

Master Thesis

“The impact of corporate social responsibility on financial performance of food industry.”

Dissertation submitted

by

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Dedicated

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Abstract

In recent years the Corporate Social Responsibility (CSR) has an increasing attention from the companies and the community, because it is an important factor for a sustainable development. For this reason, for the firms it is very essential to know the CSR strategy which they can follow and the improvements that can be done, in order to have a better performance in any industry. As a result, a research of CSR is inevitable for social responsibility activities and it can create benefits for the financial performance of the firms, which might lead in increase of the investors number. The purpose of this study is to investigate the impact of CSR on financial performance of the firms in food industry in the EMEA countries. There were many previous studies analyzing the relationship of CSR and financial performance, which gave mixed results. In this study the financial performance is measured with accounting-based measures, the Return on assets (ROA) and Return on Equity (ROE), which show the profitability of the firms and also market-based measures, Market Capitalization (MCAP). Two control variables are added in the model, the leverage and the size. The sample contains data from firms in the food industry from twenty of the EMEA countries which were published on Refinitiv database. Through the total ESG scores the CSR performance of the firms is measured. To test the hypothesis three regression models are used and the regression is conducted with the help of the STATA program. The results suggest that there is no significant impact of CSR on ROA, ROE and MCAP for the companies in the food industry, where the ROA, ROE and MCAP were used as measures of financial performance of the firms.

Keywords: Corporate Social Responsibility (CSR), Financial Performance, Return on Assets (ROA), Return on equity (ROE), Market Capitalization (MCAP), Food Industry, Europe – Middle East – Africa (EMEA).

Chapter 1

Introduction

“Economics without ethics is a caricature.

Ethics without economics is a fairy tale” – Jakub Bozydar

1.1 Introduction

Sustainability in recent years has become one of the most difficult challenges for the humanity (Gavrilescu, 2011). This is because sustainable development is a process of achieving many fundamental issues, such as security, equity, connectivity, inclusiveness and prudence (Gladwin and Kennelly, 1995). To be more specific, security refers to the safety from many chronic threats, equity is the distribution of resources fairly between everyone and can be also referred to the rights of people who live in poverty. When it comes to connectivity, the authors stated that it is the interdependence and interconnection of the problems of the world. Inclusiveness is about the human and the environmental system and prudence includes the actions of preventions and care. According to some recent studies of the UN Global study on Sustainability (2013), 93% of the CEO managers support that sustainability is a factor for the success of the businesses and 81% of them suggested that the reputation of the firm based on its sustainability goals can create an important impact on the decisions that consumers take.

Due to the fact that the corporate social responsibility (CSR) is connected with the goals of sustainable development, many authors supported that CSR has a crucial meaning in nowadays business development. According to Hegde and Mishra (2019), the CSR has a very close relationship with the sustainability because companies which implement the CSR strategy, they do social good acts while the law does not require such things, which is an initiative of the company towards the future wellbeing. For a company, it is not important only to increase their own value, but also to increase the value of their stakeholders and shareholders (Donaldson and Preston, 1995). Based on Gossling and Vocht (2007), some companies have the CSR as an obligation to their stakeholders.

For the CSR during the years, many were the definitions proposed by authors. According to Baker (2004): ‘Corporate social responsibility (CSR) is how companies manage their business processes

to produce an overall positive impact on society'. Kotler and Lee (2004), define the CSR as: *"A commitment to improve community well-being through discretionary business practices and contributions of corporate resources"*. Furthermore, based on Friedman (1970), the definition is: *"A corporation's responsibility is to make as much money for shareholders as possible"*. Despite all those definitions, the main one given by the "Father of CSR", Bowen (1953) is: *"CSR is the obligations of businessmen to pursue those policies, make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society"*.

In order for the company to communicate with its shareholders, investors, banks and other companies or individuals, the firm has to have CSR disclosures. In such a way, the company is able to communicate about its policies (social and environmental), the performance, and the different practices included in its activities. If companies do not have CSR disclosure, meaning they do not public their reports about social responsibility, this can have a negative impact on financial performance.

1.2 Research question

Many studies, such as Lee et al. (2016) and Karim et al. (2019) found that ROA and CSR had a positive relationship and that companies with higher profits were more likely to participate in CSR activities in the Korean and Bangladeshi food industries, respectively. According to Zhang et al. (2019), there is a positive relations between ROA and CSR in the Chinese food industry. Furthermore, based on Dewi et al. (2014), the CSR has a direct positive effect on ROA and ROE. On the other hand, authors such as Johnson and Greening (1999), O'Neill et al. (1989), and Patten (1991) found a negative relationship or mixed relationship between CSR, ROA and ROE.

There are many researches who showed a positive relationship between CSR and financial performance, while others showed a neutral relationship and some negative. That is why, it is important to add one more empirical research study as an additional contribution to the previous studies in order to test this relationship. In this study, it will be examined the association of CSR and financial performance of food industry in the Europe, Middle East, African (EMEA) countries. The main research question that this study will try to answer is how CSR impacts financial performance of companies in the food industry in the EMEA region.

The main purpose of this research is to describe the relationship of CSR and financial performance of companies specifically in the food industry from the EMEA territory. To do this research, the available data from 20 of the EMEA countries are being used, and the aim is to answer sub-questions which guide this study. Those sub questions are the following:

SQ1: What is the background information and the theoretical framework of CSR?

SQ2: How is the financial performance measured?

SQ3: Which is the previous literature for this study topic?

SQ4: Which is the developed hypothesis that will be tested?

SQ5: Which are the main results of this study?

SQ6: Which is the discussion developed about this topic?

SQ7: What is the conclusion from this research?

After the research question, the methodology which will be implemented in this study is analyzed.

1.3 Research Methodology

Many authors have studied the relationship between financial performance and CSR. In this study it is described the association of CSR and financial performance of firms in the food industry in a specific region of the world. Similar analyzes have been carried out by other authors, whose results may vary depending on specific data and methods used in each study. The aim of this study is to test the hypothesis by making a quantitative research method, which involves numerical data. In this dissertation, it will be conducted a statistical analysis to test the hypothesis, in order to observe trends, make predictions, run experiments by using specific econometric empirical models. This research measures certain variables to predict outcomes, and impact on financial performance in food industry. The data of the current study is analyzed by descriptive statistics and regression analysis as well. The financial performance is considered as the dependent variable, with accounting-based measures, Return on assets (ROA) and Return on equity (ROE), which measure the profitability of the companies and the MCAP as a market-based measure of financial performance. Those measures are used by authors such as Gaio and Henriques (2020), Kurt and Peng (2021) and Tanveer et al. (2018).The relationship between CSR and financial performance

in the food industry is tested for the years 2016 until 2021, where it was able to obtain the data needed.

1.4 Motivation – Objective of the study

In this dissertation, I chose to analyze companies in food industry from the EMEA countries. As mentioned in the previous literature, the CSR strategy has become an important factor for companies. This happens because, despite the fact that it adds value and improves the reputation of the companies, it can provide evidence for investors and shareholders to invest in those companies. Furthermore, social responsibility helps to promote sustainable development, a goal that is becoming more and more important nowadays. Torugsa et al. (2011) proved that the implementation of value-creating strategies can help small businesses achieve financial success. Many studies have investigated the effect of CSR on financial performance generally, in some countries or in a specific industry. Through this study, the effect of CSR on financial performance in the food industry of the EMEA region is described.

1.5 Contribution to previous studies

From this study, it is important to understand how the relationship of CSR and financial performance can help shareholders, investors, employees, managers, regulators and many more who involve in company's activities in order to take their future decisions. Moreover, from this research it is easy to understand the association that CSR has with financial performance of the firms and from the results it can be helpful to understand how to increase the financial performance. This can lead companies to attract more investors and enhance their reputation. As it is already known, there have been conducted many prior studies which analyze the association between CSR and financial performance of the firms in many different industries. This current study is significant because it will contribute to the growing body of the literature on the relationship of CSR and financial performance in the food industry and particularly from 20 countries in the EMEA region. The food industry is chosen because it is a critical sector for the global food security and has a crucial impact on the social and environmental well-being.

1.6 Limitations

In this research, there are some potential limitations on the impact of CSR on financial performance that may encounter while conducting it. Some of the limitations might include the data availability,

meaning that sometimes the data may not always be publicly available or it can be difficult to measure and quantify the data needed. Furthermore, when it comes to measure CSR, the shareholders may have different opinions for CSR and this can create a subjectivity issue. Some more limitations could be the time frame, which here is six years, and the generalization, which refers to the fact that the impact of CSR on financial performance can differ in other industries, countries, and size of the firms. Finally, in this study, there is a causality effect, which means that financial performance may have impact not only from CSR but also from other factors as well. For these reasons, it is important to acknowledge these limitations and take them into account when designing and conducting a research. Future research could seek to resolve those issues and provide better evidence on how CSR affects financial performance.

1.7 Structure of the study

The structure of this dissertation starts with Chapter 1, the introduction, which includes the research question, the motivation, the limitations, and the structure of this study. In the chapter 2 it will be described the theoretical framework of CSR, the measures of CSR and financial performance and also some important theories concerning the social responsibility will be included. In the next chapter, there is a review of the literature on the association of CSR and financial performance, based on previous researches that other authors have carried out. In Chapter 4 it is being analyzed the data and methodology of this research, while the hypotheses which need to be answered by this study are proposed as well. Next, Chapter 5 describes the results from this current study, and in Chapter 6 is added a brief discussion analysis of the findings. Finally, in the Chapter 7 a summary of all the information and the results are included and this study concludes with future suggestions for some researches about the association of social performance on financial performance of firms.

Chapter 2

Theoretical Framework

2.1 Introduction

In this chapter it is discussed the theoretical framework of this current study in order to answer the research question. In Section 2.2, Corporate Social Responsibility (CSR) is defined while the CSR disclosure is presented in the next paragraph 2.3. Furthermore, the CSR measures are added in the paragraph 2.4 and in the next paragraph there are discussed the theories around social responsibility of companies. Additionally, in Section 2.6 there is a reference to the financial performance measures. Finally, a brief summary paragraph is provided in the end of this chapter.

2.2 Definition of CSR

CSR stands for Corporate Social Responsibility and is a term that refers not only to its own economic interests but also to companies that are responsible for acting in the best interests of both society and environment. Social responsibility involves the impact of the activities of companies on stakeholders such as employees, customers, suppliers, and the environment. CSR can include a number of activities such as adopting sustainable business practices, supporting social causes, and participating in philanthropy. Furthermore, this measure aims to create positive social impact while ensuring long-term success for companies.

The story of CSR begins from the early 1920s, when many companies started to consider that social responsibility has a significant role in society and can offer positive impact to the company. For this reason, the CSR throughout history was having many different movements, from where it created its roots and started to evolve into society. As an example of this, is the Hershey Company in the United States of America, which built a model town for its employees, including schools, hospitals, and parks, to improve their quality of life. In this case the company created positive social impact throughout its actions of CSR strategy.

