

ECONOMIC ANALYSIS
OF
CHINA OCEAN SHIPPING CO.
1994 - 1997

BUREAU OF ECONOMICS
and
AGREEMENT ANALYSIS

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COSCO MONITORING REPORT - 1997

EXECUTIVE SUMMARY

Section 9 of the Shipping Act of 1984 ("1984 Act"), 46 U.S.C. app. 1708, empowers the Commission to determine whether the rates offered by a controlled carrier are unjust or unreasonable. Section 9(a) makes this a violation of the 1984 Act ["(n)o controlled carrier ... may maintain rates or charges ... that are below a level that is just and reasonable"]. Section 9(d) permits the Commission to issue an order to the controlled carrier to show cause why those rates, etc., should not be disapproved. If necessary, section 9(a) then authorizes the Commission, after notice and hearing, to disapprove any rates the controlled carrier has failed to demonstrate are just and reasonable.

The controlled carrier provisions of the 1984 Act prohibit state-controlled carriers operating as "cross-traders" in the U.S. trades from maintaining rates or charges below a level that is just and reasonable, generally measured against the rates charged by similar carriers. The major exception is for cargo moving in the bilateral trade between the country whose government owns the controlled carrier and the United States. To carry out these provisions, the Bureau of Economics and Agreement Analysis ("BEAA") maintains an ongoing monitoring program to identify and verify the status of controlled carriers, monitor their activities, and develop data relevant to enforcing the applicable statutory provisions.

As part of its monitoring program, BEAA has been tracking the growth and development of China Ocean Shipping Company ("Cosco") for several years. Generally, BEAA has observed Cosco's ambitious shipbuilding program and entry into new U.S. trades. While Cosco's market share of the world liner traffic is only about 4%, Cosco's share of the Asia to U.S. liner trade has

been much larger and continues to grow. Overall, Cosco is the ninth largest carrier serving the U.S. and third in the Northeast Asia to U.S. trade (which includes the bilateral trade between China and the U.S.). Traditionally Cosco, despite its size, has maintained rates and service below those of the premium conference carriers in the trades it serves. Its service, therefore, relies upon less time sensitive cargo and cargo assembled and consolidated by transportation intermediaries. BEAA's analysis indicates that Cosco's rate and service level has remained relatively constant vis-a-vis the conference carriers.

Cosco's overall growth, coupled with its recent entry into the U.S. - Northern Europe trades and the expansion of its U.S. to Mediterranean service suggested an enhanced monitoring effort. Nevertheless, because Cosco remains primarily active in the Asia to U.S. trades, the bulk of this analysis focuses on those areas. In particular, BEAA chose to look in depth at the import market, focusing initially on the market share of selected commodities moving from Japan, Korea, and Thailand to the United States and then on the comparative rate levels of other non-conference carriers in the trade. Additional rate data was also collected for Hong Kong. BEAA continues to collect data about Cosco's entry into the Trans-Atlantic and its growth in the Mediterranean, and an overview of Cosco's activities in these areas is also provided.

The data show that Cosco remains in strong competition with the other non-conference independents in the Trans-Pacific trades. The rates and conditions of service of these carriers have remained roughly proportional since 1994, with the rate changes or trade-wide market share shifts of one carrier being roughly matched by changes in another. Cosco had an exceptional increase in market share in the Japan - U.S. trades during 1995 and early 1996. This was a time when the traditional conferences serving the U.S. inbound trades, the Japan - Atlantic & Gulf

Conference ("JAG") and the Trans-Pacific Freight Conference of Japan ("TPFCJ") were under great pressure. Eventually, JAG and TPFCJ opted to combine their secretariats and form the Japan - U.S. Eastbound Freight Conference ("JUEFC"). Press reports at the time observed that many shippers, unwilling to sit idly by should the conferences either dissolve or, once formed into JUEFC, dramatically raise rates, shifted substantial portions of their cargo to the independent carriers. The data suggest that the independents in the Pacific, Cosco included, recognizing this as an opportunity to attract additional cargo, began a general pattern of lowering rates. Consequently, the rates of the independents, already much lower than the conference carriers in 1994, dropped lower in 1994 - 1995. As expected, the data reveal all the independents sharply gaining market share during this period. Cosco, in particular, saw sharp gains. The conference carriers then began lowering rates also and acting to regain market share through increased service offering. For BEAA's controlled carrier monitoring program, this raised the question of how much of the newly attracted cargo would go to Cosco, and, once the Trans-Pacific settled down, how much would return again to the traditional conference carriers.

Two things combined to make 1996 an interesting year for the inbound Trans-Pacific. First, the substantial tonnage all carriers had coming on line during 1996 caused shippers to demand, and eventually receive, sharply discounted rates. Second, the conference carriers in Japan, led by American President Lines ("APL"), dramatically dropped rates in a successful effort to winnow cargo away from the independents. Just as Cosco had been the target of shippers examining the alternative of using independents when the conference was undergoing stress, Cosco was the target of shippers abandoning the independents and returning to the conference carriers. Graphically, the upward spike during 1995 is therefore matched by an

equally severe downward slide in 1996.

The attached report details the market share changes for selected commodities in the Japan, Korea, and Thailand to U.S. sub-trades. In order to graphically illustrate the trends discovered through analysis of the data, the four carriers APL, Cosco, Evergreen Marine Transport ("EVER"), and Hanjin Shipping Company ("HJSC") were selected. Rate data for these carriers was also collected for 1994 - 1997 by examining the tariffs and service contracts pertaining to selected commodities. Both port-to-port and inland rates were collected, as were rates using an all-water U.S. East Coast service and an IPI (interior point intermodal) service via the U.S. West Coast rate to inland points.

