FACTORS AFFECTING STRATEGIC CHOICES OF THE EUROPEAN UNION MARITIME SHIPPING INDUSTRY: PRE- AND POST- EUROPEAN UNION ANTI-TRUST EXEMPTION

A Senior Scholars Thesis

by

SAMUEL HENDERSON

Submitted to the Office of Undergraduate Research
Texas A&M University
in partial fulfillment of the requirements for the designation as

UNDERGRADUATE RESEARCH SCHOLAR

April 2009

Major: Maritime Administration

FACTORS AFFECTING THE STRATEGIC CHOICES OF THE EUROPEAN UNION MARITIME SHIPPING INDUSTRY: PRE-AND POST- EUROPEAN UNION ANTI-TRUST EXEMPTION

A Senior Scholars Thesis

by

SAMUEL HENDERSON

Submitted to the Office of Undergraduate Research
Texas A&M University
in partial fulfillment of the requirements for the designation as

UNDERGRADUATE RESEARCH SCHOLAR

Approved by:	
Research Advisor:	Joan Mileski
Associate Dean for Undergraduate Research:	Robert C. Webb

April 2009

Major: Maritime Administration

ABSTRACT

Factors Affecting the Strategic Choices of the European Union Maritime Shipping
Industry: Pre- and Post- European Union Anti-Trust Exemption. (April 2009)

Samuel Henderson
Department of Maritime Administration
Texas A&M University

Research Advisor: Dr. Joan Mileski Department of Maritime Administration

This research explores the factors that affect the strategic decision to use or not use pools and conferences within the European Union (EU) maritime industry. The following research questions were explored: What were the differences pre- EU and post- EU harmonization of pooling regulations? Further, what part do country characteristics play?

The importance of this research is to understand the conditions for the selection of strategic choices in the maritime industry. In October 2008, the Exemption Block, created by regulation 4056-86, was repealed. The landscape of the pre-exemption (pre-1986) EU shipping industry changed after the exemption, allowing anti-competitive techniques to be used. In theory, this was to help stabilize the shipping markets by reducing fluctuation in freight rates. It is the hypothesis that the change in regulation

will have an effect on the EU liner industry landscape with an increase in merger activity and reduction in freight rate volatility.

This research tested the hypothesis by using financial records of major shipping companies, and direct data from companies using pooling techniques, and merger data from industry journals. Using statistical analysis, these data were analyzed using paired t-tests. It was determined that both freight rate volatility and merger activities were affected by the change in regulation. This research relates directly to strategic management issues students will face within the shipping industry and will have a positive impact on our future decision making abilities relating to the maritime industry.

DEDICATION

To my Grandmother, a tireless task master

&

My father, a romantic sea dog if there ever was one

ACKNOWLEDGMENTS

I would like to thank my research advisor, Dr. Joan Mileski, for allowing me the freedom to feel inadequate to the task, yet also inspiring me through the frustration, by simply making it look easy.

A special acknowledgement goes to the "problem solver", Linda Godsey. Her ever ready "get it done or get out of my way" attitude towards accomplishing goals was inspirational, at all the right moments.

I would like to acknowledge the help and advice given to me by several industry professionals and professors: Chris Bourne from the European Liner Affairs Association, Dr. Vincent Power who is head of the EU and Competition Group at A&L Goodbody, John Hark my Brokerage & Chartering instructor for all his help in running down information related to freight rates, and Dr. William McMullen for his support and timely advice.

Other *very* special thanks go to John, Ashley, and Noah Kotinek for opening their home to me. Their generosity in a difficult time allowed me the opportunity to continue working on this project during my "homeless" phase after Hurricane Ike. They personify everything that is wonderful about the "Aggie Family" spirit.

NOMENCLATURE

BDI Baltic Exchange Dry Index

EC European Commission

ELAA European Liner Affairs Association

EU European Union

IMO International Maritime Organization

UN United Nations

TABLE OF CONTENTS

		Page
ABSTRACT		iii
DEDICATIO	ON	v
ACKNOWL	EDGMENTS	vi
NOMENCL	ATURE	vii
TABLE OF	CONTENTS	viii
LIST OF FIG	GURES	ix
LIST OF TA	BLES	X
CHAPTER		
I	INTRODUCTION	1
II	THEORY AND METHODS	5
	History	6 7 9
III	RESULTS	21
	Limitations	23
IV	SUMMARY AND CONCLUSIONS	24
	Summary Future research Conclusions	28
REFERENC	ES AND NOTES	29

