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# The Effect of a Corporate Culture of Sustainability on Firm Financial Performance: A Financial Accounting Literature Review

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## Abstract

The aim of this paper is to synthesize previous research on the link between corporate social responsibility (CSR) and financial firm performance, as results in the past have been mixed. In response to growing social concern for social issues such as inequality and environmental issues, CSR has become an increasingly important way for firms to meet stakeholder expectations on corporate sustainability. It is therefore important for accounting professionals and investors to understand how CSR affects firms. As results have been mixed, a literature review within this topic is justified.

A theoretical framework explaining how a corporate culture of sustainability might benefit firm's financial performance is introduced based on theoretical papers. Then, empirical literature on the topic is analyzed and compared to each other within this framework.

This paper found that a corporate culture of sustainability affects a firm's financial for three reasons. First of all, incorporating social costs with accounting costs can help a company avoid value destruction through social conflict. Secondly, firms can benefit financially by meeting shareholder expectations, who are increasingly interested in socially responsible firms, as seen by the rise of socially responsible investment funds. Lastly, by creating good long term relationships with key stakeholders through a corporate culture of sustainability, firms can both add value and avoid value destruction. These results were empirically measured with both financial figures and accounting data.

This literature review thus adds to existing literature within the field by linking empirical and theoretical literature on the topic to assess the current findings on CSR and firm performance and pointing out limitations that should be addressed in further (empirical) research.

The practical implications from this paper are that socially responsible investors know what to look for when selecting their investments, and know that they are not less likely to make profit by making said investments. Governmental institutions and non-governmental organizations (NGO's) can use this paper as evidence that firms with a good corporate culture of sustainability are more likely to be good long term partners. Moreover, accounting professionals can use this paper to understand which accounting and financial figures should be watched carefully when a company decides to introduce a corporate culture of sustainability, and what they can expect in the short and long term of moving towards a more responsible corporate culture. In addition, firms that wish to become more altruistic through use of CSR can use the results of this paper as a 'business case' for CSR, as it has become clear that CSR does not have to be costly for a firm, and can even benefit them in the long term.

## Introduction

*Corporate Social Responsibility* (CSR) has become an increasingly important part of the modern firm. The global economy has grown a lot over the past decades, and with this growth came new social issues, such as pollution and inequality. This in turn led to an increase in demand for support of social causes by stakeholders of corporations and organizations (Kotler & Lee, 2005). Because of this, CSR has not only become important for corporations, but also for governmental institutions and non-governmental organizations (NGO's). While the overall number of companies integrating social and environmental issues in their business models and organizational processes is still small, it has been growing significantly over the past 20 years (Eccles, Ioannou, & Serafeim, 2012). For example, a recent report showed that more than 80% of FTSE stocks (which is an index of 100 companies listed on the London Stock Exchange) produce social and environmental annual reports (Owen, 2005).

There are many different definitions of CSR in the academic literature. For this paper, the general assumption of the definition of CSR will follow that of Carroll (1979), which is as follows: *"The (corporate) social responsibility of business encompasses the economic, legal, ethical, and discretionary (or philanthropic) expectations that society has of organizations at a given point in time"*. In the literature review, some papers follow a different definition of CSR; in that case, it will be specified in more detail.

Because of the increase in interest and importance of CSR, there has been a lot of business and academic literature on the topic. The aim of this paper is to synthesize the literature on the topic of CSR and financial performance by comparing and summarizing relevant papers within the field of financial accounting. The emphasis will be to help managers and accounting professionals understand the relevance of CSR to an organization's performance, and what financial accounting information can tell them about this. A potential negative effect of this is that if CSR benefits a firm financially, this might also lead corporations to a practice called 'greenwashing', which means that they wish to manipulate public opinions on their company through untruthful and deceptive reporting about their social responsibility (Laufer, 2003).

