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### Methods to Correct Freight Receipts

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One method of correcting the freight receipts makes use of the checks that the system of reporting itself provides, i.e., what has been received by a particular country should be equal, theoretically, to the sum of the payments of its partners. Hence, if we had precise information on (1) the total amount of gross freight paid by each country on its imports in a certain year, and (2) the allocation of each country's freight payments to receiving countries, we could determine how much freight had been received by every seafaring country in that year.

In Section 5, the best that could be done to meet condition (1) was discussed at length. To meet condition (2) two ways are open: (1) to ask each country to report the gross freight it paid to each of its partners;<sup>30</sup> (2) to distribute, by one device or another, the freight payments among the receiving countries.<sup>31</sup> Method (2) was, however, rough in the sense that no distinction was made between groups of commodities nor between routes over which they were transported, often simply because the importing country does not publish a sufficiently detailed distribution by flag of carrier.

Quite a number of countries report very detailed data on the nationality of the carriers. France, as noted earlier, is the best example, but most countries of west and south Europe, and also some British Dominions (for instance, India and Australia) show many details about the flags of carriers. If more detailed information becomes available, it will be possible to improve to some extent the tentative allocation made so far. It would provide us with some kind of check on the freight receipts of sea-

<sup>30</sup> We may hope that the member countries will be able to meet this requirement not too far in the future.

<sup>31</sup> An example of such a distribution can be found in Section 2 under freight on imports, where the freight payments were allocated by flag of carrier of the cargo.

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farings countries that engage to only a small extent in chartering ships.

The method would, however, break down if applied to countries that charter or let on charter considerable amounts of tonnage each year for, in the majority of cases, if the carrier is let on charter, the flag is not changed to that of the operator. This causes a diversity in the allocation of the freight payments by flag of carrier. The method can provide, therefore, no more than a provisional check on the freight receipts of countries that are heavily engaged in chartering vessels. These countries are mainly the United Kingdom, the United States, the Scandinavian countries and, of course, the fleets of Panama, Honduras, and Liberia. To check their freight earnings we have to rely on the more subtle methods of comparing receipts over time and between fleets. Each method will be illustrated by an example.

### COMPARISON OF FRENCH FREIGHT RECEIPTS OVER TIME

In Section 5, a description was given of the way in which the freight on imports of France was calculated and distributed between foreign and French carriers. In addition to the freight on imports paid to French carriers, there were also freight earnings on exports of France and on trade between third countries. Freight collected from countries outside the franc area may be assumed to be included in the receipts from maritime transportation as shown in France's balance of payments (with the possible exception of 1950, to be shown later). Freight earned by French carriers on commodities imported by the French overseas territories is, however, not included and had to be estimated as described before.

Payments for port services by French carriers to countries outside the franc area can be assumed to be part of the reported payments for maritime transportation. The rest went to foreign carriers as freight on imports of France, assumed to be equal to the results of the computations shown below. In addition to port disbursements in countries outside the franc area, there were port disbursements in the French overseas territories for refueling and other port activities, which were estimated by the method indicated in Section 2, under miscellaneous. These computations and estimates shown in Table 29, help us to form an idea of the financial gestures of the French fleet in those years.

In 1950, unlike later years, France's balance of payments does not specify receipts from transportation. The figure given as receipts from all transportation transactions is \$25 million. That figure is substantially lower than the receipts from "transportation other than maritime" by \$34 million in 1951, \$38 million in 1952, and \$40 million in 1953. Assuming that the \$25 million reported in 1950 includes also receipts for "other

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TABLE 29

FRENCH FLEET FREIGHT EARNINGS AND PORT PAYMENTS  
IN FOREIGN CURRENCY, 1950-1953  
(millions of U.S. dollars)

	1950	1951	1952	1953
Freight earned on imports				
Of nonfranc countries	—	88	91	69
Of French OT's	49	84	97	79
Total	49	172	188	148
Of France	103	163	187	148
Port payments				
In nonfranc countries	63	66	65	48
In French OT's	23	41	47	41
Total	86	107	112	89
In France	n.a.	n.a.	n.a.	n.a.

transportation," nothing is left for freight earnings on imports of nonfranc countries in 1950. This seems very unlikely in comparison with the other years, and probably accounts for something like \$50 million of the \$395 million shown in Table 23 as the difference between gross freight payments and receipts in 1950.