Later on, after World War II there are more roots of CSR, according to Spector (2008). In the 1950s and 1960s, while industrialization was taking an active place in the society, many environmental problems aroused. This led the companies to put the CSR in the middle of the discussions. In the 1970s and 1980s, social and environmental issues became increasingly

important in public consciousness, and the concept of modern social responsibility was developed. Companies began to consider their impact on the wider stakeholders, including employees, customers, the community, and the environment. Since then, social responsibility has become an increasingly important aspect of corporate strategy and is now considered a key driver of corporate success. Many companies now have dedicated CSR strategies, including sustainable procurement, ethical supply chains and charity initiatives. The concept of social responsibility is evolving as society's expectations of companies change. Today, many companies are focusing on topics such as climate change, social justice, diversity, and inclusion, reflecting the changing priorities of consumers and other stakeholders.

According to Carrol (1998), the existence of social responsibility is earlier than decennia's ago and in recent years the description and definition of CSR is being developed. Nowadays, social responsibility is important because in order to maximize the company's impact on the environment and society, it includes the align of the company's strategy with the professionals of the company, specially from the moment when day by day more and more new professionals join the field of CSR.

2.3 CSR disclosure

In this paragraph is will be discussed the CSR disclosure. This term refers to the process that companies follow in order to provide useful information to stakeholders about environmental, social and governance practices and their impact on society and the environment as well. The disclosure can cover areas such as sustainability efforts, labor practices, community involvement, supply chain management, and more. According to Armitage et al. (2008), when companies provide to a the public and also to restricted group the information about the company, this is called disclosure. Due to the demands of various stakeholders, including employees, investors, customers and regulators, transparency and accountability over social responsibility practices and impact is becoming increasingly important. Furthermore, the CSR disclosure can help enterprises build trust with stakeholders and improve their reputation as socially responsible entities. Companies can use different frameworks and standards to guide their disclosure of CSR, depending on factors such as size, industry, location, and stakeholder expectations.

It is also valuable to mention that companies can use some frameworks to have a guidance of their CSR disclosure. For example, the Sustainability Accounting Standards Board (SASB), the Global Reporting Initiative (GRI), and the Task Force on Climate-related Financial Disclosures (TCFD). By this way, companies can know their disclosures. However, depending on various factors, such as company size, industry, the geographical location of the firm, and the stakeholder's expectations can be differentiated. By this way the companies are having different kinds of information which they publish (Deegan et al., 2006). This happens as a consequence of the existence of different types of people and groups which need information about companies for a specific purpose. As an example, the investors, the lenders, the suppliers, the governments, the costumers and the media as well (Deegan et al., 2006). Additionally, based on Urquiza et al. (2010), depending on the profitability of the disclosure, the companies disclose accordingly, in order to get the maximum advantage over cost.

There are three types of disclosure based on previous literature, the voluntary, the financial and the company's disclosure (Healy et al., 2001). More specifically, the first disclosure are the Internet sites of the firms, the presentations of analysts, the conference calls, the management forecast, and the information which the press releases. Financial reports are the type of disclosure that refers to the regulatory reports, such as financial statements. However, this disclosure is mandatory to be published due to authorities' regulations, capital markets, commissions, and stipulations (Popa et al., 2008). Finally, the last type of disclosure is the company's disclosure which is provided by intermediaries. For example, some of the information intermediaries are experts in specific industries and financial analysts.

2.4 Environmental, Social and Governance (ESG)

2.4.1 ESG measures

The Environmental, Social, and Governance (ESG) strategy is an important tool that companies use to contribute to sustainable development and create long-term value for their stakeholders. By taking into account environmental, social, and governance factors in decision making and operations, companies can contribute to the construction of a more sustainable and equitable future. More specifically, the three ways to contribute to the sustainable development are from the perspective of the environment, society, the governance and ethics. When it comes to the first point, the companies which implement ESG strategies can reduce environmental impacts through

sustainable practices such as renewable energy use, waste and emissions reduction, and the conservation of natural resources. These efforts can help mitigate climate change and protect ecosystems. Second, when it comes to social responsibility, the ESG strategies can be helpful for companies to fulfill their social responsibilities and promote sustainable development. These include initiatives to support human rights, to promote diversity and inclusion, and engage communities in a responsible and sustainable manner. Last but not least, ESG can promote the development of sustainability by ensuring that companies operate in a transparent, accountable, and ethical manner. Establishing effective governance practices and promoting an ethical culture can help companies build trust with stakeholders and in this way being able to contribute to sustainable development.

Moreover, it is highly important to understand the theoretical framework of ESG in order to understand the meaning of it and the reason why companies prefer to implement such strategies in their activities. In the 1960s and 1970s, a concept of socially responsible investing (SRI) emerged. This concept is considered as an investment approach which includes the environmental and social impact of the firms on their financial performance. Later on, in the 1990s, a broader focus on sustainability led to existence of the sustainable investing, which also referred to the long-term impact that the firms can have on both environment and society as well. The ESG as a term started to become more popular in 2000s, as more and more companies, analysts and investors started to elaborate on the implementation of ESG in companies and the effect that this had on the society, the stakeholders and the environment.

In order to have a better view of the ESG breakdown the bellow frame is given:

Frame 1. Breakdown of ESG

	Environment	Society	Governance
Definition	Performance of the company as a steward of natural or physical environment	Interaction of the company with it workforce, societies where it operates and the political environment	How company makes reports, decisions and ensures ethical standards
Examples	Climate change	Wellness and Safety	Policy
	Environmental Policy	Employee engagement	Ethics
	Biodiversity	Data Privacy	Board composition

2.4.2 CSR measures

Since social responsibility has a crucial importance for companies, there are many measures of it. Some of them will be discussed in this paragraph. More specifically, CSR measures refer to the actions that companies take, in order to have a positive impact on the environment and society, and also to show commitment to both the sustainability and the social responsibility. Specific measures that companies adopt depend on location of the company, industry, size, and expectations of stakeholders. However, there are some limitations of the CSR measurements, even if previous studies provide a great variety of those measures (Turker, 2009).

First of all, one of the CSR measures that companies implement is the engagement of companies to the community by boosting volunteering actions, such as charities and philanthropy and by doing sponsorships for the community (Lee and Shin, 2010, Barnett and Salomon, 2006,). Labor practices can also be considered as a CSR measure, due to the fact that firms are trying to improve the conditions under which the workers are working. To achieve this, companies adopt strategies such as providing opportunities in order to develop the skills of workers. In addition to that, companies can ensure that the human rights are not being abused and that workers are treated with equality. As is already known, nowadays the sustainability is an important matter nowadays. For this reason, companies are making efforts to promote sustainable environmental development. For instance, the usage of renewable sources reduces waste and improvements in their supply chain. The companies also often cooperate with stakeholders such as investors, employees, and customers as well in order to understand their needs and concerns and respond accordingly. Last but not least, an important CSR measure is the implementation of procedures and policies that refer to the governance practices of the companies.

2.4.3 The CSR and ESG

The association of ESG and CSR is very close. Both terms refer to the commitment that the company has to society and the environment. As a result, they both, ESG and CSR, help companies to enhance their strategies. The social responsibility of companies is a part of the ESG and that is why, in general, the ESG scores are more likely to be used in order to measure the sustainability and of the company (Tsai and Mutuk, 2020, Yoon et al., 2018). In addition, the ESG takes into consideration not only the social and environmental activities, but governance activities as well. Furthermore, according to Ionescu et al. (2019), ESG scores can provide important information to stakeholders about the future and current performance of firms.

In general, the differences between the ESG and the CSR are not great. The ESG measures the impact of companies on environment, society, and governance and aims to improve ethical and sustainable practices (Mathis and Stedman, 2023). The CSR, refers to a more wide strategies that companies take which refer only to environment and society. The CSR includes the ESG as a measure (Tsai and Mutuk, 2020).

2.5 Theories explaining the CSR

There are several authors who explained with their studies the developed theories about the social responsibility. The definition of CSR is considered as the responsibility that a company has to take, referring to its impact on both the environment and society, combining pressure from different parts, such as stakeholders and ethical concerns. For this reason there are multiple theories about the social responsibility. Important theories which explain the theoretical framework of CSR, due to the fact that by the understanding of them the company can look forward for its economic goals and integration with the society and the environment. According to Deegan and Unerman (2006), the systems-oriented theories are the stakeholder, the institutional and the legitimacy theory, which are included in a more wide theoretical framework of the CSR. The other theories are the agency, the positive accounting and the resource-based theory. Those theories are the following:

2.5.1 Agency theory

The agency theory supports the fact that companies are using the CSR as a way to resolve agency issues of shareholders and managers to keep their commitment to each other for a long-term creation of value. In general the agency theory refers to the fact that the principles, such as

shareholders, and the agents, such as managers, have different interests and this can lead to an interest conflict. Some argue that the agency theory overlooks the responsibilities that the company should have and the companies are motivated only in order to create more financial value. The agency costs are defined from Deegan et al. (2006) and relates on that the information and the transaction cost exist. These costs refer to the costs, such as compensation to increase the profits (Brealey et al., 2009), which the principals pursue in order to make the managers work for their own interests. On the other side, some argue that the agency theory is a theory which can help and provide important evidence to the managers and principals in order to resolve issues that may be created.

The agency theory refers to the contract through which at least one or more principles engage another person, the agents, in order to perform a service for them. This service involves delegating some decision-making powers to the agent (Jensen et al., 1976). With the social responsibility initiatives, the companies are able to show to shareholders that even in short-term they will always try to create profitability and take actions in their best interests. As an example, companies might implement some strategies which will reduce the reputation damage in order to reduce the risk, and this might be in contrast with the interests that the shareholders of the company have. This is relevant to the risk management that companies need to hold, in order to protect shareholders' interests and create long-term success and resolve agency problems.

2.5.2 Stakeholder theory

When it comes to this theory, it is analyzing the expectations of society. It emphasizes certain stakeholder groups and the relationship between stakeholders and the company. Based on Freeman (1984), stakeholders are considered the groups or individuals who impact the achievements of the objectives of the company or they get affected by it. This theory proposes that companies have a social responsibility to their stakeholders, such as customers, customers, suppliers and the community. The companies that prioritize the interests of their stakeholders, and not only to their shareholders, are more likely to achieve long-term success. Furthermore, this theory suggests that the companies are implementing CSR because they can have the best interests of the company stakeholders. In such case, they have a stronger relationship between company and stakeholders and this can create value, positive reputation, loyalty of customers and long-tem success. Last but not least, stakeholder theory suggests that companies have the obligation to act in a socially

responsible way. This obligation arises from the fact that companies rely on their stakeholders for their success and therefore have a responsibility to act in their best interests. With this way, the firms contribute to the sustainability of the society they are in.

