# **World Maritime University**

# The Maritime Commons: Digital Repository of the World Maritime University

World Maritime University Dissertations

**Dissertations** 

2000

Market consolidation in container shipping: implications to liner agents, ports and container terminals, shippers, forwarders and regulators

Silvester M. Kututa *WMU* 

Follow this and additional works at: https://commons.wmu.se/all\_dissertations

#### **Recommended Citation**

Kututa, Silvester M., "Market consolidation in container shipping: implications to liner agents, ports and container terminals, shippers, forwarders and regulators" (2000). *World Maritime University Dissertations*. 1108.

https://commons.wmu.se/all\_dissertations/1108

This Dissertation is brought to you courtesy of Maritime Commons. Open Access items may be downloaded for non-commercial, fair use academic purposes. No items may be hosted on another server or web site without express written permission from the World Maritime University. For more information, please contact <a href="mailto:library@wmu.se">library@wmu.se</a>.

# WORLD MARITIME UNIVERSITY

Malmö, Sweden

# MARKET CONSOLIDATION IN CONTAINER SHIPPING: IMPLICATIONS TO LINER AGENTS, PORTS AND CONTAINER TERMINALS, SHIPPERS, FORWARDERS, AND REGULATORS

By

Silvester M. Kututa, FICS

Kenya (Republic of)

A dissertation submitted to the World Maritime University in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

in

SHIPPING MANAGEMENT

2000

© Copyright Silvester M. Kututa, 2000

# **DECLARATION**

I certify that all material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

#### Silvester M. Kututa

8<sup>th</sup> October 2000

# **Supervised by:**

Professor Tor Wergeland
Associate Professor, Shipping Management
World Maritime University.

#### Assessor:

Professor Shuo Ma Course Professor, Port and Shipping Management World Maritime University.

# Co-assessor:

Mr. Christian Gyntelberg Corporate Marketing Manager Maersk Sealand, Copenhagen.

# **ACKNOWLEDGMENTS**

Special thanks first and foremost to **THE LORD JESUS CHRIST**, my Lord and savior: He is the reason for all what I am.

I acknowledge with profound gratitude, the unwavering support of the two beautiful girls in my life- my wife Jessica for putting up with it...again, and my daughter Nia for arriving just in time to urge me on.

It would be impossible for me to mention the long list of lecturers, staff, classmates and friends who in one way or another made the completion of this dissertation, in its present form, possible. My deep appreciation to all of them especially to my supervisor professor Tor Wergeland for his time and valuable guidance, professor Shuo Ma, my course professor and all the professors of shipping management at the World Maritime University.

Special thanks to Christina Debusser and the Carl Duisberg Gesellschaft e.V. (CDG) in Cologne, Germany for their financial support which enabled me to travel, live and study comfortably in WMU- "Danke schon".

May the Almighty God bless all of you.

**ABSTRACT** 

Title of Dissertation: Market consolidation in container shipping: Implications

to liner agents, ports and container terminals, shippers,

freight forwarders and the regulators

Degree: MSc

This dissertation is a study of the ongoing container market consolidation. The big carriers are getting bigger; in the process affecting not only other smaller carriers but

also other shipping services like ports and container terminals, liner agents, shippers,

freight forwarders and regulatory bodies.

This dissertation starts by examining the different ways in which container carriers

have been consolidating their market shares and the motives driving carriers towards

consolidation. With reference to recent mergers and acquisitions, these underlying

motives are investigated and analysed. Possible implications to liner agents, shippers

and freight forwarders, ports and container terminals, and the regulators are

discussed. Recommendations are made to each of the above groups on how they can

best address the threats and take full advantage of the opportunities arising as a result

of decrease in the number of container carriers, and the corresponding growth in the

size of big carriers.

**KEY WORDS:** 

Container shipping, Liner agents, Shippers, Freight

forwarders, Ports and terminals, Liner regulation.

iv

# TABLE OF CONTENTS

De	aration	ii
Ac	owledgments	iii
	ract	iv
Tal	e of Contents	v
Lis	of Tables	viii
Lis	of Figures	ix
	of Abbreviations	X
1.0	Introduction	1
	1.1 Consolidation in other industries	1
	1.2 Objectives of the study	2
	1.3 Scope and limitations	3
2.0	Consolidation in container shipping industry	4
	2.1 Ways of achieving market consolidation	4
	2.1.1 Cross shareholding agreements	4
	2.1.2 Take-overs or acquisitions	4
	2.1.3 Mergers	5 5
	2.1.4 Alliances	5
	2.1.5 Organic growth	6
	2 Mergers and acquisitions as a measure of market consolidation	7
	3 Supply side developments	8
	4 Container terminals and container ownership	12
3.0 Co	olidation forces	14
	1 Globalisation and the increase in the size of shippers	14
	3.1.1 An example from Volkswagen	16
	2 The economic motive	17
	3.2.1 Increase in proportion of fixed assets	17
	3.2.2 Declining freight rates and profits margin	18
	3.2.3 Cost minimisation and control	25
	3 Commercial advantages	26
	4 Operational & technical benefits	27
4.0 Im	act of consolidation on liner agents	29
	1 Reasons for setting up own agency	30
	2 Case study: merger of P&O Containers with Nedlloyd Lines in 1997	33
	3 Case observations	34
	4 Threatening factors	35
	5 Recommendations for the local independent agent	36
	4.5.1 Negotiating a division of tasks	36
	4.5.2 Reductions in the agency fee	36

4.5.3	Joint venture with the carrier	37
4.5.4	Sale of the agency to the carrier	37
	Greater control of the cargo	37
	Portfolio diversification	38
4.5.7	Mergers and alliances with other agencies	38
4.6 Conclusio	<u> </u>	39
5.0 Impact of conso	lidation on ports and container terminals	40
5.1 Implication	<u>-</u>	40
5.1.1	Fewer direct ports and growth in transhipment concept	40
5.1.2	Preferential treatment	42
5.1.3	Dependence on a few bigger clients	43
5.1.4	Capital investment by ports	43
5.1.5	Increased port competition	44
5.1.6	The "knock on" or "cascade effect"	44
5.2 Recommo	endations for ports and container terminals	45
5.2.1	Customer Relationship Management strategy	45
5.2.2	Port investment	46
5.2.3	Cargo generation	47
5.2.4	Port co-operation	47
5.3 Conclusion	ons	48
6.0 Impact of conso	lidation on the regulators and the labour market	49
6.1 Governm	ent considerations	49
6.1.1	National employment / unemployment levels	49
6.1.2	Market dominance	50
6.1.3	Cargo control in the whole chain	50
6.1.4	Threat to indigenous transport businesses	50
6.1.5	Trade route subsidisation	51
6.1.6	Balance of payments	51
6.2 The labor	ur market	51
6.3 Regulator	ry recommendations	54
6.3.1	The "invisible hand"	54
6.3.2	Minimal commercial regulation is necessary at times	56
6.3.3	Excessive regulation will discourage trade	57
6.4 Conclusion	ons	57
7.0 Impact of conso	lidation on shippers and freight forwarders	58
7.1 Shippers		58
7.1.1	Freight rates developments	58
7.1.2	11 1	59
7.1.3		60
7.1.4	"Tailor-made" innovative solutions and trade guidance	60
7.1.5		61
7.2 Consolida	ation and the shipping conferences	62

7.	3 Liner con	ference considerations	64
	7.3.1	Conference stability versus carrier instability	64
	7.3.2	Long-term shipping contracts	64
	7.3.3	Conference charges and surcharges	65
	7.3.4	Trade coverage	65
	7.3.5	Increased transport efficiency and co-ordinated transport	66
7.	4 Forwarde	rs	66
7.	5 Recomme	endations to shippers and freight forwarders	68
	7.5.1	Shippers councils	68
	7.5.2	Long-term shipping contracts	68
		Value added functions for forwarders	69
7.	6 Conclusio	ons	69
8.0	Conclusio	ons	70
Refer	rences		71

# LIST OF TABLES

Table	1.1	Recent mergers in the oil sector	1
Table	1.2	Market brand shares in the cruise industry-1999	2
Table	2.1	Liner shipping mergers and acquisitions since 1995	7
Table	2.2	TEU capacity developments for top 20 between 1996 and 1999	9
Table	2.3	Asian carriers in the world's top 20 list- 1999	11
Table	2.4	Growth in average vessel size measured in TEU's	12
Table	2.5	Top 10 ports world-wide by container throughput- 1999	13
Table	3.1	Volkswagen's global shipments- 1998	17
Table	3.2	German liner freight index, 1994 to 1999	19
Table	3.3	Mergers and acquisitions summary, 1995-1999	21
Table	3.4	German liner freight index by selected trade routes	23
Table	3.5	Estimated net profits for selected carriers- 1999	25

# LIST OF FIGURES

Figure 2.1	Share of top 20 in 1996 as compared to 1999	10
Figure 3.1	German liner freight index graph- 1994 to 1999	20
Figure 4.1	MSC network of own worldwide agencies	29
Figure 4.2	Liner agency profitability curve	31
Figure 4.3	The economic decision process for setting up own agent at a port	32
Figure 5.1	Possible future scenario of multi-layered port calls	42

# LIST OF ABBREVIATIONS

AMOCO American Oil Company.
ANL ANL Container lines Pty. ltd.

ANZDL Australia and New Zealand Direct Line.

APL American President Lines.

ARCO Atlantic Richfield Oil Company.
BAF Bunker Adjustment Factor.

BP British Petroleum.

CAF Currency Adjustment Factor.
CGM Compagnie Generale Maritime.
CMA Compagnie Maritime d'Affretement.
CMB-T Compagnie Maritime Belgie

CMB-T Compagnie Maritime Belgie. COSCO China Ocean Shipping Company.

CP Canadian Pacific lines.

CRM Customer Relationship Management.
CSAV Compania Sud Americana de Vapores.

CSX CSX World Terminals.
DPA Dubai Ports Authority.
DSR Deutsche Sereederei Rostock.

ELF Elf Aquitaine.

ESC The European Shippers Council.

EU The European Union.

FINA PETROFINA

FMC The Federal Maritime Commission. FMG Flota Mercante Grancolombiana SA.

ICTSI International Container Terminal Services Inc IKEA Ingvar Kamprad from Agunnaryd, Sweden. IMO The International Maritime Organisation.

K Kawasaki Kisen Kaisha ltd. M & A Mergers and Acquisitions.

MARICO Maritime Company of East Africa.

MISC Malaysian International Shipping Company.

MISE Maersk International Shipping Education.

MSC Mediterranean Shipping Company, Sa Geneva.

NCL Norwegian Cruise Line.

NOL Neptune Orient Line. NPR Navieras de Puerto Rico. NYK Nippon Yusen Kaisha.

OECD The Organisation for Economic Co operation and Development.

OOCL Orient Overseas Container line.

OTAL OT Africa line.

P&O P&O Steamship Navigation.
PSA Port of Singapore Authority.
RCL Regional Container lines Pte, ltd.

SAFDAL South African Marine and Deutsche Africa Linien.

SCL South African Marine Container Line.

TEU Twenty foot equivalent unit. Shipping container measuring 20 X

8 X 8 feet. The 40 feet container is 2 TEU's.

TMM Transportacion Maritima Mexicana SA de CV.

UASC United Arab shipping company.

UK United Kingdom.

ULCC Ultra Large Crude Carrier.

UNCTAD United Nations Conference on Trade And Development.

US United States of America.
WTO The World Trade Organisation.
ZIM Zim Israel Navigation Company.

# **Chapter One**

# INTRODUCTION

#### 1.1 Consolidation in other industries

In container shipping, consolidation has long been awaited because the supply side of the market has been too fragmented with many service providers, if compared to other related sectors.

For example, the oil industry has long been referred to as an olygopolistic market because of the few but big and global players. Yet the same industry is still reducing the number of players as can be seen from the selected recent mergers and acquisitions.

Table: 1.1

Recent mergers in the oil sector

Year	Activity
1998	Merger between BP, Amoco and Arco to form BP Amoco Arco.
1999	Merger between TOTAL, FINA and ELF to form TOTAL FINA ELF.
1999	Merger between Exxon and Mobil to form Exxon Mobil.

Closer to the container shipping industry, an example can be sighted in the cruise shipping industry which, according to statistics from Royal Caribbean Cruises (RCL) in Oslo, the top 6 brands control a capacity of 73% as shown below: -

Table 1.2

Market brand shares in the cruise industry-1999

Royal Caribbean Line	17%
Celebrity (part of RCL)	6%
Carnival	20%
Princes	12%
Holland America	8%
NCL	10%
Other	27%
Total	100%

Source: Royal Caribbean Cruise lines (RCL).

Mergers and acquisitions therefore are not only happening in container shipping, but as a global business trend. The new world economy has forced companies to seek growth through co-operations, cross shareholding agreements, mergers and acquisitions in virtually all types of industries, as companies strategically position themselves for global challenges and global competition.

As a result, many industries are increasingly experiencing a shrinking number of players while "the big are getting even bigger". The process that has led to a reduction in the number of companies and the increase in share of the big companies is what has come to be dubbed "market consolidation".

# 1.2 Objectives of the study.

The impact of consolidation varies with each specific industry. This dissertation aims at the various groups who are being affected by consolidation in container shipping industry. It is written for liner agents, port authorities, container terminals, freight forwarders, shippers, employees, the labour unions and policy makers responsible for

commercial regulation of the maritime industry. This dissertation is also written for the merging container carriers who have to explain to shippers, ports, agents and the regulators that consolidation is not necessarily harmful to them and the public.

