburg Range	7,099.5	278.1	277.9	0.2	58.0	58.0	0.0	423.0	423.0	*	38.9	38.9	—
Portugal and Spanish Atlantic	1,447.2	559.8	559.8	—	37.0	37.0	—	483.2	482.8	.4	28.3	28.3	—
Azores, Mediterranean, and Black Sea	3,300.3	1,598.5	1,598.5	*	73.1	73.1	100.0	1,593.4	1,593.4	—	47.6	47.6	—
West Coast Africa	1,456.5	1,590.3	1,590.3	—	50.0	50.0	—	1,420.0	1,420.0	—	24.0	95.2	—
South and East Africa	810.1	1,689.1	1,676.6	12.5	90.5	90.4	100.0	1,672.8	1,672.8	—	95.2	51.5	—
Australasia	712.9	781.3	781.3	*	58.5	58.5	100.0	610.4	610.4	—	51.5	24.0	—
India, Persian Gulf, and Red Sea	2,395.3	3,471.0	2,807.2	663.8	63.8	55.2	100.0	3,121.0	3,105.6	15.4	64.4	64.2	100.0
Straits Settlements and Netherlands East Indies	2,753.2	614.8	581.4	33.4	59.7	57.1	100.0	1,350.4	1,350.4	—	61.1	61.1	—
South China, Formosa, and Philippines	5,662.1	1,107.8	1,107.8	—	84.5	84.5	—	2,263.2	2,263.2	—	59.3	59.3	—
North China, including Shanghai and Japan		149.5	149.1	0.4	87.1	87.3	—	247.6	245.2	2.4	59.3	59.9	—

(Table 10 continued on next page)

Table 10 continued

Shipping Weight of U.S. Imports on Dry Cargo and Tanker Vessels, By Trade Area and Flag of Vessel, 1937, 1946, and 1947  
( in millions of lbs. )

Trade Area	1937				1946				1947				
	Shipping Weight	Shipping Weight		Percent Carried in U.S. Ships	Shipping Weight	Percent Carried in U.S. Ships							
		Dry Cargo	Tanker				Dry Cargo	Tanker					
Canadian Trade Areas	14,200.0	13,370.1	13,313.3	56.8	30.9	30.8	60.7	9,111.4	8,956.4	155.0	23.0	21.6	100.0
Pacific Canada	1,970.2	1,256.9	1,256.9	*	40.1	40.1	100.0	1,477.4	1,477.4	*	31.8	31.8	—
Great Lakes Canada	8,079.4	7,278.8	7,254.9	23.9	27.7	27.5	100.0	3,985.4	3,918.2	67.2	11.7	10.2	100.0
Atlantic Canada and Newfoundland	4,150.4	4,834.4	4,801.6	32.8	33.3	33.4	68.0	3,649.0	3,561.2	87.8	31.7	30.0	100.0

Note: Totals represent the sums of unrounded figures, hence may vary slightly from the sums of the rounded amounts.

\* Less than 100,000 pounds.

1/ Annual rate based on January-June 1947.

2/ Includes West Coast Central America and Mexico and Gulf Coast Mexico.

TABLE 13

Cargo Tonnage, Receipts, and Approximate Average Freight Rates on  
U. S. Exports and Imports, 1937, 1946, and 1947