The relationship between business and society has been longstanding, but has especially been growing in importance since the 1990s (Henderson & Henderson, 2001). As corporations have an enormous and sometimes negative impact on the environment and on society with negative external effects from their corporate activities. The public has been increasingly demanding of these same corporations to take responsibility for their negative impact and implement measures such as responsible CSR. In this way, CSR has evolved as a Coasian solution to problems associated with social costs (Heal, 2005), meaning that there is an efficient allocation of resources to deal with the costs other parties incurred because of said negative external effects.

Even though social incentives from companies are benefiting society in general, opinions are divided on whether or not positive CSR enhances financial performance (Nelling & Webb, 2009). An argument in favor is that CSR has a positive effect on firm performance because "meeting the needs of non-shareholding stakeholders creates shareholder value" (Porter & Kramer, 2011). Additionally, firms might actually lose money by *not* having CSR; think of governmental fines, and in some cases even consumer

boycotts (Sen & Bhattacharya, 2001). On the other hand, Jensen (2001) argues that integrating environmental and social policies could actually be wasteful of shareholder wealth, since firms may lose competitiveness by putting more constraints on themselves through the use of more sustainable business practices.

Traditionally, empirical evidence has suggested that a so called 'virtuous circle' exists, meaning that increased CSR expenditures are positively related to financial performance, which in turn will lead to an increase in CSR expenditures, and so on (Waddock & Graves, 1997). While the researchers found a positive effect, the direction of the causal relationship was questionable. However, a recent study by Nelling & Webb (2009) did not find as strong evidence in favor of this virtuous cycle hypothesis when different statistical techniques were used. The authors claim that socially responsible activities do not benefit firms in terms of financial performance. The literature review part of this paper will further discuss where these differences in results stem from, and what accounting professionals and managers can realistically expect in practice.

The basic idea behind using accounting data as measures of performance is that the accounting figures make it easier to see how firm earnings respond to the implementation of CSR policies, and make comparing between firms easier. As an example, Cheng et al. (2006) found that firms which have strong shareholder rights enjoy a lower cost of capital than their competitors, a relationship was thus found between good managerial practices and ethical corporate practices by comparing the cost of capital (an example of an accounting measure) between firms.

Interestingly, one study found that irresponsible CSR activities (those activities which were in fact damaging to the environment or society) were positively associated with aggressive tax avoidance practices by comparing book-tax differences between firms with many responsible CSR activities and those without (Hoi, Wu, & Zhang, 2013). This supports the idea that CSR is a part of the same corporate culture that affects factors such as tax avoidance.

The question that remains is whether the irresponsible practices of these firms are in the benefit of their shareholders, or not. This is important, because tax avoidance and irresponsible CSR activities are bad for society, and cost money. Therefore, it is important to see whether or not those firms that do have a corporate culture of responsibility are at a disadvantage with regards to creating shareholder value when compared to firms with a more irresponsible corporate culture, and it is important to see how accounting information can show this effect.

Because there have been so many mixed results in previous research, this paper aims to synthesize the literature and figure out where these differences in results come from. At the end of this literature, it will become clearer to which extent a corporate culture of sustainability will benefit firms, and what the key financial accounting variables are which should be looked at when judging the effect of CSR on a firm's performance.

## **Research Problem & Motivation**

In response to the increase in social issues in the modern society there is an increasing pressure to be able to respond to social causes in a way that is financially feasible for the firms that are implementing CSR activities into their corporate culture. Therefore, CSR has taken on increasingly important role in the present as an integral part of modern firms. There are even a number of mutual funds who are using CSR as a screening device for investment selection (Nelling & Webb, 2009), which shows how important shareholders find CSR in their investment decisions and how companies might increase their amount outstanding stocks by means of CSR. Notably, this same study showed that CSR as a stock picking strategy was not very fruitful, meaning that shareholders must obtain other benefits from incorporating socially responsible firms within their portfolios.