The Commission has the authority under section 9(d) to require Cosco to explain the events in question, specifically addressing those times when its rates were the lowest in the trade or when it gained a significant amount of cargo for any other reason. Under section 9(b), the burden of justifying its rate actions is upon Cosco. Furthermore, since Cosco's rate making procedure may be brought into issue, Cosco's mechanisms for setting rates in the Trans-Atlantic, and the absolute levels of those rates, may also be called into question. Based upon the data provided herein, BEAA is not prepared to request that the Commission issue a formal show cause order under section 9(d). Yet BEAA believes other formal inquiries are both appropriate and timely. The events in 1995 which led to Cosco's market share increase in the Trans-Pacific trades, especially Japan, are not fully explained. Nor is BEAA fully confident that Cosco will not strategically and aggressively price in order to gain market share in the Trans-Atlantic and Mediterranean trades. Inquiries would serve to both remind Cosco of the Commission's vigorous scrutiny of its activities and provide the Commission with necessary supporting data.

The FMC's Section 9 Authority Concerning Controlled Carriers

Background

The purpose of the controlled carrier provisions embodied in section 9 of the Shipping Act of 1984 ("1984 Act"), 46 U.S.C. app. 1708, is to strengthen the powers of the Commission to regulate the rate cutting practices of state-controlled carriers operating as "cross-traders" in the United States oceanborne foreign trade. The intent is to: preserve legitimate competition among all common carriers engaged in the U.S. foreign commerce; ensure the survival of the U.S. merchant marine; provide a means to monitor, and limit if necessary, the future penetration of state-owned carriers into the U.S. trades; and maintain and promote U.S. international trade.

Generally, the controlled carrier provisions:

(a) Prohibit stated-controlled carriers operating as "cross-traders" in the U.S. trades from maintaining rates or charges in their tariffs or service contracts below a level that is just and reasonable, and from maintaining classifications, rules, or regulations in such tariffs or service contracts that would result in the carriage or handling of cargo at rates or charges below a level that is just and reasonable.¹

¹ Section 9 of the Shipping Act of 1984 (46 U.S.C. app. 1708) states in part:

(a) **Controlled Carrier Rates.** — No controlled carrier ... may maintain rates or charges ... that are below a level that is just and reasonable, nor may ... establish or maintain unjust or unreasonable classifications, rules or regulations in (its) tariffs or service contracts. An unjust or unreasonable classification, rule, or regulation means one that results or is likely to result in the carriage or handling of cargo at rates or charges that are below a just and reasonable level. The Commission may, at any time after notice and hearing, disapprove any rates charges, classifications, rules, or regulations that the controlled carrier has failed to demonstrate to be just and reasonable.

(d) **Disapproval of Rates.** — Whenever the Commission is of the opinion that the rates, charges, classifications, rules, or regulations filed by a controlled carrier may be unjust and unreasonable, the Commission may issue an order to the controlled carrier to show cause why those rates, charges, classifications, rules, or regulations should not be disapproved.

(b) Require all controlled carriers to file their tariff rates, charges, classifications, rules, or regulations, including those that result in decreases in rate levels, at least 30 days before their effective date.

(c) Grant the Commission authority to require a controlled carrier to show cause why its rates, charges, classifications, rules, or regulations should not be disapproved. The Commission may also suspend such rates, charges, classifications, rules or regulations pending a determination on their reasonableness.

(d) Provide Presidential authority to stay permanently any order of suspension or final order of disapproval by the Commission, if such action is necessary for national defense or foreign policy reasons.

Controlled carriers of a state that receives national or most-favored-nation treatment, or subscribes to the statement of shipping policy contained in note 1 to annex A of the Code of Liberalization of Current Invisible Operations of the OECD, are excepted from the controlled carrier provisions of the 1984 Act. Also excepted are rates, charges, classifications, rules or regulations of any controlled carrier covered by an agreement filed pursuant to the 1984 Act; rates, charges, classifications, rules, or regulations covering cargo moving in the bilateral trade between the country whose government owns the controlled carrier and the United States; and trade served exclusively by controlled carriers.

BEAA's Monitoring Program

The controlled carrier monitoring program of the Bureau of Economics and Agreement involves:

- Identifying and verifying the status of controlled carriers;
- Monitoring the activities of controlled carriers; and
- Developing data relevant to enforcing statutory provisions regarding controlled carriers.

Once the controlled-carrier status of a carrier has been identified and verified, the carrier's activities are monitored by the Bureau. The Bureau tracks individual market shares of carriers in various key trades. Major-moving commodities are identified, and the individual carrier's market share of those commodities are developed. Analysis of the information and data developed from these monitoring activities would support a determination of whether a controlled carrier is a significant competitor in a trade, either through its overall market share or through its market share of major-moving commodities.

Once it is determined that a controlled carrier is a significant competitor, its rate levels are reviewed against those of other carriers in the trade.² This rate analysis determines whether the controlled carrier's rate levels are below those of other carriers in the trade, and, if so, whether harm to those other carriers can be demonstrated. If the rate analysis shows that the controlled carrier's rates are similar to other carriers, there would be no need to pursue the matter further. If this is not the case, further investigative action may be required.

² Section 9(b) holds, in part,

[I]n determining whether rates, charges, classifications, rules, or regulations by a controlled carrier are just and reasonable, the Commission may take into account appropriate factors including, but not limited to, whether –

- (1) the rates or charges which have been filed or which would result from the pertinent classification, rules, or regulations are below a level which is fully compensatory to the controlled carrier based upon that carrier's (actual or constructive) costs;
- (2) the rates, charges, classifications, rules, or regulations are the same as or similar to those filed or assessed by the other carriers in the same trade;
- (3) the rates, charges, classifications, rules, or regulations are required to assure movement of particular cargo in the trade; or
- (4) the rates, charges, classifications, rules, or regulations are required to maintain acceptable continuity, level or quality of common carrier service to or from affected ports.

