

Erasmus University Rotterdam

MSc in Maritime Economics and Logistics

2017/2018

**Corporate Social Responsibility
engagement of the Greek bulk
shipping companies and its relation
with their financial health.**

by

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Acknowledgements

First, I would like to thank my thesis supervisor Dr. Michele Acciaro who provided me with valuable feedback through the whole research and thesis composition procedure. He was constantly guiding me towards the right direction while simultaneously he had been letting me develop the present thesis as my own work.

I would also like to thank the participants of the survey and Greek maritime specialists and friends of mine who invested their valuable time in order to make the present research thesis an actual fact.

Additionally, I am thankful to the MEL office staff, Renee Slater, Felicia de Jong and Martha Tjhin who were by all the students' side throughout the whole time of this Master degree.

Furthermore, I feel the need to express my profound gratitude to my parents, my sister, my girlfriend and my friends who had been supporting, patient and was encouraging me during the whole past year.

Last but not least, I cannot omit thanking the MEL class of 2017-2018, which had been providing me with constant self-confidence and willingness to keep on fighting and completing the present thesis, in moments when I considered it as an impossible task.

Abstract

Corporate social Responsibility (herein mentioned as CSR) has been a very crucial concept for many organizations. This study aims to enlighten the implementation of CSR practices in the Greek bulk shipping. Implementation of CSR practices in shipping presents a great interest due to the nature of shipping and the lag faced by Greek organizations to adopt and implement the CSR practices. At first place, this study explores whether Greek bulk shipping companies are engaged in CSR activities, and also aims to identify which are these activities. Secondly, this study will provide a further discussion on the relationship between CSR and the financial health of a Greek bulk shipping company. This relationship will be reflected upon the size of its fleet. Using a survey questionnaire the researcher has investigated the CSR involvement in the Greek shipping bulk carriers. The findings of the research showed that there is a high CSR engagement and no clear relationship between financial health and CSR engagement.

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1 Introduction

CSR as an idea has emerged and been developed to a hot issue of great controversy mostly in the last 20 years, with a major observable increased awareness for a moral obligatory contribution on this direction by the companies of the Western Democracies only in the last few decades (Aravossis, Panayiotou and Tsousi, 2008). Society is becoming more demanding day after day regarding environmental, economic matters and issues towards the direction of the quality of living, with major key factors that appear to be affecting the system to be governments, individual people and last but not least, enterprises (Metaxas and Tsavdaridou, 2013). Shipping companies fall under the category of the enterprises and especially the bulk shipping companies which are responsible for the transportation of millions of tons of raw materials that are being transported each year and are valuable for other companies and for end users or individuals.

A big number of international organizations, including International Labor Organization (ILO) and the United Nations (UN) among others, are approving but are also shaping and implementing relative guidelines during the last decades, and are staffing their corresponding departments for the promotion of research and development of CSR practices (Lee, 2008). The International Maritime Organization (or IMO) is also setting rules and the standards for the maritime industry. These are all a result of the following statement: *"It is widely argued that the firms should be judged for their economic but also for the non-economic criteria that they fulfill or do not"* (Carroll, 1998). In parallel, there is heavy competitive pressure on the business performance of corporations and a rapid information growth created by the development of the Information Technologies that are challenging the traditional strategic management that is focusing mostly on the achievement of profit related goals (Fafaliou, Lekakou and Theotokas, 2006). Society is in need of business for economic and social evolution and development, whereas corporations are in need of a supportive environment to be established and to operate in, with CSR being an agreement between these two parties for the existence of mutual benefit (Davies, 2003).

1.1 Problem identification

The research regarding CSR in the existing literature focuses mainly on the developed countries of the Western world, as for example the countries of the European Union, the United States and Canada (Maignan & Ralston, 2002). Indicators have been developed in order to create a measurement standard of CSR engagement of the western economies (Midttun et al., 2006). Results of these indicators showed that the countries of the Mediterranean Sea (i.e. Italy, Greece, Spain) and Portugal had a low score, with the latter two scoring more than Italy and Greece and that the Greek industry in terms of voluntary standards and non-financial reporting scored far lower than the other countries (Skouloudis et al., 2011).

Among the other Mediterranean European countries, namely Italy, Spain and Portugal, Greece has been noticed to be identified as having adopted CSR policies later than other European countries, as only recently has a CSR agenda started being designed and adopted, steered by the European Commission initiatives for

the promotion of a CSR European framework, and came also as a result of the impact of global initiatives towards the direction of CSR and sustainability (Albareda et al. 2007). In the same direction as being based in Greece, the awareness towards CSR of the majority of Greek companies is considerably limited, even though there are a significantly few Greek companies that have started formulating their CSR strategy and setting their CSR goals (Skouloudis et al., 2011).

Fafaliou, Lekakou and Theotokas (2006) point out that the shipping industry's "bad" image is a result of the responsive and not proactive activities taken in the industry. CSR has not been obligatory for shipping companies therefore their engagement with CSR was up to the choice of their upper management, (Theotokas and Katarellos, 2000). Moreover, minimum standards regarding safety promotion and environmental protection were applied and they were regarding the technical side of the operations of the shipping company (Theotokas and Katarellos, 2000). The attempts for creating and sustaining an enhanced image of the shipping industry and shipping companies, should revolve around minimizing negative externalities and focusing towards the constant improvement of the quality standards that are being applied in the shipping day to day operations (Fafaliou, Lekakou and Theotokas, 2006). Fafaliou, Lekakou and Theotokas (2006) also indicated, after having studied the application of CSR in short sea shipping companies, that it is limited only to a significantly small amount of companies which are providing specific services and which are or were subsidiaries of international conglomerates or were managed and controlled by entrepreneurs who had awareness and knowledge as individuals on CSR.

From the aforementioned, we can detect that the lack of technical foundation, knowledge and culture on the direction of CSR in the shipping and more specifically in the Greek bulk shipping industry relates to two major components: 1) Greece being a late adopter of CSR policies with relative attitude from the companies which operate in it and 2) The generally not obligatory nature of shipping towards CSR. For various reasons that are not to be analyzed in the present thesis, Greece as aforementioned has been a late adopter of CSR practices as a nation and as a result the same is being followed by the people and the companies that reside and operate in it. Furthermore, we could say that the demanding and competitive nature of the shipping industry and more specifically the perfect competition market model under which the oil bulk and dry bulk shipping industry operate in, mandate or dictate a need for cut of expenses for economic survival. Theotokas and Katarellos (2000) state that new standards imposed could shape the competitive advantage of each company as it will not only depend on the cost management but also on the ability of the carrier of producing services of quality and safety and will respond to the need of setting new minimum standards of operating. Cost per service unit produced by the shipping company is being increased as standards tend to be more demanding with a characteristic example being the introduction of the ISM code (Theotokas and Katarellos, 2000). In view of this, no one can deny the fact that the continuous introduction of additional standards will constantly increase the costs, but also increase the quality level offered by the individual shipping companies. Yuen and Lim (2016), by identifying the major barriers to implement strategic CSR in shipping, concluded that the implication of CSR in shipping is subject to the forces of

the macroeconomic and the microeconomic (costs, profits, revenues) forces of the environment they operate in.

In the present thesis the author tries to shed some light towards the extent that Greek Shipping companies operating fleets that include or are completely consisted of liquid bulk and/or dry bulk carriers implement CSR actions, which CSR actions do they incorporate in their strategy and if the incorporation of this is a function of the company's financial health. Do Greek Owned / Managed Companies of the Bulk shipping industry tend to become socially responsible based on the financial health of their company which is reflected by the size and the composition of their fleet?

1.2 Aim, purpose and significance of the study

In the present research thesis we are going to investigate the incorporation of CSR in the strategy of Greek owned / managed shipping companies and research will be narrowed down to those companies that their operation revolves around the ownership and/or the management of fleets which include or they are fully consisted of dry and/or liquid bulk vessels. Moreover this study will include and examine the existence of the relation of the fleet size of these companies with their involvement in CSR activities in order to understand the existence or non-existence of a relationship between these two variables. We consider that the carriage of dry bulk cargo, as for example scrap metal or liquid bulk cargo like crude oil require the same standards as compared to containerships and all other vessel types. Apart from this, we cannot overlook the fact that there is no direct interaction between bulk companies and final consumers / societies, as the container carrying companies for example in a bigger extent as it still remains a business to business (B2B) industry, which leads to a faceless and not extensively known industry. Society raises demands directly from counterparties that it interacts directly with. Greek shipping is based mostly on and is mostly famous due to the traditional ownership of dry and liquid bulk vessels without it meaning that there are no innovative companies penetrating other markets. Also we consider that there is a big gap in the implementation of CSR actions, or at least we are not aware of their existence, in this section of the industry.

Since not many relevant studies were found to have been conducted apart from the one of Fafaliou, Lekakou and Theotokas (2006) which examined CSR in shipping with the sample being short sea shipping companies, due to the personal interest of the author for the leading industry of his home country, the fact that there is uninvestigated ground in the bulk shipping industry, and the fact that we consider that only an insignificant amount of CSR actions are being published therefore known, we have decided to proceed with the present topic and research thesis and shed some light on the CSR involvement of an industry that is not observable in our everyday life but is still of the utmost importance. In an environment that all parties of the society interact, with a simple example of the society providing the companies with workforce and human capital, and the companies providing the society with products, services and capital there is a strong need for understanding of the roles of the individuals and companies and their attitude towards each other but also towards the natural environment. We hope that through the present thesis we will be able to prepare the ground for additional future researches on the bulk shipping

industry, and that we will increase the awareness of the individuals, the society and especially of the shipping companies which we consider that their relation with the environment and the society should be not related only with the financial health of the company. Being socially responsible is a matter of culture and not a periodical expression upon only the existence of funds and capital. Implementation of CSR in the strategy of the company can be achieved in a greater or smaller extent on a constant basis regardless of the aforementioned, through several different ways. We will investigate the involvement of these companies in CSR activities and their relation with, as aforementioned, the financial health of the company using the size of the company in terms of fleet size as a proxy. We consider that fleet size and its growth is a variable that first of all depends on the fact, especially nowadays, that low charter rates characterize the shipping industry, on deep knowledge of the market, experience and of course on the economic sustainability of the firms in order to be able to operate their fleets and expand them. Furthermore, we consider the existence of enough reserves to support potential loans and the operation of vessels in markets with low freight rates that can lead the vessels to operate even with negative profit margin. Keeping the aforementioned in mind, it is questioned whether the Greek owned / managed bulk shipping companies are involved in CSR actions and initiatives, in which actions they are involved and if the financial health of these companies has a negative or positive impact on CSR engagement. For simplicity sake we will refer to Greek owned / managed bulk shipping companies as Greek bulk shipping companies.

1.3 Research Question

Our research has been structured around the answer of the following Research and Sub-Research Questions:

Research Question:

- ***“Do Greek bulk shipping companies take CSR actions and initiatives; Which actions are these, and; Does the financial health of the Greek bulk shipping companies have a negative or positive impact on the engagement in CSR?”***As already mentioned, this research intends to discover whether Greek bulk shipping companies are engaged in CSR and the activities that they are mainly focused. As a second part of our research we are focusing on exploring whether we detect any impact on the alteration of economic health on the CSR engagement.

Sub-Research Questions:

- ***“Are Greek Owned Dry Bulk Shipping Companies aware of and do they incorporate in their business strategy and day to day operations a CSR strategy?”***: As we have discussed in our literature review, and as Theotokas (2011) mentions, there are a lot of shipping companies that proceed in CSR initiatives by not even being aware of the term CSR. Gifts and bonuses to employees, scholarships, relief from natural disasters are some of several actions that many ship owners have been taking all these years while not actually being a part of an organized and coordinated CSR strategy. On the other hand, there are also companies that seek only maximization of profit and minimization of

costs and are avoiding proceeding to CSR initiatives let alone implementing an overall CSR strategy for the operation of their companies.

- ***“Is CSR strategy implementation and initiatives of the Greek Bulk Shipping Company dependent on the size of the fleet as a financial health indicator?”***: With the implementation of descriptive statistics we will detect the existence or the non-existence of a pattern that governs the relationship between fleet size and CSR involvement. We will answer this question with the answers obtained by our questionnaire. The answer of this question cannot be conclusive for our research and we will not be able to draw any results only by answering this sub research question.
- ***In which CSR dimensions (Internal & External) do Greek Bulk Companies focus more?*** It is important to check whether companies of the Greek shipping industry are mainly focus only on the internal or also the external stakeholders of CSR. It is important that companies understand that CSR aims towards different dimensions which take into consideration several stakeholders under the scope and the theories which we follow to conduct our research (sustainable development and stakeholder management). Companies do not only interact with their internal environment (i.e. employees) but also with their external (i.e. nature, society etc.). So, focusing only in higher salaries and bonuses for employees, but not in more eco-friendly vessels that will lead first of all to economical sustainability from less fuel consumption but also to reduction of emissions, is not a holistic view of CSR and not an overall strategy CSR applies.

1.4 Structure of the thesis

Chapter 1 - Introduction

In the first chapter of the present thesis, the writer will introduce the reader to the idea of CSR, provide general information about the thesis and identify the problem justifying the need and value of the present research.

Chapter 2 – Literature review

In this chapter the author will present in short the existing literature regarding our topic, spotting the gaps in it and setting the foundation for our own research. Furthermore, with a need for the reader to be able to understand what CSR is, how it is applied, its pros and cons and the basic notions and ideas of CSR that we are going to utilize, we constructed this chapter to assist them. We also in short present the implementation of CSR in shipping and actions taken in Greece specifically. In addition, the main strategic options for CSR along with the basic barriers that prevent shipping companies from implementing CSR activities are mentioned and briefly analyzed as these notions will be utilized for the construction of our conclusions and the extraction of our results. Last but not least, we give a short overview to the reader in order for them to understand the nature of the industry we are researching, the bulk shipping industry, and its peculiar nature. Additionally we analyze and present the specific segment of this industry, the Greek shipping bulk companies which form our population and research group and the significance that is hiding behind narrowing our research down to this group.

Chapter 3 – Theoretical framework: Nexus between company size and CSR

In this chapter we tried to develop a theoretical framework which will be the basis of our research.

Chapter 4 – Methodology

In Chapter 4 of the Thesis we will present the methodology of the research will be presented along with our theoretical and statistical tools that have been used. We will present the questionnaire we used, the content of it, how we used the results and how we processed them in order to contribute to our thesis and how all the aforementioned are interrelated in order to reach to our conclusions and answer our research questions.

Chapter 5 – Findings, results analysis and discussion

In this chapter the author will expose the results of the statistical and theoretical analysis obtained from the survey and from his research. The results are being demonstrated through a variety of methods and ways including depicting of statistical results through histograms and scatter plots, tables and solid text relating the results with the theoretical background of the available literature and of that discussed in chapter 4 and chapter 5 and ideas presented in the literature review and the introduction.

Conclusions, Limitations and Further Research Suggestions

In this section we present the conclusions of our research, mentioning the major key points of the thesis, including methodology, focal point of research, our findings and suggestions for future research.

2 Literature Review

Logical questions can arise like for example “what is CSR?”, “How is CSR defined?”, “Why is CSR valuable?”. In this chapter we will answer all these questions and also assist the reader to understand the basic ideas behind CSR and the basic logical tools, notions and the terminology we will use throughout our research and all the theoretical fundamentals of the CSR theory that will lead us to reach our conclusions and before that analyze our research results. We will also present all the work that has been done until now in research of CSR regarding shipping generally but also in the Greek shipping industry, and we will close this chapter with a short presentation of the bulk shipping and the bulk shipping sector in order to assist the reader to understand our sample and the significance of it.

2.1 CSR Theory

As already mentioned in the introduction, Davies (2003) considers CSR to be an agreement between society and companies for mutual benefit. As per Milton Friedman on the other hand the only social responsibility from the side of the company is the usage of available resources and the involvement in activities that will increase the profits of the firm (Friedman, 1970). But as Fafaliou, Lekakou and Theotokas (2006) state, events that took place in USA and Europe showed a positive result regarding stock funds and revenues for socially responsible shipping companies, but in general, the potential advantages created by the link of CSR and economic interest of enterprises are not easy to be detected and understood, because the absence of systematic empirical data might lead to issues. Generally, the firms are still mainly assessed by their economic performance and there have been many authors and researchers who tried to fill the gap between the company's performance and the CSR (Wood and Jones, 1995)

2.1.1 What is CSR? Definition and the 4 dimensions

CSR includes actions resulting in the benefit of the society, without relating and having a direct interest for the company (McWilliams and Siegel, 2001). Additionally, Kotler and Lee (2005) contend that CSR is the engagement of the company for constant development of the society's well-being. But is there a definition for the understanding of CSR?