While chapter one introduces consolidation as a global tend, chapter two analyses various ways in which the big container carriers have been increasing their market shares. It also looks at recent mergers and acquisitions to highlight the extent of consolidation in the industry. Chapter three investigates the various reasons, which have prompted container carriers to seek increased market share through mergers and acquisitions. Chapters four to seven are an investigation of the possible opportunities and threats -faced by liner agents, ports and terminals, regulators and the labour market, shippers and freight forwarders- because of consolidation. These chapters also use examples of recent mergers and acquisitions to suggest possible alternatives to threatened companies. Recommendations are given at the end of the specific chapters because they are different for each group.

# 1.3 Scope and limitations.

Liner shipping is a "closed" industry, summed up in the words of G. Aponte, chairman of Mediterranean Shipping Company (MSC) as a game of "playing your cards as close to your chest as possible" (Boyes, July 2000, p.45). A shortage of relevant individual company or even industry data confronts researchers wishing to analyse commercial issues. Because this dissertation is more commercially oriented than academic, it relies heavily on expert opinion from the container shipping industry, seminars, field trips, the shipping press, general data from consultancy companies, and the writer's 7 years of experience in the liner sector. The recommendations given in this dissertation are therefore general to the industry, because of lack of individual company data.

# **Chapter Two**

# CONSOLIDATION IN CONTAINER SHIPPING INDUSTRY

Consolidation implies a reduction in the number of direct competitors in an industry, and an increase in the market share of the big companies. According to UNCTAD's "continued work on the elaboration of a model law or laws on restrictive business practices", consolidation in an industry could be achieved in different ways.

# 2.1 Ways of achieving market consolidation

With reference to recent activities, the most common ways of achieving consolidation in container shipping are as follows:

# 2.1.1 Cross shareholding agreements

Cross shareholding agreements is a situation where two companies in the same industry exchange shares. A good example in container shipping is the cross shareholding agreement made in January 1997 between Australia and New Zealand Direct Line (ANZDL) and the Union Shipping of New Zealand.

# 2.1.2 Take-over or acquisitions

In this type of consolidation, one company buys out all the existing ownership of its rivals. The most prominent example of acquisition in the container industry is

the purchasing of Sealand by Maersk Line in July 1999. This acquisition formed the giant company of the container world, with an estimated 11% market share, and a containership armada with more than 265 vessels and a total of 590,000<sup>1</sup> TEU capacity.

# 2.1.3 Mergers

A merger is a fusion of two or more companies to form one trading entity. The most famous of mergers in the container shipping history so far is the joining forces in January 1997, between P&O and Nedlloyd to form the Anglo-Dutch carrier now trading under the brand name "P&O Nedlloyd". Both P&O and Nedlloyd own 50% shares each in the new company.

#### 2.1.4 Alliances

Alliances, being the co-operation between two or more companies for the purpose of this dissertation has been considered as one of the early processes towards market consolidation, but need not lead to consolidation per se. Although in alliances member lines co-operate in many areas like sharing containers, ships, terminals, etc, the respective member lines maintain their identity. For this reason alliances have shown to have an unstable nature, falling off or re-organizing very often. For example, 1998 started with the re-organization of alliances, but in April 2000, 3 members of the New World Alliance joined with Maersk-Sealand, leaving the other members in a very precarious situation in what was reported by Lloyd's list in their words:

"With so many slot charter and vessel-sharing agreements between transatlantic carriers, the reverberations will be considerable. But for the Grand Alliance and Americana Ships, the new deal is particularly embarrassing." (Lloyd's List,

<sup>&</sup>lt;sup>1</sup> Figures from Containerisation International- include Safmarine slots.

13.04.2000, p.7)

This emphasizes the volatility and uncertainty of alliance agreements in container shipping, disrupting sailing schedules and affecting customer service standards adversely. Some of the alliances have, however, been stable and ended in mergers or acquisition. A good example of such successful alliance agreements is the alliance between Maersk with Sealand and DSR-Senator with Hanjin shipping. For the above-mentioned reasons, alliances will therefore not be considered in this dissertation as market consolidation.

# 2.1.5 Organic growth

Some companies prefer to grow "organically" without any mergers and acquisitions. Happag Lloyd is on record as being one of these companies. "Mergers and acquisitions is not Happag Lloyd chairman Bernd Wrede's cup of tea..." (Chorinou, November 2000, p.10)

This method of increasing market share and coverage, although taking care of possible company culture incompatibilities, is limited as to the speed of growth a container line can achieve in a fast changing world. Organic company growth takes time. No company is capable of growing organically to match the competitors who are growing by consolidation and cashing in on the market requirements in good time. Organic growth is therefore not discussed in this dissertation.

Consolidation therefore may be one company buying out all the existing shares of a competing company. It may also be two competing companies joining forces to form one bigger company with each original company maintaining a certain agreed ownership.

# 2.2 Mergers and acquisitions as a measure of market consolidation.

Consolidation in container shipping is evidenced in different ways, but the best indicator is by the number of mergers and acquisitions taking place within the industry, and the frequency with which they are happening. "Over the last couple of years, some 40 mergers and acquisitions have taken place with at least one taking place every 6 weeks". (Chorinou, Nov 1999 p.7)

In a special report on the mergers and acquisition in the liner industry since 1995, Lloyds Shipping Economist published the following table:

Table 2.1
Liner shipping mergers and acquisitions since 1995

DATE	TYPE OF DEAL
Mar 95	CP ships acquisition of CAST and maintains CAST brand name
Apr 95	Pyramid Ventures & Navieras De Pueto Rico
Jan 96	Safmarine(51%) & CMB-T to form SCL
Jan 96	P&O Containers acquisition of ANL
April 96	Contship Container lines acquisition of Proline
April 96	Seawheel acquisition of BET
Nov 96	CMA acquisition of CGM
Dec 96	TMM acquisition of FMG
Jan 97	P&O Containers and Nedlloyd lines creating P&O Nedlloyd
Jan 97	ANZDL & Union Shipping of New Zealand cross shareholding
Feb 97	Hanjin acquisition of DSR-Senator
Apr 97	TMM acquisition of Campania Transatlantica Espanola
July 97	5 Chinese shipping groups creating China Shipping group
July 97	CP Ships acquisition of Lykes lines
Aug 97	Safmarine & Deutsche Afrika Linien creating SAFDAL

Aug 97	Petronas acquisition of controlling interest in MISC
Aug 97	Holt acquisition of NPR inc.
Aug 97	Preussag acquisition of Hapag Lloyd
Oct 97	CP Ships acquisition of Contship Containerlines
Oct 97	MSC acquisition of 45% shares in Kenya National Shipping Line
Nov 97	NOL Acquisition of APL
Feb 98	P&O acquisition of Blue Star ( Renamed Hansa Star)
May98	CP Ships acquisition of Ivaran Lines
Jun 98	Hamburg Sud acquisition of South Seas Steamship
July 98	Evergreen acquisition of Lloyd Triestino
July 98	Safmarine acquisition of CMB-T gaining 100% control of SCL
Aug 98	Hamburg Sud acquisition of Allianca
Aug 98	CP Ships and TMM j/v
Aug 98	D'Amico acquisition of Italia di Navigazione
Sept 98	Oldendorff acquisition of Hoegh lines
Sept 98	CP Ships acquisition of ANZDL
Dec 98	Australian National Line acquisition by CGM
Jan 99	Maersk acquisition of SCL
Mar 99	CSAV acquisition of Grupo Libra
Jun 99	Hamburg Sud acquisition of Transroll Routes
July 99	Maersk Acquisition of Sealand
July 99	Hamburg Sud acquisition of South Pacific C.L
July 99	Hamburg Sud acquisition of Crowley A.T
Sept 99	Bollore acquisition of OTAL

Source: Lloyds Shipping Economist.

# 2.3 Supply side developments

The proportion of container slots operated by the largest carriers has been increasing at the expense of the other container carriers. The following table illustrates how the top 20 container carriers have increased their slot capacity in the

period 1st September, 1996 to 1st September, 1999: -

Table 2.2 TEU Capacity development for Top 20 between 1996 and 1999

OPERATOR	1999	1996
Maersk	544,558	232,257
Evergreen/Uniglory/LT	311,951	228,248
P&O Nedlloyd/Blue Star	268,625	221,531
Sea-land service	-	215,114
COSCO	189,016	201,593
Hanjin Shipping/DSR Sen	217,804	174,526
MSC	225,636	154,185
Mitsui OSK	146,026	115,763
NYK	156,821	128,154
Hyundai	109,105	112,958
ZIM	144,751	98,086
Yang Ming	101,445	96,145
CMA-CGM	127,147	89,658
OOCL	94,967	85,940
Neptune Orient Line	-	85,665
CP ships	133,006	85,016
K Line	90,228	84,198
APL/NOL	199,881	79,918
Hapag Lloyd	88,283	73,372
Cho Yang	-	55,882
UASC	68,880	-
China Shipping	65,535	-
Compania Sud America	61,535	-
Total	3,345,200	2,618,209

Source: Containerisation International.

In 1997, the top 20 largest container carriers operated a fleet with a combined

capacity of 2.6 million TEU's, equivalent to 48.10% of the world total employed slot capacity. The rest of the industry shared an estimated 2.8 million TEU's, which was equivalent to 52%. By the year 1999, the top 20 had a combined market share of an estimated 56%.

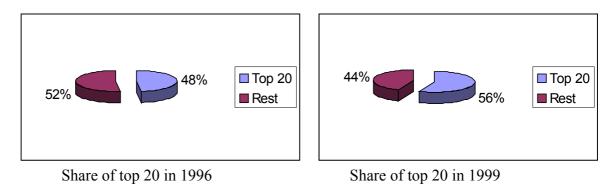


Figure 2.1 - Share of top 20 in 1996 as compared to 1999

Source: Containerisation International.

According to "Containerisation International" (Nov 1999, p. 43), the proportion of slot capacity operated by the largest 20 container carriers has continued to expand at the expense of other carriers, as the bigger lines increase their market and slot capacity shares. It is estimated that by the close of 2000, the top 20 will control more than 60% of the total world slot capacity

An interesting feature of this consolidation process is the way Asian carriers have been increasing their share of the container world slot capacity, at the expense of European and North American carriers. The acquisition of APL by NOL, DSR-Senator by Hanjin has strengthened Asia's participation of the container transportation business. Of the 18 top carriers in the 1999 list, 11 of them are based in Asia, illustrated in the following table.

Table 2.3
Asian carriers in the world's top 20 list in 1999

Slot Ranking in Top 20	Carrier
2	Evergreen/Uniglory
5	Hanjin Shipping company
6	American President Lines/NOL
7	COSCO container lines
8	NYK / TSK
9	Mitsui OSK lines
13	Hyundai merchant Marine.
14	Yang Ming Marine Corp.
15	OOCL
16	K line

Source: Shipping Times.

In 1997, Asian carriers controlled about 70% of the Asia-Europe trade and more than 80% of the containerised United States-Asia trade (Shipping times, 17<sup>th</sup> November 1997).

The growth in size of vessels entering employment is partly attributable to market consolidation. Having already established from figure 2.2 above that the top 20 companies have been increasing their market share, the following table serves to quantitatively illustrate the extent of vessel growth in average size delivered. These figures are for selected leading carriers.

Table 2.4
Growth in average vessel size measured in TEU's

Operator	Vessel average size in TEU's		
	November, 1996	November, 1999	
Maersk-Sealand	2,226	2,388	
Evergreen/Uniglory	2,113	2,363	
P&O Nedlloyd	2,090	2,296	
COSCO	1,450	1,562	
Hanjin	2,815	3,111	
MSC	1,542	1,819	
NYK	1,885	2,063	
Mitsui	1,867	2,057	
Hapag Lloyd	3,190	3,396	
Yang Ming	2,289	2,536	

Source: Containerisation International, Nov 97 & Nov 99

It can be seen from the above table that all the carriers have been replacing old tonnage with bigger new tonnage, which has increased the average operated vessel size. The increase in the size of container carriers, together with the alliance concept, has allowed carriers to seek economies of scale through employment of bigger and more efficient vessels. The average vessel capacity in TEU's for the 10 selected carriers in figure 2.4 above shows a growth rate of about 11% between 1996 and 1999.

# 2.4 Container Terminals and Container ownership

The globalisation force has not spared container terminals. Brand names like PSA, Hutchison, P&O ports, SSA, Eurogate, CSX, AP Moller, ICTSI, etc are now global. At the same time, the world's largest terminals have been growing in size

and volumes due to mergers and acquisitions. According to Maersk Sealand, the 10 largest port terminals accounted for 30% of the world's total throughput in 1999, and are also growing at a faster-than-average rate.

Table 2.5

Top 10 Ports Worldwide by throughput in 1999

Port	TEU moves <sup>2</sup>	<b>Growth Rate</b>
Hong Kong	16,100	10.4%
Singapore	15,900	5.3%
Kaohsiung	6,985	11.4%
Pusan	6,439	8.3%
Rotterdam	6,400	6.5%
Long Beach	4,408	7.6%
Shanghai	4,200	37.3%
Los Angeles	3,828	13.3%
Hamburg	3,750	5.6%
Antwerp	3,614	10.7%
Total	71,624	12.8%

Source: Maersk Sealand and Containerisation International yearbook 2000.