Class of Traffic	Receipts (millions of dollars)			Cargo (millions of long tons)			Approximate Average Freight Rates per Cargo Ton		
	1937	1946	1947 <sup>2/</sup>	1937 <sup>1/</sup>	1946	1947 <sup>2/</sup>	1937	1946	1947 <sup>2/</sup>
Exports:	274	1,630		55	77	104	\$4.98	\$21.17	
U. S. ships	65	1,080	1,454	11	44	53	5.91	24.55	\$27.43
Foreign ships	209	550		44	33		4.75	16.66	
<u>Dry Cargo</u>	184	1,554		36	64		5.11	24.28	
U. S. ships	54	1,050	1,421	9	39	48	6.00	26.92	29.61
Foreign ships	130	504		27	25		4.81	21.60	
<u>Tanker</u>	90	77		19	13		4.73	5.92	
U. S. ships	11	30	33	2	5	5	5.50	6.00	6.60
Foreign ships	79	47		17	8		4.65	5.87	
Imports:	268	582		42	44	51	6.38	13.22	
U. S. ships	82	338		13	29		6.31	11.66	
Foreign ships	186	244	300	29	15	18	6.41	16.27	16.67
<u>Dry Cargo</u>	244	515		32	23		7.63	22.39	
U. S. ships	68	286		9	13		7.56	22.00	
Foreign ships	176	229	277	23	10	11	7.65	22.90	25.19
<u>Tanker</u>	24	67		10	21		2.40	3.19	
U. S. ships	14	52		4	16		3.50	3.25	
Foreign ships	10	15	23	6	5	7	1.67	3.00	3.30

1/ Includes trade in transit through United States, which amounted to roughly 5 million tons. Beginning in 1942, the U.S. Department of Commerce assumed responsibility for the collection of data and redefined exports and imports so as to exclude transit shipments.

2/ Annual rates estimated on basis of data for January-June 1947.

APPENDIX  
Table 14

- 36 -

A. Outbound Freight Rates for Selected Commodities  
from the United States to Various World Trade Areas 1/

	North Atlantic to United Kingdom		North Atlantic to Antwerp & Rotterdam	
	March 1939	March 1947	March 1939	March 1947
	One cu. ft./100 lbs. <u>2/</u>		One cu. ft./100 lbs. <u>2/</u>	
<u>General Cargo, n.o.s.</u>	50/90	85/1.50	50/90	85/1.50
<u>Machinery:</u>				
Electrical, n.o.s.	45/80	75/1.35	50/90	85/1.50
Heavy industrial, n.o.s.	45/80	75/1.35	50/90	85/1.50
Metal working, n.o.s.	45/80	75/1.35	-	-
<u>Automobiles:</u>				
Boxed, not over 6720 lbs. <u>3/</u>	7.20	18.00	.205/41	45/80
Boxed, 6721-8000 lbs. <u>3/</u>	9.20	20.00	.255/51	50/90
Unboxed, not over 6720 lbs. <u>3/</u>	9.60 <u>4/</u>	26.00	.265 <u>4/</u>	70/1.25
Unboxed, 6721-8000 lbs. <u>3/</u>	11.60 <u>4/</u>	28.00	.315 <u>4/</u>	75/1.35
Accessories	50/90	85/1.50	45/80	1.05/1.90
<u>Iron or Steel:</u>				
Billets, blooms, ingots, loose or bundles	6.00 -W-	10.80	8.00 -W-	11.50
Sheets and plates	9.00 -W-	10.80	9.00 -W-	13.75
Castings or forgings, rough, loose, packed	12.00	19.00	12.00	21.75
<u>Chemicals:</u>				
Sulphuric acid	1.50 -100 lbs.-	2.60	-	-
Nitric acid	1.50 -100 lbs.-	2.60	-	-
Acetates	-	-	.75 -100 lbs.-	1.75
Dyes & dyestuffs, n.o.s.	50/90	85/1.50	50/90	85/1.50
Paints	50/90	85/1.50	50/90	85/1.50
<u>Cotton Manufactures:</u>				
Duck, bales or rolls	.50 <u>4/</u>	85/1.50	50/90	85/1.50
Piece goods, bales, rolls	.50 <u>4/</u>	85/1.50	50/90	85/1.50
<u>Tobacco:</u>				
Unmanufactured, cases	.665 -100 lbs.-	1.60	1.00 -100 lbs.-	2.30
<u>Vegetable Oils:</u>				
Linseed, bbls.	.90 -100 lbs.-	1.55	.80 -100 lbs.-	1.40
Cottonseed, pkgs., bbls.	.60 -100 lbs.-	1.05	.50 -100 lbs.-	1.05
<hr/>				
	Atlantic and Gulf to Rio de Janeiro		Atlantic and Gulf to Chile	
	March 1939	March 1947	March 1939	March 1947
	W/M = 2240 lbs. or 40 cu. ft. <u>5/</u>		One cu. ft./100 lbs. <u>2/</u>	
<u>General Cargo, n.o.s.</u>	24.15	52.50	90/1.60	1.37/2.74
<u>Machinery:</u>				
Electrical, n.o.s.	19.80	40.00	65/1.15	92/1.84
Metal working, n.o.s.	19.80	40.00	60/1.10	82/1.64
<u>Automobiles:</u>				
Boxed, not over 6720 lbs.	12.45	26.25	26/52 <u>6/</u>	.50 <u>1/2</u> cu. ft. <u>7/</u>
Boxed, 6721-8000 lbs.	13.45	27.50	-	.56 <u>1/2</u> cu. ft. <u>8/</u>
Unboxed, not over 6720 lbs.	15.00	32.50	32/64 <u>6/</u>	.58 cu. ft. <u>7/</u>
Unboxed, 6721-8000 lbs.	16.00	33.75	-	.64 cu. ft. <u>8/</u>
Accessories	19.80	41.25	32/64	58/1.16
<u>Iron or Steel:</u>				
Billets, blooms, ingots, loose or bundles	10.35 -W-	23.75	.45 -100 lbs.-	.90
Sheets and plates	11.95	23.75	.31 -100 lbs.-	.90
Castings or forgings, rough, loose, packed	-	-	35/.625	55/1.03
<u>Chemicals:</u>				
Sulphuric acid	48.30	105.00	1.70 -100 lbs.-	2.68
Nitric acid	48.30	105.00	1.15/2.10	1.77/3.54
Dyes & dyestuffs, n.o.s.	24.15	52.50	65/1.15	1.37/2.74
Paints	24.55	50.00	55/1.00	75/1.50
<u>Cotton Manufactures:</u>				
Duck, bales or rolls	27.15	56.25	.45 -cu. ft.-	.72
Piece goods, bales, rolls	27.15	56.25	.45 -cu. ft.-	.72
<u>Tobacco:</u>				
Manufactured	21.90	41.25	75/1.35	1.12/2.24
Unmanufactured	-	-	65/1.15	92/1.84
<u>Vegetable Oils:</u>				
Linseed, bbls.	14.20	35.00	60/1.10	82/1.64
Cottonseed, pkgs., bbls.	14.20	35.00	1.00 -100 lbs.-	1.33



