

Shipping alliances and associated risks

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Abstract

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Degree programme Bachelor's degree in International Business Report/thesis title Shipping alliances and associated risks Ocean alliances are an integral part of global trade. They have their for customers and it is important to understand these risks. Ocean alliances are loose strategic alliances formed by carriers, or companies, to share vessel capacity, port coverage, terminal facilitie	Number of pages and appendix pages 23 + 2 own risks and benefits container liner as and trade lanes.		
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This benefits the carriers by giving them access to higher level of ves and reach with reduced overhead. Customer benefits from this increa- reduced costs most of the time directly.	ssel space utilization ased coverage and		
The risks are divided into three categories, Proactive, Reactive and Avoid. Where proactive category risks are planned for and can be handled by the individual customers, reactive categories are handled with contingency plans after they have happened, there are usually little to no recourse to avoid these risks from happening. The final category avoid has risks best avoided as too expensive to deal with or transferred to a third party, such as an insurance provider. Proactive category has risks such as business risk, mitigated by being proactive about developments in the business field. Reactive risks include storms and force majeure as well as cargo tampering, with active contingency planning such as cut and run for vessels and seal tracking for cargo tampering. Risks best avoided are usually total loss cases best handled by insurance companies.			
studies in ocean freight.			

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1 Introduction

In this chapter the thesis topic, background and basis are presented along with the research question and the investigative questions. The scope of the thesis and the demarcation is introduced and the benefits of the thesis are determined, and discuss the benefits. Key concepts relevant to the thesis are defined as well.

1.1 Background

Today, the majority non-bulk cargo worldwide is transported by containers(World Shipping Council, 2015), ranging in sizes from 20 feet to 50 feet containers in different configurations(International Organization for Standardization, 2016). Multiple shipping companies exist in the world today, with Maersk and MSC being the biggest ones. However, as ship capacity, and ship size with it, has grown, so have costs related to running a ship on a weekly service. Thus, many of the shipping companies have formed into loose alliances in which they share vessels in trade lanes and port facilities and terminals, allowing lowered costs for all companies, as they cross book their containers on other alliance ships. There might an Evergreen ship sailing from Rotterdam to Taiwan but a CSCL ship sailing back to Rotterdam, with cargoes from all the partners. This forms the basic idea of shipping alliances, to achieve full utilization of vessels and port facilities and services with less overhead while still offering weekly services.

These alliances offer a multitude of risks and benefits to customers that are not always made clear and this makes it important for the customers to realize where and when their containers are going for improved risk handling.

There is no particular case company as the topic discussed in the thesis covers the shipping alliances and their effects to their customers universally, with some caveats.

The topic is inspired by the fact that even though shipping alliances are ever present in the world of maritime shipping, the customers who utilize sea freight usually have no experience of knowledge about them and who is part of them. It is important to know what risks are present in sea borne traffic and alliances are a layer of abstraction on top of the carriers that needs to be take in to account.

1.2 Research question

Freight alliances offer both benefits and risks to customers, who must understand these to reliably manage them and minimize risks to their goods. Thus the research question is as follows:

"What benefits and risks do freight alliances offer to customers?"

The objective of the thesis is to discuss benefits and risks associated with shipping alliances and discuss the theory and practicalities within them and how they affect the everyday shipments worldwide while providing an outlook to the future developments inside the industry.

Investigative Question 1. What risks are there in shipping alliances? Investigative Question 2. What Benefits do they offer? Investigative Question 3. How to categorize these risks? Investigative Question 4. What kind of risk management would help to minimize these risks?

Below, Table 1 will show the relationship between IQs, theoretical framework, methodology and results.