According to Maersk Sealand, while the annual growth rate of global port volumes grew by about 8.5 on average, the top 10 ports grew by about 12.8%. The big terminals are also increasing their market share of the world's volumes of containers handled per year.

-

 $<sup>^{\</sup>rm 2}$  Total of empty, laden and transshipment containers.

# **Chapter Three**

# **CONSOLIDATION FORCES**

# 3.1 Globalisation and the growth in size of Shippers

The world has increasingly been referred to as a global village, although some product names like Coca-Cola have been global brands for many years. More shippers than ever before need a global service in line with their global operations. Carriers understand this very well, and are appealing to the shippers, marketing themselves as global carriers. The following advertisement slogans are an example of how carriers have been emphasis on a global service:

"We can not deliver to Mars yet, but our fast service covers the earth" (Mitsui OSK, from Containerisation International, August 1999, p.24).

"DSR-SENATOR, your global partner" (DSR Senator, from BIMCO review 1998, p.72).

Global logistics implies that industries source their raw materials on a worldwide basis and manufacture anywhere on the globe at the lowest aggregate cost. Consumers on their side are buying from around the world. Since shipping demand is derived demand, from the demand for goods and services, globalisation of world trade has resulted in demand for global shipping services. Global shippers would like to have a carrier who is present in all their trades. "Global contracting" is the

name given to the practice where a shipper negotiates with one or more carriers on a one-to-one basis, for the use of the lines' services in all global locations where the shipper ships to or from.

In a study published by "Containerisation International" (1999, June), big shippers were asked if "global contracting" had any effect on their decision making of which carrier to ship with. While only a minority 12% of the shippers did not think that global contracting was important in their selection of a carrier, 88% were keen to select a global carrier as their partner in shipping. Furthermore, 82% of the shippers were considering a reduction in the number of container carriers they were currently using. If the two results above are an indicator of shippers' true preferences, then it would be likely that 88% of all the worlds container shipments will be moving by global carrier slots in the year 2000.

Global contracting gives the global shipper the relevant economies of scale in purchasing transport services. Global shippers therefore want to talk to carriers about all their cargo in order to secure freight rate discounts due to world wide volumes and to eliminate multi-carrier contracts, negotiations and documentation.

Empty containers can also be utilised better in a global carrier reducing empty repositioning costs immensely. The lines' imbalance can be reduced if the other lines are strong in the markets where the line is weak. This will reduce container-repositioning costs, which amounted to an estimated 5 billion dollars in 1998 (Drewry Shipping Consultants, 2000).

It has now become common practise for shippers to negotiate contracts only with those lines, which are able to also guarantee acceptance of bookings from the shippers in other geographical areas known to suffer from permanent empty container deficits. A good example is the coffee market. The leading coffee buyers would only negotiate with carriers on the East African coffee exports, if only the line will accept and guarantee a certain minimum shipload from Vietnam. Vietnam has a permanent shortage of empty containers while East Africa has a considerable surplus.

Even though a niche player may have a premium service in the East Africa to Europe service, it may not be operating in the Vietnam to Europe trade. This niche carrier will therefore miss bookings out of East Africa as a result. One trade route supports the others in container shipping. This is the advantage for big global carriers, and one reason why carriers have been striving to cover global markets through mergers and acquisitions.

Carriers' on their part have reluctantly embraced the lower-freight global contracting because of the stability of volumes, and the relative reduction in number of salesmen.

#### 3.1.1 An example from Volkswagen:

Volkswagen, the German car manufacturer sources, produces and markets parts and vehicles around the globe. Shippers needs and requirements being the main market driving force, carriers have been seeking to satisfy the shippers' need for a one stop shop for all the global shipping requirements.

It makes economic sense for Volkswagen to negotiate a global contract with their shipping service provider. This will ensure that Volkswagen uses its volume economies (188,600 TEU's) to achieve better freight rates, which are not attainable, if the contracts were negotiated regionally or per each individual trade. The multitrade shipper has therefore been demanding a "one stop shop" for their shipping requirements and needs.

Volkswagen's world-wide container shipments in 1998 in TEU's were as follows:

Table 3.1

Volkswagen's global shipments in 1998.

	To Europe	From Europe
Argentina & Brazil	2,500	17,700
China	600	5,800
Mexico	24,200	38,000
South Africa	51,000	48,800
Total	78,300	110,300

Source: Containerisation International.

To take advantage of global contracting in an already very capital intensive industry, with oversupply, container carriers could only expand through mergers and acquisitions. Commenting about the merger of P&O Nedlloyd, the chief executive officer, Mr. Smith was quoted:

"Our container shipping business relies upon companies which are genuinely global, and in order to serve our clients, we are ready to follow the general trends of world trading" (Lloyd's Shipping Economist, November 1999, p.8).

This clearly sums up globalisation of world trade as one of the reasons why carriers are expanding through strategic mergers and acquisitions as they position themselves to serve global clients.

# 3.2 Economic motive

# 3.2.1 Increase in the proportion of fixed assets

Container shipping is known to be a very capital-intensive industry. The large post panamax container ships on employment in the mainline East-

West markets cost increasingly more beyond the capability of most lines to provide a weekly service independently. "A modern containership of the fifth generation may cost about USD 80 million a piece" (Ma, 1999c, p2). These ships may also be too big for an average carrier to economically utilise the slots, yet carriers must achieve the relevant economies of large scale in large efficient ships to remain competitive. The solution is either to enter an alliance, or to leverage the company through strategic mergers and acquisitions. Alliances pool their vessels and other resources by each line contributing a vessel enabling lines to venture into trades they otherwise would not have had the capability to, had they been required to provide a complement of containerships, terminals, equipment etc. Alliances however, have some serious disadvantages as already discussed.

In order to expand their market coverage, while avoiding the administrative bureaucracy of consulting different members, lines have found it better to expand by mergers and acquisitions.

# 3.2.2 Declining Freight rates and Profit margins

"Not surprisingly, industry profitability has also declined, with the Asian crisis making 1998 a particularly bad year, and on the main east-west trades Drewry estimates aggregate carrier losses at almost \$2.4 billion - a negative margin of over 8%". (Drewry, 2000).

Declining freight rates and profit margins have also contributed to the current trend of consolidation in container shipping. The German liner index for the period 1994 to 1999 as shown below, has a negative correlation to the increase in mergers and acquisitions activity.

Table 3.2

German Liner freight index 1994-1999 (1991=100)

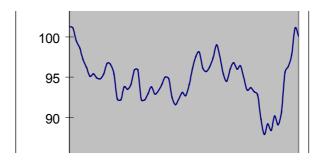
	1994	1995	1996	1997	1998	1999
Jan	101.3	96.6	93.8	96.1	96.8	90.2
Feb	101.1	95.4	92.9	97.6	96	89.1
Mar	99.5	92.3	93.3	98.1	96.4	90.7
Apr	98.6	92.2	94.1	96.1	94.9	95.6
May	97.2	93.8	95.0	95.7	93.4	96.3
Jun	96.2	93.5	94.8	96.3	93.7	97.8
Jul	95.1	94.1	92.5	97.4	93.2	101.1
Aug	95.4	95.9	91.6	99.0	92.8	100.1
Sep	94.9	95.9	92.3	97.6	89.8	
Oct	94.8	92.2	93.1	95.4	87.9	
Nov	95.4	92.2	92.7	94.5	89.2	
Dec	96.7	93.0	94.1	96.0	88.4	

Source: Institute of Shipping economics and Logistics.

The effect of these persistently declining freight rates from January 1994 to third quarter 1999, can be seen clearly in the following graph:

Figure 3.1

German liner freight index graph-1994 to 1999



Source: Institute of Shipping economics and Logistics.

The index started at 101.3 points, in January 1994. As usual with the shipping industry, the freight rates fluctuated reaching a bottom 87.9 index points in October 1998.

We can therefore conclude that on the basis of the above data, in general, freight rates had a downward trend from 1994 through 1999, before starting to increase again in late 1999. The index averaged at 94.80441 over the 68 months period. We see a correlation in the mergers and acquisition activity during this period and a slight slow down of consolidation towards the end of 1999. This could be attributable to the anticipated increase in company profitability due to a recovering freight market, as shown in the graph.

Also for economic reasons, container carriers seek big sizes to hedge against turbulent freight rates fluctuations in this era of diminishing role of the shipping conference. In the same way that olygopolistic markets like the oil majors have some measure of price and service control, container carriers hope to gain some control on the market as they seek bigger sizes and lesser players.

According to chapter two figure 2.1, the mergers and acquisition activity can be summarised as follows for each year:

Table 3.3

Mergers and acquisitions summary, 1995-1999

Year	M & A activity
1995	2
1996	6
1997	13
1998	11
1999	7

There was a very sharp increase in mergers and acquisitions in container shipping after 1995. The climax was reached in 1997, which according to "Lloyds' Shipping Economist" there was a total of 13. The mergers & acquisition activity started to decline slightly reaching 7 in 1999. An interesting point to note is that these 7 mergers and acquisitions happened between January and September, when the freight rates were still on a downward trend as shown in the Institute of Shipping Economics and Logistics statistics.

It may be important to comment that investment decisions in shipping (just like any other industry) depend on the investor's perception of the future. In other words, if freight rates are anticipated to go up, there will be a demand for shipping investment and many companies may be formed as investors look forward to profitable times ahead. On the other hand, if investors anticipate lower future freight rates, they will choose to sell off their company at a good time before the company value drops due to the

expected decline in profitability. The decline in freight rates therefore is logically expected to lag behind the consolidation process.

The decline in freight rates during the above period (figure 3.1) was partially caused by overcapacity in container shipping (supply of slots), which led to an increase in competition and also due to the slowing down of world economic growth -especially the Asian crisis. Because of the scope of this dissertation, the underlying causes of low freight rates will only be mentioned as above but will not be discussed further in detail.

As profitability for mainly western shipping lines nose-dived, their stock market performance dropped. There was pressure to increase shareholder value. One of the casualties was Sea-Land, as was summed up by "Lloyds ship manager"; "CSX needed to sell Sealand one way or another to enhance shareholders value". (Lloyds Shipping Economist, November 1999, p.8)

With freight rates continuously declining, while the UNCTAD liner code failed to secure a 40% cargo share for national shipping lines, many governments ceased the opportunity to sell their loss-making national shipping lines. Examples of such lines are Lloyd Triestino, Lykes, Safmarine, Cameroon National Shipping line, Kenya National Shipping line, just to name a few. In fact the only remaining fully national owned shipping line in Africa is the Ethiopian Shipping Line (ESL).

Since a global carrier operates in all major trade routes, this route diversification creates a cushion for the carrier so that freight rate decline on one route can be compensated on another trade route. The effect of freight rates fluctuation on different trade routes can be seen in the following table:

Table 3.4

German liner freight³ rate index by selected trade routes (1995=100)

Č	-		
Period	Europe	N-America	Asia
Jan-98	95.90	108.70	88.00
Feb	95.80	108.50	86.40
March	95.70	108.70	86.90
April	95.10	106.80	86.20
May	94.80	104.00	80.70
June	94.80	104.70	79.30
Jul	94.70	102.50	76.40
Aug	94.60	102.00	73.80
Sept	94.50	97.30	67.30
Oct	94.40	93.80	65.30
Nov	94.40	95.70	65.20
Dec	94.30	95.10	62.70
Jan-99	91.30	88.70	62.90
Feb	91.30	91.00	64.50
March	91.20	92.10	66.30
April	90.60	93.30	70.60
May	90.60	94.70	70.40
June	90.60	96.40	71.50
Jul	91.10	96.60	74.20
Aug	91.10	95.10	78.80
Sept	91.00	101.80	79.70
Oct	92.20	104.70	80.30
Trade average	93.18	99.19	74.43

Source: Institute of Shipping Economics and Logistics

\_

<sup>&</sup>lt;sup>3</sup> The trade route figures are composite import and export weighted.

From the above indices, it is reasonable to say that different trade routes have different freight rate volatility.

The European trade had an average of 93.18 points and fluctuated from the highest 95.9 points in January 1998 to the lowest 90.6 points in March, April and May 1999. The range over that period was 5.3 points.

The North America trade started at 108.7 points in January 1998, had an average of 99.19 points during the whole period (January 1998-October 1999), and fluctuated from the highest 108.7 points in January to 88.7 points in January 1999. The range over the whole period was 20 index points.

The Asian trade on the other hand started at 88 points in January 1998 had an average of 74.43 points during the whole period and fluctuated from the highest 88 points in January 1998 to the lowest 62.7 points recorded in December 1998. The range over the whole period was 15.2 index points, which is clearly higher than the previous 2 trade routes.

From these range figures, the volatility of the North American and Asian trade can clearly be seen. As compared to the European trade, North America was about 4 times volatile while Asia was 3 times more volatile in this period.

All other factors held constant, a container line operating on only one trade route e.g. Asia, will be the first one to exit the market if the freight rates persistently remain at abnormally low levels. A global line covering also the European and North American market could be able to subsidise the Asian trade with other trades in the short-run, and hedge against very adverse freight rate fluctuations in one trade. Global market coverage needs a global carrier. For most container lines this is not achievable unless through mergers and acquisitions.