	Page
APPENDIX	31
CONTACT INFORMATION	32

LIST OF FIGURES

FIGUR	RE	Page
1	Map of EU Member Countries	1
2	Baltic Exchange Dry Index (BDI) Rates	10
3	Major Liner Service Related Company Mergers & Acquisitions	16

LIST OF TABLES

TABL	_E	Page
1	Monthly Liner Freight Rate Averages	11
2	Monthly Liner Freight Rate Change Percentage	12
3	Monthly EU Related Merger Activity	20
4	Yearly Average Liner Freight Rate Monthly Percentage Change	21
5	TradeWinds Merger Data 2007-2009	22
6	T-test Results	22

CHAPTER I

INTRODUCTION

This research explores the factors that affect the strategic decision to use or not use pools and conferences within the European Union (EU) maritime industry. EU regulation 4056-86 granted an exemption, expanding the use of pooling by firms operating in and out of EU member countries as seen in Figure 1.¹

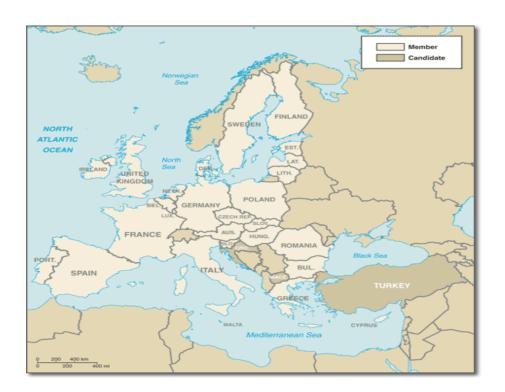


Figure 1. Map of EU Member Countries

This thesis follows the style of *Maritime Policy and Management*.

The following research questions will be explored: What were the differences across two time periods: pre EU harmonization of EU general regulations that impact maritime pooling, and post EU harmonization? What factors led to the changes in regulation allowing the use of pooling by shipping companies?

Pools are a collection of similar vessels, under various ownerships, which are placed under the care of a centralized administration. ¹ This central administration is in charge of marketing the "pool" of vessels as a singular fleet unit. ² As earnings come in, the administration is also in charge of distributing these by a "weighting" system. A "weighting system" is a system based on percentage of involvement within a "pool", to determine what percentage of profit and expenses vessel owners receive or pay. ² Regardless of its actions as the controller of the pool, the administration must market both the pool and the individual vessels themselves. ¹ They will also do charters, scheduling, and commercially operating the vessels for the respective owners.

Pooling techniques are used primarily within the liner shipping area of the maritime shipping industry. These conferences allow competitors to pool resources on specific routes in order to control rates and in theory, help the efficient and continuous movement of goods. While pools are not seen extensively within the US, they are used throughout the remaining maritime industry. This paper will focus on the EU liner industry specifically and the EU regulations regarding their use of pools.

The importance of this research is to understand the conditions for the selection of certain strategic choices in the maritime industry. In October 2008, the Exemption Block, created by regulation 4056-86, was repealed as EU Regulation 1419/2006 comes into effect.³ That change in EU regulation may have an impact on the strategic policies of companies operating within the European Union. Understanding factors which relate to strategic choices will help future decision makers.

Under Williamson's transactional cost economic theory, firms' structure will be substituted for market structure for transactions where the conditions of uncertainty, bounded rationality, opportunism and complexity exist in the organization's environment.⁴ Within the EU Maritime liner industry there is uncertainty as to how to adjust to the new regulation changes.⁵ The landscape of the pre-exemption (pre-1986) EU shipping industry changed after the exemption, allowing anti-competitive techniques to be used. It is my proposal that a similar landscape will develop after the repeal of the pooling exemption, similar to the pre-1986 landscape. However, the repeal is limited to traffic to and from the EU. Defining the parameters of use of these alliances will assist in understanding and predicting the future landscape of the EU shipping industry.

It is my argument that this change in EU regulation giving a block exemption for firms utilizing conferences could have an impact on the European Union maritime industry firms. The first hypothesis is the Block exemption has an effect on volatility of freight

rates on liner routes. The second hypothesis is that the change in regulation by the lift of the block exemption will cause an increase in merger activity.

CHAPTER II

THEORY AND METHODS

History

Shipping conferences expanded in popularity following the successful model of the UK to Calcutta conference which, in 1875, found that by collectively offering rebates to shippers, the member lines could get shipper loyalty. This loyalty was highly coveted to limit the effects of market competition. These burgeoning conferences are occasionally referred to as cartels. These cartels are not always viewed favorably or as proper.