### COMPARISON OF SCANDINAVIAN AND UNITED STATES FREIGHT RECEIPTS

Another method of checking the amounts of freight received by the vessels of a particular country is by a comparison of average earnings. It is, however, a subtle method requiring a great deal of detailed information on the composition of the fleets as well as on their earnings. The composition affects earnings, for, as we have seen in Table 11, there is quite a difference between the average earnings of dry cargo ships and of tankers, and between average earnings within each group of ships on voyage charter and time charter. Hence, there must be sufficient information on earnings as well as on tonnages of all classes of ships in the fleet to determine its average earnings.

The average earnings of vessels operated by the residents of a particular country are of most interest from an economic point of view, since those earnings indicate to what extent the residents of that country were able to benefit from rises in freight rates and other changes in the constellation of freight markets. If, however, the owner lets his ship on charter, particularly for periods of several years, the average earnings

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are far less important from an economic point of view. A comparison of earnings of self-operated tankers would not be very interesting economically, because the petroleum trade is dominated by a small number of big oil companies in the United Kingdom and the United States, with sizable fleets of their own and much influence on tanker freights. The comparison chosen, therefore, is the average earnings of self-operated dry cargo vessels of some of the more important seafaring countries.

The best comparisons of this sort could be made for the three Scandinavian countries—Norway, Sweden, and Denmark. They all supply information separately on gross freight earned by self-operated dry cargo ships and by tankers. All except Denmark state also the tonnages of their fleets engaged in foreign trade and all except Sweden the tonnages chartered out to foreign countries. Table 30 illustrates the procedure of the comparison and the results obtained.

Norway shows in Table c of its publication *Norske Skip I Utenriksfart* the proportion of its fleet engaged in foreign trade at the end of the year, distributed by tankers, dry cargo ships, and passenger ships. For the comparison in Table 30, a simple average of the figures at the beginning and the end of the year was taken, rather than the annual averages shown in Norway's Table d which was used for estimating the freight earnings of the Pan. Hon. Lib. fleet (Table 11). In the computations for that fleet, due allowance was made for parts of a year when some ships were not in actual operation, a procedure yielding very accurate averages. However, since similar averages for the two other countries do not exist, the more simple computed averages were used for all three countries instead of the more accurate ones. Comparing the average tonnage in foreign trade according to Norway's Table c with the tonnage stated in *Lloyd's Register* as of July 1 of each year indicates that, in general, more than 10 per cent of the Norwegian fleet was not engaged in foreign trade, not even in 1951 and 1952 when the earnings in foreign trade were extremely high. The tonnages let on time charter to foreign countries were taken from Table d and increased proportionately. It was considered safe to assume that the tonnages chartered in those years by Norway from foreign countries could be neglected. Finally, the freight amounts earned on the imports of Norway, being part of the total earnings of the Norwegian fleet, are included in the gross freight earnings shown in Table 10. Earnings of the Swedish and Danish fleets also contain the freight amounts earned by them on the imports of their home countries.

Sweden specifies in Table N of its publication *Sjöfart* the various tonnages of its fleet engaged in foreign and coastal trade. For foreign trade, an average of the tonnages at the beginning and the end of each year was used, as for Norway. Comparing those averages with the ton-

TABLE 30

DERIVATION OF AVERAGE FOREIGN TRADE FREIGHT EARNINGS OF DRY CARGO VESSELS OPERATED BY RESIDENTS OF NORWAY, SWEDEN, AND DENMARK, 1950-1953  
(tonnages in 1,000 GRT; earnings in millions of U.S. dollars)