More than 40 years ago Votaw (1972) mentioned: *“CSR means something, but not always the same thing to everybody. To some it conveys the idea of legal responsibility or liability; to others, it means socially responsible behavior in the ethical sense; to still others, the meaning transmitted is that of ‘responsible for’ in a causal mode; many simply equate it with a charitable contribution; some take it to mean socially conscious; many of those who embrace it most fervently see it as a mere synonym for legitimacy in the context of belonging or being proper or valid; a few see a sort of fiduciary duty imposing higher standards of behavior on businessmen than on citizens at large”*. This is an occurring issue that we also face nowadays. Several attempts have been made in order to identify the different aspects and understandings of CSR. Corporations, businessmen, individual citizens, organizations and governments perceive CSR in their own unique way, with each one including in it different elements and concepts as the ethical, the one of being

socially responsive and others. Classifications of CSR concepts and different theories need to appear with their defenders and their critics. Garriga and Mele (2004) classified all the CSR theories in 4 groups i.e. 1) the instrumental theories, 2) the political theories, 3) the integrative theories and 4) the ethical theories. After the understanding of the classification of these theories as also of the context and the scope that they approach the issue of CSR we could argue that the author of this thesis sees CSR from the viewpoint of the ethical theories and more specifically of the theory of Sustainable development that falls under this category and the theory of stakeholder management which falls under the integrative theories category (Garriga and Mele, 2004).

As Idowu and Louche (2011) stated in their book, using CSR objectives, a sustainable development definition that can be proposed is *‘the creation of value for current stakeholders-without compromising the ability to create value for future stakeholders-by ensuring that economic growth is achieved through the demonstration of environmental integrity and social responsiveness’*. This definition has been formulated, for sustainable development theory that we will analyze below, even if it is not allowed to apply universally a definition of CSR, since there is no general agreement on the concept of it in literature (Donaldson and Fafaliou, 2003). An easy definition to understand CSR is the one that can be found in Theotokas (2011) which is: *“CSR: the response to the conflicting expectations of various stakeholders, which requires voluntary behavior and action, which can go beyond the requirements of applied by the law”*. A study conducted by Dahlsrud (2008) regarding CSR and its definitions has led to the Identification of 37 different CSR definitions, with an error in his methodology that could not let all the definitions and mainly those from the academics be spotted and included in his report, meaning that the number goes way up than just 37. This can easily lead to the conclusion that CSR as an idea can be perceived differently among citizens, businessmen, academics, companies, organizations and others. In order to help the reader understand what CSR is we will stick to a definition that has been used for over 30 years with significant success in research. It is the one of Carroll (1979) which is the following: *“The social responsibility of business encompasses the economic, legal, ethical and discretionary expectations that society has of organizations at a given point in time.”*. In the aforementioned definition we can identify 4 different dimensions included in CSR which are: 1) the economic dimension, 2) the legal dimension, 3) the ethical dimension, and 4) the discretionary dimension. The fourth dimension later on started to be and it is still referred and known as the “philanthropic” dimension (Carroll and Shabana, 2010). The economic and legal responsibility that all firms have towards the society constitutes the traditional responsibilities with the additional responsibilities that are included in Carroll’s definition to be the ethical and philanthropic responsibilities (Carroll and Shabana, 2010). In a nutshell, the four dimensions / responsibilities are described by Carroll and Shabana (2010) as follows:

- Economic responsibilities: The responsibility the company has *‘to produce goods that society desires and to sell them at profit’* (Carroll, 1979)

•Legal responsibilities: “ *The legal responsibilities of business refer to the positive and negative obligations put on businesses by the laws and regulations of the society where it operates*” (Carroll and Shabana, 2010).

•Ethical and Philanthropic responsibilities: These responsibilities are being expected by the society and the stakeholders of the company and are responsibilities further to the traditional economic and legal (Carroll and Shabana, 2010).

Carroll (1979) pointed that the economic and the legal responsibilities are being required, the ethical are being expected and the philanthropic are desired by the society and the stakeholders. The companies through their operation, have to satisfy a wide spectrum of stakeholders, with a relative value for each group which is being expressed through different terms (Theotokas, 2011). At this point we have to mention the groups that are interested, as they are called stakeholders and an example of their terms as per the table below:

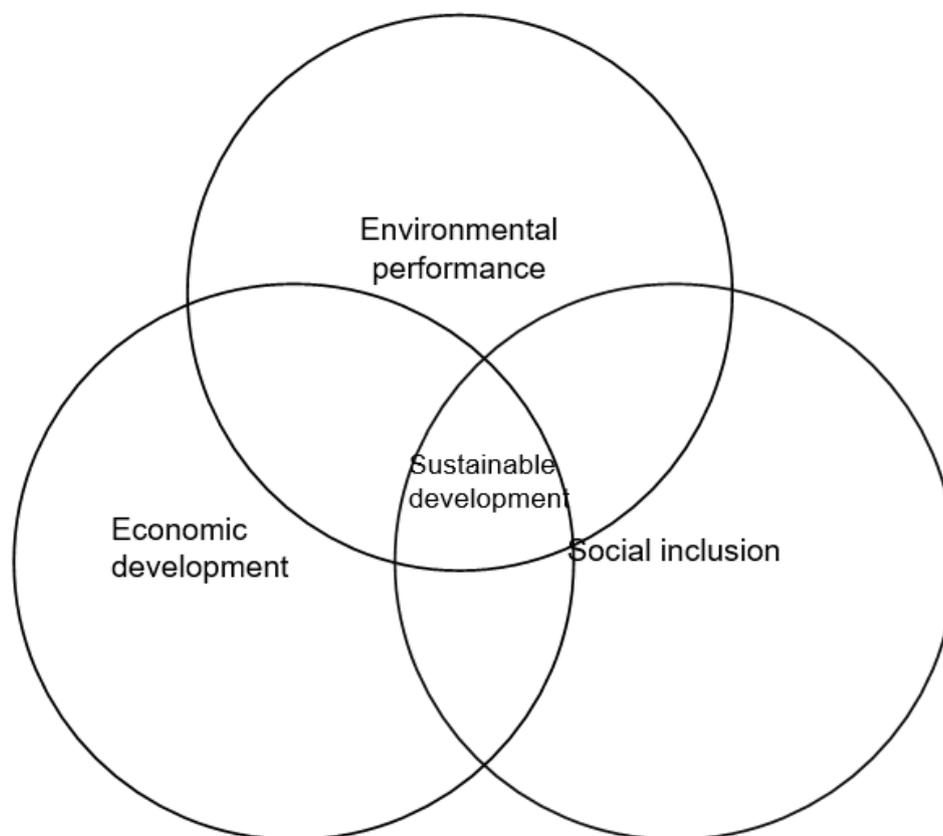
Figure 2.1: Groups of stakeholders

Groups of interest	Examples of value added/provided
Shareholders	Share and dividend increase
Clients	Products and services
Employees	Employment, salaries, chances of personal evolution
Suppliers	Incomes from sales, chances for expansion of business
Local community	Vacancies, economic growth
Society as a whole	Economic prosperity, safety, environmental protection
Labor Unions	Political power

Source: Theotokas (2011)

At this point, we have to point out the basis of the CSR. According to CSR, the companies are managed based on voluntary codes of conduct, and detect their action in three sectors at the same time which are the economic performance, the environmental protection and the social responsibility (Theotokas, 2011). This approach as a whole is connecting CSR with the principle of sustainability, i.e. the capability of the human activities to keep on being supported indefinitely by global environmental systems and acting without prejudicing and threatening the capability of future generations to satisfy their needs which is known as “triple bottom line”(Theotokas, 2011). Graphical representation of the triple bottom line can be found in the Figure 2.2 below. CSR as an idea has been approved, accepted and promoted by all parties of the society including international organizations, governments, citizens and companies mostly in the last three decades (Lee, 2008). Closing this section we have to refer to another term and its definition that is used through the present thesis. This is the one of CSR strategy. Theotokas (2011) defines CSR strategy as the implementation of initiatives of which the social and business advantages are considerably big and discrete/discernible for the company.

Figure 2.2: Triple bottom line



Source: Gupta and Racherla (2016)

2.1.2 CSR drivers, pros and cons

“Business has become the most powerful institution on the planet. The dominant institution in any society needs to take responsibility for the whole” Willis Harman stated (Hawken, 2010). Simply we can understand that Harman indicates the need for responsibility from the side of the companies to look after and support the society (Galbreath, 2011). In parallel with that, the argument that the companies must act in favor of all its key stakeholders instead of not only its shareholders has been formulated by Freeman (1984), Clarkson (1995) and others. This means that firms have to expand their interests and actions further than their economic activities and interest of profit creation, to the benefit of the society and the environment (Porter and Kramer, 2006).

What we can summarize from the aforementioned and from the work of other researchers and scholars is that companies have undoubtedly additional and further responsibilities to the society than only the maximization of their profit. In contrast though to that, there is Friedman’s belief that the one and sole responsibility of the companies is to pursue the profit maximization and nothing beyond that. Apart from Friedman there are additional objections to the responsibilities of companies to the society. Davis (1973) argued that companies are not equipped accordingly with personnel and managers who are able think and act with a mindset focused on the society needs, since they have been hired and are representing the companies for a

very specific reason. Another but not final objection against CSR is the one that Hayek (1969) had which was that CSR is not related to the main activities of the firm directly.

Taking into consideration Friedman's, Davis' and Hayek's objections, it is common sense for entrepreneurs, businessmen and shareholders to wonder why then should CSR strategies and policies should be adopted by firms? Especially if we realize that in order to meet the expectations and obligations of society, measures have to be implemented that will lead to additional costs for the companies. Implementation of CSR policy by a company means the evaluation of its actions' impact on its stakeholders (Harribey, 2010).

The last two decades, companies with their managers, investors and shareholders have slowly started to realize that in the short run, let alone in the long run, adoption of CSR strategy can lead to, without doubt, increase of income and profit for the firms (Lee, 2008). Implementation of CSR to the corporate activities and strategy as per Jones et al. (2009) can lead potentially to the following benefits for the company: 1) The company might perform better financially and increase its profitability, 2) There can be a potential reduction of operating costs, 3) Sustainability for long term periods can be achieved for the companies and their employees, 4) Strong commitment and involvement of employees, 5) Improved innovation capacity, 6) Establishment of good relations with the state and the society, 7) Improved management of risk and crisis, 8) Increased value of the service / product produced by the company with improved reputation for the firm, 9) Creation of stronger bonds with the stakeholders, the customers and improved understanding of their needs. For example, let's apply the second potential advantage regarding cost reduction in our case, shipping. The deployment of new eco-friendly vessels with increased energy efficiency and reduced fuel consumption can lead to a free fall of the operational expenses of the company creating a biggest possible margin for profit or increased revenues at least.

On the other hand, CSR implementation can come with several additional disadvantages instead of advantages. Geethamani (2017) identifies four major disadvantages which are the following: 1) Monitoring of the activities of the company can lead to increased bureaucracy which can result to an increase in the costs of the company. 2) CSR activities can lead to increased operational costs that can render the operation of the company economically not sustainable with smaller profit margins. 3) It is argued that CSR implementation is only there for an increase of the profits of the companies. 4) Methods and criteria for reporting are constantly evolving since there is a big variation of these and there is a need for unification and uniformity.

Apart from the possible benefits of CSR, a research developed in 2002 by Ernst and Young mentioned the major forces that drive the companies to implement CSR ethos and basic CSR principles. These are namely: a) Increased awareness of stakeholders regarding corporate ethical, social and environmental behavior, b) Pressures directly from stakeholders, c) Pressure coming from peer firms, d) Pressure from investors and e) An overall increased sense of social responsibility. Companies are being significantly influenced by the pressure of the peer companies

(peer effects), which is a key driver of the corporate behavior, explained by the growing interaction between the companies inside the same industry or across different industries (Cao, Liang and Zhan, 2015). We can derive from that, that the environment in which the company operates mandates and pushes constantly towards the implication of CSR policies by firms in order to be able to survive and keep on operating in the same environment. The survival of the firms in today's societies needs them to be aware of CSR and constantly consider CSR to be a part of their strategy (EnviroNics International, 1999).

Possible risks including image, legal, financial, and social dispute risks are types of risks that the company, in view of crises, has to take into consideration and assess (Idowu and Louche, 2011). In this direction standards such as ISO9000 and ISO14000 with regards to quality, health and safety and environmental protection are being implemented by companies as a part of the establishment of risk management systems (Story and Price, 2006). CSR policy implementation by a company can enhance the company to evaluate possible threats and risks on its external and / or internal environment (Harribey, 2010).

Carroll and Shabana (2010) point out that the creation and establishment of a fruitful CSR strategy by the companies, it is essential for them to realize that the benefits of CSR are related with "*mediating variables*" and "*situational contingencies*", with the example of the role of trust acting as a mediating variable which regulates the link between CSR activities and the performance of the company as per Pivato et al. (2008).

2.1.3 The 4 CSR strategic options

Jeremy Galbreath (2006), in his article "CSR strategy: strategic options, global considerations", identified 4 possible options for CSR corporate strategies as follows:

•CSR strategic option 1: "*The shareholder strategy*"

"In this strategic option, CSR is a part of the focal point of the corporation which is the profit maximization and the returns to the shareholders." (Galbreath, 2006) This can reflect to Milton Friedman's statement that the company's sole responsibility is the maximization of profits and the creation of wealth and offer to the society by the job creation, taxes payments meet the legal requirements etc. (Galbreath, 2006).

•CSR strategic option 2: "*The altruistic strategy*"

"In this CSR strategic option, the interwoven relationship between the firm and its community is acknowledged and understood." (Galbreath, 2006). Firms are not separate parts of the society and bearing this in mind they understand the need for returning something back. It is possible to be returned as a charity with main objective a positive impact on the society. Philanthropies generally are being sourced by the surplus profits that are created by the companies and as Carroll (1979) points out they can be transmitted to a wide spectrum of enterprises of social, educational, recreational or cultural activities. Hemingway and Maclagan (2004) mention the difficulty of determining the real motives that are hiding behind

these philanthropies but this strategy includes the concept of “doing the right thing” and return to the society (Galbreath, 2006).

•CSR strategic option 3: *“The reciprocal strategy”*

“This CSR strategic option is pragmatic in that it seeks to resolve the conflicts between economic objectives and intense social, moral and environmental expectations of society.” (Galbreath, 2006). What characterizes this type of strategy is the proactivity with regards to being socially responsible. It includes proactive actions that are not limited to the minimum legal standards imposed by laws, governments and conventions which can lead first and foremost to advantages for the society, to potential increase of income and profits and last but not least, less regulatory intervention (Galbreath, 2006).

•CSR strategic option 4: *“The citizenship strategy”*

“The citizenship strategy takes on a broader scope than the previous strategic options for CSR. Here, a business firm recognizes that various stakeholders have different interests and expectations, including customers, employees, suppliers, specific communities, shareholders, the environment and so on.”(Galbreath, 2006). With this strategy the company understands and accepts its responsibilities to all the external and internal stakeholders apart from those to its shareholders (Dawkins and Lewis, 2003). The firm is also trying to evaluate the needs and the responsibilities towards all the different groups of stakeholders and treat them in a balanced way (Galbreath, 2006). This evaluation will have as a result the categorization of the stakeholders as primary and secondary (Clarkson, 1995). In order to be successfully implemented the company has to enter a dialogue / conversation with its key stakeholders and take into consideration their feedback and comments on the way it will meet its goals (Galbreath, 2006).

Figure 2.3: Mapping of the 4 different CSR strategic options.

	Goal	Vehicles	Measurement	Benefactors	Benefits	Time Frame
Shareholder Strategy	Profit	Rationalization; Self-interest	Financial results	Shareholders; Others indirect	Financial	Short-term vision
Altruistic Strategy	Give back	'Check-book' Philanthropy	Donations	Community groups	Benefits may not be measured	Intermittent; Possibly timed (e.g. annually)
Reciprocal Strategy	Mutual benefits	Public relations; Sponsorship; Partnerships; Community activity; Volunteering; Cause Related Marketing	Activity-based reporting	The firm and the community	Performance; Market goals; Human resources	Medium- to long-term planning
Citizenship Strategy	Responsibility; Transparency; Sustainability; Accountability	Governance; Applied Ethics; Stakeholder dialogue; Input to/outflow of Corporate strategy	Triple Bottom Line; Holistic	To firm: Survival, position, role; To partners of all sectors; To wider society	Tangible plus potentially Intangible	Long-term horizon

Source: Galbreath (2006)

The above strategies will be utilized in the analysis of our results and we will explore where the Greek bulk shipping company stands. We can easily conclude at this point what Yuen and Lim (2016) stated, that activities aiming to the protection of the environment and that are in favor of the society with a voluntary character are contained in the CSR with the aim of the long term creation and increase of profits.