According to Deegan and Unerman (2006), there are two parts of the theory of stakeholders. The first one is the ethical, which refers to the treatment that the stakeholders have to have from the company, which included the promotion of the interests of the stakeholders. The second part, is the managerial which suggests that the companies are more prone to satisfy the interests of the stakeholders who are powerful, who are important for the company to survive. Furthermore, in stakeholder theory, there are two groups, the primary and the secondary stakeholders (Clarkson, 1995). The first group refers to the public group of stakeholders who are valuable for the survival of the company. The other group refers to those who impact, or get affected by, the company, but they do not engage themselves with the transactions, and they also are not necessary for the survival of the firm. For the first group, some examples are the investors, the customers, the suppliers, and the shareholders, while on the second group are the interest groups.

2.5.3 Institutional theory

The Institutional theory is of a great importance in order to examine the CSR practices according to Deegan et al. (2006). According to this theory, companies use CSR strategies because it is expected from customers, the society, the other organizations, and other institutional agents. According to Nikolaeva et al. (2011), in case of one company implementing the CSR strategies the other companies will follow the same direction because they are influenced by the institutional pressure. Companies that might fail have a great risk of reputation damage or even sanctions. Companies which maintain their legitimacy, they increase the shareholders and therefore their value and reputation.

The theory of institutions describes two aspects. The first aspect is isomorphism, and the second aspect is decoupling according to Dillard et al., (2004). First, the isomorphism refers to the process of adapting and changing institutional practices. This means that if the company uses a specific method to report on a particular aspect of social responsibility, other companies depend on reporting on strategy and industry. The second aspect of institutional theory refers to a separation between real organizational practices and publicly announced institutionalized practices (Dillard

et al., 2004). The decoupling evidence would be the difference between disclosure and the actual performance of the company.

It is also important to understand that the companies very often use the CSR strategies in order to gain legitimacy of the stakeholders, so they in general have a legitimacy seeking behavior. As an example, the implementation of environmental activities in order to show commitment to the goals that lead to sustainable development is an example. In this case the company gains value as a perception of the other organizations, customers and regulators as well. For this reason it can be understood that the institutional theory is not driven only by financial incentives, but also by the general norms and values of the society in order to avoid negative impact on the reputation and other important factors of society and regulators.

2.5.4 Resource-based theory

The resource-based theory refers to the fact that the CSR has the ability to become a source of competitive advantage. They also utilize their resources, including the human, social, and environmental capital they obtain. It is a management strategy theory which helps the company to create uniqueness by using CSR strategies, which uniqueness will be difficult for the competitors of the company to replicate. This leads the company to a sustainable competitive advantage. According to Castelo (2013), resource-based theory is very important because it helps managers to implement the right practices in order to enhance the economic performance of the company. It also boosts the company by improvements in innovation, motivation of the employees and it can also help in savings of cost. This theory except for the fact that helps the company in general, can have a valuable effect on the interests that the shareholders have.

According to Barney et al. (2011) they define the resources and capabilities as “bundles of tangible and intangible assets, including a firm’s management skills, its organizational processes and routines, and the information and knowledge it controls that can be used by firms to help choose and implement strategies”. The resource-based theory suggests that companies should focus on establishing their own resources and capabilities to achieve competitive advantages through social responsibility initiatives. For example, when a company has a strong reputation of ethical practices, it is able to have a competitive advantage to attract customers who take into consideration for their purchasing decisions the ethics of the firm.

2.5.5 Positive accounting theory (PAT)

One of the most important theories is the Positive Accounting Theory or PAT which refers to a theory which tries to predict specific phenomena (Deegan and Umerman, 2006). More specifically the PAT tries to explain from a financial perspective the engaging of the companies with CSR activities and strategies, helps it to have a better financial performance. For this reason, many support the fact that the PAT gives a valuable theoretical framework to the company in order to understand the financial motives that the CSR has on the firm. However, there are also some who consider that the companies act only on their interests and do not consider the CSR as an important factor.

The PAT helps the companies to survive by organizing themselves (Scott, 2009). Furthermore, according to Scott (2009), PAT is interested in predicting how managers make decisions on accounting policies and how managers respond to proposed new accounting standards. Furthermore, the companies might engage in cost-benefit analysis if they consider that from the CSR implementation on their activities they outweigh the costs (Gaurangkumar, 2015). For instance, the company might invest after a cost saving period, in new investment if it considers that the cost outweighs the initial investment.

It is generally considered that there are three PAT hypothesis, the political cost, the bonus plan and the debt covenant hypothesis based on Watts and Zimmerman (1986), Watts and Zimmerman (1990). The first hypothesis according to Scott (2014) refers to the fact that it is more suitable for larger companies to use the accounting procedures which differ the current to future period earnings. For this reason, managers will not do CSR disclosures because it can affect political scrutiny. The second hypothesis based on Scott (2014) supports that managers change the reported income in a higher level if they are compensated depending on the income report. This also refers to the fact that the managers use CSR disclosure whenever they are willing. Last but not least, the debt covenant hypothesis refers to the relaxation of the debt constraints if the CSR has a positive impact on the financial performance of the firm. Scott (2014), supported that the managers will increase the reported income by using accounting procedures if the debt to equity ratio is larger.

2.5.6 Legitimacy theory

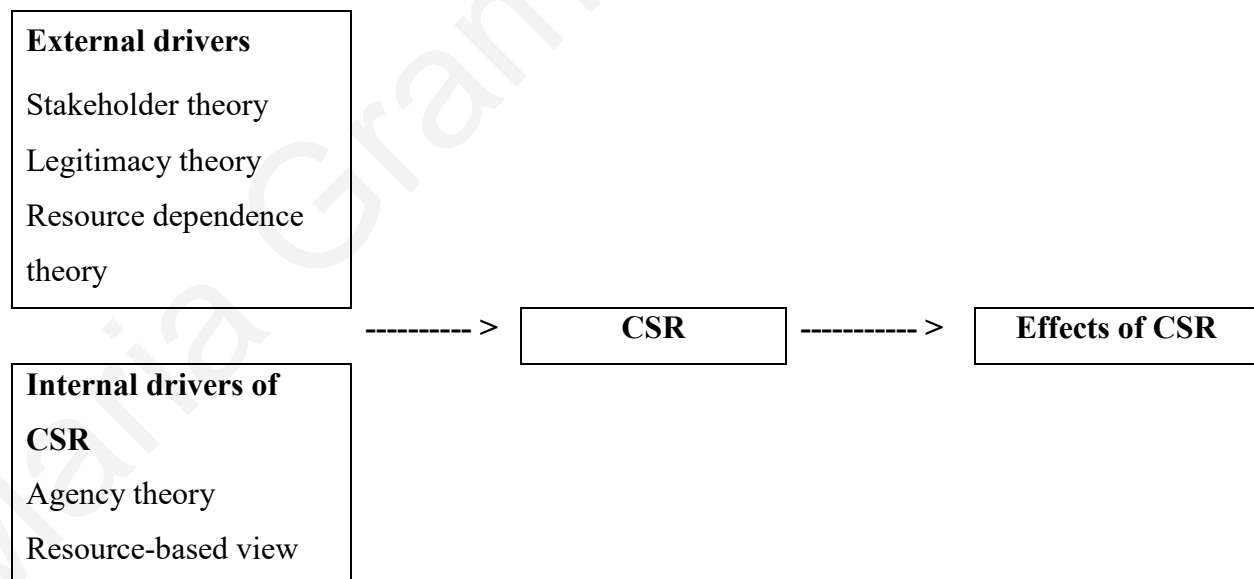
One more very important theory is the legitimacy theory which attempts to explain the CSR disclosure of company. In general the legitimacy theory supports that it is important in order to

operate and maintain the social license, the companies to implement the CSR. In this case, the companies will be able to be socially responsible to the society, in order to meet the expectations of their stakeholders and maintain the reputation. For example, companies can use environmentally friendly practices to demonstrate their commitment to sustainability and maintain legitimacy among environmental organizations, clients and mainly the regulators. Supporters of the theory believe that it provides a valuable framework to understand how social legitimacy is maintained and how social responsibility initiatives help companies achieve this goal.

This theory includes companies that continuously manage their operations and activities within social boundaries and standards. These organizations show their activities in a way that the external parties believe they are all legitimate (Deegan et al., 2006). In addition, the limits and standards described above are not static, but over time they change and companies must react quickly to adapt these changes (Deegan and Unerman, 2006). Furthermore, based on Cho et al. (2007), the companies can use disclosure of information as an instrument for maintaining their legitimacy and thus avoiding social sanctions.

In the following frame the theories are represented according to Mellahi et al. (2016):

Frame 2. Theoretical framework of Mellahi et al. (2016)



2.6 Financial performance measures

There are several measures that can estimate the financial performance of companies. Based on 51 studies, the authors Griffin and Mahon (1997) suggested that there are 80 measures that companies can adopt to measure their profitability. In the next sub-paragraphs, the two widely used types of measuring the financial performance of the firms are analyzed. According to McGuire et al. (1988), there are two methods to measure the financial performance, the market-based and the accounting-based, which look for different aspects of the financial performance. In the next paragraphs the two methods are mentioned and described.

2.6.1 Accounting-based measures

When it comes to accounting-based measures, many scholars in previous literature suggested that this measurement of financial performance refers to the short-term of the profitability (Gentry and Shen 2010). Furthermore, according to Brammer and Millington (2008), the proponents of the accounting-based measure support that this measurement of the profitability is more suitable because the market-based measure can get affected by factors which are not related to the activity of the company. However, opponents believe that with this measurement there is no evidence for objectivity, and the value-based measures that relate to both investors and shareholders are not relevant. Since such measures are used, it is important to mention some examples of accounting-based measurements. For instance, the ROA and the ROE, which are used in this dissertation. This way of measurement is widely used in previous studies (Nelling and Webb, 2008, McGuire et al., 1988, Aras et al., 2010, Pava and Krausz, 1996). In addition, the return on sales (ROS), the growth, and the operating revenue are also measures of financial performance of the firms. Finally, it is important to point out that the CSR and the accounting-based measures are more likely to have a better correlation between them, according to Orlitzky et al. (2003) and Pelozo (2009). Although, this method is very helpful there might be some limitations of their use. Due to the fact that it shows historical performance, some managers can use different standards for accounting measures, and that is how the result is more prone to have great differences with other firms of the sectors Moenna (2014).

2.6.2 Market-Based measures

Despite accounting-based measures for interpreting financial performance, there are also market-based measures. Those measures refer to the market performance of the firms. They are also less

sensitive to the accounting procedures and except from that the management manipulations affect them less, based on previous literature of McGuire et al. (1988). The author also stated that this measure is the evaluation of the investors about the ability that the companies have in order to have future profits. It is very important to refer some of the market-based measures. According to Pava and Krausz (1996), the earnings per share (EPS), the P/E ratio, the share price, and the market-to-book ratio are some very widely used measures of market-based measurement. According to Tanveer et al. (2018), the MCAP is a market-based measure that is helpful in order to measure the financial performance of firms. Some authors have also suggested that market-based measures not always correctly represent the value of firms from evaluations done by investors about the firms (Aras et al., 2010). However, market-based measurement still remains a tool to get an objective value that firms have by following strategies considered for being socially responsible (Karagiorgos, 2010, Goukasianan and Whitnet, 2008).