	Theoretical		
IQ	framework	Research methods	Result
	Risk		
1	management	Secondary research from industry sources	Risks in the industry
	Risk		Benefits of shipping
	management,		alliances, to carriers, to
2	cost analysis	Secondary research from industry sources	customers
	Risk	Analysis of risk management theories,	Categories based on severity
3	management	secondary research from industry sources	of risks
	Risk	Analysis of risk management theories,	Management suggestions
4	management	secondary research from industry sources	based on category of risks

Table 1 Overlay Matrix

1.3 Demarcation

The scope in the thesis will be solely on the shipping alliances and their effects on customers. This is because all the alliances are comprised of individual companies and there are companies outside of these alliances as well. This thesis will not go through risks associated with individual companies themselves, even though the matter might be touched when talking in the scope of alliances. The thesis will also not discuss risk involving feeder operators, who are usually not part of alliances and are subcontracted to move cargoes from ports of transhipment to end-ports, for example from Rotterdam to Helsinki.

There are numerous different types of risk associated in shipping overseas from ship delays to actual disasters, some of these are known and some unknown, some more manageable than others. This thesis will limit itself to risk arising from shipping alliances from themselves. Individual carrier or ship risk will not be studied here and neither are forces of nature within the scope of this thesis. There are many different things available so analysing them all would not be possible, nor would it be possible to provide suitable answers based on the research for these.

Also important to note on the demarcation, while shipping is a global trade, this thesis will most of the time use example specific to North-Northeast Europe and East Asia.

1.4 International aspect

The thesis has international aspects. The world of shipping is very diverse and every alliance has companies from multiple countries, serving customers in many different ports. This thesis also draws from experience working in the industry in two different countries.

1.5 Benefits

The thesis should be able to offer customers ways to understand the risks and benefits associated with freight alliances and how to manage them. Even though every case is unique, there are some overarching concepts that can be utilized to serve the needs of every customer.

1.6 Key concepts

The basis of the thesis is the shipping alliance and how they affect the world wide shipping. As the alliances are formed of individual carriers who then are represented by a multitude of agencies serving both freight forwarders and straight customers there are myriad of things interacting with each other that need to be working more or less flawlessly. From there we get the second key part of the thesis, risk management. Every new moving part brings new risks to the mix and knowing how to handle both expected and unexpected risks is the key in surviving, as well as providing good service to customers.

A shipping alliance is a strategic alliance of two or more shipping lines to share trade lanes and vessel capacities(Talley, 2009,14.) Investopedia defines strategic alliances as "an arrangement between two companies that have decided to share resources to undertake a specific, mutually beneficial project. (Investopedia, 2016.)"

While the term **sea freight** usually refers to the actual prices of shipping (Hellenic Shipping News, 2012), here it is defined as the general term for cargo that is moved on a ship.

Shipping alliances are comprised of **carriers**, or shipping lines, who operate the ships. In this study, carrier refers to the entire shipping line, instead of ship owner, operator or regional entity(Talley, 2009, 13.) Shipping and freight resource defines shipping line as "A Shipping Line is a company that operates the ships that actually carry the containers (owned or leased) and cargo from load port to discharge port. (Shipping and freight resource, 2013.)"

Agencies are the customer facing end of the carrier, as they book and contract shipments on ships of their principal carriers. Some agencies are wholly owned subsidiaries of the carriers, some are independently operated and owned. (BIMCO, 2014.)

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2 Sinking freights – The risks of shipping

This chapter goes through the theoretical framework within and what it is based upon. The personal background and interest of the writer is inspected and how this thesis builds from that background. The theory model of risk management used for the thesis is also explained and inspected.

2.1 Introduction

This thesis handles mainly risks and their management and thus will use analyse the risks identified in shipping alliances through the risk management. Many different frameworks were researched to find a suitable one for this type of study. There are multiple different ways to analyse and handle risk within supply chains and shipping especially, most of the academic studies and theories seemed to place stress on the financial risks. Even though one can say all risks in business are financial in nature, the risks that are present in this type of study are sometimes outside the scope of finance. In this thesis, research is mostly focused in the supply chain risk management and will utilize the framework developed by The Supply Chain Council Risk Research team (McCormack et al, 2008.) Many risk management theories that concern the supply chain usually are not clearly aimed towards freight forwarders, instead focusing on the procurement side of the business. While this touches upon the same problems that freight forwarders and actual operators in the container liner business, they might not be entirely suitable for use in managing risks found within the framework of sea freight. It is important to use multiple frameworks to find the one most suitable for the topic at hand and the SCRM put forward is one of the better ones to be utilized in this type of topic.

