

**THE COMPETITIVESS OF TURKISH SHIPPING
IN THE INTERNATIONAL WORLD**

by

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I. ABSTRACT

THE COMPETITIVENESS OF TURKISH SHIPPING IN THE INTERNATIONAL WORLD

1. Importance of the Subject

Shipping industry is chosen in particular for this study as a way to demonstrate the procedure because of its major importance in Turkish industry and exports. The industrial development of the countries which are now highly industrialized owed much to the vigorous expansion of their shipping industries in the developing countries⁽¹⁾, the shipping sector is important both for its employment potential and for the value added to the service sector.

2. Objectives

The objective of this study is to analyze Turkish shipping sector, mainly government's shipping policy in comparison with the foreign shipping policies to find solutions of the problems and put new directions to the policies, with the aim of increasing foreign currency income and Turkish international trade.

3. Limitations, Methodology and Conclusion

The topic shipping involves all kinds of different organizations interacting with each other to determine a nations shipping sector.

The sector includes: Ship owners; ship yards; ports; shipping agents; insurance agents; forwarders; charterers;

(1) For more information look appendix "A".

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seamen schools; marine security and coastguard establishments; shipchandlers; ship classification agents; seamen unions; government with its related institutions and more.

Considering my constraints and the impossibilities of analyzation of all those organizations, I will try to draw a border between my research area and the rest to come up with a useful thesis.

In my thesis, I felt the need of mentioning from major factors of the shipping sector, such as shipyards; ports; shipowners; international and domestic major seaborne trade; recent political and economic developments in the world which relates to the shipping sector. Leaving other parts of the sector out of discussion, I analyzed the policies and outcomes.

Here, I need to mention about the difficulties encountered in analysis. Unfortunately reliable statistical data about Turkish Shipping Sector is not available either from Turkish Statistics Institute or from the books. There are very few books printed in the area of Turkish shipping.

Therefore my research is restricted to interviews with the major Turkish shipping firms and surveys from books and periodicals. Insufficient amount of quantitative variables could be found to design a statistical model which might then lead to a quantitative solution. Because of these constraints the methodology investigates only qualitative variables which are discovered in surveys.

Based on the results of the investigations the problems of Turkish Shipping Sector has been defined and the solutions for these problems were proposed.

In conclusion, Turkey should seek to expand it's merchant marine fleet concurrent with the new export policies.

Here, the timing of the fleet acquisition is upmost importance. Investments in world shipping recession are advisable.

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ABBREVIATIONS

CIF	Cost, Insurance, Freight
dwt	Deadweight Tons
FIO	Free In and Out
FOB	Free On Board
GATT	General Agreement or Tariffs and Trade
grt	Gross register tons
ITF	International Transport workers Federation
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
OBO	Ore/Bulk Oil carrier
OO	Ore/Oil carrier
Ro/ro	Roll-on/roll-off
ULCC	Ultra Large Crude Carrier
VLCC	Very Large Crude Carrier
GNP	Gross National Product
SEABEE	Sea Barge ship
UNCTAD	United Nations Conference on Trade and Development
UNCLOS	United Nations Conference on the Law Of the Sea
LDC	Less Developed Countries

I. INTRODUCTION

A. GENERAL

Transportation is a necessary vehicle for exchanging economy and is indispensable to economic growth. Where there is no transportation, economic activity is restricted to hand to mouth subsistence levels. Specialization and the generation of surpluses for exchange on the basis of comparative advantage are not possible without the capability to move resources and goods from one place to another. The demand for transport services increases with the extension of the input output relationships of the economy, and the provision of the transportation services can be an important determinant of the pace and locational pattern of development.

Seas and inland waterways are important transport modes while they are also the source of food and energy. To carry a ton of cargo from one place to another, the cost of moving this cargo would be one for a sea transportation two and a half in railway and five in a land transportation. So, the choices of moving things by sea are made mostly for economic or compulsory reasons.

In a developed economy the volume of goods and people transported from one place to another is enormous. In developed economies, transport would typically account for 10 percent to 15 percent of Gross Domestic Product (GDP). In developing economies the contribution of transport to GDP varies considerably from one country to another, since the variables which determine the cost and volume of transport are fewer and individually more important in the simple economy. However, whose production is of relatively lower value per ton and transport systems are relatively inefficient or high cost, it is generally also the case that the contribution of transport to market GDP will be higher.

III. WORLD SHIPPING

A. History and Development

International ocean shipping constitutes a highly significant aspect of world economic and political relationships. The rapid growth in world trade and the emergence of new national entities in the last thirty years have further emphasized the role of international shipping. Because of the generally free environment in which it has operated, the industry is highly mobile and flexible-factors that together with technological progress, have facilitated the rapid growth in world trade.

In recent years, however, there have been several technological and institutional developments that are likely to have major effects on the industry. One of the latter is the aggregation of conventions and practices known as the Law of the Sea, which has been discussed in the United Nations Conference on the Law of the Sea (UNCLOS) since 1958. A new legal structure governing the oceans appears to be evolving, with traditional principles giving way to new concepts. Since the environment in which an industry operates determines its structure and mode of operations, international shipping has been molded by the conventional principles governing the use of the oceans as highways and will be strongly affected by shifts in the international climate and changes in the Law of the Sea.

Ocean shipping, as we know it today, has developed under the concepts of "freedom of the Seas" and limited territorial waters with the right of "innocent passage". The "rules of the game" were formulated mainly by the maritime powers operating within private commercial relationships subject to specific national regulations governing fleet registration and corporate activities and to various international conventions. Clearly, a new Law of the Sea derived from a reinterpretation of these concepts will

significantly change the atmosphere in which the shipping industry operates and, accordingly, dictate revised policies and practices for both industry and public authorities. A changing Law of the Sea will have an impact on all uses and users of the sea, but there are other technological and institutional developments that have already specifically affected the shipping of dry and liquid cargoes and will continue to do so.

1. Dry Cargo Shipping

Dry cargo is carried in liners, tramps, bulk carriers, and specialty ships. Liners are operated as common carriers and are engaged on fixed routes according to published schedules. Most liner operators belong to international cartels known as shipping conferences. Those conferences are formal agreements to control competition and avoid price wars through such means as fixed rates. The agreements can be of several kinds, from outright pooling arrangements -allocations of numbers of sailings or sharing the total volume of trade -to controlling the kinds of services offered. Because of the frequency, regularity, and reliability of liners, they primarily carry goods that move in relatively small lots- heterogeneous general cargoes, including manufactures and semi manufactures.

Tramps, on the other hand, go wherever and whenever their services are needed. Their freight rates are largely established by market forces and they carry primarily goods that move in large lots.

Homogenous bulk cargoes such as coal, cereals, and ore. For various reasons (mainly general economic growth, economies of scale, and technological progress in ship-building), tramps carrying bulk cargoes have grown substantially in size. It is common to refer to these larger tramps as "bulk carriers". As the needs for raw

materials increased, importers formed, respectively, purchasing and marketing organizations that have strongly affected the tramp market. To create a "countervailing" power, bulk carriers began in the late 1960s to pool their resources in order to coordinate the supply of tonnage and the freight rates.

2. Unitization

In the liner trade, the last twenty years have seen the introduction of new cargo handling methods and facilities referred to as "unitization". This development, caused by the same factors affecting the tramps, led to the introduction of containerships, ranging from ships that carry containers in their holds to the LASH (lighter aboard ship) and SEABEE (Sea large ship). At the same time, other special kinds of vessels like refrigerated ships and carriers of fruit, automobiles, lumber, newsprint, chemicals, and other so-called neo-bulk cargoes have been developed. Therefore, although ships engaged in tramp and liner services may have similar technical characteristics that might allow them to move from one type of service to another, recent innovations and modifications actually tend to make ships uniquely suited to only one type of service.

The containerization movement in the liner trade has had far reaching effects. It is generally accepted that one containership can do the work of four to ten conventional vessels, depending on trade route and size.

Because of this larger operational capacity, larger cargo volumes are needed in each port of call, and it is expected that in the future trade will be concentrated in a few ports on each route, with other ports being served by feeder ships. The fact that the container can also be used in track and rail transportation has resulted in an integration of various modes into a truly international

"transportation system". This integration movement has had inevitable effects on trade routes and shipping operations, facilitating the development of the so-called land bridges. Cargo from Europe and Japan, for example, can move in containers via the trans-Siberian railroad to the Pacific Coast of the USSR, then by ship to its destination. Alternatively, it might move by ship to the United States or Canada, by rail across the continent, and on to Japan by ship again.

The rapid developments raise numerous problems and issues for both the carriers and shippers. First, most shippers may benefit from containerization, but what about those whose commodities cannot be put into containers and cannot be moved as neo-bulk? Although there are special pallet ships and a large number of conventional vessels, such a shipper may one day pay higher rates as he becomes an exception. This is particularly relevant to low-value cargo that now- under the principle of "what the traffic will bear", moves at rates lower than average cost. Second, although services in general are faster, more regular, by containerships than by conventional services, and the use of feeder lines may cause hardships in particular cases. Third, in door-to-door service, the containers are loaded by the shipper and unloaded by the consignee, causing increases in labor costs that may offset some of the savings on rates.

The responsibility for proper stowage in the container to prevent damage is shifted from the carrier to the shipper with added costs and manpower requirements. Finally, the shippers must adapt their whole distribution network to the use of containers. If this network involves areas that cannot be serviced by containers, the resulting mixing of container and conventional shipping methods detracts from the benefits of containers.

3. Through Transport

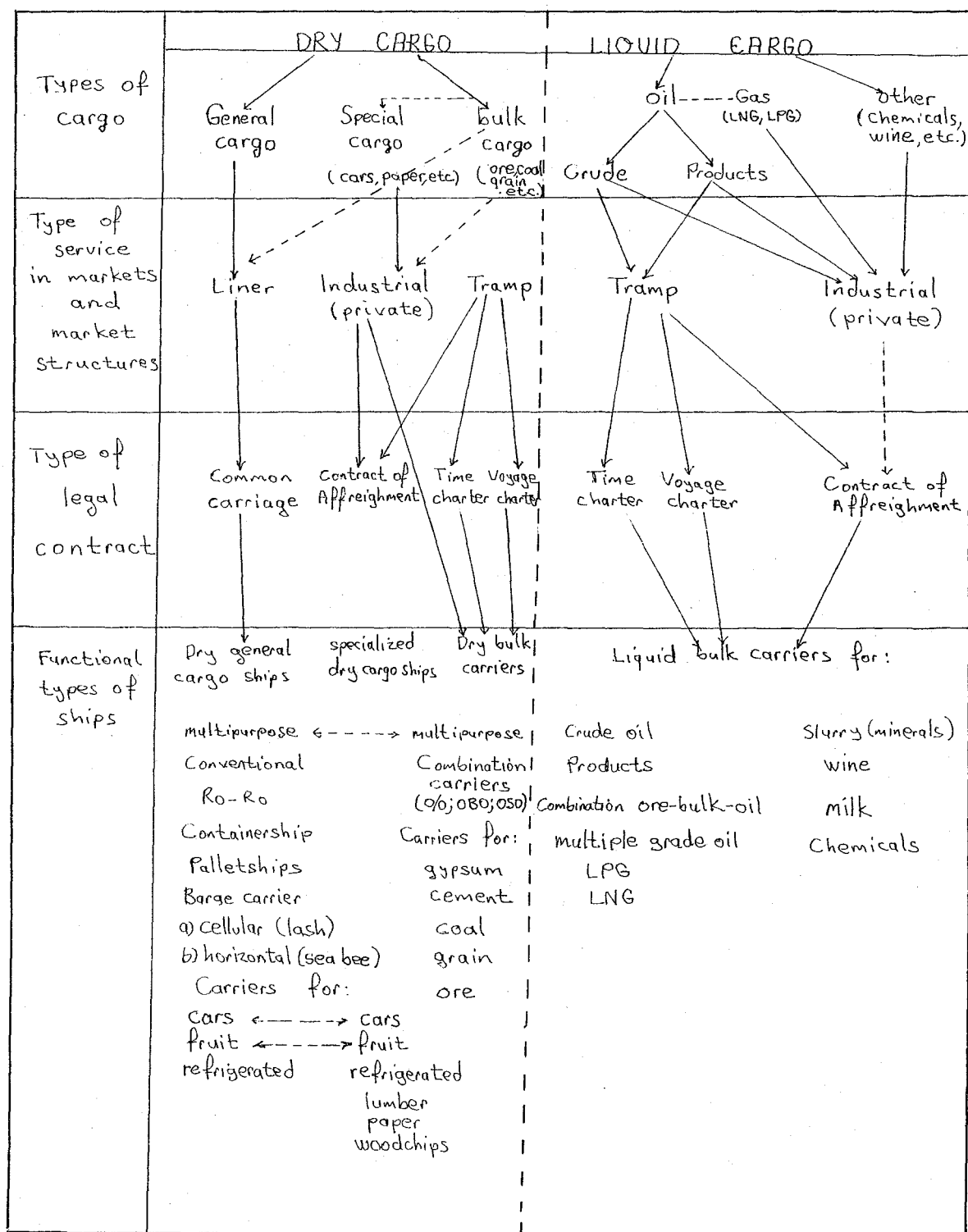
From the carrier's point of view, containerization poses problems of coordination of services. To derive the full benefits of containers, containers should move from door to door -the so-called through service concept of transportation. This necessitates interchangeable containers, a tracking system, new rates, a system for the division of rates between different carriers and modes of carriage, and a uniform "through bill of lading". Most of these problems have been at least partially resolved, but much remains to be done. For example, although the international standards organisation (ISO) has published standard dimensions for containers, and most ship classification agencies have formulated construction specifications, containers are still not completely standardized. While several international legal conferences have been held on the subject, no agreement has been reached on a uniform through bill of lading.

4. Marine Insurance

These various problems carry over into the insurance field. Insurance rates based on actuarial experience, and it appears that this experience has not been sufficient to affect rates as much as was once expected. Also, before insurance rates can be assessed on container cargo, the containers must be uniformly classified as to their insurable characteristics and acceptable methods must be agreed upon to verify the containers declared content. The legal aspects of who is liable, when, and where, for the cargo must be settled under a through bill lading since commercial terms- free or board (FOB), free along side (FAS), and the like- become ambiguous when containers are used.

FIGURE III.A.1

ELEMENTS OF SHIPPING



5. Effects on Labor

Labor also feels the repercussions as containerization makes a port capital intensive while conventional port handling is labor intensive. Thus, problems arise as port labor becomes redundant. It is doubtful that overall land-based labor requirements in the transportation system decrease as much as the immediate impact on ports indicates. Since containers must be loaded and unloaded at points of origin and destination, labor requirements at these points increase compared to previous methods. Thus, to some extent, the demand for labor shifts from the intermediate points in the transport process (ports) to the beginning and end of that process.

Aboard ships, the increased size of the ship and its increasingly sophisticated automated equipment have resulted in proportionately fewer crew members with higher technical qualifications. This has brought about in many countries a reevaluation of present maritime manpower policies and reorganization of training curricula. A current trend, notably in England and Norway, is toward "general purpose" crews. Modern training and certification is expensive and usually government supported; thus, there is a need for selection criteria to ensure that the trainees spend sufficient time in the field to justify the public expense. Research on this subject is being pursued in many shipping nations.

The problems of labor redundancy did create conflicts throughout the world as unions of both port labor and seafarers resisted the introduction of containers. However, these problems appear to have been surmounted by policies based on principles formulated by the International Transport Workers Federation (ITF). In essence, these principles stress that every effort should be made to maintain employment at existing levels, ITF suggested

lowering the retirement age of seafarers and providing for their sharing.

6. Customs Clearance

Change has also been necessary for customs clearance procedures as these have not generally been flexible enough for container shipments. Throughout the world, customs inspections have traditionally been made on piers and in ports. Although the arrival of air cargo transportation broke this pattern by requiring customs inspection of exports and imports at inland nonwaterfront locations, inspections are still primarily made in ports. A container, if it is to achieve the utmost efficiency in reducing costs, must be able to go through ports without being delayed for customs inspection and should be opened at the ultimate point of destination. The adjustment of customs procedures to accommodate containers involves, therefore, additional inland inspection facilities. Much has been done in this area in the major shipping countries.

7. Ports

Of great importance is the obvious fact that ports are affected by changes in shipping. Ports require large, long-term investment. At the time the investment is made, the port facilities are adapted to the existing or immediately foreseeable shipping technology. Since no major innovation was introduced in the shipping industry until very recently -the late 1950s- ports were constructed to serve conventional ships. The ships, on the other hand, although requiring large capital investments and having a life of about twenty years, are, relative to ports small short-term investments. A shipowner who builds his ships after port facilities have been established, therefore, adopts the ships' design to these facilities.

The tradition was broken by the development that led to modern bulk carriage and containerization as new bulk and container ports have been constructed since containers constitute only one possible solution to unitization in shipping and there is no reason to believe that the technological revolution has come to an end, port planning for future developments has become important. Any major port investment must consider the present uncertainties posed by the rapidly changing shipping technology as well as economic and political factors affecting trade flows.

8. Conferences

Concurrent with the specific operational problems recounted above, the carriers are faced with numerous other institutional and political developments. The large capital requirements necessary to keep at the forefront of the containerization movement have led to structural changes in liner operations. Since few individual companies have the financial resources or the expertise required to organize container traffic on an international scale in a highly competitive environment, they have depended on cooperation. International shipping consortia designed to operate joint container services under joint management, have been formed among large liner companies.

These developments have had repercussions on the shipping conference system. In the past, there was a consensus that conferences were precluded from assuming and abusing monopoly power by certain forces, including competition between conferences and real or potential competition from tramps and nonconference liners. Further, it was assumed that the large number of members in most conferences would prevent effective collusion and add an element of competition within the conferences. Should the conferences nevertheless become effective monopolies, in

spite of these restraints, the shippers could form "shippers councils" or "users associations" and use their collective power to counteract the conference, and as a last resort, the possibility on threat of national legislation to control conferences would act as a deterrent to monopolistic abuse.

Most of these countervailing forces, however, have been weakened by recent developments. First, there are the "Super conferences", which appreciably reduce interconference competition. Second, the increased differentiation between tramp and liner markets removes much of the real and the potential threat of competition from tramps. The high capital barriers to entry and the formation of international consortia remove the threat from non conference liners in container trades. Shippers' councils appear not to have been able to carry countervailing power alone. Therefore, potential national legislation for the control of international shipping has become a major issue in the industry. This has long been the case in the trades of the United States and some South American countries, but the issue is now becoming world wide.

