ERASMUS UNIVERSITEIT ROTTERDAM
ERASMUS SCHOOL OF ECONOMICS

Master Thesis

Corporate Social Responsibility Dimensions and Firm Value: The Moderating Effect of Profitability

MSc Accounting and Control
Academic Year 2020-2021

Student Name:	Yogesh Hingorani
Student Number:	582370
Supervisor Name:	Jeroen Suijs
Date:	August 14th, 2021

Acknowledgements

This research paper serves as the fulfilment of the master's degree in Erasmus School of Economics in the field Accounting and Control.

This master thesis has been an enjoyable ride and multiple people have supported and contributed to this master thesis. I would like to personally thank these people for their support and contribution in the completion of this thesis. I would like to thank my thesis supervisor at ESE, Mr. Jeroen Suijs, for his time, academic input, and his support throughout this thesis process. Due to Mr Suijs, I was able to complete this thesis and go through the process without many hurdles.

Finally, I would also like to thank my parents, family and friends for their never-ending support and guidance through this difficult year, either through school or through the thesis procedures. With their support, I was able to deal with any difficulties arising during this year.

Table of Contents

List of Tables

Abstract

In recent times, there has been an increasing awareness of CSR; however, there are quite a few cons of investing in CSR, which seems like an adverse operational decision. On the other hand, there are also benefits to CSR, which could positively influence the bottom line and therefore, firm value. Within this research, five dimensions of CSR are used, which are Environment, Employee Relations, Community, Product and Diversity. This research aims to determine what are the moderating effects of Profitability on the association between the CSR dimensions and firm value. Furthermore, the secondary aim of this research is to determine which dimension of CSR mainly drives the firm value by testing the association between each CSR dimension and firm value.

In terms of the moderating effects of Profitability, a significant and positive association is found between Environment and firm value. This means the Profitability strengthens the association between the Environment CSR dimension and firm value. On the other hand, a negative and significant moderating effect is found on the Employee Relation dimension and firm value. Furthermore, a negative and significant moderating effect is found on the Product dimension and firm value. Similarly, a negative and significant moderating effect is found on the association between the Community dimension and firm value.

In terms of Diversity, an insignificant moderating effect of Profitability is found; therefore, indicating that there are no moderating effects of Profitability on the association between Diversity and firm value. The results of the second model show an insignificant association between each of the five dimensions and Tobin’s Q. Hence, these results indicate that there is no association between each of the five dimensions and firm value.

Chapter 1: Introduction:

In recent times, there has been increasing awareness of Corporate Social Responsibility (CSR), which represents the engagement of the firm towards society and the stakeholders of the corporations. According to the United Nations Industrial Development Organization (n.d.), CSR is a concept in which organizations consolidate social and environmental aspects into the business proceedings and communications with the stakeholders. By consolidating these aspects into the business, a balance of the economic, environmental, and social aspects is accomplished, while focusing on the expectations of the stakeholders simultaneously. CSR is split into different dimensions that are used within this study, which are Environment, Employee Relations, Community, Product and Diversity.

Having said that, the primary aim is to investigate the moderating effect of profitability on the relation between the CSR dimensions and firm value. Prior research (Arora & Dharwadkar, 2011) states that if a company is recognized as being profitable, the stakeholders of the company can trust the company in terms of investment decisions, hereby, giving the company more freedom in investment decisions, which would be mirrored through a higher market value. Additionally, Maturbongs (2016) argues that when profitability increases, firms tend to switch their focus from aiming for profitability to aiming to perform within the social responsibility aspects. If the social responsibility aspects are neglected, this would result in legal problems and establish a negative reputation surrounding the firm. Moreover, Maturbongs (2016) states that profitable firms are more adequate in executing CSR activities and disclosing more CSR activities in comparison to the firms with a low profitability.

Riantani and Nurzamzam (2015) state that higher profitability visualizes the ability of the firm to obtain profits, which can enhance the firm's participation and investments into CSR activities and result in increased disclosures. According to Riantani and Nurzamzam (2015), the profitability of a firm provides the firm with freedom and extensibility towards management to disclose their CSR activities to the stakeholders. This is further in line with the Stakeholder Theory, where profitable firms are willing to invest in enhancing the CSR disclosures.

Machmuddah et al. (2020) argue that if a company implements CSR disclosures, the company's reputation could increase, which could increase the company's sales and profits. Therefore, this enables a company to obtain more capital to enhance the CSR disclosures (Machmuddah, Sari, & Utomo, 2020). Furthermore, firm value enhances due to the increase of sales caused by the execution of social activities by the company and the attraction of investors by the execution of the social activities. Hence, Machmuddah et al. (2020) argue that profitability positively influences the relationship between CSR and firm value since profitability positively impacts CSR disclosures, which positively influences firm value. However, according to Maturbongs (2016), profitability has a negative effect on the disclosures of CSR with regards to the Legitimacy Theory. This is when a firm is profitable and has enhanced financial performance, the firm would place more importance on reporting the financial performance whilst almost completely neglecting any non-financial information. Maturbongs (2016) further claims that in such situations, overlooking non-financial information may result in reduced disclosure of their CSR activities, which could lower firm value.

The second aim of this research paper is to investigate which of the CSR dimensions drive the firm value of US-listed firms. Furthermore, CSR can be costly to implement and conduct for corporations, which may create a perception of CSR being an adverse operational decision (Yuen & Lim, 2016). According to Goyal and Kumar (2016), an investment in CSR could hinder the goal of profit maximization and may cause corporations to see these investments as more of a cost rather than as investments. Goyal and Kumar (2016) state that the implementation of CSR can be a cumbersome procedure, where management needs to modify strategies at all organizational levels and convey these procedures to the employees and stakeholders of the corporation. Prior research (Galant & Cadez, 2017; Weber, 2008; Barnett & Salomon, 2006) show multiple benefits of corporations implementing CSR, where these benefits contribute to the overall competitive advantage of the corporations. These benefits are as follows: firstly, implementing CSR can potentially enhance the corporation's image and reputation. Secondly, CSR enables corporations to retain or captivate skilled employees and further expand employees' motivation due to environment-friendly atmosphere. Thirdly, CSR enable corporations to advertise their products more easily, which can influence and boost revenue sales. Granted this, CSR is broken into its dimensions to investigate individually which dimensions influence firm value, either positively or negatively. This leads to the following research question:

RQ: What are the moderating effects of profitability on the association between the CSR dimensions and firm value and which individual CSR dimension drives firm value for US-listed firms?

This research contributes to the existing literature by investigating two different aspects. Firstly, this research investigates the moderating effect of Profitability on the relationship between the CSR dimensions and firm value. This additional aspect is a response to the call of the research by Noor, Saeed, Baloch and Awais (2020), who call for future research to investigate the moderating effect of profitability within the CSR and firm value link. There has been multiple prior research which investigate different moderating effects such as family ownership or CSR disclosures; however, to the best of my knowledge, the moderating effect of Profitability on the association between the CSR dimensions and firm value is a unique research; hence, adding value to the existing literature regarding CSR and firm value.

Secondly, this research investigates the elements or dimensions which make up CSR. Researching the different dimensions of CSR further differentiates this research from prior research, as majority of the prior research mainly focuses on CSR as a whole and involves creating a score by combining all the elements. By breaking CSR into the different dimensions, this enables me to determine which of the dimensions of CSR drives firm value for US-listed firms. This research adds value to the existing literature by breaking CSR into the dimensions.

This research is related to the accounting profession due to the recent hype surrounding CSR and its implementation into the business operations and proceeding. This research further relates to the accounting profession since profitability is an accounting measure and assessing whether it influences the CSR-firm value relationship outlines whether more profitable firms have an advantage in exploiting the potential increase that CSR can have on firm value.

To determine which CSR dimension drives firm value, the archival research method is used. The MSCI KLD database containing information, from surveys and financial statements regarding the strengths and concerns of the firms per dimension is used, alongside Compustat database to extract the financial information to calculate Tobin's Q and ROA. The CSR score is calculated as the total strengths minus the total concerns per dimension. The ROA will be used as a proxy for the Profitability variable. A final sample of 8,829 US-listed firms is used for the period 2009-2013.

Furthermore, the first regression tests the moderating effect of Profitability on the association between the CSR dimensions and firm value. In terms of Environment CSR, Profitability strengthens the association between Environment CSR and firm value. Therefore, profitable firms have an advantage as the association between Environment CSR and firm value enhances; therefore, profitable firms should take advantage of this by investing in Environment-related CSR activities to obtain a higher firm value. In terms of Employee Relations, a directionally negative and significant moderating effect is found. This result provides evidence that profitable firms should not invest into or participate in Employee Relations CSR activities as this would negatively affect the firm value. Moreover, this result is in line with the study by Abowd (1989), who finds that the wealth of the shareholders progresses adversely to the wealth of the employees. Similarly, a directionally negative and significant moderating effect is found for the association between Product and firm value. This result provides evidence that profitable firms investing or participating more into Product CSR activities may lead to a lower firm value. With regards to the Community dimension, a directionally negative and significant moderating effect is found, therefore suggesting that investing into Community CSR activities may lead to a lower firm value. Furthermore, in terms of the Diversity dimension, the moderating effect is insignificant, which indicates that there are no moderating effects of profitability between these dimensions and firm value.

The results of the second regression show an insignificant association between each of the five dimensions and Tobin’s Q. These provide evidence that there is no association between each of the five CSR dimensions and firm value. Evidence suggests that investing in CSR dimensions does not significant affect the firm value. This is because there is no evidence of an influence or association of the five different CSR dimensions on the firm value. Hence, it may be better to invest the funds or capital allocated for CSR into other investment opportunities.