2.2 Theory

In their paper, SCCRRT put forth a supply chain risk management framework that utilizes the SCOR model (McCormack et al, 2008.) The framework was meant for individual organization but with some supporting research it can be utilized to analyse manage risk within larger organizations, such as shipping alliances.

Supporting theories not related to risk management but sea shipping economics, port economics and shipping in general have also been utilized, especially Port Economics by Wayne K. Talley(Talley, 2009.)

These theories were studied in-depth and chosen as the best fit for the purpose of this thesis, which is to identify and categorize risks born from shipping alliances, which might not be clear to the freight forwarders and shippers who utilize them.

2.3 Experience

Personal experiences contribute to this thesis as well, from working within the industry and witnessing the bankruptcy of Hanjin first hand, from inside the shipping alliance. These experiences provided valuable insights into the industry and the possible risks the customers and freight forwarders face. One part of risk management that is not visible to the customer is the one the liner agency engages in on behalf of the customer. Usually this will materialize in the correct choice of services used. As different carriers within an alliance will be sharing the load in a certain service, it might be better for the agent to try to optimize not only the route the container will take, to minimize delays, but also to minimize disruptions, for example in this case, when troubles with Hanjin became known, it was better to use services that were not utilizing Hanjin ships. Other way of risk management for customers is making clear what kind of documents the customs require in each country and making those clear for the customer, otherwise they might be facing costly delays or customs penalties. For example, Japan requires shippers telephone number on shipping documents, some countries require licenses for importing certain type of cargo or prohibit them completely.

2.4 Utilization

To start with the risk management, it is important to understand what risk is. Risk is an occurrence of any kind of random act that may have an adverse impact on a person or a corporation (McCormack et al, 2009,8)

Supply Chain Risk Management was divided into three different parts: Proactive, Reactive and Avoid, eliminate or transfer risk. Risks identified within this thesis will also be categorized under these three approaches. Understanding these categories is important and the team defines the three categories thusly:

Proactive approaches take place before the risk even happens, reducing the likelihood of negative outcomes. The intention is prevention.

Reactive approaches take place after the risk event has happened, dealing with the consequences. The focus is on different methods of handling the negative outcomes and minimize losses.

Avoid, eliminate or transfer risk approach is simply to avoid risks or eliminate them completely. It also concerns with risk mitigation of transferring them to a 3rd party, such as an insurance company (McCormack et al, 2009, 8).

Included in the Supply Chain Risk Management framework is also a framework further risk management, it is comprised of three different phase of Identification, Assessment, and Mitigation (McCormack et al, 2009, 19-20.) But this is somewhat outside the scope of this thesis and will not be utilized here.

3 Research methods

Outlined in this chapter are the research methods used for collecting data for the thesis. Research risks and validity concerns are presented and inspected as well.

3.1 Introduction

The approach to the thesis will mainly comprise of qualitative research with a small supplementation of quantitative information. The choice of approach is due to the fact that the thesis will mainly require specific and precise information that is both more efficient and accurate to gather with qualitative research from well-informed sources.

The key pieces of information that will be required are generally figures from within the shipping industry, including both figures and facts of shipping volume within across and inside alliances, per trade lane and ship wise. Some generic per customer volumes will be utilized as well.

The thesis also requires sound understanding of the theory behind the processes which will be explored in the thesis.

3.1 Data Collection

This thesis will avoid naming specific agencies or customers, concentrating on the alliances and carriers themselves.