2.7 Summary

In this chapter was analyzed the theoretical framework of the social responsibility and the two first sub-question of this dissertation were answered. This chapter provides evidence about the definitions of CSR and also about the CSR disclosure. The disclosures help shareholders, investors and consumers to be provided by important information concerning the company in order to take the most suitable decisions for them. Furthermore, this chapter refers to the several ways of measuring the social responsibility and ESG. The connection between CSR and ESG is also provided in this chapter. It also analyses the six theories of the CSR, which are very important to understand. For the financial performance, there are two measures, accounting-based and the market-based. In this study, both of the methods is used in order to calculate the financial performance of the firms. In the next chapter, is analyzed the existing literature about the CSR.

Chapter 3

Literature review

3.1 Introduction

This current chapter shows the previous research that has been done in order to analyze the relationship between CSR and financial performance of the firms. The literature review starts with the perception of CSR in paragraph 3.2 and continues with the association of CSR and financial performance in paragraph 3.3. In paragraph 3.4 is referred the CSR and financial performance relationship in different industries, while in the paragraph 3.5 briefly provided the relationship of CSR and financial performance using accounting-based and market-based measurements of financial performance. Last, in the paragraph 3.6 there is a description of previous meta-analyses studies and how they compare the results with one another. A summary paragraph is provided in the end of this chapter.

3.2 The perception about CSR

The literature review shows that according to Malik (2015), there is not a specific definition of Corporate Social Responsibility (CSR) even if it has been broadly analyzed by many authors during the last decades. Nevertheless, CSR is considered to be a key factor for the development of the companies. For this reason, many people tried to examine the correlation of financial performance and of CSR because from studies it is considered that social responsibility is strongly connected to financial profitability (Lankoski, 2008).

The research about CSR started before the 1930s and continues until now. The CSR together with the growth of the companies, the market and the economy, becomes a very important component for the practices of the business Donham (1927). He also adds that CSR gives more stability and helps the company to have better performance. Despite Donham (1927), Berle (1931), supported the idea that the company in order to be able to exercise its role as a firm, it has to achieve five responsibilities. Firstly, the acquisition of shares should benefit the entire company, not individual managers. Secondly, any change in the corporate law or the corporate charter has to benefit the entire corporation, and any benefit or sacrifice must be balanced throughout the corporation. Third, all of the issued securities have to not dilute or adversely affect the interests of existing or potential stockholders. Moreover, the asset sale or transfer, the stock exchange and merger has to take place

in the interests of all class shareholders. Last but not least, the declaration of dividends or their absence must benefit the whole company and all shareholders and also the dividends must only be made for business reasons.

The CSR later on starts to be a very important indicator and that is why even more researchers started studying about it, with the most work done by Friedman (1970). According to him there is an integration into CSR characterization of the free market rubrics, which indicate that the sellers and the buyers of the market arrive to the price based on the market demand and supply. Furthermore, Carroll (1979) analyzed the CSR and concluded that the social responsibility is characterized by 34 main factors such as legal, economic, ethical and also discretionary expectations which the society and waits from businesses to have. However, some years later, the author suggested that the main element of CSR has to be the economic responsibilities of companies but at the same time discretionary expectations have to be replaced by philanthropic responsibilities Carroll (1991). Finally, Carroll (1998) supported that there has to be a relationship between CSR, the law and the company.

Later on, the perception of importance of CSR in society did not change drastically. The CSR always was an important measurement for various reasons. The most important is that through it, it is very easy to define the association that society and business have with one another (Sarvaiya et al., 2014). Saeidi et al., (2015), stated that when a company is planning environmental management strategies, it has to include the fact of meeting its expectations and the expectations of the society. In the same year, some authors supported the fact that the CSR strategy which companies adopt has to be based on social interest, even if there might be a short term risk of business outcomes (Valiente et al., 2015). According to a research made by Long et al. (2019) in China, the increase of CSR strategy boosts the economic benefits for the firms. Bouichou et al. (2022) searched about the importance of CSR on financial and non-financial performance of the firms in Morocco. Last but not least, Giao et al. (2020), supported the fact that CSR strategies help the firms to have a stronger reputation and to change the idea that the companies should base their reputation only on their financial performance.

3.3 CSR and financial performance relationship

Plenty of authors support that the relationship between CSR and financial performance (Na et al., 2022) and some concluded that the results widely vary (Lin et al., 2009). The results also can vary not only between countries but also between industries, according to Lee et al., (2009). When it comes to this relationship, many authors found a positive relationship between them, such as from the research made by Tsoutsoura (2004). More researchers such as McGuire et al. (1988), Orlitzky et al. (2003), and Karagiorgos (2010) were going also in the same direction as the author Tsoutsoura (2004) and concluded that, to some extent, there is a positive relation of CSR and financial performance of the firms, even if each one of those authors examined specific aspects of this relation. Furthermore, the authors Chin-Huang et al. (2009) and Brammer et al. (2008) showed that there is better financial performance long-term of the firms who do investments on their CSR.

Although many are those which are against this statement and few suggest that there is neither positive nor negative relationship. Based on the research of Pava and Krausz (1996), there is no evidence that there is a difference in between companies which implemented CSR strategy from those which did not. Nelling et al. (2009), also supported that there is no association between the corporate responsibility and financial performance. Sometimes when the firms invest on CSR they exceed with it their economic benefits, because there is always a conflict between the wealth of the shareholders and the corporate responsibility (Makni et al., 2009). This means that there is a negative relationship of CSR and financial performance. Hirigoyen et al. (2015), said that there is negative relationship as well. They based their study on the dividends paid for the shareholders and the profits of the company.

3.4 The relationship of CSR and financial performance in industries

Various researchers in the past tried to specify the relation between CSR and financial performance in many different industries. Some of the main industries examined were banks (Cornett et al., 2016). More specifically Islamic banks in the Gulf cooperation Council (GCC) and Indian banks were analyzed by Platanova et al. (2018) and Maqbool et al. (2020) respectively. Furthermore an analyses on Pakistan's banks have been done by Szegedi et al. (2020), which suggests an improvement of financial performance due to an overall increase of CSR. Another industry was the one concerning telecommunications companies (Hashim et al., 2019), or fintech technology by Liu et al. (2021).

One more very interesting industry is the small and medium enterprises (SMEs) where Valdez-Juarez et al. (2019) and Bahta et al. (2020) examined the effect that CSR has on financial performance. The first ones analyzed the relationship mentioned above from the side of organizational learning and corporate social responsibility, which includes social, economic and environmental parts. When it comes to Bahta et al. (2020), they looked at this relationship specifically for countries which are developing. At the same direction moved Williams (2020), who supported the idea that the CSR investments and the monitoring of their financial performance can help firms to have more benefits. One more very important industry is the one of energy, which is a very crucial factor of sustainability. Sustainability can be achieved by having a better financial performance in companies because firms which are driven by sustainability goals can reach better results from conventional energy companies and this due to better CSR (Patari et al., 2012).

When it comes to food and beverage industries several authors conducted analyses in those industries. According to Rhou et al. (2016), the CSR moderates the relationship that the financial performance has with the social one in the restaurant industry. In addition to the literature, Nirino et al. (2020), found mixed results when it comes to the food and beverage industry from a collection of data from 190 companies. In this paper it is shown a positive effect of social outcomes and negative effect from environmental outcomes. But also it is described a non-positive effect depending on which measurement was used to calculate the financial performance.

3.5 Accounting and market based methods of CSR and financial performance

Several theories have been proposed to the association between CSR and financial performance, some focusing on accounting-based measurements and others on market based measurements. Based on Richard et al. (2009) and Inoue and Lee (2011), both of the methods are accepted measurements of the calculation of the performance that the firms have. However, market-based measurement represent the perceptions that shareholders have rather than the measure of the firm's value. On the other hand, in short-term, the accounting-measures can show more accurately the profitability of the firm.

According to Pava and Krausz (1996), the companies which used the market-based measurements for financial performance, they performed stronger and in addition they had a positive association between CSR and financial performance, something that is very important for the firms. Based on Blanco et al. (2012), there is a positive effect of CSR on financial performance through innovation.

This was based on market measures. On the other hand, there were evidence that the Return on Assets (ROA), which is an accounting based measure, can predict better the CSR, McGioren et al. (1988). Aras et al (2010), conducted their analyses with Turkish listed on Istanbul Stock Exchange (ISE) companies. They used accounting based measures and found that there is no association of CSR and financial performance. In both cases, the common part is that the CSR can be measured not only with market-based measures but also with accounting-based measures.

3.6 The meta-analyses studies of researchers

This paragraph makes a comparison of various meta-analyses studies and this is why it is so important to mention this kind of literature. According to Metsamuuronen (2009), meta-analysis indicates relevant aspects and trends of the research samples. Based on those researches, there are mixed results about the relationship between CSR and Financial Performance of the companies. Furthermore, Orlitzky et al. (2003), supported the fact that their meta-analysis of 52 studies, showed that there is an important correlation of CSR and financial performance and that is why it is an important factor of business scholars. In addition, they proved a positive correlation in between those two factors.

Some studies, such as of Boaventura et al. (2016) and Mikolajek and Gocejna (2016), showed that mostly, 71.7% and 55% in 53 and 58 empirical studies respectively, have a positive correlation between financial performance and CSR. In addition to them, Margolis et al. (2009), Bird et al. (2007) also found a very strong positive correlation. This shows that there can be a very strong and positive correlation in between of the firm's financial and social performance (Boaventura et al., 2016).

Although, others have found insignificant relationship between CSR and financial performance of the firms. When it comes to insignificance, Mittal et al. (2008) where the researches who supported that there is not much evidence that companies with a code of ethics can create great market and economic value for the firms. Also, there is no big upward acceleration of financial performance when the CSR gets increased, as there is not a great downfall when the opposite happens (Hillman and Keim, 2001, Waddock and Graves, 1997). Moreover according to McWilliams and Siegel (2000), there is no significant correlation between CSR and performance of the corporate. Also, they added that the studies which show positive or negative relationship are because there are problems with the design of the study. On the other hand, it is very important to mention the fact

that there might be also a negative correlation between CSR and financial performance of the firms as the meta-analyses studies showed (Cowen et al., 1987, Brammer et al., 2007).

There are many more researches who did comparable studies and meta-analyses, but all of them found many and different results. This happened because individually, the researches use different variables to analyze their models. Based on Surroca et al. (2010), there might occur even some issues in the relation between the variables and that's how there might be different results. A main problem could be the heterogeneity according to Surroca et al. (2010), and this can happen because of the different ways and the difficulty to find the data that the researchers use in order to conduct their analyses. Furthermore, the author mentions the fact of causality. This means that not only the CSR can affect the performance of the firm but also the financial performance can affect the CSR. And this is why, the relationship in between them varies. It can be positive, negative or even insignificant.

Last but not least, it would be interesting to mention that there were authors, such as Roman et al., (1999), who tried to correct the errors of Griffin and Mahon (1997) research, who conducted a meta-analysis about 62 different meta-analyses and also the empirical parts of other seven companies in the chemical industry. The results of this second research of Roman et al. (1999), shed the light to the fact that the studies which had a negative correlation of CSR and financial performance are much less than those that Griffin and Mahon (1997) found. This shows that the studies can show different results from the way based on the researchers.