# 3.2.3 Cost Minimisation and Control

Cost minimisation and control is another reason why container carriers have been seeking mergers and acquisitions. Declining freight rates have forced carriers to take a closer look at their costs for survival. Economies of scale can be achieved in purchasing bunkers, port terminals, trucking companies, ships and container repairs, provisions, agencies etc. Synergies in these cost areas can be achieved if the operations of two companies are merged. While administrative costs form a small proportion of the total costs of a liner company estimated at 4.4% (Alderton, 1984, p.136), huge cost savings are possible through synergies. As an example, lines may merge to eliminate duplication and save on administrative costs. These unit costs have an effect on the competitiveness of a line. The costs can be reduced by increasing cargo volumes, while keeping staff levels fairly constant. By joining together the two companies, P&O and Neddloyd reportedly yielded an estimated cost saving of US\$ 100 per TEU from the duplicated administrative services.

Considering the following selected statistics (Lloyds List, 06.11.1999, P.3) for mainline operators, US\$ 100 cost savings can make the difference between profits and losses.

Table 3.5

Net estimated profits<sup>4</sup> for selected carriers- 1999

Operator	Net Profit/TEU
MSC	\$ 94.00
CP/Americana	\$ 65.00
Maersk Sealand	\$ 22.00

Source: Lloyds List, 06.11.99.

1

<sup>&</sup>lt;sup>4</sup> Data estimates as at end of August 1999.

Economies of scale in purchasing or even setting up own container terminals, bunkering facilities and container-manufacturing plant can also be achieved if the volume of traffic so warrants.

Many alliance members have practised purchasing own facilities on the strength of a collective alliance-anticipated-demand. Any investment by a particular line based on this kind of demand can be very detrimental to a specific line if the demand fails to materialise, or worse still if the alliance breaks up.

Investments in ships, terminals etc are fixed assets which once purchased they need to achieve the relevant economies of scale and stable optimum utilisation to pay back in time. The stability required of such investments is lacking within the alliance, which has been termed by some as a "loose marriage". Filling the ships and utilising capacities optimally in the long- term will require the kind of stability and cargo growth only achievable by accelerated company growth.

# 3.3 Commercial advantages

"To combine the marketing strength of each company and to complement each other in the trade" - (Containerisation International, September 1996).

Lines need to cover the global market in an era of globalisation in order to attract global contracts and global exporters. Bigger container ships cannot generate economies of scale unless they are optimally utilised. After employing bigger post panamax container ships in search of economies of scale, the load factor must be maximised, and the empty container repositioning minimised. In order to fill the big ships, a line may take a commercial decision to reduce freight rates in order to attract extra cargo, hoping that this freight rate reduction may increase total profitability. Reducing the freight rates may be very detrimental to the line as competing lines fight back. A carrier may therefore prefer the growth of both volumes and revenues by merging with or acquiring rivals.

Marketing and sales is another reason why some lines have sought mergers and acquisitions. No line is strong in all the markets, and their penetration is different in different markets. Container imbalances therefore happen.

A good example here is the merger between P&O Containers and Nedlloyd lines in January 1997. While P&O had a strong market share in Japan, Australia and the US markets, Nedlloyd lines was strong in Latin America. By merging, the two companies into one, they hoped to enjoy improved load factors on their vessels in all routes.

If shippers are getting bigger and bigger, the carriers also should seek accelerated growth to match the bargaining power of their shippers. Small niche players may be negotiating from a very weak position if approached by a global shipper like Volkswagen, Michelin, etc.

# 3.4 Operational & Technical benefits

Bigger companies, as mentioned above, provide an opportunity for employing bigger cost-effective ships at a high cargo space utilisation ratio. Adjustments to space utilisation are better in an alliance than in an independent line, unless the line is a mega-carrier. Operational flexibility is another advantage of a global carrier. For example, should one container vessel break down, a mega-carrier with many vessels in position would be more flexible in terms of obtaining a replacement from the existing fleet, as opposed to a niche or regional player with few vessels.

This kind of flexibility is necessary in a world of increasing inventory costs for shippers as the value of merchandise increases. One day lost at sea because of engine trouble is very costly to the global shipper who has relied on the shipping lines schedule and reliability to tailor a "just in time" delivery system. Only global carriers can achieve this kind of flexibility. The Swedish furniture chain store, IKEA emphasises the importance with which global shippers are attaching to a

shipping line's ability to provide swift alternatives in case of unfortunate events (Christiansen, 2000).

Operational know-how, although not a very prominent factor why lines seek bigger sizes, could determine which carrier to merge with. A line with low operational/technical know-how can greatly benefit if it merges with another line, which has market and financial strength. This is the concept of strategic partnering where ports and also national lines have sought expertise by selling some shares to a global carrier. The need for such a partnering was the reason behind the selling of 45% Kenya National Shipping Lines' shares to Mediterranean Shipping Company (MSC).

# **Chapter Four**

# THE IMPACT OF CONSOLIDATION ON LINER AGENTS

The traditional role of the agent was (in summary), to represent the ship owner in the port where the ship owner did not have his own offices. This role has changed considerably over the years, but still remains more or less the same for the tramp agent. The liner shipping agency has, however, gone through some metamorphosis. Many of the emerging global container lines have adopted a policy of setting up their "own agencies" in ports where the traffic can allow.

The following figure and quote from a global carrier serve to illustrate the strategic importance by which global container carriers perceive the issue.

Figure 4.1

Mediterranean Shipping Company S.A: network of own worldwide agents

Source: Mediterranean Shipping Company, SA Geneva



"In order to improve and control the quality of its various operations, MSC has established its own agencies all over the world run by an extremely dedicated and professional staff." (Mediterranean Shipping Company S.A, Geneva, 2000).

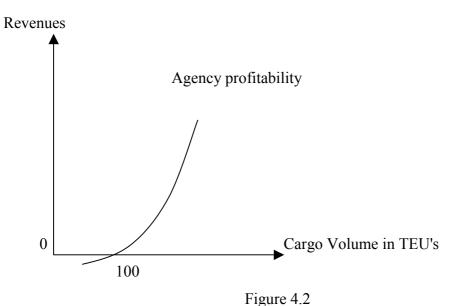
### 4.1 Reasons for setting up own agency

The decision on whether or when to set up own liner agency at a local port or region is a cost-benefit issue. It is a function of the cargo volume, the freight commission and quality of service being produced by the local agent.

Liner agents are usually paid a commission, a percentage of the gross freight per TEU or on a lumpsum basis per container. These commissions usually do not depend on the volume of the cargo generated or handled at the jurisdiction enumerated in the agency agreement. In other words, the agency commission remains the same per container regardless of the volume handled.

A small volume of cargo shipped per month may not be sufficient to sustain an agent. Usually a liner agent has several principals, whom he acts for. Most lines however, insist that there should not be any conflict of interest between themselves and any other shipping line served by the same agent.

Based on the economies of scale concept, profitability for the agent will increase as the volume of cargo handled by the agent increases and the number of lines represented increases. Explained graphically: -



The liner agency profitability curve

There is a certain critical cargo volume, below which the agent will not be covering his overheads. For the purposes of simplicity, this is assumed to be 100 TEU's in figure 4.2 above. Before the critical quantity of 100 TEU's is reached, the agent will operate at a loss.

Assuming that the line starts small, the line is comfortable paying the agency commission. This way it avoids investments in overheads such as office rent, administration etc. To set up own agency will be an inefficient use of resources, and the cost per TEU will most likely exceed the cost per TEU payable to the agent. This is because the agent has economies of scale by consolidating the cargo from different lines and principals. As the volume of cargo handled increases over time, the critical point is reached, where the agent will start to earn some profits.

On the other hand, the shipping line will continue to review the agency position as its volume of cargo, to and from this region, increases. However, as the business grows,

the lines will want to review their analysis to see at what output level the economics will justify setting up their own agency.

Revenue/Costs per TEU.

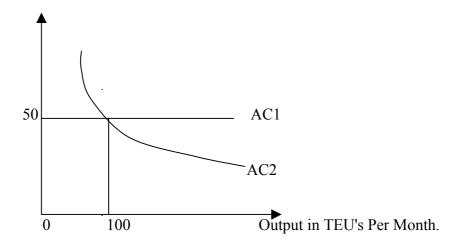


Figure 4.3

The economic decision process for setting up own agent at a port

An assumption is made that agency commission is agreed at US\$ 50 per TEU on a lumpsum basis, i.e. regardless of the freight rate level.

AC1 is the shipping lines fixed cost when agency services are outsourced. It is also equivalent to the agents' revenue per TEU.

AC2 is the carriers average cost curve when agency services are not outsourced, i.e. when operating its own agency at that port.

As the output grows the lines commission costs remaining constant, a critical point of output is reached, where the line could now operate its own agency economically without incurring losses. The once high administrative and other fixed costs are spread evenly over a large number of containers to reduce the average cost per TEU.

The average cost curve is therefore a normal one, declining from left to right because of economies of scales.

If the line maintains the agent, the average cost is still the same with different outputs at USD 50 per TEU (unless the line successfully negotiates a lower commission which will shift the curve downwards). From the above graph, it is therefore clear that it will make economic sense for the shipping line to set up its own agency at that port once the critical throughput reaches 100 TEU's per month. In real sense, the carrier may set up the agency before reaching the critical economic point mentioned above for other reasons such as:

- Gaining control of the decision making and the operations of the agency.
- Ensuring loyalty for the line and avoiding a possible conflict of interest with other lines.

This example, although based on theoretical explanation (because of lack of relevant specific data) serves to highlight the shipping lines economic decision making criteria on whether to set up own agencies and when to do so. Container lines could however, use this model using their in-house data and information to determine at what level the line will need to set up its own agency at a specific port.

Since it is clear that the decision depends on the output level, and the output level through a port is influenced by company growth, the impact of market consolidation on liner agents can be seen clearly in the following case study.

# 4.2 Case study: the merger of P&O containers and Nedlloyd lines in 1997

Before the merger of P&O and Nedlloyd to form P&O Nedlloyd in 1997, both lines had different liner agents at the port of Mombasa, Kenya. Mackenzie Maritime represented P&O where they also held some shares, while Wigglesworth Shipping

which was a private agent, represented Nedlloyd. Both agents had other principals they were also serving.

P&O Nedlloyd had acquired the full ownership of Mackenzie Maritime during the same year. After the merger of the two lines, the decision was made in favour of Mackenzie Maritime, obviously because of P&O's share ownership at Mackenzie Maritime. Wigglesworth was forced to close down its shipping division because the remaining principals (Jadroplov line being one of them) were not big enough to sustain the agency.

While P&O Nedlloyd was busy settling down in Mackenzie Maritime, the other principals served by Mackenzie Maritime (Mitsui OSK being one of them) started feeling uncomfortable being served by their competitor as their agent. They started looking for another agent, but it was Mackenzie Maritime who came up with an alternative solution. They started another agency in the name of Maritime Company of East Africa (MARICO) which became the new agent for both Mitsui OSK and Jadroplov.

However, it took about 2 years before the two lines in MARICO realised that they were still being served by their competitor and moved to Inchcape Shipping Services. MARICO was closed down in 1999.

#### 4.3 Case observations

From the above case study, the following observations can be made;

All container lines have a "one agent for every Port" policy. If two lines served by two private agents merge into one container line, the result is that one agent will unfortunately loose his job (An exception is where the lines maintain their identity and operate separately like Maersk and Safmarine or P&O and Blue Star line). That agent will most likely be the weaker one, or the one where none-of the two merging lines have share/ownership.

- As the two container lines merge their operations into one of the two agencies, the volume of business for the agent will grow geometrically. This is good news for the agent but: -
- If the container line does not own the agent, the volume of business will most likely be at new levels (critical level discussed above), which warrant the line to set up its own agency. The result is that the line will demand, from a very strong position, for ownership or part ownership of the agency. Should the agent decline, the container line will most likely set up its own agency offices to the disadvantage of the liner agent.
- Conflict of interest within an independent liner agent increases with the growth in the carrier's size. As the carriers grow and expand to new routes, there are more chances that their once different markets will overlap. One of the lines will have to look for new representation.

# 4.4 Threatening factors

From the above description of developments in the liner agency sector, the following could be the summary of threats to the liner agent as a result of emerging bigger carriers: -

The growth in the business of the agent due to growth in the carrier size has put the carrier in a domineering position vis-à-vis the agent. In many cases, the agent serves only that particular line. The agent's client base is not diversified because the agent is prevented from doing so by the conflict of interest clause. He very much depends on this big client (all the eggs in one basket), and the carrier is aware of his strong bargaining position.

 Growth in the size of carriers has encouraged carriers to set up their own agencies at the expense of the local independent agent.

# 4.5 Recommendations for the local independent agent

In view of the impending threat by the emerging global carriers taking over the role of the local agent, the agent needs to adopt a Customer Relationship Management (CRM) strategy when dealing with its principals. Some of the following suggestions may be the way forward for a threatened local agent, depending on their individual situations:

# 4.5.1 Negotiating a division of tasks

The carriers are more concerned with the cargo control function. They give this as one of the main reasons for wanting to operate own agency. The agent could negotiate with the carrier for a division of tasks so that the carrier is in control of marketing and sales (front office), while the agent maintains back room and operational (loading, discharging, vessel handling etc) and documentation functions. In this way, the agent will avoid being rendered redundant.