Data was collected from published journals and studies conducted about shipping alliances, global shipping statistics and risk management and risk management studies. Adding to this, writer has extensive personal experience in the field which will be utilized. No formal interviews with colleagues were conducted, which means no quantitative data is available for this thesis, however they provided the writer with great insights to the industry and helped greatly with information gathering for sources and actual information and their views and experiences. For methodology please refer to Figure 1 on the next page.





3.2 Associated Research Risks

Collection of information from journals is risk free, but as stated the writer's employer wishes not to be named thus requiring to be vague about agencies but they will not be the focus either way. The biggest risk in the research conducted for this thesis is the lack of information. There are lots of risk analyses and studies concluded on ocean freight in general and individual carriers or trade lanes, but actual studies related to ocean alliances are few. As such, most of the findings in this thesis are from the few industry journals and own experiences in the field.

3.3 Validity Concerns

Considering that the thesis will use qualitative research, there is less concern over validity in comparison to research methods such as surveys which can be easy to mishandle. Assuming that the thesis is referenced accordingly, the thesis will be both valid and

believable. If numbers are explained (where they come from and how they are calculated) the thesis is granted with an extra layer of credibility in comparison to simply listing them.

4 Findings

This chapter shows the results and findings of the thesis. Also discussed are the sources used for the findings.

4.1 Introduction

Risks are ever prevalent in the shipping industry and even shipping alliance wide risks raised their heads in the bankruptcy of Hanjin, where multiple carrier's containers where either on board Hanjin ships, which were not allowed to berth or pass through canals, were stranded drifting in the ocean unsure who will bear the costs of berthing and canal passage. The other side of this coin was Hanjin containers on board other alliance vessels, which could not be unloaded due to uncertainty of receiving lifting costs for the containers, not to speak of payments from customers for the containers. This not only is a risk to the individual customers but when there is dangerous cargo on board and reefer equipment, they will also possess a risk toward other customers' cargoes as well.

Even though the alliances coordinate vessels and vessel space, even sharing terminals and ports, the alliances are forbidden by law from price fixing or forming cartels, to keep the competition in the industry. Additionally, all the proposed alliances take long to form due to requiring approval from regulators in the European Union, United States and China.

4.2 Sources of research

Sources utilized for this thesis were industry specific journals which publish articles written by professionals from within the business field. Main journals used were Alphaliner, Lodestar and Splash24/7. Some blogs were also used as sources for identifying benefits and risks of shipping alliances. Industry actors and business for the most part wrote these blogs. These sources include Flexport. Included in this is the great help provided by writer's colleagues, however no data was gathered from them in a quantitative manner, still, they provided a great deal of experience and data for this. Research was also conducted to find more scholarly sources of studies conducted with shipping alliances, but these were for the most part absent. Shipping alliances have been written about mostly in passing, merely stating that they exist.

4.3 Current situation

To get a clearer picture of where we are today in the world shipping alliances, it is important to look back. Before shipping alliances, most expansion of container liner capacity was done with acquisitions and mergers with competitors, along with building larger ships. The first company to start majorly utilizing containers in ocean traffic, Sealand, merged with Maersk in 1999, making Maersk-Sealand the largest liner company in the world. However as more of the liners consolidated their capacity, it was realized that utilizing strategic alliances, like those found in airline business, it was realized that companies could operate the same amount of ships with reduced overhead. The first alliance to be born was 2M, the biggest alliance for a long time and one of the major ones still today, from agreement between Maersk and Mediterranean Shipping company. After this, in response to this new type of competition most of the liner companies in the world organized themselves into alliances(Flexport, 2015.)

In 2015 there were four different major alliances, the 2M of Maersk and MSC, Ocean 3 of CMA CGM, UASC and CSCL, G6 of NYK, Hapag-Lloyd, OOCL, APL, HMM and MOL, and CKYHE of COSCO, K-Line, Yang Ming, Hanjin and Evergreen. In 2016 there have been major changes to these alliances as detailed below.