3.7 Summary

Taking into consideration all the previous paragraphs, there is a lot of information regarding previous studies conducted to find the relationship between CSR and financial performance of the firms. The literature showed that there are mixed results of previous literature researches. When a company is paying attention to the CSR performance it can get a better financial performance both short term and long term (Lu et al., 2013). This also gives a competitive advantage to the firms and that is how it is more possible to achieve higher goals in the future and get more value. Also, in the findings of Lu et al. (2013), when economic recessions occur, the companies which are more socially responsible, they perform better in the market than those which are not.

Chapter 4

Data and Methodology

4.1 Introduction

In this chapter it is described the design of the research and the data which were used to get the results which are analyzed in the next chapter. In paragraph 4.2 the developing of the testing hypothesis is described and the regression models analysis is in the following paragraph 4.3. The data analysis is described in paragraph 4.4 and the methodology in paragraph 4.5. Finally, a brief summary paragraph is included in this chapter.

4.2 Hypothesis development

This paragraph describes the hypothesis development. The hypothesis formulation is explained through the information mentioned in chapter 2 and 3, the background and also previous literature information, about the social responsibility theoretical framework and the findings from previous studies. The main research question which has to be answered is:

“Is there impact of CSR on financial performance of the firms in the food industry in the EMEA countries?”

For this question, many are the hypotheses that can be formulated and tested in this study, in order to give the most suitable answer.

Based on previous numerous studies, it can be understood that there is no clear evidence of the relationship which the CSR and financial performance have. As it has been previously reported in the literature, many authors suggest that there is a positive association of CSR and financial performance of the companies. In contrary, many others support that there is a negative relationship and some concluded that there is neither positive nor negative association between them. In this study, it is expected to find a positive association between the social responsibility of the corporates and their financial performance.

Taking into consideration the previous researches and by using accepted measurements for the CSR and the financial performance, it is possible to develop some certain hypotheses. Those are the following:

H1: There is positive relationship between CSR and ROA in the food industry of the EMEA countries.

H2: There is positive relationship between CSR and ROE in the food industry of the EMEA countries.

H3: There is positive relationship between CSR and MCAP in the food industry of the EMEA countries.

The above hypothesis will be tested in the next chapter.

4.3 Empirical model

As in previous studies, in order to answer the main research question it is important to conduct a regression analysis. In this research, there were used three dependent variables to analyze the financial performance, both market-based and accounting-based measures of financial performance of the firms. For this reason, three models are formulated to proceed with the regression. The first regression model is the Return on Assets (ROA) and the second model the Return on Equity (ROE), which are used for the financial performance. The third model has as the dependent variable the Market Capitalization (MCAP), which measures the financial performance from a market-based aspect.

The empirical models have the following structure:

$$ROA_{i,t} = \beta_0 + \beta_1 ESGscores_{i,t-1} + \beta_2 Leverage_{i,t-1} + \beta_3 Size_{i,t-1} + \varepsilon_{i,t} \quad (1)$$

$$ROE_{i,t} = \beta_0 + \beta_1 CSR_{i,t-1} + \beta_2 Leverage_{i,t-1} + \beta_3 Size_{i,t-1} + \varepsilon_{i,t} \quad (2)$$

$$MCAP_{i,t} = \beta_0 + \beta_1 CSR_{i,t-1} + \beta_2 Leverage_{i,t-1} + \beta_3 Size_{i,t-1} + \varepsilon_{i,t} \quad (3)$$

Where,

$ROA_{i,t}$: Return on Assets of the firm i in year t (Net Profit/Total Assets)

$ROE_{i,t}$: Return on Equity of the firm i in year t

$MCAP_{i,t}$: Market Capitalization of the firm i in year t

$CSR_{i,t-1}$: Corporate social responsibility of the firm i in year $t-1$ (ESG scores)

$Leverage_{i,t-1}$: Total debt to total assets of the firm i in year $t-1$ (total debt to total assets)

$Size_{i,t-1}$: A proxy for the size of the firm i in year $t-1$ (ln of total assets)

β_0 : Constant coefficient

$\varepsilon_{i,t}$: Error term

i : Firm index

t : Year index, years 2016-2021

The dependent, the independent and the control variables will be explained and analyzed in the next sub-paragraphs. Following, the research methodology is described in the paragraph 4.5

4.4 Data analysis

In this paragraph of the research, the data which were been collected will be described and all the variables illustrated previously as well.

4.4.1 Sample description and data collection

There are several studies which already analyzed the relationship between the CSR and the financial performance of the firms. In this study, the industry is specified, which corresponds to the food sector in most of the available companies in the Europe, Middle East, Africa (EMEA) countries. The sample time period is from 2016 to 2021 on yearly basis for each company. There is used a specific time period because it was more efficient to collect the most of available data and have the minimum amount of omitted data. In addition, in this period it is possible see the most changes that happened world widely, with the most important the coronavirus (COVID-19) pandemic, which changed quiet a lot the industries. Furthermore, in this time period, the most recent data available is used in order to have the most reliable data. To obtain all the information needed the Refinitiv Datastream database were used for the twenty available EMEA countries data.

To be more specific, the EMEA countries of this current study are the followings:

Austria, Belgium, Cyprus, Denmark, Egypt, Finland, France, Germany, Greece, Ireland, Italy, Mauritius, Netherlands, Norway, Spain, Sweden, Switzerland, Turkey, United Kingdom, Zimbabwe.

Except from them some more countries can be included in the analysis but in order to avoid special heterogeneity due to the fact that the countries might not have same parameters. For this reason, in the current dissertation, only the twenty countries are being analyzed in order to create homogeneity among the results. Those countries are characterized by same law and same market characteristics.

4.4.2 Dependent variables

There are many ways to measure the financial performance of the firms. According to McGuire et al. (1988), there are two types which are able to measure the financial performance. Those are the market-based and the accounting-based measures. Both of the methods can be equally used depending on what exactly the researcher wants to study and analyze. In this current study, it will be implemented both accounting-based measures and market-based measures for the financial performance. Specifically, these measures will be the Return on Equity (ROE) which shows us how well the firm performs for its investors (Leong Lin et al., 2020) and the Return on Assets (ROA) which shows the profitability of the firm (Hargrave, 2022) as accounting-based measures. Those variables were used by many other prior authors (McGuire et al., 1988, Pava & Krausz, 1996). These measures are used in order to be able to compare the findings of this study with the findings of the previous ones.

Based on Servaes and Tamayo (2013) the ROA is defined as follows:

$$\text{Return on Assets (ROA)} = \frac{\text{Operating Income}}{\text{Total Assets}}$$

Based on Leong Lin et al. (2020), the ROE is defined as follows:

$$\text{Return on Equity (ROE)} = \frac{\text{Net Income before Tax}}{\text{Total Equity}}$$

For the market-based measure the Market Capitalization (MCAP) will be implemented. According to Tanveer et al. (2018), the MCAP is a variable which can be used in order to represent the financial performance of the firms. Based on Mendes-da-Silva and Onusic (2014) and Dhaliwal et al. (2011), the MCAP is the logarithm of MCAP.

According to them, the MCAP is defined as:

$$MCAP = \text{Number of shares} * \text{Price of shares}$$

In the next paragraph it will be described the independent variables which were used in this study.

4.4.3 Independent variables

This paragraph refers to the independent variable which is used in this study, the corporate social responsibility (CSR). Based on the previous literature, there are many ways to define what the CSR is and why it is becoming more and more important for the firms. The CSR is part of the ESG scores and that is why the ESG scores are the most suitable for measuring the CSR (Tsai and Mutuk, 2020, Tsai and Wu, 2021). In this study, the ESG scores are used as the measure of CSR.

However to have more clear view of CSR, there are four main approaches to measure it. Firstly, the environmental impact which refers to the effect that the company has on the environment. This can be used as one of the indicators of CSR. This includes analyzing factors such as carbon footprint, waste management practices, and water usage. By setting sustainability goals and tracking their progress over time, firms can measure their performance against their targets. Additionally, one more measure of CSR is the social impact that the company has. This can be done by tracking employee satisfaction, community involvement, customer satisfaction, and charitable giving. Third type of measure is the transparency and the report, with which companies reveal their CSR activities through annual reports, sustainability reports, and other public documents. Transparency and reporting can foster trust with stakeholders and demonstrate a commitment to CSR. Last but not least, the financial performance of a company, job creation, and its contribution to the communities where it operates are examples of factors that can be used to measure the economic impact of CSR.

4.4.4 Control variables

In this sub-paragraph will be described all the control variables which were used to conduct the research and answer the main question of this study. From previous studies, there is evidence that

there are factors, which affect the independent and dependent variable. For this reason, in this study, the control variables are leverage and the firm's size. They are important because they might affect the relationship that corporate responsibility has with the financial performance of companies in the food industry.

Leverage

The first variable which is the leverage is taken as control variable because of the fact that firms with higher levels of debt and can have high level of financial leverage and this is a negative effect for the financial performance (Capon et al., 1990, Gaio et al. 2020). This means that the higher level of leverage means a negative impact on financial performance and also that the company is more prone to economic downturns and changes in interest rates. On the other side, low levels of leverage refer to a positive impact of the financial performance of the firms and might have lower financial risk and lower investment returns as well. The company's leverage can be measured by various ratios, including debt-to-equity ratios, debt-to-asset ratios, and interest-to-equity ratios. These ratios measure the amount of debt the company has in terms of its assets,, assets and ability to pay interest expenses, respectively. In this study, as leverage factor the percentage of total debt to total assets of the firms is taken, in order to measure the debt that the firm have.

Size

The next variable which is widely used in many research studies is the size of the firm. Based on some researchers, it is considered that the size is important because larger companies can have greater impact through the operations they have (Gaio et al., 2020). The authors also supported that, bigger firms frequently use CSR strategies in contrary to smaller firms. According to Aggarwal and Padhanna (2017), the size of firms has a significant positive impact on financial performance. The authors found that larger companies tend to have higher profits, higher ROA, and higher asset turnover compared to smaller companies. Generally, the literature suggest that the larger companies perform better that the smaller ones and that is why the size is an important variable for this current study. However, taking into consideration the different industries that other companies work and other specific sectors of the market, there might have been differences in results of the association of the size and the financial performance. In this study, to measure firm size, \ln of the total assets is used, to control for the impact that CSR has on the financial performance of the firms examined in the food industry.

4.5 Methodology

This paragraph discusses the methodology of this research study. The models assume that the CSR has an impact on financial performance measures. Except from social responsibility it is considered that the control variables leverage and size have impact on ROA, ROE and MCAP as well. The ROA, ROE and MCAP are used as variables to measure profitability of companies, while leverage and size are used as measures of financial resources. The model explains that CSR, leverage and size play an important role in determining the financial performance of companies in the food industry. Based on that, the model suggests that the CSR has a affects financial performance and this is the reason why it has to be tested. Moreover, the financial performance analysis is at a great importance because through it is possible to find out if the financial implementations of the company were used in a proper way (Fahmi, 2011).