Outbound Freight Rates for Selected Commodities  
from the United States to Various World Trade Areas 1/  
 (continued)

	<u>Pacific Coast to Australia</u>			
	<u>Local 9/</u>		<u>Overland 10/</u>	
	<u>March 1939</u>	<u>March 1947</u>	<u>March 1939</u>	<u>March 1947</u>
	<u>W/M = 2000 lbs., or 40 cu. ft. 5/</u>			
<u>General Cargo, n.o.s.</u>	25.00	40.00	22.50	35.00
<u>Machinery:</u>				
Engines and parts	17.50	33.00	17.50	28.00
Motors and parts	22.50	33.00	17.50	28.00
n.o.s. and parts	17.50	33.00	17.50	28.00
<u>Automobiles:</u>				
Boxed, under 6720 lbs.	13.50	20.50	11.50	15.50
Boxed, over 6720 lbs.	16.00	24.00	14.00	19.00
Unboxed, under 6720 lbs.	-	24.00	-	19.00
Unboxed, over 6720 lbs.	-	27.50	-	22.50
Accessories	17.50	33.00	17.50	28.00
<u>Iron or Steel:</u>				
Billets, blooms, ingots, loose or bundles	10.00	14.50	8.00	11.50
Sheets and plates	11.50	18.50	8.00	13.50
Castings or forgings, rough, loose, packed	20.00	33.00	17.50	28.00
<u>Chemicals:</u>				
Acid, n.o.s.	30.00	40.00	22.50	35.00
Paints	20.00	33.00	17.50	28.00
<u>Cotton Manufactures:</u>				
Duck, bales, rolls	-	-	17.50	28.00
Piece goods, bales, rolls	-	-	17.50	28.00
<u>Tobacco:</u>				
Manufactured	-	-	22.50	35.00
Leaf	-	-	10.00	16.50
<u>Vegetable Oils:</u>				
Cottonseed, pkgs., lbs.	20.00	33.00	-	28.00
n.o.s.	22.50	33.00	17.50	28.00