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Key Officials: Chen Zhongbiao, President; Zhang Duchan, Executive President and Chairman, Zhou Qifang, Executive Vice President; Du Baoming, Managing Director, Li Keling, General Manager, Containers; Li-Ka-Shing, President of Hutchinson Wampoa Group; and, C.H. Tung, Chairman/CEO Orient Overseas (International) Ltd., Senior Advisors, Song Rutoa, Wang Feng, and Yu Hok Chung, Directors.

I. Corporate Information

China Ocean Shipping Company ("Cosco") is a state-owned enterprise of the People's Republic of China ("China"). It was established in 1961 utilizing four ships with a combined tonnage of 30,000 deadweight tons. The company operates a worldwide network service with five operating branches: Guangzhou Ocean Shipping Company, Shanghai Ocean Shipping Company, Tianjin Shipping Company, Qindao and Dalin Shipping Companies. Cosco, now one of the world's largest shipping companies, was reorganized in 1993 through a merger of four companies, China Ocean Shipping Company, China Ocean Shipping Agency (Penavico), China Marine Bulker Supply Company, and China Road Transportation Company. The reorganized company was named China Ocean Shipping Companies Group and is known both as "Cosco" and "Cosco Group" (hereinafter "Cosco").

Cosco Container Lines ("COSCON"), formed from three container operating subsidiaries at Guangzhou, Shanghai, and Tianjin, operates Cosco's container shipping services. COSCON has three container services departments ("CTD"). CTD I serves the United States, CTD II serves Europe, and CTD III serves other countries. COSCON is responsible mainly for securing cargo, negotiating rates, and management of intermodal services.

In 1995, Cosco established Cosco Bulk Transportation Ltd. ("COSCOB"). This subsidiary, the largest in the Cosco family of companies, is responsible for bulk cargo. It owns the world's largest bulk fleet, 113 ships, with a combined tonnage of 5.91 million deadweight tons.

Cosco International Freighting Company ("COSCOI") manages Cosco's freight forwarding business. Formed in December 1995, it is one of 12 home based specialized subsidiaries, each responsible for a specific domestic business activity. The other companies will be organized by 2000 as part of Cosco's ninth five-year plan.

Cosco now has more than 300 subsidiaries locally and abroad. Ocean shipping is its main business, although it has expanded into other areas such as road and air transportation, freight forwarding, finance, trade, real estate, heavy industry, tourism and advertising.

The company offers 340 liner services of which 320 are for container shipping. It also provides about 1,168 sailings a year for breakbulk transportation. Its fleet now numbers more than 600 ships which call at 1,100 ports in 150 countries.

Cosco continues to expand its fleet by investing more than US\$825 million in 13 new vessels, six of which will have capacity of 5,250 TEUs each. All are expected to be deployed toward the end of 1999. In addition, Cosco received a loan guarantee of \$138 million from the U.S. Maritime Administration. Four containerships, each with a capacity of 1,432 TEUs, are to be built by the Alabama Shipyard in Mobile.

Cosco has not published a financial statement of its income and expenditure. However, in 1995, its Singapore-based subsidiary disclosed a 109 percent increase in its pretax profits, earning S\$8.9 million, compared with S\$4.2 million in 1994. Cosco Pacific (formerly Florens Group) also had a profitable year in 1995, reporting an increase of 15 percent over 1994 (the latest available information). Cosco Pacific reported a profit of US\$75.5 million in 1996.

II. Fleet and Service Pattern

Cosco operates four services in the United States trades:

- The U.S. Atlantic Coast/Far East Service, utilizing 12 container vessels, (eight -1,700 TEU and four- 2,000 TEU) providing a fixed-day, weekly service with calls at Baltimore, New York, Charleston and Houston.
- The Pacific Northwest/Far East Service employing a fleet of five - 2,700 TEU vessels and one - 2,174 TEU vessel providing a fixed-day, weekly service with calls at Vancouver, Long Beach and Seattle.
- The Pacific Southwest/Far East Service, with a fleet of five - 3,500 TEU vessels making a fixed-day, weekly call at Long Beach, and Oakland.
- The U.S./North Europe Service, using a fleet of four vessels effectively providing 1,800 TEUs in a fixed-day weekly service with calls at Antwerp, Felixstowe, Bremerhaven, Rotterdam, New York, Charleston and Norfolk.

Cosco's vessels make direct calls at ports on the East and West Coast of North America, and are linked with Shanghai, Qingdao and Xingang in China. Also, Cosco provides one of the fastest services between Israel and the United States -- 14 days between Charleston and Haifa.

Cosco has upgraded its service on many routes by deploying larger and more modern vessels. Eight new vessels were used to replace a fleet of 1,200-1,900 TEU vessels in the North Europe/Asia/China service. Cosco also has deployed bigger ships in its Asia/South Africa/East Coast South American service.

Cosco offers a variety of intermodal services under one bill of lading. It has the capability to serve locations in the U.S. and Canada. It utilizes 59 transportation hubs strategically located throughout North America. These hubs rely on the services of seven ports, 34 depots, 68 rail ramps, and 22 agency offices. As part of its increasing development as a multimodal carrier, Cosco has a long-term plan to operate its own rail service in the U.S. In China, it is evaluating the prospects of moving its containers inland on the country's rail system.