#### 4.5.2 A reduction in the agency fee

Having already established in figure 4.2 above that the carriers will only choose to operate own agency in a port only when the traffic rises beyond a certain critical point, it is important for the agent to know when this point is being approached. This can be detected partly from the agents' statistics and partly from the carrier's behaviour, so that the agent will be willing to offer commission reductions per container and try to keep his profits lower. This will raise the barriers to entry for the carrier, since this action will lower the average cost curve (AC1 in figure 4.3).

#### 4.5.3 Joint ventures with the carrier

Another alternative is to offer the carrier a joint venture option where the line and the agent will be co-owners in the agency business. In this way, the agent will tie down the carrier, giving the carrier a disincentive to move away. Many carriers will be happy to maintain the agent's expertise and have a share of the profits. Care should however, be taken when exercising this option because if there are other carriers represented by the same agent, these other carriers may opt to move away once the dominating carrier acquires the joint ownership of the agency.

# 4.5.4 Sale of the agency to the carrier

Depending on the situation, the agent may achieve a win-win situation by selling the agency to the carrier. In some cases, the agent may go bankrupt for lack of business if the line leaves the agency. To avoid a decline in company value after the line leaves, the agent may sell the company to the carrier. Some carriers will be happy to strike this deal because they also get to maintain some degree of cargo stability, which is important to them.

#### 4.5.5 Greater control of the cargo

The main reason for a container carrier's existence is to carry cargo. Operating its own agency can never be achieved at the expense of this reason for existence. Agents need to adopt CRM measures, which will give them a stronger partnership with the shippers than that of the shipper/carrier (Ma, 2000). Such measures could include the diversification discussed in the next point below.

#### 4.5.6 Portfolio diversification

"... firms will have to offer a greater menu of quality services to survive and prosper. This will require larger firms capable of providing services which owners and charterers' cannot duplicate economically." (Braam, 2000).

The agent is no longer in the business of shipping, but rather he is adding value in supply chain functions. Investments in tramp agency, clearing and forwarding, warehousing, logistics etc, as mentioned above, could raise the barrier for the carriers by controlling a bigger part of the chain, and also supporting the shareholders value in case the agent loses the carrier's agency representation business.

#### 4.5.7 Mergers and alliances with other agencies

Strong agencies will survive. The strength of an agent is the amount of cargo the agent controls. The strong agent is more likely to secure new business should a global carrier leave its agency services to set up its own. The small local agents should look for possibilities of merging to form bigger entities, as long as this is possible (conflict of interest among competing lines may not allow this at times). An alternative is to merge the two agencies' back-room operations, which has been the most popular strategy so far. To quote Fairplay online,

"The number of independent agents is dwindling. To stay in business, they are not only merging their back room activities, with colleagues but also extending their activities to logistics-chain operations" (Fairplay, 2000).

Port agents may learn vital lessons from the current alliances in shipping and the airline industry. This is the way for the future: reduce costs through co-operation in the buying market and then compete in the selling market.

### 4.6 Conclusion

The liner agency market has been shrinking and as long as consolidation continues, it will continue to do so.

Global shipping agencies have also emerged. Names like Inchcape Shipping Services and Barwill agencies are now truly global. On the other hand there are agents who have taken the alliance path and formed a global alliance of agencies such as Multiport Ship agencies network- another global name. In these alliances agents from the different parts of the world support each other with marketing and information about shipping lines intending to start new services in certain ports.

Entering such an alliance is a prudent strategic decision for a liner agent, because it will increase the agents market coverage, especially for an agent wishing to acquire new business.

# Chapter Five.

# THE IMPACT OF CONSOLIDATION ON PORTS AND CONTAINER TERMINALS

As container lines grow bigger through mergers and acquisitions, they are employing bigger ships due to the corresponding growth in cargo volumes. This is because as the cargo volumes grow because of the amalgamated cargo for the two merging lines, there is an optimum number of strings a line can employ on a particular route. Beyond this optimum point, any addition in strings will not be economically justifiable, and it may be better to employ bigger ships instead of increasing the port calls. The size of ships employed in a particular string will usually be a function of the line's economies of scale on one side and the shippers needs on the other hand. Still, larger volumes of cargo per week have to be shipped across continents, and this requirement calls for increased ship sizes to match the demand.

### 5.1 Implications to ports

The growing size of container carriers and the reduction in the number will impact ports and terminals in many different ways.

### 5.1.1 Fewer direct ports and growth of the transhipment concept

As mentioned above, bigger container carriers have led to bigger container ships. Bigger ships will require optimum utilisation of the ships port calls. Bigger ships achieve higher economies of scale with fewer port calls rather than with many port calls. On the other hand they rely on the transhipment concept.

Since ships earn revenue only when they are sailing, the growth in the size of ships has led to fewer main ports for the big ships, and an increase in transhipment. This situation has led to a classification of ports into layers depending on the vessels calling at these ports (Hoffman, 1999). As vessel size increases, the number of ports called by these mother ships will continue to decrease.

The number of ports called per "mother vessel" per voyage will continue to decline as long as the cost savings generated by the mother ship are higher than the cost of feedering and other associated costs. A 15,000 TEU containership is envisaged to call at only 6 main ports in the world; one on East Coast of North America, one on the west coast, one in Europe, one in the middle-east/Asia and one in far-east/south-east pacific.

The growth of the transhipment/feeder concepts, the corresponding investment in hub ports concept, etc, have made it possible for the big mother ships to call at hub ports and to use smaller ships to tranship containers to smaller ports. With the growth of companies and ships, there is likely to be a negative impact on most ports and a positive impact on a few ports worldwide. The number of containers handled in most ports will increase due to transhipment options. Transhipment ports like Algeciras, Malta, etc have thus emerged and will continue to grow and increase for the foreseeable future. Other traditional ports are also benefiting because no port today can claim to be handling only imports and export business.

The possible future scenario for a 15,000 TEU fleet according to Hoffman is as below:

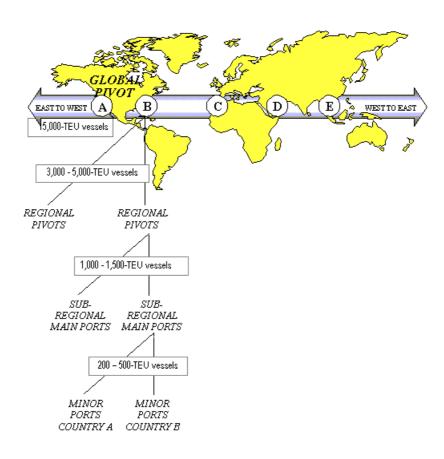


Figure 5.1
Possible future scenario of multi-layered port calls

Source: Jan Hoffman, 2000.

#### 5.1.2 Preferential treatment

Market consolidation will reduce the number of lines calling at a particular port especially if two lines covering the same route merge their operations. Some of the remaining carriers will have big market share of the traffic throughput of a port or terminal. A global carrier accounting for a bigger portion of the ports yearly throughput is a powerful client, which can demand special treatment in port services and charges. Such a line would want to be treated in accordance with the volume of

business it generates for the port. This places the port in a reduced bargaining position vis-à-vis the carrier.

#### 5.1.3 Dependence on a few bigger clients

Market consolidation implies the market being concentrated to a few big carriers. Ports will compete fiercely for the few big clients. "If one line decides to change terminals or leave the port, the effect can be disastrous" (Ishii, 1999).

An example is the port of Algeciras which although operated by Maersk Sealand, all the 1,117,000 TEU's port throughput for the year 1998 was combined Maersk and Sealand traffic. It is estimated that the port of Singapore will loose a staggering 10% (1.8 Million TEU's) volume of business on October 1<sup>st</sup>, as a result of Maersk Sealands decision to change main-haul service calls from Singapore to the port of Tanjung Pelepas (Lloyds List, 11.08.2000, p.1).

Because of their business volume, container lines will be expecting ports to treat them in a special way as mentioned in point 2 above.

### 5.1.4 Capital investment by ports

Although the growth in container ships size cannot solely be attributed to mergers and acquisitions, bigger companies give rise to even bigger container ships as the cargo volumes are amalgamated and also due to yearly trade cargo growth. These bigger ships put enormous demands on the port infrastructure, superstructure, road, rail, and short sea feeder transport facilities. Bigger ships need wider, deeper channels and berths, larger yard space for both empty and laden containers, faster, computerised and stronger gantry cranes and transfer equipment etc. These facilities are usually the responsibility of the port and the terminal operators.

The new investment requirements have hastened the process of port privatisation. With a small exception like the Port of Singapore Authority (PSA), most government-owned ports and terminals have a reputation of slow adaptability to customer needs and changes in the market place. They may not be able to keep up with the required investments to increase port productivity for the discharging and loading of container ships. Privatisation is the likely option.

# 5.1.5 Increased port competition

Because of the value of one container line calling at a particular port, the port will be under enormous pressure to keep the client. Ports will not only be competing against each other, but also against the new container carriers, which have increasingly been setting up own terminals around the world.

Bottlenecks like port reluctance to invest in the required facilities will prompt container carriers themselves to invest in the equipment by setting up own terminals for example, to the disadvantage of the local port.

As bigger and bigger ships are employed in each trade, carriers will be faced with a decision on what port to choose as a main port, and which ones to relegate to feeder ports. This could come sooner than expected because there is already talk about 8,000 (although unofficially, container ships may have already surpassed this size) and 12,000 TEU ships. According to Mr. Tsien of Hutchinson ports holdings, "the 15,000 TEU ship may not be far away" (Tsien, 1999).

#### 5.1.6 The "knock-on" or "cascade" effect

Trade growth, mergers and acquisitions, and the availability of advanced technology have enabled bigger ships to be employed on the main line east—west trades. The result has been that as mainline vessels are replaced with new, bigger ones, the ships now leaving these trades are deployed in other trades, which do not necessarily need

the bigger size vessels. For example, the biggest container ships are usually deployed in the Europe–Asia trades. At the times when the panamax ships were the biggest container ships in service, most were deployed on this route. Then came the post panamax containerships, which were deployed on the Asia-Europe trade relegating the panamax ships to the trans Pacific trades. The "knock-on" or "cascade" effect is the relegation to feeder or other routes of ships due to deployment of bigger ones on the main line trades.

Even where ports have forecasted growth in container ship size based on trade cargo growth, the bigger ships may be deployed in these ports earlier than expected because of the knock-on effect.

# 5.2 Recommendations for ports and container terminals

Ports and container terminals must ensure that they remain competitive in the wake of bigger ships and stronger, influential container carriers. The following recommendations may be useful to the ports wishing to stay ahead of the competition.

# 5.2.1 Customer Relationship Management strategy

While Customer Relationship Management (CRM) can be another dissertation topic, a few words here are in order. Ports can reap tangible benefits by adopting a CRM strategy where customers are treated in accordance with their importance and contribution to the port in TEU and revenue terms. An important port user like Maersk Sealand, generating 1,117,000 TEU's for the port of Algeciras per year should not be treated in the same way as another line with 5,000 TEU per year throughput in the same port. The traditional port tariff system is not in line with today's business market place. Bigger customers should be able to get some rebates due to the volume of business they generate for the port. The port should also constantly think of other ways to give these carriers preferential treatment (e.g. some

share ownership), binding them to the port services. Care must however, be exercised when offering a carrier share ownership because this action may discourage other carriers from calling at that particular terminal. The benefits of securing one carrier have to be weighed against the potential loss of other carriers.

#### 5.2.2 Port investment

Any carrier's decision to use a port as a main or feeder port very much depends on the facilities available, among other factors. The ports of Hamburg and Rotterdam have already invested in receiving "super post-panamax" container ships (about 8,500 TEU's). They will be the first ports to be contacted by carriers when such big ships finally enter service. The changing requirements will need a dynamic port willing to invest in providing the carriers with the necessary facilities.

Care should, however, be exercised when choosing which projects to invest in, especially with bigger containership facilities. A 12,000 TEU ship will most likely call at only one Northwest Continent port within the Hamburg- Le Havre range (Hoffman, 1999). If 2 or 3 ports invest in such facilities, some of these ports are likely to suffer redundancy and underutilisation of the expensive resources.

The question of how big container ships can get should feature prominently in the port planners' mind. The "ULCC effect" is a constant reminder of the fact that although there are economies of scale in ship size, diseconomies of scale do set in after a certain optimum size is attained.

Ports, which may have invested to attract ULCC's in the 1970's, are unlikely to have fully utilised these facilities due to a failed demand. A port investing in future requirements for bigger ships will have to decide at which point the port will minimise investment to avoid redundancy and underutilisation of expensive equipment as a result of a failure of expected demand.

# 5.2.3 Cargo generation

The traditional port was run as an operational facility, without much advertising and marketing. It sold itself. The reasoning was that "ship follows port, and cargo will follow ship". Some ports have changed to a more commercial orientation while some are still relying on a "captive hinterland" concept (Francou, 1999). Today, ships follow cargo. An example of such a port is Dubai Ports Authority.

"Due to Dubai's traditional trade links with its neighbours, shippers are keen to capitalise on Dubai's proven distribution capabilities". (Dubai Ports Authority, 2000).

Because of the distribution and manufacturing functions of Dubai, it will be very hard even with modern competing facilities like Salalah for the port of Dubai to be served as a feeder port. It is important for the port to market and generate cargo for ships calling at the port to attract bigger ships. Bigger ships generate more revenue for the port because port charges in most ports are usually based on a ship's size.