With this in mind, it is easy to see why research in the field of CSR and financial performance is important. As social issues will increase in severity in the future, additional demand for support of social causes will pressure corporations and organizations to adopt corporate cultures with more sustainable and responsible practices. It is thus of importance that managers and accounting professionals know the managerial and financial implications of transitioning to a corporate culture where responsible CSR is an important part of their firm.

By means of a comprehensive literature review, this paper aims to look at the effects of CSR with an accounting perspective, and provide a framework with which to see if the implementation of CSR has been successful by looking at financial measures within a company. This in turn might be helpful for managers and accounting professionals within companies and in consulting firms to see how corporations can implement CSR, what the potential benefits of it are, and how they can see whether or not the implementation of it has been successful. Moreover, investors can use this information in selecting their stock portfolios.

Lastly, by knowing how regulatory frameworks affect the degree to which corporations will implement CSR, governmental institutions can use this research to help design legislature. To come back to an example given earlier, Hoi et al. (2013) showed that firms who are found to incorporate irresponsible CSR activities are more likely to avoid taxes, and thus governments might use this information in their policy making and be more wary of irresponsible firms, or instead reward responsible firms.

## **Research Objectives**

The aim of this thesis is therefore to synthesize research in the field of CSR and firm performance, by doing a literature research to create framework of the financial accounting effects of CSR and to give an overview of recent research and results within this field. In order to make general conclusions and observations about the effects of CSR on financial performance, this paper will look only at empirical papers.

The main question of this paper is therefore:

***“What is the effect of a corporate culture of sustainability on a firm’s financial performance?”***

Moreover, it would be interesting to see which types of organizations can benefit the most from CSR, and whether or not this effect differs geographically. Therefore a sub-question asked in this paper is:

*“Does the effect of CSR on performance differ between types of organizations or regions?”*

Lastly, this paper aims to show how managers and investors can assess whether or not implementing CSR had a positive or negative effect on their firm’s performance. Therefore a final sub question is:

*“How can accounting figures be used to see if a firm has been successful in implementing CSR?”*

In sum, this paper hopes to provide a theoretical framework and summary of recent literature and research within the field of CSR and firm financial performance. Summarizing the most important research of the last 20 or so years will give an overview of the most important results and conclusions, and will bring limitations of said research to light, which will hopefully increase interest in further research in the field of CSR.

## Methodology

This paper will use a detailed literature review as a way of performing academic research. High quality and relevant literature will be found by using Google scholar to find literature. This will be done by searching for keywords which are relevant to this topic. For example: corporate social responsibility, firm performance, financial accounting, and combinations of these and more keywords. In addition, the journal search field filter option will be used to ensure that papers used in this thesis are relevant to the field of accounting, as for example ethical considerations are outside the scope of this thesis.

The results will be filtered based on journals which are accounting related and ranked by the quality of the journals in which they were published. This will lead to only high quality and relevant scientific papers being used in this literature review. Lowe and Locke (2006) have provided a list of the best quality accounting journals, and this list will be used to ensure that the literature is of a good standard, and is relevant to the field of accounting. Some papers have been used from literature sources outside of this list and outside of accounting related journals, however, these are justified as case studies since the methods used in their research are based on finance and accounting theory.

In addition the Erasmus Research Institute of Management (ERIM) has a primary list of accounting journals, containing the best journals in the field of management and finance, will be used in the Google Scholar search to filter for papers out of journals that are of a high quality.

These papers will first be filtered into the more theoretical papers used to create a theoretical framework explaining CSR and accounting returns for performance management. Then, the other empirical papers and case studies will be individually analyzed to look for key indicators of the financial processes and accounting returns that change when CSR is adopted, how they can be spotted and how to know whether or not the CSR implementation has been effective.

Finally, all the individually analyzed papers will be put into perspective by comparing the findings with the theoretical framework laid out. Moreover, the results will be combined and compared between different papers which will enable this thesis to make more general conclusions about the changes in managerial processes and financial accounting implications of CSR.