Finally, this research has limitations, which are: lack of available databases, and lack of up-to-date information. However, this opens areas for future research such as developing a different proxy for CSR activities, further research into the non-US firms, researching for different moderating effects and finally, future research into a different proxy for the Profitability moderating effect for robustness testing. There is the possibility to investigate other databases such as the Sustainalytics, MSCI: GMI Ratings or the Refinitiv ESG: Asset 4 database to gain a better insight or additional tests into this topic. Furthermore, by using the different databases, the possibility of different CSR proxies may become available for use. The remaining sections of this research report are as follows: Theoretical Literature Review, Hypothesis Development, Methodology, Results, Conclusions, Limitations, Future Research.

Chapter 2: Theoretical Background and Hypothesis Development

2.1 Literature Review

In this section, prior research is presented which outlines the potential moderating effect that profitability has on the relationship between different CSR dimensions and firm value. CSR is broken into different dimensions, which are as follows: Environment, Employee Relations, Community, Product and Diversity. These dimensions are selected as these dimensions best represent the stakeholders of the firms and are selected by panels, in consensus, to be important elements of CSR (Agle, Mitchell, & Sonnenfeld, 1999).

2.1.1 Profitability

One important theory within the literature of CSR is the Legitimacy Theory. Hapsoro & Sulistyarini (2019) present the Legitimacy theory such that firms are considered part of the society and therefore, must operate its business in accordance with the values and norms of the society to continue being successful. Hence, the firm would need to appear as "legitimate" in the perspective of the stakeholders, which could be undertaken by engaging in CSR activities along with disclosing these activities (Riantani & Nurzamzam, 2015).

On the other hand, the study by Maturbongs (2016) argues that with regards to the Legitimacy Theory, profit has a negative effect on the disclosures of CSR. This is due to the fact that when a firm is profitable and has enhanced financial performance, the firm would place more importance on reporting the financial performance whilst almost completely neglecting any non-financial information. Maturbongs (2016) further claims that in such situations, overlooking non-financial information may result in firms lacking the disclosure of their CSR activities, which could lead to a lower firm value. On the flip side, Maturbongs (2016) states that firms with lower profitability may place more emphasis on disclosing their CSR activities which may improve firm value than compared to if the sole focus is on reporting low profitability measures. This way, they are able to navigate stakeholders' attention to focus on the firm's engagement in sustainability rather than solely on financial performance. Additionally, when profitability is low, investors may simply be less attracted to a firm's stock, which may lead to a decrease in stock prices and hence, lowers firm value (Maturbongs, 2016).

Furthermore, there is another important theory within the CSR literature, which is known as the Stakeholder Theory (Hapsoro & Sulistyarini, 2019). Stakeholder Theory is established on the concept of the firm and the environment around the firm. This is when the firm is not only liable to the shareholders of the firm or the firm performance but rather to all the stakeholders and CSR dimensions. Moreover, according to Machmuddah et al. (2020), if the desires of the stakeholders are fulfilled by the firm, this would create an amicable relation with the stakeholders and hence, produce more profits and increase firm value.

Additionally, Gregory et al. (2014) propose the resource-based view for firms, where firms are awarded with higher stock prices if a competitive advantage is obtained. One way this competitive advantage can be obtained is by carrying out CSR activities. There is also the natural-resource-based view which states that to obtain a long-term competitive advantage, firms should devote effort towards environmental issues and activities (Gregory, Tharyan, & Whittaker, 2014). Therefore, profitability enables firms to engage in these activities (Osazuwa & Che-Ahmad, 2016).

Prior research (Arora & Dharwadkar, 2011) states that if a company is recognized as being profitable, the stakeholders of the company can trust the company in terms of investment decisions, thereby, giving the company more freedom in investment decisions. This would, in turn, be mirrored in terms of higher market value. Therefore, more profitable companies have more freedom in the use of their funds and capital thereby enabling the companies to implement CSR activities into the company (Arora & Dharwadkar, 2011; Swandari & Sadikin, 2016). According to the slack resource theory, more profit would provide the firm with more capital and resources to be able to invest more in CSR and its dimensions, such as Community, Employee Relations, and Environment (Waddock & Graves, 1997).

Research by Machmuddah et al. (2020) state that the relation between CSR and firm value strengthens depending on if the company is profitable. Machmuddah et al. (2020) state that companies, with a high degree of profitability, implements a higher level of CSR disclosures, due to the capital reserved for the disclosures. In contrast, companies with a lower degree of profitability implement fewer CSR disclosures, which could have a negative influence on the firm value. Machmuddah et al. (2020) argue that if a company implements CSR disclosures, then the company's reputation could increase, which could further, increase the company's sales and profits. Therefore, this enables a company to obtain more capital to enhance the CSR disclosures (Machmuddah, Sari, & Utomo, 2020). Furthermore, firm value enhances due to the increase of sales caused by the execution of social activities by the company and the attraction of investors by the execution of the social activities. Hence, Machmuddah et al. (2020) argue that profitability could strengthen the relationship between CSR and firm value since more profitable firms are able to exploit their ability to disclose their CSR activities thereby potentially increasing firm value.

Riantani and Nurzamzam (2015) state that higher profitability visualizes the ability of the firm to obtain profits, which can be used to enhance the firm's participation and investments into CSR activities and result in increased disclosures as well. According to Riantani and Nurzamzam (2015), the profitability of a firm provides the firm with freedom and extensibility towards the management to disclose their CSR activities to the stakeholders. This is further in line with the Stakeholder Theory, where profitable firms are willing to invest in enhancing the CSR disclosures. On the other hand, a study by Osazuwa and Che-Ahmad (2016) argues that profitability also enables firms the freedom and extensibility to engage in different CSR activities. This is also supported by the study of Maturbongs (2016), who state that due to the higher profitability, firms will be able to conduct more CSR activities which will lead to more CSR disclosures in the annual report, which may result in positive reactions from the stakeholders and result in a higher market value.

On the other hand, a study by Deswanto and Siregar (2018) states that CSR disclosures tend to involve a burden of multiple costs and therefore, only profitable firms are able to endure these expenses. Hence, it can be assumed that profitable firms are willing to take CSR to the next level and be willing to endure these costs in order to improve their disclosures. Overall, Deswanto and Siregar (2018) argue that the profitability of firms plays a significant role in provoking firms into divulging the CSR initiatives engaged in by the firms.

According to Maturbongs (2016), firms are required to designate an amount of funds to engage in the CSR activities, which would require to excel in the firm's financial performance and profitability. Additionally, Maturbongs (2016) argues that when profitability increases, firms tend to switch their focus from aiming for profitability to aiming to perform within the social responsibility aspects. If the social responsibility aspects are neglected, this would result in legal problems and establish a negative reputation surrounding the firm. Moreover, Maturbongs (2016) state that profitable firms are more adequate in executing CSR activities and disclosing more CSR activities in comparison to the firms with a low profitability thereby suggesting that profitability strengthens the CSR – firm value relationship.

2.1.2 Environment

Klassen and McLaughlin (1996) state that there has been contradicting evidence regarding the influence of environment management on firm performance and firm value. Prior research (Klassen & McLaughlin, 1996; McGuire, Sundgren, & Schneeweis, 1988) argues that there are three theoretical links between CSR, mainly environmental management, and financial performance. The first link states that explicit enhancements of environmental management could potentially lead a firm to a competitive disadvantage. This is mainly due to the increase in production expenses which, in turn, negatively influences the profitability of the firm. Renneboog et al (2008) state that the announcements of use of harmful chemicals have negative influences on the stock price of firms. Klassen and McLaughlin (1996) also state that there is the possibility that the increase in costs that come from compliance with environment regulations could deteriorate firm performance (Klassen & McLaughlin, 1996). There has also been research which states that rigorous regulations tend to have a detrimental effect on a firm's productiveness (Dowell, Hart, & Yeung, 2000).

However, there has also been other evidence regarding environment management where costs have decreased and revenues have increased due to stronger environmental performance, which in turn, leads to an enhanced firm performance (Cellier & Chollet, 2016; Klassen & McLaughlin, 1996; Renneboog, Horst, & Zhang, 2008). The next link is linked to this statement because the next link states that even though environment management expenses can be considerable, these expenses can lead to a decrease of other expenses, such as litigation costs, manufacturing costs, reduction of material waste or costs deriving from violations of regulation (Cellier & Chollet, 2016; Klassen & McLaughlin, 1996; Renneboog, Horst, & Zhang, 2008). Environment management also has the benefit of causing heightened sales due to the trend of increasing customer preference for environmental-friendly products (McGuire, Sundgren, & Schneeweis, 1988). Finally, the last link suggests that expenses relating to environment management tend to be slight and produce management advantages such as increased firm spirit and enhanced work rate (Klassen & McLaughlin, 1996; McGuire, Sundgren, & Schneeweis, 1988).

2.1.3 Employee Relations

The Employee Relations Dimension relates to activities, which consist of but are not limited to the safety of the work environment, labor, and welfare programs (Wang, Lu, Kweh, & Lai, 2014). There have been several contradicting studies regarding the influence of Employee Relations on firm performance. Prior research (Scholtens & Zhou, 2008; McWilliams & Siegel, 2001) argue that improving employee relations increases the costs of a firm. These costs could be attributed to the increase in salaries, enhancement of HR management practices or enhancement of the benefits. According to Edmands (2011), the current literature has contradicting results whether employee satisfaction is important towards increasing firm value. Alex Edmands (2011) argues that some literature is related towards more capital-intensive firms who focus more on cost-efficiency. This is where the firm's objective is to yield the highest output whilst incurring minimal expenses. Therefore, firms might not consider employee satisfaction to be an important factor due to the extra costs accompanied by it.

Research finds that one of the main ways to enhance employee satisfaction is for firms to increase salaries of its employees. A study by Abowd (1989) provided additional evidence stating that the wealth of the shareholders progresses adversely to the wealth of the employees or union members. This states that as the salaries of the employees increase, the wealth of shareholders' decrease. The author argues that there may be an enhanced productiveness of employees due to the increased salary; however, the shareholders do not consider this to be a reimbursement of the financial expenses. However, there is other literature which states that employees' roles have changed now as the labor markets need to meet quality and innovation goals of firms. According to Edmans (2011), employees are one of the main assets as the employees can be more innovative and develop relations with the consumers. These requirements usually require more human capital rather than physical capital (Edmans, 2011; Zingales, 2000). Edmands (2011) further explains the efficiency wage theory, which states that the employees' effort increases as there is an increase in the employees' wages.