9. National Merchant Marines

A part from these events which may be attributed to technological and economic changes, there are historical developments and problems that have the same political implications. With the exception of the major "flag of convenience" countries -Liberia, Panama, Singapore- the less developed countries (LDCS), as a bloc, account for only a small share of total world tonnage -10 percent in 1984 ⁽¹⁾ (Table III.A.1)- However about 45 percent of world tonnage consists of tankers (Table III.A.2) since LDC's (except the Arab Oil Producers) operate pre dominantly dry cargo carriers and few tankers, their operational capacity in dry cargo carriage is greater than the 10 percent share indicates. Even so, for various reasons,

WORLD MERCHANT FLEET BY FLAG AS OF JULY 1st, 1984

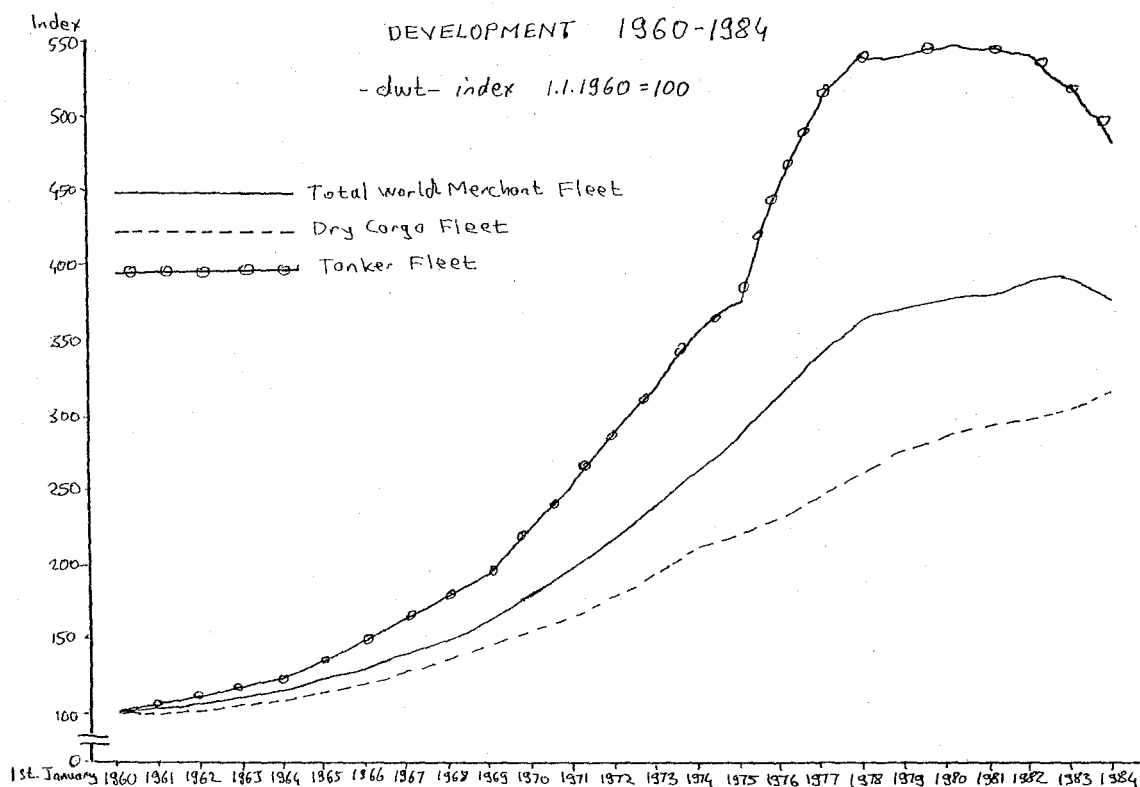
-Ships of 300grt and over-

No and Flag	No of ships	grt	dwt	Share of flag (dwt- %)
1. Liberia	1783	59 449 759	116 345 208	18.14
2. Japan	4116	36 926 525	59 860 189	9.35
3. Panama	3839	33 779 282	57 399 372	8.95
4. Greece	2287	32 610 141	57 190 727	8.92
5. USSR	3019	18 975 338	25 628 004	4.00
6. Norway	635	17 067 080	30 715 115	4.79
7. U.S.	1003	16 164 792	25 514 614	3.98
8. U.K.	934	15 256 620	24 184 052	3.77
9. France	378	8 853 337	15 338 131	2.39
10. PR of China	1003	8 645 732	13 103 787	2.04
11. Italy	815	8 469 578	14 203 136	2.22
12. Spain	701	6 228 694	12 366 364	1.94
13. Singapore	572	6 129 016	10 402 533	1.62
14. India	429	6 122 350	10 015 655	1.56
15. South Korea	663	6 061 562	10 396 936	1.62
16. FR of Germany	1079	5 849 834	9 375 247	1.46
17. Brazil	413	5 537 499	8 181 617	1.43
18. Cyprus	654	5 481 039	9 634 055	1.50
19. Hong Kong	214	5 122 587	8 513 199	1.33
20. Denmark	555	4 951 809	8 183 949	1.28
21. Netherlands	674	4 315 659	6 505 879	1.01
22. Sweden	327	3 697 239	5 936 558	0.93
23. Saudi Arabia	262	3 586 581	6 067 415	0.94
24. Taiwan	182	3 034 088	4 956 525	0.77
25. Turkey	492	2 922 327	4 903 700	0.76
26. Poland	309	2 921 397	4 146 530	0.65
27. Philippines	418	2 882 966	4 675 040	0.73
28. Yugoslavia	319	2 635 237	4 035 734	0.63
29. Bahamas	92	2 563 722	4 503 967	0.70
30. Romania	264	2 523 380	3 906 103	0.61
...	...	...	...	...
TOTAL	28 551	338 870 380	577 285 208	0.90
OTHER	5627	41 280 796	63 843 576	0.10
ALL FLAGS TOTAL	34 178	380 150 796	641 228 784	100.00
July 1st. 1983	34 691	386 117 659	654 133 720	
July 1st. 1982	34 684	389 094 988	661 444 575	
July 1st. 1981	34 145	385 741 752	658 365 872	

Source: Compiled from shipping statistics Yearbook, 1984.
Institute of Shipping Economics, Bremen.

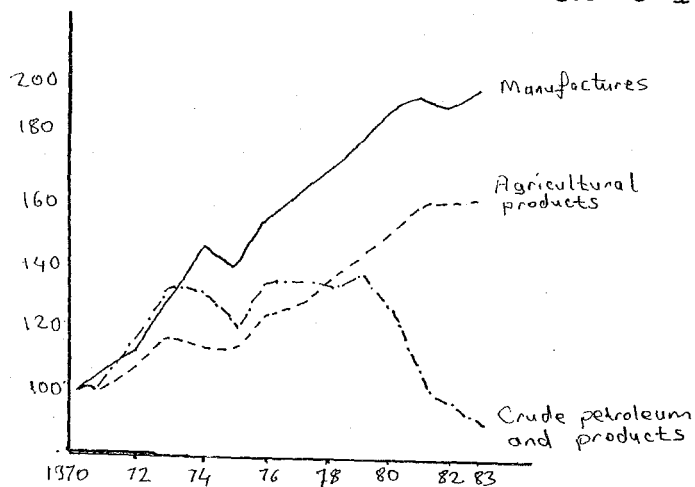
Foot-note: In the last three years Turkey's fleet capacity has risen into the world top thirty, which is a big success for Turkish Shipping.

TABLE III.A.2
WORLD MERCHANT FLEET



Source: Shipping Statistics Yearbook 1984

TABLE III.3
DEVELOPMENT OF WORLD EXPORTS 1970-1983
Volume Indices, 1970 = 100



Source: Shipping Statistics Yearbook 1984

including balance of payments, trade promotion, and defence considerations, many LDC's are actively promoting the expansion of their merchant marines. There is a growing tendency toward flag discrimination manifested in bilateral shipping agreements. Such bilateralism is likely to become the backbone of future shipping.

10. Liner Code of Conduct

One basic reason for the emergence of national merchant marines is the widespread feeling that nonshipping nations are treated unfairly and arbitrarily in terms of both services and freight rates by the shipping conferences. The problem is not new; it arose shortly after conferences were first established a century ago. At that time, shipper's councils were considered the appropriate solution, and in the post-world war II period, these organizations again became prominent. They have been effective, however, only when backed by governments, and a conflict situation has developed, with conferences and traditional shipping countries on one side and the less developed, emerging shipping nations on the other. The concept of a "conference code of practice" evolved from this conflict and such a code, with implementation on a voluntary basis, was issued by the committee of European and Japanese National Shipowners' Associations (CENSA) in 1971. The following year, the United Nations Conference on Trade and Development (UNCTAD), issued its own code, reflecting more closely the stand of the less-developed countries. This code, certain to have a major effect on shipping, called for a system of international controls of liner shipping, based on the principles that (1) government will have a predominant role in all relations between shippers and shipowners, (2) admission to conference membership will include noncommercial criteria, one of which would be the development of national shipping lines; and (3) flag discrimination to aid national shipping lines will be acceptable in principle.

Meeting in Geneva in March 1974, UNCTAD adopted an international convention along these lines. To come into force, the convention required ratification by twenty-four countries accounting at least 25 percent of world total liner tonnage. By June 1978, the first of these conditions had been satisfied, but only slightly less than six percent of the qualifying tonnage was represented. (However, starting from 1982, Liner Cargo reservation scheme is applied by most countries without its ratification). In the late 1970s, the traditional shipping nations had lost much carriage to state owned fleets particularly that of the USSR. It is evident that this trend will continue as the Soviet fleets expands with modern, technologically advanced ships.

The most important aspect of the convention is the guideline suggesting that countries trading with each other have the right to carry 80 percent of that trade, with only the remaining 20 percent open to other flag carriers. This is known as the 40-40-20 rule and has for a long time been the norm in trade between the United States and Brazil and Argentina. Applying the rule to all trade means that bilateral agreements may be the main determinant of carriers' activities and such agreements will decrease the international mobility of ships, which is one of the outstanding characteristics of the industry. Because the given volume of trade is restricted to the trading partners' tonnage, which in all cases is smaller than the world supply of shipping, there will be upward pressure on the freight rates⁽²⁾. To prevent this, rates are likely to become part of the trade agreements and to come increasingly under government control. Since this would remove much of the basis for the existence of conferences, this system may will be on its way out. In any event, the general environment for transport of dry cargo has changed and will continue to change. Strategic managerial decisions relating to the type and kind of ships and services, scale of operations, and trade routes will be increasingly affected by governmental bilateral agreements. The industry

(2) For more information look appendix "B".

is likely to lose much of its international character and mobility as markets are subdivided on a preferential basis.

11. Liquid Cargo Shipping

Liquid Cargoes carried in tankers, mainly crude oil and its products, are normally homogeneous and move in large quantity lots, though some, such as vegetable oils, wines, latex, and various chemicals move in small quantities. A recent development is the movement, in special ships, of liquified natural and petroleum gases (LNG and LPG).

The typical tanker in the post-World War II period was about 16,200 deadweight tons (dwt). However, the rapid change from coal to oil-based energy in most parts of the world, coupled with accelerated worldwide economic growth, provided the transport volume needed to reap the economies of scale inherent in larger ships. At the same time, political events such as the closure of the Suez Canal and technological progress in shipbuilding made it possible to realize these economies. As a result, we now have crude oil carriers of some 500,000 dwt and even larger ships within the range of possibility.

Although the carriage of liquids is different from that of dry cargo, the distinction between tanker and nontanker shipping is becoming rather blurred. Because of their constructional characteristics, tankers are well suited for and have always engaged in the transport of grains. Recent years, however, have seen the advent of combination carriers that can carry both oil and dry bulk cargoes, and these bulk carriers are becoming increasingly important.

The structure of the tanker market is quite different from the dry cargo situation. Liner services, in the sense of common carriers, do not exist, and there are, consequently,

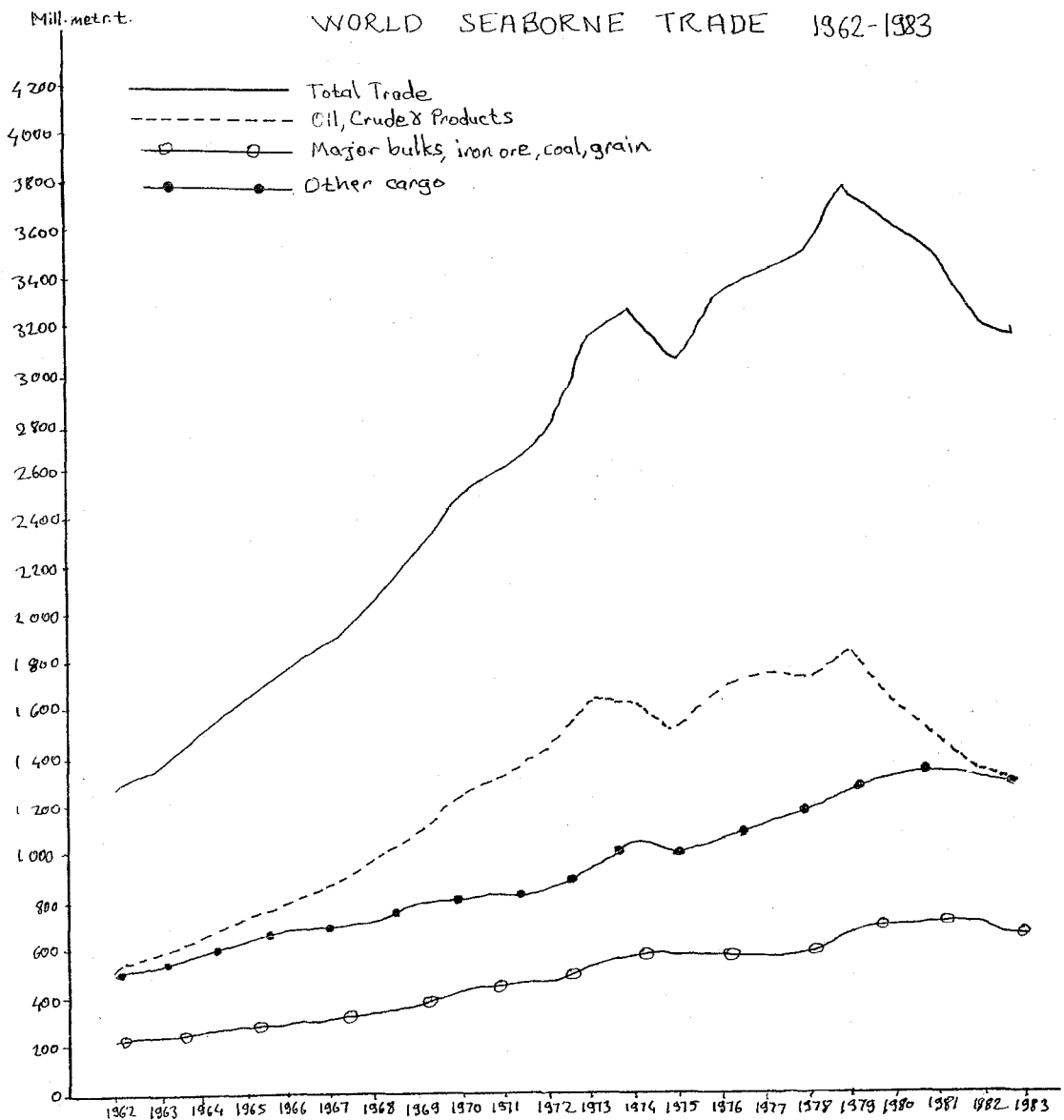
TABLE III. A4

WORLD SEABORNE TRADE 1972-1983

In million metric tons

Year	Crude Oil	Oil Products	Iron Ore	Coal	Grain	Other Cargo Estimate	Total Trade Estimate
1972	1185	261	247	96	108	866	2763
1973	1366	274	297	104	139	940	3121
1974	1361	264	329	119	130	1045	3248
1975	1263	233	282	127	137	935	3047
1976	1422	260	294	127	146	1075	3324
1977	1475	273	276	132	147	1120	3423
1978	1538	270	278	127	169	1190	3481
1979	1362	279	327	159	182	1270	3755
1980	1215	276	314	188	198	1310	3648
1981	1200	267	303	210	206	1305	3506
1982	1043	285	273	208	200	1240	3249
1983	1020	272	268	192	193	1220	3165

Source: Shipping Statistics Yearbook 1984



no conferences. Instead, the major part of the world's tanker fleet, about 80 percent⁽¹⁾, is controlled by the oil industry, which either owns the ships or charters them on long-term contracts. (About 35 percent of the fleet is owned by the oil companies and another 45 percent is normally on long-term charter.) The remainder of the tonnage is available for spot chartering and can be considered tramp service. Because of the concentrated control, the homogeneous product, and the similarity of conditions of carriage, tanker shipping management is faced with a less complex environment for strategic decision making than is the case in the liner market, but there are other problems of a more technical than structural nature whose resolution may introduce tanker management to a decision environment similar to that existing in the dry cargo sector.

The draft of the very large crude carriers (VLCCs) excludes, at the present, their passage through the Suez Canal and limits them severely as to which ports and other sea-lanes they can use. Some lanes are only partially located in international waters, or jurisdiction over a route may be shared by several nations. In addition, the traffic density and the maneuvering of VLCC's may cause difficulties in narrow waters and may necessitate traffic control. International cooperative efforts have been exerted to come to grips with these problems and the crucial international legal problem of protecting the marine environment from pollution.

B. World Dry Bulk Trades

As is shown in Table III.B.1, the volume of the major bulk cargoes entering international seaborne trade increased during the 1970s and until 1981 from 668 million metric tonnes to 806 million metric tonnes by 1981 an increase of 14 percent. The same table also shows that there was a six percent decrease in 1982 according to 1981.

TABLE III.B.1
GROWTH OF MAJOR BULK TRADES

In million metric tons

Year	Iron Ore	Coal	Phosphate rock	Grain	Bauxite & Alumina	Total
1974	323	119	48	130	42	668
1975	292	127	38	137	41	635
1976	294	127	37	146	42	646
1977	276	132	44	147	46	645
1978	278	127	47	169	46	667
1979	327	159	48	182	46	762
1980	314	188	48	198	48	796
1981	303	210	42	206	45	806
1982	273	208	40	200	38	759

Source: Compiled from the shipping Statistics Yearbook 1984,
Institute of shipping Economics, Bremen

The boundary between 'bulk' and other categories of dry cargo which by their nature are unsuited to bulk transport is consequently blurred, making it difficult to gauge the true extent of the total dry bulk trade. "Neo-bulk" cargoes which include such items as semi-manufactured steel, motor cars and lumber, are a particular problem as only part of the trade may actually be shipped in full shipload quantities, the remainder being moved by "general cargo" vessels of various types.

The categories of cargo actually carried by bulk carrier vessels are quite numerous, although the fleet's trading pattern is largely determined by shipments of a small number of raw or partly processed commodities generally referred to as "major bulks" - iron ore, coal, grain, phosphate rock, and bauxite. All other products transported by bulk vessels are designated "minor bulks". Among the most important in terms of volume are forest products and semi-manufactured iron and steel products. Various agricultural products such as soyabean, oil seeds and meals, sugar, sorghum and rice also add up to considerable volumes of cargo, while fertilizer products are also important.

1. Iron Ore Trade

Iron ore is easily the most important of the dry bulk commodities entering international seaborne trade and something like a third of the existing bulk shipping fleet is employed in the ore trade (Table III.3.2).

The quantities of iron ore which enter seaborne trade depend, to a large extent, on the import requirements of the two primary markets, Japan and the European Economic Community (or EEC), and some secondary ones - principally the United States. Almost half of world demand for Iron ore is met through imports, which means that a high proportion of the world's marketable ore enters international trade.

TABLE III.B.2
WORLD SEABORNE IRON ORE TRADE BY REGION
1974-1982

-In 1000 metric tons-

To From	UK/ Cont.	Mediterranean	Other Europe	US	Japan	Others	Total 1982	Total 1981
Scandinavia	12354	-	1447	64	-	723	14588	18312
Other Europe	1887	200	831	-	-	207	3125	2407
North Africa	2181	201	156	-	-	-	2538	1474
West Africa	13158	5238	1082	2437	883	547	23346	27350
S/E Africa	5102	226	189	53	6528	115	12213	12783
North America	11835	1775	905	3878	2931	510	21834	32132
S. America Atl.	28139	6450	8208	2835	27346	8374	81352	92552
S. America Pac.	324	1047	159	83	7723	1972	11308	11882
Asia	86	516	4238	-	19631	3265	27736	27456
Australia	8492	1523	458	-	56704	7580	74757	75260
not specified	208	241	-	61	84	-	594	-
TOTAL 1982	83767	17417	17673	9411	121830	23293	273391	
TOTAL 1981	96949	16776	20917	19484	123340	25142		302608
TOTAL 1980	98461	17745	24561	16670	133721	23212		
TOTAL 1979	110871	18254	20759	22684	130268	24648		
TOTAL 1978	91072	17021	16755	20907	114648	17982		
TOTAL 1977	84650	16884	14444	20318	132587	6639		
TOTAL 1976	94624	17845	15469	27336	133727	4767		
TOTAL 1975	88869	17651	15300	34375	131565	4067		
TOTAL 1974	115898	19375	14367	35281	141951	2129		

NOTE: Imports to US from Canada via Great Lakes are excluded.

SOURCE: Shipping Statistics Yearbook, 1984.

The pattern of the iron ore trade is the same as those of some other major dry bulk trades such as phosphate rock and bauxite, in that a significant percentage is shipped from developing countries whose economies are dependent on sales of the commodity in question, and virtually all is exported to industrialized countries whose demand controls the market. The main developing countries importing iron ore are South Korea, China and Argentina.

a. Main Importing Areas

a.1. Japan

The leading importer of iron ore is Japan; at 122 million tonnes of ore imported in 1982⁽¹⁾, responsible for about 44 percent of ore traded internationally.

As can be seen from the Table III.3.2, 46 percent of Japan's requirements in 1982 were fulfilled by Australia. But it was Brazil and India which benefitted most from the improved trading climate during that year.

a.2. USA

For many years Canada supplied around 40 percent of the USA's iron ore imports⁽¹⁾. The overall US import total has not increased substantially in recent years. Other significant sources of iron ore for the US steel industry are Venezuela and Brazil.

a.3. EEC

Total iron ore imports in the EEC in 1979 were 138 million tonnes⁽²⁾, 128 million tonnes of which came from outside the community. Western Germany was the largest importer within the EEC with 39 percent of the total and,

like the other members of the European Community, depends increasingly on South America for supplies (Table III.B.3).

b. Future Prospects

The future development of iron ore trade depends largely on the performance of the steel industry in Europe-Japan and the USA, any upturn in raw steel output increasing import demand.

Growth prospects in Japan have been affected by a number of factors, and the steel industry itself does not expect to achieve a raw steel output of more than 125 million tonnes by 1985, even if conditions become more favourable⁽¹⁾. In this case Japanese iron ore imports can be expected to be about 140 million tonnes by 1985 (Table III.B.4).

EEC steel output expected to be around 120 million tonnes in 1985⁽¹⁾. This would mean iron ore consumption of about 135 million tonnes. But the EEC, unlike Japan, has a sizeable domestic output of iron ore which has recently been meeting 20 percent of demand. Imports expected to be about 108 million tonnes in 1985.

The United States can supply two-thirds of its current consumption of iron ore from domestic output of low grade ore. Imports therefore unlikely to supply more than one third of the primary iron ore required. A large proportion of imports will continue to be supplied from Canada via the Great Lakes.

