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# Aspiring a Greener and Safer Ship Demolition Industry- The Norwegian Shipowner Profile

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## Acknowledgements

This dissertation represents the end of my MSc in Business Administration, and I have finally earned the title "siviløkonom". Yay! I have widened my academic horizon and enjoyed the opportunity to learn and grow to the fullest. Sure, there have been periods of intensive and hard work, but more than anything it has been a joyful ride.

I am proud of my work and determination. But this has not been a one-woman's show. I am, therefore, deeply humble and thankful for all the help I have received.

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Oslo, December 7th 2018

Susanne Starheim-Grøtter

## Abstract

The world's merchant fleet plays a crucial role in the global economy, and decisive for its size is the number of vessels subject for demolition. The vast majority of them end their lives at the beaches in India, Bangladesh and Pakistan, dismantled manually right there. Environment and human lives are at risk, given these yards' improper handle of hazardous wastes and abusive work conditions. Because these yards have lower costs related to the dismantling process, they can pay the shipowner considerably more for their vessels, compared to green and safe demolition yards.

There are legislative loopholes in the Hong Kong convention, the EU ship recycling regulations and the Basel convention. And in absence of global and uniform standards, the beaching practice continues along the South Asian shores, allowing the shipowner to pursue full profit maximization.

Some Norwegian shipowners have taken an active stand against the practice of beaching, and choose to recycle their vessel in a sustainable manner, and thereby accept a weighty additional cost. From a starting point where the shipowner is defined as a pure profit maximizing actor, the purpose of this study is to answer if the shipowner acknowledges his overall value chain responsibility, or if the costly choice of green ship recycling simply is good business.

Qualitative research method framed in a case study design was found most suitable in order to conduct this in a thorough manner, seeking extensive information of three Norwegian shipowners.

There were no findings indicating that green ship recycling could be considered "good business", in the sense that there were no clauses in contracts with third-parties that forced through any decision of sustainable recycling. And, although difficult to empirically test, the shipowners have no proven advantageous terms or better positions in negotiations reducing the overall costs because of a well perceived corporate reputation. Currently the shipowners' motivation to choose a safe and sound recycling is driven by an internal form of CSR, and the genuine desire to be decent and do good. The case of silent third-parties may change going forward, and the much media-created black-and-white picture of beaching is probed. However, since the demolition process from a shipowners' point of view currently appears to be a carte blanche, transnational government involvement is urgently called for to enhance business integrity and conformity.

The findings in this study are not so that they can be used as basis for broad generalization, however, they can rather be of interest for further research.

# Contents

# Abbreviations

| | |
|---|---|
| COA | Contract of Affreightment |
| CSR | Corporate Social Responsibility |
| DWT | Dead Weight Ton |
| EMS | Environmentally Sound Management |
| FOC | Flag of Convenience |
| FP | Financial Performance |
| GT | Gross Tonnage |
| IACS | International Association of Classification Societies |
| IHM | Inventory of Hazardous Materials |
| IMO | United Nations International Maritime Organization |
| LDT | Lightship Displacement Tonnage |
| LoC | Letter of Credit |
| MOA | Memorandum of Agreement |
| NSOA | The Norwegian Shipowner Association |
| NT | Net Tonnage |
| RBV | Resource Based View |
| RSRS | Responsible Ship Recycling Standards |
| SRI | Socially Responsible investment |
| UNFCCC | United Nations Framework Convention on Climate Change |
| UN | United Nations |
| RORO | Roll-on roll-off ships |
| GT | Gross Tonnage |
| NGO | Non-governmental Organization |
| UNEP | United Nations Environment Program |
| UNCTAD | United Nations Conference on Trade and Development |
| JV | Joint Venture |
| NSD | Norsk Senter for Dataforskning (Norwegian center for Research Data) |
| NOR | Norwegian Ordinary Ship Register |
| NIS | Norwegian International Ship Register |
| HQ | Headquarter |
| IPCC | International Panel on Climate Change |
| VLCC | Very Large Crude Carrier |

# 1.0 Introduction

## *1.1 Ship Recycling and Beaching*

Ship dismantling, or ship recycling, is at its core a sustainable activity, where value is derived from materials and equipment from ships at the end-of-life. Every year approx. one thousand large ocean -going ships are recycled. There is reason to be concerned because eighty to ninety per cent of these end up at the beaches at the sub Asian continent (NGO Shipbreaking Platform, 2016 ).

A vessel may be a source of marine and coastal pollution even after the end of its commercial life (Chang et al., 2010), and the process of breaking down a ship, has traditionally been dirty, polluting and dangerous, particularly when using the beaching method (Schøyen et al., 2017). Beaching takes place in south east Asia, along the shores of Pakistan, India and Bangladesh. Typically, these countries have a competitive advantage with low labor costs and weaker protection of environment, health and safety (Samiotis et al., 2013). On its final journey, ships sail steadily towards the shore during a tide and is dismantled right there at the beach, lacking facilities and installations that can collect and dispose hazardous chemicals and dangerous goods, such as asbestos. Abusive labor practices risk the workers' health and life. Numerous severe accidents and even loss of life due to fall from heights, fires and explosions have been reported, with the possibility of significant unreported numbers (NGO Shipbreaking Platform, 2016).

Furthermore, according to activists, the workforce in especially Bangladesh include immigrants and children. The sole reason for child labor in the ship breaking yards is poverty. The workers usually live nearby the yards, often in shelters or shacks with no facilities for sanitary, toilets, ventilation or clean water. As a direct consequence the workers are exposed to diseases and infections (Dao, 2008). These dirty and slum like livelihoods reflects the contractor's motive to maximize profits.

Some yards in India have invested in order to improve the infrastructure and demolition process, and have obtained a "Hong-Kong Convention Statement of Compliance" from the classification societies. Grieg Green has conducted surveys at

those beaches that are considered best practice and out of seventeen beach yards, they found two to be satisfactory in terms of gear and facilities at the beach. However, despite the safe process at the beach, beaching itself impose a danger as the tide is not a reliable factor (Heier, 2018).

Nevertheless, this industry makes some contribution to the global economy, as well as to the smooth operation of international shipping (Knapp et al., 2008). And it is possible to conduct the demolition process in a safe and sound manner.

The alternative to beaching is green ship recycling in a dry dock, which is considered to be the best method with regard to safety and environment. It is a tedious and costly process that requires proper planning, preparation, monitoring and control (Schøyen et al., 2017). Environmentally Sound Management must be followed, and in accordance to the Basel convention that means *that all parties shall take all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes* (Basel Convention, 1989a, ref. art 2.8). In this manner, green ship recycling aim to protect the environment and the workers from the harmful effects of ship recycling (Lai et al., 2011).

### *1.2 The Financial Downside*

Green ship recycling is the most safe and sound option, but the least profitable to the shipowner. The yard buying the ship from the shipowner, will re-sell the ships steels and inventory, take a cut covering the associated costs plus a profit margin. The price the shipowner receives, is thus highly correlating to the price the yard will received for the second-hand steel. Scholars have found that the sale of steel in relation to sustainable ship demolition *could be* profitable, however only by a marginal economic benefit. In the case of beaching, however, nearly all sales of recycled material are pure profit because the cost of labor and the cost of toxic material disposal are insignificant. The yards practicing beaching can therefore pay more than a dry dock yard and still easily turn a profit (Choi et al., 2016).

The demolition yard pays a price for the ship's Lightship Displacement Tonnage (LDT), that is, a price for the ship's weight including bunkers and inventory, which is the most important measurement unit in the shipbreaking process (Karlis & Polemis, 2016). In figure 1 below the vertically standing bars show the average price paid to the shipowner in USD per LDT in countries where the demolition process takes place at the beaches, India, Pakistan and Bangladesh respectively. The two horizontal curves reflect the average price in China and Turkey at the same time. These two states handle the majority of vessels recycled green. The graph illustrates the past years' price disadvantage for the shipowner choosing a safe and sound recycling method, and the evadable price differences serve as financial drivers in maintaining the practice. The additional cost that must fully be absorbed by the shipowner. Or more precisely, against a monetary loss a shipowner can decide to protect people and environment.

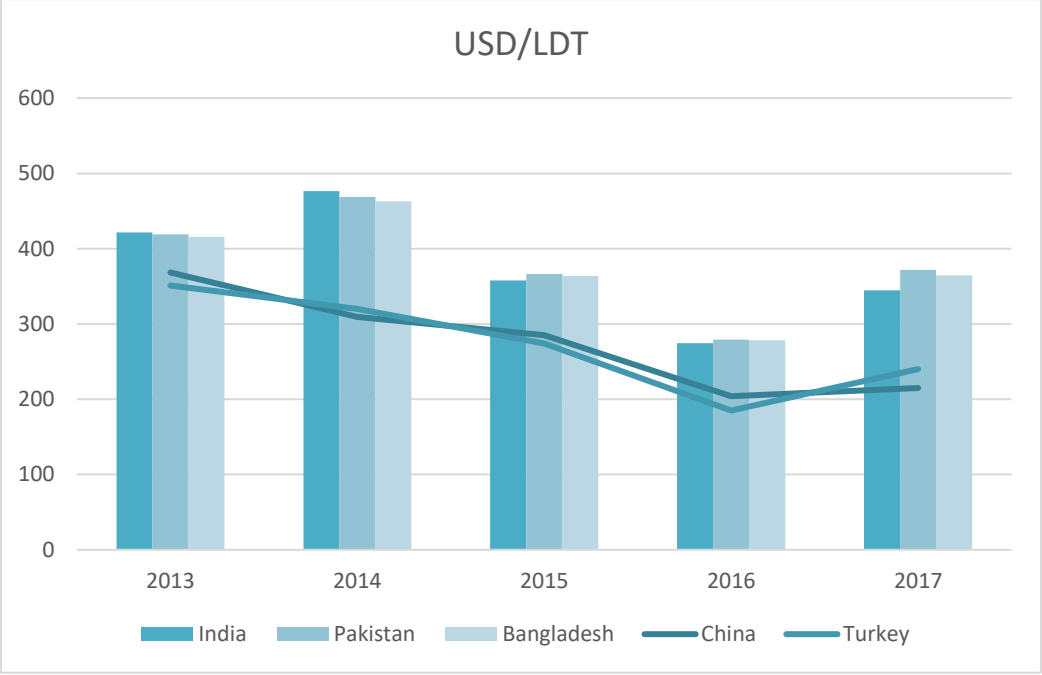



*Figure 1: The historical price gap between the green recycling states (China and Turkey) and those practicing beaching (India, Pakistan and Bangladesh) (Grieg Green, 2018)*

It is fully possible for Norwegian shipowners, as any other shipowner to take full advantage of the yards' low costs and pursue a full maximization of profit. Usually

identity marks are removed and the vessel's name covered in paint, making it difficult to trace the registered owner, reflecting the reputational risk facing the owner. The vast majority of shipowners refuse to accept any form of responsibility, alleging the vessel being beyond their control when sold to a cash buyer. If caught at the beach, they claim they only followed international rules and regulations, or simply that they are obligated to protect shareholders' investments and do what they can to minimize losses (Schøyen et al., 2017).

The fact that a shipowner, as any other business, acts profit maximizing should perhaps come as no surprise. Yet, despite a financially distressed maritime industry, some shipowners choose to recycle their vessels in a safe and sustainable manner, accepting a less desirable price in return. Moreover, as this report will return to, the legal framework is vague and inconsistent. I.e., currently it is neither the price nor the jurisdiction that are main drivers in the decision-making process for these shipowners. A paradox indeed, when sharing Milton Friedman's view of a business' social responsibility (Friedman, 1970).

### *1.3 Research Objective and Problem Statement*

In general, politically driven regulations as well as private initiatives are adopted in order to safeguard a greener maritime industry. In the context of ship recycling these are absent. However, some Norwegian shipowners have taken an active stand against primitive demolition. Based on the aforementioned paradox, assuming the shipowner by nature is profit maximizing, this study strives to answer the following research question:

*Given the current conditions for the shipping industry, hereunder legislation and financial drivers, does the Norwegian shipowner acknowledge his overall responsibility in the maritime supply chain, including ship recycling? Or is green ship recycling simply good business?*

# 2.0 Background and Theoretical Framework

The objective of this chapter is to present relevant industry information and form a theoretical framework, upon which the research's findings can be discussed.

## *2.1 Industry Relevance*

This section presents information relevant to understand the industry and the scope of beaching.

### *2.1.1 Shipping Markets*

In shipping there are four closely related markets which give opportunities for profits (and losses), each trading a different commodity: The *freight market* trades in sea transport, the *newbuilding market* trade new ships, the *sale and purchase market* trade secondhand vessels, and the *demolition market* deals in ship for scrapping (Stopford, 2009).

The figure below shows that there is a critical linkage between the four markets by the cash flows of the companies in the middle. The freight market generates cash, the sale and purchase market move it from one balance sheet to another, the newbuilding market drains it out of the market in return of new ships and the demolition market produces a small inflow in return of old ships. This study will address the latter.

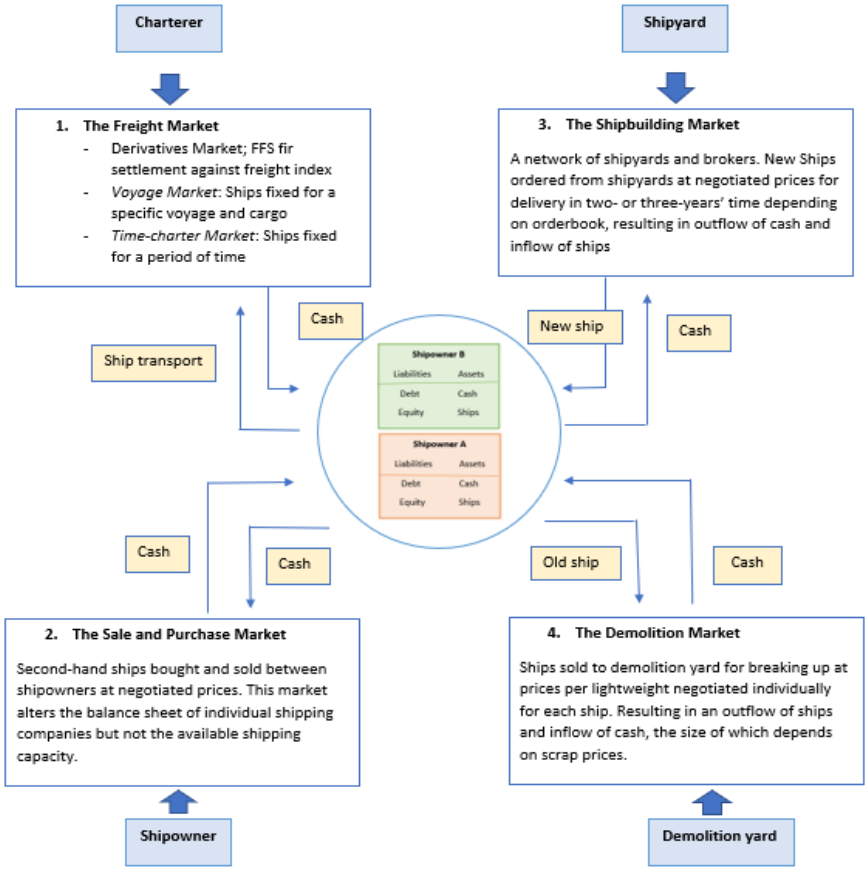



*Figure 2:Illustrative figure based on Martin Stopford's model of the shipping markets and how they interlink. (Stopford, 2009, p.179)*

### *2.1.2 Market Segmentation*

Stopford (2009) presents a method of categorizing the shipping markets in three different segments based on parcel size and product differentiation. Based on these two categories, the shipping market has evolved into three separate, yet closely connected segments, namely bulk, liner and specialized cargoes. Regardless of how we divide the shipping market, all segments are affected by the shipping market model, which consists of supply, demand and how they come together and are balanced in the freight market. Thus, at the same time one market segment might experience good earnings while another struggles and experience poor freight rate levels.

*Bulk* is carriage of unpacked bulk cargo. The five major bulks are iron ore, grain, coal, phosphates and bauxite. Minor bulk are typically steel products, scrap cement, sugar,

forest products and chemicals. In addition to these dry bulk cargoes there are liquid bulk cargoes, such as crude oil, oil products, liquid chemicals and vegetable oil.