Furthermore, due to the innovation and quality brought by the employees, retaining the employees is important as the employee creates more value for the firm (Edmans, 2011). Gorton and Schmid (2005) carried out a study to determine whether equal codetermination affects firm value and firm performance. Codetermination has to do with employees operating the firm alongside the shareholders and assists in monitoring the management board (Gorton & Schmid, 2005). The study concluded that codetermination, or increased involvement of employees within the board, has a considerable and unfavorable influence on the MTB ratio.

According to Arora and Dharwadker (2011), an important aspect within business is that organizations should participate in corporate social activities for employees of the organization. This participation should be encouraged even though the activities have the possibility to decrease cash flows. However, it is also argued that these activities may only be appreciated by certain investors such as more socially responsible investors and may be disapproving for investors that are more financially minded (Yang & Basile, 2019; Arora & Dharwadkar, 2011). The financially minded investors tend to find employee-based CSR narcissistic and tend to have a negative influence on the bottom line (Yang & Basile, 2019).

2.1.4 Community

This dimension has to do with firms that participate in and contribute to charitable activities, which in turn, forms a bond with the community in which the organization operates in (Wang, Lu, Kweh, & Lai, 2014). An interview was carried out with managers and Community Relations officers, which resulted in the belief that involvement within the community is considered a vital business goal (Berman, Wicks, Kotha, & Jones, 1999). The involvement in the community by firms are done to achieve the firm's strategy of obtaining a competitive advantage. A research by Waddock and Graves (1997) states that improving community relations enables a firm to achieve favorable tax benefits, enhanced quality of labor in the local operating environment and decrease local regulation. Firms may obtain favorable tax benefits from activities known as the corporate giving programs (Hillman & Keim, 2001).

Additionally, research by Hillman and Keim (2001) state that enhancing firms' community relations can help long term value establishment by creating intangible assets. These assets provide the firm with the capability of surpassing competition in value establishment. Hillman and Keim (2001) also argue that there is only a positive and significant effect of community on the market value of a firm compared to the other dimensions. This is supported by the study of Cristiana Manescu (2011), who finds that community was the only dimension with a positive association with risk-adjusted stock returns. However, a study by Berman et al. (1999) argue that community had an insignificant effect on firm performance. Berman et al. (1999) further state that community relations can be considered as desired to be upheld; however, it does not precisely influence or improve the firm's performance. A study by Cellier and Chollet (2016) find that improving community relations is negatively related to firm performance as it can be considered value-destroying.

2.1.5 Product

The Product Dimension of CSR relates to the product's safety, product quality and marketing of the product (Wang, Lu, Kweh, & Lai, 2014). MSCI ESG Research (2016) states that the product dimension of CSR evaluates how firms can handle the challenges of product recalls or the loss of consumer's trust. This can be hindered by the deficiencies in product quality. Additionally, the Product CSR dimension evaluates how firms handle the liability of losing consumers or market share and handle the expenses accompanied with the existence of toxic/harmful chemicals within a product (MSCI ESG Research, 2016). According to Waddock and Graves (1997), firms are paying more attention to the consumer's opinion and viewpoint regarding the firm's products as this viewpoint is becoming part of the basis of competition between firms. Waddock and Graves (1997) further state that if a consumer has good opinions regarding the products of a firm, then this would have beneficial effects such as increases in revenue or decreased stakeholder management expenses. This would, in turn, positively influence firm performance and profitability (Inoue & Lee, 2011; Waddock & Graves, 1997).

There have been many studies about the effects of product quality and product safety on firm performance and firm's market value. Firstly, Jeff Frooman (1997) states that when a firm acts in a socially immoral and improper behavior, then the market tends to behave in response to this. Jeff Frooman (1997) refers to this as a sort of punishment by the shareholders to ensure that the firm is socially moral. The punishment occurs in a form of reduced market value or reduced expected future income/ revenue. There are also multiple studies surrounding the impact of the announcement of product recalls. Prior research (Davidson & Worrell, 1988; Berman, Wicks, Kotha, & Jones, 1999; Hoffer, Pruitt, & Reilly, 1988) notes that the market would react in strongly negative direction due to these product recalls. Bromiley et al. (1989) mention a study where the shareholders suffered losses due to the announcement of auto recalls and hence, this loss played a part as a disincentive to prevent or avoid the manufacturing of risky and unsafe products. However, the research further found that this loss might not be an effective disincentive due to the profitability of faulty autos. Furthermore, the study by Hillman and Keim (2001) argue that the product dimension had an insignificant effect on firm market value, which is also supported by the study of Manescu (2011).

2.1.6 Diversity

Robinson and Dechant (1997) state that in businesses, diversity management is one of the most vital features within the operations process. By being more diverse within the workforce, this could influence firm performance either through market growth, increased productiveness of the workforce or by increasing the cost savings of the firm, which is further explained below (Robinson & Dechant, 1997; Inoue & Lee, 2011). In a study by Robinson and Dechant (1997), a survey is carried out with the Fortune 100 companies' HR executives, who provide rationale for the importance of incorporating diversity within business practices. The first explanation is the cost-saving aspect. Robinson and Dechant (1997) find that negligence of diversity could lead to a negative influence on the firm's performance and profitability. One of the main costs faced by firms that mismanage diversity is Litigation costs. Robinson and Dechant (1997) state that the amount of litigation lawsuits has increased significantly over the years. Another cost is turnover costs that come with hiring new employees. Robinson and Dechant (1997) further find that turnover rates for women are greater than turnover rates of men; similarly, the turnover rate is greater for colored people compared to non-colored people amongst U.S personnel.

Secondly, improving or enhancing diversity within a firm can enhance the retainment and promotions of more skilled employees from diverse backgrounds (Robinson & Dechant, 1997; Carter, D'Souza, Simkins, & Simpson, 2010). Robinson and Dechant (1997) state that by increasing the labor market options, the firm can recruit the most skilled employees from a larger option pool. Other than the attraction of the new skilled employees, retainment of these skilled employees is also important. If a firm restricts diversity, the turnover rate for the women and minorities increases due to the women and minorities looking for better career options and advancements (Robinson & Dechant, 1997; Edmans, 2011; Zingales, 2000). As mentioned previously, by increasing human capital, a firm can establish and maintain competitive advantages, which in turn, attract more skilled employees and hence, increase productiveness of the employees (Robinson & Dechant, 1997; Edmans, 2011; Zingales, 2000).

Furthermore, Carter et al. (2010) explain that the board of directors tend to serve a multitude of purposes. Carter et al. (2010) further state that by expanding the board of directors' selection pool, the variety of directors can contribute different assets to the firm., which could, in turn, positively influence the firm's profitability and performance, based on the Resource Dependence Theory. However, Carter et al. (2010) argue that diversity can have adverse effects on firm performance, such as differentiating opinions, which can result in a more tedious, lengthy, and stagnant decision-making process. There is also a possibility of higher employee replacement rate and more conflicts within the firm (Carter, D'Souza, Simkins, & Simpson, 2010). Carter et al. (2010) further state that a negative link has been found between gender diversity and firm value within US firms. A similar link is found between gender diversity and the gross profit margin ratio for Danish firms (Carter, D'Souza, Simkins, & Simpson, 2010). Along with these negative links, research also exists, which finds an insignificant link between board gender diversity and firm value (Carter, D'Souza, Simkins, & Simpson, 2010).

2.2 Hypothesis Development

2.2.1 Profitability

This primary aim of this research is to assess the moderating effect of profitability on the association between CSR and firm value. According to Machmuddah et al. (2020), companies with a high degree of profitability tend to reserve more capital for CSR disclosures in comparison to companies with a low degree of profitability. Furthermore, according to Section 2.1.1, Machmuddah et al (2020) argue that if a company implements CSR disclosures, then the company's reputation increases alongside the sales and profits, which could be used to enhance the disclosures and social activities and in turn, enhance the firm value. Furthermore, according to Section 2.1.1, Riantani and Nurzamzam (2015) state that higher profitability visualizes the ability of the firm to obtain profits, which can be used to enhance the firm's participation and investments into CSR activities and result in increased disclosures. Moreover, Maturbongs (2016) argue that when profitability increases, firms tend to switch their focus from aiming for profitability to aiming to perform within the social responsibility aspects. If the social responsibility aspects are neglected, this would result in legal problems and establish a negative reputation surrounding the firm. Therefore, taking all of the above reasoning into consideration, it is expected that an increase in profitability will strengthen the association between CSR and firm value.

However, as stated in Section 2.1.1, Maturbongs (2016) argue that with regards to the Legitimacy Theory, profit has a negative effect on the disclosures of CSR. Maturbongs (2016) argue that when a firm is profitable then the firm would solely focus on disclosing the financial performance while neglecting any other non-financial information. Therefore, it is expected that profitability may have a negative moderating effect on the association between the CSR dimensions and firm value. This is expected because neglecting CSR activities and neglecting disclosing these activities, may cause the firm to undervalue its value and the strides made by the CSR activities, which may lower firm value and could have a negative influence on the association between CSR and firm value. Furthermore, according to Maturbongs (2016), if the social responsibility of the profitable firms is neglected, this would result in legal problems and establish a negative reputation surrounding the firm. Therefore, it is expected that the firm is not taking the stakeholders into consideration, hence not in line with Stakeholder Theory and also, the firm may not seem "legitimate" in the eyes of the society due to the violation of norms and values of the society. Hence, taking all of these arguments into consideration, the following hypotheses are developed.