III. Market Share in Key Trades

Cosco's market share in its U.S. trades for 1996 is shown in the following table. This data, and the other market share data used in this report, come from the Port Import/Export Reporting Service ("PIERS") of *The Journal of Commerce*. The following was published in the *PIERS US Global Container Report, 1996 Annual Issue*. It shows that Cosco ranked ninth among the top 100 carriers in the U.S. containerized trade.

Trade	Imports (TEUs)	%	Exports (TEUs)	%	Total (TEUs)
NE.Asia - U.S. West	145,363	5.4	170,674	8.2	316,037
NE.Asia - U.S. East	34,375	7.4	43,491	9.4	77,865
SE.Asia- U.S. West	7,128	1.2	6,395	1.6	13,523
SE.Asia- U.S. East	4,335	3.2	11,943	8.5	16,278
Oceania - U.S. West	33	0.1	5,487	4.5	5,520
Oceania - U.S. East	8	0.0	95	0.2	103
Europe - U.S. West	0	0	0	0	0
TOTAL	191,242	2.85	238,085	3.83	429,326

IV. Agreement/Tariff/Service Contract Activity

Cosco is not a party to any conference agreement. It is, however, a member of the following agreements:

- (a) The Trans-Pacific Policing Agreement (FMC No. 202-011452);
- (b) The International Council of Containership Operators (FMC No. 203-010099);
- (c) The Israel Discussion Agreement (FMC No. 203-011547);
- (d) COSCO/KL Transatlantic Vessel Sharing Agreement (FMC NO. 232-011561);
- (e) KL/YM Transatlantic Vessel Sharing Agreement (FMC No. 232-011562);
- (f) Transatlantic Bridge Agreement (FMC No. 203-011560) which bridges FMC Agreements 232-011561 and 232-011562 specified in (d) and (e) above.

Cosco has the following active tariffs in the U.S. trades:

- COSU-001 - Inbound governing rule tariff
- COSU-002 - Outbound governing rule tariff
- COSU-003 - Equipment Interchange tariff
- COSU-004 - FMC-004 rate tariff worldwide inbound to the USA.
- COSU-005 - FMC-005 rate tariff worldwide outbound from the USA
- COSU-006 - Essential terms publication
- COSU-015 - Rate tariff to Mediterranean
- COSU-016 - Rate tariff to China
- COSU-017 - Rate tariff to Japan/Korea
- COSU-018 - FMC-018 Rate tariff to South-East Asia
- COSU-019 - FMC-019 Rate tariff to Australia/New Zealand
- COSU-025 - FMC-025 Rate tariff from Mediterranean countries
- COSU-027 - FMC-027 Rate tariff from Japan to Korea
- COSU-028 - FMC-028 Rate tariff from Southeast Asia
- COSU-029 - FMC-029 Rate tariff from Australia/ New Zealand
- COSU-030 - FMC-030 Rate tariff to Central and South America
- COSU-031 - FMC-031 Rate tariff from Central and South America
- COSU-032 - FMC-032 Rate tariff from China
- COSU-033 - FMC-033 Rate tariff to North Europe
- COSU-034 - FMC-034 Rate tariff from North Europe
- COSU-035 - FMC-035 Inland tariff - Scanbaltic countries-East/Westbound
- COSU-036 - FMC-036 Inland tariff - North Europe - Westbound
- COSU-037 - FMC-037 Inland tariff - North Europe - Eastbound
- COSU-038 - FMC-038 Inland tariff - United Kingdom/Ireland - Westbound
- COSU-039 - FMC-039 Inland tariff - United Kingdom/Ireland - Eastbound
- COSU-040 - FMC-040 Inland tariff -USA - Outbound
- COSU-041 - FMC-041 Inland tariff - Italy - Eastbound/Westbound
- COSU-042 - FMC-042 Rate tariff to France/Italy/Spain/Portugal

- COSU-043 - FMC-043 Rate tariff from Italy
- COSU-044 - FMC-044 Inland tariff - France - Eastbound/Westbound
- COSU-045 - FMC-045 Rate tariff from France
- COSU-046 - FMC-046 Time Volume Rate tariff - Eastbound/Westbound
- COSU-047 - FMC-047 Inland tariff - USA - Inbound

In 1995 Cosco filed 343 service contracts. This represented an increase over 1994 when the carrier filed 285. However, this was well below Cosco's all-time high of 725 contracts in 1993. At the end of the first quarter of 1997, Cosco had 719 active service contracts on file.

COSCO's VESSEL FLEET IN U.S. TRADES

NAME	TYPE	TEU
<i>Bing He</i>	FC	1,696
<i>Honor River</i>	FC	1,932
<i>Smart River</i>	FC	2,108
<i>Song He</i>	FC	1,699
<i>Strong River</i>	FC	2,108
<i>Xiang He</i>	FC	1,686
<i>Yu He</i>	FC	1,686
<i>Zhuang He</i>	FC	1,668
<i>Wealthy River</i>	CC	1,659
<i>Hui He</i>	CC	1,414
<i>Jian He</i>	CC	1,414
<i>Shun He</i>	CC	1,414
<i>Tao He</i>	CC	1,414
<i>Yi He</i>	CC	1,414
<i>Dong He</i>	FC	2,761
<i>Empress Dragon</i>	FC	3,494
<i>Empress Heaven</i>	FC	3,494
<i>Empress Phoenix</i>	FC	3,494
<i>Empress Sea</i>	FC	3,494
<i>Goa He</i>	FC	2,761
<i>Min He</i>	FC	2,761
<i>Pu He</i>	FC	2,761
<i>River Wisdom</i>	FC	3,800
<i>Tai He</i>	FC	2,761

Note: FC = Fully Containerized, BC = Bulk Cargo, CC = Container Cargo

Activities of COSCO in the U.S. / North Europe Trades

Trade Entry: Cosco entered the U.S./North Europe trade in mid-February 1997. Cosco provides a non-conference, fixed-day weekly service in the trade through space chartering and sailing agreements with two other carriers (Kawasaki Kisen Kaisha ("K Line") and Yangming Marine Transport ("Yangming")). Neither K Line nor Yangming previously served the transatlantic and therefore both are also new entrants to the trade.