2.2 CSR in shipping

2.2.1 What we know

Theotokas and Katarellos (2000) state that mainly the last years the results of safety and quality awareness on the bulk industry have been observed, and that the business environment under which shipping companies operate is being changing. Companies have to adapt in order to survive and retain their competitive position in the market, something that is heavily dependent on the features that characterize the structure of these companies. We have to keep in mind that as Thorstensen and Shield (1998) state, that the minimization of charter hires along with the minimization of operating costs have been through all the years the motive power of the shipping industry. Quality and safety of the provided service can increase the cost of the service and as all goods and services have a price which is determined by demand and supply, the same applies to quality which has its own price as Theotokas and Katarellos (2000) point. In this direction no one can impose by force quality application if it is not requested by the demand side, the shipping service users like freight forwarders, final consumers etc. (Fafaliou, Lekakou and Theotokas, 2006). Most of the bulk shipping companies that operate in the major bulk freight markets function under the generic strategy of absolute cost advantage proposed by Sletmo and Holste (Theotokas & Katarellos, 2000). Theotokas (1997) states, that this is the only viable strategy for the bulk shipping companies that cover major routes. Companies and specifically shipping companies are running in a constant race of cutting costs for their survival. The question that has been raised by the financial crisis is whether CSR is a threat for the survival of the business because of the demand of high capital needed for initiatives but at the same time CSR engagement can turn from threat to opportunities for the company (Giannarakis and Theotokas, 2011).

Fafaliou, Lekakou and Theotokas (2006) add that shipping is an industry where major transformations have emerged during the last decade and the business environment of bulk shipping companies is being changing by the implementation of new safety regulations and by the continues increasing awareness as Theotokas and Katarellos (2000) state. Being socially responsible was not obligatory for the bulk shipping companies for many decades, but steering direction towards turning socially responsible is part of the plan of the bulk shipping companies (Theotokas and Katarellos, 2000). Acciaro (2013) states that it is likely that CSR is being perceived differently in different places and locations around the globe. Taking this into consideration we assume that in the European Union and especially in Greece, this concept is being perceived differently in another extent comparing to other countries.

As aforementioned, in the framework of the operation of the shipping industry and the companies that operate in it, regulations and laws have been set by

organizations like the IMO that dictate the minimum standards that should be applied in order safe and of a minimum quality transportation services can be provided. These regulations have assisted to increase the standards but they have not dealt with the issue at its core, leaving a lot of space for improvement. There are a lot of times that these regulations cannot be fully applied and cannot be monitored that they are followed by the book, which is something that raises questions whether additional measures should be taken or not. In the shipping world there are multiple stakeholders apart from the shipping companies that are willing to neglect all minimum standards for a higher profit margin leading to negative externalities that have as a result the bad image that has been created for shipping. The image of shipping has changed to being bad the last decades due to accidents and incidents that led also to drastic changes to the environment that shipping companies operate in. These changes led to the implementation of regulations that all companies have to follow strictly if they are at least willing to operate. Keeping this in mind a lot of companies just prepare themselves only for the acquisition of the necessary certifications in order to comply with the regulations without any further implementations. This can be verified by PSC statistics. All the negative phenomena can be removed from the shipping industry by working its way towards implementation of CSR strategies. (Theotokas, 2011).

There are a lot of shipping companies that in the last years have been taking actions and initiatives towards CSR affecting their stakeholders, without though knowing CSR as a term and theory (Theotokas, 2011). These initiatives have been addressing towards a wide spectrum of stakeholders as the company employees or the society. In his book, Ioannis Theotokas mentions the Norwegian company Wilh. Wilhelmsen as an example mentioning, that it is not widely known what the company has done as a part of its social responsibility but only to those that are directly of interest. He also adds that this example can describe a big part of the Greek shipping companies that focus more on acting than publishing their actions. This, depending on the perspective each one has can be either a pro or con. For our survey for example, it increases our struggle for finding evidence and information.

In his book Business Administration for Shipping Companies, Ioannis Theotokas identifies six major characteristics of the shipping industry that have to all the time be taken into account when we try to understand CSR and the attitude of shipping companies towards it. These are the following:

- a. The B2B nature of the shipping industry. This has led to the inward looking of the industry with restricted amount of actions for making the image of the industry better.
- b. The focus of the firms towards its compliance with IMO demands and also towards all the regulations on the direction of safety and quality.
- c. The market structures and the belief that all the markets operate smoothly without companies being able to differentiate their services.
- d. The nature of easy changing market characteristics that they do not leave big margins for costs and they are vital for the survival of the companies.
- e. The international nature of shipping and the fact that the operation of the companies is not being affected only by the countries that they source their factors of production.

- f. The different situations and demands that each company can face, especially regarding local issues that the way they should address them might not be clearly defined by their system.

Even though results do not show that companies which systematically apply CSR strategies tend to have higher incomes, it is clear the competitive advantage of these companies when addressed to cargo owners and shippers that set specific requirements for the choice of their carriers (Theotokas, 2011). Furthermore, CSR is not the only way that will lead to the humanitarian action of the shipping companies as a whole based on the market powers that prevail in the industry (Theotokas, 2011). Nevertheless, it can act as a power to contribute to a better understanding of the interaction between the companies and the society and to a different way of operation and organization of the business activities which will be for the wider benefit of both the companies and the stakeholders (Theotokas, 2011).

Taking everything into consideration it is logical to reach the conclusion that also Theotokas and Katarelou (2000) point, which is that changes in the shipping industry will and are currently affecting competitiveness which is dependent upon not only cost factors but also upon the ability of the companies to meet quality and safety standards as well. Acciaro (2013) highlights, that there is a need of understanding in depth of CSR practices at an organizational level and not at just a level of individuals for a fruitful implementation of CSR practices. We have to keep in mind that as in every other industry also in shipping CSR has a voluntary nature. A shipping company with a CSR strategy has to try and work in order to include all those economic, social and environmental concerns of their stakeholders in their operation.

2.2.2 Barriers for CSR implementation in shipping

In 2016, Yuen and Lim, published their report with title "Barriers to the implementation of strategic CSR in shipping", conducting an extensive survey with a sample of 600 shipping companies based in Singapore in order to identify the barriers that shipping companies face in order to apply CSR strategies. Through the analysis of the feedback, they managed to identify and verify 5 main drivers that combined two or more or each of them acting alone, constitute major barriers for the implementation of CSR strategies by shipping companies. More specifically these are:

- a. The lack of resources, which includes lack of financing, lack of human capital, knowledge and expertise (Yuen and Lim, 2016). Yuen and Lim found through their research and based on Lam and Lim (2016) and Faisal (2010) that CSR strategy implementation in shipping industry requires significant amounts of resources including the aforementioned, and that the budgeting planned or that it is available is not enough for this type of investment. Faisal (2010) points out that investing as an alternative in projects with potential higher returns will be preferred. Yuen and Lim (2016) mention additionally the fact that there is no dedicated department and management to CSR in the majority of the shipping companies. This is also the case for the majority of the Greek shipping companies that operate in the bulk industry. As also mentioned below, the majority of the Greek shipping companies are family owned with 1 to maximum 4 vessels. Theotokas (1997) found

that there is an average of approximately 3 people per vessel working in the Greek shipping companies. Keeping this in mind it is logical to reach the conclusion that the existence of a separate CSR department is practically impossible.

b. The lack of a strategic vision which is strongly related to the absence as Yuen and Lim (2016) mention of commitment from the higher management levels. Husted (2003) argued that in order for this commitment to be achieved, it has to encompass the mission, the vision, the objectives and the goals of the shipping company. In addition to that, Skouloudis, Evangelinos and Nikolaou (2011), support that an additional reason for the lack of strategic vision is the focus on short term goals and results including profits, whilst CSR is implemented for a more long term payoff.

c. The lack of measurement systems. The measurement systems can be a valuable tool for assessing the CSR performance of companies and organizations and create a reward system through the quantification of the advantages created by CSR (Yuen and Lim, 2016). Only a very limited number of such tools and indicators have been developed, accepted and adopted. GRI reporting system for companies for example has been developed but the majority if not all the shipping companies are not following these guidelines if they create report for their CSR activities. Additionally, another example is the ISO 26000:2010 standard system with clear directions on the implementation of a CSR strategy and voluntary practices. The shipping community however, and especially the ship owning companies are not receptive in the acceptance and implementation of this system (Coady et al, 2013).

d. The high regulatory standards imposed: Shipping is considered to be among the most highly regulated industries. This is very obvious with a wide spectrum of conventions, rules, regulations and laws that have been ratified towards every possible matter with environmental, social, labor and safety nature that has to be addressed. Companies in order to be able to operate are constantly being called to accept and implement and meet all the necessary standards. Exceeding the mandatory standards by voluntary additional actions can be translated in to implementation of CSR activities, and can lead to insignificant market advantages (Yuen and Lim, 2016). Yuen and Lim (2016) present Brammall's (2012) research results that showed that the most out of the shipping companies are (or at least were), still on the stage of trying to comply with the minimum obligatory standards in order to avoid penalties and fines for non-compliance.

e. The low willingness to pay for CSR: It is important what Yuen and Lim (2016) highlight, and this is that shipping companies do not receive sufficient return and are not sufficiently compensated and rewarded for their CSR activities, voluntarily made or not and initiatives. Another reason mentioned that justifies the low willingness to pay for CSR is the B2B nature which has a result the shipping industry and especially the bulk shipping to refrain from the final consumers (Haddock - Fraser and Fraser, 2008). Haddock - Fraser and Fraser (2008) also add that this leads to lessening of the constant close examination and pressure to the industry.

2.3 The bulk shipping industry

“Strictly speaking, ‘bulk cargo’ describes the transport mode and not the commodity type.” -Stopford (2009)

As Martin Stopford (2009) describes, the bulk shipping is responsible for the carriage of big quantities of unprocessed (raw) materials and “bulky semi-manufactures”, and he points out the significance of this industry as being very peculiar.

Vessels of the tramp / bulk industry are defined as being vessels of not specific construction, which are executing trips based on a charter party for the transportation of suitable cargo, mainly bulk homogenous, between two ports, with a freight as a reward, where everything is arranged between the carriers (ship-owner mostly) and the charterer, regulated under a C/P (Vlachos, 2011). Vlachos (2011) and Stopford (2009) identify the main characteristics of the bulk industry as follows:

- The bulk cargoes including grains, liquid and dry fuel, iron ore, fertilizers, sugar bauxite etc., are being carried each time in big quantities, due to the increased size of the demand side.
- Origin of all the aforementioned goods can be traced all around the globe with the importing and exporting countries to vary.
- The demand of these cargoes is heavily influenced by seasonality effects.
- The demand of these cargoes is subject to long term, frequent and most of the times significant quantity fluctuations due to a wide spectrum of different factors such as economic cycles, weather conditions, political instability, strikes etc. The previous mentioned fluctuations do not allow the execution of the whole transportation of the amounts that need to be carried in a specific period of time and mostly of the main goods as crude oil, iron ore and others.
- The sum of the bulk cargoes are goods of great need, with a low and insignificant cost per unit, whose demand is inelastic in the price fluctuations.

Each year, the vessels that operate in the bulk shipping industry execute a restricted number of voyages (up to maximum 5- 6 trips) (Stopford, 2009). The operation of a shipping company which has its activity in the bulk shipping industry, can be also successful with the ownership and / or operation of only a single vessel, due to the environment of the market which does not restrict the owner for the transportation of only one type of good and it offers great flexibility and the potential of launching the vessel into different markets (Vlachos, 2011). The shipping companies which own and / or operate fleets of bulk cargo vessels are competing with each other in an almost perfect competition environment (Vlachos, 2011). Yet, Veenstra (2018) mentions that the general cargo shipping operates in a perfect competition market whilst bulk shipping tends in certain occasions depending on the region and the time, to operate in a monopolistic competition environment.

The correct classification of bulk vessels is the one based on the main purpose that they have been built to serve, which is the transportation of specific cargo or cargoes. As per Vlachos (2011) we can distinguish the bulk vessels in to 4 types: 1) Dry bulk cargo vessels, 2) Liquid bulk cargo vessels, 3) Mixed / combined bulk

cargo vessels (O.B.O., O/O, etc.) and 4) Other types for transfer of particular types of bulk cargo. The previously mentioned 4 types of bulk vessels are utilized for the carriage of the 3 main categories of cargo transported in bulk mentioned by Stopford (2009) as follows: First of all the liquid bulk cargo. This type of cargo needs tankers to be transported. Namely the basic and most common liquid cargoes are crude oil, liquid chemicals, edible oils and others. In addition to the liquid bulk the second type are the five major bulks. Under this category of cargoes fall the following: iron ore, grain, coal, phosphates and bauxite. Last but not least we have the minor bulks. In this category are included the rest of the bulk cargoes with the major ones to be steel products, scrap, cement, salt, sulphur and chemicals. In Table 2.4 we present you the total trades of minor and major bulk commodities according to Clarkson Research Services (2018) Dry Bulk Trade Outlook. Please note that the figures for 2018 are a forecast made from Clarkson Research Services in order to reflect total amounts for full

Figure 2.4: Dry bulk trade growth 2008-2018

	Millions Tonnes										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Major bulks	1,912	1,999	2,233	2,364	2,564	2,733	2,964	2,931	3,010	3,156	3,228
Minor bulks	1,602	1,402	1,578	1,682	1,736	1,823	1,844	1,872	1,874	1,920	1,984
Total dry bulk	3,514	3,401	3,811	4,046	4,300	4,556	4,808	4,803	4,885	5,075	5,213

Source: Clarkson Research Services (2018)

Something significant about the market of bulk cargoes is the fact that the competition between the shipping companies in this industry is based on the paid freight (Vlachos, 2011). This can lead to a very fundamental and valuable conclusion, that the competition is pushing the freights to the levels of the marginal costs or even operational expenses of the vessels in which the carriers tend to respond positively (Vlachos, 2011).

As referred previously, this market works under the characteristics of the perfect competition. This means that there are a lot of buyers (cargo owners) and sellers (ship-owners) of the dry bulk shipping services. It is impossible for them, to influence separately prices and freights as also to affect the equilibrium between demand and supply.

Taking all the aforementioned into consideration, the prevalence in the bulk shipping market is subject to the capability of the shipping companies to secure for them a strong competitive positioning, by achieving a transportation cost less than the transportation cost of the relative, available and suitable vessels that are competing for the same cargo each time (Vlachos, 2011).

Under the category of the dry bulk cargo vessels the main types include as per Vlachos (2011): a) General cargo vessels, b) Iron ore vessels and c) Bulk carriers. Under the category of the bulk carriers, are included the combined cargo vessels, dry and liquid bulk vessels, when they are utilized for the carriage of dry bulk cargoes. Respectively when they are carrying liquid bulk cargoes they are included under the category of liquid bulk vessels. The basic size categories of the bulk vessels along with their basic characteristics can be found at table .2.5.

Figure 2.5: Dry cargo vessels

Type	Carrying Capacity (DWT)	Special Features	Cargo
Capesize	+100.000	Single-deck	Grain, iron-ore, coal
Panamax	55-80.000	Single-deck	Grain, seeds, coal
Handymax	40-55.000	Single-deck, usually fitted with 4 cranes of lifting capacity 25 tones	Grain and agricultural products that can also be in bags
Handysize	20-40.000	Single-deck usually fitted with cranes	Grain and agricultural products that can also be in bags
Multi-Purpose	5-25.000	Double-deck usually fitted with cranes	Bulk cargo, general cargo, pallets, containers and possibly RO-RO

Source: Vlachos (2011) and Stopford (2009)

The market condition under which this industry of liquid bulk cargos, unprocessed and processed, are more or less the same that characterize the bulk industry in general and the dry bulk industry as for example the fact that liquid bulk cargos and mostly the unprocessed crude oil are being carried in big quantities and that the demand is subject to fluctuations etc. (Vlachos, 2011). Stopford (2009) states that as a response to the fluctuations of freight rates, bulk vessels can easily change the markets that they operate into. The similarities are enabling the ship-owners of the bulk cargo shipping to expand their activities to the liquid bulk shipping industry and vice versa (Vlachos, 2011) Vlachos (2011) point out that the main features that distinguish the liquid bulk shipping industry are the following:

- The biggest part of the demand concerns one and sole good. This is the crude oil. Additionally, the regions of origin and destination of these goods, mostly of the crude oil are numbered, which is a factor that enables the concentration of the cargo in big quantities that need to be transported.
- There are certain peculiarities regarding the control of the vessels due to the ownership of the cargo.
- The buyers of the shipping services are limited, consisting basically a monopsony character market.

In the Table 2.6 below, the major tanker sizes are being presented. We decided to consider inserting for ease of reference only the tanker sizes as the crude oil represents the biggest share of the liquid bulk market in total. The rest of the liquid bulk commodities are being transported by relative vessels with suitable specifications for the condition of the transported good. LNG carriage vessels, LPG carriage vessels, CMG carriage vessels, chemical tankers and other liquid bulk vessels are also separated into size categories as the oil tankers below.