In the *liner market* the vessel sails between certain ports and will transport cargo or passengers in return for freight. It is a regular and scheduled service. For centuries the standard for the players in the liner service has been to arrange conferences. It is a debatable issue whether or not these conferences are to be considered cartels or institutions to prevent destructive competition, as these conferences- or cargo preference arrangements- effectively limits the free trade. Most common types are containerized cargo, palletized cargo, pre-slung cargo and liquid cargo in drums and tanks.

*Specialized* cargoes sit somewhere between the liner and bulk shipping sectors, but characteristically requires specialized ships. Typical cargoes are motor vehicles (RORO), forest products, reefers, liquid gas and offshore.

I will in the next chapter go into more specific details of drivers for the demolition market. But I will mention here in relation to market segmentation, that in addition to earnings and type of vessel, another driver for demolition and choice of method is the vessel's size. Since the price paid to the owner typically is calculated on the basis of USD per lightweight tons, there are incentives for shipowners with larger vessels to shop around for a better paying yard. The greater the ship, the more to gain profit-wise for the shipowner.

### *2.1.3 The Demolition Market*

Expected lifetime for a vessel is typically 25 to 30 years. The costs of maintenance will be increasing, and at some point, it will no longer be economically profitable to operate the ship. Scrapping, or recycling, of the vessel will be a natural cause of action to consider (Stopford, 2009). Ships subject for demolition are, thus, typically older ones that have become technically, obsolete. Regulatory change can narrow down the life span of the vessel, and consequently affect the decision to recycle a ship, the requirement of double hull tankers being an example (Knapp et al., 2008).

However, it could be that this literature is beyond mature. The industry notice that the average age of vessels going to recycling has decreased dramatically, and due to new regulations the expected development is assumed to show even further decrease in age (Heier, 2018).

Regardless, from a shipowner's perspective, another main driver for recycling the vessel is the state of the market cycle, typically reflected through the general level of freight rates. Recycle of the ship can be an option in troughs, or when the market experiences a surplus on the vessel supply side and the demand is too low to engage the vessel in trade. The demolition market therefore assists in balancing the supply and demand in the shipping industry, and from that perspective is a major driver of market equilibrium and level of freight rates (Stopford, 2009).

The ultimate buyers are the yards. Nevertheless, trade between the shipowner and the demolition yard is usually completed intermediaries, *cash buyers*. These cash buyers have insight and detailed competences about the market, and the deal is driven by speculations. The objective is to earn a profit margin based on timing and changes in price (Mikelis, 2008).

The cash buyer can buy a ship for dismantling on an "as is-where is"- basis or a "delivery"- basis. The first refers to a process where the vessel is purchased against a full cash payment and for a short time the cash buyer becomes a shipowner. The vessel is re-flagged, given a new name, boarded with new crew and new insurance covers are issued. After operating the vessel for a period of time, the cash buyer will negotiate the sale of the ship to the shipbreaking yard usually against a bank Letter of Credit (LoC). This is the most common practice. Alternatively, the cash buyer can provide a cash deposit of 10-30% to the shipowner against a Memorandum of Agreement (MoA) for the delivery of the ship at the shipbreaking yard. Upon delivery of the ship the balance is paid to the shipowner. In either process the cash buyer acts a financial facilitator, and the shipowner's risk is reduced as the final payment for the vessel is not contingent upon receiving funds from the recycling yard (Karlis & Polemis, 2016).

The price the demolition yard pays for the ship's LDT is the most important measurement unit in the shipbreaking process. The price is determined by the market and will depend on the state of the local steel market and capacity in the yards. Prices can consequently be highly volatile. After the demolition process, steel, bunkers, inventory and other parts are recycled and/or sold at a higher price (Chang et al., 2010; Schøyen et al., 2017; Stopford, 2009). The type and size of the vessel will determine the LDT, and it gives an estimate of the useful material after demolition (Mikelis, 2008).

As mentioned in the introduction, most vessels are sold to demolition yards practicing the beaching method, along the shores of Pakistan, India and Bangladesh. Typically, these countries have a competitive advantage with low labor costs and weaker protection of environment, health and safety. The safe, and costly, alternative is green ship recycling in a dry dock.

The price difference is an obvious driver for choosing beaching. If taking a VLCC vessel to exemplify with the very large crude carrier (VLCC) and current prices (as of November 27th 2018). A VLCC standard is 300,000 DWT, allowing carriage of two million barrels of crude. Its LDT will be approx. 42,000. Today the prices a shipowner can receive is USD 445 per LDT and USD 167 per LDT in Bangladesh and China respectively (Go Shipping, 2018). The shipowner can pursue full profit maximization, earning around USD 18,5 million, or take responsibility and earn USD 7 million, and thus accept a loss of close to USD 11,5 million.

Nevertheless, historically there have been periods where the price differences have been less evident. But even then, the majority of shipowners still chose to beach their vessels (Heier, 2018). It is reasonable to ask if it is due to lack of knowledge or negligence.

In the figure below, I have graphed the recycling decision as a two-leveled process. Firstly, the key drivers for the shipowners' decision to recycle. Secondly, the shipowner's plausible arguments in favor of dirty and unsafe -and green and safe respectively.

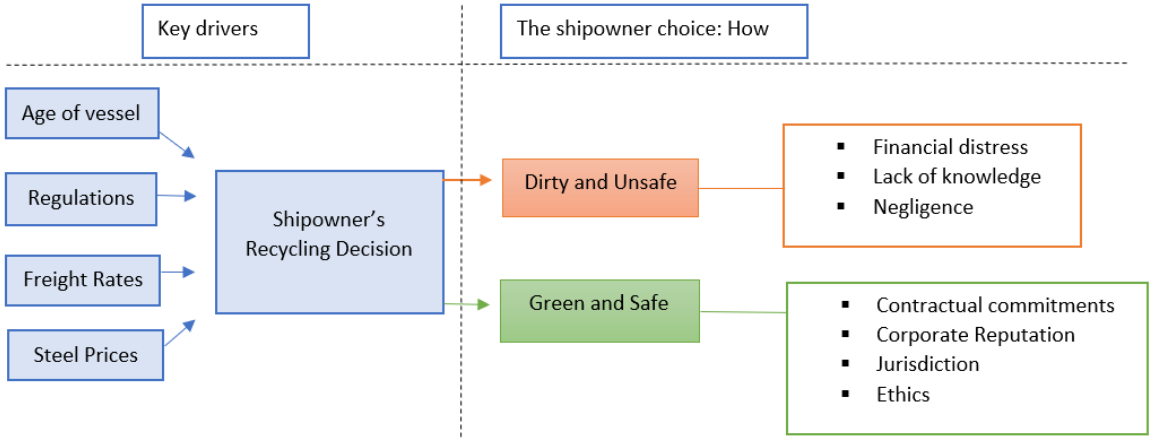
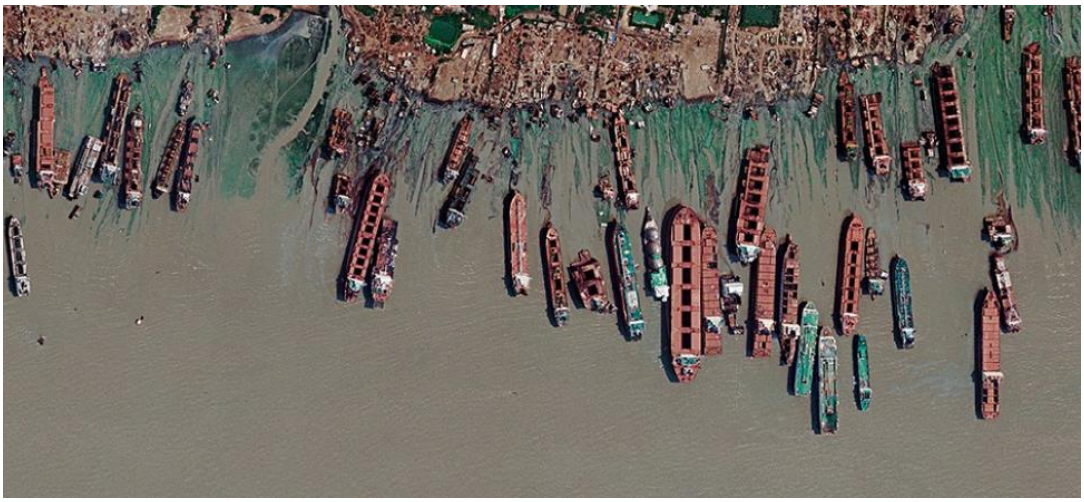


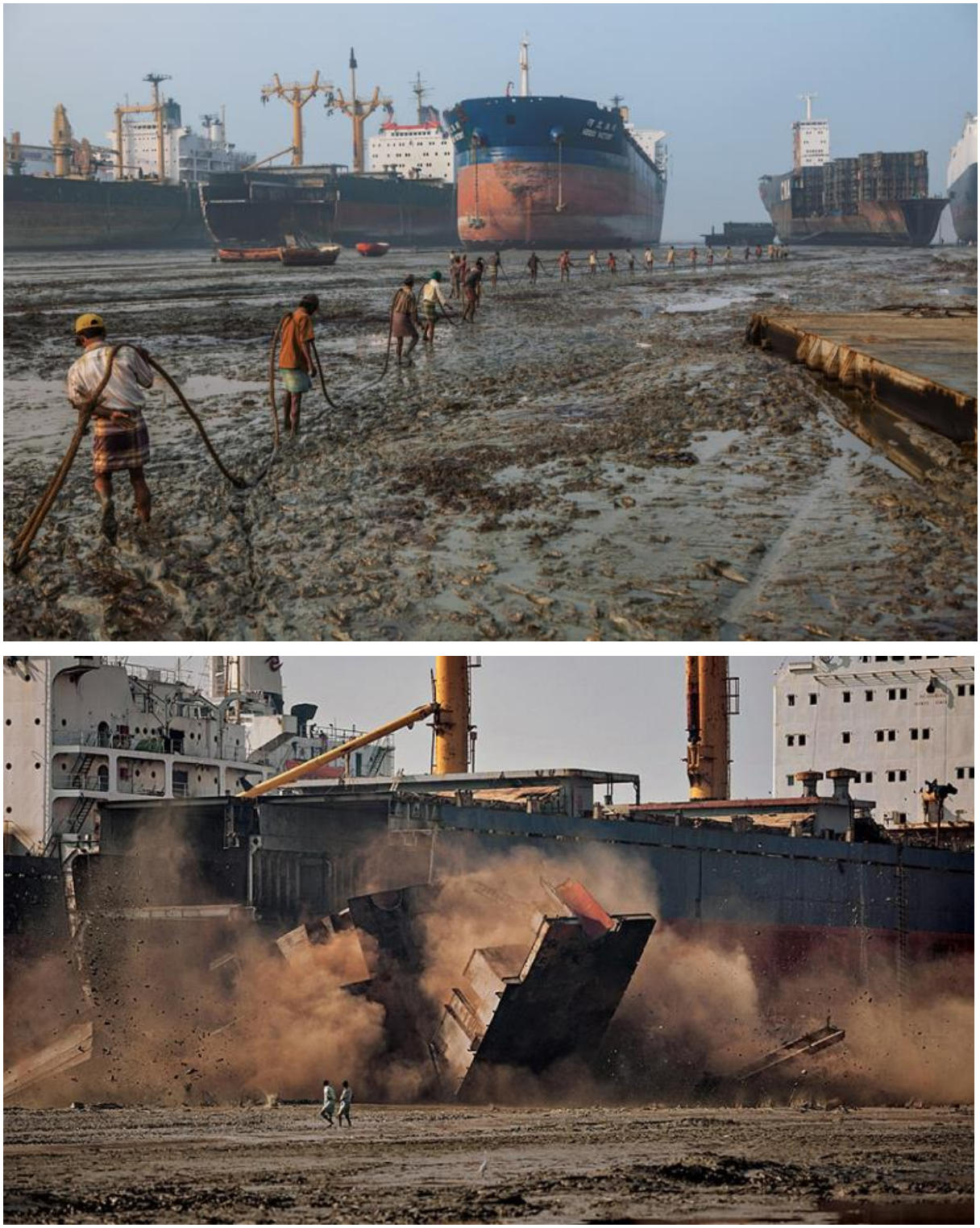

*Figure 3: Author's two-leveled illustrative model of the decision-making process facing the shipowner. The drivers of the recycling decision are external factors. The method of how, to the contrary, is a decision-making process mostly driven by internal factors.*

### *2.1.4 Beaching- An Ethical Dilemma*

The concept of beaching, and how it is carried out, was addressed in introduction. It can, however, be difficult to grasp the massiveness of the ships and how dirty it really is, if this industry is unfamiliar.

Gwin (2014), on behalf of National Geographic, documented the shipbreaking industry in yards outside Chittagong in Bangladesh. The pictures below are from this article, and illustrate well the scope of ship demolition, and beaching in particular, and perhaps why the beaching yards in South Asia should become a concern of the world.





"The ship breakers" in Bangladesh (Gwin, 2014)

Beaching is by definition an ethical dilemma, as the method can directly and indirectly harm people and environment. Moreover, safer (and more expensive) alternatives do exist, and the presence of various NGOs proves that the practice forms moral engagement.

*Normative ethical theories* are rules and principals that determine right and wrong for a given situation (Crane & Matten, 2016, p.86). *Ethical absolutism* and *ethical relativism* are the two extremes along the same dimension. Absolutism claim that right or wrong are objectives which can be rationally determined, i.e., valid if applicable anywhere. Relativism, to the contrary, argues that the context will determine whether something is right or wrong, that it as a subjective matter which will depend on the decision and his culture (Crane & Matten, 2016, p.87).

The shipping industry is governed by an embodiment of conventions developed by the United Nations' specialized agency the International Maritime Organization (IMO). This ensures legal uniformity and smoothens business operations (Falkanger et al., 2011). Thus, the industry as a whole seems to be absolutistic by nature, having established universal rules of right and wrong, which could prove to be challenging in the case of regulatory loopholes.

A relativist would suggest that different codes should be developed for different contexts, while an absolutist would argue that one code can, and should, fit all. Ship breaking exemplifies a situation where these two extremes should be balances. In order to find the balance a core behavioral guiding principle for firms should at least be to respect human dignity and basic human rights (Crane & Matten, 2016). Obviously, this is currently not true for most ship owning entities.

### *2.2 The Loopholes in Applicable Law*

The scope of *global governance* captures the interaction between business and government when then the business is internationalized (Crane & Matten, 2016). To a large extent the shipping industry is governed by an embodiment of conventions which ensures uniformity throughout the industry. It enables smooth operations from both a corporate -and a governmental perspective (Falkanger et al., 2011).
An increase in transnational regulations will increase the imperative regulation at a national level, as the government must implement conventions and other treaties. This will limit the shipowner's possibility to shop around.

The purpose of this chapter to present a short overview of the legal framework governing ship demolition, to establish to which extent the shipowner enjoys freedom of choice regarding recycling method.

### *2.2.1 The Basel Convention*

Since end-of-life vessels compromise of an array of hazardous materials, such as asbestos, PCBs, oil residues and other toxic substances can harm the environment if not handled properly, the activity of ship recycling is partially regulated by the *Basel Convention of the Control of Transboundary Movements of Hazardous Wastes and their Disposal* (Basel Convention), which was adopted by the United Nations Environmental Program (UNEP) in 1989. The convention has been ratified by 181 countries (Basel Convention, 1989b), and remains the only international regulation which aims at protecting developing countries from dumping of toxic wastes. I.e., whenever a shipowner sells a ship for recycling that contains hazardous wastes, the ship becomes waste subject for international law.

But there are certain loopholes, and given the global nature of the industry and the extensive use of Flags of Convenience (FOC), there has been difficulties in applying the provisions of the Basel Convention to ship recycling (Karim, 2009). I will return to the matter of FOC in sub-chapter 2.2.4.

### *2.2.2 The Hong Kong Convention*

The maritime industry is legally governed through an embodiment of widely ratified conventions developed by the United Nation's International Maritime Organization (IMO) (Falkanger et al., 2011). *The International Convention for Safe and Environmentally Sound Recycling of Ships*, generally referred to as the Hong Kong Convention (HKC), is an attempt to seal the legal loopholes. It was adopted in May 2009 and will enter into force twenty-four months after ratification by fifteen states, representing forty per cent of the world's merchant shipping by gross tonnage. Its overall objective is to provide standards for ship breaking, ensuring that ships after their operational lives, do not pose any unnecessary risk to human health and safety and to the environment. After nine years only six states have ratified the convention,

namely Belgium, Congo, Denmark, France, Panama and Norway (IMO, 2009). Although expected to lead to a new administrative regulation with legal basis in the Ship Safety Act §36a, the convention has not yet been adopted as a part of Norwegian maritime law (Lovdata, 2018).