North Atlantic to North Africa

	<u>March 1939</u>	<u>March 1947</u>
	<u>W/M = 2240 lbs., or 40 cu. ft. 5/</u>	
<u>General Cargo, n.o.s.</u>	25.00	37.50
<u>Machinery:</u>		
Electrical, n.o.s.	18.00	30.00
Heavy industrial, n.o.s.	-	-
Metal working, n.o.s.	-	-
<u>Automobiles:</u>		
Boxed, not over 6720 lbs.	9.60	18.00
Boxed, 6721-8,000 lbs.	12.10	24.00
Unboxed, not over 6720 lbs.	12.00	21.00
Unboxed, 6721-8,000 lbs.	14.50	27.00
Accessories	9.60	18.00
<u>Iron or Steel:</u>		
Billets, blooms, ingots, loose or bundles	11.00 - W -	18.00
Sheets and plates	8.00 - W -	18.00
Castings or forgings, rough, loose, packed	-	19.50
<u>Chemicals:</u>		
Sulphuric Acid	-	37.50
Nitric Acid	-	-
Acetates	27.00 - W -	30.00
Dyes & dyestuffs, n.o.s.	-	27.00
Paints	25.00	31.50
<u>Cotton Manufactures:</u>		
Duck, bales or rolls	-	-
Piece goods, bales, rolls	20.00	33.00
<u>Tobacco:</u>		
Unmanufactured, cases	19.00 - W -	35.50
<u>Vegetable Oils:</u>		
Linseed, bbls.	17.90 - W -	22.50
Cottonseed, pkgs., bbls.	17.90 - W -	22.50

Note: n.o.s. means not otherwise specified.

- 1/ Rates from U.S. North Atlantic ports to the United Kingdom were obtained from the North Atlantic-United Kingdom Freight Conference tariff numbers 37 and 39; U.S. North Atlantic ports to Antwerp and Rotterdam from the North Atlantic Continental Freight Conference, tariff numbers 16 and 18; U.S. Atlantic and Gulf ports to Rio de Janeiro from the River Plate and Brazil Conferences, tariff numbers 7 and 10; U.S. Atlantic and Gulf ports to Chile from the Atlantic and Gulf /West Coast of South American Conference, tariff numbers 1-B and SA-3; U.S. Pacific Coast ports to Australia from the Pacific Coast Australasian Tariff Bureau - local traffic numbers 5 and 9, overland tariff numbers 6 and 10; from U.S. North Atlantic ports to North Africa from the North Atlantic Morocco Algeria Tunisia Freight Conference, tariff numbers 3 and 6.
- 2/ Rates quoted in cents per cubic foot or 100 pounds. Steamship option to compute rate on whichever basis yields the greater revenue, unless otherwise specified.
- 3/ Rates on this commodity were quoted in dollars per 2240 pounds or 40 cubic feet, whichever yields the greater revenue.
- 4/ In 1939 the rate on this commodity could be assessed on a measurement basis only.
- 5/ W/M means tons rates can be computed on a weight or measurement basis, whichever yields the greater revenue, unless otherwise specified.
- 6/ This rate applies to automobiles weighing not over 8960 pounds.
- 7/ This rate applies to automobiles weighing not over 6000 pounds.
- 8/ This rate applies to automobiles weighing from 6000-8960 pounds.
- 9/ Local rates apply on cargoes originating on the West Coast.
- 10/ Overland rates apply on freight originating at interior points and received by ocean lines from rail carriers on through export bills of lading.