### **Thesis Outline**

First of all, the most important theoretical papers with regards to financial accounting, firm performance and CSR theory will be incorporated in a theoretical framework. After that, the rest of the literature can be reviewed in depth. Subsequently, the findings will be compared within the perspective of the theoretical framework and comparisons will be made between the papers. After this, the central question and sub questions can be answered. A discussion will follow, addressing the conclusions and also the limitations of the scope of this paper. Over the course of this research paper, a framework will be created which accounting professionals can use to assess the effectiveness of CSR, and make it clear which key accounting figures are important to look at when implementing CSR.



## Theoretical Framework

There are several theories that attempt to explain the link between CSR and financial performance from many different fields of academic research. For this paper, the financial accounting perspective is obviously most important, but some other fields of research should be considered to understand the financial accounting perspective on CSR. Historically, Adam Smith's view of the 'invisible hand' was widely accepted, which concluded that the self-interest of capitalists will eventually lead to an increase in social welfare, this view was also popularized by Milton Friedman: "*The social responsibility of business is to increase profits*" (Friedman, 2007). In that case, CSR would not be necessary, and as we have seen in the introduction, only an extra burden on a firm's competitiveness. So why do modern firms then choose to adopt CSR practices? As will be seen, recent literature proposes many other viewpoints and arguments in favor and against CSR, these will now be discussed and synthesized into a theoretical framework. Finally, a model will be introduced which is used in many papers to analyze firm financial performance.

### Economic perspective

To understand why corporations adopt CSR into their business practices, Adam Smith's view must be left behind and the more modern economic concepts of social costs and private costs must be understood. When corporate and social interests are not aligned, markets do not always do a good job at producing an optimal outcome with regards to negative external effects that come from production (Heal, 2005). For example, industries that produce tobacco, automobiles, and oil put great costs on society by selling and producing their products. In such sectors, the theory is that CSR can benefit a firm's financial performance because many firms overlook these social costs in their standard accounting perspectives. These social costs can still turn out to be very costly for a firm: think of governmental fines, consumer boycotts, or even decreased stock performance as a result of investors finding the company too risky (Husted, 2005).

Heal (2005) also gave two practical examples of how CSR might help in these situations. The first illustration is the oil company BP, which took a stand on climate change in 1997 that led to a reduction in emissions and a claim that their net income increased by 600 million USD. Secondly, Dow Chemical responded to social pressures to reduce pollution by cutting back on unstable chemical sources, and claims to have saved tens of million dollars in the process. By avoiding conflict with society, these companies claim to have saved money in terms of goodwill, net income, and cost of goods sold, arguments in favor of the economic theory behind CSR.

### Shareholder perspective

The second perspective on how CSR affects firm performance is the shareholder perspective. The shareholders are very important for companies, as they own (part of) the company and thus have certain expectations of the company. If shareholders value firms which have CSR, it should in theory lead to an increase in outstanding stocks or stock price.

If projects by firms with CSR are positive net present value (NPV) projects, and increase stakeholder wealth through CSR as well (see stakeholder perspective), firms investing in such projects should have higher share prices (Renneboog, Ter Horst, & Zhang, 2008), lower cost of capital, and a lower systematic risk (also known as stock beta) (Roberts, 1992) than firms who do not add value to their firm through CSR.

If this theory is correct, a firm would highly value its shareholders expectations, and should ensure that their financial reports properly disclose their perspectives and efforts towards a corporate culture of sustainability through CSR, as it could lead to attracting additional investments. Indeed, some studies have shown that the amount and level of social reporting in firm disclosures is positively correlated with a firm's reputation and social performance, though results were mixed in other studies (Belkaoui & Karpik, 1989). As will be seen in the literature review, however, during the time period the paper by Belkaoui & Karpik was written, most environmental reporting was still at a very general level without attention to much detail, which might explain the mixed results (Harte & Owen, 1991). Therefore it will be interesting to see more modern empirical results to see whether or not the shareholder perspective is helpful in explaining CSR.