	1950			
	Norway	Sweden	Denmark	Scandinavia
Tonnages				
Fleet, July 1 of year	5,457	2,050	1,269	8,776
In foreign trade <sup>a</sup>	4,715	2,015	1,291	8,021
Passenger ships <sup>a</sup>	84	210	101	395
Cargo vessels <sup>a</sup>	4,631	1,805	1,190	7,626
Tankers <sup>a</sup>	2,240	320	190	2,750
Dry cargo ships <sup>a</sup>	2,391	1,485	1,000	4,876
Laid up	-	-	50 <sup>b</sup>	50
	2,391	1,485	950	4,826
On time charter to other countries	781	n.a.	110	891
	1,610	1,485	840	3,935
On time charter from other countries	n.a.	n.a.	n.a.	n.a.
Self-operated dry cargo fleet	1,610	1,485	840	3,935
Earnings				
Gross freight	226	172	100	498
Gross freight, tankers	44	7 <sup>b</sup>	11	62
Gross freight, dry cargo ships	182	165	89	436
Average earnings <sup>c</sup>	113	111	106	111
1951				
	Norway	Sweden	Denmark	Scandinavia
Tonnages				
Fleet, July 1 of year	5,817	2,116	1,344	9,277
In foreign trade <sup>a</sup>	5,057	2,081	1,367	8,505
Passenger ships <sup>a</sup>	87	217	101	405
Cargo vessels <sup>a</sup>	4,970	1,864	1,266	8,100
Tankers <sup>a</sup>	2,574	400	246	3,220
Dry cargo ships <sup>a</sup>	2,396	1,464	1,020	4,880
Laid up	-	-	20 <sup>b</sup>	20
	2,396	1,464	1,000	4,860
On time charter to other countries	746	n.a.	115	861
	1,650	1,464	885	3,999
On time charter from other countries	n.a.	n.a.	n.a.	n.a.
Self-operated dry cargo fleet	1,650	1,464	885	3,999
Earnings				
Gross freight	382	249	156	787
Gross freight, tankers	110	9 <sup>b</sup>	21	140
Gross freight, dry cargo ships	272	240	135	647
Average earnings <sup>c</sup>	165	164	153	162

(continued)

TABLE 30 (concluded)

	1952			
	Norway	Sweden	Denmark	Scandinavia
Tonnages				
Fleet, July 1 of year	5,907	2,334	1,391	9,632
In foreign trade <sup>a</sup>	5,327	2,256	1,439	9,022
Passenger ships <sup>a</sup>	93	223	98	414
Cargo vessels <sup>a</sup>	5,234	2,033	1,341	8,608
Tankers <sup>a</sup>	2,910	510	332	3,752
Dry cargo ships <sup>a</sup>	2,324	1,523	1,009	4,856
Laid up	—	—	19 <sup>b</sup>	19
	2,324	1,523	990	4,837
On time charter to other countries	769	n.a.	110	879
	1,555	1,523	880	3,958
On time charter from other countries	n.a.	n.a.	n.a.	n.a.
Self-operated dry cargo fleet	1,555	1,523	880	3,958
Earnings				
Gross freight	378	261	152	791
Gross freight, tankers	121	12	25	158
Gross freight, dry cargo ships	257	249	127	633
Average earnings <sup>c</sup>	165	163	144	160
1953				
	Norway	Sweden	Denmark	Scandinavia
Tonnages				
Fleet, July 1 of year	6,264	2,578	1,529	10,371
In foreign trade <sup>a</sup>	5,800 <sup>b</sup>	2,417	1,520	9,737
Passenger ships <sup>a</sup>	95 <sup>b</sup>	232	95	422
Cargo vessels <sup>a</sup>	5,705	2,185	1,425	9,315
Tankers <sup>a</sup>	3,315 <sup>b</sup>	635	363	4,313
Dry cargo ships <sup>a</sup>	2,390	1,550	1,062	5,002
Laid up	—	—	35	35
	2,390	1,550	1,027	4,967
On time charter to other countries	775 <sup>b</sup>	n.a.	127	902
	1,615	1,550	900	4,065
On time charter from other countries	n.a.	n.a.	n.a.	n.a.
Self-operated dry cargo fleet	1,615	1,550	900	4,065
Earnings				
Gross freight	314	227	135	676
Gross freight, tankers	94	18	26	138
Gross freight, dry cargo ships	220	209	109	538
Average earnings <sup>c</sup>	136	135	121	132

<sup>a</sup> Averages.

<sup>b</sup> Estimates.

<sup>c</sup> U.S. dollars per GRT.