B. Inbound Freight Rates for Selected Commodities from  
Various World Trade Areas to the United States 1/United Kingdom to North Atlantic

	<u>March 1939</u>		<u>March 1947</u>
	<u>W/M = 2240 lbs. or 40 cu. ft. 2/</u>		
<u>Hides and Skins:</u>			
Hides, undressed, dry; loose	27.69	- W -	37.00
Hides, undressed, green; bundles	13.42	- W -	18.00
Hides and skins, partly dressed	25.38	- M -	35.00
Hide cuttings bags, bbls., boxes	9.15	- W -	11.00
<u>Leather</u> , in bags, bales, rolls, not over \$250 value per ton	18.44	- W -	25.00
<u>Leather Goods, n.o.s.</u> in cases (not boots or gloves)	22.22	- M -	30.00
<u>Beeswax</u>	16.85	- W -	22.00
<u>Meal:</u> linseed	10.13	- W -	13.00
hound	12.69	- W -	17.00
<u>Dry Goods</u> , cotton duck, laces, tweeds, cur- tains, dress goods, etc.; cases or bales	24.90	- M -	34.00
<u>Bottles</u> , common glass; bbls., crates, cases, cut glass; packages	9.39	- W -	12.00
	14.52	- M -	19.00
<u>Clay Ball</u>			
China; casks or bags	5.88	- W -	8.00
Fire; packed	6.66	- W -	10.00
<u>Chalk:</u>			
Cases	16.11	- M -	22.00
Common, in bbls. or bags	7.19	- W -	8.00
<u>Aluminum Alloy:</u>			
Sheets; packed	11.73	- W -	29.00
Bars; packed or loose	11.73	- W -	16.00
<u>Chinaware:</u> boxes, bbls., casks	13.79		19.00
<u>Oils:</u> vegetable, animal, seed, liquid or solidified; bbls.	8.91	- W -	11.00
n.o.s.	18.44	- W -	25.00
<u>Wines:</u>			
Bottled, in wooden cases; or bulk	14.43	- M -	23.00
Bottled, in fibreboard containers	16.65	- M -	25.50

Continent to North Atlantic

	<u>March 1939</u>		<u>March 1947</u>
	<u>W/M = 1000 kilos or 1 cubic meter 2/</u>		
<u>Hides and Skins:</u>			
Tanned, in bales	14.00		21.00
Kid, sheep; raw and dry	32.00	- W -	44.00
Rabbit fur; cases	25.00		35.00
Silver fox fur	70.00		97.00
<u>Leatherware, n.o.s.</u> (not gloves)	32.00		50.00
<u>Bulbs:</u> flower; per 40 cbf	19.00		25.00
<u>Marble:</u> Chips	7.50	- W -	12.00
Small pieces	8.50	- W -	13.00
Clocks, mantelpieces; cases	26.00		42.00
Slabs, rough	14.50	- W -	18.00
<u>Flint Stones:</u>			
For pocket lighters	37.50		3/
n.o.s.; packed or bulk	8.50	- W -	11.50
<u>Sodium:</u>			
Caustic, in casks	7.25	- W -	10.00
Sulphate of, in bags	5.25	- W -	8.50
<u>Cosmetic Goods</u>	35.00		55.00
<u>Cotton Goods:</u>			
Made up, n.o.s.	15.00		25.00
Piece goods	15.00		25.00
<u>Watches</u> 4/	1 1/2 ad val. -		1-3/4%
<u>Photographic Apparatus</u>	37.50		52.50
<u>Fertilizers:</u>			
Nitrogenous, bags	5.50	- W -	9.00
Nitrogenous, bulk	5.25	- W -	8.50
<u>Cobalt:</u> acetate of	27.50	- W -	35.00
Silicate concentrates, in bags	12.50	- W -	17.50
<u>Wines:</u> In casks	37.50	- W -	60.00
In bottles; in cases	22.50		36.00

Inbound Freight Rates for Selected Commodities  
from Various World Trade Areas to the United States 1/  
 (continued)