Evidence of the increasing investor awareness to social issues is evident in the fact that over the past few decades socially responsible investments (SRI) have grown rapidly (Renneboog, Ter Horst, & Zhang, 2008). SRI's are made both individually and in SRI mutual funds. Investors filter their investments based on ethical and environmental criteria, to ensure a portfolio with a high degree of CSR. This is evidence in favor of the theory of CSR enhancing a firm's financial performance by meeting their shareholder's expectations.

### Stakeholder perspective

The third view on why CSR affects firm performance comes from management accounting literature, this is the stakeholder perspective. Freeman (1983) introduced the concept of the *stakeholder*. The stakeholder concept simply means that there are other parties, outside of the shareholders, to which the corporation is responsible. This, in turn, can affect firm performance, and is closely linked to the shareholder perspective.

Roberts' (1992) empirical research showed that social responsibility disclosures are a way to meet stakeholder expectations and benefit financial performance. This research found a positive relationship between an increase in CSR disclosures and financial data such as the debt to equity ratio, the growth in the return on equity, revenues, and a negative relationship between CSR and stock beta (as also seen in the shareholder perspective).

In the introduction we also saw that by *not* meeting the needs of stakeholders, companies might destroy value (Sen & Bhattacharya, 2001). This is because socially irresponsible actions will incur higher explicit costs, and lead to a competitive disadvantage (Waddock & Graves, 1997).

However, a difficulty with the stakeholder perspective is that financial metrics alone will not fully inform corporations on how well they are meeting stakeholder expectations (Eccles, Ioannou, & Serafeim,

2012), in such cases, managers could add non-financial measures of performance too, such as using the Balanced Scorecard introduced by Kaplan and Norton in 1992. However useful non-financial measures of performance might be, they are outside of the scope of this paper, but could potentially be used in future research on CSR.

### Financial Perspective

What this paper considers the ‘financial perspective’ is the so called ‘virtuous circle’ discussed in the introduction. This view suggests that a firm’s strong stock performance leads to greater firm investments in CSR (Nelling & Webb, 2009). Indeed, it seems that the better the economic performance of a company, the greater its social responsibility activity and disclosure of these activities is (Roberts, 1992). Measuring the causality from economic performance to CSR is different than what the other perspectives do, but still uses many of the same measures of performance. Roberts (1992) also includes lagged values of debt to equity ratios and proxies for firm performance. In addition, a proxy variable for CSR is necessary for regression models, which we will see in the literature review.

### Measuring Firm Performance

The literature review found that the most widely used model to measure financial performance in the financially relevant papers is the capital asset pricing model (CAPM). Since this paper will incorporate these financial papers in the literature review, it is important to go over some of the basics of the CAPM model. This theoretical framework will use a model based on the CAPM model of Fama & French (2004) and include alternative measures of investment performance proposed by Bello (2005). The main takeaway of the CAPM is that there is a relationship between the amount of risk and a stock’s or stock portfolio’s expected return:

$$E(R_i) = r_f + \beta_i [E(R_M) - r_f] \quad i = 1, \dots, N$$

The intuition behind this is that the expected return ( $E(R_i)$ ) on any asset  $i$  equals the risk free interest rate  $r_f$ , plus a risk premium, which is given by multiplying the asset’s beta  $\beta_i$  by the premium per unit of beta risk  $[E(R_M) - r_f]$ , where  $E(R_M)$  is the expected return of holding the market portfolio (Fama & French, 2004). In this model, the beta indicates an asset’s sensitivity to the expected market returns, which is the covariance of the return divided by the variance of the market return:

$$\beta_i = \frac{Cov(R_i, R_M)}{Var(R_M)}$$

This stock beta thus simply measures how volatile an investment is compared to the market. The term systematic risk is also used interchangeably for beta in this paper.