Conferences continued to have a free hand in spite of the occasional use of practices widely recognized as undesirable, such as the use of "fighting ships." Fighting ships were placed on berth by conference members collectively to coincide with the schedule of an "outsider". Rates would be cut to ensure retention of traffic to the conference. ⁶

It should be noted that modern "conferences" today have followed predictable business trends in relation to government in that it is a heavily regulated industry, thus limiting misuse of power.

In order to recognize the influence the European Union wields within the maritime industry, the following data is helpful.

The EU enjoys current world dominance in the industry. Currently, ninety percent of all external trade with Europe and 40 percent of all internal trade is transported by sea. Although not all members of the EU have large maritime industries, all countries experience direct and indirect impact from waterborne transportation. ⁴

Such considerable market control lends itself to having the ability to be a trend setter within the industry. This leadership position can also lead to forefront attention which spurs the industry into the need to regulate further.

Changes in regulation

As of October 25, 2008, the European Union lifted the block exemption allowing "conferences" and closing the door on anti-competitive behavior on the part of shipping firms doing business in and out of the European Union.³ The "lift" did not actually introduce new laws, but is simply enforcing old laws already on the books. The parameters that initially existed in order to create a block exception were deemed obsolete.⁷

Purpose of change in regulation

Behind change is typically some force, internal or external, that changes the variables. When faced with variable change, reactions to the change typically will be for the betterment of the firm. Let us examine some of those benefits of the change in the lifting of the block exemption.

One of the potential benefits from this change within the industry is the lower prices.⁸ It was noted earlier that a side effect of lifting the exemption is increased competition.

Typically, as competition for market shares grows, the customers benefit from decreased costs as firms compete for their business, as is evidenced in other markets.⁹

The introduction of competition for both international telephone calls and European economy airfares caused average prices to fall by more than half within the decade as national monopolies or dominant firms became subject to greater competition. Within the new car and replica football kits markets, where competition from close substitutes was more prevalent, price reductions of more than 10% have been observed. ¹⁰

Effects of change in regulation

Because of regulation changes, firms that enjoyed stable revenue will face increased volatility within the market. Small firms that are more susceptible to market shifts are likely to feel the instability the most. Small firms may find it harder to adjust rapidly to the block exemption removal and may be at a disadvantage compared to larger firms. The UK has looked at the "policy implications [and they] have already been considered".

A Partial Regulatory Impact Assessment (RIA) carried out by the Department of Trade and Industry in January 2006 on this subject was considered by both Houses and cleared by their respective Committees. ⁸

It was determined that there "is no justification for retention of the block exemption on competition grounds and therefore the regulation should be repealed in its entirety.⁸ The UK believes that repeal of the block exemption "offers clear benefits to the consumer in terms of lowering transport costs, maintaining reliability of services and enhancing the industry's competitiveness in a global market".⁸ Further the report says "that a repeal of the block exemption will bring about substantial benefits to EU industry and consumers, in particular as regards transport prices, reliability of liner shipping services, competitiveness of the EU liner shipping industry and small EU liner carriers.⁸

This change could have several impacts on the European Union maritime industry firms. The first is decreased volatility of freight rates on liner routes. The second is the potential increase in merger activity and thus shrinkage of available market shares. This consolidation leads to fewer firms competing within a market should new competition not enter the market.

The specific benefits which were determined from the impact study were many. One is that the transport prices for liner shipping services would decline.⁷ It was also found that service reliability in regards to deep sea and short sea trades would improve.⁷ The service quality and competitiveness of EU liner shipping firms were both believed to either be impacted positively or be unaffected by the change of regulation.⁸ Perhaps the most counter intuitive findings, were that small liner shipping carriers would not experience problems and that no negative impact or even positive impact would occur

for EU ports, employment, trade, and/or developing countries.⁸ This summation of why the block exemption should be repealed mirrors many views within the EU maritime industry, as shown in interviews with industry leaders.⁴

Freight rate theory

One of the driving reasons for allowing a block exemption allowing liner conferences was a side effect of anti-competitive behavior: freight rate stability. As a whole, freight rates are a volatile thing, as can be seen in Figure 2 of freight rates for 2007 from the Baltic Exchange, where a decrease in rates occurred after the October change in regulation. This characteristic has drawn the attention of financial traders, who thrive on volatile markets. This does not benefit shippers which are exposed to shifting rates.