It was decided to choose panel data models in order to conduct the regression analysis. This will shed light on whether there is impact of social responsibility on financial performance, combining cross-sectional and time-series (Gujarati and Porter, 2009). The quantitative approach on this test is reasonable, since the variables can be quantified. More specifically, to understand whether it is more suitable to use the fixed effect or random effect model, Hausman specification test is implemented. If the null hypothesis is accepted then the fixed effect model had to be implemented for the tested model. On the other side if the null hypothesis is not accepted, it is more suitable to conduct the random effect model. If the random effect mode is being accepted, it is important to conduct the Breush-Pagan test. If the null hypothesis has to be accepted then the random effect model was correctly chosen, otherwise the pooled model has to be used. Furthermore, in the study, a robust regression is implemented, which is helpful as an additional test to prove that the results of the study are reliable.

4.6 Summary

In this chapter it was described the hypothesis of the current study and at the same time it was also described the research methodology. As is already known, in previous researches the results were very different. In this case, there were developed hypotheses in order to elaborate with the main research question. The first hypothesis, tests the relationship between CSR and ROA which represents the financial responsibility. The second model tests the association of CSR and ROE and the third the relationship between CSR and MCAP. To find out the relationship between

corporate social responsibility and the financial performance it is needed to conduct a research by using those three regression models. In the next chapter of the dissertation, the findings are being analyzed.

Chapter 5

Results

5.1 Introduction

In this chapter will be described the results of the regression analysis. The paragraph 5.2 presents the descriptive statistics and the correlation analysis. In the next paragraph are the outcomes of the panel regression analysis. In the paragraph 5.4 there is the robustness test from the models that were used in this study. In the appendices, are included the outputs of the regression and correlation tables from the program which were used (STATA). In the last paragraph, it is provided a brief summary of the chapter.

5.2 Descriptive statistics and correlation analysis

5.2.1 Descriptive statistics

In order to understand the findings of this research, it is relevant to analyze the descriptive statistics and describe the characteristics of the data which were collected. First of all, scatter plots are made to visualize the relationship that the independent variables and control variables have with the dependent variables of the study. The scatter plots are in the appendix and show clearly the relationship.

The Table 1 is showing an overview of the variables used in the descriptive statistics of this study. This table provides evidence about the variables included in this research, which are the dependent, the independent and the control variables. The sample size is 273 firm-year observations. There are some omitted values due to the fact that the independent and control variables are taken at t-1. When it comes to dependent variables, the mean is 5.86 for the ROA, 10.32 for the ROE and 8.07 for the MCAP. This indicates that the mean of the most companies are 5.86%, 10.32% and 8.07% for the ROA, ROE and MCAP respectively. The independent variable, the ESG score, has a mean of 37.66, where the ESG score is the measure used to analyze the CSR. The leverage mean is 24.77 and the size of the firms have an average of 14.41.

Table 1. Descriptive summary

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROA	450	-27.44	31.57	5.86	6.03
ROE	450	-108.8	46.47	10.32	15.01
MCAP	490	3.77	12.64	8.07	2.02
ESG score	375	0	91.78	37.66	30.12
Leverage	375	0	69.64	24.77	13.22
Size	443	10.56	19.36	14.41	1.75

In the following paragraph are analyzed the correlation results.

5.2.2 Correlation matrix

In this paragraph the correlation between the variables is being analyzed. In the Table 2 there is the correlations of the variables of this study. The correlation values are estimated in significance level of 5%. The Table 2 provides evidence on that the correlation between ROA and ESG score is 0.03, ROE and ESG score is 0.11 and MCAP and ESG score is 0.53. All of them show that there is a positive relationship between the independent and dependent variables, which means that an increase of ESG score will lead to an increase of the dependent variables. One important fact to mention is that, the correlation between the ROE and MCAP and the ESG scores is significant at the level of 5%. However, the ESG scores and the dependent variable ROA do not have a statistically significant correlation at 5% level. When it comes to the leverage, the correlation matrix indicates that there is a negative but also significant relationship with ROA and ROE with -0.18 and -0.12 respectively. The negative impact suggests that there is a decrease of ROA and ROE by -0.18 and -0.12 respectively. Furthermore, the table indicates a positive relationship of leverage and MCAP, which this is also significant at the level of 5%. Finally, the size of the firm shows also a negative relationship with two dependent variables, the ROA and ROE and positive relationship with MCAP. More specifically, the ROA and size is -0.17 and it is statistically significant at the 5% significance level. The ROE and the size variables have a negative correlation of -0.06, which is not statistically significant. Finally, the correlation between MCAP and size is

statistically significant at the 5% level of 0.73. However, except from the correlation between the independent and dependent variables it is also important to mention the correlation between the independent and control variables. From the Table 2, there is clear evidence that there is a positive and statistically significant at the 5% level correlation between the ESG scores with leverage of 0.31 and with size of firms of 0.67. Last but not least, there is a statistically positive correlation among leverage and size of 0.39 at the 5% significance level.

Table 2. Correlation matrix

	ESG score	ROA	ROE	MCAP	Leverage	Size
ESG score	1.000					
ROA	0.0376	1.000				
ROE	0.1191*	0.8520*	1.000			
MCAP	0.5303*	0.2074*	0.2595*	1.000		
Leverage	0.3157*	-0.1801*	-0.1226*	0.2233*	1.000	
Size	0.6731*	-0.1724	-0.0606	0.7380*	0.3917*	1.000

*Note: Significance level is indicated as * $p < 0.05$*

In the next chapter, will be analyzed the results from the panel data regression analysis and the three main variables will be discussed.

5.3 Panel regression analysis

In order to test the hypotheses which have been developed in this study a regression analysis was conducted. The first equation includes the dependent variable, ROA, the independent variable, the ESG scores, which is the measure of CSR, and there are two control variables, the leverage and the size of the firms. In the model, the independent variable and the control variables are examined in first order lag, in order to get more clear result how the CSR affects the financial performance of the firms. The regression is given in the appendix. At first step, Hausman specification test is applied to test which method is the more appropriate to use in this regression model (Hausman, 1978). The analysis result accounts for the robust standard errors in order to avoid potential autocorrelation and heteroscedasity issues and to present less biased results. It was also used in order to have a more representative model and try not to have endogeneity problem. By conducting

the Hausman specification test, in this model, the p-value is equal to 0.00 which is smaller than the significant level 0.05. This suggests not to accept the null hypothesis (Hoechle, 2007). For the current research the Hausman test indicated that the fixed effects model is more suitable.

According to the table, the value of R-squared which is 0.03 overall and it shows how well the variables are describing the model. This means that the ROA is explained by the independent variable for 3%. Furthermore, the F-statistic is equal to 4.44, which is important test that indicates the models explanatory power. The model in this study describes how the independent variable affects the main dependent, ROA. First of all, the ESG scores variable has a p-value > 0.05 and this means that the null hypothesis is accepted. The ESG variable has a positive impact on the ROA for 0.721, but it does not have statistically significantly impact the ROA which consequently suggest neutral results. Thus, no significant relationship between ESG scores and ROA was found. Moreover, the table provides evidence for the impact of leverage and the size variables on the dependent variable. The table suggests that, leverage does not have a statistically significant effect on ROA, since its p-value equals to 0.925 is greater than 0.05, which refers to not accept of the null hypothesis. Finally, the size presents a positive low coefficient and it is statistically significant, since the p-value is $0.005 < 0.05$. To sum up, there are neutral results between the ESG scores, leverage and ROA and low statistically significant impact of size to ROA.

As in the previous model, the same tests are conducted for the second model of this study, where the dependent variable is ROE. The value of R-squared is 0.0063 overall, which indicates that the ROE is explained by 0.6% from the independent variable. The F-statistic is equal to 7.92 and the model is statistically significant since p-value < 0.05 . In this model, the ESG score and the control variables are examined in first order lag as in the previous model. By implementing the Hausman specification test, there is evidence that the fixed effects model is more suitable to apply ($0.0001 < 0.05$). The F-statistic shows that there is a good explanatory power of the model since it is equal to 7.92. Firstly, the ESG scores showed that there is no statistically significant effect on ROE, since the null hypothesis is not accepted because p-value equals to 0.304 and it is greater than 0.05. Same are the results for the leverage ($0.85 > 0.05$), so there is a neutral result and the leverage has positive but not statistically significant effect on the dependent variable. On the other hand, as in the previous model, the control variable size, has a statistically significant impact on ROE. This happens because the p-value is equal to 0.00 and this is less than 0.05, so consequently

the null hypothesis is accepted. To sum up, there are neutral results of ESG scores, leverage and ROE, but statistically significant effect of size to ROE.

Table 3. Panel data regression analysis table

Dependent variable:	ROA	ROE	MCAP
Independent variables:			
ESG scores	0.0059 (0.017)	0.042 (0.041)	0.0029 (0.0019)
Control variables:			
Leverage	0.0065 (0.069)	0.031 (0.174)	-0.0071 (0.0053)
Size	-6.58* (2.251)	-16.01* (4.053)	0.69* (0.092)
Constant	99.77 (31.14)	236.9 55.32	-2.019 (1.342)
R-squared	0.03	0.0063	0.509
Chi-square			68.27
F test	4.44	7.92	
Observations	294	294	273

*Note: Robust standard errors in parentheses. Significance level is indicated as * $p < 0.05$*

5.4 Robustness test

In order to make the research more accurate a brief robustness test was conducted. To achieve this the third model of the study were used. In this model the dependent variable is the MCAP and the independent variables, as well as the control variables remain the same as in the previous two models. The same methodology is used in this current situation as well. At first the Hausman specification test is applied in order to understand which model is more suitable to use. In the current study, the p-value is equal to 0.29 and because this is greater than 0.05, the null hypothesis has to be accepted and the random effect model is more suitable to be applied (Hoechle, 2007). The results of the regression indicate that the R-squared is equal to 0.509, which means that the independent variable describes for 50.9% the dependent variable MCAP.

When it comes to the independent variable the ESG score at significant level 5% does not have a statistically significant effect on the MCAP since 0.129 is greater than 0.05, and the null hypothesis has to be accepted. The leverage is having p-value of 0.17. For this reason the null hypothesis is accepted ($0.17 > 0.05$). This means that the leverage has a neutral result on the dependent variable. Finally, the control variable size has a statistically significant impact on the dependent variable MCAP, due to the fact that the p-value for the size is equal to 0.00 which is smaller than 0.05. To sum up, the ESG score and leverage do not have a statistically significant impact on MCAP at the significant level of 5%, but the size has. Furthermore, since the Hausman specification test indicated that the random model is more suitable, it was conducted a Breush-Pagan additional test to convince that the random model is more suitable. From the results of the regression the p-value is equal to 0.00 which is smaller than 0.05. This indicates that the null hypothesis can not be accepted and consequently it proves that the random effect model is the most suitable regression.