Ideas like cargo centres, distribution centres, export processing and tax free zones, hinterland development etc; are worthy projects for a port to pursue in order to increase its container traffic and port competitiveness. Value added functions would be expected of ports. In other words, "Ports will change from the port industry to the transport industry" (Beth, 1999).

### **5.2.4** Port co-operation

Co-operation between competing ports could improve their competitive advantage with each of the two ports seeking to specialise in what it does best at the lowest cost.

An example is the new co-operation between the port of Copenhagen and the port of Malmö. Specialisation, based on the law of comparative advantage will mean that the port of Malmö can specialise in bulk and general cargo while the port of Copenhagen specialises in containers and the passenger/cruise business.

Although port co-operation and specialisation has its disadvantages (Ma, 2000), the specialisation will ensure that the two ports do not compete for the same services, and therefore do not duplicate resources. They can now focus on investing the very best technology in the particular area of specialisation.

#### 5.3 Conclusions

Competition in ports is increasing due to market consolidation among container carriers. It is easier for container lines today to change ports of call than ever before, because of improved road and rail networks, which have expanded each port's shared hinterland. This competition is based on their geographical advantage, their vessel and cargo handling costs and the amount of cargo the port can generate per sailing.

Port investments to keep pace with bigger, wider, deeper container ships will shape future port competition and determine which ports will be relegated to the bottom tier. Ports are likely to have a multi-layer classification similar to the current container ships classification, depending on their functions and ship sizes.

# **Chapter Six**

# THE IMPACT OF CONSOLIDATION ON REGULATORS AND THE LABOUR MARKET

### 6.1 Government considerations.

Fewer and bigger container carriers will have an impact on a government's regulations and their competition policy. Governments as well as employees and labour unions need to be aware of how market consolidation in container shipping will impact on them. This paper will only address the issues of commercial regulation and avoid other types of regulation, which are not directly relevant to the dissertation. The following reasons explain why governments may be interested in how consolidation develops in any market.

# 6.1.1 National employment / Unemployment levels

Consolidation affects the job market and the employment/unemployment levels in a country as already discussed in chapter four. Employment levels affect the macroeconomics of a country, hence the relationship between consolidation and the regulation authorities.

#### 6.1.2 Market dominance

Consolidation leads to bigger liner companies. These bigger companies affect the way business is done in the liner shipping market. They also compete from a very strong point of view with designated national shipping lines. Mr. Vieljeux, the president of the CMA-CGM group was quoted as saying that "Nobody takes competition from Maersk line lightly these days..."(Containerisation International, Nov 1999).

Bigger companies always push for special treatment, e.g. own terminal facilities, etc. This may be at the expense of small locally operated niche container carriers, freight forwarders and other local companies.

# 6.1.3 Cargo control in the whole chain

The global mega-carriers of today's market place have direct control of the cargo from shipper to receiver, door-to-door (and more recently, factory-to-shop). The regulators are faced with a problem of trying to ensure that cross subsidisation of the different legs of the whole transport system is not practised by the carriers at the expense of other competing unimodal transport companies.

# **6.1.4** Threat to indigenous transport businesses

The new global mega carriers are increasingly competing with relatively weaker local clearing and forwarding companies, truckers, railway companies, terminals etc. The asset-rich container lines, controlling the flow of the cargo, are likely to push many local players out of the market, killing indigenous enterprises.

On the other hand, the EU argument is that the sea voyage and the land transport section of container carriers must be priced separately to avoid subsidising the land part with the sea voyage, and killing the land competitors unfairly.

#### 6.1.5 Trade route subsidisation

Because of their diverse market coverage, global carriers are able to subsidise the trade route/land transport with earnings from other routes. They can therefore charge for some legs below what the local operator can compete. This practice may be utilised in the short run to throw local companies out of the market, and later assuming a monopoly position.

# **6.1.6** Balance of payments

Global carriers are multinational organisations, which have the globe as their market place, but still maintain head offices in a certain country. Capital flight in the form of profit repatriation can be a source of regulatory concern to reduce the country's capital account deficit, especially in developing countries. The UNCTAD liner code (1974) was partly based on this argument (UNCTAD, 1974).

#### 6.2 The labour market

Market consolidation is about economies of scale. The merging of two companies into one involves synergies and efficient use of resources. It involves administrative savings too among other types of savings. Some employees are laid off as the two companies merge their operations into one entity.

The same is true on the liner agency side. As two container lines merge their two operations into one agency in all geographical locations, one agency loses its business and a proportion of its employees has to be laid off. The redundancy criteria are usually based on the level of education and training, and the relative marginal benefit derived by the company from each employee.

In order to have a sizeable control of the local offices by the owners; expatriates are more likely to increase in the new liner agency. This replaces local labour with foreign labour. The number of expatriates working in developing countries where unemployment is also high has increased due to consolidation in the container industry.

On the other hand, because the cost of labour in developed countries' has been increasing steeply, shipping companies have been increasingly turning to developing countries for manpower, especially crewing needs. Less developed countries will stand to benefit in this area if they are able to train and export quality labour.

Bigger and bigger container lines require high employee training and competence. As the organisation grows bigger and bigger, handling new complex operations like logistics and supply chain management, the battle of the brains becomes the deciding factor and very stiff both within the organisation and in competition with other lines. The innovative container line is the one most likely to succeed in the particular route/market.

As the company consolidates the two operations into one, the volume of cargo creates a demand for a dedicated container terminal, own clearing and forwarding company, and a fleet of trucks/trains. The impact to the labour market will be positive as new jobs are created within the container line in these new land investments

The presence of experienced expatriates and the extra investment in training usually provided by the big container lines is an advantage to developing counties. The mega-carriers usually have a system of manpower strategy, which looks at long term employee development as a key to company success. A good example is the Maersk International Shipping Education (MISE) in Copenhagen, which trains Maersk Sealand's junior and middle level employees from around the world. A look at their

current (2000) list of students from different countries serves to emphasise this argument of transferring skills to developing countries. "Presently more than 300 trainees from 57 different countries worldwide are enrolled in the Maersk International Shipping Education programme" (Maersk Sealand, 2000).

Due to the rapid expansion of CMA CGM after their merger in November 1996, the new company embraced the Maersk Sealand idea by establishing its own learning and research Centre in the year 2000. They regard this type of training as central to the lines future success (Lloyds List, 31.07.200, p. 3).

One other way in which developing countries can benefit from global mega carriers is through the transfer of technology. This transfer can be achieved in areas such as electronic data interchange, innovations in ports and terminals leading to increased efficiency and other data transfer methods such as Internet and email achieved through research and development. Breakthroughs in other parts of the world are quickly transferred to all own terminals and agency offices worldwide.

It is usually assumed that bigger lines experiencing more economies of scale will usually pass at least some of the cost savings to their customers in terms of lower freight rates, reduced transit times (quality of service), and some voluntary community welfare contributions. Cheaper, efficient transport costs are to the advantage of the trading countries and the world at large. Low transport costs lead to low production costs, encouraging production and trade. Developing and developed countries stand to benefit from the current consolidation in container shipping. Trade is encouraged to the benefit of all. It leads to employment creation and higher income levels for the trading partners.

The growth in company sizes in virtually all industries has brought with it the corresponding weakening of the trade unions power. Ports and their employees know pretty well that in this age of cut-throat port competition, strikes and labour

unrest will hurt the employees and the port more than the container carriers. Any dispute whether between the port and the trade union, or between the trade unions and the container carriers, has to be resolved amicably. Today, the container carrier can change ports of call at short notice, thanks to the improved transport network, free cargo movement and a wide selection of ports within a geographical location. This is especially so in North America, Europe and more lately, Asia. This ability to switch ports of call is limited in Africa where land transport is not well developed and port choice is limited. For a port to lose a container carrier because of an industrial action could be counterproductive to the labour unions. It may result in a lay-off if the carrier permanently takes big business to a competing port.

# **6.3** Regulatory recommendations

Market consolidation is expected to continue at least for the foreseeable future. The following proposals could be useful to the regulators wishing to ensure that shippers, consumers, the economy and the job market are not affected adversely by the growing size of container carriers.

#### 6.3.1 The "invisible hand"

The best regulator in the free market situation is the invisible hand, which will allocate resources optimally. The consolidation process and causes as discussed in chapter three is a product of competition and economies of scale. Consolidation is about cutting production costs, which under normal circumstances will benefit the shippers. These benefits to shippers can be shown in declining freight rates over the years, which are partly attributable to lower costs.

The argument that shipping is capital intensive and that the amount of capital required for starting a shipping line creates a barrier to entry could have been a valid point before the emergence of the China Shipping group. With the emergence of China Shipping, it has been proved (at least in the long run) that the barriers to entry

are not too high to the extent that a domineering carrier could reap monopolistic profits. Any attempts by domineering lines to reap monopoly rent will be met by entry into the market by new lines, curtailing monopolistic prices.

The recent spate of protests against the World Trade Organisation, however, has demonstrated that some countries feel that few countries are reaping the globalisation benefits. Instead of looking and lobbying for new regulations, developing countries should capitalise on their competitive advantage. The Philippines, for instance, has been a global provider of seafarers. That is their competitive advantage, which they should capitalise on. Kenya on the other hand has untapped shipping skills demonstrated by the wealth of international qualifications in shipping management and operations as demonstrated by the number of students excelling in the Institute of Chartered Shipbrokers examinations. These are competencies the relevant governments should develop to participate in globalisation and concentration in liner shipping.

The emergence of strong shippers' councils in the main east-west trades has brought some form of balance to the industry, reducing some need for government regulation. Carriers know the ESC for bringing up court cases against alleged misconduct.

The sixth annual Tripartite Shippers Meeting in Vancouver, Canada brought together a record number of shipper organisations from Asia, North America, and Europe -- the world's three main trading blocs. Representatives from this year's meeting recognised that turning greater co-operation into common strategies to liberalise maritime transport and other modes of transportation is an integral part of ensuring that carriers are in a position to meet the needs of shippers in the world economy (European Shippers Council, 2000).

The shippers council idea has gained momentum as shippers councils from different continents seek to unite and speak with one voice on commercial issues. These

shipper councils are now co-operating in what they call the "Shippers Tripartite". Regulators should encourage these councils as a means of the market regulating itself.

# 6.3.2 Minimal commercial Regulation is necessary at times

While it is true that consolidation results in economies of scale, the leading carriers could (in imperfect market conditions) abuse concentration of market power by reaping monopolistic rents. It is vital for regulators to ensure the creation of employment and promotion of trade while the environment is not adversely affected by consolidation. Organisations like WTO, OECD, FMC and so on have adopted an attitude of deregulation of the liner sector while still maintaining minimum control in the form of anti-trust curtailment. The IMO on the other hand is mandated to regulate the shipping industry as a whole to ensure safe use of the sea as a global priority.

Regulators should keep an eye on global carriers who may control the whole chain from trucking to ocean ships, to container terminals, to trains etc. This is because any such control may be a source of an incentive for monopolistic tendencies to subsidise one sector with the others, killing competition and raising charges later.

While the job market is not fully liberalised, the African and South American countries stand to lose from consolidation since they do not have big shipping lines compared to their Asian and European counterparts. Very minimum regulations in terms of expatriates could be necessary to protect and build local expertise. Care should however, be exercised to make these regulations as voluntary as possible. This could be in form of incentives to the complying carriers rather than imposing penalties to any uncomplying carrier.

#### **6.3.3** Excessive regulation will discourage trade

Regulation should never be aimed at protecting national shipping lines or the smaller shipping lines. It should also not be aimed at strategic cargo reservation for reasons of "national security". If this is done, the result will be minimal competition and higher freight rates. These higher freight rates will reflect themselves in reduced exports and imports and a slowdown in the economy. Cargo reservation policies, for instance, like the "Johns Act" will lead to above-market freight rates.

Regulation should mainly be aimed at avoiding monopolistic market structures, which lead to monopoly rent.

#### 6.4 Conclusion

While the invisible hand is the best way of allocating resources, imperfections in the market warrant regulators to intervene with minimum orders to avoid monopolistic tendencies and to protect the environment. These interventions by the regulators must be as voluntary as possible, and must not aim at protecting local enterprise like national shipping lines against external competition. Cargo reservations policies and other discriminative measures are likely to hurt the economy than help it.

# **Chapter Seven**

# IMPACT OF CONSOLIDATION ON SHIPPERS AND FREIGHT FORWARDERS

# 7.1 Shippers

Shippers are the main reason why container carriers exist. The impact of market consolidation on shippers is a vital subject because it will also affect the way the regulators view the industry. Governments have a mandate to protect local business-shippers included- from unfair competition.

If consolidation is the reduction in the number of companies and the increase in the size of companies, many would be quick to say that it tends to create some degree of monopolistic power, to the detriment of the shipper. Others would argue that mergers and acquisitions are all about synergies, and therefore it is beneficial to the shippers.

### 7.1.1 Freight rate developments

Bigger carriers have implied economies of scale and development of innovative technology. Bigger and bigger cost efficient ships have been employed as the carriers seek ways of moving increased cargo volumes while at the same time minimising the number of strings/loops on a specific route.