Rio de Janeiro to Atlantic and Gulf

	<u>March 1939</u>		<u>March 1942</u>
	<u>W/M = 1000 kilos or 40 cu. ft. 2/</u>		
<u>Cargo, n.o.s.</u>	17.33		50.00
<u>Rubber, crude, cases</u>	16.17		37.50
Balls or bales	23.10	- W -	53.75
<u>Hides and Skins:</u>			
Fleshings, bales	9.24		25.00
Dry; loose, bales	23.10	- W -	82.50
Wet, Salted; bales	13.86	- W -	37.50
Skins, furs, n.o.s.	25.41	- W -	56.25
<u>Wines:</u>			
n.o.s., cases	11.55		30.00
n.o.s., casks	17.33	- W -	45.00
<u>Oils:</u>			
Cottonseed	11.55	- W -	28.75
Linseed	17.33	- W -	28.75
Peanut	11.55	- W -	28.75
Neatsfoot	17.33	- W -	33.75
<u>Coffee:</u>			
Green, bag	.69	- bag -	1.69
<u>Leather, n.o.s.</u>	17.33		43.75
<u>Meats:</u>			
Dried, jerked, beef	11.55	- W -	31.25
Canned	11.55	- W -	30.00
<u>Cotton:</u>			
High density bales	8.09	- W -	33.75
Linters, density bales	6.93	- W -	33.75
Waste	6.93		27.50

Chile to Atlantic and Gulf

<u>Cargo, n.o.s.</u>	25.00		35.00
<u>Cargo, refriger., n.o.s.</u>	30.00		50.00
<u>Rubber; bags, bales,</u>			
crude and scrap	25.00	- W -	30.00
<u>Hides and Skins:</u>			
Sheep, dry; bales	25.00	- W -	35.00
Sheep, wet; bbls.	25.00	- W -	40.00
Hides, dry, n.o.s.	20.00	- W -	30.00
Skins, n.o.s., bales, under			
\$150 a ton	25.00	- W -	36.00
Over \$150 a ton	35.00	- W -	46.00
<u>Wines:</u>			
In bbls.	20.00	- W -	25.00
In cases	20.00	- M -	25.00
<u>Wool:</u>			
Sheep, bales	25.00	- W -	31.00
n.o.s., under \$150 a ton	25.00	- W -	44.00
n.o.s., over \$150 a ton	35.00	- W -	44.00
<u>Copper, ores:</u>			
Under \$100 a 1000 kilos	8.50	- W -	10.00 5/
Bars	7.50	- W -	10.50 5/
<u>Soda: bags,</u>			
Nitrate of	9.00	- W -	open 5/
Sulphate of	10.00	- W -	12.50
<u>Tin:</u>			
Concentrates, ores; in bags	8.50	- W -	11.00 6/
<u>Fruit:</u>			
Fresh, refriger. - peaches, grapes	20.00		26.00
n.o.s.	22.00		28.00
No refrigeration	12.50		18.00

Inbound Freight Rates for Selected Commodities from  
Various World Trade Areas to the United States 1/  
 (continued)

Australia to Pacific Coast

	<u>March 1940*</u>		<u>March 1947</u>
	<u>W/M = 2240 lbs. or 40 cu. ft. 2/</u>		
<u>Cargo, n.o.s.</u>	21.26	- M -	27.00
<u>Rubber, raw</u>	18.22	- M -	23.00
Scrap	13.67	- W -	17.50
<u>Tin ingots</u>	19.44	- W -	24.50
<u>Wool, carbonized</u>	3.67	- 100 lbs. -	4.15
Greasy, dumped	3.04	"	3.44
Scoured, dumped	3.67	"	4.15
Noils	3.67	"	4.15
Tops, in bales	3.54	"	4.00
Waste	1.89	"	2.20
<u>Hides: wet, dry</u>	1.01	"	1.60
<u>Skins, unprocessed:</u>			
Calf, bales	1.27	"	1.60
Sheep, bales	1.90	"	2.70
Furred, n.o.s.	4.42	"	5.50
<u>Wines and Liquors: cases or casks</u>	19.13	- M -	24.00
<u>Cooper, blister</u>	7.59	- W -	13.25
Ore, in bags	9.11	- W -	11.50
Scrap	10.63	- W -	13.50
<u>Meats, canned</u>	15.19	- M -	19.50
Beef, refrig.	2.53	- 100 lbs. -	2.33
Mutton, refrig.	3.54	"	3.25
<u>Refrigerator Cargo</u>	36.45	- M -	46.00
<u>Oils: cocoanut, casks</u>	21.50	- W -	27.00
Cocoanut, bulk	8.75	- W -	23.00
Neatsfoot	27.34	- W -	35.00
Tar	10.63	- W -	13.50