5.5 Summary

To sum up, in this chapter it was analyzed the results of conducting this research and were answered the sub question about which are the results of this dissertation. First of all, scatter were made to check the diagrammatic relationship between the ROA, ROE and MCAP with the CSR, leverage and size. Moreover, from the descriptive statistics there is evidence for the total observations, the mean and the standard deviation. Thirdly, a correlation matrix is implemented, in order to understand better how the variables interact with one another. Furthermore, in order to conduct panel data analysis, regression models were used to satisfy the needs of this research. Finally, it was conducted a robustness test to check the relationship of ESG scores with a market-based variable MCAP. The program that were used to make all those tests is the STATA.

Chapter 6

Discussion

6.1 Introduction

In this chapter will be analyzed the result of the findings, which already were mentioned in the previous chapter. In the paragraph 6.2 are discussed the results from the hypothesis testing. Paragraph 6.3 shows the relationship that this study has with other previous studies. In paragraph 6.4 is referred to a comparison to a regression with companies in non EMEA countries. In the following paragraph, it is described the contribution of this research to the already existing. Finally, a brief summary of the chapter is provided.

6.2 Analyses of CSR and financial performance

In this paragraph will be discussed the findings of the study and the outcomes from the developed hypothesis. Based on the panel data regression analysis which was conducted, the findings for all the three models are same. There is no significant impact of ESG scores on ROA, ROE and MCAP which represent the measures of financial performance. The ESG scores represent a measure of CSR. More specifically, there are neutral results in the association among social responsibility and financial performance of the companies.

The hypotheses which were developed for the three models are the followings:

For the first model:

There is positive relationship between CSR and ROA in the food industry of the EMEA countries.

For the second model:

There is positive relationship between CSR and ROE in the food industry of the EMEA countries.

For the third model:

There is no positive relationship between CSR and MCAP in the food industry of the EMEA countries.

For the first model which examines the association between CSR and ROA, the null hypotheses was accepted. More specifically, because of the fact that the p-value is greater than significant

level 0.05, the null hypothesis is being accepted in this model. This indicates that there is no positive relationship between the social responsibility and the ROA and consequently with financial performance, since the ROA is the accounting-based measure of the performance of the companies. The positive relationship H_{1a} is concerned as not significant. From the control variables, leverage is not significantly associated with the dependent variable while the size is significantly associated with ROA. To sum up, from this hypothesis test the outcome is that the first model of this study supports the null hypothesis.

Accordingly to the previous model, this model is also examined by the same methodology. It refers to the relationship of CSR and ROE. For this model the null hypothesis have been accepted as well. This is because the p-value is greater than the significant level 0.05, so consequently the null has to be accepted. Moreover, this shows that there is no positive relationship among CSR and the accounting-based measure for the financial performance, ROE. This also indicates that there is no positive association of social responsibility with the financial performance of the companies. The positive relationship H_{1b} is concerned as not significant. From the control variables, similarly to the previous model, the leverage is not significantly associated with the dependent variable while the size is significantly associated with ROE. Overall, from this hypothesis test the result is that the model supports the null hypothesis.

The third model of this study were used in order to conduct the robustness check test. In this model there is examined the relationship between the CSR and the MCAP. The MCAP refers to a market-based measure of financial performance of the firms. For this model, the null hypothesis is accepted. This happens because the p-value of the model is greater than the significant level 0.05. This proves that there is no positive relationship between CSR and MCAP and consequently there is no positive relationship between CSR and financial performance. The positive relationship H_{1a} is concerned as not significant. Furthermore, from the control variables, as in the previous models, the leverage is not significantly associated with the dependent variable. On the other hand, the size is significantly associated with MCAP. To sum up, from this hypothesis test the result is that the model supports the null hypothesis.

In order to have a more clear view of the acceptance and not acceptance of the hypotheses, the next table was made:

Table 4. Hypotheses table

Hypothesis	Accepted / Not accepted
1) There is positive relationship between CSR and ROA in the food industry of the EMEA countries.	Not accepted
2) There is positive relationship between CSR and ROE in the food industry of the EMEA countries.	Not accepted
3) There is positive relationship between CSR and MCAP in the food industry of the EMEA countries.	Not accepted

Poorly executed or neglected CSR can have detrimental effects on a company. First of all, it can damage the company's reputation as customers, stakeholders, and the public lose trust and loyalty due to unfulfilled CSR commitments or unethical practices. Secondly, consumer support may decrease as socially and environmentally conscious customers choose to boycott products or services, which can lead to a decline in sales and market share. Thirdly, regulatory issues may arise if the company fails to meet social and environmental standards, resulting in scrutiny, fines, or legal consequences. Furthermore, employee dissatisfaction can occur when the company neglects its social responsibilities, leading to decreased productivity, high turnover rates, and difficulties in attracting top talent. Neglecting CSR also exposes the company to operational risks such as supply chain disruptions, environmental accidents, and labor standard violations, which can result in financial losses, legal battles, and reputational damage. Last but not least, investors who prioritize sustainable and responsible practices may be deterred by poor CSR performance, limiting the company's access to capital and hindering long-term growth. Therefore, it is crucial for companies to prioritize and effectively implement CSR initiatives to mitigate these negative consequences.

6.3 Comparison of previous studies

In the previous years, many were the scholars who analyzed the association between CSR and financial performance of the firms. According to Chin-Huang et al. (2009) and Waddock and Graves (1997), there is a positive relationship between CSR with ROA and financial performance of companies accordingly. However, in the current research the results indicated a neutral results. This is in line with the study of Aras et al. (2010) using the accounting-based measurement. According to Gemar and Espinar (2018), there is a neutral relationship among CSR and ROE. In this research, the

results meet the results of the previous authors. Finally, when it comes to the MCAP, based on Tanveer et al. (2018), this variable is considered as a measurement of financial performance. Furthermore, as in this study, some of already existing researches use the MCAP in order to conduct a robustness test. Some studies, such as of Pava and Krausz (1996), suggested that the market-based measures have a low association between the CSR and the financial performance of the companies. In this study, the findings showed a neutral correlation between CSR and financial performance and this is the same results as in the findings of Tanveer et al. (2018).

6.4 Comparison with companies in non EMEA countries

In order to understand if the results can be the same for 17 non EMEA countries, an additional panel data regression was conducted. The results are in the appendix. From the regression the results showed that the ESG scores, which is measure of CSR, do not have a statistically significant effect on ROA, ROE and MCAP. Consequently, the results from the analysis of the EMEA countries corresponds to the results of non EMEA countries. The leverage, as well, does not have a statistically significant effect on the dependent variables. Furthermore, as in the EMEA countries the control variable size has a significant effect on ROA and MCAP while it does not have a statistically significant effect on ROE. To sum up, the CSR does has a neutral effect on financial performance both in EMEA and non EMEA countries.

6.5 Contribution to existing literature

In this current study it is described the impact of the CSR on financial performance of companies in the food industry of the EMEA countries. The results of this research suggest that there is no significant impact of CSR on financial performance of the companies. The methodology of this study can be added to the existing literature because the sample of this study is different from the previous researches due to the fact that it is collected only for companies in the EMEA region of the world and concretely the ones operating in the food industry. This is the main reason which differentiates this study from previous and closes more the existing literature gap on this topic. Finally this study provides evidence on that the findings can be related to the findings of previous authors, such as Waddock and Graves (1997), Gemar and Espinar (2018) and Tanveer et al. (2018).

6.6 Summary

In this chapter, the results of this study were analyzed and discussed. By this way it was possible to answer to the sixth sub-question. From the research it was possible to test and understand the

relationship between CSR and financial performance by using market-based and accounting-based measures. The findings showed in all cases neutral results. This means that in all models which were tested, the null hypothesis is being accepted, which referred to that there is no positive relationship of CSR and financial performance based on both market-based and accounting-based measures. This was proven by the tests conducted in this study and it was consistent to some extent to the already existing studies on this topic. In the following chapter, the conclusion will be discussed.

Chapter 7

Conclusions

7.1 Summary

The purpose of this study is to find the relationship of CSR and financial performance in the food industry for the EMEA countries. In order to answer the main question, it was necessary to formulate sub-questions, which were answered in the followed chapters.

From the theoretical framework and the background information about the CSR, the first sub-question is being answered.

The second sub-question refers to the measurement of the financial performance of the firm, which generally can be measured by accounting-based or market-based measures. In this research, there are used both the accounting-based and market-based measures of financial performance.

The third sub question describes the previous literature, researches of other authors. This chapter supports the fact that there are many authors who examined the relationship between CSR and financial performance. The same happens with the results, because of the fact that there are mixed findings. Furthermore, the measures to estimate financial performance and the CSR are also analyzed in that chapter. Several theories have been proposed to measure financial performance. Some focusing on accounting-based measures for the financial performance, others on the market-based measures. The most common are the first by using the ROA and ROE as measures. In addition to them, the MCAP was also used as a market-based measure, in order to examine the financial performance of the firms. The existing literature is widely extended about the relationship of social responsibility and the financial performance of the firms and there are many other ways to examine the valuation of financial performance.

Moving to the next sub question, there is a refer to the sample and the methodology which were used to conduct this research. In this chapter, it is developed the hypotheses which have to be tested in order to find the association between CSR and financial performance. From the three hypotheses that are developed, three models to test were created. The sample for the regression models are taken from a database about companies in EMEA countries and specifically in the food industry. It is important to test the hypotheses to understand whether the relationship is the positive,

negative or neutral between CSR and financial performance by using accounting-based and market-based measures.

The fifth sub-question is showing the results of the current research. More specifically, a panel data regression analysis was conducted. The correlation was estimated by using the Hausman specification test. Moreover, robustness check was included to investigate if the significant variables of the models affect the final research outcome.

In this chapter were discussed the results of this study. The first model showed that the null hypothesis has to be rejected ($p\text{-value} < 0.05$). This means that fixed effect model is the appropriate. In the second model, where the dependent variable is the ROE, there are same results as before. More specifically, the null hypothesis is not accepted, since $p\text{-value}$ is lower than 0.05, which means that fixed effects model is more suitable. The results confirm that the preferable choice for the measure of financial performance were the accounting-based measures ROA and ROE. However, in the third model, after the test the null hypothesis is accepted because the $p\text{-value}$ is greater than significant level 0.05. As a result, the random effects model is chosen and in addition the Breush-pagan test proves that the random effects model is the most suitable.

In the end, the research provides answer to the last sub-question, which is the conclusion that were made in this study.

7.2 Conclusion

Several prior studies have analyzed the relationship between the CSR and the financial performance. Even if many studies conducted their research in the food industry, they did not do the analysis which is covering the companies of EMEA countries. The purpose of this study was conducted to investigate the relationship of CSR and the financial performance in the food industry for the EMEA countries. The main research question which this dissertation tries to answer is:

“Is there impact of CSR on financial performance of the firms in the food industry in the EMEA countries?”