Figure 2.6: Tanker vessels

Tankers	dwt
VLCC	200.000+
Suezmax	125-200.000
Aframax	85-125.000
Panamax	55-85.000
Handy	10-55.000

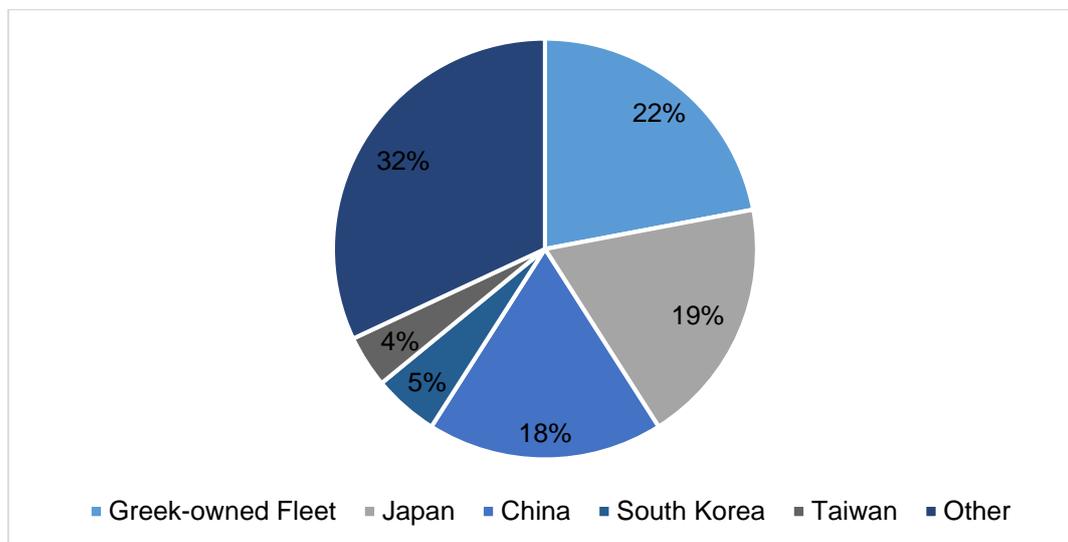
Source: Vlachos (2014) and Clarkson Research Services (2018)

2.4 The Greek bulk shipping industry

In this sub-chapter we will introduce the reader into the bulk shipping industry, the Greek ship owning company, the Greek ship owning industry and the traditional relation and steady growth of the Greek shipping companies' involvement in the shipping and mostly in the bulk industry. We will also indicate the imperative need of research of CSR involvement of the Greek bulk shipping companies as they own the biggest market share of the bulk shipping market among all countries in the world. As we will see historically Greek ship-owners have been pioneers and entrepreneurs, and in this direction we humbly consider that they should also be leaders in the implementation of CSR strategies and initiatives.

Greece has been traditionally supporting its economy by mainly a strong service sector with shipping being its leading service industry. The population of Greece represents only the 0,15% of the world's population, but sea going vessels that carry more or less the 20% of the world's trade are owned by Greek shipping companies (Ugs.gr, 2018).Theotokas (2007) affirms the share of the Greek ship-owners to be approximately 14,1% back in 1975 and 16,5% in 2006 in terms of tonnage. In Figure 2.7 the share of the Greek bulk fleet for the 2017 is depicted by Clarkson Research Services (2018). There is an observable constant growth pattern through the last years and indicates a strong affinity of the Greek ship-owners with the bulk shipping sector, which explains this success.

Figure 2.7: Bulk shipping industry fleet share per country for 2017



Source: Clarkson Research Services (2018)

So, there is a logic question arising. Which shipping company is considered to be Greek and how is this company defined? Icaza et al. (2009) point that analysts are considering a shipping company to be “Greek” when Greek interest is behind the ownership of the company. These Greek shipping companies are in their majority run, owned and controlled by families (Theotokas, 2007). The vast majority of these strong and powerful ship-owning families were created mostly and we can trace our roots at Greek Islands of the Aegean Sea with overwhelming examples to be Chios, Andros, Samos and others, which families provided great foundations for the creation of a strong Greek shipping industry.

Analysts and researchers consider the Greek shipping companies and the Greek ship-owners as being a particular and separate category in the shipping industry. Martin Stopford (1988) characterized the Greek ship-owners as those who turned the art of survival into the art of success resulting to leading the way and turning into an example of competitiveness in the bulk shipping markets in the post WWII period. There are two main characteristics that are distinguishing Greek shipping from others around the globe (Icaza et.al., 2009): The first one, is the heavy dependence on the values and ties of family and ethnicity which can be reflected on the sharing of information and expertise but also in the finding of capital and in the insurance market (Icaza et al., 2009). The second one is the flexibility of the Greek ship-owners to alter the location of their business based on the economic and political environment which prevails (Icaza et al., 2009).

Greece has steadily been for the last years the leading ship-owning country with an approximate total carrying capacity of 309 million dwt in 2017 (UNCTAD, 2017). The majority of the Greek owned fleet is flying other than the Greek flag though, for various reasons that are not of vital importance to be analyzed in the present research thesis, with major to be the flags of Panama, Liberia, Cyprus and Panama. In the online version of the Greek Newspaper “Eleftheros Typos” in June of 2017 the following was mentioned in Greek: “*More than half of the tankers, container*

ships and bulk carriers that are registered under the Greek registry belong to only 18 different ship-owners. We should not omit to mention that from a total of the 200 biggest Greek shipping companies the 146 do not fly the Greek flag to none of the vessels of their fleet.”¹ Furthermore, in UNCTAD’s Review of Maritime Transport of 2017, Greece seems to have the biggest fleet capacity share in bulk carriers, and the biggest fleet of liquid bulk vessels including oil tankers, LNG vessels, LPG vessels and others. The specialization in the industries of liquid and dry bulk shipping is among the main driving forces that have shaped the success of the Greek shipping industry through the years and this is due to the rapid growth of these markets compared to all the others during the last three decades. (Icaza et al., 2009). For over six decades now Greeks have been specialized along with the Norwegians in the bulk shipping industry compared to other shipping countries, with Greek shipping companies owning under the Greek flag more than 5% of the world’s ore and bulk fleet and even bigger percentage under other registries. (Thanopoulou, 1994). The Greek shipping cluster has as its core the approximately 850 shipping companies which perform mostly owning and operation activities of bulk carriers and oil tankers (Icaza et al., 2009). Theotokas (2007) from various sources found though that at that time 690 shipping companies are Greek owned companies with a 64,5% to be small companies operating and / or owning 1 to 4 vessels and only 9% of these companies operates / owns more than 16 vessels. Theotokas (2007) states that the size of the companies as a factor was not significant for competition purposes until recently, that is becoming more important, with a close relation to the cost/quality performance relation. The vast majority of these companies are being operated from Piraeus region (including Athens, Marousi, Glyfada and other parts of the Attica region) and the rest from other Greek cities as Thessaloniki and from abroad with major Greek shipping centers to have historically been formulated to be New York and London. A significantly big percentage of these companies includes in its operations transportation of liquid and / or dry bulk commodities. This is going to be our target population for our research. The need of Greek shipping companies to focus on the expansion of their bulk fleets is imperative. (Thanopoulou, 2007). As it seems there has been a significant steering of their activities towards the LNG markets apart from the traditional oil and dry cargo markets. (Glass, 2006)

Theotokas (2007) describes as a paradox the Greek dominance in the shipping world and especially in the gaining of significant competitive advantage in bulk shipping since Greece has an insignificant part in the world trade transactions, a limited demand for deep sea shipping services and home capital markets that are not possible to cover the shipping requirements. The development of shipping nations resulting to development of shipping companies can be explained at a certain extent by entrepreneurship (Svendsen, 1990; Metaxas, 1988; Evangelista and Morvillo, 1998). Greek ship-owners have been innovative in the past but there is a data lack in order to verify that this has always been the case as a mean of assuming risk but all Greek ship-owners are being considered as entrepreneurs (Theotokas, 2007). Another reason that partially explains the competitive advantage of the Greek shipping companies as per Theotokas (2007) is the existence of

¹<https://www.eleftherostypos.gr/business/108326-molis-18-efoplistes-kratoun-psila-tin-elliniki-simaia/>

human capital and human resources with deep knowledge of the shipping industry, owning, managing and staffing these companies.

The author of the present thesis has conducted an extensive literature review for the research. In order to be able to examine the CSR involvement of the Greek bulk shipping companies and its relation with the variable of fleet size as a proxy for financial health of the company, the stakeholder management theory has been utilized as our major analytical tool.

2.4.1 CSR and the Greek bulk shipping

Fafaliou, Lekakou and Theotokas (2006) try to make the meaning of CSR clear inside the European Maritime Industry with a case study applied to the Greek-owned short sea shipping companies applying a qualitative research with a survey conducted as a main research tool. It is significant that the results of their research showed that the application of CSR is limited mainly in companies that are subsidiaries of international conglomerates or owned and/or managed by owners that are individually conscious and aware of the advantages occurring by implementing CSR aspects in the strategy of their companies. The vast majority of small –Greek owned shipping companies are not involved in CSR activities and this can mainly be related to the Greek culture of entrepreneurship, the absence of information and the disrespect towards the positive influence of CSR to the performance of the firms (Fafaliou, Lekakou and Theotokas, 2006). Greek companies start to realize that a factor that can drive their success is inclusion of CSR activities in their business strategy (Metaxas and Tsavdaridou, 2013). But is this also the case for the bulk shipping companies of the Greek fleet? Shipping is a responsive industry and that is its biggest disadvantage. Moreover, CSR promotion in Greece is being slowly growing and Greek firms understand that competitiveness relies also on a strategy that includes CSR strategies as per Fafaliou, Lekakou and Theotokas (2006).

Apart from the analysis of the results of our survey we have also conducted a research in the available newspapers, magazines and online sources in order to have an overall view of the actions of the companies of our sample, but also of additional companies. We found major actions and initiatives focusing on the most recent and the most significant in our opinion facts. There have been a lot of times that as part of the society the Greek ship-owners were standing by the side of the Greek citizens and the Greek government. As stated on the Greek website newsit.gr, the 3 biggest and most economically powerful charity foundations of Greece such as these of Stavros Niarchos and Alexandros Onassis are based on and managing mainly capital sourced from shipping².

On the 23rd of July devastating wildfires destroyed hundreds of houses in the region of Attica, Greece leaving behind more than 90 people dead, and additional people missing. The social face of the Greek ship owner of the bulk industry once again was uncovered. More specifically Mr. Evangelos Marinakis, owner of Capital Ship Management and major shareholder of Olympiacos F.C. offered 1 million euros, Onnasis foundation and Ioannis S. Latsis foundation offered each from 5 million

² <https://www.newsit.gr/opinion/elliniki-naytilia-ethniki-mas-dynami/2543887/>

euros to those that were affected by the fires³. At the online version of “Naftika Chronika” shipping magazine it was stated that at the same time, Stavros Niarchos foundation proceeded to the donation of 25 million euros to the firefighting unit of Greece, aiming towards the support of the firefighters in terms of maintenance of the existing equipment and for educational and training actions as also for the potential future renewal of equipment⁴. In the same article it was stated that recently the foundation of Stavros Niarchos took the initiative a few months ago for the donation of 143 ambulances for the National Center of Immediate Assistance (EKAB). A few days ago, Mr. P. Laskaridis owner of Laskaridis Shipping Co. and leader of the Aikaterini Laskaridis foundation, was awarded by the Greek President for his long term contribution and promotion in the sectors of education, history and the contributions to the Greek coast guard and the Greek Navy⁵. The company S. Livanos Hellas, every year organizes its annual dinner in the honor of the Greek marine, expressing in that way the gratitude and the support towards its employees, and in the same direction the company supports the local hiring and the Greek merchant marine academies by attempting keeping a steady number of 10 to 14 Greek mariners on board each vessel of the company even though the cost of the Greek crew members cost is comparable higher than this of other nationalities⁶.

Apart from the individual course of actions that each company is willing to proceed with for the benefit of the society, there has been a collective initiative through the Union of Greek Ship owners, which was the foundation of a separate legal entity, with a nonprofit making character with the name “Company of Social Offering of the Greek Shipping”, or shortly “SYN-ENOSIS” (ΣΥΝ-ΕΝΩΣΙΣ) (Ugs.gr, 2018). As stated in the official website of the Union of Greek Ship-owners, this new entity has been created to act as a permanent vehicle with which, the Greek Ship-Owning community will be able to realize solidarity projects, projects of support and contribution towards the Greek society (Ugs.gr, 2018). The main fields of interest and action of SYN-ENOSIS include involvement in food aid, social care, health, maritime education, projects of public interest and last but not least granting of scholarships (Syn-enosis.gr, 2018). In Kathimerini’s newspaper online version article, it was stated by the American ambassador Mr. Geoffrey R. Pyatt that the Greek shipping is the major contributor of the AMVER (global voluntary and rescue program ⁷) and characterized Greek shipping community as a bright example of positive contribution to the society ⁸.

In the actions of the initiatives of the Greek shipping community, into consideration should be also taken the establishment of the Hellenic Marine Environment Protection Association (or HELMEPA) (Theotokas, 2011). It was an initiative of Greek ship-owners and mariners in 1982 with the first proposal of G.P. Livanos, aiming towards the elimination of sea pollution and enforcing of the safety standards

³ <http://www.naftikachronika.gr/2018/07/29/o-ellinikos-efoplismos-sto-plevro-ton-pyroplikon/>

⁴ <http://www.naftikachronika.gr/2018/07/30/to-idryma-stavros-niarchos-enischyeyi-oikonomika-to-pyrosvestiko-soma-ellados/>

⁵ <http://www.naftikachronika.gr/2018/07/27/o-p-laskaridis-parasimoforeitai-gia-tin-synoliki-tou-prosfora-ston-topomas/>

⁶ <http://www.naftikachronika.gr/2018/07/30/h-s-livanos-hellas-tima-ton-ellina-naftiko/#>

⁷ <http://www.amver.com/>

⁸ <http://www.kathimerini.gr/933213/article/epikairothta/politikh/paiat-h-ellhnikh-efoplastikh-koinothta-ypodeigma-syneisforas-sthn-koinwnia>

(Theotokas, 2011). The organization fully supports and operates under the IMO aim of "Safe ships in clean seas" (Theotokas, 2011).

By the above we can detect a big gap in the literature of CSR in bulk shipping and especially in the Greek bulk shipping industry. Apart from Fafaliou, Lekakou and Theotokas' (2006) research in the short sea shipping sector of Greece there is no additional literature on the CSR in Greek shipping industry which leads to the need for further investigation and especially of the segment of the industry that leads the Greek and the global shipping.

3 Theoretical framework: Nexus between company size and CSR

During the review of the literature, we came across a numerous amount of articles that they were investigating the relationship between CSR and financial performance of the company, with more specifically investigating the impact of CSR on financial performance (e.g., McWilliams and Siegel 2000; Aguinis and Glavas 2012; Barnett 2007). The size of the company and its relation with CSR engagement has also been an objective of study by various researchers, -yet much less. For more than 4 decades now, the results over the relationship between CSR and financial performance of the companies have been controversial, leaving the impact of CSR performance on the economic performance of the companies under question (Perrini et al., 2011; McWilliams and Siegel, 2000; McWilliams and Siegel 2001). For instance, Perrini et al. (2011) point out that even though a lot of researches and studies have a common place of, as they say, "the unstated assumption" that says if the most powerful companies are more involved in CSR actions and initiatives will have bigger returns, a lot of studies, for example the one of Horvathova (2010), conclude that there is no clear correlation or even a clear direction of the correlation. Lepoutre and Heene (2006) add that there is no clear relationship between the small size of the firm and their involvement in CSR activities, initiatives and the integration of a CSR strategy.

The vast majority of the researches have not been able to set as a factor of the CSR implementation the size of the company and the literature has mainly been focused on the bigger companies (Vázquez-Carrasco and López-Pérez, 2012). Yet, small and medium- sized enterprises (or SMEs) are representing more or less the 99% of the companies in EU with a very high percentage of employment which is more than 60% meaning that they have a direct and undisputable impact on the society (Lepoutre and Heene, 2006), and all around the globe in developed and developing countries, SMEs are responsible for a significant share of the economic contribution (Jamali et al., 2009). Some say that SMEs tend to and are more able than bigger companies to be involved in social responsibility for various actions and social engagement including job creation, assisting in the economic growth, being innovative (Audretch, 2002). Additionally these SMEs are able to concentrate employees, suppliers and clients more into local communities (Lepoutre and Heene, 2006). As Besser (1999) highlights, it is of vital importance for SMEs to create a good reputation around their names for their competitiveness, leading to socially responsible actions. Another reason for small companies being socially responsible is the small size of the company that for the majority of the times leads to the owner being also the manager which leads to the creation of personal bonds that can result into socially responsible actions and behaviors (Solymossy and Masters, 2002). On the other hand it has been also concluded that socially responsible actions from small businesses are more difficult to be achieved, since for example managers of small businesses might think that their impact on the society or on the environment is very little (Hitchens et al., 2005), or because there is a restriction of time and/ or resources (BITC, 2002) etc. Baring these pros and cons in mind we can assume that they can work reversely for the big companies. As for an example, big companies do know their direct and big impact on the society and, if direct relation exists and to the environment as well (i.e. shipping companies), and additionally

they hold significantly more human capital and financial resources than small companies.