However, the convention neither forbids beaching nor does it regulate workers' rights. The most important feature of the convention is that it takes on a "cradle to grave" approach, that every ship must have a certification of Inventory of Hazardous Materials (IHM) and that a final survey is conducted prior sending a vessel to recycling (Lindgren et al., 2016).

### *2.2.3 EU Regulations*

The *EU Ship Recycling Regulations* were adopted in 2013, and the overall objective is to reduce the negative impact that EU flagged tonnage impose when recycled. The regulation brings forward the requirements of the Hong Kong Convention and applies to all end of life vessels flying an EU member state flag. According to the regulation, from December 31st 2018, large commercial seagoing vessels flying an EU member state flag can only be recycled in yards included in the European List of Ship recycling facilities, generally referred to as the "white list" (European Commision, 2018b).

The process of updating the list is ongoing. As of June 2018, the EU white list of approved ship recycling yards counted twenty-one yards, all located in the EU, with a capacity of 300,000 LDT (European Commision, 2018a). The regulations have set a capacity target of 2.5 million LDT, there is, thus, a significant gap. The capacity problem can be solved by approving non-EU yards, and some have applied for approval: The US (two yards of 72,868 LDT), Turkey (seven yards of 450,903 LDT), India (five yards of 323,497 LDT) and China (four yards of 1,767,215 LDT). These are currently pending (The Maritime Executive, 2018).

Two important remarks should be made in the context of the EU regulations. Firstly, forty-one per cent of the world tonnage is owned by EU registered owners, but less than ten per cent of the recycled vessels fly an EU member state flag. Hence, the

regulation only applies to a very small percentage of the merchant fleet (Heidegger et al., 2015).

Secondly, at the same time as the EU regulation will come into full effect as of January 1st 2019, China, a pioneer in the field of green ship recycling, will no longer serve as a destination for recycling for international ships. The decision can cause a possible vast setback for the whole industry, and shipowners might be forced to suboptimal yards (Safety4sea, 2018).

### *2.2.4 Flags of Convenience*

The flexibility mechanism in shipping, the possibility for a shipowner to fly the flag he finds more convenient, known as FOC (Flag of Convenience), has proven effective in order to avoid any new regulation.

Traditional flag states usually have strict nationality rules governing registry of ships, requiring a genuine link. Other flag states are open registers, which allow ship registry through a post box company. These are in the industry referred to as FOCs. Typically the shipowner can enjoy the privilege of minimal regulation, cheap registration fees, a desirable tax environment, and freedom to exploit cheap labor (Heidegger et al., 2015).

The most popular FOCs are Panama, Marshall Islands and Liberia, and that has been stable over time. These flags are white listed by the port state control organs, Paris MOU, i.e. they are regarded low risk. Moreover, there are also particular "end-of-life flags of convenience", which are hardly used during the operational life of ships, yet popular for the last voyage to the substandard demolition yards. St Kitts and Nevis, Comoros, Tuvalu, Togo, Tanzania and Sierra Leone, are all grey- or black listed by the Paris MOU, meaning that these flags are low-performing and high risk.

Given the loopholes in conventions and regulations, and the extensive use of "last voyage FOC registration", it seems the shipowner enjoys the privilege of a carte blanche, and that the ultimate legal responsibility for environmental -and safety issues of recycling facilities is left to the recycling state (Moncayo, 2016).

## *2.3 The Shipowner's Corporate Social Responsibility*

In the context of this report's research objective it is natural to address corporate social responsibility (CSR). I will in this section first define CSR, then present relevant theory of CSR in relation to corporate reputation and financial performance.

### *2.3.1 Defining CSR*

Numerous definitions of CSR exist. CSR can be defined *as a business approach that contributes to sustainable development by delivering economic, social and environmental benefits for all stakeholders (*Greening & Turban, 2000). In this context, the choice of sustainable recycling can be regarded as an act of CSR.

Archie Carroll suggest that CSR is the attempt by companies to meet the economic, legal, ethical and philanthropically demands of a given society at a particular point in time (Carroll, 1991). CSR is presented as a multilayered concept, which also serves as a prioritizing order. Hence, doing good is CSR insofar as it promotes own self-interest. Motivations could be to enhance revenue, reduce costs, manage risk and uncertainty or maintaining the social license to operate. Naturally, to what extent this really is CSR should be reflected across (Crane & Matten, 2016).

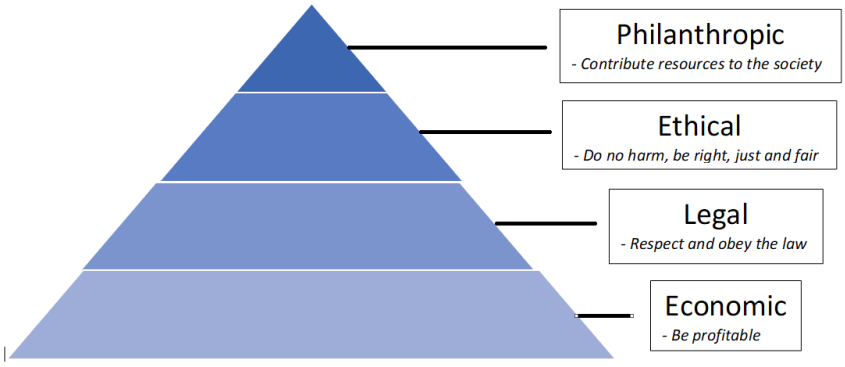



*Figure 4: Model resembling Archie Carroll's pyramid of a the firm's responsibilities and in which order to prioritize them (Carroll, 1991, p.42)*

If taking on Carroll's CSR approach, a shipowner who sells his vessel to a green ship recycling yard, and accepts the extra costs associated with this practice, is pursuing self-interests. By "doing good" today, the ship owning entity will benefit profit-wise sometime in the future.

*Instrumental CSR* suggests that an ethical act is done for the purpose of making money in the future. It is not the moral rational that has first priority. *Integrated CSR*, to the contrary, are acts done by the company rooted in the motivation of doing right. In many cases it can be argued that the outcome will be the same for stakeholders, and the motivation underlying the act will be of less importance. But how robust the ethics are, will depend on the motivation behind.

Regardless of the underlying motivation of CSR, the nature of globalization fuels the debate and those accepting that corporations have certain responsibilities beyond maximizing (Crane & Matten, 2016).

### *2.3.2 Corporate Reputation and Financial Performance*

It can be argued that various activities of CSR can positively affect a firm's corporate reputation (CR). Reputation has been defined as *"a perceptual representation of a company's past actions and future prospects that describe the firm's overall appeal to all its key constituents when compared to other leading rivals*" (Roberts & Dowling, 2002). It can be understood as how the general public and all the firm's stakeholders judge the company based on its contributions on the financial, social and environmental arena over time, and to which extent the firm is "good" or "bad". It is suggested that a good CR allows a firm to enjoy persistent profitability (Roberts & Dowling, 2002).

Corporate reputation has in the literature been mentioned as a driver to attract capital. Financial investors' investment decision, individual investors' in particular, do usually not rest upon a process of due-diligence. In addition to mathematical and statistical parameters, they often make shortcuts to obtain information in which can back-up or reject their investment decisions. One convenient shortcut in this regard is the firm's CR (Weng & Chen, 2017).

Moreover, according to the Resource Based View (RBV) framework, a resource, tangible or intangible, is an asset that a firm has, which potentially can deliver competitive advantages. In order for the firm to enjoy a sustained competitive advantage, the resource must have VRIN attributes, namely *valuable, rare, inimitable*

*and non-substitutable* (Kristandl & Bontis, 2007). Therefore, in accordance to the RBV rationale, a well perceived CR should be regarded as a resource that can give a company a strategic head-start (Weng & Chen, 2017).

In relevance to financial performance, scholars have found evidence of certain cost advantages for companies with a good reputation. For instance, are processes related to employees mentioned in the literature, since employees prefer to work for a quality brand. A consequence is smoothened hiring processes enabling the firm to attract highly qualified to lower pay, and to keep the outstanding employees (Cable & Turban, 2003; Pharoah, 2003). Also, if the name of the firm is well-know and positively perceived, the firm can enjoy a more competitive position than its rival (Fombrun & Shanley, 1990). A direct effect in this regard are lower costs related to contracts and monitoring due to trust, since suppliers to a less extent fear contractual disagreements (Roberts & Dowling, 2002). Reputation should, therefore, be identified as an important driver of firm valuation (Saeidi et al., 2015).

Hence, if CSR, hereunder green ship recycling, is perceived as something good the firm's CR in strengthened, and the subjected shipowning entity could increase its competitive advantage by gaining a cost advantage and increase its attractiveness amongst investors.

### *2.3.3 How Does CSR Affect Corporate Reputation and Financial Performance?*

As briefly addressed above, researchers have found a positive correlation between a good CR and the firm's FP. This positive correlation is, however, fair to question. Just as well as a corporate reputation helps a company to reach its financial targets, so too could any of the firm's other intangible assets (Roberts & Dowling, 2002).

The relation between FP and CR has been studied at length amongst several scholars, and one core driver in this regard is the desire to show that a firm can "do well while doing good" (Neville et al., 2005). If doing good positively contributes to the firm's bottom line, it could be argued, regardless of the ethics governing the company, that CSR should be an incorporated part of the business' mission and strategic decision-

making process. The question of how CSR contributes to the CR and FP naturally arise.

The debate on financial benefits of CSR has been going on for decades, and continues to do so. Some scholars strongly argue that the engagement in CSR- related activities conflicts with the firms' overall objective of maximizing profits, as it deviates from the business' core activities (Friedman, 1970; Jensen, 2002; McWilliams & Siegel, 2000). On the other side, there are those scholars that argue in favor of CSR, as it could contribute to a strong brand positively perceived by the public and consequently the activity will contribute in favor of FP (Fombrun & Shanley, 1990; Greening & Turban, 2000; Saeidi et al., 2015).

CSR influences FP by affecting the perceptions of public stakeholders and financial stakeholders differently (Wang & Berens, 2015). I.e., the firm's engagement in health, social and environmental matters are not necessarily regarded as "doing good" by all their stakeholders. There will be conflicts of interest. Academia argues that stakeholder theory holds the potential for providing the CSR-FP relationship. It is, thus, within the organization's relationships with its stakeholders that the extent of its responsibilities is framed and its performance is assessed (Neville et al., 2005).

I have not succeeded in finding theory that unbiased and unambiguously can confirm a specific relationship between FP, CR and CSR. Several scholars have, however, obtained results confirming that the three affect each other to a certain extent. And that the synergies created combined could lead to a competitive advantage.

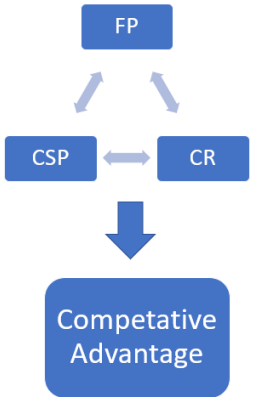



*Figure 5: Author's illustrative graph of how the interrelating relationships of FP, CSR and CR can be understood and how they could contribute to a sustained competitive advantage.*

### *2.3.4 Stakeholder Theory*

Stakeholders are defined as *"any group or individual who can affect or is affected by the realization of the organization's objective".* They enjoy the benefits and harms of the firm's activities, and also carries rights and duties towards the company. It is in this regard an interdependent relationship (Crane & Matten, 2016).

The stakeholders' role is to; 1) set expectations; 2) experience effects; 3) evaluate outcomes; and 4) act on these evaluations. In that sense, stakeholders can through their sanctions, directly change the firm's allocations of resources of which they are dependent on, and thus directly impact FP (Crane & Matten, 2016; Neville et al., 2005). Organizations will probably have different reputations depending on the various stakeholder groups. How an organization is perceived will depend on the stakeholders' expectation's to the firm (Neville et al., 2005). Expectations are dynamic, following knowledge and trends, and are therefore likely to change over time. Neville et al. (2005) argue that stakeholders are thus uniquely positioned to affect the FP of the firms, through withholding or providing effort (employees), infrastructure (government) or cash flow (customers).

Moreover, since a certain CSR activity can be perceived differently among the many stakeholder, it can as a result affect the firm's FP. An example is where corporate social activity is perceived positively among public stakeholders but negatively among financial stakeholders. CSR's impact on firm value could be ambiguous(Wang & Berens, 2015).

In contrast to Friedman's shareholder theory, the *stakeholder theory* has become an influential approach to merge business and ethics. The main claim is that corporations are not simply managed in the interest of their shareholders alone, but also for everyone having a stake in the company (Crane & Matten, 2016, p.56). The following section will in short describe the shipowner and its' key stakeholders. Surely, other stakeholders, such as media, NGOs, employees, employees at the yards, end-customers, competitors and so forth are also identified. They will not be addressed in more detail. The stakeholders mentioned specifically are in a power-

position where they can contract clauses relevant for the recycling decision, and *how* it is conducted.

### *The Shipowner*

The term shipowner is a vague description and can be viewed in many different ways. When limiting the scope to its legal sense it is the person who starts up the organization, manages it and bears the economic risk (Falkanger et al., 2011). The shipowner is defined as the legally responsible person(s) or company who owns and is legally in charge of, and responsible of, the ship. The shipowner is liable for actions made by anyone in service of the ship, and to be named shipowner, one should have the highest authority in combination with ownership interests (Falkanger et al., 2011).

In an industry where commercial -and technical management frequently are outsourced to specialized third parties it can, however, be difficult to determine who owns and who carries the liability (Asuquo et al., 2014; Jeon et al., 2014). Combined with FOCs, partnerships and charterparty contracts the shipowner's identity can be concealed, and it becomes challenging to determine who owns and who carried the liability (Falkanger et al., 2011).

The shipowner in this paper is the person, or company, whom is responsible for the recycling of the vessel. I.e., the selection of the recycling method and yard is therefore the responsibility of the shipowner, and the associated profits or losses his to earn or bear.

Scholars have found that that the demolition market is driven by shipowners' motivation to make money, rather than where and how the vessel is scrapped (Schøyen et al., 2017), and that the shipowner chose to avoid any role and responsibility in this regard (Sivaprasad, 2010). Hence, the shipowner is, in most cases a pure profit maximizing actor.

### *Shareholders*

The shipowning entity can be structured in many different ways. Mentioned in the literature are sole proprietorship, part-owner, limited partnerships and limited liability

companies. The latter is the dominant ownership form, independent of tonnage or type of vessel, where the shareholders' liability is limited to their investment (Stopford, 2009). The owners therefore do not necessarily hold a personal interest in the company as such, mere function as pure financial investors expecting the management and employees to do business in order to safeguard shareholders' interests (Crane & Matten, 2016, p231).

Shareholders have a powerful position from which to hold the company accountable of many issues. Examples in this regard are shareholder activism and Socially Responsible Investment (SRI). Shareholder activism is the attempt to use shareholder rights to actively change the practices and policies of a corporation. Over the years this practice has addressed a range of social issues, including product safety, labor issues and pollution. SRI refers to an investment decision that combines the search for financial returns and doing morally good with regard to social, ethical and environment (Crane & Matten, 2016, p.263)

### *Market Institutions*

Banks, brokers and insurers play significant roles in the maritime industry as financial enablers, with extensive knowledge and network. The institutions also protect valuables and act as guarantors of damage to third parts in operation of the vessel (hereunder wreck removal and oil spill) (Stopford, 2009).

The Responsible Ship Recycling Standards (RSRS) initiative proves that third-party market institutions can contribute to safe ship recycling, recognizing that the activity indeed is a part of the shipping industry value chain. RSRS are applicable to debt financing where a ship is pledged as security in relation to a loan. It is embedded in the bank's due diligence process when granting a loan and applies for the entire fleet, not only the subjected vessel (ABN AMRO et al., 2017).

As of December 3rd 2018, I find no evidence of similar initiatives amongst brokers or insurers.

### *Charterers, Cargo Owners and Strategic Partners*

As size usually is recognized as a strength, it is common to enter into various forms of partnerships. I will here specifically mention shipping pools, joint ventures (JV) and charterparty.