Bigger and bigger carriers have also challenged the necessity of the conference tariff system. Since in the past the revenue side was more or less guaranteed by the conference tariff, lines had no urgency to reduce costs. Consolidation will benefit the shippers as long as competition among carriers is maintained. There is reason to believe that competition will increase. Large lines are entering onto new routes as they expand their activities, increasing competition on those new routes. The year 1999, for example saw MSC, ZIM and CGM/CMA enter the Trans-Pacific trade. In the last decade, Asian carriers have also been expanding their services to serve Europe, North America and the North-South trades. Although there has been a worldwide decrease in the number of carriers, the number of carriers on each route has increased due to the expansion of global carriers. If this competition is maintained among the remaining few carriers, cost savings that are achieved by the bigger company sizes could be passed on to shippers in the form of lower freight rates. These lower freight rates will encourage trade, both imports and exports.

# 7.1.2 Shippers options

Global carriers are able to offer their clients a global menu of destinations and tailor-made global service options, such as global contracting or local contracting. They can offer port-to-port as well as house-to-house multimodal movement. Most global carriers also have an extensive land transport network, and competition is now turning to the investment on these land facilities.

The growth in company sizes will increase the use of the transhipment concept as lines seek to reduce port calls for the expensive mother ships. Transhipment will increase the options available to shippers for shipping a container to a certain destination.

They can also move the cargo in standard or special equipment. The ability of the large lines (with comparatively higher collateral) to raise capital for further

investment in facilities like special containers, market information and so on, are other ways that shippers stand to benefit from market consolidation.

#### 7.1.3 Bargaining conditions

Global carriers have increasingly eliminated the need for a rigid conference system. The conference system has been, to some extent, weakened by the emergence of more powerful global "independents" like MSC and Evergreen. Shippers can now negotiate on their own terms with individual carriers on a one-to-one basis, thanks also to deregulation.

The shippers' councils also seem to have gained more prominence in the last few years. They owe their success mainly due to increased deregulation of the liner sector, the decreasing importance of the shipping conference and the increasing need for mainly small shippers to speak with one voice in regards to countering the bigger container carriers. This organisation could serve as a shipper forum in case any line is engaged in some anti-competitive practices. This is important because it enhances the shippers position vis-à-vis the strong carriers.

One-to-one negotiations as opposed to the old conference system, enables individual carriers to treat shippers in accordance with their individual commercial worth (Forsyth, 2000).

### 7.1.4 Tailor-made innovative solutions and trade guidance

Global carriers engage in many modes of transport and regions, developing expertise, which can be utilised by the small, local inexperienced exporter. The carrier can advise this small inexperienced exporter on the best way to ship his merchandise to the markets at the lowest cost and in the shortest time. The carrier can also utilise its experience to advise shippers on the best way to increase the load factor and minimise broken stowage in the container. These global carriers have the advantage

of investing in value added services which cannot be provided by a comparatively small carrier. The successful global carrier of tomorrow's market place will have to invest in providing individualised technical solutions to the shippers. Such could be for example developing optimal stuffing/filling rates for the containers to ensure that the shipper stuffs the maximum quantity of cargo in each container. These are services, which could save the shippers huge amounts of money each year, and reward the carrier with loyal customers in return. Shippers therefore stand to benefit this way from the growth in company sizes.

The global carriers ship huge volume of cargo per year, and in the process developing a comprehensive trade database, which can be very useful to the small or prospective exporter. For instance, the line can assist a prospective exporter to find buyers of a certain commodity, based on the information gathered in-house, in effect acting also as consultants to the shippers.

## 7.1.5 Stability of business partners

When asked by *Containerisation International* about what benefits the CMA-CGM merger to their clients, Mr. Tristan Vieljoux, the president of the line commented that "....it will inspire financial confidence from the company's customers" (Containerisation International, November 1999)

The economic and commercial stability of a shipping line as a partner to a shipper is very important. Shippers want to be sure that the line they are dealing with will be in business tomorrow. They want to establish long term strategic partnership with the shipping line. According to Mr. Lars Christansen, Transport Manager for IKEA Swedish AB (Christiansen, 2000), shippers are now going for long term contracts with carriers. The stability of the carrier is therefore becoming a determinant factor in choosing the premium carrier. This stability is more likely in a bigger than in a smaller carrier. Shippers therefore stand to benefit from more financially stable partnerships in an industry with fewer, but bigger carriers.

# 7.2 Consolidation and the shipping conferences

The impact of consolidation on the shipping conference will also have a knock-on effect on the shippers.

The liner conference is,

"A group of two or more vessel-operating carriers which provide international service for the carriage of cargo on a particular route or routes ...(and)..which has an agreement ...within the framework of which they operate under uniform or common freight rates and any other agreed conditions with respect to the provision of liner services" (UNCTAD, 1973)

The above definition of liner conferences as given by UNCTAD in 1973 implies the following as the purposes and objectives of a shipping conference:

- To co-ordinate scheduled transport services provided by the conference members in a particular trade.
- To set up common or uniform tariff and rates, charges and surcharges.
- To increase efficiency of the members transport operations.

The conferences argue that they promote a commercially viable and economically sound transportation system in the trade to forster commerce, service and stability. They argue that this is essential and advantageous to the shippers because it introduces a regular and dependable liner service for the shipper whether or not sufficient cargoes exist at any specified period. Liner shipping is very vulnerable to rate undercutting when vessels are not full, with the likely result that otherwise perfectly reliable lines could suddenly be overwhelmed by low freights during periods of low volumes. Conference member lines therefore argue that they need the

stability and security needed to invest in their very capital-intensive services to allow the development of the trade (Dowse, 2000).

Shippers on the other hand argue that the conference is an outdated concept, which should be done away with. The European Shippers Council, the Canadian Shippers Council, etc have repeatedly called on their policy makers including the EU, OECD, WTO, FMC, the Japanese and the Canadian governments to put an end to the shipping cartels and the anti-trust immunity (Egebjerg, 2000). The European Shippers Council sees itself as:

..the pre-eminent body responsible for efforts to liberalise/de-regulate liner shipping markets. It has achieved this through curtailment of the power of liner conference cartels to impose cartel/monopoly prices on shippers and unfair contracts/contract terms through the pursuit of various complaints with the European Commission. (European Shippers Council, 2000)

Shippers, however, agree that some type of co-operation is necessary in order to reap the most wanted economies of scale benefits. These co-operations, they insist, should be in the form of alliances and vessel sharing but not price fixing cartels.

The regulators have therefore had to deal with the issue of conferences. There have been several investigations into conference activities. The UK and the USA governments have taken the lead, and the US banning any form of a closed conference, while Brussels has granted conferences a tighter mandate; they may not set inland or through rates collectively.

The necessity for a conference was discussed above as the need to maintain stable freight rates, co-ordinate service and increase efficiency (Dowse, 2000 p.1). The dynamic nature of the shipping industry has meant that the shipping conference idea needs a review, especially in the wake of emerging bigger global container carriers. From the above brief description of the functions of the conference, the following are

subjects of discussion for the purposes of establishing the impact of consolidation on the conference system, which will in turn impact shippers.

#### 7.3 Liner conference considerations

## 7.3.1 Conference stability versus carrier instability

Shippers have, in the past, accepted the conference system because of the need for some kind of price and negotiating body stability. Mergers and acquisitions will bring bigger, worldwide and financially stable companies. The big container carriers own a wealth of assets; not forgetting that shipping is a capital-intensive industry. This is even more so with container carriers where the proportion of fixed assets is even higher than in tramp shipping. "The yearly turnover of P&O Nedlloyd is around US\$ 4 Billion. Our net asset value is US\$ 1.5 billion, with a capital employed of US\$ 2 billion". (P&O Nedlloyd, 2000)

The emergence of more financially stronger carriers is an advantage for shippers who are looking for stable partnerships. This kind of a partnership could only be provided by the conference in the past. Many shippers in the passed were forced to use the conference for stability reasons, as opposed to the smaller carriers of the past. The financially stable global carriers now provide for this financial stability.

#### 7.3.2 Long-term freight contracts

According to Hans Broby Hansen, Director of global sales for AP Moller (Hansen, 2000), shippers are increasingly demanding long-term freight contracts. Lars Christiansen, Transport Manager for Europe IKEA Systems, confirms this (Christiansen, 2000). IKEA for example has 4 to 5 year contracts with 9 shipping lines. Apart from the financial strength of a company, shippers have in the past looked up to the conference for stable and long-term (mostly one year) shipping

contracts. The emergence of the global carrier able to independently negotiate even 5-year contracts may render the conference system less attractive to shippers.

## 7.3.3 Conference charges and surcharges

The conference tariff system has increasingly become self-defeating with member lines not adhering to the tariff. Because of the conference agreement, these lines charge less than the conference tariff, by issuing credit notes for the discount amount. Shippers therefore have to contend with the laborious task of reconciling these credit notes and invoices. A non-conference member is flexible to charge any freight rate and issue only an invoice for the freight amount. Only one entry is required if a shipper deals with non-conference members as opposed to 2 entries (an invoice and a credit note) when the shipper chooses a conference member.

Surcharges like BAF, CAF, congestion surcharges and many other conference surcharges have increasingly become unpopular with shippers. Shippers are looking for freight stability on the basis of which they can base their cost calculations. This system of charges and surcharges based on the conference system has been undermined by stronger carriers who are able to offer a single freight rate for a fixed period of time as explained in item (B) above. It is therefore very unlikely that BAF, CAF and other surcharges will persist for long.

#### 7.3.4 Trade coverage

The original shipping conference idea was based on a specific route as opposed to many different routes. In other words, the shipping conference covering Europe to the Far East will not cover the Trans-Atlantic trade or Trans-Pacific trade. In a globalised world, shippers are demanding global and multi-trade contracting. This has become a handicap because the conference has been rigid, not adapting to globalisation demands. The question shippers will ask themselves is; why should

they deal with a conference, negotiating with different conferences for each trade instead of negotiating with global carriers for all their global shipping needs?

## 7.3.5 Increased transport efficiency and co-ordinated transport

This being another reason for conference existence, the question is; will the emerging bigger lines be able to organise their transport operations more efficiently than conferences?

Consolidation has been driven by the need to reduce costs and to cover markets, both of which could not be covered sufficiently by the conference. Container lines have been seeking more efficiency than can be provided by the conference. The conference is also limited by how much control it has over the members. Different members have different ambitions and strategies. Decisions like the size of ships ordered by the lines are individual decisions. Undeniably, the conference has had its successes in reducing member costs such as purchasing economies and regulating supply of slots, but it falls short of further cost reductions like administrative costs for example. This function of a conference is also being served better by an increased size of carriers than by the conference.

#### 7.4 Forwarders

In the past the role of a freight forwarder was in summary, to complete all documentation and clearance formalities on behalf of the shipper/receiver of the goods. Over the years, this role has expanded to more diverse roles like cargo consolidation, warehousing, logistics, transportation, and even in some cases trucks and block trains

The emergency of mega-carriers operating on a global basis has, and will continue to change the role of the freight forwarder. Bigger container lines are more likely to

have huge capital investment commitments in land transport as the competition turns to shore facilities.

"The chairman of the Associations of Clearing, Warehousing and Freight Forwarders of Kenya, Mr Peter Mambembe, said the survival of local freight companies was threatened by the government's move to allow International shipping lines operating in Kenya to start freight divisions" (Ouma, July 24, 2000).

Container lines are now owning container terminals, warehouses, supply chains and distribution channels, block trains and trucking companies. They have in the process attacked the traditional freight forwarders market as they try to control the whole chain for strategic reasons. In other words, the container carrier service has changed from shipping line to transport provider. Container lines are now issuing multimodal transport documents covering all modes of transport on a single document from the shipper warehouse to the receivers warehouse. This chain includes clearing (customs brokerage) and documentation which, depending on the volumes involved, many lines are not willing to outsource to freight forwarders.

As more and more lines become global, more and more shippers will be willing to entrust their cargo to one line which will handle the whole chain instead of the traditional way of using both a container line for the sea voyage and a freight forwarder for the land voyage.

It is imminent therefore, that the freight forwarder will increasingly face stiffer competition not only from other freight forwarders, but from container lines as they become bigger through consolidation.

#### 7.5 Recommendations to shippers and freight forwarders

## 7.5.1 Shippers councils

At stake to shippers is the ability for the growing container carriers to assume monopolistic tendencies, which will work against the shippers. It is vital therefore, for shippers (especially the small ones) to embrace the shippers council idea and to strengthen it so that it acts as a counterbalance to the growing carriers. The shippers' council, as has been seen with the European Shippers Council, should deal with any abuse of market dominance- but through non-confrontative means like consultations with carriers. Shippers have been at the forefront, advocating for deregulation of the liner sector through the shippers' council.

# 7.5.2 Long-term shipping contracts

Regular shippers need to understand that the stability of freight rates will vanish together with the conference system which they have been advocating against (European Shippers' Council, 2000). Shipping is a cyclical business as demonstrated by figure 3.5. With the weakening of the conference and the emergence of few big carriers, the liner trades freight rates are likely to assume a "demand-driven" response. Short-term (seasonal) demand will determine the freight rates like in the tramp sector. Individual shippers need to take note of the business uncertainties that are likely to affect them with a more volatile freight rate regime. These uncertainties can be minimised by signing long-term contracts with reputable carriers in exchange for guaranteed space and freight rate. Because the usual shipping cycle is estimated at 5 years, the agreements could run for say a minimum of 5 years, starting from the depression period, taking advantage of favourable freight rates. This strategy would ensure that shippers hedge against any seasonal demand-driven increases in freight rates.