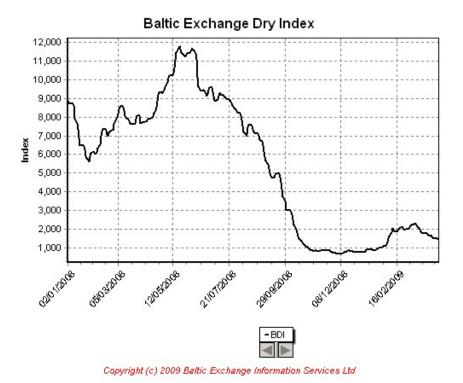


Figure 2. Baltic Exchange Dry Index (BDI) Rates

The argument for the block exemption creating this calming affect on the freight rate markets often stems from conference members themselves.¹⁴ The carriers feel conferences improve services by avoiding destructive competition, overcapacity, and helping to stabilize rates.¹⁴

Unfortunately data from the 1980's, during the initial block exemption, is scarce. Many of the firms involved with conferences were privately held.¹⁵ Hence, very little public data is available as to the actual effects of the block exemption on liner freight rates from this period.

Data collected from the United Nation's annual publication called *Review of Maritime Transport*, provides an interesting insight into liner freight rate behavior. 16

Table 1. Monthly Liner Freight Rate Averages

Months	1985	1986	1987
January	168	144	121
February	172	139	121
March	171	135	123
April	161	136	123
May	164	135	123
June	163	134	124
July	156	131	124
August	153	128	124
September	155	128	123
October	150	127	121
November	148	127	116
December	146	126	115

Source: Review of Maritime Transport

1987

As can be seen from Table 1, the freight rates in the year following the block exemption have more monthly averages that match other months, thus showing lower volatility.

Also, it can be seen on Table 1 that the rates lowered after the regulation change. Even further, the range of the rates from 1986 to 1987 reduced from 18 to 9, which is a

reduction in range by 50 percent. Further review of this data revealed the percentage changes from month to month throughout each year, as can be seen in Table 2.

Table 2. Monthly Liner Freight Rate Change Percentage

Month to Month	1985	1986	1987
January to February			
%Change	2.38%	3.47%	0.00%
February to March			
%Change	0.58%	2.88%	1.65%
March to April			
%Change	5.85%	0.74%	0.00%
April to May			
%Change	1.86%	0.74%	0.00%
May to June			
%Change	0.61%	0.74%	0.81%
June to July			
%Change	4.29%	2.24%	0.00%
July to August			
%Change	1.92%	2.29%	0.00%
August to September			
%Change	1.31%	0.00%	0.81%
September to October			
%Change	3.23%	0.78%	1.63%
October to November			
%Change	1.33%	0.00%	4.13%
November to December			
%Change	1.35%	0.79%	0.86%

Created using data obtained from: Review of Maritime Transport

Mergers

Whether the industry will utilize the business tool of Joint Ventures has yet to be determined. In order to determine whether mergers or joint ventures should be used is based off current European Union guidelines. Utilizing a self assessment methods, firms self test from within. These self assessments will help firms determine whether they are in compliance with current EU competition regulations.

The following self assessment 7 step tool kit is used to determine the risk of breaking competition laws under the new conference regulation¹⁷:

- 1 Examine the structure of the market
- 2 Consider the nature of the information being exchanged
- 3 Who are the participants in the information exchange?
- 4 Consider the age of the information being exchanged, but in the context of the market involved?
- 5 How frequent are the information exchanges?
- 6 In what manner was the information exchanged?
- 7 What about the exchange of price indexes?

The consequences of breach of the competition rules can be severe, based on the examples of fines imposed by the European Commission to companies totaling

272,980,000 Pounds.¹⁸ In regards to companies conforming to regulations, consequences such as fines, aid in the norming process.¹⁹

Once it has been determined that a pool needs to be adjusted in order to avoid these possible consequences, there are several possible moves. The pool can dissolve, it can do nothing and hope for the best, defend itself, "de-claw" its activities to conform, or restructure.¹⁷

Restructuring as a compliance option also has multiple methods. The pool partners can merge into one or the partners can create a full functioning joint venture.¹⁷ Once this is done the merger must go through a notification and clearance process, meet the full compliance guarantee.¹⁷

According to the European Commission, mergers could generate efficiency gains such as economies of scale and enhanced technical progress or might improve the efficiency of management. Another possible outcome could be anti-competitive effects due to the unilateral increase of market power or increased collusion opportunities from a reduction of market competitors.²⁰