A *pool* is created by forming a common legal entity where shipowners of similar vessels go together under common administration, marketing and they trade their vessels by fixings vessels under a single name, joint collection system and joint revenue distribution. A *JV* is a strategic alliance in which the parties jointly undertake activities for mutual profits. Typically, one party has something the other does not have, for instance technology, marketing channels, finance or customers. By *chartering* in vessels, a shipowner increases his capacity without undertaking the associated finical risk when building and owning the vessel himself (Stopford, 2009).

A charterparty is a contract of renting the vessel, whole or in part. Time charter party is renting the vessel for a specific time, where the charterer pays hire, a fixed rate per day, in addition to bunker consumption and port fees. The concept of a voyage charter party is to serve several cargo owners, each taking up a certain percentage of the vessels capacity, against freight rate payment. Bareboat charterparty is renting the entire ship and all associated expenses (and risk) are transferred from the shipowner to the charterer (Stopford, 2009).

A contract of affreightment (CoA) is an agreement between the shipowner and cargo owner of transportation of goods. The shipowner typically has a large and modern fleet, serving industrial customers with specialized vessels. These are often long-term contracts and the shipowner is sometimes a total logistics provider, offering storage, transportation, shipment, services inland/offshore in addition to load and discharge. The long-term relation is characterized by mutual trust and collaboration (Brodie, 2014; Crane & Matten, 2016).

As a starting point there is contract of freedom, thus in principle anything can be contracted, and a cargo owner can therefore contract specific demands regarding the

ship, hereunder recycling of the ship. Consequences for the shipowner in the case of not complying can be termination of future contracts or compensation (Heier, 2018).

### *Government*

Crane and Matten (2016) argue that the government is an important facilitator of business. They can provide equal grounds for competition and create opportunities for business owners, but even more importantly, they set the boundaries for business behavior. But in the context of the demolition market defining *the* government can prove challenging.

I have identified governmental representatives at two levels. Representatives for the United Nations' involvement with the maritime industry and environment at a *transnational level*. At a *national level* is represented through the various flags, namely The Norwegian Maritime Authority on behalf of the Norwegian flag state, the various FOCs and the flags of states performing beaching.

The government represents citizens' interest and self-interests. In the role as the representative for citizens' interests, the government typically defines the red tapes for business operations. (Crane & Matten, 2016).

Governments can be characterized as having the authority to develop laws and regulations, and the authority to follow up with sanctions in cases of non-compliance. These *imperative regulations* thus give incentives to act in accordance to the law and will thereby either constrain, enable or encourage particular business behaviors (Crane & Matten, 2016). A ratification of the Hong Kong convention would represent such an imperative regulation.

*Private regulations* are rules that are issued by business and civil society to standardize ethical business practices. Their force relies on market mechanisms and works in a softer and more indirect way (Crane & Matten, 2016). The aforementioned bank initiative RSRS could represent such a private regulation, when a commercial contract force through a choice of green ship recycling.

### *2.4 Research Actuality and Review of Previous Research*

The fairly new bank initiative RSRS and the Norwegian ratification and involvement of with regard to the HKC, are two already mentioned drivers to this research's actuality.

Moreover, the practice of beaching has made numerous headliners in commercially wide broadcaster recently, especially in the aftermaths of the so-called Harrier-case. In February 2017 *Harrier* (previously named *Tide Carrier*) had an engine failure outside the southwest coast of Norway, resulting in a costly process of salvage. It was restricted to sail, and during the inspections it was discovered that the vessel was en-route to Pakistan, were it was intended to be dismantled at the beach. The Ministry of Climate and Environment took arrest in the vessel, classifying it as waste and prohibiting its further journey. Currently, former owner of the vessel is convicted for selling the vessel to a cash buyer with the intention to re-sell the vessel to a beaching yard, and their Norwegian P&I insurance agent is co-defendant for insuring the last voyage, neglecting knowledge of its purpose (NRK Rogaland, 2018).

To further mention a few recent headliners:

- "Insurance agent Skuld Marine Agency indicted in the "harrier case"" (Klevstrand, 2018a)
- "Professor in Law about the Harrier case: Should be an eye awakener for the entire industry" (Klevstrand, 2018b)
- "The until now unknown Norwegian ships on "worst list"" (Bach, 2018)
- "In 18 years the vessel was in service for Equinor, now it is scrapped on an Indian beach" (Nordstrøm, 2018)

When these issues become headliners in commercial newspapers, it seems that the practice of beaching is a behavior judged inexcusable by the general public. Hence, beaching is no longer a subject for a few industry-specific interested, this have become of interest of everyone.

Moreover, I find few studies concerning the Norwegian shipowner in particular in the context of sustainable ship recycling. Vedeler (2006) sheds light over the Norwegian owner who trade internationally and to what extent he acknowledges his

responsibility throughout the value chain, demolition included. The author discusses the shipowners' responsibility in the context of current industry conditions in terms of market circumstances and legislative landscape. She found that as long as the industry code of a practice is not changed, it is highly unlikely that that a shipping company change practice and admits full value chain responsibility. The study's findings are valuable and of interest for this research, but two remarks should be made in this context. Firstly, the study is rather mature and a lot has happened, with respect to both legislation and norms. And secondly, the study studied one particular shipping company only in -depth.

Schøyen et al. (2017) contributed to the field by answering how Norwegian ship managers influence the ship demolition process, and thereby minimize environmental and safety issues, and what approaches could be taken by shipowners in order to achieve a more sustainable recycling industry. Their findings suggest that for shipowners choosing green recycling there are strong economic underlying drivers. They suggest further studies within the field of CSR. The researchers experienced few willing respondents, and the research does not have a financial approach as such.

Of further interest for this research are the findings in a Norwegian master thesis, showing that from the current marked situation it could be argued that for instance forbidding the beaching method is not realistic, and that it in a principle of sustainable development could be criticized, since a prohibition could restrict an economic development in the beaching state (Karlsen, 2017).

Internationally, in the context of climate and environment, to the contrary, there are several studies, for instance in terms of economic incentives to invest in energy optimizing technology and analysis of current legislation (Alam & Faruque, 2014; Choi et al., 2016; Rahman & Mayer, 2016; Yılmaz et al., 2016). These studies are not concerned about the Norwegian shipowner specifically. Choi et al. (2016) do, however, encourage to more research that can shed light on the balancing of economic and environmental aspects, and to what extent regulations are valuable.

Silverman (2014) argues in favor of research having a broader catchment than the grade- setting professor: the research should be able to give practical and relevant information to current political decision makers. It is also the hope that this study's findings can assist in the strive towards a greener and more sustainable shipping industry.

The given limited research in general, and of the Norwegian shipowner particularly, in addition to the more frequent tabloid headlines, substantiates this research's relevance and actuality.

## 3.0 Methodology

The relevant theory and background concerning the Norwegian Shipowner in relation to ship recycling has been discussed, thus the foundation for which further analysis can be built upon is laid.

On basis of the background and theoretical framework presented above, I have identified four areas that possibly can reveal to what extent the shipowner is a pure profit maximizer. Firstly, the financial state of the shipowner and characteristics of his market, can say something about the urgency and necessity to make use of any cost cutting initiative. Secondly, a deeper dive into governance can assist me in discovering *who* are the owners, in terms of engagement, competences and commitment. Thirdly, the key stakeholders must be addressed, to establish to what degree commercial contracts impose restrictions in terms of ship recycling. And lastly, what are the shipowner's drivers to implement various CSR activities? Is it a strategic step to strengthen their corporate reputation and possibly perform better financially at a later stage, or is the rooted in their motivation to do good? Through these processes, the objective is to find the governing business ethics, which can assist in answering my research question.

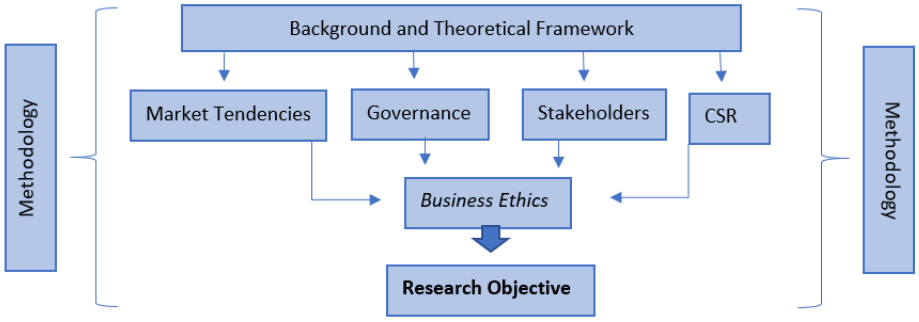



*Figure 5: Author's illustrative chart of the research process.*

The following chapter will address the choice of method and discuss the treatment of data.

### *3.1 Qualitative Data*

It is the research itself that should guide the researcher to his or hers preferred method with respect to collect, treat and analyze data (Silverman, 2015). Hence, the choice of method should be anchored in the research objective and the researcher's possibility to gather information. And most importantly, what best can answer the research question:

*Given the current conditions for the shipping industry, hereunder legislation and financial drivers, does the Norwegian shipowner acknowledge his overall responsibility in the maritime supply chain, including ship recycling? Or is green ship recycling simply good business?*

In accordance to the theory of CR and CSR, and their effect on FP, combined with the assumption that the shipowner of nature is a profit maximizer, it is fair to assume that the less profit maximizing choice of safe and sound recycling, indeed could be financially motivated. If so, the incentives are rooted beyond the demolition data and else information available. The aforementioned example of restrictions in commercial contracts being one example, and the fear of lost CR and the associated opportunity costs being another.

These elements are matters of sensitivity, and it could prove challenging to reveal the underlying and true reasons of why the shipowner accepts the associating financial

loss. In order to find their inducement, qualitative research method is considered suitable. Qualitative design tries to provide descriptions and go deeper into the rationale and opinion of just a few. The design seeks understanding in the data, rather than empirical testing (Silverman, 2015).

Furthermore, there are relatively few studies that shed light over this particular field of research. When seeking extensive information about a rather narrow phenomenon, a preferred technique could be to conduct a case study. A case study will provide the researcher the opportunity to go in-depth of a single unit, and promote accurate descriptions of a phenomenon and draw descriptive conclusions (Silverman, 2015). The choice of case study will consequently affect the research design, collection of data, analysis and discussion. It will not necessarily be so that the findings can be used as basis to broadly generalize, but rather be of interest for further research.

### *3.2 Selection Criterion*

Some Norwegian shipowners have clear and communicated sustainable strategies regarding ship recycling, and have taken a stand against the beaching method. Three of these shipowners will primarily create the basis for a discerning selection for the study. Grieg Green assisted me and quality checked my selected shipowners, for instance by confirming that the shipowners have no recent history of beaching.

Four in-depth interviews with key people positioned hierarchal high in either commercial or technical department were conducted, representing three different shipowners, each lasted between 37 and 70 minutes. I found this to be sufficient to cover the subject, and achievable given the limitations in time. The dataset is completely anonymous and consists solely of information which cannot identify individuals, neither directly nor indirectly. Therefore, approval from Data Protections Services (NDS) in advance was not required.

The respondents were contacted by phone prior the interviews. They are known to me through my personal network in the maritime industry, or through Grieg Green which could provide me with names and contact details. A friendly tone and atmosphere were, therefore, established in advance of the actual meeting, ensuring a

communicative flow and no waste of time on informal small talk. The figure below displays the various interviews, their order randomized. One interview was conducted in June, one in September, one in October and the last in November. Two interviews were conducted by video conference call, the other two were in-person, held in the Oslo area. Close to no time was spent on travel.

| Participant | Length of Interview |
|---|---|
| 1 | 37 min, 5 pages transcript |
| 2 | 46 min, 6 pages transcript |
| 3 | 50 min, 6 pages transcript |
| 4 | 70 min, 8 pages transcript |

### *3.3 Semi-structured Interviews*

The interview guide and the selection of respondents form a basis from which data can be extracted. Equally important, though, is *how* a question is asked. Leading questions from the researcher can path the interview to a certain direction, and consequently reduce the respondent's possibility to influence the content of the interview (Ryen, 2002). Creating an environment enabling the respondent to influence and affect the interaction is emphasized.

The main purpose is to catch the respondent's perspectives. Too much structure can strangle the researcher to such an extent that confusions and wrongful interpretations are bypassed without being cleared. On the other hand, a well-prepared structure can effectively avoid unnecessary information (Ryen, 2002).

I, therefore, found personal semi-structured in-depth interviews, which allows flexibility, to be the best approach. Open questions characterized by narrative method such that the informant freely can respond and reflect around the questions. By repeating key words and main points the respondent's answers were confirmed

(Silverman, 2015). Ryen (2002) advocate in favor of pre-sending an overview of the topics subject for discussion in order to optimize use of time and avoid redundant matters. For two of the respondents this was desired.

### *3.4 Data Collection and Reflections Around Analysis*

Given the research model and the choice of case study, the importance of "pattern tracking" in datasets was given weight. The objective was to report the interrelation between data and theory (Silverman, 2015).

A natural part of the preparations was to check Data Protections Services (NSD) to ensure that the study was in line with responsible collection of data, which safeguards the respondents' privacy in line with the EU regulation GDPR. In addition, two key executives working in the industry have assisted to ensure the contents and quality of the interview guide.

The interviews were all tape recorded, and transcripts were made as quickly as possibly thereafter, ensuring the transcripts' necessary accuracy and quality. The interviews were ordered systematically after topics. When using citations, it was important to ensure that the respondent's answer was neither taken out of context nor assigned a different meaning, merely confirming a finding. And lastly, it was important to make sure that an intended meaning was not lost in the process of translation from Norwegian to English.

### *3.5 Other Data*

In addition to the interviews thorough due diligence of the subjected shipowners was conducted. This included extracting information about fleet, segment, management, board of directors and strategies from websites and financial reports, if available. This was done as a part of the preparations before the interviews. Data of demolition and prices were provided from The Norwegian Shipowner Association (NSOA) and Grieg Green.

### *3.6 Reliability and Validity*

It is natural to emphasize the notions of reliability and validity. If the research fails in convincing its audience that the procedures used can ensure that the methods are reliable, and the conclusion valid, the attempt to conclude seems worthless (Silverman, 2015).

Reliability concerns consistence and stability in measurements, and to what extent one will reach the same result if another scholar repeats the study. Precision and absence of error in measurement consequently strengthens the reliability of the study (Silverman, 2015). It was, thus, important to show precision and accuracy in the process of data collection. The thorough preparations in advance of the interviews, the recording and the immediate transcription ensured precision and quality. I also enjoyed the opportunity for a call-back in case of anything being unclear. The reliability was further strengthened through the use of citations.

The validity of the study refers to what extent the researcher is measuring what he was intended to measure and determines the approximate truthfulness of the results (Silverman, 2015). To safeguard this study's validity in best manner, the research is anchored in previous research and strives to avoid selection bias by selecting shipowners with comparable tonnage. The interview guide was built upon neutral and not-leading questions. Respondent validation of the interview guide could enhance the general validation, but this was not desired from neither of the respondents. Observation internally in ship owning entities, for instance in the processes of negotiations of commercial contracts, could improve the validation further, but given the limitations in time and typical clauses of confidently this was not possible.

### *3.7 Ethics*

Ethical considerations were secured by ensuring that the respondents participated voluntarily and guaranteeing their confidentiality. Furthermore, in line with Silverman (2015) arguing, ethics were governed through the development of mutual trust, and making sure that the respondent under no circumstance, and in no way, suffered.

Ethical matters must be balances pre, under and post data collection. It was crucial to ensure the respondents self-determination and privacy. The recruiting process was informal and friendly. To ensure the respondents volunteer participation was necessary, and a follow-up e-mail or SMS was sent prior the interview. The respondents expressed their desire to read the final report, which naturally will be met.

# 4.0 Summary of the Interviews

The interviews followed the same interview guide and had the same structure. In this chapter a summary of the interviews will be presented. The overall purpose being to identify the common characteristically traits, and where the shipowners differ.

## *4.1 Market Tendencies*

World seaborne trade is served by different types of vessels of various sizes, employed in different parts of the world, by the shipowner himself or on various contracts.

The purpose of this section is to present the current situation facing the shipowners with regard to market structures and key factors for tonnage demand development. Stopford (2009) suggests four counter-reactive actions for a shipowner in order to minimize the resulting damage in weak market periods, namely; slow steaming, lay-up, increase the use of cargo preference arrangements and demolition. Especially in light of the latter, it is therefore crucial to understand what market the shipowner is in.