#### 7.5.3 Value added functions for forwarders.

As the lines get bigger, their ability to remain close to their small customers will be severely tested. It is more likely that the small shippers will the freight forwarding industry's niche market. This is not a new function for the forwarder since consolidation of cargoes has always been a part of freight forwarding.

Big forwarders with international networks are more likely to introduce NVOCC services as their traditional business comes under increasing attack from the global shipping lines. Advances in technology could be tapped by the local freight forwarder to consolidate full container loads from different shippers and acting as the shipper towards the carrier. This way the forwarder obtains a margin by offering a higher freight rate to the actual shippers and obtaining volume discounts from the carrier.

#### 7.6 Conclusions

Shippers may benefit most in the current market consolidation than even the carriers themselves. They also stand to gain frequent transportation thanks to the growth in transhipment. Overcapacity due to the "cascade" effect (Fairplay, August 2000) will ensure continued overcapacity of supply for slots in the foreseeable future. Shippers are likely to reap lower freight rates (at least in the non-main lines) as a result of increased competition to fill the available slots (Marginal cost pricing).

Competition from carriers to forwarders will increase and the traditional forwarder will have to provide other value added services, not provided by the carriers, in order to survive.

# **Chapter Eight**

#### **CONCLUSION**

Consolidation has been happening in virtually all industries as a global trend. As usual with all global trends, some opportunities as well as threats do arise, both within as well as outside the industry. Consolidation in container shipping has been as a result of carrier adjustments to market conditions. Shipper demands for efficiencies, lower freight rates, and a global service have forced container carriers to seek accelerated growth through mergers and acquisitions.

Any regulation on the industry should be as voluntary as possible and should not be aimed at protecting local enterprises like national shipping lines. Cargo reservations policies are also detrimental to the local economy and trade because they give rise to "above market" freight rates. Consolidation will benefit shippers and consumers as carriers reduce their costs while competition is maintained. Affected companies and governments should therefore seek to put in place strategies, which will make them benefit from consolidation without stopping or hindering the process.

#### REFERENCES

- Alderton, P. (1995). <u>Sea transport operation and economics</u>. London: Thomas Reeds publications.
- Badjis, C. (2000). <u>Fairplay market forecast 2000-Container market outlook</u>. Coulsdon, Surrey: Fairplay Publications Ltd. Retrieved June 21, 2000 from the World Wide Web http://www.fairplay.co.uk/markets/MFContain.htm.
- Barker, D. (1998). The cycle of change continues in liner and port agency. <u>BIMCO</u> review 1998. London: BIMCO.
- Beddow, M. (1999, Nov). Enigmatic Maersk Line. <u>Containerisation International</u>, 32 (11), 45-49.
- Beddow, M. (1999, November). Global freight purchasing. <u>Containerisation</u> <u>International, 32</u> (11), 71.
- Beddow, M. (2000, March). Going Global: time is fast running out for ocean carriers in the global shipping arena. <u>Containerisation International</u>, 33 (3), 43-47.
- Beth, H.L. (1999). <u>Trends and strategies in port development</u>. Hamburg: Port of Hamburg.
- Boyes, J. (2000, July). Aponte's Maxims. Containerisation International 33 (7), 45-47.
- Braam, T. (2000). Liner operators 2000. London: Fairplay Publications.
- Braam, T. (2000). Principle Shipping Companies: An insight into 75 of the worlds major liner carriers. Alkmaar, The Netherland: Dynamar Consultancy B.V.
- Brooks, M. R. (1990). <u>Strategic alliances versus ownership in the container transport industry</u>. Halifax, NS: Dalhousie University.
- Brooks, M. R. (1991). <u>Strategic alliances in the global container transport industry:</u> Halifax, NS: Dalhousie University.

- Chan, S. (1997, Nov 17). Asian carriers rule the waves. <u>Singapore Shipping Times Archives</u>. Retrieved April 10, 2000 from the World Wide Web <a href="http://business-times.asia1.com.sg/shippingtimes/">http://business-times.asia1.com.sg/shippingtimes/</a>.
- Chorinou, S. (1999, Nov). Shipping seeks new global role. <u>Lloyd's' Shipping Economist</u>, 21 (11), 7-10.
- Dow, J. (2000). Who's on first? Using a scorecard can help keep truck of changing maritime carrier alliances. <u>Export Observer Online</u>. Retrieved April 31, 2000 from the World Wide Web http://www.unzco.com/observer/jun98/onfirst.html.
- Drewry Shipping Consultants. (2000). <u>Container Market Outlook: High Risk, High Stakes Where is the Payback?</u> Retrieved July 16, 2000 from the World Wide Web: http://www.drewry.co.uk/frame5.phtml.
- Dubai Ports Authority. (2000). <u>DPA advantages</u>. Retrieved July 19, 2000 from the World Wide Web: <a href="http://www.dpa.co.ae/">http://www.dpa.co.ae/</a>.
- Eller, D. (November, 1999). CI poll shows shipper priorities. <u>Containerisation International</u>, 32 (11), 63.
- European Shippers Council. (2000). <u>About the European Shippers Council: Cross-Sector liaison</u>. Retrieved July 20, 2000 from the World Wide Web: <a href="http://www.europeanshippers.com/public/aboutus/index.htm">http://www.europeanshippers.com/public/aboutus/index.htm</a>.
- European Shippers Council. (2000). <u>Key activities and achievements:</u>
  <u>Liberalisation/De-regulation of the liner shipping markets</u>. Retrieved August 18, 2000 from the World Wide Web:
  <a href="http://www.europeanshippers.com/public/aboutus/index.htm">http://www.europeanshippers.com/public/aboutus/index.htm</a>.
- Fairplay Publications. (2000). <u>Liner operators 2000: an analysis of major liner trade companies</u>. Coulsdon, Surrey: Fairplay Publications. Retrieved June 29, 2000 from the World Wide Web: <a href="http://www.fairplay.co.uk/arch.asp?ffn=/services/directories/linercont.htm">http://www.fairplay.co.uk/arch.asp?ffn=/services/directories/linercont.htm</a>.

Fast-track winners in transatlantic. (2000, April 13). Lloyd's List, p. 7

- Forsyth, R. (29<sup>th</sup> June, 2000). <u>Learning to practise CRM</u>. London: Olympia. Retrieved July 31, 2000 from the World Wide Web <a href="http://www.crm-forum.com/crm">http://www.crm-forum.com/crm</a> conference output/lpcrm/ppr.htm.
- Franco, B. (1999). <u>Macro Economics</u>. Unpublished Lecture handout. World Maritime University, Malmö, Sweden.
- Ginkels, G. (1999). <u>Terminals: a global view by Maersk Sealand</u>. Unpublished lecture handouts, World Maritime University, Malmö, Sweden.
- Gyntelburg, C. (1999). <u>Liner shipping workshop by Maersk Sealand</u>. Unpublished lecture handouts, World Maritime University, Malmö, Sweden.
- Herman, A. (1983). Shipping Conferences. London: Lloyd's of London Press
- Hoffmann, J. (2000). <u>Concentration in Liner shipping: its causes and impacts for ports and shipping services in developing regions</u>. Retrieved April 10, 2000 from the World Wide Web: <a href="http://www.eclac.cl/English/research/dcitf/lcg2027/contents.htm.">http://www.eclac.cl/English/research/dcitf/lcg2027/contents.htm.</a>
- Institute of Shipping Economics and Logistics (ISL). (1999). <u>Shipping Statistics</u> yearbook 1999. Bremen: Author.
- International Asset Systems Ltd. (2000, June 24). <u>Interbox market overview</u>. Retrieved June 24, 2000 from the World Wide Web: http://interbox.com/interasset.html
- Ishii, J. (1999). <u>Globalisation in liner trade shipping</u>. Japan: Mitsui OSK. Retrieved July 10, 2000 from the World Wide Web: <a href="http://www.iaph.or.jp/rimmer.htm">http://www.iaph.or.jp/rimmer.htm</a>.
- ISL. (1999, Dec). Liner Freight rates. Shipping statistics and market review 1999, 5.
- Juda, L. (1983). <u>The UNCTAD Liner Code: United States maritime policy at the crossroads</u>. Colorado: Westview Press.
- Ma, S. (1999a). <u>Logistics management</u>. Unpublished lecture handout. World Maritime University, Malmö, Sweden.
- Ma, S. (1999b). <u>Maritime Economics I</u>. Unpublished lecture handout. World Maritime University, Malmö, Sweden.

- Ma, S. (1999c). <u>Maritime Economics II</u>. Unpublished lecture handout. World Maritime University.
- Ma, S. (2000). <u>Port Marketing</u>. Unpublished lecture handout. World Maritime University, Malmo, Sweden.
- Maersk Sealand. (2000a). <u>About us: Did you know?</u> Retrieved June 22, 2000 from the World Wide Web <a href="http://www.maersksealand.com/maersksealand/">http://www.maersksealand.com/maersksealand/</a>.
- Maersk Sealand. (2000b). <u>Maersk International Shipping Education</u>. Retrieved June 24, 2000 from the World Wide Web: <a href="http://www.mise.edu/">http://www.mise.edu/</a>.
- Maersk set to leave Singapore by October 1. (2000, August 11). Lloyd's List, p.1.
- Mediterranean Shipping Company S.A. (2000). <u>Worldwide agents</u>. Retrieved June 28, 2000 from the World Wide Web <a href="http://www.mscgva.ch/marketing/index.htm">http://www.mscgva.ch/marketing/index.htm</a>.
- Mergers and acquisitions bring time of consolidation for brokers. (2000, July 17). <u>Lloyd's List</u>, p.7.
- Mergers and acquisitions bring time of consolidation for brokers. <u>Lloyd's List</u>. Retrieved July 17, 2000 from the World Wide Web <a href="http://www.llplimited.com/ll/lldate.cgi?d=cur">http://www.llplimited.com/ll/lldate.cgi?d=cur</a>.
- News analysis: a brave new world or the gamble of a tumbling dice? (1999, May). Lloyd's Shipping Economist, 4-6.
- Ouma, S. (2000, July 24). Local Freight Agents want law against "unfair competition". <u>The East African Online</u>. Retrieved July 30, from the World Wide Web <u>http://www.nationaudio.com/News/EastAfrican/Current/Maritime/MA4.html</u>.
- P&O Nedlloyd. (2000). <u>Company profile</u>. Retrieved August 20, 2000 from the World Wide Web: <a href="http://www.ponl.com/">http://www.ponl.com/</a>.
- Payne, A. (2000). <u>Customer Relationship Management.</u> Cranfield: Cranfield University. Retrieved July 31, 2000 from the World Wide Web <a href="http://www.crm-forum.com/academy/apcrm/ppr.htm">http://www.crm-forum.com/academy/apcrm/ppr.htm</a>.

- Port of Hamburg. (1999). <u>Port of Hamburg handbook 1999/2000</u>. Hamburg: Author. Retrieved July 1, 2000 from the World Wide Web: <a href="http://www.Hafen-hamburg.de/html-engl/news.php3?=2">http://www.Hafen-hamburg.de/html-engl/news.php3?=2</a>.
- Porter, J. (2000, July 31). CMA CGM expansion prompts training drive. <u>Lloyd's List</u>, p. 3
- Richard, P. (1999, May). Deregulation unsettling time for major containership alliances. <u>Asian Shipping</u>, 15-17.
- Rimmers, P.J. (2000). <u>Summary of the 21<sup>st</sup> IAPH worlds ports conference: Global trade through port co-operation</u>. Canberra: Australian National University. Retrieved July 12, 2000 from the World Wide Web: <a href="http://www.iaph.or.jp/rimmer.htm">http://www.iaph.or.jp/rimmer.htm</a>.
- Robinson, H. (August 2000). Container Market forecast. Coulsdon, Surrey: <u>Fairplay Publications Ltd</u>. Retrieved August 4, 2000 from the World Wide Web: <a href="http://www.fairplay.co.uk/markets/MFContain.htm#Cascade">http://www.fairplay.co.uk/markets/MFContain.htm#Cascade</a>.
- Shaerf, P. (1998). Container review. <u>BIMCO review 1998</u>. London: BIMCO.
- Tsien, J. (1999). <u>Changing structure within the port and shipping industries</u>. London: Hutchinson Port Holdings. Retrieved July 6, 2000 from the World Wide Web: <a href="http://www.iaph.or.jp/rimmer.htm">http://www.iaph.or.jp/rimmer.htm</a>.
- UNCTAD. (1995). <u>Continued work on the elaboration of a model law or laws on restrictive business practices</u> (UNCTAD/TD/B/RBP/81/Rev.4). Geneva: Author
- United Nations Conference on Trade and Development (UNCTAD). (1993).

  <u>Concentration of market power, through mergers and acquisitions of control.</u>

  <u>And its effects on international markets in particular the markets of developing countries (TD/B/RBP/80/Rev.2). New York: United Nations</u>
- Wergeland, T. (2000). <u>Shipping Management Strategy</u>. Unpublished lecture handouts, World Maritime University, Malmö, Sweden.
- Wijnolst, N & Wergeland, T. (1997). Shipping. Delft: Delft University Press.
- Wilhelmsen, W. (2000). The merger of Wilhelmsen with Wallenius. Unpublished

lecture handouts, Wallenius Wilhelmsen Lines, Oslo, Norway.