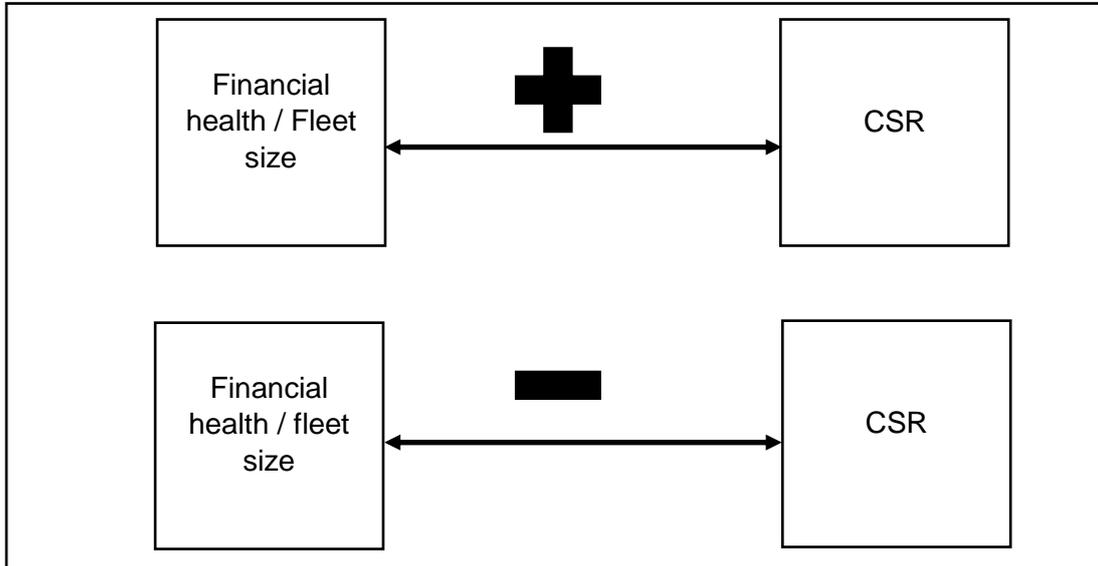
At this point, we have to highlight that multinational corporations seem to always appear and present their CSR actions on the media or in the CSR research (Blombäck and Wigren, 2009) and they tend to report and publish these reports on CSR that include their actions towards the society (Baumann-Pauly et al., 2013). On the contrary less is known about CSR involvement in the small companies. There is a wide spectrum of initiatives that has been designed and can be implemented only by big and multinational corporations which have the demanded resources as human capital and financial eligibility in order to be able to integrate the needed procedures in their operations (Baumann-Pauly et al., 2013). However, Baumann-Pauly et al. (2013) show in their research, that small and medium sized enterprises tend to actually implement comparably more CSR practices than the multinational and big corporations which sometimes tend to lack CSR implementation plans when they are focused on communicating their commitments to CSR. They conclude that CSR implementation is not dependent on the size of the company without detecting any relationship and they point out that the size is only being held accountable for some attributes that can be advantageous or not for CSR actions to be taken.

Concluding, Kolk (2003) highlights the fact that small sized and medium sized companies and not only big corporations or firms that belong in industries with significant environmental impact have been becoming reporters of their activities. Corporate social performance and its relationship with the financial performance of the company can be characterized as “complex, ambiguous and nuanced” which is something that does not leave any margins for generalization of assumptions. (Devinney, 2009). Keeping all the aforementioned in mind in order to reach our conclusions we have to take into consideration the following that result from our literature review: 1) There is no clear relationship between the financial performance and the CSR engagement of the companies and 2) There is no clear relationship between the size of the companies and their engagement in CSR. The literature examined was not based on the research in the shipping industry since there is a big gap of literature in this industry segment. Let alone, there is a big gap in the literature regarding the relationship between size / financial performance in the Greek bulk shipping industry.

In the present thesis we are going to examine which of the above relationships is present in the Greek bulk shipping industry. We refrain from the construction of hypotheses since there is absence of indication for a clear direction of the relationship between CSR and financial health.

In Figure 3.1 we present a graphical representation of the theoretical framework that we utilized.

Figure 3.1: Theoretical framework



4 Methodology

4.1 Quantitative Method

The methodology for the present research thesis is consisted of quantitative research method. More specifically the methods that will be applied are the following: Statistical and theoretical analysis based on surveys/ questionnaires based on extensive literature review and based on a survey.

First of all, an in depth Literature Review of existing papers, books, articles, journals and online sources is of vital importance for the comprehensive understanding of the rational, the theory and the perspectives of CSR and it will provide us the needed secondary data to structure our basis for our research. Both international but also Greek literature had to be reviewed. Basic ideas, rational, understanding and fundamental theory as also debates and necessity behind CSR can be found in the international literature which also includes a variety of researches on CSR regarding shipping activities. As our research is being focused on the Greek shipping society and more especially the Greek bulk shipping companies there is indeed a need for the review of also the Greek literature. Giannarakis and Theotokas (2011) on their paper about CSR performance as effected by the financial crisis, Theotokas and Katarelou (2000) on their research on strategic choices for small bulk shipping companies in the post ISM code period and mostly Fafaliou, Lekakou and Theotokas (2006) with their case study on the Greek owned short sea shipping companies, are the three core insightful articles of the Greek academic literature that are building our interest for further investigation on the direction of Greek bulk companies. Our secondary data had been carefully collected and selected so as to be closely related to our interest.

Since no other research has been traced on the aforementioned sample, the Greek bulk shipping companies, and its involvement in CSR as factor of size of the fleet, an indisputable need for primary data is required. The primary data have been obtained by self-administered questionnaire (SAQ) that has been designed by the author and distributed to the respondents. The survey is being comprised of 25 (with an additional one for organizational purposes meaning 26 in total) questions that are based on the knowledge of the existence of CSR, on the company's awareness on CSR, voluntary and obligatory actions taken towards environmental, economic and societal dimensions that the company is being involved in and the perception of the company's dependence upon the existence of CSR actions and initiatives of its economic sustainability as also of its relationship with the stakeholders. We kept the questionnaire as short as possible with an average timespan of 10 minutes, but at the same time to obtain all the information/ data we need.

4.2 Sample

The sample of our research as aforementioned is consisted of Greek owned shipping companies that their fleet is entirely consisted of or it includes at least one vessel for the carriage either of dry bulk cargo (i.e. grain, scrap, steal) or liquid bulk cargo (i.e. crude oil, oil products etc.) or manage such vessels. Our sampling is a mixture of both criterion and purposive sampling methods. The criterion sampling has to do with the selection of cases that meet a criterion of importance as per

Patton, 2001. Our criterion for our case is the consideration of the restricted engagement in initiatives in the direction of CSR and sustainability in the shipping companies' strategy. The nature of our sampling to be also purposive comes from the fact that our whole population is the Greek shipping companies that their fleets include dry and/or liquid bulk vessels out of all the Greek owned shipping companies that have a great spectrum of activities.

4.3 Data Collection Tools

Galant and Cadez (2017) mention 4 different approaches in order to measure CSR which include reputation indices, content analysis, questionnaire-based surveys and one-dimensional measures. As they add, questionnaire-based surveys are mainly used when not enough data and information including corporate reports are available in order to proceed to a content analysis. After conducted research, we detected lack of information available in public with also a significant lack of even websites of the companies, let alone publicly available CSR or other reports. Our main and sole tool for collection of feedback from the above mentioned companies has been the aforementioned questionnaire created by the author of the present thesis that has been handed out to as many as possible companies (approximately 100 shipping companies operating fleets as described above based in Greece) in order to create a representative sample with a representative status of the market. The final sample of the 100 companies has been tested for its representativeness by two senior managers of bulk shipping companies that operate in Greece. The initial purpose was to have a representative sample of Greek bulk shipping companies operating on a global scale.

Our first aim for individuals that would answer the questionnaire was, if the company had such a department, the CSR managers or somebody else from the specific department. Since the structure of the majority of the Greek companies having such vessels but also in general, are small companies up to four vessels each with a maximum office staff of ten to fifteen employees, and as many people are involved in different operations, there is no existence of such department or even of clear and specific roles among individuals. Without being able to find more up to date data and after establishing communication with specialists and employees from the Greek shipping industry, we can be based on Theotokas and Katarellos (2000) statement that the majority of the shipping companies which exist in the bulk shipping industry are of small size and of Mottram (1999) that 30% of the world's shipping companies are small. Keeping that in mind we tried to reach out to the top management of the smallest in size companies in order to obtain as honest and valid answers that reflect the reality as possible.

The questionnaire has been created on an online questionnaire designing tool and has been sent directly to the person of interest, directly to the companies or by third parties that could forward it to people that would have interest in filling it.

In addition to the above, once the survey filling procedure was finalized, based on our sample, and on the respondents that were willing to reveal the company they are representing, we tried to obtain additional secondary data from the websites of these companies. Some of the companies are operating a website and some others do not. From those that do, we found additional information regarding their actions

on the CSR since some of them have a dedicated section for Social Responsibility or Sustainability. We mention specific actions or their published CSR reports if they had as such. Also we investigated how related and how representative were the answers of the survey and if they were in line with the information provided at the websites of the companies.

With the last question, number 26, of the questionnaire we were requesting the respondent to specify the name of the company he or she was representing. This was necessary and valuable information in order to be able to link each questionnaire received to a specific company in order to find the fleet size of the company. Even though it was stated in the introduction, in the question and along with the email encompassing the questionnaire when forwarded that all data were and would be treated with the maximum confidentiality some respondents (3 in total) did not fill the name of the company they are representing, something that makes it impossible for these companies to be tracked down and find which they are with all needed information as their fleet size. Apart from that knowing the source of the completed survey can prevent us from obtaining more than one response from the same company, something that would lead to false results. This information is mostly important for the second part of our research question in order to be able to proceed to a statistical (correlation analysis).

4.4 Data Analysis

We had set a deadline for the collection of the questionnaires since we were under time pressure for the finalization of the research. After the collection of the questionnaires we conducted theoretical and statistical analysis. A statistical analysis has been conducted from all the sources in order to have an overview of the industry's perception and actions towards CSR based on the answers obtained but also we have split the answers between known and unknown sources in order to draw more specific conclusions. We have conducted a statistical analysis in order to explore the relation between CSR involvement in the shipping companies' strategy and the financial health in terms of size of the companies with the size of the fleet being considered as a driving force.

There has been an imperative need for quantification of the answers of the questions in order to execute our statistical analysis. We reached to the decision that the most proper approach would be to create a score with a maximum possible achieved score of 100 with the most active involvement in CSR actions and minimum possible of 0 with the least active involvement in CSR actions. In the questionnaire are included different types of questions that vary regarding the way of answering. More specifically there are "YES/ NO" questions, questions that the respondent has to rate on a scale from 1 to 10, questions that the respondent has to choose among more than one different choices or even to specify, write and mention facts and additional data. Especially the last type of questions with the respective answers are without any doubt the most demanding if for the quantification of these answers. Taking into consideration the aforementioned we decided not to take into account all of the questions for the creation of scores. The main reason is that since the answers that needed further investment of time for answering in free text from the side of the respondent would be impossible to

quantify without making sure that all the respondents disclosed the requested data. Respondents in each company could vary from CSR manager to an Operations Manager with a vast experience in the industry and a long career in the company. The aforementioned types of executives among them have different perspectives, restricted time, and each individual might have a different level of willingness to answer the survey properly. If no answer has been obtained in one or more questions this cannot be interpreted as there is no action taken from the side of the company. It is most probable that the respondent either does not have relative knowledge to answer the question or he was under time pressure resulting to skipping the answer. All the questions have been equally weighted with a maximum score from each of 100. YES/ NO questions have a score of 100 for "YES" and 0 for "NO". For the multiple choice questions, each answer has a score of 100. The sum of the checked answers multiplied by 100 and divided by the total number of the possible answers of each multiple choice question results to the score for each multiple choice question. The scale rating answers are the easiest since the score of each question is the answer of the respondent multiplied by 100. The sum of the scores of individual questions, following the previously mentioned method, divided by the total number of questions we used for the scoring procedure will lead to the final score of each company participated.

In order to be more specific, questions 1, 4, 5, 6, 14, 16, 17, 18 and 19 are YES/ NO questions. Questions 2, 20, 21, 22, 23, 24, 25 are questions with scaling answers from 0 to 10. Questions 3, 9, 10, 11, 12, 13 are multiple choice questions. All the aforementioned questions will be taken into consideration for our scoring procedure. Questions 7, 8 and 15 due to their nature have not been taken into account. Additionally there is a need to mention that all questions included in our analysis have been equally weighted.

More specifically the scoring method has been conducted as per below table:

Figure 4.1: Questionnaire Scoring

Question#	Q1#	Q2#	Q3#	Q4#	Q5#	6#	7#	8#	Q9#	Q10#
Type-and-Possible-Score#	YES/NO#	Scaling·	M·	YES/NO#	YES/NO#	YES/NO#	Not·into·	Not·into·	M·	M·
	100·or·0#	0-100#	Choice#	100·or·0#	100·or·0#	100·or·0#				
Question#	Q11#	Q12#	Q13#	Q14#	15#	Q16#	Q17#	Q18#	Q19#	Q20#
Type-and-Possible-Score#	M·	M·	M·	YES/NO#	Not·into·	YES/NO#	YES/NO#	YES/NO#	YES/NO#	Scaling·
	Choice#	Choice#	Choice#	100·or·0#	account#	100·or·0#	100·or·0#	100·or·0#	100·or·0#	0-100#
Question#	Q21#	Q22#	Q23#	Q24#	Q25#	%	%	%	%	%
Type-and-Possible-Score#	Scaling·	Scaling·	Scaling·	Scaling·	Scaling·	%	%	%	%	%
	0-100#	0-100#	0-100#	0-100#	0-100#	%	%	%	%	%
Type-and-Possible-Score#	0-100#	0-100#	0-100#	0-100#	0-100#	%	%	%	%	%
	0-100#	0-100#	0-100#	0-100#	0-100#	%	%	%	%	%

We understand that the aforementioned scoring method has been created by the author of the present thesis without any prior experience or without being based on following a pre-existing scoring method which can result to biases and / or pitfalls. This is the reason that we applied the correlation analysis (as we will see below) to both the sum of the score of all the questions but also to the sum of the first two general questions' sum in order to cross check whether our results are significantly altered in order to answer the last part of our research question.

Our analysis is being comprised of two different parts which include a statistical correlation analysis with a main prerequisite being the need for knowledge of the source, in order to perform our statistical analysis with dependent and independent variables with the former to be the score of the survey and the latter data as the companies' fleet size in order to answer the second part of our research question. Descriptive statistical analysis with the use of graphical techniques as pie charts, scatter plots and histograms and comparison of answers among all respondents has been also conducted in order to answer the first part of our research question and explore whether the Greek bulk companies are engaged in CSR activities and which activities these are.

As already mentioned above, the websites of the companies have been utilized to detect the complete fleet sizes. In addition to that, another useful tool that has been utilized is the Equasis.org, which is a database with all the shipping companies based worldwide, with a complete, updated fleet list and contact information. The scores with fleet size allowed us to proceed to a statistical correlation analysis in order to find the relationship pattern between size of the companies and CSR engagement.

4.5 Ethical Considerations

This research, as mentioned beforehand, includes a questionnaire filled and obtained by representatives of shipping companies as a supporting method for our research. It is being mentioned in the introduction of the questionnaire that all the answers will be treated with the strictest of confidentiality. Furthermore the last question asks the participant to fill the name of the company he or she represents and it is also being stated that this sensitive information will be treated with confidentiality. In the present thesis document the reader will not come across any details regarding the respondents, and the companies they represent. Analysis and presentation of the results has taken place without any possibility by the side of the reader of matching the answers with specific companies. The author will, as reassured the participants, will respect their will for confidentiality and the trust they showed him.