### *4.1.1 Freight Rates and Shipping Cycles*

The three shipowners are present in two of the three aforementioned separate, yet closely connected segments. They all report horrible earning because of poor freight rate levels in combination with increased bunker price. There is little willingness to invest in the market, reflected through the current orderbooks.

For two of the shipowners the poor state of the market is argued to be driven by over-supply in tonnage. The supply side is ponderous and slow to change, whereas demand is fast-changing. Hence, if too much tonnage is contracted into the market, it will take time for the market to be balanced and back in equilibrium. One of the respondents describes the scenario:

*"At all times there are vessels anchored up outside Asia, waiting to be employed.* (Respondent 2).

Even though neither of the respondents operate within the container segment, they all refer to this segment working as an undertow for the entire industry. Container has not only been hit by higher bunker prices and over-supply, they have also encountered a general decrease in demand. For years these shipowners have struggled for survival, affecting other segments significantly.

*"The freight rate in other segments continuously affects us (..)There are large container ships that do not make money, they fight to minimize their losses with all they have* [entering our network and offer slim rates]" (Respondent 4)

The respondents describe a scenario similar to a trough of a short-term business cycle. A cycle is defined as a shipping period from a trough, via a recovery, a peak and collapse back to trough. And a short-term cycle is strongly correlated to the general state of the world economy and its fluctuations. The cycles are a mechanism where Darwin's "survival of the fittest" is highly applicable (Stopford, 2009). This is confirmed by the respondents, and as one expresses:

*"It is no secret that we have endured losses the past years. Bad freight rates and the high bunker prices is a killer combo. But what's going on now is not sustainable over time, it will adjust itself. We'll simply have to wait it out."* (Respondent 2)

In a weak market there are counter-reactive strategic actions available for the shipowner, amongst them demolition. Hence, a weak market is a potential key driver for demolition. It is reasonable to assume that it will also work as an incentive to avoid an expensive choice of green recycling.

*"It is today not possible to recycle the ship in a safe and sound manner without losing money (..) and some just cannot do it. If they should recycle green the entire stock is left unemployed and the company would be bankrupt. That is the unpleasant truth. It is so much money involved. We are currently engaged in a project to recycle green (..). The vessel is huge. The price difference between two yards, both green, is USD 20 million. If we go to India, the difference would be significantly larger. For many shipowners it is a matter of survival"* (Respondent 1).

And;

*"It is unavoidable that the cost aspect serves as a driver in shipping, especially the past years with falling markets. It could be argued that that in itself could be a driver for beaching."* (Respondent 3)

For the shipowners in this report, it has not been necessary to consider increased demolition. However, all respondents report they have to go through all the nitty gritty details to become more efficient. Mentioned are customization of sailing route, avoidance of bad weather, thorough planning, optimization of load and discharge, in addition to cargo preference conferences and slow-steaming.

*"We must balance the cost and earnings of full speed, and the cost of slow-steaming. But every shipowner has been slow-steaming. Really, since 2009 everything has been going slow"* (Respondent 4).

### *4.1.2 Cargo and Trade*

The respondents all described a shift in trade, entrance of new competitors, a tougher competition and that the separation of the aforementioned segments perhaps in somewhat blurrier. Even those shipowners that operate in a market that in its narrow sense is not disrupted by over-supply, have to adapt since their market has become attractive for those suffering from over-supply and consequently bad freight rates.

*"We have experienced that new actors take an interest in celluloses* [one of their cargoes] *because it often is associated with larger cargo quantities and longer sailing distances. On certain routes containerships can offer very cheap transportation. ROROs attack our shipping of windmills. We then have to focus on our competitive advantages, for instance that our vessels are smaller and can reach*

*more ports and that we can use our own cranes for non-rolling objects and thereby are in less need of logistics and infrastructure"* (Respondent 4)

All respondents report that the current market situation has forced through creativity in terms of what cargo owners to target, and in part aggressively attacked those segments that pay the most, the original purpose of the ship being irrelevant. For instance, the main cargoes for RORO are cargoes that can be rolled on and rolled off, typically cars, tractors and trucks. Common practice now a days is to also take non-rolling cargo by lifting them on strollers and roll them onboard. Cubic by cubic these cargoes pay much more, compared to traditional roro cargoes. Market share is consequently stolen from another segment.

Another example from the bulk market are vessels which were contracted to carry dry bulk cargoes from A to B, and sail deadhead back. In the case of no returning dry bulk cargoes, the shipowner bids on contracts on wet bulk cargoes. This is costly not only to ensure technically compliant vessels, but also in terms of lengthy negotiations.

*"Those negotiations took literally years. They* [crude owners] *have so many technical requirements to obey and are not trusting anyone new, so convincing them that our vessels indeed were good enough was not an easy task"* (Respondent 3).

The respondents describe a reality where they do everything they can in order to remain competitive and keep head above water.

*"We must renew our strategies all the time. Are there other cargoes that we can carry or are there customized adjustments we can do on our ships (..) to sail with less air, and more cubic and load. We will be disrupted if not"* (Respondent 4).

### *4.2 Governance and Organization*

The maritime industry is characterized by limited private companies and often complex ownership structures which limit the shipowner's liability and deceives his identity. This section will profile the shipowner in terms of governance and organizational structure.

### *4.2.1 Corporate Governance and Transparency*

None of the represented shipowners are listed at the stock exchange. They are all organized as private limited companies. All three shipowners have informative webpages, with overview over fleet, history, news, contact details and ownership structure. Furthermore, they all have clear and open strategies governing ethical -and environmental issues.

In contrast to a listed company there are less legal requirements in terms of transparency, which is evident. Two of the represented shipowners do not share their financial statements for instance, arguing that that sort of information simply is not for everyone. The third shipowner has a clear strategy of being transparent and in that sense less different than a stock listed company.

All three shipowners have a range of sister companies in addition to the ship owning company, reflecting diversified portfolios. The common structure is a parenting holding company being a full or at least majority owner of all the companies umbrellaed.

It would be reasonable to assume that the shipowner could create synergies, technical and/or commercial, however the findings are ambiguous. One company has extensive cross-functional activity and a strategy of assisting each other, with the objective of increasing the performance for the group as a whole.

*"We have an incorporated flexibility so that all the companies within the group become closer to one another, and we appear in each other's boards. We all work closely together and make use of the various competences internally"* (Respondent 4).

The other respondents have another set up and a more distinguished separations of the various entities.

*"Sure, we have the same owner but we have nothing to do with each other. They run a completely different business, and we have no knowledge of what they're doing. We have no synergies, neither technical nor commercial"* (Respondent 2)

### *4.2.2 Ownership: Family First!*

More important than the actual structure seems to be ***who*** owns. The three represented shipowners have in common that they are all family owned, i.e., the holding firm is majority-owned by individuals related by blood or marriage. The owning family is represented in the Board of Directors and/or in the Management, and have female representatives at both levels. Two of the respondents claim to have *"relatively low leverage".* In a capital-intensive industry typically characterized by highly leveraged firms, it is ambiguous how to interpret these statements. Only one of the shipowning companies have their financial figures available. They have a debt to equity ratio of 1.29. On a general average, it is fair to claim that such a ratio reflects low-risk behavior.

There was consensus amongst the respondents that being family-owned influenced the corporate culture. The answers were somewhat vague, but several point to the fact that business must be conducted in a manner so that the organization, and family, as a whole can be proud.

*"It affects everything. It is a big machinery which has held its position throughout decades. My boss is the heir of what his father built up. In contrast to other shipping companies, it is not about taking over the world, it is about continuing what the family built up, drive it forward and not destroy it. This sets certain frames. There are enough cowboys within shipping, we're not one of them."* (Respondent 3)

The fact that the owning family is a part of the day-to-day operations, are knowledgeable of the business activities and has industry insight are elements stressed by the respondents. It is argued that such a level of competences ensure efficient processes.

*"That the owning family is visible and present every day affects the organization (..) Their vision and strategy as family are ruling (..). If the family decides that we shall start a sustainability project, well, then we start a sustainability project."* (Respondent 4)

Moreover, the owning families' presence and endurance are influencing the managerial decision-making process of the firm. All respondents clearly state that the

number one priority is to make money and be profitable, but the horizon outspreads longer than the quarterly financial delivery.

*"Our owners are in it for the long run. There are good times, there are bad times, but there must be some kind of continuity in what you do (..) We have a different perspective, and we enjoy the opportunity to do so."* (Respondent 2)

And;

*"We have a different agenda. There are many different shipowners (..) some have no other interest than making money, it is simply an investment. For those it is just money and they have no interest and no drivers to follow best practices."* (Respondent 1)

One respondent emphasizes the fact that the owners are represented in both the board and the management ensures that everyone are equally informed about the organization and that it prevents the rise of potential conflicts of interest.

*"A listed company is through the shareholder's agreement committed to deliver profits and so forth, but in a family owned company there is less pressure in that regard, because we control everything ourselves. Just look at Tesla nowadays!"* (Respondent 3)

### *4.2.3 Fleet Characteristics*

Together the selected shipowners own 102 vessels, 58 of these fly the Norwegian flag (NIS). 44 ships fly under a FOC, all of which are white-listed by the Paris and Tokyo MoU Port State Controls. The statistics are not equally distributed amongst the three shipowners, nevertheless they all have one or more Norwegian flagged vessels, and one or more vessels flying a FOC. In total their fleets combined represents little more than 3,5 million DWT. To compare, the Norwegian merchant fleet consisted of 1400 vessels yielding a total of 13.3 million DWT (Dataset from NSOA, 2018)

Despite trading in different segments, the vessels have in common that they are simple yet sophisticated, and designed to maximize capacity whilst running safe and efficient, rather than technically advanced. This is an important remark, as the larger

and simpler the vessel, the greater the share of steel and the higher the LDT. Hence, choice of recycling method will be more significant.
The combined fleet is fairly young, average age being 10.5 years, but all shipowners have vessels that are nearing the age of retirement. None of the shipowners have strategies of selling their vessel in the second-hand market before retirement in order to avoid the recycling decision. And the commitment throughout the ship's lifecycle is underlined.

*"We own our vessel from they are ordered till they retire (..) There is generally little activity in the sale-and-purchase market for our segment, little change of hands"* (Respondent 2)

Two of the shipowners are engaged in industrial shipping. It seems these long-term contracts force through an even more entirely business approach.

*"Standardized tonnage is typically subject for asset play and these shipowners are often financial companies and speculators. But we are in industrialized shipping, where we design, build, operate and recycle. We are owners throughout the life of the vessel, thus we shall not make money on sale and purchase, we shall make money on the operation"* (Respondent 4).

### *4.2.4 Norwegian Flag versus FOCs*

Most countries' ship registers, the two Norwegian register NOR and NIS amongst them, require a genuine link between state and shipowner, for instance that the companies head quarter must be physically located there. The FOCs in which this report's subjected shipowners has chosen for their vessels, are open registers which may allow lower crewing costs, lower operating costs, less regulatory control and avoidance of corporate tax. The motivation for flagging out is purely cost related.

*"I guess you have seen that we have vessels registered at the Marshall Islands. It is simply about cost control, not to avoid safety regulations. And this is not a shady flag which requires continuous monitoring, to the contrary, it is a good flag"* (Respondent 3)

And;

*"Well, we have vessels registered in Panama, but they even ratified the* [Hong Kong] *convention. This is tax related"* (Respondent 2).

One of the shipowners has chosen a different strategy. They too manage ships that sail FOCs, but these are not owned by the shipowner, they are chartered on long-term contracts. Their owned fleet is registered in Norway, because it is a competitive flag. It is their belief, however, that the Norwegian International Ship Registry (NIS) and Norwegian Maritime Authority (NMA) have work to do in terms of marketing themselves, because it is not an inconvenient flag to fly. To the contrary, NIS is innovative and forward-seeing, for example with respect to digitalization and crewless ships. This particular shipowner wants to be a part of that journey, but if they want to be heard, they must be present.

*"Our owners have firmly stated that we shall be in Norway (..) and take an active part in the Norwegian maritime cluster. If there is something regarding terms and conditions that we are unhappy with, we shall stand on the barricades and fight."* (Respondent 4)

Flying the Norwegian flag could be regarded as a sign of quality. The standards regulating the maritime industry are not equally rigid around the world. However, the Norwegian legislation on environmental issues and safety has historically been more strict than other maritime nations, thus all vessels registered in NOR and NIS are in compliance with the most updated and progressive laws in the world. In reference to ship recycling, this could provide a competitive advantage when other flag states also must meet the standards set by IMO. However, this is currently not the reality.

*"Cargo owners do not care, it is completely irrelevant to them. They think it is fine, but you cannot charge an extra premium (..)You can perhaps gain cred from insurers and banks, because it is a transparent flag, which provides a good structure, but only for those who knows the structure. Although, the flag alone is not enough (..) But the Norwegian flag itself does not provide a competitive advantage. Not because it is bad, but because there several other flags that are equally good."* (Respondent 4)

### *4.2.5 Partnerships*

All the respondents reveal high activity in terms of establishing partnerships to increase their fleet to be better positioned to bid on contracts. All three shipowners are engaged in contracts like the aforementioned pools, JVs and charter parties. Regardless of which, they all operate vessels they from a legal aspect do not necessarily carry a strict cradle-to-grave responsibility for. They emphasize the due-diligence processes done in advance to safeguard that the partnerships established are with equals.

*"We have a shared and agreed Code of Conduct with the registered owner, and we seek business with partners that are similar to us with the same values and the same standards"* (Respondent 4)

And;

*"It is like an old boys club* [Gutteklubben Grei] *where those that want to do business properly cluster together"* (Respondent 3)

It is stressed that if a charterparty contract is terminated, and the vessel still has several operating years left it is difficult, if not impossible, for the shipowner to control its final destination.

*"If we end the charterparty, the vessel is sold, and end up at a beach ten years later, that is beyond our control. We are not owners and there is not much we can do with respect to the chartered vessels, in contrast to those vessels we own our self"* (Respondent 4)

Contracts governing strategic alliances such as JVs and pools seems to be stricter and more detailed, also with respect to the registered owners recycling decision.

*"These are long term contracts, with clauses about ethics and what environmental standards to be followed (..) The retiring vessel is the registered shipowner's responsibility, but we presuppose sustainable recycling of the vessel. If he steers his vessel to the nearest beach* [signs]*well, it will be an ugly breach of contract. Even if you sell to an intermediary. You will be blacklisted by us"* (Respondent 3).

### *4.3 Stakeholders*

It is reasonable to assume that a shipowner that choose the less profitable recycling action do so because of demanding stakeholders, and that commercial, and consequently financial, considerations drive in the shipowners' decision making. The interviews were therefore steered into the role of various stakeholders.

#### *4.3.1 Market Institutions*

The role of banks, insurers and brokers were discussed. The RSRS bank initiative and the regulations' cross-default clauses was explicitly mentioned.

*"The banks are active (..) The cross-default clauses in the contracts ensures a green recycling not only for the subjected vessel, but for the entire fleet."* (Respondent 1)

All respondents were recycling green before the regulations were adopted, and are thus not affected by them. Although the general consensus that the initiative is welcomed and a necessary push in the right direction, uncertainty rules as of what the real outcome will be.

*"We think it is nice and about time (..) But they state that the ship must be recycled green. Well, what does that mean? They further state that the standards are applicable for the entire life of the vessel. But if you sell the vessel after five years, then what? And you cannot include an old claim when re-selling your asset. We are expectant, and will follow closely to see how these issues are resolved."* (Respondent 4)

Furthermore, there was not consensus as to what extent the regulations would work as a moral compass for other shipowners given the limited catchment of scope.

*"It is nice to see that some banks take a stance against the dirty process. But there are enough of shady banks in the world willing to finance the shady shipowners."* (Respondent 3)

Similar initiatives have not been seen from insurers or brokers. Insurers have certain requirements, usually related to port state controls and historical incidents, but not in terms of recycling method.

One of the respondents made a remark on the insurers' behalf, and that, especially in light of the Harrier case, there could be initiated some kind of standards and regulations. Another respondent reflected around the power position for instance a broker potentially can be in.

*"The shipowner prefers to have an intermediary, rather than being in direct contact to a shipyard, as that represents a too significant risk"* (Respondent 1)

However, since such an initiative remains to be made, the brokers role with respect to a green recycling practice is less significant.