Assuming that raw steel production in the EEC, Japan and the USA rises to the expected levels, the three markets will receive about 270 million tonnes by sea in 1985. Allowing for increasing trade with the rest of the world, it is probable that world seaborne iron ore trade, in

TABLE III.B.3

EEC Imports of Iron Ore
(000 metric tons)

Year	1979
Australia	11 766
Brazil	30 739
Canada	18 848
Chile	169
India	386
Liberia	15 537
Mauritania	7 428
Norway	3 726
Peru	143
South Africa	8 824
Sweden	19 512
Venezuela	6 273
Others	4 412
TOTAL	127,763

Source: Shipping Statistics Yearbook 1984

TABLE III.B.4

RAW STEEL PRODUCTION OF THE EEC AND OTHER MAJOR COUNTRIES
— in 1000 tons —

Year	EEC total	of which FR of Germany	Belgium	France	UK	Italy	US	USSR	Japan
1974	155539	53232	16225	27023	22323	23803	135235	136206	117131
1975	125552	40415	11584	21530	20088	21836	108250	141325	102313
1976	134037	42415	12145	23221	22274	23447	118790	144805	107393
1977	126068	38985	11256	22094	20411	23334	116315	146655	102405
1978	132601	41253	12601	22841	20311	24283	127170	151436	102105
1979	140188	46040	13442	23360	21464	24250	126530	149093	111748
1980	127740	43838	12321	23176	11277	26501	103159	147941	111395
1981	126318	41610	12284	21258	15573	24777	111159	148445	101676
1982	111309	35880	9896	18402	13704	24009	68585	147153	99548
1983	109470	35729	10056	17621	14378	21812	76620	152511	97169

Source: Shipping Statistics Yearbook, 1984

total, will be about 310 million tonnes in 1985. An increasing proportion of this trade will originate from developing countries.

2. Coal Trade

Although less than 10 percent of the world's production of hard coal is traded internationally⁽¹⁾, coal constitutes a very important cargo for the shipping industry and will increasingly become more significant for dry bulk shipping (Table III.B.5). At present some 12 percent of all dry bulk cargo carried by sea consists of coal, only iron ore and grain entering international seaborne trade in larger tonnages, and a sizeable part of the bulk shipping fleet finds employment in the coal trade, primarily on long-haul routes.

a. Main Coal Importing Areas

The EEC, the United States and Japan together consume about one third of the world's coal. Statistics indicate that these three economies, together with the USSR, Eastern Europe and China consumed something like 85 percent of the world's output⁽¹⁾. The US share of the world's coal is approximately 20 percent.

The end-use varies considerably from one country to another, and it is difficult to estimate accurately how much of the world's coal is used for coking, power generating and other uses.

Table III.B.5 gives the major coal importing regions and the amounts imported by each over the period 1974-1982. A part from the industrialized European, American and Japanese markets which are the principal coal importers. There are a number of smaller, less developed countries which are presently beginning to import coal in significant volumes.

TABLE III.B.5

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WORLD SEABORNE COAL TRADE BY REGION
1974-1982

-In 1000 Metric tons-

From To	East Europe	Other Europe	North America	Australia	South Africa	Others	Total 1982	Total 1981	Total 1980
UK/ Continent	5296	3880	22526	5353	10876	1023	48964	54230	53899
Mediterra- nean	2446	2139	13239	946	3129	—	21899	21002	18752
Other Europe	5699	4215	12103	1585	3568	100	27270	28429	25113
South America	1480	—	4459	347	—	—	6286	6145	6826
Japan	245	—	34341	31920	5939	4607	77052	78940	69108
Others	600	496	7819	8657	3513	5062	26147	21270	14747
TOTAL 1982	15766	10740	94487	48808	27025	10792	207618		
TOTAL 1981	8591	12685	102200	48946	28552	9042		210016	
TOTAL 1980	22331	8004	81626	43144	27268	6072			188445
TOTAL 1979	29256	6759	56045	40790	20703	5867			
TOTAL 1978	28401	7795	36381	35283	14093	4573			
TOTAL 1977	28951	6510	46145	34461	11300	3481			
TOTAL 1976	30729	5029	50816	31956	—	8260			
TOTAL 1975	28196	6184	56061	30446	—	6481			
TOTAL 1974	28249	6056	52578	26115	—	6144			

Source: Shipping Statistics Yearbook, 1984

b. Main Coal Exporting Countries

As the largest producers of coal-the United States, USSR and China are also the largest consumers, it is not surprising that only a small part of the world's supply of hard coal enters international trade, exports representing less than 10 percent of the total output of bituminous coal and anthracite.

3. Grain Trade

Only a small and variable proportion of the world's production of the main grain is traded internationally. The share generally being less than 15 percent⁽¹⁾. However in response to increasing needs world trade in grain and oilseeds more than doubled in volume during the 1970s rising to over 168 million tonnes in 1979, and 200 million in 1984. At the same time, changes have occurred in the composition of trade as well as in the patterns of shipments, longer shipping distances heightening the importance of grain as a bulk Shipping Cargo (Table III.B.6).

In order to examine the volume and direction of international grain movements they may be disaggregated into wheat and wheat flour, and coarse grains.

a. Wheat and Wheat Flour

Table III.B.7 shows the exports of wheat and wheat flour going to importing countries over the crop years between 1982 and 1985.

It can be seen from these figures that the main developing region importing wheat and wheat flour is the Far East Asia which, as a whole, imports nearly 27 million tonnes per annum. The main importing countries in Far East being China (10 million tons) and Japan (5.8 million tons).

TABLE III.B.6

WORLD SEABORNE GRAIN TRADE BY REGION
1974-1982

-in 1000 metric tons-

From \ To	USA	Canada	Argentina	Australia	Others	TOTAL 1982	TOTAL 1981	TOTAL 1980
UK/ Continent	16808	1345	375	44	469	19741	19772	22785
Mediterranean	14113	1511	1491	-	272	17393	16624	17806
East Europe	15011	10731	9412	2230	3723	41173	43508	37871
Other Europe	5118	280	38	38	685	6153	6166	5490
Africa	7836	1115	247	2250	4138	15806	16503	14208
America	12614	2530	1730	141	1333	18348	23277	25931
Near East	3344	434	53	1938	2607	8376	6937	3444
Indian Ocean	3168	1115	1228	2355	1376	9842	7776	8381
Japan	20581	2275	1127	1631	2473	28087	28493	28435
Other Far East	21941	3804	487	4013	3861	34112	29198	30653
Not specified	405	5	28	233	114	785	1275	3083
TOTAL 1982	121205	25745	16216	15533	21117	199822		
TOTAL 1981	128840	21506	20128	11619	15533		205923	
TOTAL 1980	128333	20827	11668	16220	21100			198147
TOTAL 1979	120227	16005	15023	145423	16351			
TOTAL 1978	110521	18605	13588	9559	17258			
TOTAL 1977	87703	17384	14838	12623	14778			
TOTAL 1976	92083	15266	8064	11930	19036			
TOTAL 1975	88776	14884	7732	11584	19226			
TOTAL 1974	77693	12695	9309	9574	20137			

NOTE: The figures comprise wheat, maize, barley, oats, rye, sorghum.

Source: Shipping Statistics Yearbook, 1984

TABLE III.B.7

Trade in Wheat and Flour by Region and Selected Countries

- (in million tons (wheat equivalent)) -

Imports by	1982/83		1983/84 (estimated)		1984/85 (estimated)	
WESTERN EUROPE	4.9		5.4		5.0	
EEC		3.4		3.4		3.0
Others		1.5		2.0		2.0
EASTERN EUROPE	3.9		3.6		3.5	
Poland		2.9		2.0		2.5
Others		1.0		1.6		1.5
USSR	20.1		19.4		20.0	
NORTH/CENTRAL AME.	3.1		3.7		3.7	
SOUTH AMERICA	8.1		8.6		8.5	
Brazil		3.9		4.3		4.3
Others		4.2		4.3		4.2
NEAR EAST ASIA	8.0		10.7		11.5	
Iran		2.0		3.3		3.0
Iraq		1.9		2.8		3.0
Others		4.1		4.6		5.0
FAR EAST ASIA	32.3		28.1		26.5	
Bangladesh		1.6		1.6		1.5
China		12.9		9.5		10.0
India		4.3		2.4		0.5
Indonesia		1.5		1.7		1.8
Japan		5.6		5.7		5.8
Korea (republic)		1.8		2.4		2.3
Others		4.6		4.8		4.6
AFRICA	15.0		17.7		18.0	
Egypt		6.2		6.5		6.5
Algeria, Libyan, Morocco, Tunisia		4.5		5.9		5.7
Others		4.3		5.3		5.8
WORLD TOTAL	96.1		99.3		99.0	
Of which						
Developed countries	11.2		12.2		12.0	
Developing Countries	45.6		51.9		50.5	
Centrally planned count	39.3		35.3		36.5	
EXPORTS BY	1982/83		1983/84 (estimated)		1984/85 (estimated)	
Argentina		7.5		9.6		8.0
Australia		8.5		11.6		14.5
Canada		21.1		20.8		20.0
EEC		14.1		15.0		15.5
US		39.3		38.0		36.5
TOTAL 5 MAJOR EXPORTING COUNTRIES	90.5		95.0		94.5	
USSR		0.4		0.4		0.5
Others		5.2		3.9		4.0
WORLD TOTAL	96.1		99.3		99.0	

Source: Shipping Statistics Yearbook, 1984

Other major importers in the world being USSR (20 million tons); Egypt (6.5 million tons) and Brazil (4.3 million tons). The major exporter countries are the USA (37 million tons) and Canada (20 million tons). USA; Canada and Australia exports wheat to the Far East Asia, USA being the leader.

The USA is also the major exporter to Africa, the third highest wheat importing region. Africa imports 18 million tonnes of wheat and wheat flour per annum.

b. Coarse Grains

International trade in coarse grains, stimulated by the growing demand for animal feeding purposes, first in western Europe and later in other areas such as the USSR and Japan, is considerably larger than that of wheat. The main constituent is maize (corn) and, in 1983/84, exports of this feed grain were at a record level of 90 million tonnes. Of this, 80 percent was supplied by the USA which accounts for a much higher proportion of world grain trade than it does of output. As the world's largest producer of maize, the US accounts for up to two-thirds of all exports of coarse grains (Table III.B.8).

c. Factors Affecting the Demand for Grain Imports

It is evident that the grain market is continually changing, both export availabilities and import requirements varying with annual harvests, stock positions and domestic and international trading policies. There are many factors to consider when trying to forecast further import requirements by various countries, but the following are among the most important:

- (1) Those affecting the quality and quantity of the grain produced in the exporting countries (principally the US, Canada, Argentina, Australia and South Africa.

TABLE III.B.8
WORLD-TRADE IN COARSE GRAINS

- In million tons -

IMPORTS BY	1982/83	1983/84 (estimated)	1984/85 (forecast)
WESTERN EUROPE	16.5	15.8	12.0
EEC	6.5	6.0	5.5
Spain	6.5	6.0	2.5
EASTERN EUROPE	4.2	4.1	4.0
USSR	12.0	10.8	14.0
NORTH & CENTRAL AM.	7.7	7.5	8.0
Mexico	5.8	5.5	6.0
SOUTH AMERICA	2.8	3.5	3.5
NEAR EAST ASIA	7.0	7.4	8.0
FAR EAST ASIA	31.4	28.8	30.0
China	2.7	0.3	0.5
Japan	18.5	18.8	18.5
Korea, Rep.	3.8	3.5	3.8
Taiwan	3.8	4.0	4.2
AFRICA	5.4	8.3	8.5
South Africa	0.2	2.4	2.0
OTHERS	0.9	1.9	3.0
TOTAL	88.0	88.1	91.0
EXPORTS BY			
Argentina	10.6	12.1	11.0
Australia	1.8	3.8	5.0
Canada	6.1	6.8	7.0
EEC	5.1	3.5	5.0
South Africa	3.3	0.1	0.1
Thailand	2.3	3.1	3.5
US	52.8	55.0	56.0
TOTAL ^{7 major} Exporter	82.1	84.5	87.6
OTHERS	5.9	4.6	3.4
WORLD TOTAL	88.0	88.1	91.0

Source: Shipping Statistics Yearbook, 1984

- (2) Those influencing the level of grain stocks.
- (3) Those which can cause production shortfalls in food grains, necessitating large purchases in the world market.
- (4) Those affecting income levels as this dries up the demand for meat and feed grain imports⁽³⁾.

4. Bauxite and Alumina

The pattern of world trade in bauxite and alumina is largely determined by regional imbalances in raw material supply and the form in which any deficit is made up.

North America and Europe are the major importing regions 18 million and 10 million tonnes respectively. Africa, Australia, and Jamaica are being the major exporter countries, 12; 9 and 7 million tonnes respectively (Table III.B.9).

5. Phosphate Rock

The growth of world phosphate rock trade over the post decade has been determined largely by developments within the fertilizer industry, as this is the dominant end-user, accounting for something like 85 percent of consumption. The principal markets are the industrialized nations of Europe and North America, with Australia and Japan dominating the secondary markets (Table III.B.10).

a. Importing Areas

Fourty-three percent of world exports were destined for Western Europe and 20 percent for Eastern Europe. Europe has always been the major importer as it has no indigenous supplies, and this position is unlikely to change significantly in the foreseeable future. The world market for phosphate rock has traditionally been divided into largely self-contained

⁽³⁾ For the explanation of how do these factors affect import requirements, look Appendix "C".

TABLE III.B.9

WORLD SEABORNE BAUXITE AND ALUMINA TRADE BY REGION

- In 1000 metric tons -

TO FROM	UK/ Cont.	Other Europe	North America	Japan	Others	Total 1982	Total 1981	Total 1980
Mediterranean	526	1325	4	11	10	1876	1933	2525
Africa	1594	4641	4936	—	400	11571	12090	11374
Jamaica	371	507	4392	—	400	5670	8538	9479
Other America	1098	1211	5187	86	300	7882	8690	8568
Asia	50	161	359	1193	170	1933	2430	2948
Australia	1613	1478	2386	2301	500	8878	10601	13179
Others	9	136	8	—	10	164	286	197
TOTAL 1982	5261	9459	17873	3591	1790	37974		
TOTAL 1981	5865	10423	21553	4389	1918		44748	
TOTAL 1980	6359	9957	23186	6440	2328			48270
TOTAL 1979	5699	10243	21349	5357	2980			
TOTAL 1978	5651	9583	21707	5506	3107			
TOTAL 1977	6208	10349	20850	6259	2622			
TOTAL 1976	5821	10315	18527	4903	2449			
TOTAL 1975	6004	9113	18514	5160	2396			
TOTAL 1974	6060	6789	21235	5359	2439			

Source: Shipping Statistics Yearbook, 1984

TABLE III.B.10

WORLD SEABORNE PHOSPHATE ROCK TRADE BY REGION

in 1000 metric tons—

TO \ FROM	Morocco	Other Africa	USA	Pacific Islands	Others	Total 1982	Total 1981	Total 1980
UK/Continent	5219	2001	2608	—	1779	11607	12473	14273
Mediterranean	3584	1620	114	—	2832	7875	8055	8942
Other Europe	2932	1170	881	—	2800	7805	8125	8905
North America	802	—	2692	—	21	3515	4244	5343
South America	116	30	117	—	81	344	615	972
Japan	614	75	1155	26	264	2134	2345	2763
Australia	—	27	407	2511	71	3016	2882	3845
Others	645	631	1955	187	1763	5181	4318	5131
TOTAL 1982	13972	5554	9929	2724	7638	39817		
TOTAL 1981	15631	5408	10549	2729	7234		41551	
TOTAL 1980	16381	6394	14641	3529	6961			47906
TOTAL 1979	17590	7347	14425	3544	5367			
TOTAL 1978	16805	7540	13324	3680	5678			
TOTAL 1977	15448	7433	13276	2679	5495			
TOTAL 1976	14512	6400	9169	2088	5044			
TOTAL 1975	12646	7481	10057	3251	4141			
TOTAL 1974	18570	9473	9452	4490	5921			

Source: Shipping Economics Yearbook, 1984

regional units, each with a fairly rigid pattern of supply. Europe's traditional suppliers are the producers in North and West Africa, although Eastern Europe gets about one third of it's supplies from the USSR.

North America has traditionally relied on US sources of phosphate rock and Canada still gets all of its supplies from there. In recent years however, the US has imported small quantities of rock from Morocco. Australia and New Zealand have always received most of their supplies from the Pacific islands of Banaba, Naru and Christmas.

Asia has slightly increased its share of world imports over the past few-years, largely because of increased its share of world imports over the past few-years, largely because of increased purchases by Japan. The USA has always been the major supplier to the Asian market but Morocco and Jordan have been particularly successful in recent years in diversifying their sales into Asia.

b. Exporting Areas

About 65 percent of world exports originate from developing countries. The USA which is the second largest exporter at 10 million tons in 1982.

Marocco is the world's largest exporter of phosphate rock with total export sales in 1982 of 14 million tonnes.

C. Shipping Policies of Major Trading Blocks

Appendix A indicates that very many trading nations have on their statute books legislations which restrict the free movement of cargoes and vessels. Almost without exception, the governments of nations possessing merchant fleets, whether state-owned or privately owned, offer some form of assistance to their maritime industries. Until the 1950s the world

shipping order was more or less liberal but, with a background of the rapidly spreading use of flag discrimination as a means of shipping policy and the rise of new politicoeconomic systems, it is possible to discern three categories of shipping policies.

- (1) the traditional maritime countries
- (2) the developing countries
- (3) the centrally-planned economies.

1. Traditional Maritime Nations

These are essentially the industrial economies of Europe and Japan and most closely relate to the theoretical concept of 'Freedom of the Seas', under this system, maritime transport is basically free from government interference in respect of access to cargo and choice of vessel. This is not to say that there is no 'discrimination' in the maritime field for shipping enterprises are free to organize their business, particularly in shipping conferences, and thus the system offers scope for private restraints on competition by shipping conferences and shippers' associations. Though government interference is minimal in the operation of shipping enterprises, the increasing tendency to provide financial assistance to national fleets (through ship purchase subsidies and favourable treatment of shipowners revenues for tax purposes) has and is contributing to altering the flag distribution of world shipping e.g. recent significant increase in the Greek register.

2. Developing Countries

Flag discrimination is currently applied on a large scale and is perhaps the most important instrument of shipping policy by the majority of developing countries which form the 'Group of 77' in UNCTAD. Therefore the problem of discriminating

policies in shipping is closely related to the fundamental issue of 'Third World' development.

The main aim of the discriminatory shipping policy of the developing countries is to establish a fleet under the national flag in order to bring about substantial shifts in the flag distribution in world shipping. Behind the general objective of fleet development lies a variety of aims towards shipping. These aims may be classified into:

- (a) Economic aims
- (b) Non-economic aims

a. Economic Motives

The hopes for economic benefits underlying the desire of many non-maritime nations to establish a merchant fleet may be categorised as:

- (1) direct, and
- (2) indirect benefits.

(1) Direct Benefits

Investment in shipping is no different from investment in any other economic activity, except that it is a very capital-intensive industry with a much higher capital/labour ratio than other industries. Therefore, the creation of a shipping fleet will not make significant inroads into a nation's unemployment situation. Despite this, investment in shipping is often attractive because of the credit facilities and other forms of shipbuilding aids which are made available by most major shipbuilding nations wishing to encourage domestic shipbuilding. Similar credit facilities are seldom available for the establishment of other industrial activities.

(2) Indirect Benefits

i. Balance of Payments

Balance of payments deficits may be reduced by either decreasing expenditure on using foreign vessels or by earning foreign exchange through the utilisation of national shipping services. However, in the early years of fleet development it is difficult to quantify the net benefits because without the existence of necessary, ancillary industries, such as ship repairing, insurance, etc., it is probable that in the short-term the acquisition of a sizeable merchant fleet will result in a deterioration of a nation's balance of payments, particularly when the capital cost repayments of a vessel are taken into consideration.

ii. To Encourage Trade and Communications

A nation may have possible export potential in a specific commodity, which because of the lack of a shipping service, or because of high freight rates, cannot be exploited. Shippers have long complained that exports are not growing at the rate they should because there are not enough direct shipping services. In the absence of direct shipping services cargo is often obliged to move on a transshipment basis, which adds to costs.

The use of promotional freight rates may be instrumental in helping to generate new markets. In order to expand an existing market it will normally be necessary to lower the price of the commodity. This is often difficult because the profit margin on the exports of many developing nations, which are essentially primary products, is small. The lower price must therefore be achieved by a decrease in the freight element which constitutes a large proportion of the aggregate CIF price. A small reduction in transport costs may be

instrumental in causing a large increase in exports. Therefore, it is in the national interest to provide services on new routes to promote exports. In this situation the aggregate income of the exporting nations may be increased.

The argument that 'trade follows the flag' may be included under this heading, as exports are said to increase if there is a large fleet of national vessels ('showing the flag' round the world). This is because the operation of a sizeable merchant fleet requires a network of agents, consuls, etc., who promote the interests of their employers.

iii. National Security

This is often regarded as the most important motive for developing a national fleet, and several nations regard their fleet as a fourth arm of defence. In essence, national security requires a sufficiently large fleet to meet defence transport needs in time of hostilities, and this need includes a sufficient shipping capacity to handle a nation's necessary trade in the same circumstances.

iv. Influencing Conferences

In the past, some non-maritime nations have experienced difficulties in trying to influence the freight rates of foreign flag lines in conferences serving them. It has often been felt that the element of monopoly power inherent in the conference system, which prevents free entry, together with the cost structure of liner shipping, gives shipowners a considerable leverage in the rate policy they choose to follow. Many nations consider that the only way to overcome this problem is to have national flag ships in the conference, in order to influence conference decisions.

v. Less Reliance on Foreign Shipowners

Any nation which lacks a shipping fleet or operates a very small fleet is highly dependent upon the shipowners of other nations for its foreign trade. Leaving political considerations aside, a foreign shipowner's major criterion is to operate profitably, and therefore should a service to a specific nation prove unprofitable it is possible that it may be withdrawn or rescheduled, or reduced in frequency, or the type and size of vessel may be changed, thus jeopardising that nation's export trade. Old and unsuitable vessels may be utilised, thus increasing the freight rate. Therefore, by acquiring its own shipping fleet, a nation may theoretically minimise those risks, even if operating old and unsuitable vessels.

vi. Industrial Integration

The shipping industry is only one aspect of economic activity, in that it is a very important service industry. A positive effect of the establishment of a national fleet may be to stimulate the growth and development of related industries.