Number and Size of Vessels: The Cosco, K Line, Yangming agreements use a total of four vessels (*Atlantic Bridge, Houston, Trade Apollo, and James*). Two are operated by Cosco, while Yangming and K Line each operate one vessel. The service adds approximately 1,800 weekly 20-foot container slots ("TEUs") in each direction of the trade. Cosco reportedly controls about 900 TEUs in each direction and Yangming and K Line each control 450 TEUs per week in each direction. On an annual basis, Cosco's capacity adds 93,600 TEUs per year or 2.8% to the trade.¹

Vessel Utilization: Industry sources indicate that 300 TEUs were lifted by each of the first two vessel sailings under the agreement resulting in a vessel utilization rate of approximately 17%.

Service Details: Ports served and carrier advertised transit times².

	<i>Eastbound</i>			
	<u>Antwerp</u>	<u>Felixstowe</u>	<u>Bremerhaven</u>	<u>Rotterdam</u>
New York	9 days	10 days	11 days	12 days
Norfolk	10 days	11 days	12 days	14 days
Charleston	12 days	13 days	14 days	15 days
	<i>Westbound</i>			
	<u>New York</u>	<u>Charleston</u>	<u>Norfolk</u>	
Rotterdam	10 days	12 days	14 days	
Bremerhaven	11 days	13 days	15 days	
Felixstowe	13 days	15 days	17 days	
Antwerp	14 days	16 days	18 days	

¹ Calculation: $((900 \times 52 \times 2)/3,329,907)$. Total annualized transatlantic eastbound/westbound vessel capacity based on data contained in *Global Container Markets*, Drewry Shipping Consultants, July 1996.

² Source: Journal of Commerce, *Shipcards*, February 27, 1997.

Additional Services and Infrastructure:

Cosco

Offers thru service to other destinations in U.K. & Continent. New service between U.S. & the Mediterranean started in March 1997.

K Line

Offers thru service to other destinations in the U.K. & Continent. K Line operates its own double-stack train service between NY, Norfolk & Charleston, connecting with 37 U.S. inland hub points.

Yangming

Offers service to certain destinations in U.K. & Continent, & the Mediterranean and Israel.

Planned Service Expansions: Industry reports indicate that the agreement parties plan to add additional vessels to the trade in June of this year.

Short-Term Trade Conditions: The initial impact of the three-carrier agreement on the U.S./North Europe trade has been minimal. During the first quarter of 1997, the combination of previous shipper service contract commitments with the conference and existing non-conference carriers, and overall trade volume growth in both the eastbound and westbound trades has mitigated the loss of market share to the new independents. During the first quarter of 1997, total liner cargo volume for the trade increased 8% and 9% in the eastbound and westbound trades, respectively.

Mid-Term Trade Outlook: It is anticipated that the second half of 1997 will prove more challenging for existing carriers in terms of holding the line on rates and market share. By the end of June, most shippers with service contracts will have met their minimum-quantity-commitments ("MQCs") and be in a more flexible position to try-out Cosco's, K Line's, and Yangming's new services. In addition, the three carriers plan to place additional tonnage in the trade in June 1997. Depending on overall trade growth, both factors will tend to put downward pressures on rates.

Long-Term Trade Outlook: While industry reports indicate that the three-carrier partnership anticipates targeting about 10 percent of the overall trade, the market is not projected to grow by that amount over the next five years.³ Other trade reports indicate that some carriers operating in the trade have recognized that 10 percent of the trade could be lost to the newcomers.

Targeted Commodities: Key commodities include beverages, chemicals, furniture, general department store merchandise, as well as NVOCC cargo.

³ Sources include: *Trade Horizons*, PIERS/Journal of Commerce, Spring 1997, and *Global Container Markets*, Drewry Shipping Consultants, July 1996.

General Service Contract Activity: To date, Cosco has signed 42 service contracts covering the U.S./North Europe Trades. Contract MQCs range from a low of 5 TEUs to a high of 1,000 TEUs with shippers committing nearly 9,000 total TEUs under Cosco's 42 service contracts. Service contract durations range from 30 days to one year.

First Quarter 1997 Market Share:

Exports from U.S. Atlantic, Gulf and Pacific to North Europe

COSCO		K Line		Yangming		Three-Carrier Total	
TEUs	Percent	TEUs	Percent	TEUs	Percent	TEUs	Percent
1,786.83	0.7%	1,292.97	0.5%	962.72	0.4%	4,042.52	1.5%

Total
Trade TEUs 266,769.81

Imports to U.S. Atlantic, Gulf and Pacific from North Europe

COSCO		K Line		Yangming		Three-Carrier Total	
TEUs	Percent	TEUs	Percent	TEUs	Percent	TEUs	Percent
667.12	0.3%	523.20	0.2%	639.82	0.3%	1,830.14	0.7%

Total
Trade TEUs 252,053.85

Overview of Cosco's Mediterranean Service

Cosco operates a service from the U.S. East Coast to the Western Mediterranean (Italy, Southern France, and Portugal) Middle East (Israel) and Far East (Singapore, Hong Kong, and China). Cosco operates mainly as an independent carrier in these trades, although it is a member of the Israel Discussion Agreement.