There are three distinct reasons for utilizing mergers and acquisitions to gain market share control. The first is that acquisitions of firms are quick to be executed. By utilizing mergers to gain greater market share, firms can quickly build itself into the

market.⁹ The second advantage of utilizing mergers is to gain a specific advantage over competitors, whom might also be vying for market share.⁹ Market can see surges in mergers and acquisitions to gain control of markets. This can be caused by deregulation or regulation changes which create variable change in firm's decision paradigms regarding market approach.⁹ The third benefit to mergers and acquisitions is the belief that there is less risk involved with merger and acquisitions.⁹ This is in part due to the fact that a firm is acquiring assets, know-how, and market specific knowledge.⁹ The acquired firm has a history of revenue and expenses which can aid in evaluating risk and benefit.⁹

Added to the four conditions set by Williamson under transactional cost economic theory, "a fifth condition, of no regulatory prohibition on cooperative organizational structures, leads not only to removing the transaction from the market into an organizational form, but the transaction migrates into a specific *type* of organizational form, which is in this case is the cooperative strategy or pool". Using this theory, the reverse of which would equate to firms moving from conferences into a structure that eliminates uncertainty. Through the activity of mergers, companies would therefore bypass market regulations that create uncertainty.

Based on data retrieved from the industry journal "TradeWinds" and the Lloyd's shipping Competition Seminar Documents, the liner shipping industry is beginning to

take advantage of alternatives to conferences is clear, following a series of merger activity over recent times.²¹

Year	Purchasing Firm	Target Firm
2005	AP Moller Maersk	P&O Nedlloyd
2005	TUI (Hapag-Lloyd)	CP Ships
2007	Torm & teekay	OMI

Figure 3. Major Liner Service Related Company Mergers & Acquisitions

The European Commission (EC) has approved the acquisition of P&O Nedlloyd by AP Moller Maersk in July of 2005. The EC also approved the acquisition of CP Ships by TUI which controls Hapag Lloyd in October of 2005. In more recent times, Torm and Teekay successfully jointly purchased OMI in 2007, all of which can be seen in Figure 3. Lowri Evans, formerly the director of DG Competition, commented that, "the consolidation process is a positive development for the EU industry." Evans also noted," the European Commission's reform of competition law in the international maritime sector may encourage further consolidation." ²²

Even if consolidation within the industry continues in 2009, the European Commission states the following:

Even if the repeal of Regulation 4056/86 would lead to an increase in merger activities, it is unlikely that this would result in a significant increase in concentration on a global scale. ²³

For many pool members, the idea of merging firms might not be viable because they reduce flexibility and independence. Should this be the case, joint ventures may be an acceptable alternative. Theoretically, changing a pool into a joint venture operationally or structurally will not lead to much change. 17

Consortia agreements are already available to the liner service industry under the Consortia block exemption, Regulation 823/2000. How long this will be available with the current trends in regulation change should be of concern to firm managers when decided to utilize consortia as a form of cooperation.¹⁷ Consortia generally help to improve the productivity and quality of available liner services due to the economies of scale achieved.¹⁷

Methods

The first method of data analysis involves the testing that will be done in regards to the liner freight rate volatility. Data was obtained from the United Nations annual publication called the *Review of Maritime Transport*.¹⁶ This liner index was compiled by the Ministry of Transport of the Federal Republic of Germany. Specifically, the

monthly weighted assessments of freight rates on cargoes loaded or discharged by liners of all flags at ports in the Antwerp/Hamburg range.

The monthly liner freight rates for individual years were collected: 1985, 1986, and 1987. Using this data, the percentage change from one month to the next was determined. The highest monthly average was then compared to the lowest monthly rate average in order to determine the range.

Based on the argument that the regulation change had an effect on merger activity, the second method chosen for this paper involves the analysis of reported merger activity information. I will be utilizing data obtained from the industry journal, TradeWinds. I will be utilizing data collected from 2007 and 2008 in anticipation of the regulation change. By collecting and transforming data into a numerical format, trends and patterns can be used to glean conclusions about mergers. The purpose of this analysis is to determine any trends in the mergers and if there is any correlation between regulation changes and merger activities.

I am choosing my data sample based on several factors. The first involves location. I will be analyzing only mergers that are subject to a member country of the European Union. Second, the data I will be using must be readily available. Thus, I am only using data that is published by the TradeWinds. I will analyze the 2007-2008 data that is available in order to determine any increase or decrease in merger talks. I will only

analyze merger activity based on liner routes that are relative to the EU regulation change. Thus, I will be utilizing specific company related mergers that operate within the realms of "liner shipping".