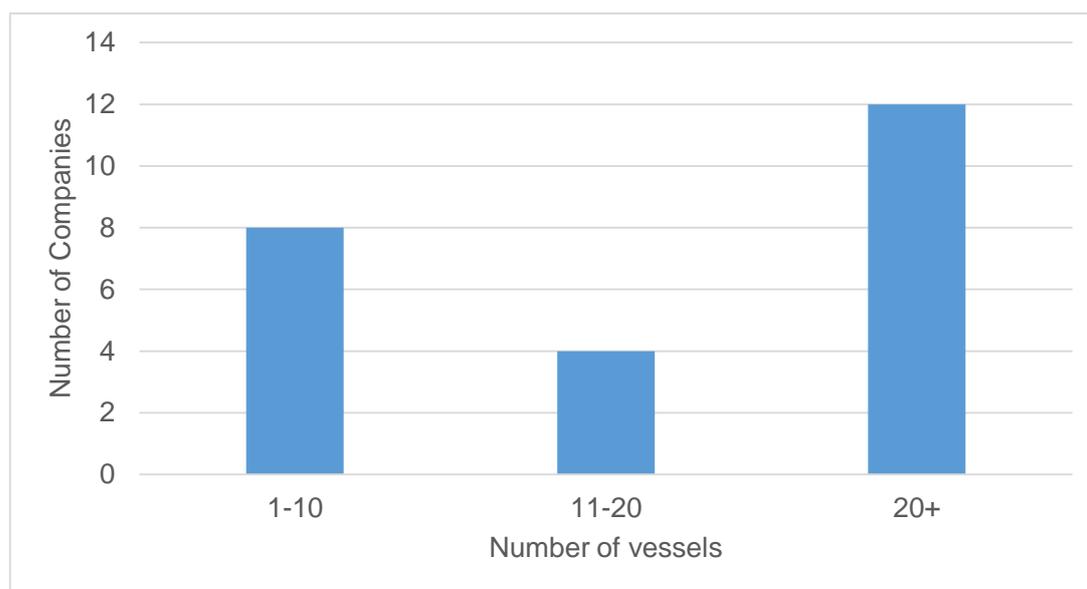
4.6 Potential Research Bias

The present research has been conducted with a personal interest of the author to explore the CSR field in the shipping companies of his own home country, Greece and their initiative involvement in CSR and sustainable shipping without any professional nature but just purely academic interest. The author is not willing in any case to judge the actions taken and the choices made by the companies that were willing or had the chance to fill and return the questionnaire.

5 Findings, results analysis and discussion

We collected 27 filled questionnaires from different Greek bulk shipping companies that could meet our criteria in order to be part of our sample. 21 one of these companies answered our last question requesting the name of the company the respondent was representing. 3 out of the remaining 6 respondents of the questionnaires were willing to disclose the name of the company but they were not willing to fill the name in the questionnaires. The remaining 3 questionnaires did not include the name of the company and we cannot detect the source of them. As a result we can conclude that we were able to conduct our statistical correlation analysis only with 24 out of the 27 questionnaires. Even though the number is low comparing to our population we consider that our analysis can be a non-conclusive indicator that can lead to further examination and research. As already mentioned the 100 companies that we addressed to were considered to be a representative sample. However our sample is comprised mainly from big companies (see Figure 5.1). Our findings are more representative for bigger Greek bulk shipping companies.

Figure 5.1: Sample companies fleet sizes



Here below we present relevant table with descriptive statistics on both our variables which are the Fleet Size and the Score that resulted from the questionnaire.

Figure 5.2: Descriptive statics on Fleet Size and Score variables

Variable	N	Mean	Minimum	Maximum	Range
Fleet Size	24 (no source for rest)	35 vessels	2 vessels	134 vessels	132
Score	27	55	19	84	65

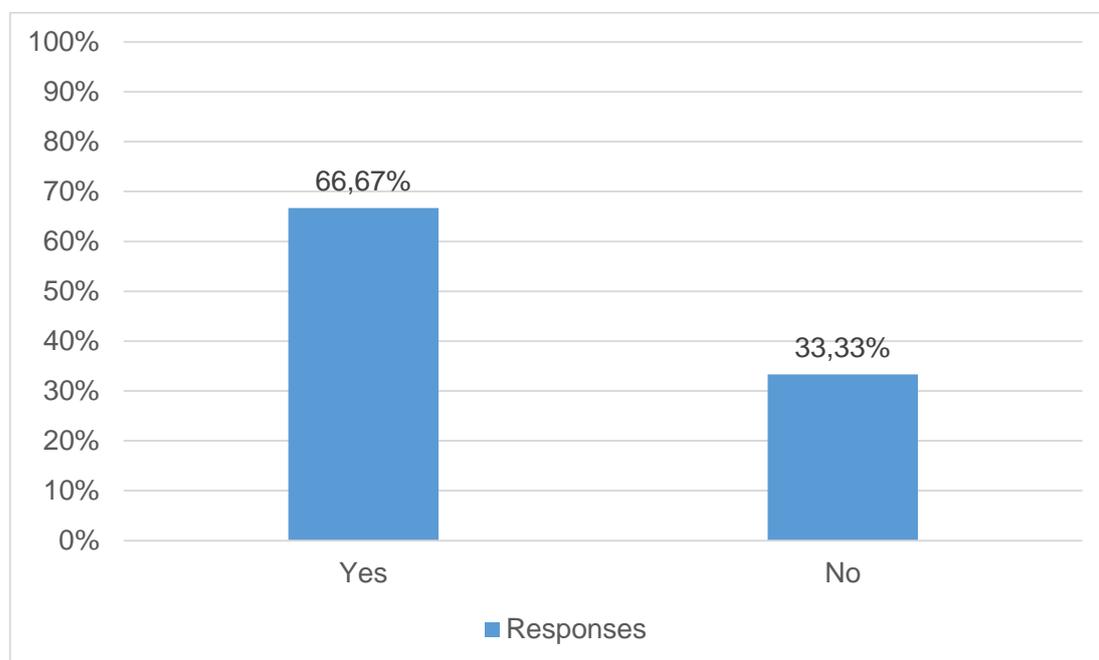
We discuss the findings and results of our study according to our research question. "Do Greek bulk shipping companies take CSR actions and initiatives; Which actions

are these, and; Does the financial health of the Greek bulk shipping companies have a negative or positive impact on the engagement in CSR?' We begin the discussion with the findings regarding the CSR actions and initiatives of Greek bulk shipping companies.

5.1 CSR actions and initiatives: Results and discussion

At the first question of the questionnaire we were asking the respondents to specify whether the company they were representing was following a specific philosophy or vision regarding CSR. 18 out of the total 27 companies (66,67% of our sample) seem to follow a strategy and have a vision towards CSR whilst 33,33% of our sample does not have and follow a specific philosophy. We present the relevant self-explanatory Figure 5.3.

Figure 5.3: Philosophy followed by the Greek bulk shipping companies re. CSR



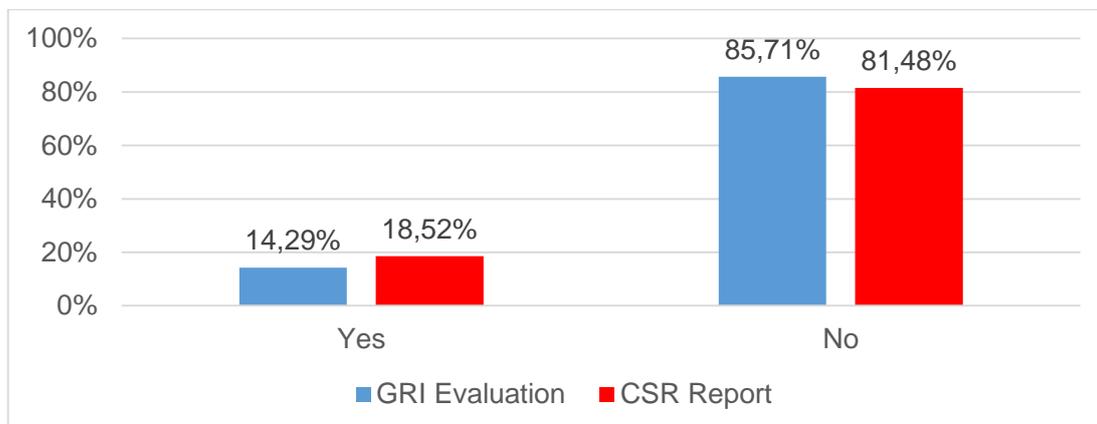
This can be interpreted in several different ways. We can suppose that approximately 1/3 of the shipping companies of our sample either are not willing to shape and follow a specific philosophy or vision for CSR, or we can also suppose that they, as per Theotokas (2011) they might not know CSR as a term. It is possible that they have been following CSR practices, with voluntarily actions and initiatives towards the benefit of the society and / or the protection of the environment without being able to identify that they are following CSR practices. Yuen and Lim (2016) mentioned that one of the barriers for the implementation of CSR in shipping can be the lack of an overall strategic vision which can lead to lack of commitment regarding CSR. Fafaliou, Lekakou and Theotokas (2006) noticed the limited involvement in CSR by short sea shipping companies, something that is in contrast with our finding at a certain extent. Short sea shipping involvement in CSR might be limited due to the not international nature of it if compared to the bulk shipping. Simultaneously we can notice that 2/3 of our sample does have a specific philosophy and vision towards CSR, which is a fact that we cannot oversee.

In the second question, respondents were asked to show how valuable do they perceive the CSR engagement generally for their company. From a scale from 0 to 10 our sample scored an average of approximately 7,4 that considers that CSR is valuable. We consider that this alone has not any valuable meaning apart from the fact that we consider that a big percentage of our sample considers CSR engagement valuable which is an interesting finding. What we can detect is that our answers are varying from 0 to 10 with 23 answers being 7 and above with one company considering CSR is with no value choosing 0 as an answer. What is also interesting here, is that whilst 66,67% has a specific philosophy towards CSR, 23 out of 27 companies or 85,18% thinks that it CSR is valuable. The question that we raise here is if these companies do all think that CSR is valuable, how is the non-existence of a philosophy and vision by all of them explained? We can once again reflect to the fact that there are companies and individuals that they act in a socially responsible way without even knowing the existence of CSR as a term. We have to highlight that individuals that answered the questionnaires might recognize the non-establishment of a clear philosophy about CSR from the side of the company but they can detect some behaviors, actions and initiatives that without any doubt can point that the higher management of the company recognizes the value of CSR. Companies that even marked the value of CSR about the company with a 10/10 do not appear having a philosophy towards it.

As we mentioned in the literature review and in our theoretical framework, utilizing the stakeholder theory *“the stakeholders, through the stakeholder theory have the right to be aware of financial and non-financial information that are related to the company (Gray et.al., 1996)”*. In respect to this, we asked the companies whether they publish a separate CSR report. As expected a very big percentage of 81,48% as per Figure 5.3 in the red column does not publish CSR report with only 5 out of 27 companies stating that they publish. Drobetz et al. (2014) researched the CSR disclosure of listed shipping companies and they concluded a constant growth and additionally, highlights that the amount of shipping companies engaging in CSR reporting has been increasing the last years, and it is generally accepted that the number of shipping companies engaging in CSR reporting has increased (Lund-Thomsen, Poulsen and Ackrill, 2016). This is not being reflected by the responds we obtained as a significantly big percentage does not engage in CSR reporting. In the blue column of the Figure 5.4 you can see the percentage of the companies out of the 81,48% that they are having their CSR reports evaluated based on the GRI standards⁹. The rest 14,29% is not evaluating their reports based on GRI standards. After our research on the companies' websites in order to find CSR relevant information, we found that none of the companies that were declaring that they publish CSR reports had such report available on their website. We cannot make any conclusions regarding the size of the company in fleet terms and its relationship with CSR reporting since the shipping companies of our sample that publish CSR reports have a fleet that vary from 10 to 100+ vessels.

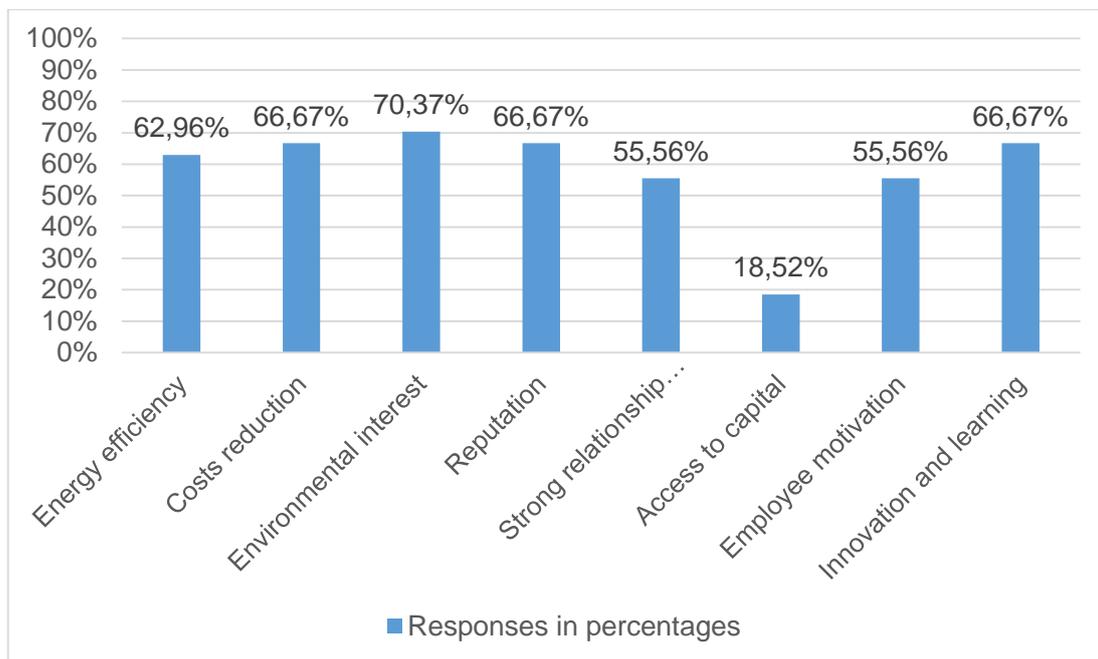
⁹“ GRI helps businesses and governments worldwide understand and communicate their impact on critical sustainability issues such as climate change, human rights, governance and social well-being.” Source: <https://www.globalreporting.org/information/about-gri/Pages/default.aspx>

Figure 5.4: CSR reporting in the Greek bulk shipping companies



We asked our respondents, in case they consider that CSR is valuable, which objectives their company has towards CSR. The findings were very interesting. As we can see in Figure 5.5 the interest of the Greek bulk shipping companies based on the answers we obtained focuses mostly on the environment with a percentage of 70,37%. The least interested companies are in CSR implementation for achieving access to capital. Jones et al. (2009) include in the potential benefits of CSR that the company might perform better financially and increase its profitability. Fernando and Lawrence (2014) mentioned also the attraction of investors by socially responsible companies and Ernst and Young (2002) mentioned as a driving force for CSR implementation the pressure coming from investors. This is important because it seems that Greek bulk shipping companies do not believe or ignore that they can have access to capital by CSR involvement. On the other hand we cannot ignore the possibility of the potential completely altruistic and philanthropic character of these companies, but we have to take into consideration the fact that companies operate to satisfy apart from stakeholders as the employees and the society, also the shareholders that they seek profit maximization. As we aforementioned also in the literature review there are companies that are part of the supply chain and investors as well that are interested in cooperating with and investing in respectively, companies with a socially responsible face. With regards to that, fourth in order comes as a CSR objective the establishment of strong relationship with other parties of the supply chain and parties involved in the companies day to day business and the employee motivation, both with 55,56%. Third as objective comes with 62,96% the energy efficiency and second with 66,67% the cost reduction, the reputation and the innovation and learning. Jones et al.(2009) include into the potential benefits of CSR implementation the reputation that can come as a result of the better service produced and from the socially responsible face of the company as also the benefits of the cost reduction.

Figure 5.5: CSR objectives to be achieved in Greek bulk shipping companies

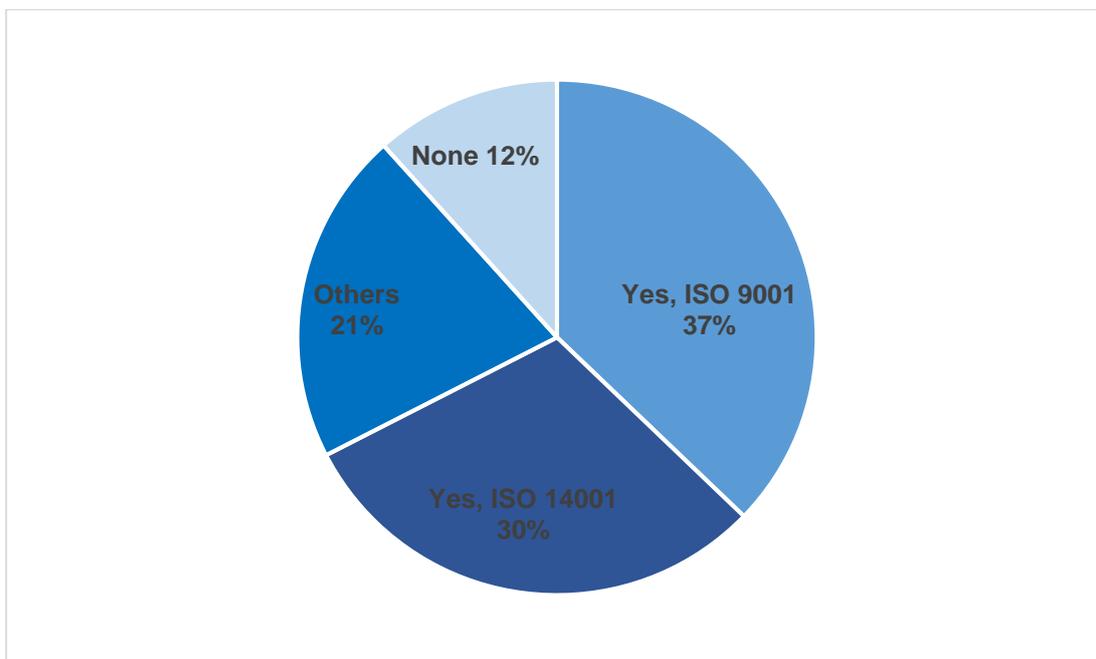


What we would like to highlight at this point is the fact that we consider that at a certain extent, all CSR actions and initiatives taken with a CSR objective being the environmental interest is mainly because of the strict nature of the industry of shipping towards violations of international environmental regulations. We suppose that the fear for penalties if rules for environment protection are not met can lead the companies to implement additional measures and take additional voluntary actions for the protection of the environment.