In the U.S. - Israel trade between April 1995 and March 1996, Cosco had a 15 percent market share, compared to the market leader Zim's 47 percent.

In the Western Mediterranean trades, Cosco began its service in March 1997. For the first quarter 1997 Cosco carried only 45 TEUs outbound to Italy and 24 TEUs inbound from Portugal. However, Cosco has currently signed 23 contracts in this trade ranging from 20 to 4,000 TEUs. The typical duration of these service contracts are from April 1997 to December 1997, however, two of the outbound contracts to Italy were for only 20 TEUs and expired after 30 days. Overall, Cosco has commitments for 8,300 TEUs during 1997 for the Western Mediterranean. Note, however, that Italy is also included in other Cosco service contracts as an additional destination, yet it is impossible to know at this time how much cargo will actually be transported to Italy under these contracts.

ANALYSIS OF COSCO RATES AND MARKET SHARE IN THE PACIFIC 1994 - 1997

Trade Volume and Market Share

The trend in total imports from both Northeast and Southeast Asia, a fast rise from 1993 to 1995 and a slower increase in 1996, was similar for Evergreen, Hanjin, APL, and Cosco (see graphs). The larger trade, Northeast Asia, showed this general pattern with greater market volume swings. Evergreen had a fairly constant 3-5% growth in both trades. Hanjin increased rapidly between 1993 and 1994, and then gradually declined over 1994 to 1996. Cosco showed the biggest change, with growth between 1993 and 1994, very sharp growth from 1994 to 1995, and a strong decline from 1995 to 1996. APL's imports from Northeast Asia grew slightly from 1993 to 1994 and then fell dramatically from 1994 to 1995. APL then recaptured some of the decline between 1995 and 1996. APL's Southeast Asia import growth was very moderate but remained steady.

Exports to Northeast and Southeast Asia increased for all carriers from 1993 to 1996. Exports to Northeast Asia for the independent carriers were particularly strong. Evergreen, in particular, had an almost 30% growth in total westbound carriage. Hanjin grew sharply from 1993 to 1995, and then declined from 1995 to 1996. Cosco also grew strongly from 1993 to 1995, and then grew only slightly from 1995 to 1996. APL experienced moderate growth from 1993 to 1995, but then declined more than 12.5% from 1995 to 1996. Export growth to Southeast Asia was better for APL during 1993-1995 and remained strong for both Evergreen and Cosco. Hanjin experienced strong growth from 1993 to 1994, but then declined from 1994 to 1996.

Cosco's market ranking, based on 1996 total carriage, is 11 from Northeast Asia, 14 from Southeast Asia, 3 to Northeast Asia, and 12 to Southeast Asia. Cosco's relative market share has varied over time in all of these trades. In Northeast Asia in 1993, Cosco was ranked 9, fell to 10 in 1994, rose to 5 in 1995, and fell back to 11 in 1996. This market share pattern is shown most clearly in import statistics from Japan, where a strong surge in liftings in 1995 was followed by a sharp decline in 1996. Cosco's relative ranking on imports from Southeast Asia was 14 in 1993, 1994, and 1996, although it rose to 13 in 1995.

In the outbound Northeast Asia trades, Cosco's presence is quite large. In 1993, Cosco's relative market share made it 9th in a market dominated by Evergreen (Evergreen carried almost 25% more cargo than its nearest competitor NYK Lines). By 1996, Cosco had increased its share of the market by almost 50% over its 1993 level, but so had several other carriers (Hanjin and Hyundai, in particular). Much of this increase is cargo destined to China through Hong Kong and other Chinese entry ports, a trade where Cosco has a strong natural advantage.

Capacity Information

The total capacity a carrier brings to a trade is calculated by multiplying each vessel's size in terms of the number of TEUs that the vessel is capable of carrying times the number of voyages that the vessel makes, and then combining this figure for each vessel into a fleet total. Using this procedure, the largest carrier in the Trans-Pacific fleet was Hanjin in 1994 and 1995 and Evergreen in 1996. APL, number three in 1994, grew to second place in 1995, but was leapfrogged by Evergreen and Sea-Land in 1996. Cosco, number seven in 1994, grew to number five in 1995, but was overtaken by Evergreen and Maersk in 1996.

The Trans-Pacific capacity data also shows the extent to which the trade is becoming equally balanced between the conference and non-conference carriers. In 1994, the conference accounted for more than 60% of the total capacity offered. By 1995 this lead had decreased to 55%, where it remained during 1996. Among the conference carriers, APL has consistently been either first or second. Sea-Land and K Line have undergone extensive building programs and have increased their relative fleet size significantly. Cosco, number two behind Hanjin in 1994 and 1995, has been pushed to third place by Evergreen's rise to first place. Currently, Evergreen and Hanjin together are more than three times Cosco's size in total capacity offered, yet have only 2.75 times more vessels. This shows the impact of the faster average transit times offered by both Evergreen and Hanjin.

Selected Commodities

The following commodities were selected to evaluate the increase in Cosco's market share during 1995: Frozen Fish, Textiles/Garments, Hardware, Tools, Lamps, Kitchenware and Appliances, Computers, Electrical Goods ("E-Goods"), Footwear, Furniture, Toys, Christmas Decorations, Plastic Goods, and General Cargo and General Department Store Merchandise ("GDSM"). These commodities are representative of the breadth of commodities Cosco carries from both Northeast and Southeast Asia. While some commodities move mostly from particular areas, e.g. hardware imports from Japan and South Korea were in the thousands of TEUs while hardware imports from Thailand ranged between 74 in 1994 and 148 in 1996, these commodities include those moved by very large shippers (GDSM), specialized shippers (Toys), large industrial shippers (Hardware, Plastic Goods, Tools), and lower volume, infrequent movements (Lamps and Lamp Parts).