In 2016, most of the four major alliances underwent major changes. 2M is relatively most unchanged. At one point Hyundai Merchant Marine was in talks of joining the 2M alliance but currently is in talks of joining the THE Alliance, but at the moment it is uncertain (Alphaliner, 2016, 1-2.)

The biggest alliance today is OCEAN alliance, born from carriers from Ocean 3, G6 and CKYHE, it is comprised of Evergreen. COSCON, who acquired CSCL, CMA CGM, who acquired APL, and OOCL. (Alphaliner, 2016, 2-3.) Since this restructuring takes carriers from three different existing ocean alliances, it was the spark for the current restructuring of the alliances.

The third alliance is THE Alliance, where the remainders organized as an answer to the new alliances, it includes Hapag-Lloyd, who merged with UASC, K-Line, MOL, NYK and Yang Ming (Alphaliner, 2016, 2-3.) One of the most interesting points in this alliance is that for the first time all three Japanese carriers are now working together under one alliance. This might spur on some more extensive collaboration between the three of them in the future.

Together, these three alliances make up 88% of the transpacific container capacity and 86% of the Europe-Asia container capacity(Alphaliner, 2016, 1-3.)

These restructurings are related to the current low freight rate levels, spurred on by overcapacity with ships and the halting global trade. Hanjin is a prime example of the victims in this situation. The benefits and risks of alliances are discussed later. No alliance specific mentions about risks and benefits are made.

In the next pages you will find a timeline of ocean alliances from 1990 when Trio, ScanDutch and ACE consortiums were reshuffled into multiple separate alliances and the development to year 2016.

1996	1997		1998		1999-2000
Maersk	Maersk		Maersk		Maersk-Sealand
				Ma	ersk acquired
Sea-Land	Sea-Land		Sea-Land	Sea	land
				ı	
НММ	MSC		MSC	ļ	MSC
MSC	Norasia			ı	
Norasia			Norasia		Norasia
	HMM		СМА	ļ	CMA CGM
CMA	CMA				
	CKY Consortium		CKY Consortium	1	CKY Consortium
COSCO	COSCO		COSCO		COSCO
[]	K Line		K Line		K Line
K Line	Yangming		Yangming	ļ	Yangming
Yangming	Tricon+HJS+UASC		United Alliance	n	United Alliance
Tricon+Hanjin	DSR-Senator		Choyang		Choyang
DSR-Senator	Choyang		Hanjin-Senator		Hanjin-Senator
Choyang	Hanjin		UASC	ļ	UASC
Hanjin	UASC			1	
			Evergreen		Evergreen-LT
Evergreen	Evergreen		Lloyd Triestino	Eve	rgreen acquired LT
Lloyd Triestino	Lloyd Triestino			CSA	V acquired Norasia
Grand Alliance	Grand Alliance		Grand Alliance	1	Grand Alliance
Hapag-Lloyd	Hapag-Lloyd		Hapag-Lloyd		Hapag-Lloyd
NYK	NYK		NYK		NYK
NOL	NOL		NOL		OOCL
P&O	P&O		MISC		MISC
			P&O Nedlloyd	ļ	P&O Nedlloyd
Global Alliance	Global Alliance		New World Alliance	1	New World Alliance
Nedlloyd	Nedlloyd		APL		APL
OOCL	OOCL		MOL		MOL
MISC	MISC		HML		НММ
APL	APL	Reshu	Iffle after NOL acquire	d AP	Land
MOL	MOL	P&O I	merged with Nedlloyd		

Figure 2 Alliance timeline 1990-2000 (Alphaliner, 2016)