The voluntary face of the shipping companies can be also reflected by the adoption of standards as ISO standards. As per Organisation Internationale de Normalisation (ISO), ISO is an independent, non-governmental international organization that through its members is responsible for the implementation of voluntary standards that provide specifications for services to ensure quality, safety and efficiency and exist to facilitate international trade¹⁰. We asked the companies if they have adopted ISO 9001 and ISO14001 for quality management and environmental management respectively, other standards or if they adopt no extra quality/standard systems and we obtained the answers as per Figure 5.6.

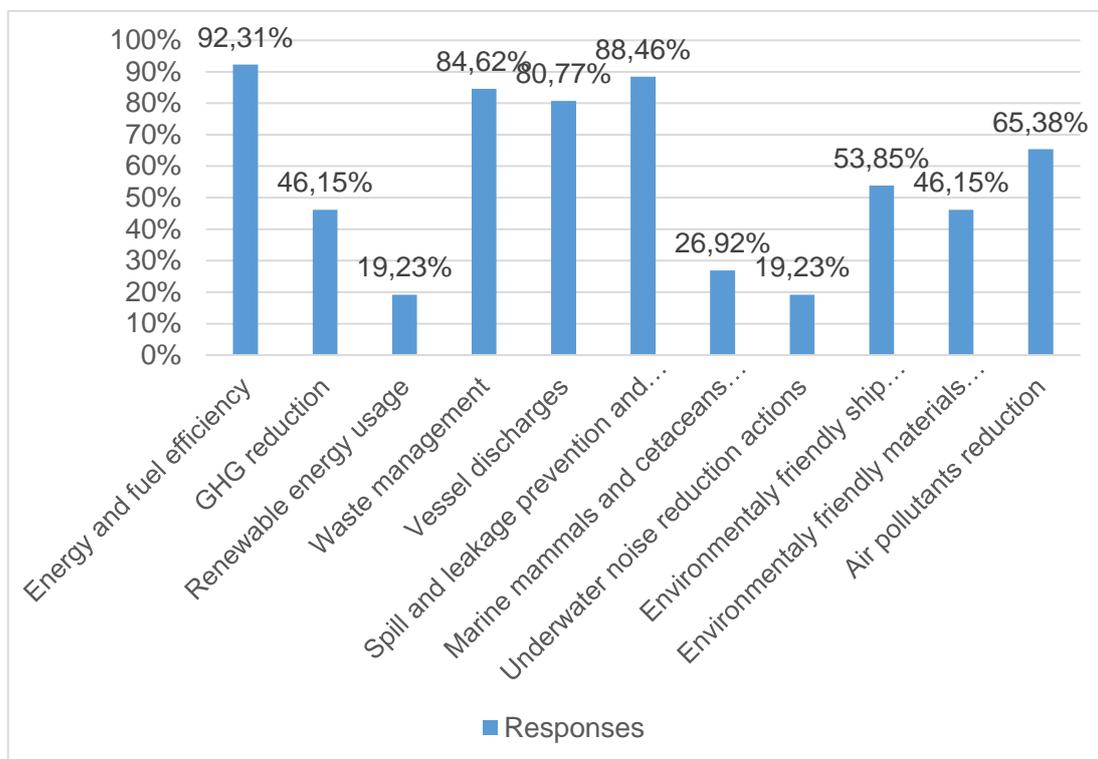
¹⁰<https://www.iso.org/about-us.html>

Figure 5.6: ISO standards adopted by Greek bulk shipping companies



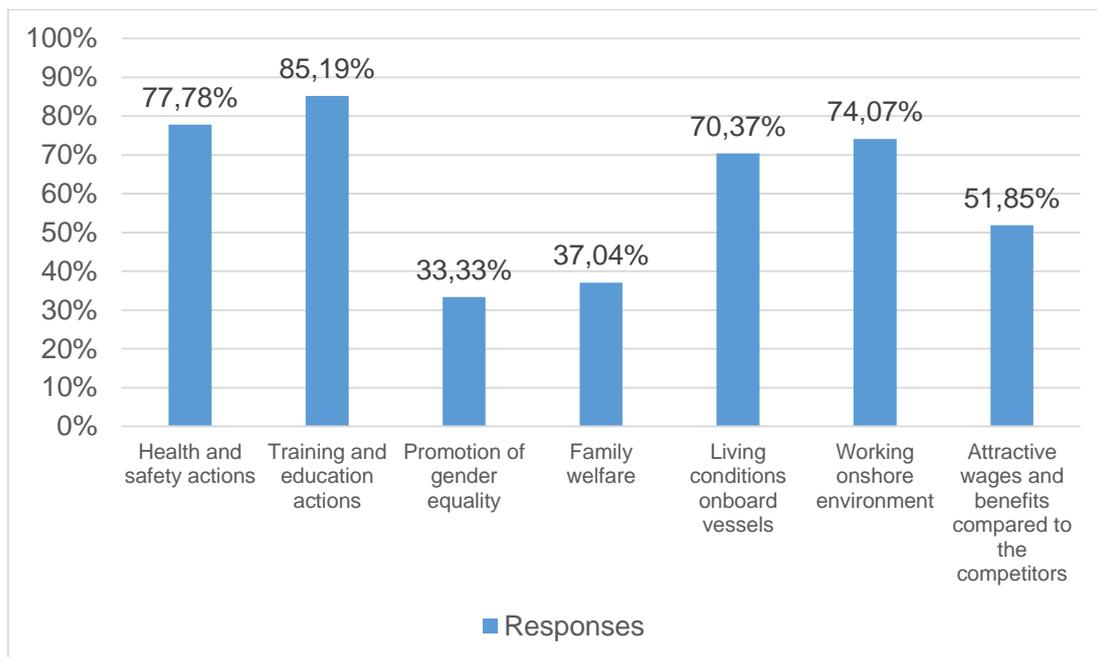
As already aforementioned, respect to the environment and the protection of it has been becoming more and strict and it is obligatory at a great extent. We asked the companies what initiatives they take towards energy efficiency and environmental protection with the prevailing that are being taken by the majority of the companies to be initiatives towards energy and fuel efficiency, waste management, vessel discharges, spill and leakage prevention and response proactive actions. IMO regulates these actions and what we can comment is that the majority of the actions we asked if they are being implemented by the companies as initiatives are being proactively regulated in a great extent. Renewable energy usage and underwater noise reduction initiatives are less popular as it seems in the Greek bulk shipping community with both being applied by only 19,23% of the companies. Detailed results can be found in Figure 5.7 below. One of the respondent companies specified a very characteristic initiative which is the placement of order of 19 vessels that will be fueled with LPG. Indeed such an initiative needs access to a significant amount of finance but it is an initiative and decision that apart from the long term fuel energy save will lead into less impact to the environment and the society as a whole.

Figure 5.7: Energy efficiency and environmental initiatives taken by the Greek bulk shipping companies



We tried to explore the relationship of the company with the environment as part of the triple bottom line of the sustainable development through the initiatives that the Greek bulk shipping companies take for energy efficiency and environmental protection. As also part of the triple bottom line and through the stakeholder theory we tried to see the CSR relationship that the Greek bulk shipping companies establish with the society including both internal and external stakeholders and actions. For the internal stakeholder we tried to explore the initiatives taken towards the companies' employees' well-being. It seems that the vast majority of the companies of our sample with a 85,19% invest and take initiatives towards training and education. We understand that constant training is of utmost importance especially for safety reasons and for the smooth operation of the vessel on a day to day basis. As we can more specifically see with 77,78% the companies take initiative for the health and safety of the employees onboard the vessels. On the other side we can see that companies of the Greek bulk shipping do not promote gender equality with only the 33,33% of the companies of our sample to be promoting gender equality. This can probably reflect the traditional and old mentality of the Greek companies which supports that shipping is not an industry for women. Whatsoever, one of the respondents mentioned that the company that they are representing is giving equal chances to all its employees without any discrimination among nations, ages and gender. The rest of the initiatives that they undertake can be found in Figure 5.8.

Figure 5.8: Initiatives towards employees' well-being



What we can notice from Figure 5.8 above regarding initiatives towards employees' well-being is that we consider that the initiatives are mostly concentrated in those that have a direct link with the working environment of the employees probably aiming to an increased performance. Training, health and safety, living conditions onboard vessels and working environment onshore, are actions that can increase efficiency but are also being regulated by conventions as the Safety Of Life At Sea convention (SOLAS) regulated by the IMO, and the Maritime Labor Convention (MLC) adopted and regulated by the International Labor Organization. We can notice that a percentage a little bit higher than 50% is interested in providing attractive wages and benefits compared to the competitors. After a conversation with an employee of one of the companies of our sample he stated that:

"If you ask me, in my opinion I consider that Greek shipping companies with a few exemptions are being labor intensive and not capital intensive. Low salaries are a characteristic of the current situation faced in Greece after the economic crisis of 2008. Employers consider that it is better hiring more employees with less salary who can be expendable at least for the lower hierarchy levels than investing in higher salaries. Apart from that it is common that employees will be working overtime with no expectation of being paid or enjoying any other benefits exactly because of the fact that they are being considered to be expendable."

Even if this is the case for all the Greek shipping industry though we are not in the position of being able to generalize any of these we cannot also oversee this statement. One of the respondents declared initiatives and also actions which are being regulated and are being mandatorily implemented as safety working plans and comfortable living conditions. We have to keep in mind the voluntary nature which governs CSR and presenting actions to the public that are being mandatorily

implemented should not be considered or perceived as voluntary and it is misleading.

At this point we can also mention the fact that we asked the companies to disclose to us whether they are taking any extra initiatives supporting the implementation of the existing conventions and rules in different categories. In detail, 74,07% of the companies declared that they are taking additional measures and initiatives regarding health, safety and labor beyond the standards that conventions as STCW, SOLAS and MLC impose. The same percentage additionally takes extra measures towards the protection of the environment and safety, than the standards that conventions as COLREG, CSC and MARPOL impose.

Apart from employee well-being, we also tried to investigate the involvement of the Greek bulk shipping companies in the local socio-economic development. All the companies of our sample are based in Greece, with 26 of them based in the greater region of Piraeus including Faliro, Glyfada, Kifisia and Athens. The last one is based in Thessaloniki. The most interesting finding is that the local hiring is being supported only by the 46,15% of the companies. We consider that this number reflects the local hiring onboard the vessels and not in the offices since as from personal knowledge and experience of the writer of the present thesis, offices of the companies of the sample are being stuffed with people from Greece and of Greek nationality. Zervas (2014) states that Greeks employed by Greek owned companies onboard vessels under the Greek flag consist of 61% of the crew and the percentage of Greek sailors employed in vessels under foreign flags is 36%. An overall mean of Greeks working onboard the Greek owned fleet is 48% which is something that can verify the validity of the 46,15% of our sample. Apart from the local hiring, top in terms of engagement is the involvement in local community actions and local socio-economic development 46,15%. Such actions that were mentioned by the respondents include volunteering in the local community, participation of the company in local sport and cultural events for the social benefit as marathons and basketball football / games donations to local institutions for people with mental health problems and for institutions for abused children, and support and operation of NGO foundations.

Figure 5.9: *Local socio-economic development actions*

Actions	Percentage of respondents
Involvement in the local community actions	46,15%
Local socio-economic development actions	46,15%
Local hiring	46,15%
Local sourcing	38,46%
Granting of scholarships	42,31%
None	15,38%

In the Figure 5.9 we present an overview of the local socio-economic development action categories that our respondents had as choices and the percentages of respondents that took each actions and initiatives. 4 out of the 27 companies of our

sample (or 15,38%) is worth mentioning that are not taking any of the above actions. Apart from actions towards the local society we asked the companies to mention actions taken for worldwide disaster relief. The results are as per Figure 5.10.

Figure 5.10: Worldwide disaster relief actions

Actions	Percentage of respondents
Humanitarian aid	29,63%
Infrastructure rebuilding	22,22%
Environmental clean-up and rehabilitation	51,85%
None	29,63%

With this specific question in mind, we wanted to have a better overview of the activities of the company from the society view lens of CSR. As we can see, overall, not a significantly big percentage of the companies that took part in our survey are involved in such actions, with the leading category of initiatives to be environmental clean-up and rehabilitation, with 51,85% of the companies to be involved in such actions. 29,63% of the companies are not involved at all in such actions. Such actions include organization of coastal cleaning events and building of schools in underdeveloped countries like Africa and Asia or Uruguay and Ghana.

Since we considered that the above answers could be conclusive with difficulty, we decided that we should try to obtain as much information as possible in order to be able to draw some conclusions. We asked the companies to specify examples of voluntary actions taken in the following 5 categories with the relative percentage of companies that are engaging in and were willing to specify respective actions:

Figure 5.11: Specified initiatives towards CSR

Actions	Percentage of respondents
Energy consumption reduction	85,71%
Educational actions	90,48%
Societal actions	61,90%
Cultural actions	33,33%
Policy towards employees	66,67%
Others	4,76%

6 out of the 27 respondents did not mention any activities. We will not draw the conclusion in any case that these companies for our current analysis did not take any actions but we will continue our comments as the percentages are being drawn on the whole sample. As also above, we can see that actions and initiatives are mainly focusing on actions towards energy efficiency which can lead to two results. First is the environmental protection and second the long term cost reduction for the company. These actions have been focusing in the design of the vessels, in the installment of photovoltaic panels onboard the vessels, on actions such as recycling inside the offices and onboard the vessels, use of hull paints for friction reduction and others. But the category with the most actions specified is education, with a wide variety of actions that include, scholarships, additional seminars to the employees onboard and onshore with dedicated departments of the companies,

payment of tuition fees for students without income additional postgraduate programs sponsorship and internships. As many actions from the rest of the categories were also mentioned above, we would like to mention some actions which drew our attention including the following: yearly increase of salary and profit sharing were two unexpected findings. These two actions, both needed for our analysis below, are being taken from 2 different companies. One company operates a fleet of 2-4 vessels whilst the other a fleet of 30+ vessels. Keeping this in mind, we can detect that not only big companies are taking CSR actions.

What came as a surprise was the fact that 12 out of the 27 companies of our sample (i.e. 44,4%) include in their budget a specific amount only dedicated to CSR actions every year. It might be an insignificant percentage, but we consider, should we generalize our results to the whole Greek bulk shipping industry, that if almost half of the companies pre-decide budgets for CSR actions, it shows organization and not a strategy that is based only on the investment of "leftovers" for the common good.

We consider that the last three questions of the questionnaire are conclusive and that could reflect the general perception that the companies of our sample have towards CSR. The respondents, when asked if they thought that CSR added value on the service they offered, gave an answer of an average of 64, 48 out of 100. 5 companies ranked this question with more than 90 which leads us to the speculation that these companies consider CSR as a basic pillar of their operation and of the service they offer. When asked if CSR has a positive impact on the relationship of the company with the suppliers the average was 66,6 out of 100 with 8 companies considering it very important marking more than 90 for their answer. Additionally, 70,07 percent of the companies consider that CSR has a positive impact on their relationship with their clients. Keeping in mind that shipping and especially bulk shipping, is a B2B industry, with Theotokas (2011) mentioning this as one out of 6 major characteristics that we need to consider when trying to understand CSR in shipping, we see that more than 2/3 of the companies of our sample detect and recognize a positive impact in the relationship with their clients and their supplier. This number also matches more or less with the overall consideration of our sample for the value of CSR for their company which was a bit higher than 70%. As a B2B industry these clients and suppliers are also companies/business, which if we suppose that they are interested in the shipping company being socially responsible then we can assume that these companies that are part of the supply chain are also interested in implementing CSR strategies or taking some CSR initiatives. It is of utmost importance to mention that companies of our sample in a scale from 0 to 10 rank with a 5,46 that their clientele prefers, in such a competitive environment, to choose the services of these companies as a result of their engagement in CSR activities and of their CSR strategy. 4 out of the 27 companies highly agree and consider that the service they offer is preferable due to the CSR initiatives that are being taken by them.