Japanese Rates

The rates on Japanese imports to the United States show a highly competitive situation between the independent carriers. Nine commodities were examined with specific destination rates (generally to Atlanta, Chicago, and New York) collected for those commodities where inland destinations were common. In all, 33 rate profiles were assembled for the nine commodities, with rates ranging from lows of \$1,100 - \$1,500 (E-Goods and Plastic Goods to the U.S. West Coast) to highs above \$3,400 for Home Appliances and Plastic Goods to the U.S. East Coast (mini-land bridge via West Coast ports). Hanjin and Cosco generally had the lowest rates, with Hanjin lowering rates below Cosco's

on 5 occasions, Cosco lowering rates below Hanjin's once, Cosco lowering rates below Evergreen's 3 times, and Hanjin lowering rates below Evergreen's once.

For reference, the rates of the Japan-Atlantic and Gulf Conference ("JAG"), Trans-Pacific Freight Conference of Japan ("TPFCJ"), and Japan - United States Eastbound Freight Conference ("JUEFC") were also provided (where appropriately comparable rates were available). In almost every case, the conference rate was higher than the rates of the independents. This brings up an important caveat which needs to be noted with respect to the rate analysis: the rates offered by the three carriers and three conferences were primarily taken from service contracts. Because service contracts are agreements negotiated between a carrier or conference and a specific shipper, these rates vary according to many factors. In addition to the service factors detailed in each contract, the parties' relative skill in negotiation, the amount of cargo offered, and the length of the time the shipper and carrier have been working together also affect the final rate. Therefore, while service contract rates are indicative of the rate which would be generally available for common carriage, differences in the rate each carrier offers is weighed by the shippers against the service that the carrier offers.

As can be seen from the rate chart, the conferences and independents often carry different commodities and a rate offered for a commodity merely indicates the rate at which the carrier is willing to transport the cargo, not necessarily that the carrier actually shipped much of that cargo. Sometimes even the lowest rate is not utilized. This occurs when the service offered by a carrier or conference matches a shipper's needs so closely, that the carrier or conference is virtually guaranteed that shipper's continued support. Other carriers may offer lower rates, but where the service element cannot be matched, lower rates alone are insufficient to attract the cargo. For this reason, some cargo, particularly cargo which is time-sensitive or requires extensive inland handling, is simply not available to the independent carriers; such cargo is almost exclusively carried by conference carriers. Other cargo, however, is carried by independents and therefore is, theoretically, available to a carrier such as Cosco which is trying to increase its market presence.

Despite the previous caveat, it is clear from the data that Hanjin and Cosco are in strong competition for cargo imported into the U.S. from Japan. The pattern of rate matching and the relative growth in its tonnage carried suggest that Cosco is increasingly becoming a presence in the trade. To some extent, this increased presence is at the expense of Hanjin, which appears to be responding by offering lower rates in a, thus far, unsuccessful attempt to retain its market.

Rates from Korea, Thailand, and Hong Kong

Analysis of selected commodity rates to the U.S. East and U.S. West Coasts from Korea, Thailand, and Hong Kong clearly shows two important patterns: rates for imported goods have declined overall from 1994-1995 to 1996 - 1997, (although Hanjin rates generally rose from 1994-1995 to 1995-1996) and Hanjin continues to price aggressively vis-a-vis Cosco. The rates for Korea, Thailand, and Hong Kong show the independents generally pricing below the Asia-North America Eastbound Rate Agreement ("ANERA") (and APL, whose independent action rates were also noted), although

in some instances, Korea to U.S. West Coast, for example, Evergreen rates were actually above ANERA's.

Market Share by Country

Japan

The pattern of shifting market shares for individual commodities was consistent: Cosco maintained a fairly constant, and usually modest, market share through 1994 and the first quarter of 1995, and then gained a relatively huge share in 1995, which it lost again by the third quarter of 1996. Sometimes the growth was pronounced (e.g., in the areas of Textiles/Garments, Hardware - Nuts/Bolts, Kitchenware and Home Appliances, Footwear, Furniture, Christmas Decorations), although it may have lasted only a short time (Textiles/Garments), or seemed to be very mild (Computers, E-Goods, GDSM Cargo). Only with Frozen Fish does Cosco seem to be regaining market share (although note that the gain is from 2% to 6% in a market where NYK Line has 40-50%).

Cosco's market share jumped from 6.3% of Textiles/Garments to 15.5% at the same time K Line's declined from 24.4% to 18.7%. Similarly, around this time, Maersk went from 10.8% to 0%, APL from 1.3% to 0%, and Westwood Shipping from 24.5% to 20.5%. At the same time, Hanjin's market share rose from 7.6% to 19.2%. By mid-1996, K Line's market share was back to 26.8%, Maersk to 19.3%, and APL was up to 6%. K Line also lost market share, as did OOCL, for the commodity Footwear. From the 1st quarter 1995 to the 2nd quarter 1995, K Line's market share declined from 50.8% to 11.2% (OOCL's declined from 31.7% to 6.9%), while Cosco's rose from 0% to 16.5%. Similarly, Hapag-Lloyd went from 0% to 36.1%. A similar pattern happened with Christmas Decorations (K Line to 0% from 71.4%, Cosco up from 0% to 45% and Maersk up from 23.9% to 45%). Finally, this pattern continued with Furniture, except that here it was NYK which lost market share rather than K Line, from 22.4% to 6.5%, while Cosco gained from 6.3% to 33.3%. In all of these cases the market share "returned" to normal levels after a brief rise.