The collected merger data is from the specific years: 2007-2009. I will analyze the 2007 year merger activity versus the 2008 merger activity preceding the regulation change in October of 2008, in order to obtain trends relating to the regulation change. Further analysis should be conducted of the current regulation change which occurred in October of 2008 by expanding the data collected further from the actual change in regulation.

The specific statistical test used to analyze the data is the Paired T-test, utilizing Microsoft Excel, based on a 1-tailed distribution. My sample arrays came from Table 3 data. The first sample is based on data collected from 2007, before the block exemption was lifted. The second sample of data comes from 2008 collected data, also regarding the time period before the change in regulation.

This was chosen in order to analyze the merger activity before the block exemption was lifted and any activity that was done in expectation of the regulation change. Therefore the first sample set will consist of 2007 monthly totals. The second sample set will consist of monthly data collected from 2008.

Table 3. Monthly EU Related Merger Activity

Month	2007	2008	2009
January	0	1	0
February	0	3	0
March	0	2	3
April	1	1	0
May	0	1	n/a
June	0	1	n/a
July	0	0	n/a
August	0	4	n/a
September	0	1	n/a
October	1	0	n/a
November	0	0	n/a
December	0	0	n/a

CHAPTER III

RESULTS

The results for the first hypothesis tests show a reduction in freight rate volatility in regards to the liner shipping freight rates as can be seen in Table 4. The liner freight rate data shows that the percentage change averages from one month to the next for the year 1987 was less than 1985 percent change average. In fact, each consecutive year from 1985 to 1987 shows a downward trend in volatility of liner freight rates.

Table 4. Yearly Average Liner Freight Rate Monthly Percentage Change

Month to Month	1985	1986	1987
Average of Monthly Percentage Rate Change	2.25%	1.33%	0.90%

Chart derived from data collected from Review of Maritime Transport 1987

This downward trend in volatility of liner freight rates seems to confirm the EU's argument that liner conferences would help decrease the volatility within the liner market.

The merger data results showed an increase in total merger activities in 2008 compared to 2007 as can be seen in Table 5. This data backs up the theory that the affect of the change in regulation was an increase in mergers activity.

Table 5. TradeWinds Merger Data 2007-2009

Data	April - December 2007	January - December 2008	January- April 2009
EU Related Merger Totals	2	14	3

Source of data: TradeWinds

The T- test revealed that the differences in the 2007 merger activity mean and the 2008 merger activity mean were statistically significant, as can be seen in Table 6. Thus, proving the increased merger activity hypothesis.

Table 6. T-test Results

Month		Array 1	Array2
January		0	1
February		0	3
March		0	2
April		1	1
May		0	1
June		0	1
July		0	0
August		0	4
September		0	1
October		1	0
November		0	0
December		0	0
	T-Test	:	0.0161375

Limitations

Limitations of this research involve the availability of information. The liner freight rate data is not a complete picture of all liner freight rates for the specified years due to the lack of complete merger news coverage. The merger activity data collected from the industry journal TradeWinds also offers problems with data in that while it is packed with industry information, it does not record *all* mergers and acquisitions activity for the industry. Therefore a complete picture of merger activity cannot be determined. Furthermore, the effects of a world recession and decreased flow of credit have not been measured as to the effects on merger activity.

CHAPTER IV

SUMMARY AND CONCLUSIONS

Based on the results of the examination of freight rate data, it can be concluded that the European Union's block exemption did have an effect on the volatility of liner freight rates on routes operating in and out of EU member nations. There is a reduction of freight rate volatility after the change in regulation, thus achieving the desired goal of normalizing liner freight rates.

Merger activity data indicates an increase in merger activity from 2007 to 2008 and was statistically proven via a T-test. Thus, the base theory that the regulation change would affect the industry by increasing competition and creating an environment where companies would combine or merge in order to remain competitive, is validated.

The long reaching implications of this research are difficult to determine. As with most business, the maritime industry is constantly evolving whether this is due to internal changes such as management turnover or external influences such as government regulations. I believe that having a better understanding of how firms react to regulation will better prepare firms and mangers in making "real time" decisions in the best interest of the company. This is supported in other markets that deal with environmental issues in that "those companies that stay ahead of and go beyond the requirements of federal, state and local environmental regulations often can also establish a competitive market

advantage.²⁴ It is better to act as opposed to react to changing variables within the industry.

The next consideration in using this research is the potential for consolidation within the industry. A worldwide economic down turn combined with governmental regulation changes may lead to increased competition. This should lower profit margins and decrease revenue stability. Smaller market share holders may face issues of being acquired by larger competitors within the market place. Firms should prepare for possible approaches from smaller firms seeking consolidation or larger firms taking advantage of the unfavorable economic situation by acquiring smaller firms to sustain growth and provide stability. The data obtained from TradeWinds confirms this increase in merger activity in 2008. The trends for 2009 have yet to be determined.