H_0: An increase in profitability has no moderating effect on the association between the CSR dimensions and firm value
H_1: An increase in profitability has a positive moderating effect on the association between the CSR dimensions and firm value association
H_2: An increase in profitability has a negative moderating effect on the association between CSR dimensions and firm value association

2.2.2 Environment

As mentioned in Section 2.1.2, there has been evidence, which finds that firms' participation into environmental CSR activities can be detrimental to the firm due to the extensive expenses and regulation that are associated with the activities. However, there are also links stating that expenses tend to be slight/immaterial and leads to increased productivity (Klassen & McLaughlin, 1996; McGuire, Sundgren, & Schneeweis, 1988). Hence, it is uncertain how significant the effect of the Environment Dimension could be on firm value. Therefore, the null hypothesis is developed stating that there is a possibility of no association between environment CSR and firm value. Given the mixed evidence, there could be a positive or negative effect of the environment dimension on firm value due to the links mentioned above. Therefore, it is expected that an increase in Environment CSR activities would cause the firms to face more regulations and in turn, incur more expenses to maintain the activities and operate according to the regulation. It is also expected that the enhanced firm productivity and increased firm spirit has the possibility to positively influence firm value. Hence, the alternative hypothesis states that an increase in environment CSR has an association with firm value.

H_0: An increase in Environment CSR Score has no effect on firm value
H_1: An increase in Environment CSR Score is associated with firm value

2.2.3 Employee Relations

It is expected that an increase in the Employee Relations Dimension will result in a disapproval from certain investors and shareholders. This is in line with the study by Gorton and Schmid (2005), which find that increased involvement of employees tends to have an unfavorable and considerable impact on the market-to-book ratio. Furthermore, the study by Abowd (1989) finds that the wealth of the shareholders progresses adversely to the wealth of the employees. Furthermore, as mentioned in Section 2.1.3, increased focus into employee relations tends to be accommodated with increased expenses regarding salaries, enhanced HR management practices or enhanced employee benefits or perks (Scholtens & Zhou, 2008; McWilliams & Siegel, 2001). Edmans (2011) argues that employees are one of the main assets as employees are more innovative and develop relationships with consumers. Edmans (2011) also argues for the efficiency wage theory, which states that employees' efforts increase with an increase in the wages. However, it is expected that the costs of Employee Relations CSR activities outweigh the benefits associated with enhanced employee relations and it will have a negative influence on the firm's value.

H_0: An increase in Employee Relations CSR Score has no effect on firm value
H_1: An increase in Employee Relations CSR Score is negatively associated with firm value

2.2.4 Community

According to Section 2.1.4, Community CSR is considered an important business goal to achieve a competitive advantage (Wang, Lu, Kweh, & Lai, 2014). In terms of the competitive advantage, firms can achieve favorable tax benefits from activities like corporate giving programs, enhanced quality of labor within the local operating environment and decreased local regulation (Waddock & Graves, 1997; Hillman & Keim, 2001). It is expected that an increase in the Community dimension will have the largest impact on the firm's value. This is also in line with studies by Hillman & Keim (2001) and Manescu (2011), which find that the community CSR dimension is the only dimension to positively influence the market value and risk-adjusted stock returns respectively. Hillman and Keim (2001) argue that the Community

Dimension helps obtain long-term benefits such as value establishment, which attributes to the positive influence. Therefore, the following hypothesis was developed.

H_0: An increase in Community CSR Score has no effect on firm value
H_1: An increase in the Community Dimension has the most significant and positive effect on firm value in comparison to the other dimensions

2.2.5 Product

A research conducted by Waddock and Graves (1997) found that the importance of customers' opinions and viewpoints of a firm's product are rapidly increasing, which has become a part of the competition. Section 2.1.5 notes that product recalls have indicated that product recalls have been detrimental to the market value of a firm, which serves as a sort of disincentive (Davidson & Worrell, 1988; Berman, Wicks, Kotha, & Jones, 1999; Hoffer, Pruitt, & Reilly, 1988). However, further research by Bromiley et al. (1989) argues that this disincentive may not be effective. There are also studies such as those by Hillman & Keim (2001) and also by Cristina Manescu (2011) that find that the Product dimension has an insignificant effect on market value and risk-adjusted stock returns. Therefore, based on this mixed evidence, it is expected that a decrease in the Product dimension would result in a negative effect on firm value and the firm performance due to the detrimental effects of activities such as product recalls. However, it is also possible that there might not be an influence on firm value; hence, I developed the following null hypothesis as well.

H_0: A decrease in the Product CSR Score will not have an influence on firm value
H_1: A decrease in the Product CSR score will result in a negative influence on firm value

2.2.6 Diversity

Diversity management within the workforce influences firm performance either through market growth, increased productivity, or increased cost savings. As mentioned in Section 2.1.6, negligence of diversity leads to litigation costs and employee training and replacement costs (Robinson & Dechant, 1997; Inoue & Lee, 2011). Furthermore, according to Section 2.1.6, diversity management enables firms to retain and promote skilled employees, due to the increase in labor market options and increased employee pool (Robinson & Dechant, 1997; Carter, D'Souza, Simkins, & Simpson, 2010). Retention increases as the turnover rate for women/minorities increases due to better career options. Also, this further attracts more skilled employees (Robinson & Dechant, 1997; Edmans, 2011; Zingales, 2000). Therefore, it is expected that an increase in diversity within firms can have a positive impact on firm value, which is in line with the benefits summarized in Section 2.1.6.

On the other hand, according to Section 2.1.6, diversity may also have adverse effects on firm performance. Firstly, increase of diversity on the board may make the decision-making process more tedious and stagnant due to the large number of differentiating opinions, which leads to an increase of internal conflicts within the firm (Carter, D'Souza, Simkins, & Simpson, 2010). Furthermore, negative relations were found between gender diversity and firm value within US firms and between gender diversity and the gross profit margin ratio for Danish firms (Carter, D'Souza, Simkins, & Simpson, 2010). Therefore, a second hypothesis was developed to account for the potential negative relation between diversity CSR dimension and firm value.

H_0: An increase in Diversity CSR Score has no effect on firm value
H_1: An increase in Diversity CSR Score is positively associated with firm value
H_2: An increase in Diversity CSR Score is negatively associated with firm value

Chapter 3: Methodology

This research aims of this research are firstly, to determine the moderating effect of profitability on the association between CSR and firm value and secondly, to determine which CSR dimension drives firm value. To carry this out, the methodology is split into the reasons for the chosen database, sample selection, and the research designs.

3.1 Motivation for Database (KLD)

This research is conducted using an archival methodology. According to Kim et al (2012) and Galant (2017), prior research implies that the KLD database is one of the extensively approved CSR measures that have been previously used by many researchers and academics. Also, this database has been widely used by prior research to accommodate for CSR engagement of firms (Kim, Park, & Wier, 2012). Swajkowski and Figlewicz (1999) evaluate the validity of the KLD database and argue that the database has a considerable validity and reliability. Prior research (Waddock and Graves, 1997; Johnson and Greening, 1999) find that there are multiple benefits to using the KLD ratings. Firstly, KLD rates these corporations based on an objective array of criteria. Secondly, KLD maintains consistent rating among the corporations and thirdly, the employees of KLD represent a group of educated personnel that are not associated with the corporations that were rated with the aim of deriving independent and objective ratings (Waddock & Graves, 1997; Johnson & Greening, 1999). Furthermore, the MSCI KLD database is the only database available to me in comparison to the Sustainalytics, MSCI: GMI Ratings or the Refinitiv ESG (Asset 4) database.

3.2 Sample Selection

Data is extracted from the MSCI ESG KLD Stats database, where a sample of US-listed firms is used. KLD contains information from surveys, financial statements, and academic journals' articles, which assesses the social involvement and performance of firms based on certain dimensions. The KLD database compiles the data into multiple dimensions/categories which are: Corporate Governance, Community, Employee Relations, Environment, Diversity, Product, and other dimensions known as "sin" companies which are: Alcohol, Tobacco, Military and Nuclear (Kim, Park, & Wier, 2012; Waddock & Graves, 1997). The dimensions included in this research, to determine which dimension primarily drives the firm value of the firms are Community, Employee Relations, Environment, Diversity, Product. These dimensions are selected as these dimensions best represent the stakeholders of the firms and are selected by panels to be important elements of CSR (Agle, Mitchell, & Sonnenfeld, 1999). Most notably, the "sin" companies' dimension is excluded from this research due to the lack of up-to-date information. Also, the Corporate Governance dimension is excluded as Kim et al (2012) argue that Corporate Governance is recognized as a separated concept from CSR.

Based on the availability of data and taking the most recent data into account, a sample of five years from 2009 till 2013 is extracted from the KLD database, which would represent the dimensions of Corporate Social Responsibility. The S&P Compustat database is used to extract financial information of the firms to calculate the Tobin's Q over the period of 2009 till 2013. At the beginning of the sample selection, a total of 15,784 variables are collected from the KLD database and the S&P Compustat database. Then the missing values and duplicates are omitted. Furthermore, the dataset is winsorized to remove the extreme values in the dataset that would have caused multiple outliers in the research models. In the end, 8,829 observations remain, which are used for the testing of the relationships.

3.3 Research Design

3.3.1 Independent Variable: CSR Dimension and overall CSR

The research of Kim et al. (2012) is used as a guideline to obtain the independent variable of CSR. This research calculates an overall CSR score by subtracting the total concerns from total strengths. However, this research focuses on each category instead of the overall CSR score. Therefore, a CSR score is calculated per dimension, which is done by subtracting the total dimension's concerns from the total dimension's strengths. Due to the lack of availability of the information regarding the magnitude of the dimensions, it is assumed that all dimensions are equally relevant and important to the firm and CSR as a whole. This calculation differs from prior research (Kim, Park, & Wier, 2012; Deckop, Gupta, & Merriman, 2006; Agle, Mitchell, & Sonnenfeld, 1999; Mishra, 2017) as these studies look at the net rating of each dimension, which is calculated as the total strengths minus the total concerns and then adding all the net ratings in an aggregate amount for the overall CSR score.