South Africa to Atlantic and Gulf

	<u>October 1940*</u>		<u>March 1947</u>
	<u>W/M = 2240 lbs. or 40 cu. ft. 2/ 7/</u>		
<u>Cargo, n.o.s.</u>	30.00		35.00
<u>Wool, grease</u>	1-3/4¢	- lb. -	2-1/4¢
Scoured	2-1/2¢	- lb. -	3¢
<u>Copper, concentrates</u>	12.00	- W -	16.00
<u>Fluorspar</u>	13.00	- W -	14.50
<u>Gold, concentrates</u>	12.00	- W -	16.00
<u>Asbestos, under \$25 a ton</u>	13.00	- W -	16.00
<u>Hides and Skins, dry</u>	1-3/4	- lb. -	2¢
<u>Wattle bark</u>	8.50	- M -	13.00
<u>Coffee, bags</u>	8/	- W -	22.00
<u>Cocoa, bags</u>	8/	- W -	30.00
<u>Oils, drums, bbls.</u>			
Palm kernel	8/	- W -	24.50
Vegetable, n.o.s.	8/	- W -	24.50
<u>Rubber, crude or raw</u>	8/		21.50
<u>Sisal</u>	8/		17.00
<u>Wine: in cases</u>	8/		20.00
in casks	8/	- W -	25.00

\* Rates were not available prior to March 1940 from Australia to the Pacific Coast Ports and prior to October 1940 from South Africa to Atlantic and Gulf ports. It can be assumed that the 1939 rates were somewhat higher.

Note: n. o. s. means not otherwise specified.

- 1/ Rates from the United Kingdom to United States North Atlantic ports were obtained from the North Atlantic Westbound Freight Association, tariff number 11 and the Temporary Schedule filed effective January 14, 1946; from the Continent to United States North Atlantic ports from the Continental North Atlantic Westbound Freight Conference, tariff numbers 7 and 1-A; from Rio de Janeiro to United States Atlantic and Gulf ports from the Brazil/United States Freight Conference, tariff numbers 2 and 9; from Chile to United States Atlantic and Gulf ports from Grace Line Tariffs, numbers 3 and 5; from Australia to United States Pacific coast ports from the Oceanic Steamship Company, tariff number 4 for 1940 rates, and the Australia, New Zealand and South Sea Islands Pacific Coast Conference, Australian freight tariff number 2 for 1947 rates; from South Africa to United States Atlantic and Gulf ports from the South Africa/U.S.A. Conference, an un-numbered tariff received by the U.S. Maritime Commission on October 11, 1940 and freight tariff number 4 effective January 28, 1946.
- 2/ W/M means ton rates can be computed on a weight or measurement basis, whichever yields the greater revenue, unless otherwise specified.
- 3/ There was no rate on this commodity in the 1947 tariff.
- 4/ Minimum value per shipment in 1939 was \$10.00 and in 1947, \$20.00.
- 5/ Rates on this commodity are based on 2240 pounds.
- 6/ The 1947 rate applies to Gulf ports only and is for a tin content of 18 percent-35 percent and a value up to \$100.00 per 1,000 kilos.
- 7/ In 1940 W = 2,000 pounds.
- 8/ There was no rate on this commodity in the 1940 tariff.