For example, the development of shipbuilding and ship repairing may be considered to be an upstream market to the shipping industry. Many nations have embarked on related shipping / shipbuilding policies, whereby a viable shipbuilding industry is created from the existence of a captive shipping market. Japan has successfully pursued such policies in the past; and many developing nations including Brazil are undertaking similar co-ordinated development programmes.

b. Non-Economic Motives

In some nations the primary motives for fleet expansion or the maintenance of a merchant fleet are political and

military rather than economic. This is the case in the US and USSR. The US Merchant Marine Act of 1936 is the cornerstone of US shipping policy, and as such formulates the national defence objective of the US Merchant Marine. The 1936 Act even extends control by the US Marine Administration to ships registered in flag of convenience nations (Panama, Liberia, Singapore, Cyprus) which are under US citizens' control. The two main aims of USSR shipping policy are probably:

- 1) To protect Soviet trade flows from possible embargoes and give them independence from western shipping and
- 2) To assist the balance of payments.

3. The Centrally Planned Economies (Comecon Nations)

Though the COMECON nations have as yet a relatively insignificant proportion of the world bulk fleet (6.5 % of world dwt. in 1984) Table III.A.I. they do exercise considerable influence on non-bulk sectors of the international maritime industry and who is not to say that they too will not increase their bulk tonnage fleets during the 1980s/1990s.

In principle the centrally planned economies follow a similar policy as of the developing countries i.e. beralateralism and cargo reservation. But they also assist their fleets in order to obtain a competitive advantage over fleets operating under the traditional maritime order, especially in liner field.

All sectors of the maritime economy are state-owned and thus centrally planned. Access to cargo and choice of vessels by shippers are subject to close supervision and regulation. Amongst instruments utilised in carrying out shipping policy are:

- 1) bi-lateral shipping agreements
- 2) state trading monopolies determine terms of shipment
- 3) the fixing of freight rates in bi-lateral trades.

When no formal agreement exists giving non-Comecon fleets access to cargoes, they can be excluded by the state trading monopolies which determine that exports are shipped CIF and imports are purchased FOB. Thus the right to choose the vessel lies with the state chartering of foreign vessels is entirely dependent upon the availability of national ships. National ships also benefit from a number of other advantages which are peculiar to the economic system of COMECON countries:

- 1) The central planners decide fleet sizes and structures, the trades to be scored and operational aims.
- 2) The central planners' decisions are not guided by cost considerations but wider national criteria often political.
- 3) Shipping companies need not cover costs from freight revenues.
- 4) Foreign currency revenues are frequently converted into national currency at rates which amount to subsidies to shipping companies.

Shipping companies operate generally independently of economic criteria with little relationship between cost and revenues and aim of earning and saving foreign exchange is an overriding aim followed closely by political aims.

It is significant that COMECON countries have signed UNCTAD code of conduct on liner trades but only under conditions:

- i) Bi-lateral treaties already concluded were to remain intact.
- ii) They should have the right to organise their own maritime economy according to their own principles.

D. Government Legislation to Encourage National Fleet Development

1. Ship Operating Subsidies

a. Berthing Preferences

Many nations give priority to national flag vessels when in national ports. This is particularly advantageous in periods of heavy port congestion when foreign vessels may incur costly delay. Similarly, importers using foreign vessels delayed by port congestion will have such increased costs passed on to them.

b. Taxation and Port Expenses

National flag vessels may be exempt from income-tax and other taxes, and may also have reimbursement of harbour dues

pilotage expenses, conal dues etc., where there is no exemption or recimbursement, port dues, charges and navigation fees (including light dues, pilotage, ship entrance and clearance charges) are often higher for foreign vessels.

c. Pilotage

National flag vessels may be exempt from pilotage requirements, and may therefore be able to enter and leave port without the use of a pilot. This is not only a saving in cost, but also in time, and may be significant in reducing vessel turnaround time.

d. Subsidised Bunkers

Though not widespread, the Mexican government for instance, subsidises the cost of national flag vessel's fuel to the extent of 50 percent of the total fuel expenses. With bunkers, in many instances, accounting for more than 50 percent of shipping's variable costs, this has become a very significant subsidy.

2. Other Vessel Operation Subsidies

Some governments may invoke bereaucratic port procedures for foreign vessels, which may be irritating. Foreign flag operators may be compelled to employ national agents in port to have the necessary documents reviewed. Foreign vessels may have to pay port and other related expenses in Dollars while national flag vessels may pay all such expenses in national currency.

a. Cargo Reservation

A given proportion of specific imports or exports or total trade is reserved for the national flag carrier.

b. Exchange Controls

Favourable rates of exchange are available to shippers who import or export in national flag vessels.

c. Buying FOB and Selling CIF

In economies with centralised control the national government is able to select the ocean carrier used for import or exports, which will invariably mean that national carriers are used when available.

d. Import Duties

Part of any import duty may be refunded to the importer if a national flag vessel is utilised.

e. Import or Export Licences

Import and export licences will only be issued provided national flag vessels are used.

3. Other Cargo Allocation Measures

Government-generated cargoes will be directed to national flag vessels by special legislation.

Cabotage laws will exclude any foreign flag vessel from a nation's domestic trade.

4. Ship Purchasing Measures

a. Finance

Some nations, and particularly those with significant domestic shipbuilding capacity, advance cheap loans to national shipping companies for the acquisition of tonnage.

Brazilian shipowners can obtain 85 percent credit repayable over fifteen years at 5 percent per annum. South Korean government assistance to domestic owners is far more generous with 90 percent credit available over eight years at 1 percent, with a two year grace period (Table III.D.1).

b. Taxation

Tax concessions are widely available to shipping companies in both developing and industrialised nations.

5. Bi-Lateral Arrangements

An increasing proportion of world trade is carried out under bi-lateral trade agreements, with restrictive shipping clauses limiting the conduct of the trade to vessels of the contracting nations. The total trade is usually split into percentages to be carried by the vessels of both nations, the most common arrangement being a straight 50/50. Bi-lateral trading agreements are common in Comecon Trades, and particularly in Latin America.

E. Recent Trends in World Shipping

During recent years, world has been confronted with long-lasting overcapacities in the various markets. In many cases freight rates have been at levels which just did cover the voyage cost and part of the operating cost⁽⁴⁾ but did not cover the capital cost. In such a situation the question arises whether it is advisable or not to invest into new tonnage.

The problems with which the shipping industry is confronted today, are not only of a cyclical nature of the world economy. Structural changes are coming forth and intensify the pressure which is on the shipowners. To be

⁽⁴⁾ Look appendix "D" for the shipping costs.

TABLE III.D.1

Aid to Domestic Shipowners by Shipbuilding Countries
at 1984

Country	Term Years	Amount %	Interest %	Others
Belgium	15	80	4.5	2 years moratorium
Brazil	12	70	5	30% investment award, operating subsidies
Denmark	12	80	8	2 years moratorium
Italy	15	70		50% credit cheapening
Japan	13	upto 90	60% at 7.3 30% at 8.6	3 years moratorium
Sweden	15	90	8	4 years moratorium
Spain	12	85	8	2 years moratorium
Taiwan	12	80	8.5	dollar contract
Turkey	8	90	18.5	2 years moratorium

Source: Compiled from Verband der Deutschen Schiffbauindustrie, 1982

mentioned are the increasing competition from low-wage countries, the slower economic growth, and protectionism.

Graph III.E.1 shows the relationship between the development of the yearly percentage changes of seaborne trade (major dry bulk trade) and the development of the freight rates. As can be seen, there is a close correlation between both curves. Strong increases in seaborne trade are directly followed by strong increases in freight rates. On the other hand, decreases in trade growth are followed by decreases in freight rates.

Graph III.E.2 shows the relationship between the development of freight rates and the development of the placement of newbuilding orders. It can be seen that freight rate increases often lead to increases in order placements, but the placement of orders can also take place without a visible increase in freight rates.

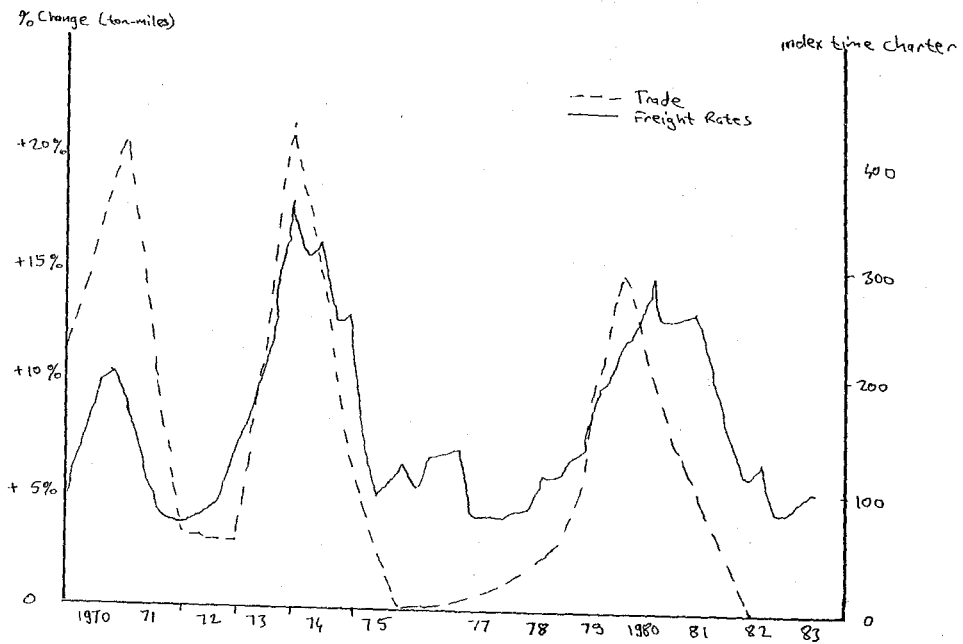
The relationship between the development of freight rates and the development of second-hand prices shown in Graph III.E.3 second-hand prices react in accordance to freight rate movements.

The recession in shipping is characterized by aggravating competition and by declining freight rates which stabilize on a much lower level than before. The shipowners are forced to rationalize their services in order to bring the high running costs into harmony with the low freight rate level. This situation results in the driving-out of old and inefficient vessels by modern ships which have been ordered more recently.

In the aftermath of the Suez crisis in 1956, international shipping experienced a long recession of some ten years. However during a recession period an order upturn

FIGURE III.E.1

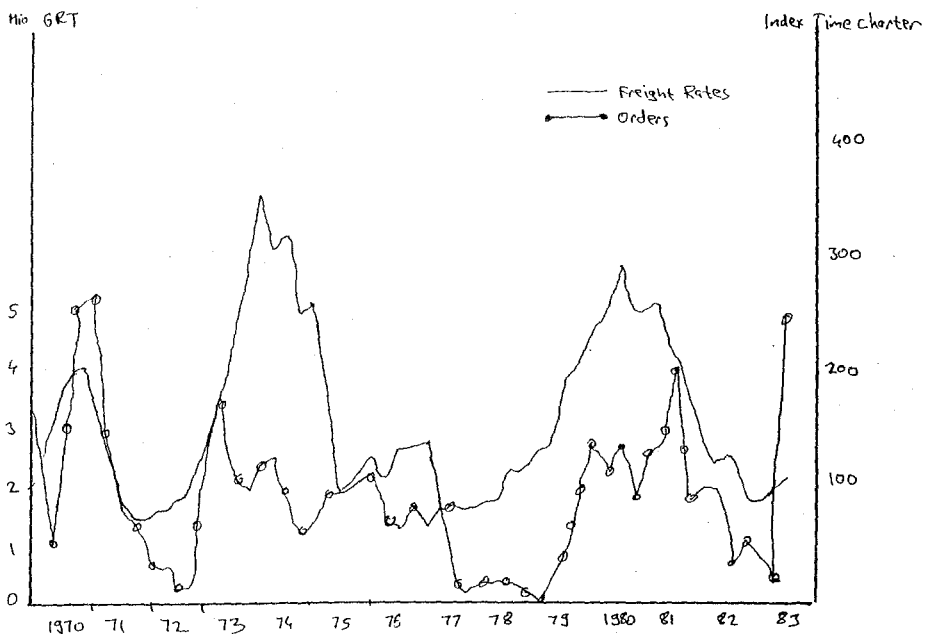
Seaborne Trade of Major Dry Bulk Commodities and Development of Freight Rates



Sources: Fearnly, GCBs

FIGURE III.E.2

Development of Freight Rates and of Dry Bulk carrier Newbuilding Orders



Source: GCBs

had been observed with the coincidence of two major developments, namely increasing seaborne trade volumes and the creation of a new vessel design.

The order upturn for handy-sized dry bulk carriers in 1983 has also been caused by a significant technological advance. After a lot of research work, new efficient propulsion systems have been developed. A ship built in 1983 can save about one third of the fuel which ships need that have been built in the sixties and seventies. An economic comparison between a newbuilding and an existing vessel reveals that bunkers make up 34 percent of total costs in case of an existing vessel but make only up 18 percent of the total costs in case of a newbuilding⁽⁵⁾.

During recession periods the shipbuilders are forced to quote prices which sometimes do not even cover their cost. Additionally, subsidies are granted from governments with the aim to secure employment in the shipbuilding industry. For example, under OECD conditions shipyard financing for a newbuilding covers 80 percent of the price of the vessel to be repaid over 8 1/2 years at 8 percent annual interest (Table III.D.1).

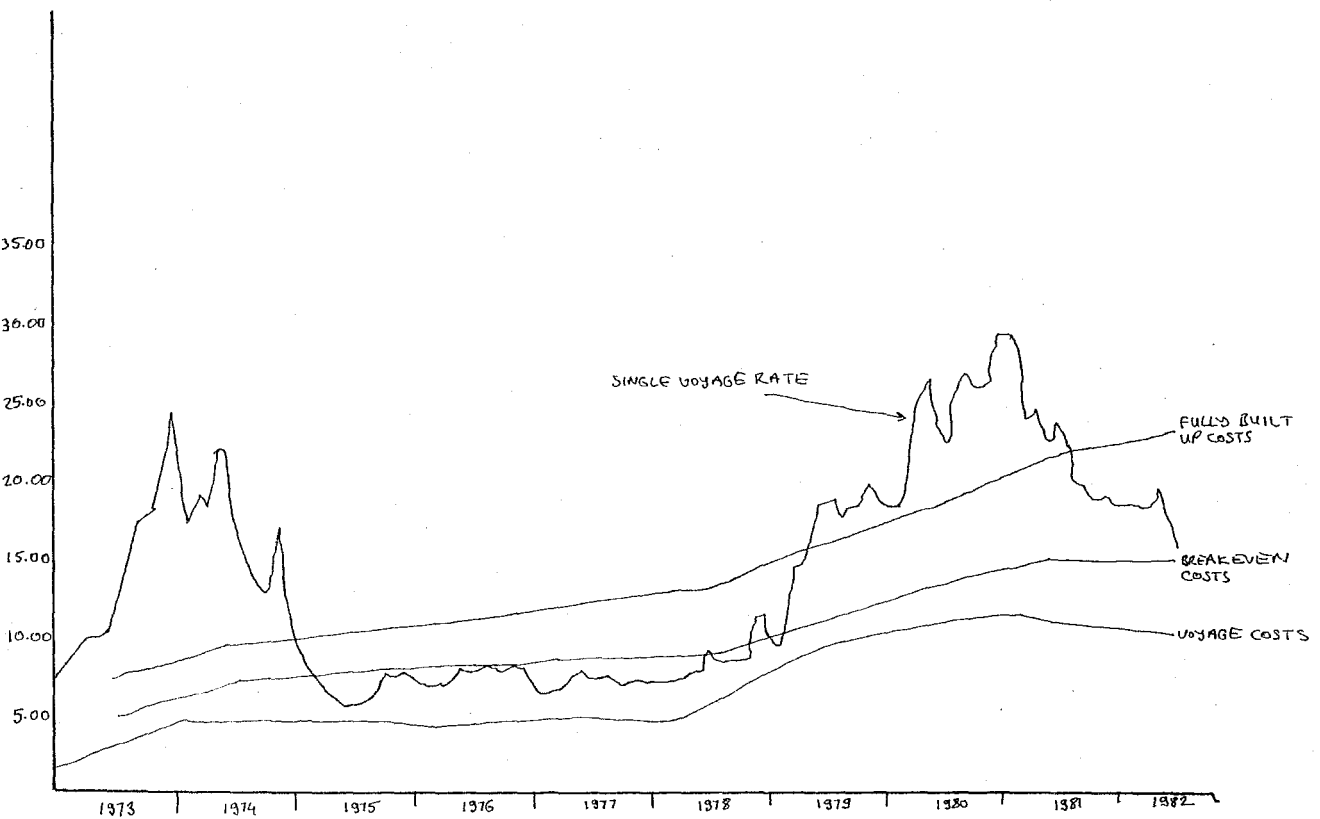
F. Shipping Cost

Shipping cost can be classified in many respects. Looking at the Graph III.D.1, obviously, as far as overhead cost (head office, supervision, selling and marketing, etc.) and operating cost (crew, maintenance, repairs, insurance, stores, etc.) are concerned, they arise irrespective of boom or recession market conditions. The height of voyage cost which consist mainly of fuel (apart from port and canal dues)

(5) Poten & Partners (1983). For details of calculation look Appendix E.

FIGURE III.D.1

SPOT MARKET TRADING COSTS VERSUS REVENUES 1973-1982
 60,000 DWT BULK CARRIER, COAL HAMPTON ROADS- JAPAN



Voyage Costs - Bunker plus port/canal charges.

Breakeven Costs - Voyage costs plus operating costs.

Fully Built up Costs - Breakeven costs plus Capital costs.

Source: Drewry (1983) P.114

is heavily dependent on the price development in the energy market. The shipowner will have no possibility to influence fuel price developments.

An influence can be exerted on the height of the Capital cost which consists of depreciation, interests payable on the loans, and profit (return on Capital). Depending on the time of acquisition, newbuilding prices can vary by some 100 percent and second-hand prices by some 400 percent (from previous graphs). It makes a heavy difference in competitiveness whether a shipowner is burdened with depreciation cost which is as double as high as that of the competitors or not.

The amount of freight revenues necessary to cover capital repayments is differing significantly according to the year of acquisition of the vessels. In addition the yearly amount of capital to be repaid is the lower the longer the duration of the loan is. Repay in a loan over eight and a half years (OECD terms) is more difficult for a shipowner than over 15 years. Finally, as far as moratoriums are offered, the financial burden within the initial period of the investment is heavily reduced (Table III.D.1).

Currently, one major problem western shipowners are facing is the increasing competition from low-wage shipping countries. In 1981, the comparison of the wage cost for a 60,000 dwt. bulk carrier under German, Korean and Turkish flag is made, which revealed that the German crew was seven and a half and Korean Crew was two and a half times as expensive as the Turkish crew (Table III.D.2).

TABLE III.D.2

Comparison of fully built-up cost, 60,000 dwt bulk carrier,
German, Korean and Turkish flag, in \$ per day.

Shipping costs	German vessel (28 men)	%	Korean vessel (23 men)	%	Turkish vessel (23 men)	%
Capital cost	11,630	42	11,630	45	11,630	46
Operating cost	6,105	22	4,135	16	3,510	14
of which crew cost	(3,420)	(12)	(1,075)	(4)	(450)	(2)
Voyage cost	10,180	36	10,180	33	10,180	40
TOTAL	27,915	100	25,945	100	25,320	100

Source: Compiled from Drewry and ICS records

IV. TURKISH SHIPPING

A. History and Development

1. General

Turkey's rectangular looking shape is covered with sea water from all three sides which account as much as 8172 km. coast line. Turkey with its geographical location between Europe and Asia serves as a bridge country. Occupation of an important strategic place in the Middle East requires an Economic and Military protection. This could partly be achieved by having a strong fleet.

There was no real national merchant fleet in the period which begins from the foundation of Ottoman Empire to the beginnings of the Republic of Turkey. Capitulations were granted to French and Italians by Sultan Süleyman the Magnificent. Thereby foreign interests were benefiting from this rights of commercial shipping around the country. The Republic of Turkey was relieved from this situation after signing the "Treaty of Lousanne". Later, under the law No. 815 on "Cabotage", issued in 1926. The right of transportation of passengers and cargoes at the Turkish coasts and catching sea products in the Turkish territorial waters have all been given exclusively to Turkish seamen and Turkish flag ships.

During the decleration of the Republic of Turkey (1923), Turkish Merchant fleet consisted of 88 ships with about 6000 GRT (Gross registered tonnes).

There was no significant move in the Turkish Shipping industry up until Turkish Maritime Bank Co. was established in 1951, with the purposes of performing transportation services both in internal and external waters of Turkey and also to operate the dockyards and ports.

After the Maritime Bank, the Turkish private and state shipping sector has showed a gradual increase with the most dramatic increase being in the current decade (Figure IV.A.1).