### *4.3.2 Cargo Owners and Charterers*

All shipowners serve different cargo owners, ranging from niche customers to general cargo owners, some on long-term contracts and others handles on a day-to-day basis. All shipowner face requirements from cargo owners on current contracts to ensure the vessel's technical compliance. The dry bulk operator betting on wet crude contracts mentioned above being just one example. None of the shipowners have experienced cargo owners contracting in clauses about recycling. Generally, it seems that the contractual demands forced through from the cargo owners mainly is concerned about fulfilling their own contractual duties, and thereby limit their own liability.

*"Some of our cargo owners, mainly Japanese, have certain specifications, for instance that the vessel must be insured by P&I club member or that the vessel cannot be more than 25 years of age. In the end of the day I guess this is a matter of their own insurance agreements"* (Respondent 2)

And;

*"After the 9/11 we had American cargo owners demanding that we did not do transactions with certain Arab states when the transactions were made in USD, because of the increased risk of the transaction being stopped in New York. But as long as we organized it in a JV it was apparently OK"* (Respondent 3)

### *4.3.3 Employees*

What was mentioned by two of the respondents was the power of the employees. For all the represented shipowners the employee demographics are well balances in terms of gender and age, they are rated as attractive employers and generally high levels of education reflect a skilled and knowledgeable workforce. That their expectations drive the recycling decision is stressed:

*"If we had beached a vessel, well, I can promise you there would be massive reactions, especially from the employees. They are strongly attached to the company, and you shall not tamper that."* (Respondent 4)

And;

*"There was a case in the newspaper about them* [a shipowner] *beaching their vessels. The employees threatened to leave the company, and they had to promise to not do it anymore. It was a huge thing"* (Respondent 1).

Other stakeholders were not discussed at length, and neither one of the shipowners have experienced explicit demands from other stakeholders with respect to recycling.

## ***4.4 Corporate Reputation***

It is arguable that the corporate reputation of a shipping company has little impact. For instance, regardless of reputation it is not possible for the company to charge premium prices for their services. It is, however, full consensus that CR is important, despite it being a blurry concept.

*"Everyone wants to be perceived as good I guess, but in the end, what value it has is difficult to know."* (Respondent 2)

A repeated element, stressed by all the respondents is the CR and its relevance for the human capital, for instance how the reputation can take effect in recruitment and hiring processes, and that the company is able to hire a highly skilled workforce with values that fits the one of the organization's.

*"For each vacant position we have very many applicants and we have a rich and wide selection. People let themselves be enthused by what we do and how we do it"* (Respondent 4).

And;

*"It is bad PR to do things like that* [beaching]- *I think it matters (..) it matters for many of us to work for a decent company (..) You don't want to work for a villain."* (Respondent 2)

To what extent the employees are willing to work harder and to a lower pay is ambiguous. All respondents claim that they are not wage leading in the industry but as one also reflects:

*"(..) we must maintain some humbleness and not be too cocky. We make mistakes, as everyone else."* (Respondent 4)

One of the respondents believe that because of the egalitarian and less steep hierarchical model governing Norwegian business, this is difficult to prove:

*"You have to ask those working abroad, if they are willing to work more for less. You know Norway, no huge wage gaps. Especially for those sitting in HQ"* (Respondent 3)

The corporate reputation was by three of the respondents linked to the recent headliners and ongoing debate of ship recycling, and to what extent such headliners can damage the shipowner's corporate reputation. Because of the articles in typical commercial newspapers, the general public is to a larger extend aware of the pollution and human suffering caused by the demolition industry. It is still a long way to go, and a parallel was drawn to the current go-green movement, and awareness of plastic because of a whale on the Norwegian shores with its abdomen full of plastic waste. That provokes the hordes, because it is near us. The lack of engagement and awareness in Norway could be because of the physical distance to the sub-Asian continent, and that the problems are not physically visible to us.

*"If those vessels steered onto Huk* [beach in the Oslofjord] *I think people would care"* (Respondent 1)

But the increased focus in media on the matter forces the shipowner to act more responsible. As one of the respondents stated:

*"The choice of recycling method is linked to the reputation of the company. To dismantle the vessel at the beach, and let children die in the process doesn't look good and it is simply not okay."* (Respondent 3)

The shipowner experiencing strong synergies and close cooperation to their sister companies, stress the fact that such a headliner would be damaging for the group as a whole.

*"The corporate reputation is common for all of us!"* (Respondent 4)

It is challenging to find the empirical evidence confirming the importance of a well perceived corporate reputation. The concept remains blurry. One of the respondents argues that rating platforms, such as Right Ship, could change this going forward. These platforms will rate ship by ship, not the fleet as a whole, on the basis of certain criteria related to performance, safety and environment. Before entering into contract with a shipowner you want to know all the nitty gritty, such as fuel consumption, with whom they do transactions, age of vessel and so forth. In that way rating platforms provide a simple way to see if the shipowner is compliant. The platforms are continuously improving, but might prove useful.

*"A full-scale development of these platforms can provide a full and extensive screening of the owner, in the future perhaps also beaching (..) but even now it can be useful. If a shipowner has a lot of shitty tonnage it reflects is eagerness to maximize profits, and what measures he is willing to use. The shitty tonnage will give you a bad rating, and if you have a bad rating, well, you are not accepted by us"* (Respondent 3)

Another respondent is less enthused. The fact that these platforms contribute with something else and they can shed a different light on the industry is regarded as positive. They have an extensive intelligence for doing what they do, and they include soft facets as well, which is good. But the respondent describes several challenges that must be solves before the platforms are reliable and can be used for the purpose of really assessing the shipowners, and consequently be a rating tool in terms of corporate reputation. In many cases their approach is too simple. For instance, when

they give an environment rate, they calculate on the basis of weight loaded and the associated bunker consumption This discriminate vessels loading per cubic, as those vessels can be fully loaded, only with lighter cargo. Container vessels are rated on the basis of number of containers, not their content, i.e. they can trade containers of air, as long as there are many, they will receive a top rate:

*"What is difficult is that they decide the criteria without revealing the algorithm. We do not see the logic rational when one ship is rated 2 and another 5, and it is difficult to get a proper answer. But we will not be on the bleachers, we want to contribute to change, we are therefore in continuous dialog"* (Respondent 4)

### *4.5 CSR*

The less profitable choice of sustainable ship recycling reflects is an act of taking on corporate social responsibility. Or, to the contrary, it could be argued that it is a strategic decision yielding a higher pay-off as the shipowner will win in the next round of effects. Rooted in the respondents' reflections around the recycling choice it becomes evident that the latter is not the case. The recycling decision is part of an entirely process contributing to a safer industry, where several elements are weighted.

*"In our company there was a lot of talk of how to do this in a green and safe manner. And china took on a leading role and has invested in the facilities and infrastructure needed. And then you pay whatever to it there. Simple as that."* (Respondent 3)

And;

*"(..) this is not only a matter of environmental issues, it is human life also. Accepting loss of life in third world, and thereby saying that their life is less worth is a moral conundrum."* (Respondent 1)

And;

*"We continuously monitor our environmental footprint, how much we pollute. There are clear targets that shall be reached and the emissions shall continue to be reduced. Recycling is a part of that"* (Respondent 2)

In light of CSR the owning family reappears as a key driving facto and that sustainability and green processes permeates the company as a whole. That their overall responsibility is culturally anchored and it drives the implementation of processes. The represented shipowners have in common that their strategies governing environment are followed up by implementation of best practices, following the same strict code of conduct. As important as the on-shore activity are the off-shore activities. For instance, the vessels shall be clean and waste shall be properly handled. In addition, there is extensive training of the crew to ensure compliance, ranging from waste handling and technical processes to gift-giving and corruption. As one respondent expresses:

*"It is easy to behave properly here [in Norway], it is more difficult to behave properly in India when the ship is held back in a port (..) We put our seafarers in a difficult position, but they fight and refuse to succumb"* (Respondent 4).

One of the shipowners have widened their scope of corporate responsibility beyond the company's activity. They have established partnerships with NGOs focusing on education and female empowerment and are engaged in various activities, social and cultural, in communities outside of where they operate. These initiatives are mainly driven by the enthusiasm and moral of the owning family.

*"He* [the owner] *is extremely proud of his achievements and rightfully so. It is not only owners that shall benefit from the operation of the company, so shall the community"* (Respondent 4)

With the exception of information on their web pages of their commitment to operate safe and sustainable, neither of the shipowners market themselves in light of their social contributions. For instance, in relation to the negative press coverage companies that beach their vessels receives none of the shipowners buys advertising in the same newspaper informing that they are against the practice. At the same time, there is an expressed desire to market themselves in relation to CSR. The respondents see that CSR plays a significant role, also for applicants. Their acts of CSR reimburse their corporate reputation.

*"We see that there are many young people that care and think this is good (..) Yes, it indeed costs money, but we are actually earning on it"* (Respondent 4)

# 5.0 Discussions

The interviews were structured and centered around topics which I thought could contribute to the understanding of the shipowner's recycling decision. My reflections in this chapter will roughly follow the same structure.

## *5.1 Market: Strong Financial Position Despite Poor State of the Market*

The shipowning entities in this report suffers from a weak shipping market. However, being part of a diversified portfolio, they enjoy a healthy financial position since the group as a whole deliver profits, allowing a longer-term strategic horizon. Thus, regardless of poor earnings they have a certain financial strength, and can therefore still accept a lower received scrap price in return for an obsolete vessel.

As mentioned in chapter four, poor market condition can alone be a driver to scrap a vessel, possibly also a motive to pursue profit maximization through suboptimal yards. For some of the shipowners that are caught on the beaches, this is true, claiming that the additional cost of green ship recycling is impossible for them to bear, and that they have a responsibility to protect the shareholders' investments and minimize losses (Fredriksen & Haugan, 2015). Implicitly, it could be interpreted that they would choose green ship recycling if the cost difference was eliminated.

If a universal standard prohibiting beaching as it is carried out today is implemented, the currently competitive price advantage some yards can offer would diminish. Hence, every shipowner would be paid less, and the shopping around for a demolition yard would prove less rewarding. Would then numerous of shipowner's go bankrupt?

I will here allow myself to draw a parallel to the IMO 2020 bunkers regulation planned to be implemented January 1st 2020. The regulation aims to reduce Sulphur oxide emissions from the world's merchant fleet burning fuel oil, with tighter restrictions in designated emission control areas. Shipowners can meet the requirement by using low-Sulphur compliant fuel oil or by installing exhaust gas cleaning systems, generally referred to as scrubbers (IMO, 2018b). Thus, the regulations represent increased operational costs for the shipowner, either through a more expensive fuel oil or by an investment of approx. USD five million. In the

industry it is generally accepted and assumed that this additional cost cannot be absorbed by the shipowner or industry alone. There are a lot of uncertainty as of how it will play out, but it is likely that it will be moved in part, or fully, over to the end-consumer. Hence, an additional cost applicable for an industry as a whole will not affect the shipowner as such. It will merely create equivalent competitive terms. However, since the equality factor evening out the price differences remains to be implemented, the status quo is that the choice of green ship recycling requires a certain already earned profitability, in addition to the shipowner's acceptance of a lower profit.

### *5.2 Governance: Family-owned Companies*

The shipowners were selected on the basis of their anti-beaching stand and choice of green ship recycling. It was found that neither of the them are stock listed and they are all family-owned. The respondents' reflections around ownership match Berzins et al. (2018) findings, who studied Norwegian family-owned firms, particularly what concerns informational advantage and less conflicts of interest.

Information advantage refers to the advantage the family-owned firms enjoy due to information asymmetry. Because they know each other it is easier for the family to find the best representatives as officers and directors, and often the owning family holds both the chair and CEO position. I.e., the family is usually well informed about the firm's projects. Moreover, most firms face costly agency problems, for instance due to conflict of interest between managers and owner. This problem is, in fact, small in family firms. It is argued that these elements can reduce the cost of capital (Berzins et al., 2018).

The respondents share a loyalty towards their owners. They are proud of the family-heritage and how the current generation manages the business.

It does seem strange, though, that decades-old companies which have demonstrated an unreserved loyalty to founder's vision can remain fearfully competitive. I therefore suggest that the most important feature of the family-owned companies is how the

owning family set the boundaries of what is accepted and not, and consequently strongly influence the corporate culture. It seems it becomes the identity of the organization and its employees: "This is who we are, and this is what we do"! Independent of each other the respondents emphasize the importance of being decent and fair, throughout every process. And its' catchment is much wider than the isolating matter of ship recycling, it embraces the entire entity.

These findings are in accordance to scholars' previous results. Astrachan et al. (2002) studied the phenomenon and found that there are no clear cultural advantages associated with nonfamily firms, in strong contrast to the family-owned firms as they enjoy several cultural advantages. His results indicate that the family-controlled firms do have a distinct, performance-enhancing culture.

I did not succeed in finding statistics revealing the per centage family-owned shipping firms in Norway. In relevance to one of the respondent's reflections around "Norway has typically been best in class", one becomes curious whether the acting fair-attitude originates from being Norwegian, or if it is a family-owned trait. If a significant number of Norwegian shipowners are family-owned it could point in the direction of the latter. A point of interest, however, known to me from my work in ship insurance, is that being a typically family-owned Norwegian company is a qualitative element that plays in favor of the owner when setting the insurance premium. These companies are associated with lower risk. But this has also proved true in the case of a typical family-owned German shipping company, where the owning-family is hands-on in the business.

Since the shipowners in this report are family-owned, they do not need to make themselves attractive for investors, and thus the stakeholder theory of shareholders is of less relevance. The shipowner's decisions of recycling can, thus, be taken without consider an external investors appetite for full profit maximization.

### *5.3 Stakeholders: Silent Third-parties*

With the exception of some few banks who have joined in one the RSRS initiative (as of November 16th they counted eight) and, to a certain extent, employees, the

shipowner's main stakeholders remain silent, and demand nothing from the shipowner in terms of sustainable recycling. Insurers and brokers, for instance, have yet to initiate a collective movement to safeguard environment and health in relation to the demolition process. I found this surprising, as a third-party probably have little to lose financially by contracting in clauses about recycling in commercial contracts. Especially now, in a market suffering from over-supply. A favorable situation for those in need of ship transportation, as they are an empowered part in negotiations. But perhaps this will change going forward. I will in more detail return to why when discussing corporate reputation.

In absence of an undisputable and fully ratified convention, and a complete lack of engagement from the shipowner's third parties, the industry has nothing which will enhance business integrity and conformity to a certain standard. Therefore, government involvement becomes even more urgent. As an important facilitator of business, they can provide equal grounds for competition and create opportunities for business owners and set the boundaries for acceptable business behavior.

### *5.3.1 Urgent Call for Transnational Government Involvement*

Representing the citizens' interests, the government typically defines the red tapes for business operations, but it is reasonable to ask what is really in the citizens' best interest?

I will argue that the various governments, hereunder the beaching states, the FOCs and the Norwegian state, all strive balancing self-interest and citizens' interest when allowing the practice of beaching.

Pakistan, India and Bangladesh insure employment and earned tax income. The various FOCs ensure stable and healthy governmental income, without risking neither life nor environment locally. The Norwegian Environment Agency and The Norwegian Maritime Authority have on behalf of the Norwegian government done a great deal (ref the Harrier case and ratification of HKC), however not taken else active steps to stop the practice. With all institutions and competences needed for any maritime business, such as yards, leading banks, legal specialists and insurers,

headquartered domestically, Norway has the privilege of being a complete maritime cluster. The government could possibly restrict these institutions' engagement in various contracts unless certificates of safe recycling of ships can be provided. However, in the case of such an execution, the cluster's position could be weakened and business be lost, and so could governmental revenue.

Reflected in the national governments' protection of self-interest and citizens of their own countries, it seems clear that the governments at the transnational level must take responsibility in order to protect the worlds' population.

The failure of the HKC has been discussed at length. I find it, however, relevant to address pollution from another angle in this context. It is assumed that the future damages caused by climatic changes will vary greatly between countries. According to the International Panel on Climate Change (IPCC) developing countries are likely to continue to suffer the worst effects of climate change, as extreme weather patterns become the norm and sea levels rise. It will be revealed in decreased food security, loss of livelihood, increased displacement, health and sanitation impacts, among other ramifications. Moreover, countries hit hardest are also the least equipped to adapt to this shifting ecological reality. Where developed nations will suffer impacts from global warming as well, the infrastructure to cope with them is more resilient (IPCC, 2014).