3.3.2 Dependent Variable: Tobin's Q

In order to measure firm value, Tobin's Q is used as a proxy. According to Carter et al (2010), two widely used methods of measuring firm performance and value are namely: Tobin's Q and Return on Assets (ROA). Tobin's Q is a financial performance measure, which has been regularly used by researchers of governance. Furthermore, Carter et al (2010) state that Tobin's Q is a proxy or model that is based on the market. Tobin's Q is calculated by the sum of the market value of the firm's equity, book value of liabilities, preferred stock and total assets divided by the firm's total assets. This calculation is in line with the study by Mishra (2017). According to Gregory et al. (2014), accounting-based measures tend to be based on historical values/measures. However, Tobin's Q illustrates the firm's forecast of future cash flows, hence making Tobin's Q known as forward-looking. As a result, this measure is deemed more suitable to determine the effects of CSR on firm value for stakeholders and investors (Gregory, Tharyan, & Whittaker, Corporate Social Responsibility and Firm Value: Disaggregating the Effects on Cash Flow, Risk and Growth, 2014). The formula of Tobin's Q is depicted below and is in line with literature (Bhagat & Bolton, 2008; Jiao, 2010).

$$Tobin's\ Q = \frac{Total\ Assets + MV\ Equity + Preferred\ stock + BV\ Liabilities}{Total\ Assets}$$

3.3.3 Moderating Variable: Profitability

In order to proxy firm profitability, the Return on Assets (ROA) is used. ROA is one of the most acknowledged and popular measures of profitability. The aim of the ROA ratio is to determine how competently firms make use of or govern its assets (Sun & Kim, 2013). This proxy provides an insight into the firm's capability to obtain accounting-based revenues based on the assets of the firm (Carter, D'Souza, Simkins, & Simpson, 2010). This proxy is measured as the net income divided by the book value of the firm's total assets. Return on Assets (ROA) is based on the net income over the historical depreciated value of assets. Furthermore, ROA computes the amount of profit per dollar of assets; therefore, ROA draws the attention to the net income, known as the bottom-line (Sun & Kim, 2013).

$$ROA = \frac{Net\ Income}{BV\ of\ Total\ Assets}$$

3.3.4 Control Variables

In order to accommodate for omitted variables and also to control for the firm heterogeneity, control variables are added to the regression models. Firstly, firm size is a control variable added to the model as firm size has been stated by prior research (Kim, Park, & Wier, 2012; Waddock & Graves, 1997; Johnson & Greening, 1999) to be correlated to CSR performance and firm value and is calculated as the log of total assets. This is proxied by ConSize. Next, to control for unobservable variables, fixed effects are also be included in the model, which is in line with Barnett and Salomon (2006). The fixed effects that are used in this research are Firm, Year and Industry. According to Manescu (2011), there is a possibility that some firms within an industry have high CSR scores and high returns, while in another industry have lower CSR scores and low returns. Therefore, Manescu (2011) argues that there is a possibility of a false positive association between CSR and returns, which could misrepresent the total association relation. The inclusion of industry as a control variable is in line with other prior research (Waddock & Graves, 1997; Hillman & Keim, 2001; Arora & Dharwadkar, 2011).

According to Barnett and Saloman (2012), leverage influences the behaviors of the managers. Leverage influences managers' behaviors by either motivating the managers to operate in the best interests of the organization or by constricting the managers from addressing new opportunities (Barnett & Saloman, 2012). These influences of managers' behaviors have the possibility of influencing the firm value and profit (Barnett & Saloman, 2012). Therefore, aligning with the prior research and to control for the influence of leverage on the dependent variable, Leverage is added to the regression model as a control variable and is proxied by "ConLev", which is calculated by dividing total debt by total assets.

3.3.5 Regression Models

Based on the variables explained above, the regression models are developed to answer the research question and the hypotheses mentioned above. In terms of testing the moderating effect of the Profitability, the CSR dimensions are proxied by CSR_dimension and the moderating effect is proxied by CSR_dimension:ROA, which is shown in Equation 1. In terms of determining which dimension of CSR drives firm value, Equation 2 is developed. For this regression model, the CSR_dimension represents the proxy for the dimension for which the regression conducts, alongside the control variables listed above.

Equation 1: Moderating Effect of Profitability

Tobin's $Q_{i,t} = b_0 + b_1$CSR_dimension + b_2ROA + b_3CSR_dimension:ROA + b_4ConSize + b_5ConFirm + b_6ConLev + b_8ConIndustry + b_9 ConYear

Equation 2: Dimension Effect Regression

Tobin's $Q_{i,t} = b_0 + b_1$CSR_dimension + b_2ConSize+ b_3ConFirm+ b_4ConYear + b_5ConLev + b_6ConIndustry

Chapter 4: Results

This chapter of the research outlines the results from the archival study and regression models described in the previous chapter. Firstly, I describe and discuss the descriptive statistics of the sample, followed by the correlation matrix. Then I outline and discuss the regression results of Equation 1 and finally, the regression results of Equation 2.

4.1 Descriptive Statistics

Table 1: Descriptive Statistics

This table outlines the key statistics of the important variables within this study.

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Median	Pctl(75)	Max
Environment Score	8,289	0.26	0.91	-5	0	0	0	6
Community Score	8,289	0.12	0.51	-2	0	0	0	4
Diversity Score	8,289	-0.30	1.41	-3	-1	0	0	7
Employee Relations Score	8,289	0.27	1.23	-4	0	0	0	8
Product Score	8,289	-0.08	0.59	-4	0	0	0	2
Tobin's Q	8,289	1.86	1.52	0.28	1.07	1.41	2.05	46.07
ROA	8,289	0.03	0.14	-2.00	0.01	0.04	0.08	5.21

Table 1 above depicts the key statistics of the important variables within the sample of 8,289 observations. It is noteworthy that more than 50% of the observations have a score of 0. As mentioned in Chapter 3, the dimension score is calculated as the total number of dimension strengths minus the total number of dimension concerns. Therefore, this indicates that the sample firms have the same amount of CSR dimension strengths as CSR dimension concerns. A score of 0 could suggest that firms invest in CSR just enough to counter the concerns made by those firms.

The average Environment Score for the sample was 0.26, with a max score of 6 and min score of -5. However, the Community Score has an average of 0.12, which is lower than Environment, and Community has a max of 4 and min of -2. Furthermore, Diversity has an average score of -0.30; however, there is a max score of 7 and min score of -3, which indicates that Diversity has a differing importance to the other dimensions due to the variance as visualized by the standard deviation of 1.41. The sample firms have an average Employee Relations Score of 0.27, with a min of -4 and max of 8, which indicates that Employee Relations has a high variance as visualized in the standard deviation of 1.23. The sample firms had an average Product score of -0.08, with a min of -4 and max of 2.

In regard to Tobin's Q, the average is 1.86, with a max of 46.07 and min of 0.28. As seen in the huge difference between the max and min, there is a high standard deviation and a high variance in the Tobin's Q variable, which is 1.52

4.2 Correlation Matrix

Table 2: Correlation Matrix

This table provides an overview of how the key variables in this research are related to one another with the use of a correlation matrix. The coefficients are represented at their respective significance levels. Coefficients without an asterisk are likely due to a lack of statistical significance.

	Environment Score	Community Score	ER Score	Diversity Score	Product Score	Tobin_Q	ROA	ConSize	ConLev
Environment_Score	1	0.381***	0.267***	0.344***	-0.021*	0.012	0.069***	0.264***	0.035***
Community Score	0.381***	1	0.206***	0.415***	-0.059***	0.010	0.081***	0.302***	0.049***
ER Score	0.267***	0.206***	1	0.167***	0.066***	0.028**	0.057***	0.240***	0.015
Diversity Score	0.344***	0.415***	0.167***	1	-0.194***	-0.044***	0.075***	0.483***	0.162***
Product Score	-0.021*	-0.059***	0.066***	-0.194***	1	0.046***	-0.023**	-0.201***	-0.064***
Tobin's Q	0.012	0.010	0.028**	-0.044***	0.046***	1	0.102***	-0.290***	-0.148***
ROA	0.069***	0.081***	0.057***	0.075***	-0.023**	0.102***	1	0.180***	-0.095***
ConSize	0.264***	0.302***	0.240***	0.483***	-0.201***	-0.290***	0.180***	1	0.416***
ConLev	0.035**	0.049***	0.015	0.162***	-0.064***	-0.148***	-0.095***	0.416***	1

*Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$*

The correlation matrix in table 2 shows an indication of the preliminary results. In terms of firm value, Environment and Community is directionally positive but insignificantly associated with Tobin's Q. Furthermore, it is observed that the Employee Relations and Product dimensions are positively and significantly associated with Tobin's Q, which indicates that higher values in those dimensions will be associated with higher firm values and vice versa.

This indicates that potentially enhancing the Employee Relation and Product dimensions may be associated with a higher firm value. Furthermore, the Diversity dimension is negatively and significantly associated with firm value, which indicates that a higher value in the Diversity dimension is associated with a lower firm value and vice versa. This indicates that by strengthening Diversity, firm value potentially decreases by -0.044. In terms of Profitability, which is proxied by Return on Assets (ROA), the Environment, Community, Employee Relations, and Diversity dimensions are directionally positive and significantly associated, which indicates that higher values in the scores of these dimensions are associated with higher values in the firm's profitability and vice versa.

On the other hand, the Product CSR dimension is negatively and significantly associated with the firm's profitability. This shows that a higher firm's profitability is associated with a lower Product dimension score and vice versa. As seen in the correlation matrix, the control variable Firm Size, which is proxied by ConSize, is positively and significantly associated with the Environment, Community, Employee Relation and Diversity dimensions and the firm's profitability and vice versa. This indicates that whenever the firm size increases, there is a possibility of these dimensions scores and firm's profitability increasing likewise and vice versa. However, a negative and significant association is observed with the Product dimension, and firm size, indicating an increase in firm size is associated with a lower Product score and vice versa. Furthermore, it should be noted that these are preliminary results.