To expand on the financial impact, we look towards the study done to forecast market effect of the repeal of the conference block exemption. The estimated fiscal effect in annual benefit is around £17 to 85 million.⁸ It should be of note that those responsible for estimating these numbers are cautious of the accuracy.

Benefits cannot be accurately measured; however, even a small range of price declines would lead to annual savings of many millions of pounds. Smaller customers with weaker buyer power are likely to benefit most.⁸

When judging the affects of this change in regulation on overall firm strategy, certain logical facts exist. Economic recessions, by definition, are not a sign of growth, but

shrinkage. If a firm cannot grow via overall market growth, then it is a logical option to attempt to increase market share size through acquisition of competition. Decreased profit margins and depressed market value can all lead less fiscally strong firms to become targets for firms who are flush with cash.

Removal of the block exemption may lead to further mergers between carriers and higher market concentration. This may lead to a more oligopoly / monopoly market structure. However, the liner shipping market is already characterized by high market concentration and a trend towards greater concentration.⁸

Firms should prepare for such situations, but on occasion, they do not adjust to the new variable changes occurring around them. In the end, firms that have a smaller market share may find it harder to adjust rapidly to the block exemption removal and may be at a disadvantage compared to larger firms.

One of the driving theories in favor of pooling is the calming effects they have on the liner freight rate market. Rates tend to fluctuate when competition is high.⁸ This drives owners to lowering prices to sway customers to use their vessels. The unfortunate side effect of this is that the lowering of prices means less profit. Less profit means less money to re-invest into the vessels and crew. This may lead to un-kept vessels which are a danger to crew and society at large.²⁵ Also, such competition might lead to instability in the flow of goods. The point of having liner routes is that goods move from point to point on a regular schedule which can be planed around by customers.¹

Open competition for routes could lead to vessels moving from route to route based on profitability causing a flux in supply and therefore demand of products onboard vessels.

An economic downturn, which potentially can also drive down freight rates, combined with increased competition within the EU shipping industry will cause firms to cut costs. This might cause them to lay up vessels which under normal circumstances would be operated at a profit despite inefficiencies. The strategies of leading maritime shipping companies remain shrouded for the moment, but I believe that the use of alliances, pools, and consortia will continue to be used in varying degrees and methods. Warnings of more severe world-wide effects can be heeded as shown in the next article:

If the U.S. government revoked conferences' antitrust immunity, conferences would lose their collective rate-making capability. This could create the potential loss of the majority of their membership. In such a case, rate wars might ensue much like what has happened in U.S. domestic airline and trucking industries. Unrestrained competition in these industries has led to widespread carrier failure and a multitude of mergers and acquisitions. It is also possible that deregulated ocean shipping industry without liner conferences serving the U.S. would weaken remaining U.S.-flag carriers like Sea-Land and American President Line.⁶

There will also be some positive effects from this change in regulation. In the long term, increased competition puts further pressure on carriers to innovate and improve

performance.⁸ With this in mind, technologies, service, and overall performance should improve efficiency as firms compete for market shares.

Future research

Further research could be done in the realm of liner freight rate trends. The collection of data from other years would generate a more complete picture of liner freight rate behavior. The affects of a world recession and decreased credit flow on mergers and acquisitions should be investigated within the maritime industry.

Conclusions

Overall discussions with industry and regulation makers have left the distinct mark of a very chaotic time within the liner shipping industry. As paths are determined for the proper course to follow, firms will have to react accordingly. At this time the industry conditions can be summed in this quote from Dr. William McMullen, PhD and Head of the Maritime Administration department of Texas A&M at Galveston, "the maritime industry is constantly shifting in order to adjust to new variables. With the new regulation changes still so new, the industry must remain fluid to change."⁵