2001	2002-2004	2005	2006-2009
Maersk-Sealand	Maersk-Sealand	Maersk-Sealand	Maersk
			Maersk acquired
		P&O Nedlloyd	P&ONL
]		
MSC	MSC	MSC	MSC
CMA CGM	CMA CGM	CMA CGM	CMA CGM
CSCL	CSCL	CSCL	CSCL
ZIM	ZIM	ZIM	ZIM
	UASC	UASC	UASC
CKY Consortium			
	CKYH Alliance	CKYH Alliance	CKYH Alliance
Kline	COSCO		COSCO
Yangming	Kline	Kline	Kline
United Alliance	Yangming	Yangming	Yangming
Haniin-Senator	Haniin-Senator	Haniin-Senator	Haniin-Senator
UASC			
Chovang bankrupt	Evergreen-LT	Evergreen-LT	Evergreen
Evergreen-LT			LT dropped
	PIL & Wan Hai enter	PIL-WHL	PIL-WHL
CSAV Norasia	CSAV Norasia	CSAV Norasia	CSAV Norasia
Grand Alliance	Grand Alliance	Grand Alliance	Grand Alliance
Hapag-Lloyd	Hapag-Lloyd	Hapag-Lloyd	Hapag-Lloyd
NYK	NYK	NYK	NYK
OOCL	OOCL	OOCL	OOCL
MISC	MISC	MISC	MISC
P&O Nedlloyd	P&O Nedlloyd	New World Alliance	New World Alliance
New World Alliance	New World Alliance	APL	APL
APL	APL	MOL	MOL
MOL	MOL	НММ	НММ
НММ	НММ		

Figure 3 Alliance timeline 2001-2009 (Alphaliner, 2016)



Figure 4 Alliance timeline 2010-2016 (Alphaliner, 2016)

2M Maersk MSC CCAA CGM COSCO Evergreen OOCL CMA CGM to acquire APL COSCO merged with CSCL COSCO merged with CSCL Hapag-Lloyd K Line MOL NYK Yang Ming UASC HMM status still to be confirmed	2017
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THE AllianceHapag-LloydK LineMOLNYKYang MingUASCHMM status still to beconfirmed	
Hapag-Lloyd K Line MOL NYK Yang Ming UASC HMM status still to be confirmed	Alliance
K Line MOL NYK Yang Ming UASC HMM status still to be confirmed	pag-Lloyd
MOL NYK Yang Ming UASC HMM status still to be confirmed	ne
NYK Yang Ming UASC HMM status still to be confirmed	L
HMM status still to be confirmed	
HMM status still to be confirmed	
confirmed	status still to be
	ned

Figure 5 Alliance timeline 2017 (Alphaliner, 2016)

4.4 Risks of ocean alliances

Here are identified the risks in three different categories. The categories are not as clearly limited in their definitions, which were stated earlier, and the categorization of the risk happens by the suggested approach to the risk.

4.4.1 Proactive

In this category are risks best handled by being proactive in avoiding their occurrence. These risks include such as identifying risks in the industry as a whole, for example possible known financial difficulties with alliance partners, such as Hanjin this year, or known issues with particular carriers. This last one is best summed by a saying in the industry that 2M alliance made it possible to get either MSC level service at Maersk prices, or Maersk level service at MSC prices. These risks are best identified employing a holistic study of the business field, as most publications such as Alphaliner and Splash24/7 offer a very good weekly overview of the business and help forecast possible difficulties and new changes regarding alliances and legislation. The key to being resilient to the types of risks is to cross book between alliances, instead of between carriers. This helps avoid problems at terminals, excluding such cases as major storms or strikes, etc.

However, even though different alliances may not share the terminals and ocean vessels, especially in Europe they might use the same feeder operators. From writer's experience, this has been especially pronounced in Norway-Rotterdam traffic, where there are only few feeder operators operating in the Rotterdam-North Norway service, so difficulties in one port or terminal may cascade to all alliances. This effect is pronounced especially by storms that are very regular in the autumn season on the North Sea. The feeder operators may also have preferential agreements with different carriers, to the point of excluding one carriers' cargo in favour the other. To customers this might be an ideal situation if they can identify the correct carrier to utilize with their cargo, but in worst case scenarios it may cause weeks of delays. One indicator is determining which carrier might produce the largest amount of traffic, or in other words generate the largest amount of traffic for the feeder operator, is to follow the rate levels between carriers.