4.3 Hypothesis Testing

Table 3: Moderating Effect Regression Result

This table provides the regression results of the moderating effect of Profitability on the association relationship between the CSR dimensions and firm value. This is represented by the interaction variable. The control variables included in this model are Firm Size (ConSize, which is the log of assets to prevent skewing), Leverage (ConLev), Industry fixed effects, Firm fixed effects, and Year fixed effects. The coefficients below are represented in their respective significance levels.

Moderating Regressions Results

	Dependent variable:
	Tobin_Q
Environment_Score	-0.048***
	(0.016)
ROA	0.426***
	(0.129)
Community_Score	0.004
	(0.028)
EmployeeRelations_Score	0.016
	(0.010)
Diversity_Score	0.011
	(0.011)
Product_Score	0.058***
	(0.020)
ConSize	-0.418***
	(0.042)
ConLev	0.189*
	(0.105)
Environment_Score: ROA	0.650***
	(0.170)
Community_Score: ROA	-0.541*
	(0.291)
EmployeeRelations_Score: ROA	-0.377***
	(0.098)
Diversity_Score: ROA	-0.005
	(0.069)
Product_Score: ROA	-0.661***
	(0.166)
Constant	8.303***
	(0.734)
Observations	8,289
R^2	0.854
Adjusted R^2	0.806
Residual Std. Error	0.669 (df = 6258)
F Statistic	17.984*** (df = 2030; 6258)
Note:	*p**p***p<0.01

The hypothesis for the moderating effect of profitability expects that there will be a positive moderating effect on the association between the CSR dimensions and firm value. In terms of the interaction variable of Profitability and the Environment dimension, there is a directionally positive and significant moderating effect of 0.650. This result indicates that Profitability strengthens the association between Environment and firm value. This result further provides evidence which contradicts the first link between CSR and financial performance, which states that enhancements of environmental management potentially leads to a competitive disadvantage (Klassen & McLaughlin, 1996; McGuire, Sundgren, & Schneeweis, 1988). This is because the positive moderating effect indicates that profitable firms should invest more into environmental activities. This suggests that the higher the Environment CSR Score, the higher the firm value, in regards to profitable firms. This result is in line with the Legitimacy theory, as when the profitable firm operates its business while engaging in Environment CSR activities, the firm values the norms set by the society and therefore tend to be more successful. Overall, the results suggest that profitable firms have an advantage as the association Environment CSR and firm value enhance, thus, profitable firms could further boost their firm value by investing in Environmnt CSR activities.

With regards to the interaction variable of Profitability and the Employee Relations dimension, a directionally negative and significant moderating effect of -0.377 is found. This result is in line with the hypothesis that profitability has a negative moderating effect on the association between the Employee Relation CSR dimension and firm value. Furthermore, this result provides evidence that profitable firms should not invest into or participate in Employee Relations CSR activities as this would affect the firm value. Moreover, this result is in line with the study by Abowd (1989), who finds that the wealth of the shareholders progresses adversely to the wealth of the employees. The study by Edmands (2011) explains the efficiency wage theory, where employees' effort increases as there is an excess in their wages. However, this result provides evidence that the efficiency wage theory may not be applicable to profitable firms due to the negative and significant moderating effect. Also, this result is in line with the study of Yang and Basile (2019), who state that employee-based CSR tends to have a negative influence on the bottom line. This is in line with Yang and Basile (2019) as profitable firms, investing in Employee Relations CSR potentially decreases firm value. This result is not in line with the study by Machmuddah et al. (2020), who state that the relation between CSR and firm value strengthens depending on if the company is profitable.

Similarly, a directionally negative and significant moderating effect of -0.661 is found for the interaction variable of Profitability and the Product CSR dimension. This result provides evidence that profitable firms investing or participating more into Product CSR activities may lead to a lower firm value. Instead, it may possibly be more beneficial for these profitable firms to allocate their resources to Environment CSR activities, which could increase firm value. Furthermore, this result contradicts the study by Gregory et al. (2014), who argue that profitable firms put effort into investing and engaging in CSR activities to obtain a higher market value. However, this result provides evidence that a profitable firm, who increases CSR activities, by expending effort and capital, may actually have an adverse effect on the association between Product and firm value. Pertaining to the interaction variable of Profitability and the Community dimension, a directionally negative but significant moderating effect of -0.541was found. This result is not in line with the hypothesis that an increase in profitability has a positive moderating effect on the association between the Community CSR dimension and firm value. This result provides evidence that investing in Community CSR activities may lead to a lower firm value for profitable firms, making it an adverse operational decision. Therefore, this result contradicts the study by Berman et al. (1999), who carried out an interview that stated that involvement in the community by firms are done to a competitive advantage. The result further contradicts the study by Riantani and Nurzamzam (2015), as when a company is profitable, it shows that the firms are not in line with the Stakeholder Theory as the firms neglects the social responsibility and do not take the stakeholders into consideration.

Furthermore, a directionally positive but insignificant moderating effect of -0.005 for the interaction variable of Profitability and the Diversity dimension is found. Therefore, due to the insignificant result, there is no evidence of a moderating effect of Profitability on the association between the Diversity dimension and firm value; hence, this is not a moderating relationship. Therefore, these results suggest that no matter the level of profitability, there were no significant changes, if any, between the firm values per CSR score. However, there is a possibility of an effect, however these effects would have a statistically weak significance and therefore are not in the confidence level.

Within this model, the R-squared is 0.854, which indicates that approximately 85.4% of the variance in the independent variables explains the variance in the dependent variable. Hence, stating that this model performs well in the prediction of the dependent variable, which is explained by the linear model explaining 85.4% of the variance in the dependent variable.

Table 4: CSR Dimension Regression Results

This table provides the regression results of the association relationship between the CSR dimensions and firm value. The CSR dimensions are represented by the Environment, Community, Employee Relations, Diversity and Product Scores. The dependent variable represents the firm value, which measures the influence of the dimension on firm value. The control variables included in this model are Firm Size (ConSize, which is the log of assets to prevent skewing), Leverage (ConLev), Industry fixed effects, Firm fixed effects, and Year fixed effects.

CSR Scores Regression Results

	Dependent variable:
	Tobin_Q
Environment_Score	-0.015
	(0.014)
Community_Score	-0.020
	(0.023)
EmployeeRelations_Score	-0.001
	(0.009)
Diversity_Score	0.011
	(0.011)
Product_Score	0.029
	(0.019)
ConSize	-0.399^{***}
	(0.042)
ConLev	0.055
	(0.102)
Constant	8.085^{***}
	(0.734)
Observations	8,289
R^2	0.852
Adjusted R^2	0.804
Residual Std. Error	0.672 (df = 6264)
F Statistic	17.838^{***} (df = 2024; 6264)
Note:	*p**p***p<0.01

As seen in Table 4, the Environment dimension has a directionally negative but insignificant association with firm value. Therefore, due to the insignificant result, this indicates that there is no association between the Environment dimension and firm value. This is in line with the null hypothesis, which states that an increase in the Environment CSR score has no effect on firm value. With regards to Table 3 Community dimension, a directionally negative but insignificant association with firm value is found. This result is opposite to the expected hypothesis, which expected that the Community dimension would have the most significant and positive effect on firm value compared to the other dimensions. This result also contradicts the studies by Manescu (2011) and Hillman & Keim (2001), who find the Community dimension was the only dimension to positively influence market value and risk-adjusted stock returns. The negative but insignificant association is in line with the study by Berman et al (1999), who argue that the Community dimesion has an insignificant effect on firm performance.

In terms of the Employee Relations dimension, I find a directionally negative but insignificant association with firm value. This is not in line with my expected hypothesis, which states that an increase in the Employee Relations Score is negatively associated with firm value. This suggests that no significant association exists between the Employee Relations dimension and firm value. This result is in line with the studies by Manescu (2011) and Hillman & Keim (2001), who find no relation between the Employee Relations dimension and market value and risk-adjusted stock.

On the other hand, a positive but insignificant association was found between the Diversity dimension and firm value. This result indicates that there is no evidence of an association between the Diversity dimension and firm value. This finding contradicts the study by Robinson and Dechant (1997), who argues that negligece of diversity could lead to a negative influence on the firm's performance and profitability. Furthermore, this research contradicts the negative links found by the study of Carter et al. (2010), however, the result is in line with the insignificant link found between board gender diversity and firm value.

Similarly, the Product dimension has a directionally positive but insignificant association with firm value. This result provides evidence that the coefficient does not differ from zero, indicating that significant association exists between the Product dimension and firm value. This finding, however, is in line with the studies by Hillman & Keim (2001) and Manescu (2011), who both find insignificant effects of product dimensions on firm market value.

Within this model, the R-squared is 0.852, which indicates that approximately 85.2% of the variance in the independent variables explains the variance in the dependent variable. Hence, stating that this model performs well in the prediction of the dependent variable, which is explained by the linear model explaining 85.2% of the variance in the dependent variable. This could be due to all the fixed effects that is implemented in the regression models.

As seen in table 3 above, the constant variable is positive and significant, given that industry, firm, and year fixed effects are implemented in the model. The constant variable is interpreted as the dependent variable when the independent variables are kept to 0. According to Table 3, the average Tobin's Q for the sample firms in models 1-5 are 8.1, 8.088, 8.077, 8.065 and 8.024 respectively. This indicates that when the scores are kept to zero, this is the average Tobin's Q of the firms. Furthermore, an additional robustness analysis is conducted in which the average Tobin's Q per CSR dimension score is observed. There is barely any distinction or variation in the average Tobin's Q per score. This supplement analysis can be seen in Chapter 7 and provide reasoning for why there are insignificant associations between the CSR dimensions and firm value.