In order to answer this research question, it was followed the structure to answer seven sub-questions. The sample which were used includes the data from ninety companies in twenty countries of Europe, Middle East and African countries. The period of the analysis is from 2016

to 2021. The hypotheses which were developed test if there is positive relationship between social responsibility with ROA, with ROE and with MCAP. The model of the study were regressed with the help of Hausman test. From the results, it is clear that there is neutral association of CSR and the measures of financial performance, the ROA, ROE and MCAP. The results support the fact that there is a neutral relationship of CSR and financial performance of the firms in the food industry for the countries of the EMEA. To sum up, the findings indicate a neutral association between CSR and financial performance by using as measures of financial performance the ROA, ROE and MCAP. Generally it is considered that the socially responsible companies benefit from a stronger reputation and image and are therefore there have greater possibility in being accepted by society. This can have a positive impact both in short and long-term.

7.3 Limitations

This study tries to find the association of the CSR and the financial performance of the firms in the EMEA countries in the food industry. However, there are some limitations to this approach. One main limitation, is that it is that this study focuses only on a specific industry and region of the world. For this reason the limitation of generalization can be held, because with the results of this study it is difficult to have evidence for the other industries and how they perform. Because of the lack of data availability, it was decided not to investigate all the time framework of data, but only six years (2016-2021), in order to avoid the fact of wrong results because of lack of data. In addition to the previous limitations, it is important to refer on the lack of information about the variables used, which contributed to reduction of the sample size. Moreover, the limitations of the recent studies naturally include the measurement method for the CSR. There are several authors who debate on which measure is more suitable for the CSR and this creates a subjective issue. To sum up, understanding those limitations it is important to have future investigations on the relationship between CSR and financial performance and it is crucial to mention that the interpretation of the results of this study has to be made with some caution.

7.4 Suggestion for future research

Despite the fact that there has been done a lot of research on the topic of association between CSR and financial performance, there is plenty space to fill with further future research. The suggestion for future research would be to use other disclosure methods to measure the CSR of the companies. In addition, future research has to take into consideration that the data can be generalized by using

larger sample size and for longer time period. Different types of control or independent variables can also be used in order to test the regression models. In this study is analyzed only the food industry in EMEA countries, while the results vary in different industries. This is the reason why it is suggested for future research to have more broad data sample and more reliable results. To sum up, those future researches can provide many more potential aspects for further research on this topic.

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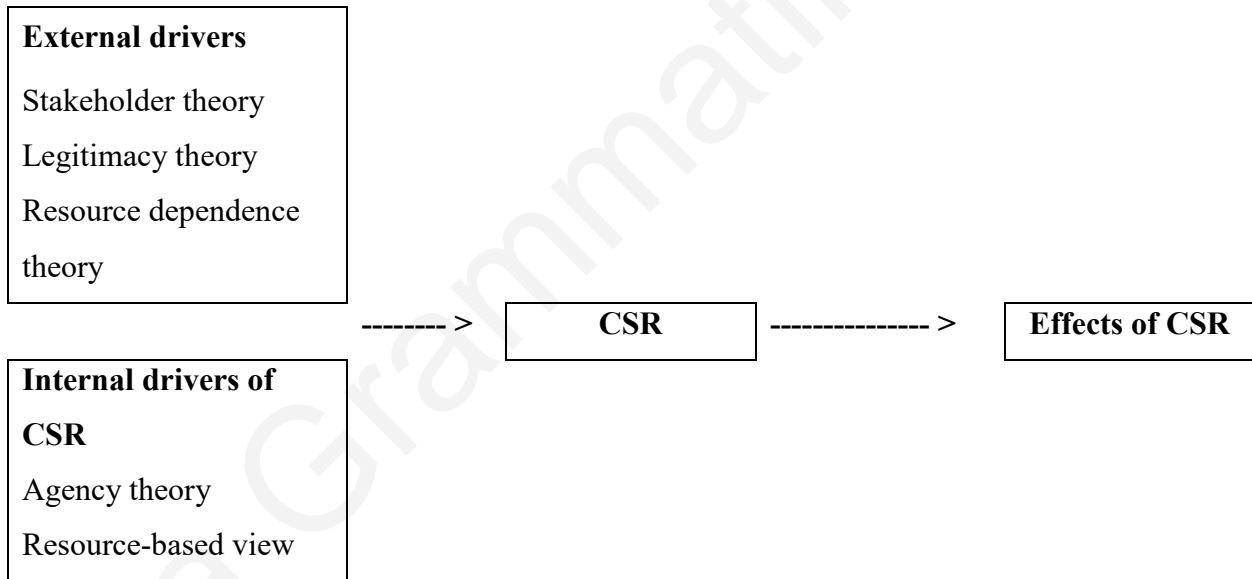
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Appendices

A1. Breakdown of ESG

Definition	Environment	Society	Governance
	Performance of the company as a steward of natural or physical environment	Interaction of the company with its workforce, societies where it operates and the political environment	How company makes reports, decisions and ensures ethical standards
Examples	Climate change Environmental Policy Biodiversity	Wellness and Safety Employee engagement Data Privacy	Policy Ethics Board composition

A2. Theoretical framework of Mellahi et al. (2016)



A3. Summary of countries and companies

Austria	AGRANA BETEILIGUNGS
Belgium	ANHEUSER BUSCH INBEV
	GREENYARD
	LOTUS BAKERIES
Cyprus	PURCARI WINERIES PCL
Denmark	CARLSBERG A/S
	CARLSBERG B
	ROYAL UNIBREW
	SCHOUW AND Co
Egypt	ARABIAN FOOD INDS.
	JUHAYNA FOOD INDS.
Finland	ANORA GROUP
	ANORA GROUP OYJ
	HKSCAN A
	HKSCAN CORP
	OLVI A
France	BONDUELLE
	BONDUELLE SA
	DANONE
	MBWS
	PERNOD RICARD
	REMY COINTREAU
	SAVENCIA
Germany	BERENTZEN GRUPPE
	FROSTA
	SUEDZUCKER
Greece	MARFIN INV.GP.HDG.
	MARFIN INVESTMENT
Ireland	C&C GROUP

	GLANBIA
	GREENCORE GROUP
	KERRY GROUP 'A'
Italy	NEWLAT FOOD
Mauritius	GOLDEN AGRI RESOURCES
Netherlands	DAVIDE CAMPARI MILANO
	DSM KONINKLIJKE
	FORFARMERS
	FORFARMERS NV
	HEINEKEN
	JDE PEET S
Norway	AUSTEVOLL SEAFOOD
	LEROY SEAFOOD GROUP
	MOWI
	ORKLA
	SALMAR
Spain	EBRO FOODS
Sweden	AAK
	CLOETTA 'B'
	MIDSONA B
Switzerland	ARYZTA
	BARRY CALLEBAUT
	BELL 'R'
	CHOCOLADEFABRIKEN LINDT
	COCA COLA HBC
	EMMI AG
	NESTLE 'N'
	NESTLE SA
	ORIOR
	ORIOR AG

Turkey	ANADOLU EFES BIRACIL
	ANADOLU EFES BIRACILIK
	COCA COLA ICECEK
	KEREVITAS GIDA SANVETC.
	PINAR SUT MAMULLERI SYI.
	TAT GIDA SANAYI
	ULKER BISKUVI SANAYI
United Kingdom	BAKKAVOR GROUP
	BAKKAVOR GROUP PLC
	BARR (AG)
	BRITVIC
	BRITVIC PLC
	CARR'S GROUP
	CRANSWICK
	DEVRO
	DIAGEO
	DIAGEO PLC
	FEVERTREE DRINKS
	FEVERTREE DRINKS PLC
	HOTEL CHOCOLAT GROUP
	NAKED WINE
	NAKED WINES PLC
	NICHOLS
	PREMIER FOODS
	SHEPHERD NEAME 'A'
	TATE & LYLE
	THWAITES (DANIEL)
	TRETT
	WYNNSTAY GROUP
Zimbabwe	DELTA CORPORATION

A4. Descriptive summary for the EMEA countries

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROA	450	-27.44	31.57	5.86	6.03
ROE	450	-108.8	46.47	10.32	15.01
MCAP	490	3.77	12.64	8.07	2.02
ESG score	375	0	91.78	37.66	30.12
Leverage	375	0	69.64	24.77	13.22
Size	443	10.56	19.36	14.41	1.75

A5. Correlation matrix for the EMEA countries

	ESG score	ROA	ROE	MCAP	Leverage	Size
ESG score	1.000					
ROA	0.0376	1.000				
ROE	0.1191*	0.8520*	1.000			
MCAP	0.5303*	0.2074*	0.2595*	1.000		
Leverage	0.3157*	-0.1801*	-0.1226*	0.2233*	1.000	
Size	0.6731*	-0.1724	-0.0606	0.7380*	0.3917*	1.000

*Note: Significance level is indicated as * $p < 0.05$*

A6. Panel data regression analysis table for EMEA countries

Dependent variable:	ROA	ROE	MCAP
Independent variables:			
ESG scores	0.0059 (0.017)	0.042 (0.041)	0.0029 (0.0019)
Control variables:			
Leverage	0.0065 (0.069)	0.031 (0.174)	-0.0071 (0.0053)
Size	-6.58* (2.251)	-16.01* (4.053)	0.69* (0.092)
Constant	99.77 (31.14)	236.9 55.32	-2.019 (1.342)
R-squared	0.03	0.0063	0.509
Chi-square			68.27
F test	4.44	7.92	
Observations	294	294	273

*Note: Robust standard errors in parentheses. Significance level is indicated as * $p < 0.05$*

A7. Descriptive summary for non EMEA countries

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROA	1,146	-44.46	98.31	8.97	7.87
ROE	1,146	-139.6	191.8	15.56	18.49
MCAP	1,045	3.23	19.40	10.57	2.83
ESG score	955	0	89.57	21.48	26.06
Leverage	955	0	111.31	20.55	17.51
Size	938	7.89	17.85	14.08	1.54

A8. Correlation matrix for non EMEA countries

	ESG score	ROA	ROE	MCAP	Leverage	Size
ESG score	1.000					
ROA	-0.0819*	1.000				
ROE	0.0239	0.7166*	1.000			
MCAP	0.1807*	-0.0126	-0.0052	1.000		
Leverage	0.0164	-0.2537*	-0.1950*	-0.0135	1.000	
Size	0.4640*	-0.2537*	-0.1936*	0.3595*	0.0745*	1.000

A9. Panel data regression analysis table for non EMEA countries

Dependent variable:	ROA	ROE	MCAP
Independent variables:			
ESG scores	-0.003 (0.019)	-0.038 (0.032)	-0.0001 (0.012)
Control variables:			
Leverage	0.121 (0.141)	0.06 (0.148)	-0.033 (0.079)
Size	-4.936* (2.22)	-5.83 (3.603)	-1.69* (0.456)
Constant	76.37 (29.66)	97.54 (51.02)	33.42 (15.65)
R-squared	0.0354	0.0243	0.1005
Chi-square			30.92
F test	3.47	3.07	
Observations	773	773	773

*Note: Robust standard errors in parentheses. Significance level is indicated as * $p < 0.05$*

A10. Scatterplots