Most risks in the proactive category are easily defeated by actively paying attention to the developments in the industry. Especially the agencies representing the different carriers are very interconnected so information is easily available. However, the active gathering of information is in the foreground here.

4.4.2 Reactive

In this category, found are risks that are usually hard to avoid, so the handling approach is mitigating the negative consequences of the risks listed. These risks are usually somewhat inconsequential but none the less frustrating to deal with regularly, so best steps are taken before anything happens. These might range from cargo tampering to force majeure declared by ships. The handling of each risk factor and possible occurrences differ wildly from one thing to another, so there is no unifying way to deal with these, beyond trying to minimize their happening in the first place or having good contingency plans.

Cargo tampering is a risk that might happen everywhere in the world, but today each container has one or more seals, usually provided by the carrier, that require bolt cutters to dispose of. Active monitoring in the ports have minimized cargo tampering risk in ports and modern cellular ship design makes container access while on board very hard so the crew has no access to open any of the containers. Cargo is most likely at risk during delivery and employing trusted road carriers helps minimize it from happening.

Most of the unexpected risks fall under this category and one of the more interesting examples of reactive handling of these risks was when multiple carriers' refrigerated containers, or reefers, were filled with wrong type of refrigeration gas, causing them to explode randomly. While from the customer perspective, to be best prepared for this is to have correct emergency procedures for the aftermath, the carriers had to react quickly to identify reefers at risk and decide an action plan for them. The reefers identified are banned from United States and they still have restrictions on reefer traffic from Vietnam as result of this. As the improperly filled reefers all came from one depot in Vietnam, it was a simple plan of marking all the containers affected with a simple notice and rerouting them back to Vietnam at the first opportunity. This however caused a stop in reefer traffic and in total it affected over 1000 containers (Maritime Incident Casebook, 2011.)

As storms are prevalent in the climate everywhere on Earth, they are for the most part unavoidable, while vessels may make course corrections to avoid big storms, they will still cause delays to vessel schedules, especially causing problems with time sensitive cargo. It is important for customers to see where their cargo is headed and if there might be possible storms that might cause problems and act accordingly, to either provide enough time for the passage of goods and consider air cargo instead. Even though a ship might be able to avoid or traverse through a storm, a port will not able to relocate during the storm and all operations might be stopped in adverse weather, which usually happens in

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the typhoon season in Asia, especially affecting ports in South China and Taiwan. In these cases, if cargo is already on its way, there is not much that can be done, but it is good to consider if it is possible to unload cargo at an earlier transhipment port and use different mode of transport for the final leg. In this case the Change of Destination procedure of the carrier utilized must be understood as the vary wildly between carriers and might incur huge costs, as in most cases cargo insurance does not cover declared force majeure cases.

These risks might not be visible easily even with best data monitoring and business field studies. It is important for customers to be familiar with possible risks and consequences of shipping and have proper contingency and emergency plans for these situations.

4.4.3 Avoid, eliminate or transfer risk

In this category are risks best avoided completely, by not engaging in activities where those risks present themselves, or risks that are handled best by transferring them to a 3rd party, for example an insurance provider.