2. Shipyards

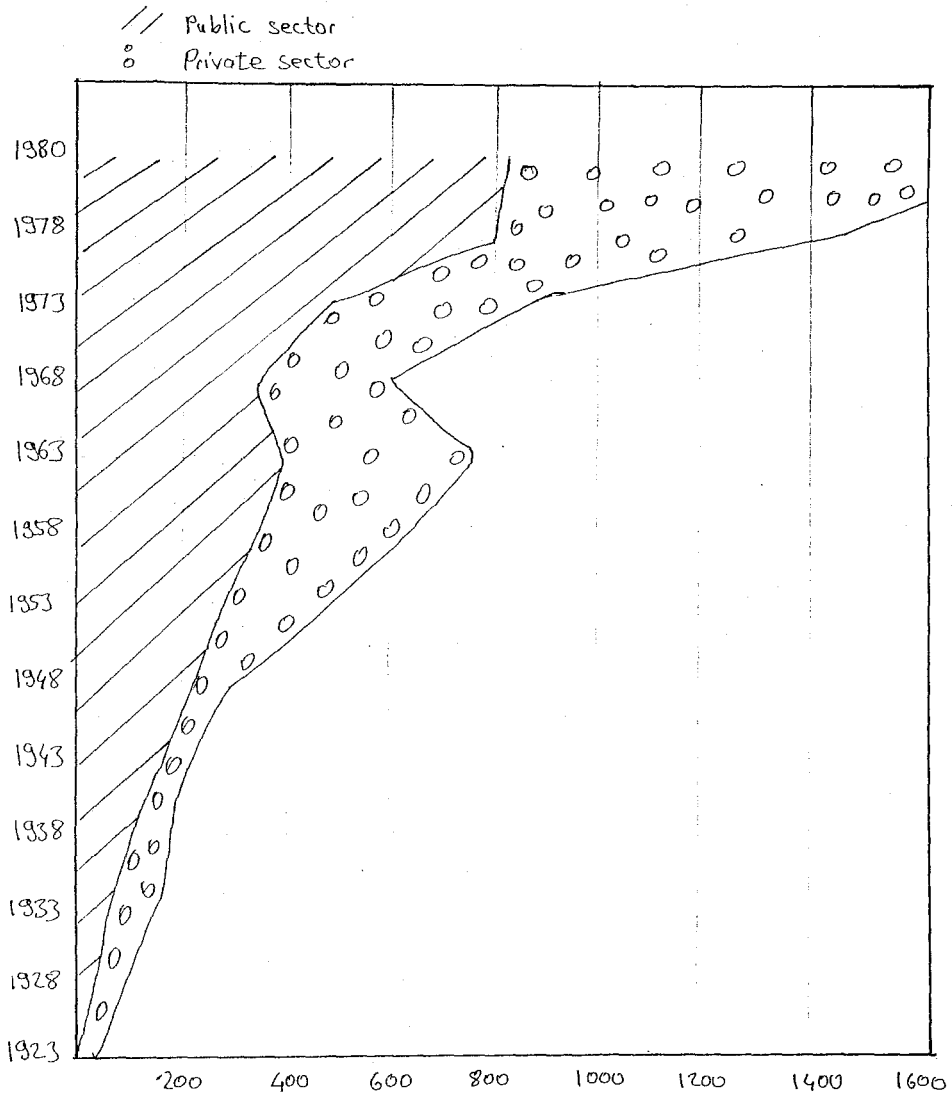
The shipbuilding in Turkey goes back to Selçuk Turks in the history. They have founded first shipyards in Sinop, Alanya and İzmir. During the Ottoman empire there were shipyards in İzmit, Karamürsel, Gelibolu, İstanbul, Süveys and Sinop.

Turkish shipbuilding falls into two categories public and private and until recently was not regarded as a sector of particular potential. Prior to 1980, there were a number of private shipyards working in Golden Horn area of Istanbul but even the largest of these could only build relatively simple vessels of up to 5000 dwt. Over the last couple of years, however, the authorities have encouraged the shipbuilders to relocate their facilities outside Istanbul so that the expansion will be easy in new areas and pollution will be prevented in Golden Horn.

There was no basic changes in the shipyards until the five yearly development plans of Turkish republic. In the first development plan (1963-1967) some new private sector shipyards were built and state shipyards showed developments. Second development plan (1968-1972) was aimed to build young small capacity ships at home while allowing to buy large tankers, bulkers and specialized ships from abroad. Pendik and Alaybey (İzmir) shipyards were given more importance in the third development plan (1973-1977). Also, during this plan when "the policies of development and encouragement of Turkish shipyards, Turkish merchant fleet and Turkish sea trade" was put in force. The goal was to carry at least 50

FIGURE IV. A.1

Development of the Turkish Merchant Fleet
During the Republic of Turkey



Source: DIE records

TABLE IV.A.6
FOREIGN SHIP PURCHASES IN TURKEY

Years	Number	Total DWT	US \$
1977	10	284.625	93 007 320
1978	8	193.964	26 523 306
1979	2	6.700	16 206 752
1980	2	17.628	6 750 000
1981	11	633.362	77 090 000
1982	23	710.665	98 504 497
General Total	56	1846.944	318 082 475

Source: "Türk Denizcilik Politikası" Semineri, 1983

TABLE IV.A.1
THE CAPACITIES OF TURKISH SHIPYARDS

Groups of Shipyards	Existing Capacity		1984-88 Capacities	
	Steel Ton/year	DWT year	Steel Ton/year	DWT year
Dz.K.K. Shipyards	10750	40000	10750	40000
Maritime Bank Shipyards	36700	142500	36700	142500
Tuzla Area Shipyards	26350	87800	170200	530500
Other Private sector shipyards	63200	258400	63200	258400
TOTAL	143000	528700	268850	1031400

Source: "Türk Denizcilik Politikası" Semineri, 1983

TABLE IV.A.5

TURKISH MERCHANT MARINE FLEET DEVELOPMENT
(300 Grt. and over)

- 1000 Grt -

Ship Types	1963	1968	1971	1974	1977	1980	1981	1982	1983	1984
Dry Cargo Ships	448	485	604	793	1.101			2.045	2.338	2.719
Tankers	250	260	263	554	539			1.376	1.750	2.400
TOTAL	698	745	873	1.353	1.700	2.134	2.514	3.421	4.088	5.119

Source: Compiled from DIE records and Shipping Statistics
Yearbook, 1984

percent of the foreign trade in an efficient manner. Still large ships were purchased from abroad. During the fourth development plan (1978-1982) I. stage of Pendik shipyards (stateowned) started production.

Tuzla area was also chosen as an integrated multi-shipyard place and distributed to private sector. The area on which the builders have concentrated was picked by the Government in 1980. On the shores of the sea of Marmara, Tuzla provides the setting for most of the country's private yards. Annual production capacity in these facilities is about 350.000 dwt. but it is expected that this will increase over the next four years to reach 1 m.dwt. by 1988 (Table IV.A.1).

The biggest of the yards can construct ships of up to 30.000 dwt. and by the end of the present five year plan it is envisaged that all the builders facilities will be fully operational. Meanwhile, the yards work simultaneously on building ships and improving their own facilities: in many construction of slipways has only been completed a few weeks ahead of launch dates and occasionally ships have been launched from makeshift slipways to avoid delays.

The state builders are a small way along the coast in the Pendik-Tuzla area and, although the original project to establish a national shipbuilding facility was launched in 1939, production has only recently begun. The Pendik yard is capable of building all types of vessels of up to 70.000 dwt. and several projects to add to its capacity are at varying stages of completion.

3. Ports

a. General

A sea port is best defined in terms of its function as a place where eachway exchanges between land and sea transport regularly take place. Regularity of function can not usually be achieved in exposed watersites, and today it is axiomatic that a successful commercial seaport is equipped with harbour properties, which may be natural but are usually artificially enhanced.

There is a major two fold classification of cargoes handled by ports: Bulk cargo and break bulk cargo. Bulk cargo is essentially homogenous, without packing, usually consisting of fuel or raw materials, and has been subject to the economies of scale in transport by larger bulk carriers.

Break-bulk cargo used to be described as "general cargo" an unsatisfactory term since it had specific reference to heterogeneous dry cargo, packed in small lots, such as foods or high value per unit of weight raw materials or manufactured products, and all generally bound for many consignees.

b. Cost of Shiptime

Conventional cargo liners may spend as little as 20-25 percent of their time at sea ⁽²⁾, and further that three-quarters of the time in port was "dead time" for weekends holidays, and non-working hours in cases where ports worked a five-day week and one eight-hours shift per day. Also the congestion in ports is another factor that effects the turn-around time of ships. Such delays convert the ship into a highly expensive floating warehouse, thus adding to the cost of transport. Table IV.A.2 gives the percentages of time

TABLE IV.A.2
TIMES SPENT FOR DIFFERENT
TYPES OF SHIPS

Type of Vessel	Time Spent at Sea %	Time spent in Port %
Passanger Ship	63	37
Liner	40	60
Tramp	57	43
Tanker	81	19
Container Ship	87.5	12.5

Source: "Port Planning", B.Ü.

M.S. Thesis in C.E. by İbrahim Özen, 1976.

TABLE IV.A.3
PORT HANDLING RATES

Handling Type	Rate
Conventional	15 tons
Paletization	60 tons
Container	200 tons

Source: "Port Planning", B.Ü.

M.S. Thesis in C.E. by İbrahim Özen, 1976.

spend in port, and time spent at sea for different types of conventional transportation.

The turnaround time of ships is, also, directly related to the type of handling in ports. The greater the unitization of cargo, the greater the handling rate. Table IV.A.3 gives handling rates for different types. The greater the time spent in port the greater the cost of transportation.

c. Turkish Ports

Turkey's 8172 kilometers of coastline are dotted with ports many of them small, private terminals designed to complement local industrial complexes. Some are municipal, establishment to provide facilities for coastal traffic, but the major ports fall under the jurisdiction of the Government, authority being vested either in the maritime sector of the National Maritime Bank or with the Turkish State Railways.

About 80 percent of the Turkish foreign trade made through ports ⁽³⁾. Main Turkish ports are shown in the Table IV.A.4. Currently Turkish ports are working with the conventional cargo handling methods to handle all kinds of cargoes. Some conteyner terminals and ro-ro berths are constructed in major ports (İzmir, İstanbul and Mersin) but still gantry cranes are not existent for fast handling of conteyners.

For the coOrdination of all Turkish Ports, Ministry of Transport has **issued** a legislation no 13754 in 23.10.1972 to form "Turkish ports coordination committe" ⁽⁸⁾. Also the law no 618 has accepted the regional port authorities as an only port management authority. As in some countries, Turkish port regulations does not differ for foreign ships. The most exciting development of 1984 was the official announcement on may 29 to establish free trade zones, long a subject of

TABLE IV.A4
MAJOR TURKISH PORTS

Name	Operator
Istanbul Haydarpaşa	State Railways
Istanbul Salıpazarı	Maritime Bank
Istanbul Karaköy	Maritime Bank
Istanbul Sirkeci	Maritime Bank
Istanbul Kuruçeşme	Maritime Bank
Derince	State Railways
Bandırma	State Railways
Izmir, Alsancak	Maritime Bank
Mersin	State Railways
İskenderun	State Railways
Antalya	Maritime Bank
Samsun	State Railways
Trabzon	Maritime Bank

Source: Türk Deniz Taşımacılığı, 1982

discussion in Turkey. Mersin and Antalya were selected for this privilege ⁽⁶⁾.

B. Turkish Cargo Moves by the Maritime Transportation

State is the major shipper for importing and exporting of mostly bulk cargoes in Turkey. Major imported bulk cargoes include: Coal; iron ore; fertilizers; phosphate; crude oil; wheat; rice and chemicals. And the exported bulk cargoes: Cement; iron and steel; sugar and cereals.

The break-bulk cargoes imported and exported in Turkey's foreign trade include: Paperpulp; mechanical machinery; electrical machinery; vehicles; and parts; chemical products and fruits and nuts; tobacco; cotton; glass and glassware; textile products respectively (Look Table IV.B.1 and Table IV.B.2).

Third source of shippers besides Turkish private and state sectors are the Middle Eastern countries which usually import cargoes from western developed nations, use Turkish transit sea ports.

The potential for transit trade is massive and now that access to Gulf ports is so much more difficult. Turkey stand to benefit even more from the transit trade, worth an estimated \$ 500 m. last year ⁽³⁾. Annual capacity is now running at two million tonnes although this could easily increase three million tonnes. About 90 percent of the transit cargo crossing Turkey's docks is currently destined for Iran, with 10 percent heading for Iraq, although these percentages have varied during the four-year war. While Mersin and Iskenderun being the major ports for the Iraq transit trade, Samsun and Trabzon are the major ports for Iran trade.

⁽⁶⁾ For more about "Free Port Zones" look appendix "F".

TABLE IV.B.1

Denizyolu ile Yapılan İthalatta Türk ve Yabancı Gemilere Ödenen Navlunlar
 Freight Totals Payed in Turkish Seaborne Imports to Turkish and Foreign Carriers

Year	Freight Total (000\$)	Turkish (000\$)	Foreign (000\$)
1981 March-December	256 533	138 939	157 654
1982	349 327	168 716	180 611
1983	353 544	204 630	148 914
1984 (10 months)	359 818	204 329	155 489

Source: DIE records
 (Turkish Foreign Trade Statistics, 1981-1984)

TABLE IV.B.2

The Seaborne Trade Values of the Total Turkish Import and Export Trade
1980-1983

Year	IMPORTS (Land, Air, Sea)		IMPORTS (Sea)		EXPORTS (Land, Air, Sea)		EXPORTS (Sea)	
	GENERAL TOTAL		GENERAL TOTAL		GENERAL TOTAL		GENERAL TOTAL	
	TON (000)	(000)\$	TON (000)	(000)\$	TON (000)	(000)\$	TON (000)	(000)\$
1980	23 347	7303 444	22006	6514539	4855	2910122	3510	1316336
1981	22538	8333365	21945	7322644	9137	4702335	5363	2445708
1982	23181	8842665	22702	653386	12550	5745373	8183	2515649
1983	26849	9235001	25823	6853167	11317	5727833	7401	2179463

Source: DIE Records
(Turkish Foreign Trade Statistics, 1980-1983)

TABLE IV.B.3

MAJOR TURKISH SHIPPING COMPANIES

1	D.B. Deniz Nakliyatı T.A.Ş.
2	D.B. Denizyolları işletmesi T.A.Ş.
3	Zihni Denizcilik Grubu
4	Um Denizcilik A.Ş.
5	Sönmez Denizcilik Grubu
6	Martı Denizcilik Grubu
7	Cerrahogulları Denizcilik A.Ş.
8	Cerrahgil Denizcilik A.Ş.
9	Sohtorik Denizcilik Grubu
10	Anadolu Denizcilik Grubu
11	Koştug Denizcilik Grubu
12	Genel Denizcilik Nakliyatı A.Ş.
13	Denizcilik A.Ş.
14	Kolotoğlu Denizcilik A.Ş.
15	Aksoy Denizcilik A.Ş.
16	M. Faruk Ürkmez Denizcilik A.Ş.
17	Kalkavan Denizcilik Grubu
18	Şahlan Denizcilik A.Ş.
19	Kaptanoğlu Denizcilik A.Ş.
20	Türk-Libya Denizcilik A.Ş.
21	Işıklı Denizcilik A.Ş.
22	Moras Denizcilik A.Ş.

TABLE III.B.4

Major Commodities which are included in Turkish Import
Seaborne Trade (1983)

Commodity	Quantity (tons)	Value (\$000)
Cereals	182820	33482
Animal and Vegetable fats and oils	131658	34164
Salts sulphur, earthen and stone lime and cement	1113232	75228
Metallic Ores	1352537	48683
Mineral Fuels; mineral oils and Products of their distillation	17100233	3742134
Inorganic chemicals	1467618	331368
Organic chemicals	700403	449793
Fertilisers	1103581	113535
Artificial resins and Plastic materials	170537	167974
Miscellaneous chemical Products	65657	111244
Rubber, Synthetic Rubbers	60087	82582
Paper making material	53533	23187
Paper and Paper board	35213	22672
Man-made fibres (continuous)	26983	70833
Man-made fibres (discontinuous)	42350	71093
Iron and Steel	2616262	674880
Aluminium and articles	65703	84852
Boilers, machinery	163073	1432260
Electrical machinery and equipment	40513	337624
Vehicles and part	33986	301887

Source: Compiled from DIE records
(Turkish Foreign Trade Statistics, 1983)

TABLE IV.B.5

MAJOR COMMODITIES WHICH ARE INCLUDED IN TURKISH
EXPORT SEABORNE TRADE (1983)

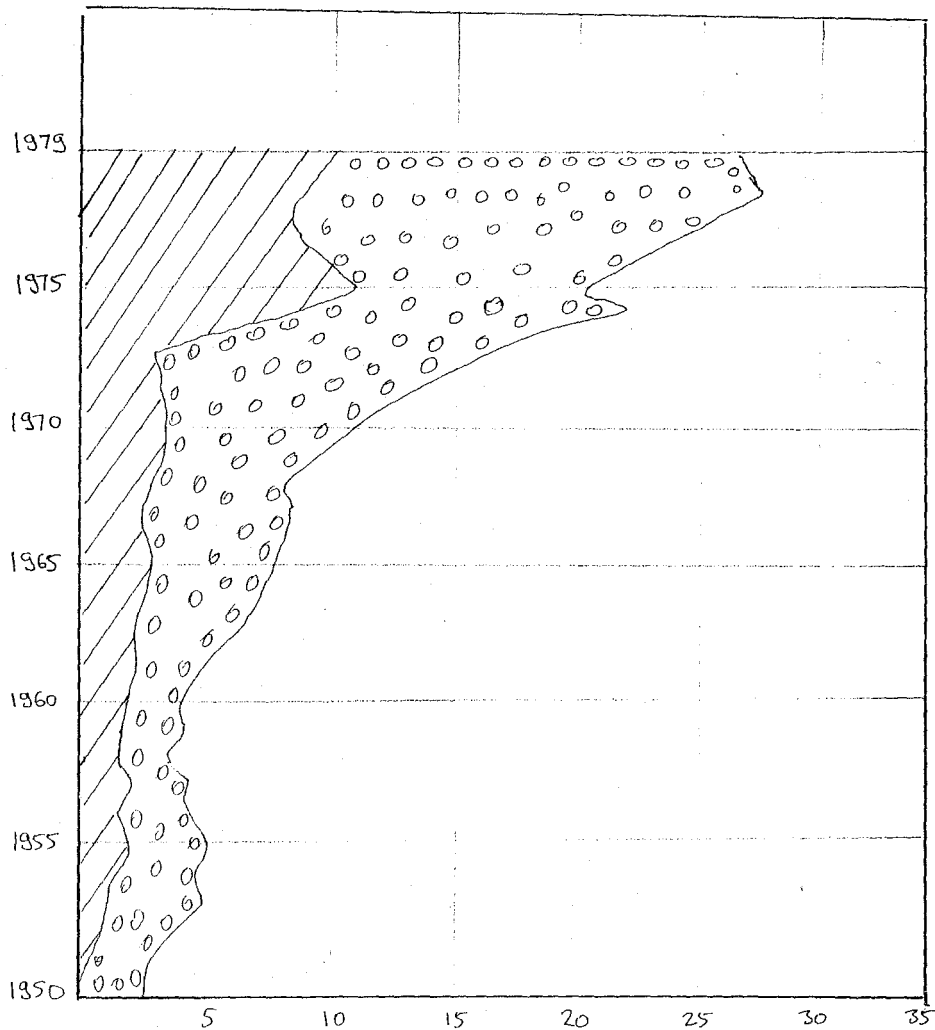
Commodity	Quantity (tons)	Value (\$000)
Edible fruit and nuts	706 561	525 612
Cereals	1 208 417	187 256
Products of the Milling industry	304 764	65 936
Sugars and Sugar Confectionary	406 618	106 487
Salts sulphur; earthen and stone; lime and cement	3353 965	237 730
Tobacco	63542	237 828
Mineral fuels, mineral oils and products	905 785	234 707
Cotton	285 130	551 250
Man-made fibres (discontinuous)	65 785	174 986
Glass and Glassware	213 935	81 433
Iron and steel	1 152 633	407 185
Boilers; machinery and mechanical appliances	35 613	102 751
Vehicles	35 436	122 943
Carpets and tapesteries	7 037	188 501
Clothing accessories of textile	17 463	393 231
Live Animals (head)	2 771 795	30 4 820

Source: Compiled from DIE records
(Turkish Foreign Trade Statistics, 1983)

FIGURE IV-B1

The Turkish Foreign Trade and the Transportations made by the Turkish Vessels between 1950-1980

// Transportations made by foreign vessels
oo Transportations made by Turkish vessels



Source: DIE Records (Million Tons)
(Transportation statistics and Turkish
Foreign Trade)

C. Government's Maritime Policies

Turkish shipping policy has shown a long stagnation period up until to 1980. Formerly there was no liberation in the policies. After 1980 the government policy towards the maritime industry has shown a semi liberal move.

One can see a sharp turn up and dinamizm in Turkish shipping after 1980. Major elements of the new policy were to allow foreign ship purchases and leave government generated cargoes to open market conditions. The need and role of a government liason and coordination were realized in the sector and move through instituanalization was started during the period. Marine coordination committee, prime ministry undersecretary of Marine and Istanbul Chamber of shipping was formed during this period.