In order to conclude and to answer the first part of our research question which is whether the Greek bulk shipping companies take CSR actions and to identify these actions, we can say that as it seems from our sample, the Greek bulk shipping industry is highly involved in CSR activities. We can detect a wide spectrum of different activities focusing on different aspects including society, local community,

environment, local socio-economic development, and disaster relief. It is indisputable that we detected a concentration of actions that support obligatory frameworks that have to be applied and followed as a high engagement in actions that focus on environmental protection and actions towards employees. We understand that these fields have been the center of attention of many international organizations and are in direct link with the society. In this direction, we could suggest that the companies are focusing their activities and engagement regarding CSR on these categories for the three following reasons: 1) We consider that they are willing to be proactive in order to prevent unwanted impacts, 2) Sometimes environmental interest can be seen from the viewpoint of energy efficiency which can lead into decrease of operational expenses in the long term, 3) Initiatives and actions towards CSR for employees can potentially increase their productivity if they work with more tempting incentives. 3 companies of our sample additionally are also investing money and are supporting the operations of 3 of the biggest non-governmental non-profit driven foundations of Greece that are focusing in disaster relief, education, economic support of local communities, promotion and support of the maritime education and culture, granting of scholarships, economic support and building of schools in countries of Africa, support in the research of the fight against cancer and charities for the public interest and donations the Greek navy, the Greek coastguard, the Greek firefighting brigade and others.

Furthermore in section 2.1.3, we presented the 4 CSR strategic options identified by Galbreath (2006). If we had to classify the Greek bulk shipping companies in one of these four strategies we would consider them following the second one. This is the *"Altruistic strategy"*. As Galbreath (2006) mentions *"the relationship between the firm and its community is acknowledged and understood"*. The companies of the Greek bulk shipping industry seem to be identifying the existence of different stakeholders and the interconnection as also the interaction with these different parties internally and externally. The understanding of the companies that they have to return something is obvious as is the great extent of philanthropy and charity that characterizes the industry. We are not in the position of doubting and / or questioning the philanthropic nature of these actions and the real deep humanitarian interest of the people behind these initiatives, but we cannot neglect that some like Hemingway and Maclagan (2004) argue the difficulty to detect the real incentives behind these altruistic and humanitarian actions keeping in mind that one of the potential benefits of CSR engagement is the improvement of reputation, but it can also be the increase of profits, or the pure humanitarian attitude of individuals and corporations.

5.2 Financial health and CSR

5.2.1 Findings

In order to be able to answer the second part of our research question we conducted a simple correlation analysis. As we have explained, we correlate the financial health of the company on CSR engagement. In our methodology we used financial health in terms of fleet size while CSR engagement of each company has been obtained using relevant methodology as described above and by utilizing the results of our questionnaire.

The results of the correlation analysis are as follows: $r=0.276$ ($p=0.19$). Our correlation analysis reveals the typical finding of many previous researchers (e.g. McWilliams and Siegel 2000), i.e., that CSR and financial performance are not statistically significantly correlated. Still, in order to inform better our results, we conducted a further analysis taking only two measures of CSR –i.e. two questions- of CSR from our questionnaire. The reason for this was to check whether the overall CSR score of inquired companies can be reflected upon the very basic questions of CSR. Particularly, we added the score of first and second question (Q1: "Is there a specific philosophy or vision followed by your company regarding CSR?", Q2: "How valuable do you consider CSR being for your company?") for each company. Then, we proceeded to a similar correlation analysis. The results obtained do not alter significantly ($r=0.317$, $p=0.13$).

5.2.2 Discussion

The results of our analysis showed a non-relation between fleet size and CSR engagement. Interestingly, we see that financial health of a company reflected upon the fleet size is irrelevant to its CSR initiatives. According to this both small companies may engage in "great" CSR actions and vice versa.

We consider that our results can be justified and supported by a number of different reasons of different nature as follows:

Greek bulk shipping companies might have different mentality with no relation to the size. As we mentioned in the literature review, Fafaliou, Lekakou and Theotokas (2006), when examined the application of CSR in short sea shipping companies, proved the fact that CSR engagement is limited to a significantly small number of shipping which 1) are involved in the production of specific services 2) which were / are subsidiaries of international conglomerates and 3) were managed and controlled by entrepreneurs who had awareness and knowledge as individuals on CSR. This conclusion cannot reject the possibility that the CSR engagement of the small short sea shipping companies can be dependent upon the nature of the services that are produced or on the control of these companies by entrepreneurs with a socially responsible mentality. We possibly can extend this conclusion to also our sample and suggest that there is no direct relationship between financial health and CSR engagement. The extent of engagement can be dependent upon different factors that they were not taken into consideration or researched in the present thesis. In addition to the above, the drivers for CSR strategy implementation, and CSR actions that Ernst and Young (2002) mentioned and we described in the literature review as increased awareness of the stakeholders, or peer pressure can possibly have an overall impact on the whole market without any distinction among companies that are economically more or less healthy.

The theory might be general and cannot be applicable in shipping. We consider the possibility that the model and the theoretical framework we developed cannot be applicable in shipping let alone in the Greek bulk shipping industry but could be of a more general application.

Fleet is a variable that can be altered with difficulty compared to other indexes and indicators of financial health of a company. CSR engagement is able to be

altered more easily and it can be more volatile. Fleet has a very slow pace of changing resulting to its reflection upon the financial health can take up to several years to be observable. Basic initiatives might be added or be removed from the agenda of the companies on a daily basis whilst fleet might be expanded or reduced after several years. On the other hand the utilization of a more changeable variable / indicator / proxy of financial health of the company can be more representatively utilized as a proxy for financial health of the company for our own case. With a better management of daily expenses or a worst management of expenses can lead to alteration of results to increase or decrease of profits even within days for example and based on the profitability of the company as it is more volatile than the fleet we can detect probably a more representative impact on the CSR engagement.

In the section 2.2.3 we tried to find and include information regarding major actions taken by Greek ship owning companies and focus mainly on actions and initiatives taken by bulk shipping companies. We gathered information irrespectively the size of the companies online. Based on Equasis.org database we managed to find the following information: Livanos Group consists of a fleet with more than 20 bulk carriers, including tankers, product carriers and dry bulk carriers. Capital Ship Management of Mr. Evangelos Marinakis consists of a fleet of more than 66 vessels including chemical tankers, oil product tankers, containerships, crude oil tankers, dry bulk carriers and others. Laskaridis shipping consists of a fleet of 38 vessels including dry bulk carriers and 3 reefer ships. Latsis group of shipping companies consist of a fleet of approximately 30 vessels that include among others tankers and dry bulk carriers. Onnasis group of companies operate also a fleet of approximately 30 vessels including bulk carriers and oil tankers. From a rough first look, what we can detect from the aforementioned is that all the companies that we mentioned operate undeniably big fleets with a mean of more than 35 vessels. Additionally we can see that all of the companies that we mentioned have fleets that their composition is rich in different types of vessels and not focused only in one type. But that evidences and findings are still not enough to draw any conclusions or assumptions. As we can see from the aforementioned, we could not detect any actions taken by companies with compared to the above, small fleets. However this cannot let us draw any assumptions such us that big fleet means high CSR engagement or the opposite. We have mentioned in the literature review that it is as Theotokas (2011) stated in the mentality of the shipping companies to focus in acting than promoting their actions. As we also mentioned, it is important to understand as an extension of the literature review, that smaller companies with smaller fleets might be able to offer more to the society on a more local level with each action not having a significant impact on its own. Bigger companies with higher profitability margins are potentially more able to contribute with actions that can indeed "make some noise". Donations as the aforementioned of millions of euros even if the companies tried to keep them confidential are of the greater benefit of the public meaning that they would be heard sooner or later.

Conclusions, Limitations and Further Research Suggestions

Worldwide but specifically in Europe and Greece, different types and categories of individuals and organizations, including NGOs, governments, international organizations, citizens and companies have been focusing on CSR the last decades as an inextricable part of the strategy of companies and organizations. The need for understanding the relationships, the forces and the obligations among stakeholders is of vital importance. Potential CSR implementations in different type of industries and companies, along with the potential benefits but also the drawbacks of CSR actions that may arise have to be further investigated. This is also the situation for the Greek bulk shipping industry, which as a leader of the whole shipping industry, demonstrates a greater need of investigating the CSR engagement of the companies and the actions they are mainly involved in as a big gap in the literature has been noticed.

For an in depth investigation of this very specific and peculiar segment of the shipping industry, we conducted a survey by the distribution of questionnaires addressed to the Greek bulk shipping companies, regarding their engagement in CSR actions and initiatives in a wide spectrum of different categories of activities. Our sample as a whole was purely companies of Greek interest. This is of vital importance since it can show us the steps needed towards the adoption of socially responsible attitudes by the Greek maritime industry comparing the results to the existing literature.

The results of the survey showed a satisfactory to high-as we could describe it- level of engagement among these companies. We detected a wide spectrum of different activity categories of CSR engagement. Additionally, we demonstrated a close to zero or insignificant impact, of the financial health of the company upon CSR engagement. We concluded this by using fleet size as a proxy for financial health. Indeed, this led us to speculate CSR engagement by both small and big companies, economically more or less healthier.

Through the conduction of the present thesis various limitations arose, which can be addressed in subsequent research. We decided to present them in this last part, always commenting upon the way they might have affected the results of our research. These limitations have most possibly affected the quality of our findings but also the effectiveness with which we answered our research question. These limitations focus on both parts of our research question but mainly on the second part.

First of all we recognize the fact that the usage of the fleet as a proxy of the financial health might not have been of the most proper choice. We considered that fleet size has been the easiest and most accurate information of financial health to obtain if we take into consideration that shipping companies and especially Greek shipping companies are not easily convinced to disclose information. Databases with fleet information could indeed help us overcome this issue and obtain fleet sizes for all the companies of our sample. Without any doubt we understand that the usage of another proxy as for example profitability could have a better reflection on our research and lead us to more valuable results.

As already mentioned, it was not an easy task to approach the companies of our populations and obtain all the needed information. Approaching more 100 companies resulted into the collection of 27 questionnaires, where 24 of them could be utilized for the second part of our research. In future research a bigger sample will without any doubt lead to more representative results for the market. We were not familiar with the exact response rate and we were expecting a way more high one.

We should additionally take into consideration the fact that respondents might have not understood in depth the terms "initiatives" and "additional actions". We noticed a lot of responses in free text questions that are of obligatory and not voluntary nature. This is a perception that can lead to misinterpretation of the question and subsequent misleading results.

The scoring method of our thesis has been based on the writer of the present thesis. There were aspects and answers that were difficult to be quantified and inserted in the questionnaire. Keeping this in mind, a future research based on a questionnaire quantification should develop a more thorough scoring method.

Apart from the suggestions regarding methodological issues of our research, future research can shed light upon the phenomenon of CSR in shipping in a couple of different directions. First and foremost, this was a very early paper in terms of theory of CSR in shipping. Actually, it is built on two parts, where the first tries to understand CSR in shipping while the second tries to connect CSR with financial health of a company. That is, we have conducted the first step of identifying CSR in shipping. Next works, can focus upon specific CSR initiatives of Greek shipping companies and connect them with more specific financial indicators. For instance, it would be of great importance to understand the effect of environmental protection taken by Greek bulk shipping companies upon their financial performance. Would that be the same with the effect of CSR measures regarding its employees? We tend to believe that the second effect might be of greater value and significance. Another interesting avenue for future research might examine the long term effects of CSR upon financial health of shipping companies. Comparing it with different industries might be informative of the real investments shipping companies should take in CSR in case they want to positively affect their performance. Finally, future research should address the effect of CSR upon more generic measures of performance. Here, we did an effort to find a relationship between CSR and financial health of shipping companies. We found a non-significant correlation between the two. We consider that a significant addendum to the literature would have been a correlation between CSR and a more holistic "basket" of performance measurements stretching upon finance, accounting but also marketing and human capital. Last but not least we should take into consideration for future research that it is important to build a sample more representative for the Greek bulk shipping since the majority of the Greek bulk shipping companies are mainly small whilst our sample was mainly comprised of bigger shipping companies.

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Annex 1-Survey Questionnaire

Corporate Social Responsibility and Sustainability in the Greek Owned Bulk Shipping Companies

Welcome to my Thesis Survey regarding CSR on Greek owned bulk shipping companies!

Thank you for your time and agreement to participate in the present survey for Corporate Social Responsibility incorporation in Greek owned shipping companies. My name is George Kapasakalidis and your feedback is valuable for the collection of data for my thesis during my studies for my MSc in Maritime Economics and Logistics at the Erasmus University of Rotterdam. Today you will be kindly asked questions and you will state the position of the company you represent regarding its involvement in CSR. This survey should only take 6-8 minutes to complete. The survey has no purpose of judging your or the company's you represent actions or strategy. Be assured that all answers you will provide will be kept in the strictest confidentiality and only for the academic purpose of the aforementioned thesis and only.

In the last question you will be kindly asked to provide the name of the company you represent. This is not compulsory but it would be helpful in terms of better organisation of data and for acquiring knowledge of the sources of the answers.

For potential queries or upon willingness of being provided with the results of this survey do not hesitate to contact me at 489884gk@student.eur.nl

Corporate Social Responsibility and Sustainability in the Greek Owned Bulk Shipping Companies

1. Is there a specific philosophy or vision followed by your company regarding Corporate Social Responsibility?

- Yes / No

2. How valuable do you consider CSR being for your company?(0 not valuable at all, 10 very valuable

- 0-10

3. If you think CSR is valuable, please mark one or more of the below that you think represent your company's CSR objectives:

- Energy efficiency
- Costs reduction
- Environmental Interest
- Reputation
- Strong relationship establishment with other Supply Chain Management individuals or other parties involved in your company's day to day business.
- Access to capital
- Employee motivation
- Innovation and learning

4. Are you and/or the company you represent aware of the United Nations Sustainable Goals?

- Yes / No

5. If yes, has your company taken an active step in accepting any or all of the United Nations Sustainable Development Goals?

- Yes / No

6. Does your company publish separate/individual CSR report ?

- Yes / No

7. If yes, is the report evaluated by the Global Reporting Initiative?

- Yes / No

8. Also if yes is the report structured by the Global Reporting Initiative Standards?

- Yes / No

9. Do the companies have extra quality systems as ISO9001 and ISO14001?

- Yes, ISO 9001
- Yes, ISO 14001
- Others No

10. What CSR initiatives have been undertaken by your company regarding Environmental Responsibility and Energy Efficiency?

- Energy and fuel efficiency
- GHG reduction
- Renewable energy usage
- Waste management
- Vessel discharges
- Spill and leakage prevention and response proactive actions
- Marine mammals and cetaceans protection actions
- Underwater noise reduction actions
- Environmentally friendly ship recycling actions
- Environmentally friendly materials and resources use
- Air pollutants reduction
- Please specify some of the above actions taken voluntarily

11. What CSR initiatives have been undertaken by your company regarding Employee Well-Being?

- Health and safety actions
- Training and education actions
- Promotion of gender equality
- Family welfare
- Living conditions onboard vessels
- Working onshore environment
- Attractive wages and benefits compared to the competitors
- Please specify some of the above examples of initiatives taken

12. What CSR initiatives have been undertaken by your company regarding Local Socio-Economic Development?

- Involvement in the local community actions
- Local sourcing
- Local socio-economic development actions
- Granting of scholarships
- Local hiring
- None
- Please specify some of the above actions taken

13. What CSR initiatives have been undertaken by your company regarding Disaster Relief?

- Humanitarian aid

- Infrastructure rebuilding
- Environmental clean-up and rehabilitation
- None
- Please specify some of the above actions taken

14. Is there any involvement of your company in actions regarding marine protected areas and spatial planing?

- Yes / No

15. Please mention initiatives taken towards CSR regarding the below:

- Energy consumption reduction
- Educational actions
- Societal actions
- Cultural actions
- Policy towards employees
- Others

16. Is there a predicted/predecided yearly budget either separate or incorporated with PR and/or marketing budget for the above initiatives?

- Yes / No

17. If yes, would the budget for CSR be considered as operational expenses?

- Yes / No

18. Is your company taking additional measures and initiatives regarding health, safety and labour beyond international conventions as STCW, SOLAS, MLC minimum standards imposed?

- Yes / No

19. Is your company taking additional measures and initiatives regarding environmental responsibility beyond international conventions as MARPOL, COLREG, CSC minimum standards imposed?

- Yes / No

20. How important do you think is the application of the aforementioned further initiatives for the global acceptance of your company?

- 0-10

21. How important you think are the above initiatives for the profitability of your company?

- 0-10

22. Do you think that CSR initiatives give added value to the service you provide?

- 0-10

23. Do you think that the CSR initiatives taken by your company have a positive impact on your relationship with your suppliers?

- 0-10

24. Do you think that the CSR initiatives taken by your company have a positive impact on your relationship with your clients?

- 0-10

25. Do you think your clientele is preferring the service produced by your company due to these initiatives at a certain extent?

- 0-10

26. Please mention the name of the company you represent (Optionally-No personal or company data and information will be dis