Since industrialized nations have emitted far more greenhouse gas emission than developing nations, enabling a cheaper path to industrialization, rich countries face a greater responsibility and burden for action to address climate change. And rich countries, therefore, must support developing nations adaptation to avoid a polluting path to development.

The underlying point is, in relation to the pollution from marine activity, IMO is perhaps not the only responsible organ at the transnational level. In the context of pollution, as the shipping industry, which is responsible for two per cent of the world's carbon dioxin emissions, UNFCCC should perhaps be more actively

involved. The maritime industry is for instance not a momentum in the Paris Agreement

Nevertheless, IMO has been committed to reduce the greenhouse gas emissions from international shipping since the MARPOL convention in 1973, and the work is on-going. The most recent and ambitious plan is the targeted emission cap set so that air pollution from the maritime industry shall be reduced by fifty per cent in 2050 compared to the base year 2008. The problem is, however, that the process of recycling is in this context completely absent (IMO, 2018a) .

Throughout out the life cycle of a ship, where emissions in relation to building and operation are continuously reduced, the environmental footprint from the recycling process will probably increase relatively going forward, as the ship demolition process remains unregulated.

An alternative solution whilst the global standards are pending, could be for the transnational government to establish funds to be transferred from rich shipping nations to the poor states practicing beaching to ensure necessary equipment and technical compliance.

### *5.4 Business Ethics and The Shipowner's Motivation*

In chapter two I presented theory supporting the notion of a well perceived corporate reputation contributing positively to the financial performance. It could suggest that firms doing good for society really is targeting doing well for themselves. I.e., that choosing green recycling rather than beaching is driven by the desire to maximize profits.

Also, historically, there have been shorter periods where the price difference between beaching and green recycling has been close to zero. But even then, the prominent choice regarding recycling method is beaching (Heier, 2018). It could be speculated to what extent this is driven by lack of knowledge or lack of engagement.

### *5.4.1 Corporate Reputation: Does it Matter?*

The concept of the shipowner's corporate reputation, and what impact beaching could have, remains blurry. The respondents acknowledge that it is an advantage to be perceived as "good" amongst their stakeholders, explicitly mentioning employees and that they experience to be a desirable employer, attracting a skilled work force. These findings are in accordance to previous research. On the other side, there is little experienced goodwill or reduction of contractual costs because of a good reputation, in contrast to Roberts and Dowling (2002)'s findings. To the contrary, the respondents tell about lengthy negotiations when entering into contract with new partners. It seems that mutual trust and a possible reduction in contractual costs, and consequently an increased financial performance, currently is because of long-term relations rather than a well perceived reputation. To what extent the corporate reputation is a resource, as presented through the RBV framework, helping the shipowner gaining a sustained competitive advantage is currently ambiguous.

It is consensus that reputation is important, and at least no set back. It is, however, difficult, if not impossible, to firmly address the impact of beaching on the shipowner's reputation. Nevertheless, I see two tendencies that potentially could impact the relevance of beaching in relation to corporate reputation going forward, namely how the media can affect stakeholder expectations, and the recent legal charges and court cases.

Firstly, the media is quick to pick up the NGOs' "name-and-shame" of the shipowners. The pressure from media might increase the awareness, not only in the industry but in the society as a whole. Stakeholders expectations are dynamic and follows knowledge and trends. With knowledgeable stakeholders, the pressure on the industry and the shipowner is likely to increase. Furthermore, I will claim that third-parties, like market institutions, have little to risk by forcing through a more ethical behavior from the shipowners, as the associated cost of recycling really is not theirs to bear. To the contrary, through an active stand against beaching their own CR could be enhanced.

In chapter two I referred to previous research which found that investors use the corporate reputation as a short cut in their investment decision. The shipping markets are characterized by ponderous and slow-to-change supply side and a fast-to-change demand side, creating high volatility. Typically, these markets attract speculators, believing they know the market better than their opponents, chasing fast rewards playing the cycles (Stopford, 2009) . Rooted in this knowledge, and the respondents' experiences from the industry, I will claim that headliners of beaching and a possible weakening of reputation in that regard, will have limited effect on typical shipping investor.

Secondly, shipowner who chose an unsafe and unsound manner of ship dismantling may not only face reputational risk, but in a worst case be charged with violation of shipment of waste, a possibility in accordance to the Basel convention that has been little used. The aforementioned Harrier case, in which not only shipowner is convicted but also the insurer, was addressed earlier. Moreover, in March 2018 a Dutch shipowner and two executives were fined USD 925,000 by the Rotterdam District Court, for selling vessels to beaching shipbreakers through a cash buyer. The court found them guilty, arguing that the shipowner and the executives acted with neglect, because it is common knowledge that the practice of beaching is dangerous and dirty (Meijer, 2018). The accused parties deny wrongdoing, and the verdict is appealed. The outcome of this court cases and the Harrier-case could prove that ship recycling in south Asia will come with new legal liabilities, forcing through a duty of care for all parties involved.

Possibly events as mentioned above can create a scenario where that reputational consequences impact financial performance, forcing the shipowner to internalize the externalities, meaning that the burden of external damage caused by the shipowner's operation shifts from being a cost for society to a cost absorbed internally by the company. I.e., they have to pay for their pollution and harm. I find it furthermore reasonable to assume that a full development of the aforementioned rating platforms can hold the potential to assist in this process, aggregating commercial information and rating the ship and shipowner also on the basis of court cases, media cover and so forth.

### *5.4.2 CSR: "More" Ethical?*

Somewhat pompous strategies of CSR and sustainability must be followed up by action in order to have relevance and value. I argued in chapter two that the choice of green ship recycling is an act of CSR. Throughout the interviews I also learned that the shipowners in this report that are engaged in the community and carries out other green initiatives.

At the same time, all respondents state that the overall objective is to earn money and be profitable, otherwise it will practically impossible to survive and contribute to the community in the long-run. The profit-motive could be regarded as less virtuous because it serves self-interest, but that is not necessarily the same as being egotistical. This line of reasoning is in accordance to Archie Carrols rational and his pyramid of corporate social responsibility. In my opinion all three shipowners meet their responsibilities at all four levels: they run the business responsibly, they obey the law and comply with governing regulations, they act ethically in the sense that they behave fairer than required by the law, and they all give back to society in various forms, such as charity and sustainability projects and cultural involvement. I would, however be careful to suggest that this alone provides a basis upon which to conclude that these shipowners are "more" ethical than their opponents and competitors. It is more important, in my opinion, to understand the rationale behind the moral acts.

As initially mentioned in chapter two, there are two possible motivations for CSR. *Instrumental CSR* reflects an ethical act done for the purpose of making money in the future, in contrast to *integrated CSR* where the ethical act is rooted in the motivation of doing right.

In many cases it does not really matter what is the true motivation for the company, since the outcome will be the same and society, and company, will win. For instance, in 2007 Scandinavian Airlines wanted to perform so-called green landings, meaning that the engine was shut down at cruising altitude and the aircraft sailed in and landed with no engine power. In order to do this, they needed clearance from the air traffic control center at an early stage. This was argued from the control center to be difficult given limited resources. The airliner went public and criticized the practice, claiming

that the aviation authorities were standing in the way for a more environmentally friendly airline industry. (NTB, 2007) Regardless of their motivation for green landings being anchored the wish to do good, or if there was an identified potential of saving fuel and maximize profits, the society as well as the company would win.

However, the robustness of the business ethics will depend on the underlying motivation and will reveal itself in times of financial distress.

For example, the Danish shipping giant Maersk have publicly condemned the practice of beaching. It therefore came as a surprise when two Maersk vessels entered the scrapping yards in 2016, followed by two more in 2017. The company stated then that more vessels than first anticipated had to be scrapped. Green recycling was therefore no longer financially feasible for the company. The company argued, however, that they do what they can to make sure that this is carried out in a safe manner, by training the workers and to continuously monitor and control the process (Digges, 2016).

Allowing myself to speculate, it could be claimed that the first initiative of condemning beaching and perform green ship recycling was a strategic step to be ahead of regulations and gain a possible competitive advantage. When it becomes apparent that the future competitive advantage possibly will never be realized since the convention still remains unratified, the shipowner returns to the beaches pursuing full profit maximization. The first initiative of CSR in terms of green recycling was instrumentally motivated, and the company wins in the end. In this case, it matters since society loose.

It seems that the shipowners in this report has an internally motivated form of CSR, where ethical absolutism and ethical relativism is well balanced, although difficult to empirically test and prove. They recycled their vessels safely before the adoption of the Hong Kong Convention, and they continue to do so when it becomes likely that the convention perhaps will never enter into force. These shipowners strives to do good simply because it is the right thing to do.

I find it relevant to remind the reader that the shipowners represented in this report are in a financial position where they actually have the opportunity to perform internally motivated acts of CSR. It is easy to be morally good when the company has enjoyed times with favorable freight rates and healthy profits. A thought experiment could be to place the shipowners in such a financial distress, so that the difference of green ship recycling and beaching could make or break the company. A reasonable argument for a suboptimal choice then, could be that by surviving today the company can do good in the future. Society will first lose, but overall win in the long-run.

### *5.6 A Closuring Remark: The Scope of Beaching*

The practices of beaching have made major headliners in the commercial newspapers, especially the past year, painting a black-white picture of the industry; beaching or not beaching. Moreover, the Norwegian Shipowners' Association encourages its member to recycle their vessels *in accordance to the Hong Kong Convention and to avoid beaching* (Norges Rederiforbund, 2018). It could be interpreted as to follow the HKC and to beach a vessel are mutually exclusive choices. I shared this impression of the industry when I first started my work, and the idea was strengthened through much of the published journal articles and academic reports used as theoretic embodiment for this report.

Throughout the research process, though, I have become much more knowledgeable of the demolition market in general and beaching in particular. I will argue that the black and white picture of ship breaking not necessarily is true, and that the reality is much more nuanced.

There are hundreds of plots, or yards, along the shores in Pakistan, India and Bangladesh. Some are worse than others with respect to environment and work condition. Some yards have upgraded the facilities at the beaches and invested in equipment to ensure a safer demolition process. Even several shipowners themselves have invested in some of these yards to increase their quality (Heier, 2018). It seems that at least some shipowners do acknowledge a certain responsibility, and are determined to at least do it properly at the beaches.

Some of the yards have even gained HKC accreditation from leading IACS class societies, in itself strange since the convention is still not ratified, but it become evident at least that the HKC does not prohibit beaching. It is furthermore debatable what this certification really means. For instance, The NGO Shipbreaking Platform has directed critique against the practice of HKC accreditation, showing examples of such yards where the handling of hazardous wastes and work conditions still are unsatisfactory (The Maritime Exceutive, 2018)

It has also come to my understanding that there are demolition yards that are not practicing beaching, that should be met with the same skepticism and critique as many of the "worst" beaching yards, as they too have no proper handling of hazardous wastes or protection of workers health and life.

Moreover, there are yards in for instance Turkey using the beaching method. However, due to less shallow waters, the beaching practice there is not regarded as unsafe as at the sub-Asian continent. It proves that the concept "beaching" is not necessarily tantamount to dirty and dangerous.

Hence, there are good beaching yards, and there are bad dry dock yards. Regardless of beaching or not beaching, the industry is in need of other standards, perhaps a graded rating system, to better describe the yards. The yard could be rated on the basis of the technical processes (the use of cranes, handling of hazardous wastes and so forth), employment contracts and livelihoods for the workers.

By doing so, the industry is allowing a widening of the scope, from beaching or not beaching, to worst practice and best practice, including everything in between. Continued activity along the beaches in South Asia is important. It ensures employment and tax revenue for the local states, safeguards capacity in the demolition market and the shipowner can take advantage of the cheap labor, however, this must be done in a way that does not damage people and environment. And perhaps the shipowner's decision with respect to *how* to dismantle the ship will be more nuanced, as illustrated in the model below.

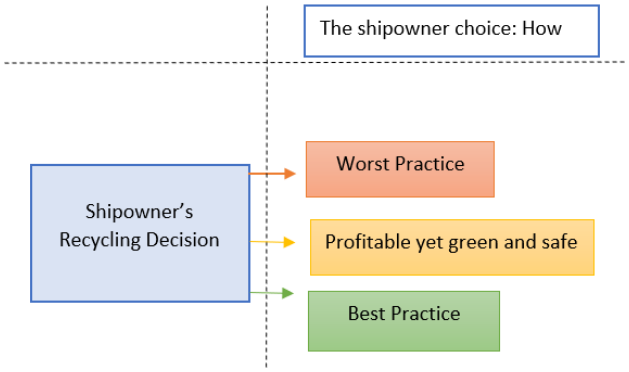



*Figure 7: A possible development of the ship recycling decision going forward, by implementing a more nuanced scale upon which to rate the demolition yards.*

## 6.0 Limitations and Suggestions for Further Research

Beaching has been presented as something that should be of global concern, and this report has contributed to that field of research. However, its obvious limitations must be addressed, namely the fact that basis upon which conclusions were made was formed by four respondents only, representing three Norwegian shipowners. The findings are, thus, neither representative for ship owning entities in general, nor the industry as a whole.

In order to create a better understanding of the shipowner, and to what extent he is willing to undertake responsibility, more knowledge is needed. I will address four main areas in which further research is suggested.

Firstly, in order to further explore, and possibly confirm or reject this study's finding of family-owned shipowners and the owning family's impact on the corporate culture, this study could be repeated with a larger sample size and desirably with international shipowners.

Secondly, the shipowners' corporate reputation and to what extent it matters, is encouraged to be subject for future scholars. The ongoing court cases, and if their outcomes will have a behavioral effect on the industry and/or engage stakeholders to a larger degree, suggests to be followed closely. In this context, it would be natural to examine the potential risks stakeholders face.

Thirdly, Chinas reported restrictions for importing end-of-life vessels in addition to EU's white lists, might create capacity constraints in the industry. Therefore, the development within the industry should be continuously monitored going forward, and the constraints' impact propose subjected for further research.

Lastly, total emissions from the shipping industry is continuously reduced through a well-established and dynamic legislative framework, however regulations governing recycling is lacking. Lifecycle studies of ships, and the demolition process' environmental footprint in this regard, is proposed conducted.

## 7.0 Summarizing Conclusions

This study has strived to answer the following research question: *Given the current conditions for the shipping industry, hereunder legislation and financial drivers, does the Norwegian shipowner acknowledge his overall responsibility in the maritime supply chain, including ship recycling? Or is green ship recycling simply good business?*

Qualitative method designed as a case study was found most suitable. Four in-depth interviews of key people at three shipowners were completed, and their answers formed the basis upon which to discuss, conclude and propose areas of further research.

There were no findings indicating that green ship recycling could be considered to be "good business", i.e., there were no clauses in contracts with third parties that forced through any decision of sustainable recycling, and the despite a good reputation the shipowners have no proved advantageous terms or better positions in negotiations reducing the overall costs. The choice of the costly alternative to beaching was anchored in the business attitude and corporate culture, established by the owning family through generations. It is difficult to qualitatively measure to what extent corporate reputation really matter. However, the unison agreement is that it matters and that it is important to be perceived as good, especially amongst employees and in relation to hiring processes.

To the extent the shipowners enjoy some kind of cost advantage, it seems that originate from the ownership structure. Being family-owned the firm has an information advantage and lower levels of conflicts of interest.

Lastly, despite the internally motivated form of CSR, status quo is that the choice of sustainable recycling requires an already earned profitability, in addition to the acceptance of a lower profit. The call for transnational governmental involvement is therefore becoming urgent.

As a closuring remark I questioned the media's black-and-white presentation of the ship breaking industry, framing it in the context of "beaching or not beaching". There are beaching yards that must be recognized as satisfactory both with respect to workers' rights and waste handling systems. At the same time, it is reason to be equally concerned for certain yards not practicing beaching, as dry dock yards also could have inadequate processes and undermine basic human rights. It is therefore suggested to bring forward a graded rating system.

Knowledgeable of the limitations in this study, which are addressed above, the data have provided a ground indicating that that green ship recycling is currently not good business, and the Norwegian shipowner do acknowledge his overall responsibility in the maritime supply chain.

## 8.0 Bibliography


ABN AMRO, ING & NIBC. (2017). *ING, ABN AMRO and NIBC present the responsible ship recycling standards*. Available at: https://www.ing.com/Sustainability/ING-ABN-AMRO-and-NIBC-present-the-responsible-ship-recycling-standards.htm (accessed: September 20th).