REFERENCES AND NOTES

- 1. Packard, W., 1995. *Shipping Pools*. Second. (London: Lloyd's of London Press Ltd).
- 2. Packard, W., 1989. Shipping Pools. (London: Lloyd's of London Press Ltd).
- 3. Pekkarinen, M., 2006. *Official Journal of the European Union*. http://eurlex.europa.eu/JOIndex.do
- 4. McMullen, W. and Mileski, J., 2007. Changing European Union Regulation of the Maritime Industry.
- 5. McMullen, W., 2009. Private Communication.
- 6. Heaver, T., 2001. *The Shipping Conferences Exemption Act: Review and Suggestions of Positions Appropriate for the Panel*. http://www.reviewcta-examenltc.gc.ca/CTAReview/CTAReview/english/reports/heaver_scea.pdf
- 7. Sigmund, A., 2006. President of the European Economic and Social Committee. *Official Journal of the European Union*. http://eur-lex.europa.eu/JOIndex.do
- 8. Department of Transport., 2008. Explanatory Memorandum to the Merchant Shipping (Liner Conference) Act 1982 (Repeal) 2008. 163rd ed.
- 9. Hill, C., 2008. International Business. *Competing in the Global Marketplace*. (Syracuse, New York: McGraw-Hill/Irwin).
- 10. Coles, H., Davies, S., Olczak, M., Pike, C., and Wilson, C., 2004. DTI Economics Paper 9, The Benefits from Competition: Some Illustrative UK Cases, Centre for Competition Policy, University of East Anglia.
- 11. Baltic Exchange., Baltic Dry Index Data. 2007-2009. http://www.balticexchange.com/
- 12. Bradbury, M., 2009. The Modern Tanker Office: Operations and Freight Derivatives. Texas A&M Guest Speaker Series.
- 13. Latrobe, J., 2009. The Modern Tanker Office: Operations and Freight Derivatives. Texas A&M Guest Speaker Series.

- 14. Clarke, R., 1997. An Analysis of the International Ocean Shipping Conference System. *Transportation Journal.* **36**, 17.
- 15. Bourne, C., 2009. Executive Director. *European Liner Affairs Association*. (Lloyd's Maritime Academy: EU Competition Law in Shipping).
- 16. Review of Maritime Transport., 1985,1986,1987. United Nations Conference on Trade and Development. Geneva.
- 17. Tupper, S., 2009. *Merger Regulations Possibilities and Pitfalls*. (Lloyd's Maritime Academy: EU Competition Law in Shipping)
- 18. Holmes, M., 2009. *Consortia Legislation*. (Lloyd's Maritime Academy: EU Competition Law in Shipping).
- 19. DiMaggio, P. and Powell, W.W., 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review.* **48**,147-160.
- 20. Power, V., 2009. Head of EU & Competition Group, A&L Goodbody. *The EU Law on Sharing Information between Competitors*. (Lloyd's Maritime Academy: EU Competition Law in Shipping).
- 21. TradeWinds, 2007, 2008, 2009. Merger Data. http://www.tradewinds.no/>.
- 22. Evans, L., 2008. The EU's New Competition Regime for Maritime Transport: Options and Opportunities for the Shipping Industry. 4th Edition. http://www.wfw.com.
- 23. ELAA, 2005. *European Commission Review of Council Regulation 4056/86*. http://ec.europa.eu/competition/antitrust/others/elaa_resp.pdf>
- 24. Challener, C., 2007. Keeping Current with Regulations. *ChemAlliance.Org*. http://www.chemalliance.org/Articles/040927.asp.
- 25. Haralambides, H.E., Tsolakis, S.D. and Cridland, C., 2005. Econometric modeling of new building and secondhand ship prices, in: Cullinane, K.P.B. (ed.), *Shipping Economics*, *Research in Transportation Economics*, Vol. XII, (Amsterdam: Elsevier).

APPENDIX

\sim		1 .	TC	. •
('(nvri	ont	Intori	matı∩n
\sim	руш	5111	mon	mation

Operations Mailbox < operations@balticexchange.com>

Mon, Apr 27, 2009 at 5:11 AM

To: S H < samuelr.henderson@gmail.com>

Thank you for your enquiry.

We grant you permission to publish a chart of the BDI in your thesis on a one off basis.

Please note that any use of the data must be credited with Baltic Exchange Information Services Ltd, and correctly headed.

The BDI should be referred to as Baltic Exchange Dry Index.

Please see articles regarding republication of Baltic data

- 1. http://www.balticexchange.com/default.asp?action=article&ID=24
- 2. http://www.balticexchange.com/default.asp?action=article&ID=878
- 3. http://www.balticexchange.com/default.asp?action=article&ID=4831

Please forward an electronic copy of the chart when complete for our own records.

Regards

Operations

CONTACT INFORMATION

Name: Samuel Henderson

Professional Address: c/o Dr. Joan Mileski

Department of Maritime Administration Texas A&M University at Galveston

PO Box 1675

Galveston, TX 77554

Email Address: samuelr.henderson@gmail.com

Education: B.S., Maritime Administration, Texas A&M University

2009