Chapter 5: Conclusion, Limitations and Future Research

This chapter is the Conclusion, Limitations and Future Research of this research paper. Within this chapter, the motivation of this study is outlined followed by the research question. Furthermore, the prior literature is summarized, then the methodology and the results are described. Then it is followed by explanation of the limitations and future research.

5.1 Conclusion

In recent times, there has been an increasing awareness of CSR, which represents the engagement of the firm towards society, by the stakeholders and shareholders of the corporations. However, CSR can be costly to implement for corporations, hence being an adverse operational decision. On the other hand, CSR has multiple benefits such as enhancing corporation's reputation, retaining skilled employees, and increase in advertising leading to boosted revenue. Furthermore, a study by Noor, Saeed, Baloch and Awais (2020) calls for further research into the moderating effects of Profitability on the CSR and firm value relation. To determine which CSR dimension drives firm value, the archival research method is used with the use of the MSCI KLD database, which contains data regarding the strengths and concerns of the firms per dimension, and the S&P Compustat database to extract the financial information. The dimensions that this paper focuses on are Environment, Community, Employee Relations, Diversity and Product for which a CSR score is calculated as the total strengths minus the total concerns per dimension. A final sample of 8,829 US-listed firms is used for the period 2009-2013.

With regards to the first regression, which tested the moderating effects of Profitability, a positive and significant moderating effect for the Environment dimension is derived, which indicates that Profitability strengthens the association between Environment and firm value. This is in line with the hypothesis that Profitability has a positive moderating effect on the association between Environment and firm value. The positive moderating effect suggests that, for Environment CSR, profitable firms could boost firm value by investing more in Environment CSR activities. In terms of Employee Relations, the results provide evidence of a directionally negative and significant moderating effect. This result is in line with the hypothesis that profitability has a negative moderating effect on the association between the Employee Relation CSR dimension and firm value. Furthermore, this result provides evidence that profitable firms should not invest into or participate in Employee Relations CSR activities as this could negatively affect the firm value. Moreover, this result is in line with the study by Abowd (1989), who finds that the wealth of shareholders progresses adversely to the wealth of the employees. This is in line with the study by Yang and Basile (2019), who state that employee-based CSR tends to have a negative influence on the bottom line. Furthermore, this result contradicts the study by Edmands (2011), who presents about the efficiency wage theory, where employees' effort increases as there is an excess in wages. Similarly, a negative and significant moderating effect on the association between Product and firm value. This result provides evidence that profitable firms investing or participating more into Product CSR activities may be associated with lower firm value.

With regards to the Community dimension, a negative but significant moderating effect was found. Therefore, this result provides evidence that investments into Community CSR activities by profitable companies tend to result in a lower firm value, making it an adverse operational decision for profitable companies. Moreover, this is not in line with my expected hypothesis of a positive moderating effect. On the other hand, a directionally positive but insignificant moderating effect was found for the Diversity dimension. Therefore, due to the insignificant result, there is no evidence of a moderating effect of Profitability on the association between the Diversity dimension and firm value.

The results of the second regression show an insignificant association between each of the five dimensions and Tobin's Q. These provide evidence of no association between each CSR dimensions and firm value. Firstly, an increase in the Environment dimension is directionally negatively associated with firm value. This result is in line with the null hypothesis, which states that an increase in the Environment CSR score has no effect on firm value. Similarly, a directionally negative association is found between the Community dimension and firm value. This result is not in line with my hypothesis as the Community dimension doesn't have the positive effect on firm value in comparison to the other dimensions. A directionally negative association is found between the Employee Relations dimension and firm value. This is not in line with my hypothesis, which states that an increase in employee relations score is negatively associated with firm value. Diversity dimension has a directionally positive association with firm value. This result indicates that there is no evidence of an association between the Diversity dimension and firm value. This finding contradicts the study by Robinson and Dechant (1997), who argue that negligece of diversity would lead to a negative influence on the firm's performance and profitability. Similarly, the Product dimension has a directionally positive but insignificant association with firm value. This provides evidence that there is no evidence of an association between Product and firm value. This finding is in line with the studies by Hillman & Keim (2001) and Manescu (2011), who find insignificant effects of product dimensions on firm market value.

5.2 Limitations and Future Research

One main limitation of this research is the lack of available databases. Due to the limited access of databases, the database selected is the MSCI KLD database. Within this database, there is a lack of available data for more up-to-date information of CSR dimensions for the companies and the mandatory use of the CSR proxy used in the research. This hinders the process of carrying out the models on more recent data, which could have suggested different results. Based on the first limitation above, there is the possibility to investigate other databases such as the Sustainalytics or the Asset 4 database to gain a better insight or additional tests into this topic. Furthermore, by using different databases, the possibility of different CSR proxies may become available for use. By doing this, the future research can investigate possibly different aspects of CSR or develop a different proxy to measure CSR activities. Another limitation of this research is that the research is based upon the assumption that each CSR dimension is equally important and relevant to the companies. This is a limitation as it is unclear whether the firms take each dimension as equally as important and are not biased towards a specific dimension. Lastly, another limitation is that as there is barely any literature regarding the moderating effect of Profitability on the association between CSR and firm value, the theories and prior literature for CSR disclosures are used as a guideline in this study.

Another future research topic could be looking into non-US firms. There is limited research into the impact or association of the CSR dimensions on firm value for non-US firms. There has also been an increase of importance of CSR for firms within the emerging countries, which could be an interesting topic to research into. As the importance of CSR has been increasing, it may be useful to investigate these other countries to see if CSR is a useful investment. Finally, the last future research topic could be researching the moderating effect of profitability with the use of alternative proxies. In a study by Joo and Hussanie (2017), a list of potential proxies has been stated such as Return on Equity (ROE), Profit after Tax, Net Interest Margin, Return on Deposits and Net financing margin. Therefore, further studies may investigate these proxies to see if the results of this research alter.

Chapter 6: Bibliography

Abowd, J. M. (1989, September). The Effect of Wage Bargains on the Stock Market Value of Firm. *The American Economic Review, 79*, 774-800.

Agle, B. R., Mitchell, R. K., & Sonnenfeld, J. A. (1999, October). Who Matters to CEOs? An Investigation of Stakeholder Attributes and Salience, Corporate Performance, and CEO Values. *Academy of Management, 42*, 507-525.

Aguilera, R. V., Williams, C. A., Conley, J. M., & Rupp, D. E. (2006, May). Corporate Governance and Social Responsibility: a comparative analysis of the UK and the US. *Corporate Governance : An International Review, 14*, 147-158.

Arora, P., & Dharwadkar, R. (2011). Corporate Governance and Corporate Social Responsibility (CSR): The Moderating Roles of Attainment Discrepancy and Organization Slack. *Corporate Governance: An International Review, 19*, 136-152.

Barnett, M. L., & Saloman, R. M. (2012). Does it pay to be really good? Addressing the shape of the relationship between social and financial performance. *Strategic Management Journal, 33*(11), 1304-1320.

Barnett, M. L., & Salomon, R. M. (2006, November). Beyond Dichotomy: The Curvilinear Relationship between Social Responsibility and Financial Performance. *Strategic Management Journal, 27*, 1101-1122.

Berman, S. L., Wicks, A. C., Kotha, S., & Jones, T. M. (1999, October). Does Stakeholder Orientation Matter? The Relationship between Stakeholder Management Models and Firm Financial Performance. *The Academy of Management Journal, 42*, 488-506.

Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 257–273.

Bromiley, P., & Marcus, A. (1989). THE DETERRENT TO DUBIOUS CORPORATE BEHAVIOR: PROFITABILITY, PROBABILITY AND SAFETY RECALLS. *Strategic Management Journal, 10*, 233-250.

Carter, D. A., D'Souza, F., Simkins, B. J., & Simpson, W. G. (2010, September). The Gender and Ethnic Diversity of US Boards and Board Committees and Firm Financial Performancecorg_809. *Corporate Governance : An International Review, 18*, 396-414.

Cellier, A., & Chollet, P. (2016, January). The effects of social ratings on firm value. *Research in International Business and Finance, 36*, 656-683.

Davidson, W. N., & Worrell, D. L. (1988). The Impact of Announcements of Corporate Illegalities on Shareholder Returns. *Academy of Management Journal, 31*, 195-200.

Deckop, J. R., Gupta, S., & Merriman, K. K. (2006, June 1). The Effects of CEO Pay Structure on Corporate Social Performance. *Journal of Management, 32*, 329-342.

Deswanto, R. B., & Siregar, S. V. (2018). The associations between environmental disclosures with financial performance, environmental performance and firm value. *Social Responsibility Journal, 14*(1), 180-193.

Dowell, G., Hart, S., & Yeung, B. (2000). Do Corporate Global Environmental Standards Create or Destroy Market Value? *Management Science, 46*, 1059-1074.

Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics, 101*(3), 621-640.

Frooman, J. (1997, September). Socially Irresponsible and Illegal Behavior and Shareholder Wealth. *Business and Society, 36*, 221-249.

Galant, A., & Cadez, S. (2017). Corporate social responsibility and financial performance relationship: a review of measurement approaches . *Economic Research-Ekonomska Istrazivanja, 30*, 676-693.

Gorton, G., & Schmid, F. A. (2005, September). Capital, Labor, and the Firm: A Study of German Codetermination. *Journal of the European Economic Association, 2*, 863-905.

Goyal, P., & Kumar, D. (2016). Modeling the CSR barriers in manufacturing industries. *Benchmarking: An International Journal*.

Gregory, A., Tharyan, R., & Whittaker, J. (2014). Corporate Social Responsibility and Firm Value: Disaggregating the Effects on Cash Flow, Risk and Growth. *Journal of Business Ethics, 124*, 633–657.

Gregory, A., Tharyan, R., & Whittaker, J. (2014). Corporate Social Responsibility and Firm value: Disaggregating the Effects of Cash Flow, Risk and Growth. *Journal of Business Ethics, 124*, 633-657.