Alam, S. & Faruque, A. (2014). Legal regulation of the shipbreaking industry in Bangladesh: The international regulatory framework and domestic implementation challenges. *Marine Policy*, 47: 46:56.

Astrachan, J. H., Klein, S. B. & Smyrnios, K. X. (2002). The F-PEC scale of family influence: A proposal for solving the family business definition problem1. *Family business review*, 15 (1): 45-58.

Asuquo, M., Coward, I. & Yang, Z. (2014). Modeling selection of third party ship management services. *Case Studies on Transport Policy*, 2 (1): 28-35.

Bach, D. (2018). *Hittil ukjente norske skip på «verstingliste»: – Beaching er alvorlig*. E24. Available at: https://e24.no/naeringsliv/shipping/hittil-ukjente-norske-skip-paa-verstingliste-beaching-er-alvorlig/24409024 (accessed: August 12th).

Basel Convention. (1989a). *Basel convention on the control of transboundary movements of hazardous wastes and their disposal*. Basel, Switzerland. Available at: https://www.basel.int/Portals/4/Basel%20Convention/docs/text/BaselConventionText-e.pdf (accessed: 6 September).

Basel Convention. (1989b). *Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*. In UNEP (ed.). Available at: http://www.basel.int/Countries/StatusofRatifications/PartiesSignatories/tabid/4499/Default.aspx (accessed: December 3rd).

Berzins, J., Bøhren, Ø. & Stacescu, B. (2018). The governance and finance of Norwegian family firms: Main characteristics of the population. 2018 (1): 6-89. Available at: https://www.bi.edu/globalassets/forskning/centre-for-corporate-governance-research/publications/fbn_report_complete.pdf.

Brodie, P. (2014). *Commercial shipping handbook*. 4th ed. London, UK: Informa Law from Routledge.

Cable, D. M. & Turban, D. B. (2003). The value of organizational reputation in the recruitment context: A brand-equity perspective. *Journal of Applied Social Psychology*, 33 (11): 2244-2266.

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business horizons*, 34 (4): 39-48.

Chang, Y.-C., Wang, N. & Durak, O. S. (2010). Ship recycling and marine pollution. *Marine pollution bulletin*, 60 (9): 1390-1396.

Choi, J.-K., Kelley, D., Murphy, S. & Thangamani, D. (2016). Economic and environmental perspectives of end-of-life ship management. *Resources, Conservation and Recycling*, 107: 82-91.

Crane, A. & Matten, D. (2016). *Business ethics: Managing corporate citizenship and sustainability in the age of globalization*. 4 ed. England: Oxford University Press.

Dao, R. (2008). *Childbreaking yards- child labor in the shipbreaking industry in Bangladesh*. FIDH. Available at: http://www.shipbreakingplatform.org/shipbrea_wp2011/wp-content/uploads/2011/11/Report-FIDH_Childbreaking_Yards_2008.pdf (accessed: August 7th).
Digges, C. (2016). *Danish shipping giant caught beaching ships in India and Bangladesh*. Bellona. Available at: http://bellona.org/news/industrial-pollution/2016-10-danish-shipping-giant-caught-beaching-ships-in-india-and-bangladesh (accessed: December 3rd).
European Commision. (2018a). *European List of Ship Recycling Facilities*. Environment Directorate-General. Brussels, Belgium. Available at: http://ec.europa.eu/environment/waste/ships/pdf/list_ship_recycling_facilities.pdf (accessed: September 28th).
European Commision. (2018b). *Waste Streams, Ships*. Environment Directorate-General. Brussels, Belgium. Available at: http://ec.europa.eu/environment/waste/ships/index.htm (accessed: August 10th).
Falkanger, T., Bull, H. J. & Brautaset, L. (2011). *Scandinavian Maritime Law: The Norwegian Perspective*. 3 ed. Oslo: Universitetsforlaget.
Fombrun, C. & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. *Academy of management Journal*, 33 (2): 233-258.
Fredriksen, A. W. & Haugan, B. (2015). *Fredriksen-skip hugges opp på stranden*. E24. Available at: https://e24.no/jobb/fredriksen-skip-hugges-opp-paa-stranden/23501558 (accessed: January 10th).
Friedman, M. (1970). *A Friednzan doctrine-*. New York: The New York Times Magazine. Available at: https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html (accessed: June 10th).
Go Shipping. (2018). *Demolition Market- current prices*. Available at: https://www.go-shipping.net/demolition-market (accessed: November 27th).
Greening, D. W. & Turban, D. B. (2000). Corporate social performance as a competitive advantage in attracting a quality workforce. *Business & Society*, 39 (3): 254-280.
Grieg Green. (2018). *Total demolition data and calculations*. Green, G. (ed.).
Gwin, P. (2014). *The Ship-Breakers*. National Geographic Magazine. Available at: https://www.nationalgeographic.com/magazine/2014/05/The-Ship-Breakers/ (accessed: September 5th).
Heidegger, P., Jenssen, I., Reuter, D., Mulinaris, N. & Carlsson, F. (2015). *Briefing paper: What a difference a flag makes—why ship owner's responsibility to ensure sustainable ship recycling needs to go beyond flag state jurisdiction*. NGO Shipbreaking Platform. Brussels. Available at: http://www.shipbreakingplatform.org/shipbrea_wp2011/wp-content/uploads/2015/04/FoCBriefing_NGO-Shipbreaking-Platform_-April-2015.pdf (accessed: August 3rd).
Heier, P. (2018). *Current situation of the demolition market and green recycling [personal communication]*. Oslo.
IMO. (2009). *The Hong Kong international convention for the safe and environmentally sound recycling of ships*. Available at: http://www.imo.org/en/about/conventions/listofconventions/pages/the-hong-

kong-international-convention-for-the-safe-and-environmentally-sound-recycling-of-ships.aspx (accessed: May 10th).
IMO. (2018a). *Low carbon shipping and air pollution control*: IMO. Available at: http://www.imo.org/en/MediaCentre/HotTopics/GHG/Pages/default.aspx (accessed: October 3rd).
IMO. (2018b). *Sulphur 2020 – cutting sulphur oxide emissions*: IMO. Available at: http://www.imo.org/en/mediacentre/hottopics/pages/sulphur-2020.aspx (accessed: November 1st).
IPCC. (2014). *Climate Change 2014: Impacts, adaption and vulnerability- summary for policymakers*. Working group II contribution to the fifth assessment for report of the intergovermental panel on climate change: The Intergovernmental Panel on Climate Change. Available at: https://www.ipcc.ch/site/assets/uploads/2018/02/ar5_wgII_spm_en.pdf (accessed: June 22nd).
Jensen, M. C. (2002). Value maximization, stakeholder theory, and the corporate objective function. *Business ethics quarterly*: 235-256.
Jeon, J.-w., Yeo, G.-T., Thai, V. V. & Yip, T. L. (2014). *An evaluation of the success factors for ship management companies using experts' knowledge*. International Forum on Shipping, Ports and Airports (IFSPA) 2014: Sustainable Development in Shipping and Transport LogisticsHong Kong Polytechnic University.
Karim, S. (2009). Environmental pollution from the shipbreaking industry: international law and national legal response. *Geo. Int'l Envtl. L. Rev.*, 22: 185.
Karlis, T. & Polemis, D. (2016). Ship demolition activity: A monetary flow process approach. *Pomorstvo*, 30 (2): 128-132.
Karlsen, I. F. H. (2017). *Resirkulering av skip: Det folkerettslige regelverket vurdert i lys av internasjonale miljørettslige prinsipper*. MSc. Bergen: The University of Bergen.
Klevstrand, A. (2018a). *Insurance agent Skuld Marine Agency indicted in the "Harrier case"*. Dagen Næringsliv: Dagen Næringsliv. Available at: https://www.dn.no/shipping/skuld-marine-agency/stale-hansen/okokrim/forsikringsagenten-skuld-marine-agency-siktet-i-harrier-saken/2-1-400355 (accessed: September 1st).
Klevstrand, A. (2018b). *Professor in Law about the Harrier case: Should be an eye awakener for the entire industry*. Dagens Næringsliv: Dagens Næringsliv. Available at: https://www.dn.no/shipping/strandhugging/beaching/okokrim/jusprofessor-om-harrier-saken-burde-vare-en-vekker-for-hele-bransjen/2-1-396309 (accessed: September 1st).
Knapp, S., Kumar, S. N. & Remijn, A. B. (2008). Econometric analysis of the ship demolition market. *Marine Policy*, 32 (6): 1023-1036.
Kristandl, G. & Bontis, N. (2007). Constructing a definition for intangibles using the resource based view of the firm. *Management decision*, 45 (9): 1510-1524.
Lai, K.-H., Lun, V. Y., Wong, C. W. & Cheng, T. (2011). Green shipping practices in the shipping industry: Conceptualization, adoption, and implications. *Resources, Conservation and Recycling*, 55 (6): 631-638.
Lindgren, F., Andersson, K., Landquist, H. & Wilewska-Bien, M. (2016). *Shipping and the environment- improving environmental performance in marine transportation*. 1 ed. Berlin: Heidelberg: Springer Berlin Heidelberg.

Lovdata. (2018). *Den internasjonale Hongkong-konvensjonen om sikker og miljømessig forsvarlig gjenvinning av skip 2009*: Lovdata. Available at: https://lovdata.no/dokument/TRAKTAT/traktat/2009-05-15-88 (accessed: 13th November).
McWilliams, A. & Siegel, D. (2000). Corporate social responsibility and financial performance: correlation or misspecification? *Strategic management journal*, 21 (5): 603-609.
Meijer, B. (2018). *Dutch shippers sentenced for having ships demolished on Indian beach*: Reuters. Available at: https://www.reuters.com/article/us-netherlands-shipping-court/dutch-shippers-sentenced-for-having-ships-demolished-on-indian-beach-idUSKCN1GR2NC (accessed: May 31st).
Mikelis, N. E. (2008). A statistical overview of ship recycling. *WMU Journal of Maritime Affairs*, 7 (1): 227-239.
Moncayo, G. A. (2016). International law on ship recycling and its interface with EU law. *Marine pollution bulletin*, 109 (1): 301-309.
Neville, B. A., Bell, S. J. & Mengüç, B. (2005). Corporate reputation, stakeholders and the social performance-financial performance relationship. *European Journal of Marketing*, 39 (9/10): 1184-1198.
NGO Shipbreaking Platform. (2016). *Annual Report*. Available at: http://www.shipbreakingplatform.org/shipbrea_wp2011/wp-content/uploads/2017/05/NGO_Shipbreaking_Platform_Annual_Report_2016_05-web-page.pdf (accessed: June 10th).
Nordstrøm, J. (2018). *Skipet var i tjeneste for Equinor i 18 år – nå skrotes det på indisk strand*: E24. Available at: https://e24.no/naeringsliv/shipping/hadde-18-aar-i-tjeneste-for-equinor-naa-skrotes-det-paa-indisk-strand/24429281 (accessed: September 3rd).
Norges Rederiforbund. (2018). *Recycling of vessels*. Available at: https://rederi.no/en/about/diciplines/corporate-social-responsibility/recycling-of-vessels/ (accessed: November 7th).
NRK Rogaland. (2018). *Lasteskipet Tide Carrier /Harrier*: NRK. Available at: https://www.nrk.no/rogaland/lasteskipet-_tide-carrier___harrier-1.13392692 (accessed: November 14th).
NTB. (2007). *SAS ønsker utstyr for "grønne" landinger*. Teknisk Ukeblad. Available at: https://www.tu.no/artikler/sas-onsker-utstyr-for-gronne-landinger/323805 (accessed: December 2nd ).
Pharoah, A. (2003). Corporate reputation: the boardroom challenge. *Corporate Governance: The international journal of business in society*, 3 (4): 46-51.
Rahman, S. M. & Mayer, A. L. (2016). Policy compliance recommendations for international shipbreaking treaties for Bangladesh. *Marine Policy*, 73: 122-129.
Roberts, P. W. & Dowling, G. R. (2002). Corporate reputation and sustained superior financial performance. *Strategic management journal*, 23 (12): 1077-1093.
Ryen, A. (2002). *Det kvalitative intervjuet: fra vitenskapsteori til feltarbeid*. Bergen: Fagbokforlaget.
Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P. & Saaeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of business research*, 68 (2): 341-350.

Safety4sea. (2018). *ISRA: China's ship recycling plans a 'major step back' for the industry*. Available at: https://safety4sea.com/isra-chinas-ship-recycling-plans-a-major-step-back-for-the-industry/ (accessed: June 10th).
Samiotis, G., Charalampous, K. & Tselentis, V. S. (2013). Recent developments in the institutional framework of ship recycling and the positive impact on international ship dismantling practices. *SPOUDAI-Journal of Economics and Business*, 63 (3-4): 158-171.
Schøyen, H., Burki, U. & Kurian, S. (2017). Ship-owners' stance to environmental and safety conditions in ship recycling. A case study among Norwegian shipping managers. *Case Studies on Transport Policy*, 5 (3): 499-508.
Silverman, D. (2015). *Interpreting qualitative data: A Guide to the Principles of Qualitative Research*. 5 ed. London: Sage Publications ltd.
Sivaprasad, K. (2010). *Development of Best Practices for Ship Recycling Processes*. India: Cochin University of Science and Technology.
Stopford, M. (2009). *Maritime Economics*. 3 ed. London: Routledge.
The Maritime Exceutive. (2018). *Shipowners Call for Ratification of Hong Kong Convention*. Available at: https://www.maritime-executive.com/article/shipowners-call-for-ratification-of-hong-kong-convention (accessed: June 2nd).
The Maritime Executive. (2018). *What Will 2018 Bring to the Ship Recycling Industry?* Available at: https://www.maritime-executive.com/editorials/what-will-2018-bring-to-the-ship-recycling-industry (accessed: February 9th).
Vedeler, K. V. (2006). *From cradle to grave: value chain responsibility in the ship scrapping industry*. Bergen: Norwegian School of Economics and Business Administration.
Wang, Y. & Berens, G. (2015). The impact of four types of corporate social performance on reputation and financial performance. *Journal of Business Ethics*, 131 (2): 337-359.
Weng, P.-S. & Chen, W.-Y. (2017). Doing good or choosing well? Corporate reputation, CEO reputation, and corporate financial performance. *The North American Journal of Economics and Finance*, 39: 223-240.
Yılmaz, A., Karacık, B., Yakan, S. D., Henkelmann, B., Schramm, K.-W. & Okay, O. S. (2016). Organic and heavy metal pollution in shipbreaking yards. *Ocean Engineering*, 123: 452-457.

# Attachments

## Attachment I: Interview Guide

| | | |
|---|---|---|
| **Market, Segment and Trade** | • Ship, segment and main cargo<br>• Freight rates and earnings<br>• Competitive situation<br>• Actions in market troughs (slow steam, lay up, recycling etc)<br>• Special clauses negotiated by third parties<br>  o Cargo owners<br>  o Banks<br>  o Insurers<br>• Flag state<br>  o Benefits / drawbacks of FOCs<br>  o Norwegian flag (quality, price, competitiveness) | Comments: |
| **Ownership** | • Family-owned: how does it affect the organization?<br>  o Family involvement<br>  o Board and management<br>• Being part of a group of companies<br>  o Commercial and/or technical synergies<br>  o Social involvement (knowledgeable of activities, competence, reputation)<br>• Financial achievements<br>  o at what means<br>  o pressure? | |
| **Recycling** | • Green recycling- when became it a topic?<br>• What was done before?<br>• Chartered vessels vs own | |

| | | |
|---|---|---|
| | • If in poor state:<br>  o change flag and sell to cash buyer?<br>  o Avoid the decision and sell ship mid-life?<br>• Third-party demands?<br>  o Internal vs external stakeholders | |
| **CSR** | • Ref. the stated strategies regarding environment, ethics etc- what do you do, big and small, to comply?<br>  o Internally and externally<br>  o Examples<br>• Communicating activities of CSR? Where, how and why?<br>• Build brand and gain a better position, to be perceived as "good" by stakeholders? | |
| **Corporate Reputation** | • Does it matter?<br>• Benefits of being well perceived?<br>  o Premium prices?<br>  o Employees (recruitment, salary, efforts)<br>  o Partnerships (strategic alliances, cargo owners, suppliers)<br>  o Commercial benefits (banks, insurers)<br>  o Spillover-effects to/ from sister companies?<br>• Rating platforms (ex right ship), how do they contribute now? Future aspirations? | |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