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nages as of July 1 of each year in *Lloyd's Register*, we see that, on the average, only about 2 per cent of Sweden's fleet was not engaged in foreign trade—a striking contrast to Norway. Without information on the tonnage for transportation of dry cargo chartered to and from foreign countries, the assumption was adopted that the tonnages both ways were the same in those years—probably not too far off. The average freight earnings for self-operated dry cargo vessels of Sweden arrived at were in all years somewhat lower than Norway's.

Since Denmark does not show in its publication *Danmarks Handels fløde og Skibsfart* the tonnage of its fleet engaged in foreign trade, the total tonnages stated for the beginning and the end of each year were used. This is probably why the average freight earnings arrived at for Denmark are 5 to 10 per cent lower than those obtained for Norway and Sweden. Denmark's Central Bureau of Statistics supplied information on the tonnages of dry cargo ships and tankers chartered out to foreign countries in those years. On the basis of the average charter hire received by the owners, it was assumed that all were dry cargo ships. As for Norway, it was assumed that the tonnages chartered from foreign countries can be ignored. The average freight earnings obtained for the Danish fleet were 5 to 10 per cent below those of the two other Scandinavian countries. However, if the fact that only part of the Danish fleet was engaged in foreign trade in those years could have been taken into account, average earnings arrived at for Denmark would probably have been about the same as found for Norway and Sweden.

In Table 30, the average earnings shown for the three countries together (Scandinavia) are probably somewhat lower than the actual earnings because of the lack of information about Denmark, just explained. Compared with dry cargo freight rates, the over-all average earnings not only change more gradually from one year to another, which is natural, but also have a somewhat different pattern, as the following indexes show.

	1950	1951	1952	1953
Average freight rate index	100	208	133	88
Average earnings index	100	146	144	119

The freight rate index is derived from *Norwegian Shipping News*, which computes and publishes monthly indexes of dry cargo rates, on trip charter (shown here) and voyage charter, separately, and of tanker rates for single voyages. It appears that the changes in the average earnings are not only smoother but also lag behind those of the average freight rates. Examination of the factors causing the difference in changes of freight rates and earnings would make an interesting separate study.

The United States is the other country for which a specification of the



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gross freights on U.S. exports, U.S. imports, and trade between third countries separately earned by dry cargo ships and tankers could be obtained. The information on the tonnages was sufficient to make a computation of average earnings similar to those for the Scandinavian countries possible. The amounts of gross freight earned by dry cargo ships on U.S. exports, including specified amounts earned in the coal and grain trade, were obtained from the *Survey of Current Business*.<sup>32</sup> Since no breakdown of the freight on military exports by tankers and dry cargo ships could be obtained, it was assumed that all this freight was earned by tankers. The amounts earned by dry cargo ships in trade between third countries and on U.S. imports was obtained from the Transportation Section, Balance of Payments Division, Department of Commerce. The freight received from Canada was subtracted from the totals, to be explained below.

The number of tons in actual operation in foreign trade during those years was taken from Maritime Administration publications. The assumed tonnage of the passenger fleet, 200,000 GRT in those years, was subtracted from the tonnage given for ships carrying passengers as well as cargo. Because of the special character of the Great Lakes trade, tonnages operating there were also excluded to make the comparison with Scandinavian countries as fair as possible.

No information could be obtained, however, on tonnages of freighters chartered from and to foreign countries in those years, but the charter hire received and paid by the United States for chartering of dry cargo vessels was supplied by the Commerce Department. Those amounts were converted to tonnages by use of the average amounts of charter hire received by Norwegian dry cargo ships in those years. The charter hire reported as received from foreign countries in 1950 was a multiple of the receipts in later years, probably because a large, but not exactly determined, amount of the 1950 receipts referred to later years. Some adjustment was made to counteract the adverse effect of that irregularity upon the average earnings.

Table 31 shows the tonnages of dry cargo ships engaged in foreign trade operations and their gross freight earnings in the four years, the last line showing the average earnings per GRT. A comparison of these average earnings with those of Scandinavian countries (Table 30) in millions of U.S. dollars is given below.

	1950	1951	1952	1953
Scandinavian countries	111	162	160	132
United States	130	141	133	131

<sup>32</sup> Published monthly by the Department of Commerce, Washington, D.C.