Hapsoro, D., & Sulistyarini, R. D. (2019, December). The effect of profitability and liquidity on CSR disclosure and its implication to economic consequences. *The Indonesian Accoutning Review, 9*(2), 143-154.

Hillman, A. J., & Keim, G. D. (2001, February). Shareholder Value, Stakeholder Management, and Social Issues: What's the Bottom Line? *Strategic Management Journal, 22*, 125-139.

Hoffer, G. E., Pruitt, S. W., & Reilly, R. J. (1988, June). The Impact of Product Recalls on the Wealth of Sellers: A Reexamination. *Journal of Political Economy, 96*, 663-670.

Inoue, Y., & Lee, S. (2011, August). Effects of different dimensions of corporate social responsibility on corporate financial performance in tourism-related industries. *Tourism Management, 32*(4), 790-804.

Jiao, Y. (2010). Stakeholder welfare and firm value. *Journal of Banking & Finance, 34*, 2549–2561.

Johnson, R. A., & Greening, D. W. (1999, October). THE EFFECTS OF CORPORATE GOVERNANCE AND INSTITUTIONAL OWNERSHIP TYPES ON CORPORATE SOCIAL PERFORMANCE. *The Academy of Management Journal, 42*, 564-576.

Joo, B. A., & Hussanie, I. (2017, October). Selecting the Right Variable as a Proxy for Profitability - A Propitious Beginning for Researchers. *Journal of Arts, Science and Commerce, 8*, 80-95.

Kim, Y., Park, M. S., & Wier, B. (2012). Is Earnings Quality Associated with Corporate Social Responsibility? *THE ACCOUNTING REVIEW, 87*, 761-796.

Klassen, R. D., & McLaughlin, C. P. (1996). The Impact of Environmental Management on Firm Performance. *Management Science, 42*, 1199-1214.

Machmuddah, Z., Sari, D. W., & Utomo, S. (2020). Corporate Social Responsibility, Profitability and Firm Value: Evidence from Indonesia. *Journal of Asian Finance, Economics and Business, 7*, 631–638.

Manescu, C. (2011). Stock Returns in Relation to Environmental, Social and Governance Performance: Mispricing or Compensation for Risk? *Sustainable Development, 19*, 95-118.

Maturbongs, D. P. (2016). THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE TO MARKET REACTION WITH PROFITABILITY AS MODERATING VARIABLE. Universitas Atma Jaya Yogyakarta , 1-11.

McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988, December). Corporate Social Responsibility and Firm Financial Performance. *The Academy of Management Journal, 31*, 854-872.

McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: a theory of the firm perspective. *The Academy of Management Review, 26*, 117-127.

Mishra, D. R. (2017, January). Post-innovation CSR Performance and Firm Value. *Journal of Business Ethics, 140*, 285-306.

Montgomery, C. A., & Wernerfelt, B. (1988, March). Tobin's q and the Importance of Focus in Firm Performance. *American Economic Review, 78*, 246.

MSCI ESG Research. (2016, March). *MSCI ESG KLD STATS: 1991-2015 DATA SETS.* Retrieved May 31, 2021, from MSCI: https://wrds-www.wharton.upenn.edu/documents/1353/MSCI_ESG_KLD_STATS_1991-2015_Data_Set_Methodology.pdf

Noor, S., Saeed, A., Baloch, M. S., & Awais, M. (2020). CSR permanency, family ownership, and firm value: Evidence from emerging economies. *Corporate Social Responsibility and Environmental Management, 27*, 2135-2149.

Osazuwa, N. P., & Che-Ahmad, A. (2016). The moderating effect of profitability and leverage on the relationship between eco-efficiency and firm value in publicly traded Malaysian firms. *Social Responsibility Journals, 12*(2), 295-306.

Renneboog, L., Horst, J. T., & Zhang, C. (2008). Socially responsible investments:Institutional aspects, performance, and investor behavior. *Journal of Banking & Finance, 32*, 1723–1742 .

Riantani, S., & Nurzamzam, H. (2015). Analysis of Company Size, Financial Leverage and Profitability and Its Effect To CSR Disclosure. *Journal of Management Dynamics, 6*(2), 203-213.

Robinson, G., & Dechant, K. (1997). Building a business case for diversity. *Academy of Management Executive, 11*, 21-31.

Scholtens, B., & Zhou, Y. (2008). Stakeholder Relations and Firm Performance. *Sustainable Development, 16*, 213-232.

Sun, K.-A., & Kim, D.-Y. (2013, December). Does customer satisfaction increase firm performance? An application of American Customer Satisfaction Index (ACSI). *International Journal of Hospitality Management, 35*, 68-77.

Swandari, F., & Sadikin, A. (2016, November). THE EFFECT OF OWNERSHIP STRUCTURE, PROFITABILITY, LEVERAGE, AND FIRM SIZE ON CORPORATE SOCIAL RESPONSIBILITY (CSR). *Binus Business Review, 7*, 315-320.

Szwajkowski, E., & Figlewicz, R. E. (1999). Evaluating Corporate Performance: A Comparison Of The Fortune Reputation Survey And The Socrates Social Rating Database. *Journal of Managerial Issues, 11*, 137-154.

United Nations Industrial Development Organization. (n.d.). *What is CSR?* Retrieved from United Nations Industrial Development Organization: https://www.unido.org/our-focus/advancing-economic-competitiveness/competitive-trade-capacities-and-corporate-responsibility/corporate-social-responsibility-market-integration/what-csr

Waddock, S. A., & Graves, S. B. (1997). THE CORPORATE SOCIAL PERFORMANCE– FINANCIAL PERFORMANCE LINK. *Strategic Management Journal, 18*, 303-319.

Wang, W.-K., Lu, W.-M., Kweh, Q. L., & Lai, H.-W. (2014, August). Does corporate social responsibility influence the corporate performance of the U.S. telecommunications industry? *Telecommunications Policy, 38*(7), 580-591.

Weber, M. (2008). The business case for corporate social responsibility: A company-level measurement approach for CSR. *European Management Journal*, 247-261.

Yang, J., & Basile, K. (2019). The impact of corporate social responsibility on brand equity. *Marketing Intelligence & Planning, 37*, 2-17.

Yuen, K. F., & Lim, J. M. (2016). Barriers to the Implementation of Strategic Corporate Social Responsibility in Shipping. 049-057.

Zingales, L. (2000, August). In Search of New Foundations. *The Journal of Finance, 55*, 1623-1653.

Chapter 7: Appendix

7.1 Supplement Analysis

7.1.1Environment Average Tobin’s Q

Table 5: Average Tobin's Q per Environment Score

Environment Score	Average Tobin’s Q
-5	1.834087
-4	1.524184
-3	1.282947
-2	1.444082
-1	1.605089
0	1.885536
1	1.877893
2	1.752119
3	1.813547
4	1.888096
5	1.841355
6	1.168821

Upon further analysis, it is found that there are slight differences in the average Tobin’s Q for the Environment dimension. Table 5 shows an indication to the reason why there is no significance result found between Environment and Tobin’s Q as there is no clear distinctions among the scores. Additionally, when looking at Table 5, it can also be seen that a directionally negative association exists between Environment Score and Tobin’s Q, which is visualized by a -5-score having a higher average Tobin’s Q in comparison to a +6 score.

7.1.2 Community Average Tobin's Q

Table 6: Average Tobin's Q per Community Score

Community Score	Average Tobin's Q
-2	1.383742
-1	1.569713
0	1.866811
1	1.887745
2	1.739287
3	1.867870
4	1.634563

By doing further viewing, it is found that there are slight differences in the average Tobin's Q for the Community dimension. Table 6 shows an indication to the reason why there is no significance result found between Community and Tobin's Q as there is no clear distinctions among the scores. Additionally, when looking at Table 6, it can also be seen that a directionally negative association exists between Community Score and Tobin's Q, which is visualized by a -2-score having a higher average Tobin's Q in comparison to a +4 score.

7.1.3 Employee Relations Average Tobin's Q

Table 7: Average Tobin's Q per ER Score

EmployeeRelations_Score	Average Tobin's Q
-4	1.331616
-3	1.376701
-2	1.643263
-1	1.725195
0	1.855843
1	2.010710
2	1.912889
3	1.946704
4	2.062814

5	1.700237
6	1.543100
7	1.409270
8	2.383804

Upon further viewing, it is found that there are slight differences in the average Tobin's Q for the Employee Relations dimension except for the +8-score. Table 7 shows an indication to the reason why there is no significance result found between Employee Relations and Tobin's Q as there is no clear distinctions among the scores except for the +8 score. Additionally, when looking at Table 7, it can also be seen that a smaller directionally negative association exists between Employee Relations score and Tobin's Q.

7.1.4 Diversity Average Tobin's Q

Table 8: Average Tobin's Q per Diversity Score

Diversity Score	Average Tobin's Q
-3	1.393025
-2	1.959281
-1	1.916435
0	1.792926
1	1.811205
2	1.757743
3	1.727281
4	1.798809
5	1.823290
6	1.398782
7	1.561959

On the other hand, a directionally positive increase between Diversity and average Tobin's Q can be seen in Table 8 visualized by the -3-score and +7 score. Furthermore, the difference between the lowest score and highest score is minimal, hence conforming to the regression result. However, there is no clear differences in the average Tobin's Q among the difference

Diversity Scores. Hence, this could potentially be a reason for the lack of statistical significance of the regression results.

7.1.5 Product Average Tobin's Q

Table 9: Average Tobin's Q per Product

Product Score	Average Tobin's Q
-4	1.807331
-3	1.555065
-2	1.596020
-1	1.690674
0	1.877456
1	1.944742
2	1.866498

Additional viewing of the data, it is seen that there are no clear differences in the average Tobin's Q among the scores for the Product dimension. As visualized in the -4-score and +2 score, there is a minor difference in the average Tobin's Q. Hence, based upon table 9, it is potentially a reason as to why the Product and Tobin's Q relation lacks statistical significance.