These steps through institutionalization and coordination in shipping sector has shown the increasing interests from both government and private sector sides.

The new government believes that its new merchant marine policies long term affects will be: increase in total production, opening new areas for employment, bringing increases in total personal and firm tax payments, development of Turkish exports and foreign trade and increase in the foreign currency reserves.

As a summary the government believes that new Turkish shipping policy has a direct relationship with the governments major policy of increasing Turkish foreign trade. The government also believes that, by following a similar world standard shipping regulations, Turkey can compete with other countries.

After 1980, governments has brought new subsidy measures on the financial side of ship operating and ship purchasing regulations, while leaving the shipping trade market to open market conditions.

The following are the existing government incentives:

- (1) Custom's duty free import of ship and ship equipment.
- (2) Investment credit.
- (3) Reducement in tax payments.
- (4) Payback of interest differential.
- (5) Medium and long-term credits:

Foreign purchases: 10 percent downpayment by purchaser
90 percent government credit, of
which:

percent 60 percent by Central Bank, 30
percent interest for eight year.
40 percent by other banks, 30
percent or more interest eight
years payback period.

Domestic buildings: 10 percent down payment by purchaser
90 percent government credit, of
which:

75 percent by Central Bank, 19.5
percent interest for eight years.
25 percent from Gisat fund, 11
percent in interest for 10 years.

(Table III.D.1 in page 48)

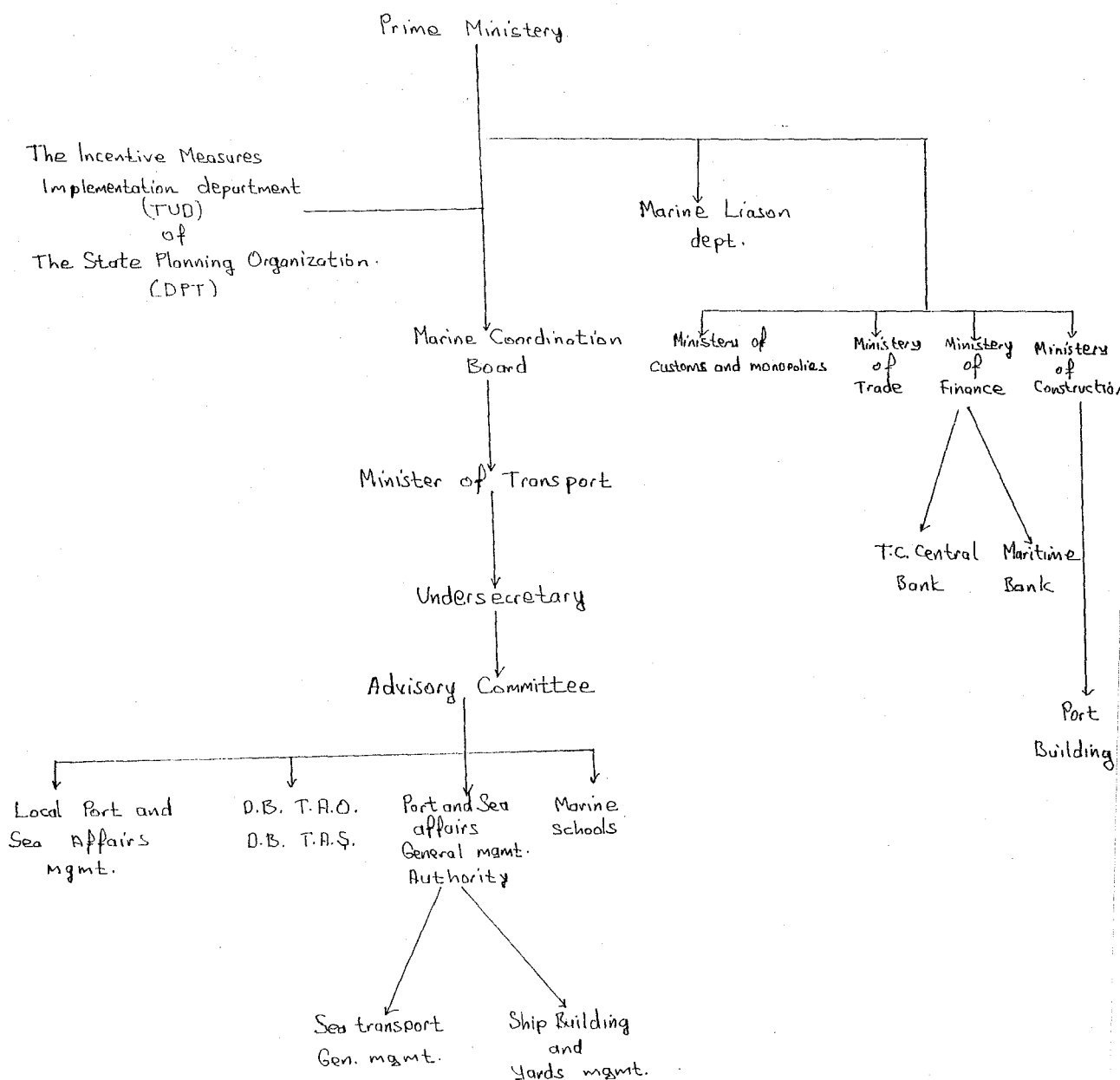
- (6) Priority in foreign currency credit payments.
- (7) Lower downpayment ratios in credits, five percent
for ro-ro ships and 10 percent for other ships.
- (8) For both, new and second-hand purchases made abroad,
minimum tonnage is 7500 grt.

- (9) Reasonable ship age restrictions for direct purchases from abroad. The maximum age for tankers is nine years; for passenger, cargo, fishing and other vessels the maximum age is 13 years⁽⁷⁾.
- (10) Exception of building taxes.
- (11) Merchant marine is considered one of the export tax rebate sectors.
- (12) Tax rebate in freights.
- (13) Simplification of exchange regulations.
- (14) Accelerated depreciation.

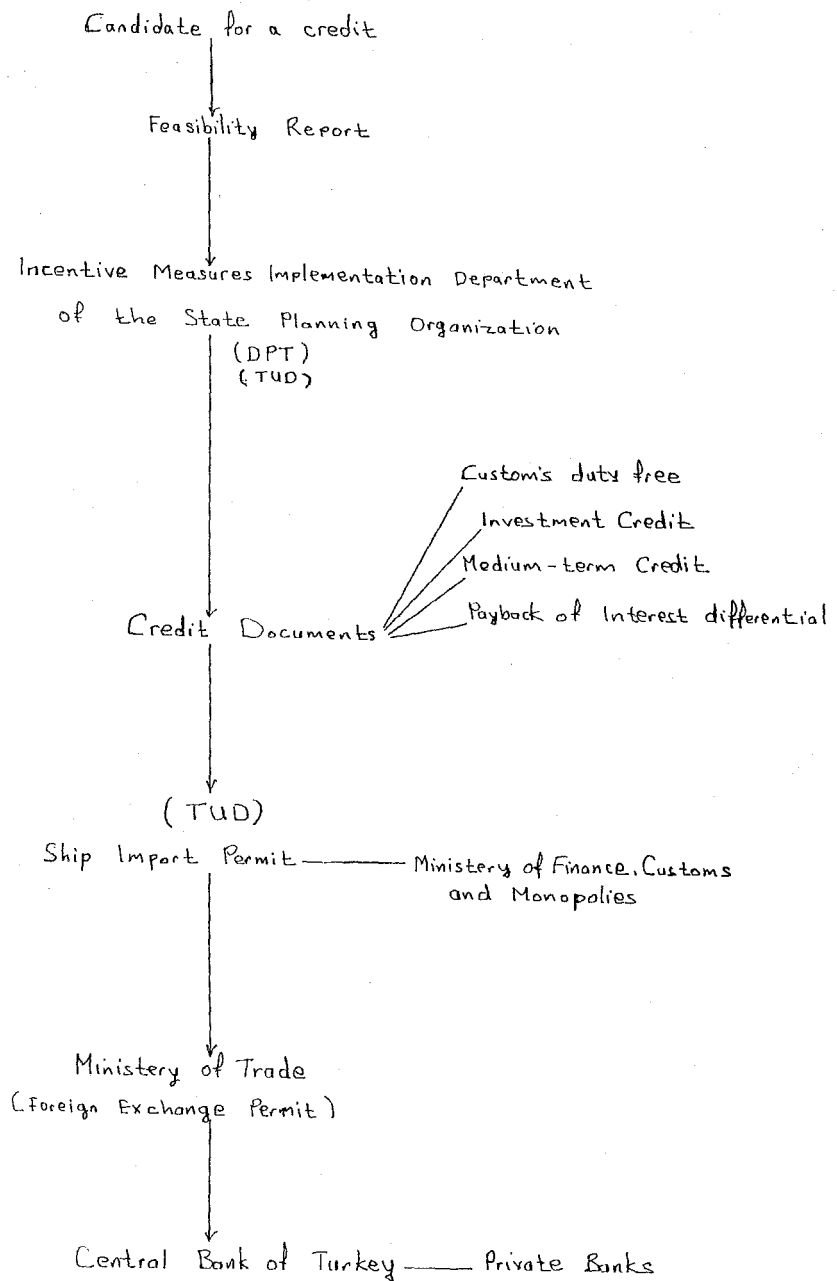
Government policy towards ocean shipping in recent years has stimulated a fleet growth of around three million dwt. (Tables IV.A.5 and IV.A.6) during that period the industry has contributed more foreign exchange to the Turkish economy than the country has received from traditional export sources over the past years. The research of Istanbul Chamber of Shipping among 152 of 996 membership has revealed that, majority of Turkish fleet contributed 335 million and 442 million dollars to the country's economy in 1982 and 1983 respectively⁽⁴⁾.

(7) Average ship life is about 20 years. So, by allowing 13 years maximum ship age, 7 years of usable ship life will be left which would be longer in Turkey's conditions of cheap new and cheap maintenance. The usable life period of second-hand ships will be sufficient for the Turkish Shipping to pass it's development stage. Thereby quick acquisition of a fleet with limited funds will only be realized by this way.

FIGURE IV C1

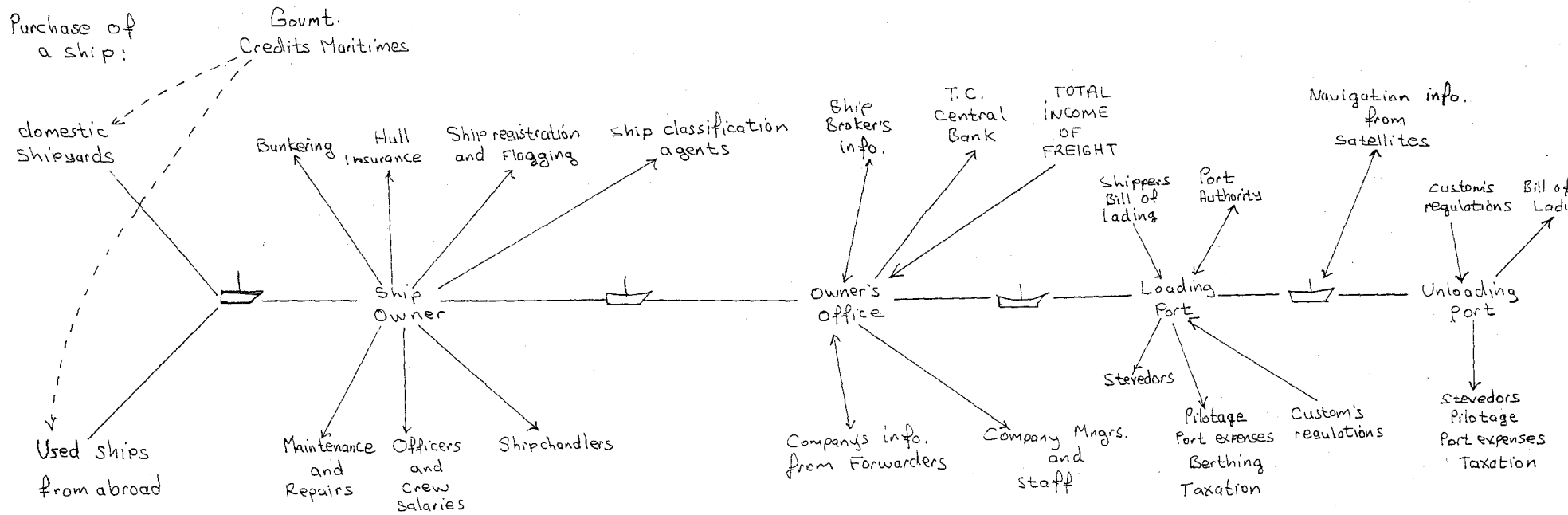


THE STRUCTURE OF THE TURKISH SHIPPING SECTOR



PROCESS FLOW OF THE SHIPPING CREDIT APPLICATIONS
IN TURKEY

FIGURE IV.C3



INFORMATION AND CURRENCY FLOW IN A TURKISH SHIPPING SYSTEM

V. FIELD RESEARCH

A set of standart questions were prepared in the form of questionnaire (look appendix C). Then eight major Turkish shipping firms were interviewed and asked to fill up these questionnaires in the face to face interviews. (In appendix C, tables in pages 116, 117, 118).

Results of these interviews were not completely satisfactory in terms of compaling a statistical source. However, they were helpful to show the new issues in the firms base.

The following points are the general results of the interviews:

- (1) Out of the 45 managers researched, 20 of them were graduates of Yüksek Denizcilik Okulu and holders of bachelor degree in Ship Officership.

There was also six retired naval officer; six bachelor degree holders in business administration; bachelor degree holders from other disciplines are: four in economics; three from abroad; two in law; one in mechanical engineering; one in political science and two managers were without degree.

- (2) Managers usually read the international maritime periodicals (seatrade, Fairplay, Lloyds gazette) and only two of them has joined the international shipping conferences in last year.
- (3) 90 percent of the firms interviewed has increased their capacities recently.
- (4) None of them answered to the question of last year's figures about the carried tonnage and profit or loss.
- (5) Most of the managers didn't know their cost structure exactly. They only gave comments about the crew cost and capital cost.

- (6) They were all agree that in recent years, governments were more helpful to shipowners by following new maritime policies. But, they demand more help from the government in reducing interest rates and as a liason or coordinator in domestic and foreign markets.
- (7) Maintenance policies of the companies were generally geared to the repair when there is a break-down. Only two firms had the preventive maintenance. Other two firms had the preventive maintenance of only important items.
- (8) Except two of the firms interviewed, the firms were not aware of their foreign competitors and only relay to the foreign shipbrokers as the major source of information for the international cargo moves.
- (9) They were all agree in that the Turkish merchant fleet has not opened to foreign markets yet. The fleet is mostly geared for Turkey's imports and export trades.
- (10) The opinion of an insufficient Turkish fleet Capacity for acquining foreign trade markets was widespread among the shipowners⁽⁸⁾.
- (11) Common opinion was that, the Turkish coaster fleet is the leading carrier in the Mediterranean market.
- (12) Turkish firms had the only crew cost advantage against the competitors, while the competitors had advantages in many aspects, namely: in quality managers; in long-standing experience; have better information sources and financial power.
- (13) Most of the managers were agree in that the Turkish merchant fleet has consisted from old and inefficient ships which gives a big disadvantage to the firms in terms of fuel consumption, speed and reliability in markets with comparing to foreign competitors.

(8) Look appendix G for more information.

- (14) Other common opinion was that the Turkish merchant fleet must continue to expand to be able to gain new markets.
- (15) One manager has quoted that Turkey has capacity in young coaster fleet which is indicated by the market leadership in the mediterranean, but the government still continues to supply credit for this kind of ships and for large tankers when Turkish fleet needed Panamax type ships now. Therefore, he quated that the credit policy should be clearly set for the ship types, according to the trade needs.
- (16) One shipowner demanded that the government should seek new bilateral trade agreements with foreign countries.
- (17) One other shipowner has also stressed that almost everybody can take a shipcredit from government by mortgage, which has caused a lot of new entries leading many small shipowners who really didn't know and not aware what shipping is. He also added that? this has resulted with the waste of national scarce resources. Therefore the feasibility reports for the credit application should be very good prepared and the firms structure should be investigated before giving the credit.
- (18) One manager has quoted that, ship owning is a long-term commitment, a shipping company should be reliable and should have outstanding experience to be able to recognized in international markets. A shipping company should have clear objectives and marketing strategies and should be specialized in certain shipping markets instead of buying one or two ships from every kind (tanker, bulk carrier, dry cargoship, product carrier, ro-ro... etc.)

In addition to the results of the above questionnaires the following problems has been discovered in the verbal interviews with Istanbul Chamber of Shipping and other shipping sector managers:

- (19) The need of coordination among the Turkish shippers and carriers and, preplanning of the goods to be carried was stressed.
- (20) Turkish shippers were even not aware of the application of trade terms. Such as C.I.F.; F.O.B.; etc. and therefore incurring a lot of additional costs when using foreign carriers.
- (21) Shipping sector needs a quality people for their head-offices and for ship crew. Current seamen schools are not sufficient for this. There is an urgent need of a merchant Marine Academy.
- (22) To solve the wage problems of seamen, the income tax they pay from their salaries in foreign waters to the Turkish Government should be removed away.
- (23) Majority of the shipping firms has severe financial problems in paying capital costs and maintaining operating capitals.
- (24) Port authorities should not charge the shipowners according to their monopoly rates, while the service was not given to the shipowner in question.
- (25) Transportation tax and harbour due's consisting a big financial burden for the shipowners, they should also be removed away.
- (26) International trade agreements should be followed up to date and the interests of the Turkish shipowners should be preserved in the agreements.

- (27) Incentive payments should be given to the ships which earn foreign revenue as a cross trader in foreign waters, thereby pushing the fleet to the world shipping markets.
- (28) Second-hand ships purchased from abroad or ships built in Turkey should easily be sold to domestic or foreign interests without any bureaucratic interference. To be able to gain new foreign markets a special privilege (in terms of a currency transfer) should be given to the Turkish firms in opening new sales agents in foreign countries.
- (29) Turkish ports should be brought to a modern appearance, in terms of decreasing ship time; loading and inloading speed; speedy cargo turnaround of storage areas and a modern management.
- (30) Modern and reliable data base center should be connected to each port and should be fed with up to date informations from each port to obtain a precise statistics of Turkish shipping.
- (31) The bureaucratic custom problems which Turkish oceangoing ships always encounter each time in Turkish ports should be reduced to a minimum.

VI. RECOMMENDATIONS AND CONCLUSIONS

A. General

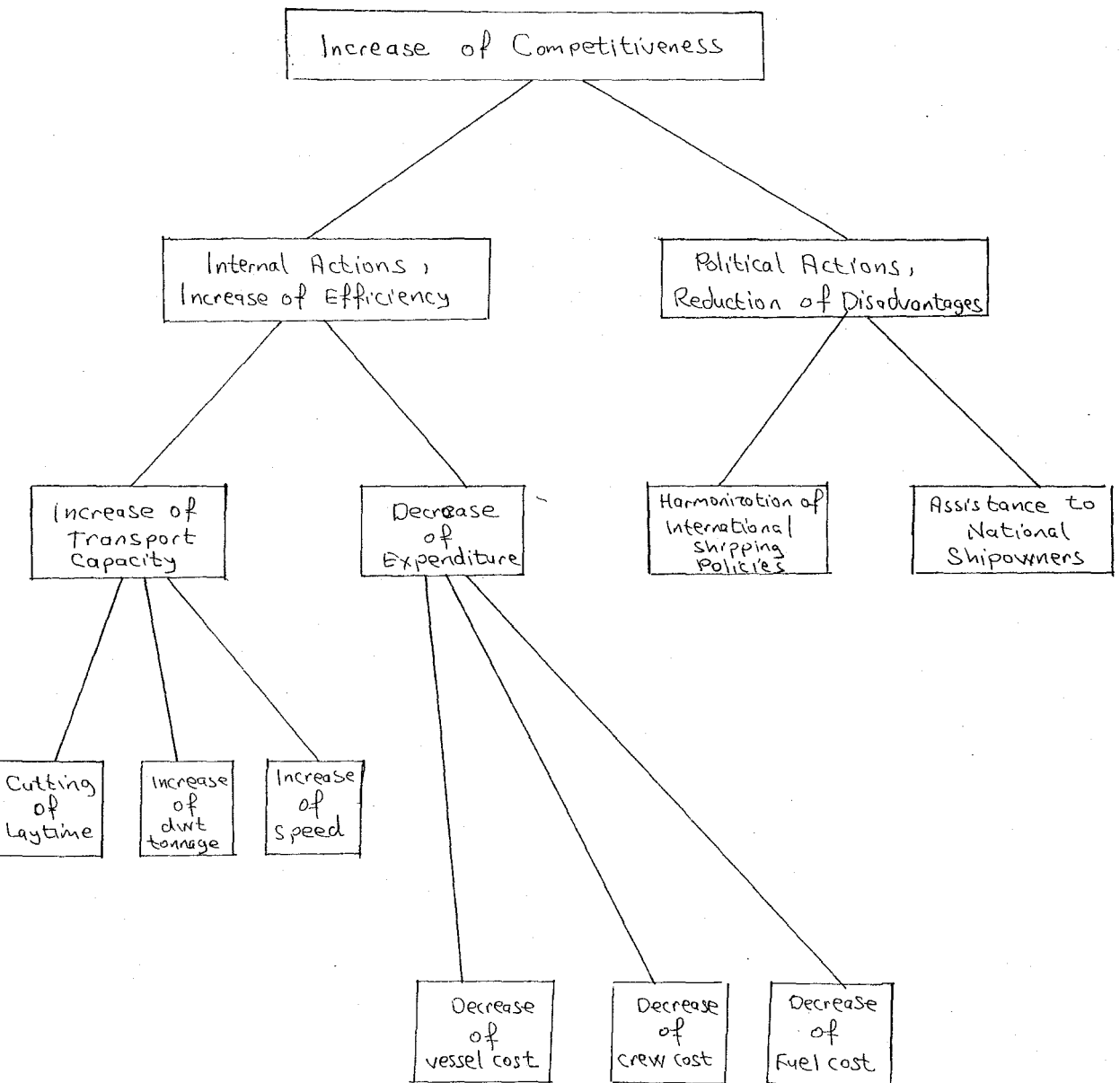
The competitive situation of a shipping company is dependent on two essential factors, the first one being its internal cost structure and the efficiency of its vessels, and emphasis must also be laid on influencing the government that actions are taken in order to reduce the disadvantages arising from the fact that foreign competitors are either being subsidized or being favoured by less stringent regulations. This can be done by pressing for harmonization of international shipbuilding and shipping aid policies to which preference should be given or, by launching legislation and assistance in favour of national shipowners in order to compensate for the disadvantages they experience (Figure III.D.1 in page 46).