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TABLE 31

DERIVATION OF AVERAGE FOREIGN TRADE FREIGHT EARNINGS OF DRY CARGO SHIPS  
OPERATED BY UNITED STATES RESIDENTS, 1950-1953  
(tonnages in 1,000 GRT; earnings in millions of U.S. dollars)

	1950	1951	1952	1953
<b>Tonnages in Foreign Trade, July 1 of Year</b>				
Combined passenger and cargo	283 <sup>a</sup>	355 <sup>a</sup>	298 <sup>a</sup>	283 <sup>a</sup>
Freighters	3,696	5,589	5,133	3,458
Chartered from other countries	432	403	426	512
Chartered to other countries	4,411	6,347	5,857	4,253
<b>Total</b>	<b>4,361</b>	<b>6,135</b>	<b>5,695</b>	<b>4,226</b>
<b>Gross Freight Earnings</b>				
On commercial exports	335	629	503	332
On cross trade	26	28	32	24
On imports	225	249	274	241
Received from Canada	586	906	809	597
<b>Total</b>	<b>567</b>	<b>868</b>	<b>756</b>	<b>555</b>
<b>Average earnings, per GRT</b>	<b>130</b>	<b>141</b>	<b>133</b>	<b>131</b>

<sup>a</sup> Adjusted.

The U.S. earnings were higher than the Scandinavian in 1950 but considerably lower in 1951 and 1952. Apparently the U.S. fleet benefited only slightly in 1951 by the favorable freight rate situation of 1951 and 1952, while the three Scandinavian countries showed good returns in both years.

There is a good possibility, however, that U.S. freighters earned more freight in 1951 and 1952 on U.S. exports and in cross trade than Table 31 indicates. The gross freights in Table A-9 show the following differences, in millions of U.S. dollars.

	1950	1951	1952	1953
Paid by partners to U.S. or Canada	644	1,219	1,022	649
Received by U.S. and Canada from partners	622	1,058	920	669
<b>Difference</b>	<b>22</b>	<b>161</b>	<b>102</b>	<b>-20</b>

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The considerable excess of partners' payments over the area's receipts in 1951 and 1952 may presumably be allocated in large part to U.S. dry cargo ships and tankers, rather than Canadian. Though not conclusive proof that the freight earnings of dry cargo vessels are understated for those two years, the differences strongly suggest that they are. Even so, the average earnings of U.S. dry cargo ships in 1951 and 1952 will remain well below the corresponding Scandinavian earnings, while those in 1950 remain above. In other words, in those years the U.S. average earnings seem to have been much more constant than the Scandinavian.

This constancy in the U.S. average earnings is not surprising in view of the various factors that favor it. First, some prevent the earnings from dropping too far down.

1. The U.S. fleet benefits greatly from the fact that every year enormous quantities of commodities are imported and exported by the United States in U.S. ships. This mitigates the reduction of earnings of the domestic fleet in a downturn, during which preference for the domestic flag is much stronger than in good times. The foreign trade of the Scandinavian countries is small compared with that of the United States, and the earnings of their fleets drop much more, therefore, in bad times. The amount of freight earned by U.S. carriers, both dry cargo ships and tankers, on the country's own imports and exports amounted in the four years to 85 per cent, on the average, of all U.S. freight earnings. The corresponding percentages were 18 per cent for Norway, 48 per cent for Sweden, 21 per cent for Denmark, and 29 per cent for all three Scandinavian countries.

2. The Foreign Operations Administration and its predecessors showed strong preference for shipping foreign aid items in U.S. operated vessels. It can be assumed that about \$500 million was paid for freight by those agencies to U.S. flag vessels between April 1948 and June 1954.<sup>83</sup> While not all of it was freight on dry cargo, we can still assume that about \$50 million was paid in each of the four years to U.S. freighters, most of it because of that cargo preference.

On the other hand, there is also a factor preventing the United States average freight earnings from rising above a certain level. The operations of virtually the whole U.S. dry cargo fleet are confined to thirty-one routes. The resulting greatly decreased flexibility of their operations prevents U.S. operators from taking full advantage of favorable freight situations, such as occurred in 1951 and 1952, towards increasing the earnings of their ships.

<sup>83</sup> Taken from Wytze Gorter, *United States Merchant Marine Policies: Some International Economic Implications* (Essays in International Finance No. 23, Princeton University, 1955), in which the United States shipping policies are sharply criticized.