Several things were going on which affected this pattern of cargo shifting. First, the long-standing Japan conferences were in the process of disbanding and recombining into a single conference (or possibly joining ANERA). Although eventually the Japan - Atlantic and Gulf Conference ("JAG") and the Trans-Pacific Freight Conference of Japan ("TPFCJ") merged into a single entity, the Japan-U.S. Eastbound Freight Conference ("JUEFC"), 1995's service contract negotiations (which normally occur in the Spring) were thrown into uncertainty. Furthermore, rates had been rising in the inbound Pacific trades despite shipper beliefs that the additional tonnage almost all the carriers had ordered and which was coming on-line would drive rates down. The combining of these two conferences concerned some shippers, fearful that the combined entity would have more control over rates than the two separate conferences. Finally, Cosco had additional vessels coming into the trade for which it was actively seeking cargo.

There are several possible explanations of the cargo shifting which did occur. Cosco's rates do not appear to have dramatically dropped in an attempt to solicit this cargo. It is clear, however, that rates

throughout the Pacific, Cosco's included, dropped very quickly thereafter. One explanation is that shippers, fearful of the conference dissolving and impatient with the carriers not dropping their rates fast enough, simply explored the alternative of using Cosco as a means of leveraging the other carriers, particularly the conference carriers, into reducing their rates. In this regard, it may be important that the highest volume commodities, Computers, E-Goods, and GDSM cargo, (see selected commodities import volumes chart) shifted very little. Yet this explanation does not account for why Cosco, in particular, gained the additional cargo. Hanjin, Evergreen, Hyundai, and the other independents were available to carry this cargo at rates below the conference rate. All four had long-term, well established services capable of ensuring safe delivery of cargo anywhere in the U.S. or Canada. A question is why these shippers opted for Cosco instead. Also interesting is the fact that K Line, one of the few other carriers Cosco has formed an alliance with (see the discussion above concerning Cosco in the U.S. / North Europe trades), was the carrier from whom Cosco appeared to be gaining cargo.

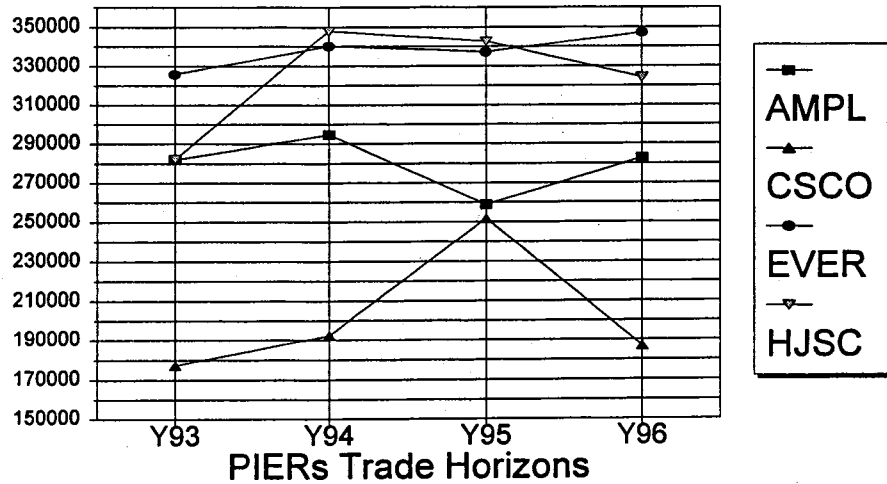
Korea

The pattern frequently witnessed in Japan, where Cosco would gain considerable market share during 1995 and lose it again in 1996, did not repeat itself for Korean imports. With a couple of important exceptions. Hardware - Nuts/Bolts, E-Goods, and GDSM cargo all showed an increase during 1995 relative to either 1994 or 1996. These commodities are important commodities in the Korean trade, especially E-Goods and GDSM cargo, and represent a significant amount of cargo. Interestingly, the volume of GDSM cargo imported, trade-wide, showed a large decline for 1995, falling from 23,960 TEUs in 1994 to 9,780 TEUs in 1995, before climbing back up to 21,531 TEUs in 1996. In this instance, the loss was mainly felt by Hanjin, whose total carriage of GDSM cargo dropped dramatically in 1995. The trading patterns for the other two commodities, Hardware - Nuts/Bolts and E- Goods, are more readily explained. Hardware - Nuts/Bolts shifted from NYK Line to Cosco briefly and then to OOCL in the matter of a few quarters. The data show that NYK began with about 30% of the cargo in 1994 but had dwindled to 0% by the end of 1996. Conversely, OOCL started with 3% and rose to 22.9% of the cargo by the third quarter of 1996. For calendar year 1995, Cosco managed to garner slightly more than 20% of the cargo before losing it to OOCL. Finally, although Cosco increased its share of E-Goods during late 1994 - early 1995, it only went from 1% to 4% and then declined back to 1% by 1996. The big players in this traffic are Hanjin and Hyundai, with more than 50% of the trade between them at all times.

Thailand

Although Cosco has recently announced its intention to become a major partner of Thai shippers, there is little evidence through 1996 of Cosco gaining market share in this trade. Press reports indicate that while Cosco has recently signed a service contract with the Thai Shippers Council with a 20,000 TEU minimum, the other established carriers seem indifferent. Perhaps evidence that this disinterest is warranted came when the maiden call of Cosco's new vessel, *Yue He*, loaded only 566 TEUs. The problems included gantry cranes which could not fully load the 5,250 TEU vessel (they were designed for vessels up to 4,000 TEUs).

Imports from Northeast Asia 1994 - 1996



Imports from Southeast Asia 1994 - 1996