In figure VI.A.1 page 83 an outline is given as to the possibilities open to shipowners in order to increase their competitiveness. Considering the left wing of the figure, reference is made as to improving the transport capacity of the vessels and as to reducing the cost of operation.

Transport capacity can be improved by shortening of laytime, e.g., by enlargement of the load units or by employing new and more efficient cargo-handling equipment. The cargo-carrying capacity of the vessels can be improved either by building larger ships or introducing new designs. Increase of vessel speed today is not very popular because of the high voyage cost (bunker cost) involved but the turnaround time can be improved by new organization of the sailing schedule. A lot of further examples for improvement of transport capacity and productivity of the vessels could be mentioned is the planned introduction of round the world container services which Israeli shipping is experiencing

FIGURE VI.A.1

Range of Actions to Increase of Competitiveness



Source: Institute of Shipping Economics, Bremen, 1984

Selected Countries fleet capacities and corresponding
gross shipping revenues in 1982 and 1983

Country	Fleet (1000) Tonnage (dwt)	Gross (mil.) Revenue (\$)	Gross Revenue own currency	Fleet Comments
Norway	(1982) 38 283	4 600		2/3 of the fleet is tankers
	(1983) 35 440	4 000		1/3 of it dry cargo carriers
Sweden	(1982) 6 580	1 500	13 000 mil. sw. kr.	1/2 of the fleet is tankers
	(1983) 6 105	1 535	13 300 mil. sw. kr.	1/2 of it dry cargo carriers
Finland	(1982) 3 400	600	4 183 mil. Markkaa	2/3 of the fleet is tankers
				others dry-cargo and passenger ships
W. Germany	(1982) 11 714	3 500	9 676 mil. D.M.	1/3 of the fleet is tankers
	(1983) 11 115			2/3 dry-cargo carriers
Denmark	(1982) 7 882	1 750	19 265 mil. kr.	62% tankers
	(1983) 7 837			38% dry-cargo carriers
Netherlands	(1982) 7 583	1 135	3 374 mil. Guilders	40% tankers
	(1983) 6 200	1 030	3 605 mil. Guilders	60% dry-cargo carriers
U.K.	(1982) 37 650	4 700	3 183 mil. £.	58% tankers
	(1983) 32 025			42% dry-cargo carriers
France	(1982) 18 427	2 200	19 777 mil. Fr.	70% tankers
	(1983) 17 288			30% dry-cargo carriers
Spain	(1982) 13 900	4 500	6 175 mil. pesetas (1970 value)	58% tankers
	(1983) 12 500			42% dry-cargo carriers
Israel	(1982) 900	841	20 403 mil. Shekel	42% Container ships
				58% other cargo carriers
Turkey	(1982) 3 422	(335) ¹ (163) ²		50% tankers
	(1983) 4 088	(442) ¹ (205) ²		50% dry-cargo carriers
Belgium	(1982) 3 356			
	(1983) 3 500			

Source: Compiled from the Shipping Statistics yearbook, 1984 and DIF records

1. According to Istanbul Chamber of Shipping Research

2. According to DIF records

today by its zim container and Eilat lines. Comparison of its total annual revenue with such a small fleet to Turkey's (Table VI.A.1) is an indication of an importance of containerization in shipping. The intention of such a service is to increase cargo-carrying capacity by using large vessels, to cut laytime, and to improve the turn-around time of the vessels by calling only at few and very efficient ports.

Expenditures can be reduced by economizing in various cost elements. Turkish shipowners are more advantageous than its competitors in savings on crew cost. Considerable savings on fuel cost are possible today when ordering a vessel with a fuel-efficient propulsion system.

From the comparison in Table VI.A.2 it becomes clear that the introduction of technological advance will not offer equal advantages to all ship types since the amount of savings will differ according to the cost structure of the various types. And further, the amount of savings may be high enough to induce the one shipowner to replace his old tonnage by newbuildings and may possibly not be high enough to induce other shipowners to make investments. It is self evident that the shipowner must always have a close look at developments affecting the efficiency of his vessels and he must quickly react to developments if necessary.

The major problem which has found in many Turkish shipping companies today is the management problem. They are in need of a quality top and middle managers who will be able to analyze the firms strategic financial and marketing problems and fast processing of information to give ontime decisions. They have to know their competitors by obtaining continuous informations from the world shipping markets. They should also follow an aggressive marketing policies to obtain new market niches by using their crew cost advantages.

TABLE VI.A.2

Comparison of fully built-up trading cost 1981 of various cargo vessels percentage shares

vessel type	Capital cost	Operating cost	Voyage cost	Total
General Cargo Vessel	42	24	34	100
Container Vessel	59	20	21	100
25,000 dwt Bulk carrier	40	23	36	100
60,000 dwt Bulk carrier	43	19	38	100
110,000 dwt Bulk carrier	42	18	40	100

Source: Drewry (1982) p.66

A shipping company is not just assets to be bought and sold or moved around on a vast global monopoly board. It is people first and foremost skilled professional people who need a climate in which the fast decisions necessary in the shipping business can be taken. "if you are in the freight business, you should stand close to the freight" (5)

B. Implications for the Turkish Government Policies

Turkish Government should pursue the following actions to be able to make Turkish shipping and Turkish foreign trade competitive with the rest of the world:

- (1) It should assume a responsibility in the task of coordination of shipping firms with the major public and private shippers.
- (2) It should seek bilateral trade agreements with other countries in the world.
- (3) It should finance those ships which are forecasted ship types of Turkey.
- (4) A new civil Merchant Marine Academy should be established to train quality officers, ship managers and seamen, instead of relying current Naval Academy which is mostly geared to train warship officers.
- (5) Tax burden on seamen and unnecessary dues on shipowners should be reduced.
- (6) The most important one's are: the port development (in terms of physical and management aspects); the reliable statistical data base establishment and the modernization of custom's bureaucratic obstacles⁽⁹⁾.

Turkey should consider efficient large local ports instead of too many small inefficient ports. Established modern ports will speed up the cargo handling and will make

(9) For better understanding of above implications look appendix H.

door-to-door container service is possible, thereby increasing the efficiency.

Turkey should also start planning for containerized shipping (Although it is high capital intensive investment). Between 1970 and 1981, an amazing seven billion dollars was invested for new containers in the world. World containerized trade is still rising rapidly 14.1 percent in 1980, 9.7 percent in 1981 and seven percent in 1982 ⁽⁶⁾. This means that 60 percent of world general cargo trade is now carried in containers. Modernization of custom formalities in Turkey will be major factor in achieving this efficiency.

A reliable statistical maritime data base for Turkey is an upmost need to pinpoint major shipping problems and to forecast future projections. It will also be helpful in related research areas and in determining governments maritime policy.

In conclusion, Turkey should seek to expand its fleet concurrent with the new export policies. Here, the timing of the fleet acquisition is upmost importance. Investments in recession are advisable (like current policy) in case vessel prices are low and consequent savings in capital cost are possible (purchasing second-hand ships).

A recession in shipping is not felt by all shipowners in the same way. Differentiation must be made between high-and-low cost operators. The higher voyage cost of old ships must be compensated by lower capital cost (Purchasing the vessels during unstable market situations at lower prices) and lower crew cost.

APPENDIX A

Industrial development need not go through the expansion of a shipping industry. However, it could be considered one of the most important industries for the developing countries. The industry was also considered important in the early development of existing developed countries.

When we look at Table VI.A.I in page 86, we can see from this table that, shipping revenues are still a good source of income for many developed countries. Even though these figures corresponds to the recession years in world shipping.

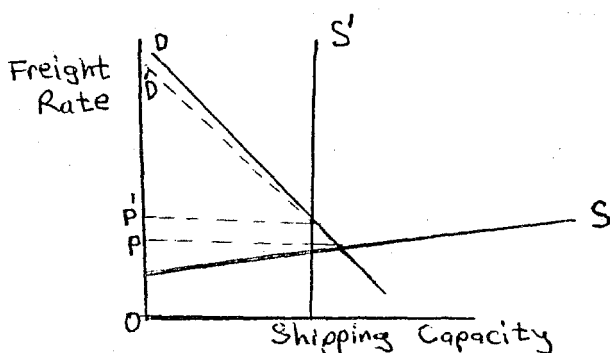
Shipping industry is important, because:

- 1) It involves expansion of heavy industries (ship building, ship repairing, ship mechanical systems production, steel industry expansion)
- 2) Opens a new area for employment.
- 3) The most important one is being the marketing and transportation vehicle for the country exports.
- 4) It helps to decrease the balance of payment deficits.
- 5) It encourages trade and communications.
- 6) Shipping industry is necessary for the national security of most countries.
- 7) It helps to the industrial integration.

APPENDIX B

Before the liner code of 40-40-20 rule, let say the Turkish shipping market was open to all the worlds' merchant fleet which accounts as much as 700 mil. dwt. capacity supplied (S), and the demand for this shipping capacity would be a Turkish foreign trade (34 mil. tons in 1983, p. 68). (D).

After the liner code, Turkish shipping market would be open to only Turkish flag ships, whose capacity is fixed (5 mil. dwt. in 1984) and represents only 0,76 percent of the total worlds' capacity (S'). But the demand for this capacity would not be much different from the previous situation and will be at least 80 percent of the total Turkish foreign trade which will account to 27 mil. tons (D').

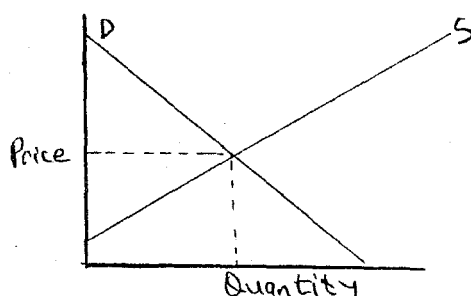


In the latter situation the supply curve of shipping would be represented by an almost a vertical line, which would have the property of being completely inelastic. That is, capacity supplied would not be responsive to freight rate changes. When the supply is completely inelastic. In these cases, an increase in demand in a competitive market will lead to a higher equilibrium price (OP'). Therefore, after the liner code there will be an upward pressure on the freight rates.

Note: Decrease in demand will be much less than the corresponding decrease in supply. Therefore will be an increase in the equilibrium price.

APPENDIX C

Economic theories of supply and demand are effective in determining these factors. As we know from the economics, supply and demand will determine the price in a competitive markets.



Before the equilibrium price, buyers will tend to drive price upwards by competing each other, and sellers or suppliers were competing against each other in an attempt to sell their goods, tending to drive price downwards. Only when equilibrium has been reached have opposing forces cancelled each other out.

Economic theories of supply and demand are also important in the factors affecting the demand for grain imports:

- a. Quality and quantity produced in exporting countries will be effective on the supply of grain, which consequently will change the world grain prices.
- b. Level of grain stocks and production shortfalls will affect the demand and supply of grain respectively. Consequently price change will occur.
- c. Decrease in the income levels will consequently reduce the demand for meat and increase the demand for grain imports.

APPENDIX D

Shipping costs are the costs incurred by the shipping companies. It can be classified in many respects. But mainly it consists from three different cost items:

- 1) Operating cost (crew, maintenance, repairs, insurance, stores)
- 2) Voyage cost (fuel, port and canal dues)
- 3) Capital cost (depreciation, interests payable on the loans, return on capital)

Voyage and operating costs are considered as variable costs. These two costs should be covered if a company wants to reach a break-even point, and the integration of these points will give the break-even cost curve (Figure III.D.I. p. 53). Capital cost is considered as a fixed cost, and the sum of all these three costs will give a fully built up costs.

APPENDIX E

ECONOMIC COMPARISON BETWEEN A NEWBUILDING AND
AN EXISTING VESSEL

	<u>Newbuilding</u>	<u>Existing Vessel</u>
Deadweight tons	33.000	27.000
Service speed (knots)	14	14
Bunker consumption		
Tons per day high viscosity fuel (HVF) at sea	21	32
Tons per day marine diesel oil (MDO) at sea	0	2
Tons per day marine diesel oil (MDO) in port	2	2
Tons cargo at draft of 33 feet	30.000	25.000

Placing the vessels on a trans-Atlantic trade with 11.3 trips per year results in the following costs:

	<u>Newbuilding</u>	<u>Existing Vessel</u>
Annual Expenses		
Port changes	\$ 500.000	\$ 450.000
Bunkers (fuel)	900.000	1.500.000
Operating costs	1.600.000	1.800.000
Financing costs	<u>2.000.000</u>	<u>600.000</u>
Total	\$ 5.0 million	\$ 4.35 million
Total tons of cargo per year	340.000	280.000

Annual Profit (Loss) Analysis (Exclusive of Taxes)Poor Market

Revenue (\$ 10/ton)	\$ 3.4 million	\$ 2.8 million
Total expenses	<u>5.0</u>	<u>4.4</u>
Profit/(Loss)	(\$ 1.6 million)	(\$ 1.6 million)

Normal Market

Revenue (\$ 15/ton)	\$ 5.1 million	\$ 4.2 million
Total expenses	<u>5.0</u>	<u>4.4</u>
Profit/(Loss)	\$ 0.1 million	(\$ 0.2 million)

Good Market

Revenue (\$ 20/ton)	\$ 6.8 million	\$ 5.6 million
Total expenses	<u>5.0</u>	<u>4.4</u>
Profit/(Loss)	\$ 1.8 million	\$ 1.2 million

APPENDIX F

FREE PORT ZONES

A "free port" is an isolated, enclosed area in or adjacent to a port of entry without a resident population. Furnished with the necessary facilities for loading and unloading, for supplying fuel and ship's stores, for storing goods and reshipping them by land and water, it is an area within which goods may be landed, stored, mixed, blended, repacked, manufactured and reshipped without payment of duties and without the intervention of customs officials. The purpose of the free zone is to encourage and expedite that part of a nation's trade which its government wishes to free from the restrictions imposed by customs duties.

The most successful free ports are those which are strategically located by reason of geography and ship service to serve as points of transshipment. In Turkey, Mersin and Antalya were selected as free ports. The implications of this ports for Turkish shipping and Economy could be assessed by a careful analysis of the anticipated beneficial affect of induced transshipment trade or desirable port industries utilizing the port, the availability of a sufficient area, and the likelihood that income from the land rentals, shipping, and cargo revenues will offset the cost of creating and guarding the area. However, it is anticipated that the total increase in Turkish Mediterranean Trade and the revenues will offset the cost of creation of these free ports.

APPENDIX G

In 1983 the total Turkish imports were 26 mill, tons and exports were about 7,5 mill. tons by sea (Table IV.B.2 p. 68), which totals to 34 mill. tons. Whereas the total Turkish merchant fleet capacity in 1983 were 3 mill. tons. Annual average number of ship trips were differing between 3 to 9, according to the ship's routes, sizes and trade characteristics. We can assume this is being 5 for Turkish ships. One complete trip would be 2 transportation capacity. Then the total annual capacity would be:

$$5 \times 2 \times 3 = 30 \text{ mill.tons}$$

Which is less than the aggregate trade of 34 mill.tons. In addition, DIE records of 34 mill.tons trade is much less than the real trade figures which has deliberately lost in the ports for tax reasons. This above arguments indicates that, Turkey needs an additional fleet capacity.

Turkey's Gross National Product (GNP) is about 50 billion dollars, and it can export 7 billion dollars of it which is only 15 percent of its GNP. The new government has realized this surplus potential and thinking to extend Turkey's foreign trade by opening new markets. These future plans also support the decision of "Insufficient Turkish Fleet Capacity".

APPENDIX H

Implications for the Turkish Government Policies

Referring to these implications:

- 1) Implicitly assumes why Turkey can't carry all its foreign trade.
- 2) Increase foreign markets.
- 3) Planned expansion of the shipping capacity.
- 4) Better trained Crew.
- 5) Increase the operating leverage of Turkish Shipping Companies who have a difficulty in maintaining cash. Increase the motivation and consequently efficiency of Turkish seamen.
- 6) Modern ports for better cargo handling to increase the efficiency.

APPENDIX K

SUMMARY OF MAJOR FLAG DISCRIMINATION AND
CARGO RESERVATION LEGISLATION

SOUTH AND CENTRAL AMERICAArgentina

Current legislation states that 50 % of exports and 70-75 % of imports should be carried in national flag vessels. But the Argentinian authorities are known to favour the carriage of 80 % of all trade in national flag vessels. The following categories of goods must all be transported in national flag vessels:

- i. Government cargoes import and export, purchases by official departments, state enterprises and dependencies, municipal and provincial governments and companies in which the state has minimum 50 % interest.
- ii. Imports or exports financed by any credit institution of the state or enjoying any form of import duty reduction, exchange control relief or tax concessions from the government.
- iii. A minimum of 50 % of all goods imported or exported under any international commercial trade agreement. In addition the following measures promote the use of the national fleet by Argentinian traders.
- iv. Shipments in national flag vessels are exempt from consular and similar fees.
- v. Export credits granted by Argentine banks may include 85 % of the freight element, if national vessels are used.

- vi. The government must approve all freight conference agreements which involve Argentina's overseas commerce.
- vii. Government can deny port facilities to any vessel operating outside approved agreements.
- viii. The government refunds 5 % - 30 % of the value of manufactured exports, based on FOB value for goods shipped in foreign vessels and CIF value for those shipped in Argentine vessels.
- ix. Argentina has cargo sharing agreements on a 50/50 basis with Brazil, Cuba, Chile, Uruguay, Peru, USSR and China.

This series of incentives and penalties make it virtually impossible for Argentinian shippers to use non-Argentinian ships. Argentina is now attempting to apply the same measures to European shippers who trade with her.

Bolivia

When the Bolivian fleet reaches sufficient size:

- i. 30 % of imports and exports must be carried by Bolivian national lines. This figure rises to 50 % as the fleet capacity increases.
- ii. Government and official imports and exports of basic foodstuffs must be carried in national flag vessels.
- iii. The Bolivian/Uruguay trade agreement contains a discriminatory shipping clause.

Brazil

Flagship preference law implemented 1969, to secure 100 % for government goods and 50 % shares for coffee and cocoa:

- i. Imports and exports by federal state, municipal or public administration departments, including public enterprises and mixed economy firms.
- ii. Imports and exports which have special tariff concessions, preferential internal fiscal treatment or preferential credit facilities, or financed by national banks or international loans.
- iii. Advantageous rates of exchange for carriage costs for national lines.
- iv. Incentives in form of fiscal accounting measures given to exporters using Brazilian flag vessels.
- v. Action in certain circumstances against lines not in conference or not parties to agreement with Brazilian lines.
- vi. Ultimate division of trade on a bi-lateral basis, with only a small share for third flags.
- vii. The regulations of conferences to ensure increased carriage of cargoes by national flag vessels e.g. The northbound trade from Brazil to United States shared by carriers on a 40/40/20 basis, i.e. 40 % for Brazil, 40 % for US and 20 % for 3rd. flags.
- viii. A number of bi-lateral trade agreements contain 50/50 cargo sharing clauses; e.g. Peru, Chile, Argentina, Mexico, Uruguay, Algeria. Maritime agreements have been signed with USSR, Poland, Romania and German Democratic Republic.
- ix. All exports of paper (excluding special paper and pulp) must be carried in Brazilian ships where special arrangements provide otherwise.

- x. Foreign shipping companies commonly operate from Brazil if they are members of a conference, but only those conferences of which C.N. Lloyd Brasileiro is a member are approved.

Chile

Established in 1969, the law implementing 100 % of government goods by national lines:

- i. 50 % of imports and exports other than nitrate and most ores, bulk cargoes and oil.
- ii. Cargoes of the state, state-owned enterprises and all bodies in which the state has an interest or part-interest, must be carried in the state-owned line or failing that- a Chilean-owned /chartered vessel.
- iii. Bilateral trade agreements with 50/50 cargo sharing clauses, e.g. Argentina, Brazil.
- iv. Chile/Peru agreement gives each nation's vessels access to the other's coastal trade.
- v. Decree 466 provides tax and other incentives for building up national fleet.