It is very important to insure the cargo. When speaking of Full Container Load cargo or FCL cargo, you usually have about 20 metric tons of cargo in a single unit, and the value of the cargo is very high. All shipments are under carrier's liability clause to secure the interest of the carrier and Incoterms help make it clear the responsibility of all the parties under different terms, but the importance of third party cargo insurance cannot be stated. Even if today vessel safety standards are high and were further improvement by the new SOLAS regulation requiring Verified Gross Mass of all containers to be provided to carriers before they are loaded in vessels. This helps planning the loading of the cargo and makes vessels and crews more safe as heavier containers will be loaded on the bottom of the ship and lighter cargo on top. Still, accidents do happen regardless of the cause. There are multiple insurance providers but the most famous is still Lloyd's. While storms and human error and negligence has always existed, in the 21st century piracy was revived and especially in the heavy trafficked Red Sea is home to multiple modern day pirates. The situation is somewhat eased by the deployment of different countries navies to fight the pirates but it is still important for customers to understand that the risk exists and might affect their cargo.

4.5 Benefits of ocean alliances

One of the most obvious benefits for customers from ocean alliances is the amount of services available. You have multiple partners inside an alliance where one partners' specialty is Europe-Asia trade and others' Europe-South America trade and they are able to have space allowance on both partners' ships for customers and are able to deliver much wider service network. However, most of these benefits are not as obvious to the customers, and just as risks, are somewhat obscure and for better management they should be understood as well, whether it relates to documentation, containers or ships themselves.

Not only do partners have allocation on partner vessels, they usually share port coverage and terminals. This allows for one vessel to have a wider coverage for customers and having better service, however of course, having to call multiple terminals inside one port is time consuming and it creates additional strain on vessel schedules. However, shared terminals help reduce overhead in port operations, helping increase the margin of profits.

On the carrier side, alliances help minimize costs of running bigger ships, as most of the big carriers in the world have ordered even larger containerships, with some 18000 TEUs of capacity, such as the Maersk Triple-E class vessels and CMA CGM Benjamin Franklin. These vessels call the largest ports on earth such as Ningbo in China and Los Angeles in USA and only one partner's customers' cargo would be hard pressed to fill the entire vessel, they can now take on partner cargo as well.

5 Conclusions

In conclusion, this thesis encompasses both literary sources from the ocean freight industry and personal experiences as part of it. The thesis encompasses extensive working in ocean freight in two different countries and hearing multiple accounts from more experienced sources, albeit without quantitative research to back it up due to the reluctance of the employer in question. However, extensive resources were provided for research.

5.1 Lack of research

Identified during research for this thesis is the lack of academic sources that encompass risk management and ocean freight, and ocean alliances in particular. There was dearth of sources for introductory level research into ocean freight and risk management, some deeper than others. Especially risk management studies were characterized by a lack of risk management studies of ocean freight. Supply chain management and risk management thereof has multiple great sources and some were utilized in creating framework for risk analysis in this thesis. This thesis gives an introductory look into the ocean alliances in the world.

5.2 Recommendations

Writer recommend this thesis as introductory reading for ocean alliances and risks thereof. Ocean alliances are an integral part of ocean freight and it is important for customers to know what kind of risks and benefits they offer to better understand the business field and offer the best options to their customers in return. Personally, writer witnessed multiple cases where because of alliances there was an ability to provide better service to customers at an equal or lower level of cost.

Further studies should be done about risks, especially in quantitative nature, as a distinct lack was identified. The field is of particular interest right now as well because of the changes in the ocean alliances right now and in the future.

5.3 Personal learning

Write learnt a large amount in doing a project as large as this. Even though the writer has done public presentations multiple times on a variety subjects, the research in those compared to what was done here is miniscule. This thesis topic would have benefited from quantitative research to better source and illustrate personal experiences from the

field and the lack of research done in the field. The people who work in the field are a veritable treasure trove of information that is underutilized and could be collected to provide an even better understanding of the field of business.

Project management played a big part in this thesis writing as well and writer learnt the importance of proper management. As it was written during working full time in two different countries, not as much time and concentration was allotted to it as could have been.

It was a very interesting topic for the writer and more can be done with it. I wish to extend thanks to my employer and the line they represent and to all my colleagues all over the world who I had the joy to work with and who taught me so much about ocean freight and ocean alliances.

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Appendices

Appendix 1. Thesis project timeline as a Gantt Chart