Colombia

Established in 1969 the cargo preference act under which 50 % of two-way trade is reserved for national flag carriers:

- i. A minimum of 50 % of general import and export cargoes on established routes served by Colombian vessels.
- ii. Imports to be on an FOB basis, freight and insurance to be paid in Colombian currency, of which a proportion is not transferable.

- iii. Agreement with Argentina and Uruguay contains 50/50 cargo sharing clauses.
- iv. Ratified in 1974 the LAFTA Water Transport Agreement which brought it into operation.
- v. Latin American shipowners registered in Latin American Association of shipowners can participate in transportation of reserved cargoes if their countries offer reciprocal rights to Colombia.

Ecuador

Enacted in February 1972, the law providing for 30 % bulk cargo and 50 % oil to be carried by national flag vessels:

- i. Imports and exports which are government property or state-owned enterprises to be carried by nationally owned vessels. 50 % may be transported by partner country provided it is done on the basis of reciprocity.
- ii. Colombian flag vessels are considered equivalent to Ecuadorian flag vessels for purposes of cargo preference, as are foreign lines that have pooling arrangements with Ecuadorian flag shipping companies.

Guatemala

Adapted in 1971, the tax-exemption measures for import cargoes carried by national carriers under the industrialisation promotion act:

- i. Export of timber or other specific goods to the US.
- ii. Goods imported duty free Industrial Development Laws.
- iii. Government imports.

- iv. 100 % surcharge on imports from countries with which Guatemala has an unfavourable trade balance, unless they are carried on Guatemalan ships or associated lines.

Nicaragua

Established in March 1972, the cargo reservation law enforcing the "Ship Nicaragua" policy which calls for lifting 50 % of the country's trade goods by national flag ships.

Paraguay

50 % of all non-LAFTA cargoes reserved for national flag vessels.

Peru

"Ship Peruvian" policy strengthened from 1970 on words in order to gradually have national flag shares:

- i. 20 % of all exports and imports between Peru and other countries, rising to 50 %.
- ii. All imports and exports of state and parastatal entities.
- iii. Imports exempt from customs duty must be carried in national ships when these are available.
- iv. Peru/Argentina agreement contains a 50/50 cargo sharing clause similar agreement with Brazil.
- v. Chartered vessels considered as Peruvian for purpose of cargo reservation.

Uruguay

- i. The reservation of 50 % of Uruguayan seaborne foreign trade, and 100 % of imports, for Uruguayan-flag vessels. Foreign vessels can be used if no Uruguayan-flag vessel is available, and provided that the vessel is included in international maritime transport exchange agreements between Uruguay and the flag country.
- ii. Imports carried in foreign ships not in conferences in which Uruguayan ships operate incur an additional surcharge of 10 %, when national flag ships were available, and 5 % when they were unavailable.
- iii. The government is empowered by law to extend the above requirement to exports that are tax exempt or financed by the national banking system.
- iv. For national flag vessels there is a 25 % reduction in wharfage and docking fees. Trade with LAFTA countries is considered to be coastal trade and cargoes from those countries are exempt from 12 % consular fees if arriving on Uruguayan vessels.
- v. Imports for use by state entities, as well as certain exports, are entitled to certain fiscal exemptions if cargo is shipped in Uruguayan flag vessels.
- vi. 50/50 cargo sharing agreements with Brazil, Argentina and Colombia, and an agreement with Bolivia contains a discriminatory shipping clause.

Venezuela

Cargo reservation law implemented 1974:

- i. Duty free imports if carried in national flag, government owned vessels.

- ii. Government-controlled cargoes, reserved 100 % for Venezuelan vessels. If none available, other Venezuelan flag vessels. Foreign flag vessels participate in reservation only on the basis of reciprocity.
- iii. General cargo 50 % for national flag vessels.
- iv. Bulk cargo-not less than 10 % imports and exports for national flag vessels; rising to 50 %.
- v. Agreement with US whereby up to 50 % of cargo is made available to national flag vessels.
- vi. Potential legislation for reserving proportion of oil exports in national flag vessels.
- vii. Concession or port changes to national flag vessels.

Latin American Free Trade Area (LAFTA)

Cargoes reserved for members' vessels in intra-regional trade. Limited participation by third flag vessels.

ASIA

Burma

Nationalised shipping agencies favour national flag vessels.

India

US Export-Import Bank cargoes which are not carried in US vessels to be carried in national flag vessels;

Nationalised shipping agencies favour national flag ships.

- i. India/Iran
 India/Poland
 India/Rumania
 India/USSR
 Trade agreements contain "best endeavour" clause to allocate bi-lateral cargoes to flags of either nation;
- ii. India/Egypt
 India/Bulgaria
 India/GDR
 India/USSR
 Trade agreement contains 50/50 clause in respect of bi-lateral cargoes.
- iii. Shipments for government account are normally carried in national flag ships.

Indonesia

- i. Export of Indonesian goods must be channelled through the Directorate of shipping which gives priority to national shipping companies.
- ii. Various administrative pressures and state cargo booking procedures have favoured national ships, e.g. 40 % of total trade to Europe must be carried by Indonesian ships and no freight increase can be effected without government approval.
- iii. 45 % cargoes from Europe to be carried in Indonesian ships.
- iv. Trade between Indonesia and Singapore, carriage restricted to the fleets of the two countries.
- v. 20 % of timber exports to Japan to be in national flag vessels.
- vi. Trade agreement with USSR includes a "best endeavour" clause to allocate bi-lateral cargoes to flags of either nation and other agreement with USSR contains a 50/50 cargo sharing clause.

Iraq

- i. Iraq/USSR : trade agreement providing for transport of Soviet goods to Iraq or Iraqi bottoms.

Pakistan

- i. 50 % of World Bank and US aid cargoes in national flag vessels.
- ii. Joint Iran/Pakistan shipping company established to carry 100 % of crude oil imports.
- iii. Government intention to allocate most of the cargo it controls to either the National Shipping Corp. or the Pakistan Shipping Corp.

Philippines

Presidential decree 667-1975 provides for incentives to the shipping industry by granting a variety of deductible items for income tax purposes:

- i. Cargoes financed or guaranteed by the government must be shipped in Philippine flag vessels when available (import licences for government cargo will only be issued when it is to be transported in national flag vessels. However, due to unavailability of national flag vessels a large amount of cargo goes to non-national flag vessels).
- ii. Incentives to promote use of national flag vessels are given. National flag vessels and those which are owned, controlled or chartered by Philippine nationals share cargoes 50/50 with vessels of the country with which they are trading.
- iii. Exporters of Philippine products can deduct from taxable income 150 % of amount of overseas freight

expenses and arrastre changes in Philippine ports if national vessels used. Some provisions for importers of raw materials and intermediate products.

- iv. Enterprises registered with the Board of Investment are allowed to deduct from taxable income 200 % of shipping costs if national vessels utilized.
- v. Imports of US agricultural products in excess of the 50 % required to be carried on US flag vessels, must be carried on Philippine flag vessels where they are available.

Saudi Arabia

Royal Decree requires national flag vessels to be used if they are equal in ability, quality and performance.

Singapore

The Singapore Shipping Association and the Indonesian Shipowners Association have a bi-lateral agreement containing a 50/50 cargo sharing clause for members of the associations.

South Korea

- i. Government encourages use of Korean-flag ships by awarding some government procurements on an FOB rather than a CIF basis so that Korean owners can compete on a more equal basis. (Relatively large ratio of cargoes is carried by Korean oceangoing merchant fleets).
- ii. Agreements with USA, W. Germany and Japan on carriage of cargo.
- iii. Crude oil, iron ore, logs, grain and fertilizers are to be imported by national flag vessels.

- iv. 100 % imports and exports to be carried on national flag vessels according to the shipping promotion law.
- v. Preferential interest rate for importing raw materials for export production is extended to cover freight costs when the imports are carried on Korean-flag vessels.

Sri-Lanka

- i. Regulations in principal trades of its national line to reserve a major part of imports.
- ii. Freight Bureau established to give preference to national flag vessels.
- iii. Promotional rates for exporters.
- iv. All imports for Government departments and state corporations are to be carried in national flag vessels.

Thailand

- i. Transport of state-financed goods must be carried out by national flag vessels.

AFRICA

Algeria

- i. National flag vessels and French flag vessels carry cargo between Algerian and Metropolitan French ports.
- ii. Cargo sharing agreements or either a 50/50 basis or on the UNCTAD 40:40:20 basis have been signed with China, Bulgaria, France, GDR, Guinea, Republic of Cape Verde and the USSR.

Egypt

- i. 30 % of exports and imports to be carried in national vessels.
- ii. All organizations in which the Egyptian government has a 25 % + interest give priority to national flag vessels.
- iii. All imports and exports controlled by national public institutions, organisations and affiliates are arranged through the Egyptian Company for Maritime Transport.
- iv. A number of bi-lateral agreements contain discriminatory shipping clauses including those with the USSR, India and Rumania.

Gabon

- i. Government Decree of September 1978 confirms division of cargo using UNCTAD's 40:40:20 formula. Government or quasigovernment cargo to be expressly reserved for national flag vessels.

Ghana

- i. Discriminatory shipping and insurance clauses annexed to import licences require importers to use vessels of the state-owned line.
- ii. Ghana Supply Commission (government purchasing organization) orders all cargoes, which are then handled by the Black Star Shipping Line as agents.

Ivory Coast

- i. Bi-lateral cargo sharing agreements with France, Belgium and W. Germany.
- ii. 40:40:20 cargo sharing agreement with Senegal.

- iii. Talks with Cameroon for agreement similar to that of ii.

Marocco

- i. 40% of imports and 30 % of exports (of specific commodities) reserved for national flag vessels.
- ii. All phosphate exports planned to be carried in Moroccan or Moroccan-chartered vessels.

South Africa

All cargoes from Europe to South Africa which are for government use to be shipped in vessels operated by the South East African Conference lines, of which SAFMARINE, the South African national line, is a member.

NORTH AMERICA

U S A

- i. Agreement with USSR that no less than one third of the total weight of cargo carried between the two countries should be carried by the national flag vessels of each contry.
- ii. Agreement with Brazil gives national flag carriers of each country equal access to government controlled cargoes loaded between them.

Mexico

A bill for the development of the Mexican merchant fleet formally took effect from the middle of 1981. The bill provides for:

- i. Fiscal incentives to build ships in home yards.
- ii. Cargo reservation for priority to be given to national vessels in the carriage of government-financed or supported cargoes.
- iii. Authorises the government to negotiate bi-lateral or multilateral agreements, with countries having significant importance in Mexico's foreign trade to ensure the equitable distribution of cargoes.
- iv. Provide tax incentives to shippers using national carriers.

Legislation already passed includes:

- i. 25 % subsidy of freight rates to Mexican producers shipping their products to areas bordering USA, Guatemala and British Honduras.
- ii. 50 % bunker subsidy.
- iii. Bi-lateral agreements with Brazil, Bulgaria and USSR which include cargo-sharing clauses for cargo division on a 50/50 basis.

EUROPE

Belgium

Holds cargo-sharing agreement with the Ivory-coast.

France

- i. 50 % of coal imports for national flag vessels (waivers frequently granted).
- ii. National flag vessels have "de facto" monopoly on traffic between Metropolitan France and overseas departments.

- iii. 50 % of cargoes between Metropolitan France and Algeria and Tunisia are reserved for national flag vessels.
- iv. Government has statutory powers to restrict the freedom of French shipowners to charter their own and/or foreign ships on the grounds of national interest.
- v. Cargo-sharing agreements with Ivory Coast and Senegal.

Greece

- i. Shipping agreements with USSR, Poland and China provide for development of bi-lateral relations.
- ii. Agreement with Syria for cooperation in shipping.

W. Germany

- i. Agreement for cargo-sharing with Ivory Coast.

Portugal

- i. 50/50 division of cargo with USSR. This does not interfere with the right of vessels of other countries to participate in the trade.
- ii. Cargoes shipped by public sector companies to be carried by national flag vessels or by vessels chartered by Portuguese companies. Up to 50 % of these cargoes may be carried on vessels of the other country if reciprocity has been established.

Spain

- i. Various imports such as petroleum, tobacco and cotton are restricted to national vessels through government monopolies. Restrictions on carriage of imports of these commodities must be lifted on accession to the EEC.

- ii. When national flag vessels are subjected to measures contrary to free competition by another country they may reciprocate in similar terms.

Turkey

- i. Public sector cargoes must be carried in national flag vessels.
- ii. The Maritime Bank encourages exporters and importers to use national ships for commercial cargoes where available.

APPENDIX L

QUESTIONNAIRE

SERVICE SECTOR:

FIRMS NAME :

Address :

Telf. No :

I. Names of the people interviewed:

	<u>Name and Surname</u>	<u>Position</u>
a.		
b.		
c.		
d.		

II. The quality of management

1. Managers and their education level

	<u>Name and Surname</u>	<u>Position</u>	<u>Education</u>	<u>Experience (year)</u>
a.				
b.				
c.				
d.				
e.				

II.2. How top managers evaluate their spare times?

- a. The periodicals and publications which top managers follow:

<u>DOMESTIC</u>	<u>FOREIGN</u>
1.	
2.	
3.	
4.	
5.	

II.3. International seminars, conferences and meetings which top managers attended within last year:

<u>TYPE OF ACTIVITY</u>	<u>NUMBER OF ATTENDANCE</u>	
	<u>DOMESTIC</u>	<u>FOREIGN</u>
a. Seminar		
b. Meeting		
c. Conference		

II.4. The recent developments which could affect the firms' future:

- | | |
|---|--------------------------|
| a. Additions to the quality of the firm's service | ☐ |
| b. Move to the new types of service | ☐ |
| c. Increase of the capacity | ☐ |
| d. Penetration of new markets | ☐ |
| e. Findings of new financial sources | ☐ |

II.5. Please indicate the percentage share of the main cost inputs in total cost

<u>Main cost inputs</u>	<u>Percentage share in total annual cost</u>
capital cost	
overhead cost	
operating cost	
voyage cost	

II.6. Which policy do you follow for the maintenance and repair of your ships:

- ☐ preventive/protective maintenance
- ☐ repair when there is a break-down
- ☐ other (explain)

II.7. How do you follow your domestic and foreign competitors:

Competitor following style

- ☐ Using professional periodicals
- ☐ By international commercial firms
- ☐ By international shipping brokers
- ☐ other (explain)

III. Marketing Analysis

III.1. Do you believe that the Turkish Merchant Fleet has opened the international shipping markets and gained a sufficient share?

Yes ☐

No ☐

explain

III.2. What do you think about the reasons of insufficient market share from the world shipping markets?

- ☐ Using bilateral agreements or conferences world shipping markets are already shared.
- ☐ The competitiveness level is high in shipping markets.
- ☐ Information network and information process of the Turkish firms is behind the state of the art.
- ☐ Capacity of the Turkish Merchant fleet is insufficient to compete with others.
- ☐ Other (explain)

III.3. What do you think about the advantages and disadvantages of the Turkish firms in terms of competitiveness:

- ☐ Unit costs of other firms are lower than Turkish firms.
- ☐ The financial power of the competitors is higher to stand longer price cuts in the way of competition.
- ☐ There has not been a strong marketing department of The Turkish Shipping Firms and also the manager's lack of knowledge in marketing and financial analysis.

IV. Government Shipping Policies

IV.1. Do you think the government is interested and helped to the problems of The Turkish Shipping sector?

Yes ☐

No ☐

IV.2. Are there new problems to be solved and more policies to be put by the government?

explain:

IV.3. Should Turkish Merchant Fleet continue to expand?

Yes ☐

No ☐

IV.4. Do you think the shipping investment is profitable according to the current interest rates?

Yes ☐

No ☐

RESULTS OF THE FIELD RESEARCH

Name of the Company	Managers and Education level	Periodicals and Publications which Managers Follow	International Seminars Conferences Attended	The Recent Developments which could affect the firms future
1. D.B. Deniz Nakliyatı A.Ş.	Bachelors in Economics Bach. in Business Admin. Experienced ship Officers Retired Naval Officers	Fairplay Lloyd List Seatrade		• Moved to new markets Red sea and Far East Lines.
2. Zihni Denizcilik Grubu	Seven Bachelors in ship officership. General manager has bach. degree in marine engineering and masters in industrial eng. from Long Island N.Y.	Fairplay Lloyd List Seatrade Wall street Journal BIMCO Ship Broker	Exoship 84 N.Y. Exoship Hong-Kong Pasadonya Exhibition	• Increase of Capacity • Increase in the quality of service
3. Martı Denizcilik Grubu	One bachelor in Law one bachelor in Political science three bachelors of business administration one which from ODTU.	Fairplay Lloyd List Seatrade Marine Engineering Ship Managers	Exoship 84 N.Y.	• Increase of Capacity • Moved to the new markets
4. Sohtorik Denizcilik Grubu	One bachelor of Economy in Switzerland One bachelor of deck officership one bach. of marine engineering Gen. manager bach. of Law Turkey eight year experience in U.S.	Fairplay Lloyd List Seatrade		• Increase of Capacity
5. Anadolu Denizcilik Grubu	Two bachelors of Business Admin. One bach. of Mech. Eng. from BU. One bach. in deck officership One retired Naval officer	Fairplay Lloyd List Seatrade Ship Broker Naftiliaki		• Increase of Capacity
6. Denizcilik A.Ş.	One bach. in business admin. One bach. in social science One masters in Maritime Law from Sorbon university One masters in ship building Eng.	Fairplay Seatrade		• Increase of Capacity
7. Genel Denizcilik Nakliyatı A.Ş.	one retired naval officer one ship officer two bachelors in Economics	Fairplay Seatrade		• Increase in the quality of service
8. Moras Denizcilik A.Ş.	One bach. in business Admin. Two bach. in ship officership Top managers (owners) without a university degree	Fairplay		• Increase of Capacity

RESULTS OF THE FIELD RESEARCH

Name of the Company	Maintenance and Repair Policies	How do you follow the competitors?	Has Turkish Fleet gained foreign markets recently and is this sufficient?	What are the reasons of insufficient market share?	What are the advantages and disadvantages of Turkish firms?
1. D.B. Deniz Nakliyatı A.Ş.	repair when there is a break-down	- By international shipping brokers - No real marketing policy at all	No	Management Problem	- Competitors have younger ships - They have better management
2. Zihni Denizcilik Grubu	preventive maintenance of important items.	- By international shipping brokers - From the shipping market gossip - using periodicals	No	- Insufficient capacity - High competition	- Competitors have better fleet - They have good information sources - They have better financial power
3. Martı Denizcilik Grubu	- preventive maintenance of important items - repair when there is a break down of less important items	- By international shipping brokers - From the shipping market gossip - By employing sales representatives abroad	No	Insufficient capacity	- Turkish firms have lower crew cost - We have equal opportunities with the competitors
4. Sohtorik Denizcilik Grubu	preventive/protective maintenance	- By international shipping brokers - By using professional periodicals	No	Management Problem	Competitors know this shipping business much better than us
5. Anadolu Denizcilik Grubu	preventive/protective maintenance	- By international shipping brokers - By using professional periodicals	No	High Competition	Competitors have good management teams and long-standing experience
6. Denizcilik A.Ş.	repair when there is a break-down	By international shipping brokers	No	Insufficient capacity	- We are poor in financial and capacity aspects - competitor's unit cost is lower
7. Genel Denizcilik A.Ş.	repair when there is a break-down	By international shipping brokers	No	Management Problem	- They have better management - We have crew cost advantage
8. Moras Denizcilik A.Ş.	repair when there is a break-down	By international shipping brokers	No	Insufficient capacity	- We are poor in financial aspects - They are good in information processing

RESULTS OF THE FIELD RESEARCH

Name of the Company	What are the percentage shares of the main cost inputs in the total cost?	Is the Government helping to the shipping sector?	Are there new problems to be solved?	Should Turkish fleet continue to expand?	Do you think the shipping investment is profitable recently?
1. D.B. Deniz Nakliyatı A.Ş.	% 10 crew cost % 31 fuel cost	Yes, partly	• Government generated cargoes (i.e. Major Bulks) should continue to be carried by D.B.	Yes	Not for beginners
2. Zihni Denizcilik Grubu	% 31 fuel cost % 10 crew cost % 45 Capital cost	yes, for sure	• High interest rates • Need of seamen schools	Yes	• Not for new entries • Yes for old firms
3. Martı Denizcilik Grubu	% 35 fuel cost % 50 Capital cost	Yes	• More financial help from government needed • High interest rates	Yes	Yes, if you know the business
4. Sohtorik Denizcilik Grubu	% 50 Capital cost % 30 fuel cost	Yes	• Need of Marine information center	Yes	• Yes, if you know the business • Need long experience
5. Anadolu Denizcilik Grubu	% 50 Capital cost % 35 fuel cost	Yes	• Need of coordination between the major Turkish shippers and Turkish shipping companies	Yes	• Profitable investment for experienced firms
6. Denizcilik A.Ş.			• Need more financial help from government	Yes	• Not, with today's recession and high interest rates
7. Genel Denizcilik A.Ş.			• Need of Seamen schools • Better port management	Yes	• It depends to the operator
8. Moras Denizcilik A.Ş.			• More financial help from government needed	Yes	• If you have sufficient working capital to stand today's shipping recession.

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