Jensen’s alpha is a measure of abnormal (excess) returns of stocks, and is given by the following formula:

$$R_i - r_f = \alpha_i + \beta_i [E(R_M) - r_f] + \varepsilon_i$$

Where  $\alpha_i$  is Jensen's alpha of stock  $i$ , and  $\varepsilon_i$  is simply the residual term. Jensen's alpha captures any abnormal returns above and beyond what would be expected from the stock's excess return based on the risk of that stock (beta).

Lastly, the Sharpe performance measure (also known as Sharpe ratio) is a way of calculating returns in a way that is risk-adjusted. This has become a quite standard measure in more financial papers, and is given by the following formula:

$$\frac{E(R_i) - r_f}{\sigma_i}$$

By dividing the excess return by the stock's standard deviation ( $\sigma_i$ ), this measure of performance is risk-adjusted, and shows by how much the extra risk of a stock is being compensated in terms of stock return.

### Summary of theoretical framework

By looking at several different perspectives of how CSR can affect firm performance, and by introducing the CAPM model that is used to measure financial performance in many of the papers in the literature review, this theoretical framework sets up a way in which the papers reviewed can be compared within these different perspectives and results can be categorized accordingly. The theoretical framework is summarized in Table 1.

<b>Perspective</b>	<b>Theory</b>	<b>Financial Indicators</b>
Economic	CSR can benefit a firm because incorporating social costs into private firm costs can lead to an increase in financial performance by avoiding social conflicts (Heal, 2005; Husted, 2005)	Net income, Cost of Goods Sold (COGS), Stock price, Goodwill
Shareholder	When shareholders place additional value on firms that have CSR, a corporate culture of sustainability could lead to an increase in firm financial performance. Stock portfolios that hold CSR funds (SRI's) might outperform non-CSR portfolios.	Cost of equity, Cost of capital, Jensen's alpha, Systematic risk ( $\beta$ ), Firm disclosures
Stakeholder	Firms have a responsibility towards parties outside of the shareholders; CSR can benefit firms by meeting stakeholder expectations to increase financial performance and avoid value destruction through conflicts	Return on Equity, D/E-ratio, Systematic risk ( $\beta$ ), Non-financial performance measures, Balanced Scorecard
Financial	The better economic performance a company has, the more money it can invest in CSR, linking CSR and firm performance to each other through a 'virtuous cycle'	Expected return, Jensen's alpha, Systematic risk ( $\beta$ ), Sharpe Ratio, Growth in Return on Equity, Proxies for Firm Size and CSR

Table 1: Summary of Theoretical Framework

## Literature Review

This literature review will consider empirical papers written on the subject of the effect of a corporate culture of sustainability on firm performance. The paper will follow the different perspectives introduced in the theoretical framework when reviewing the empirical literature on the subject. The following propositions follow from the theoretical framework to help answer the main research question:

*Proposition 1: A corporate culture of sustainability has a positive effect on firm financial performance because incorporating social costs into private firm costs can avoid social conflicts*

*Proposition 2: A corporate culture of sustainability has a positive effect on firm financial performance by meeting shareholder expectations and reducing shareholder uncertainty*

*Proposition 3: A corporate culture of sustainability has a positive effect on firm financial performance by meeting stakeholder expectations*

*Proposition 4: Better economic performance in previous periods leads to an increase in a firm's disclosure of CSR activities*

In the course of this literature review, the sub questions introduced earlier will also be given attention:

*“Does the effect of CSR on performance differ between types of organizations or regions?”*

*“How can accounting figures be used to see if a firm has been successful in implementing CSR?”*

By considering these questions within the scope of financial accounting, this paper adds to existing literature on CSR by comparing the empirical results more aimed at financial performance, whereas previous literature reviews often discussed the ethical or strategic implications of CSR.

Appendix 1 provides a table in which the papers are compared to each other within the theoretical framework and shows what the evidence of the papers in the literature review was on these four propositions by categorizing them within the four perspectives approach given in the theoretical framework.

### Measuring CSR

Throughout the literature review, it will be seen that different papers use different ways to measure CSR. Some papers in the literature review even use executive opinions as measurement tools, whereas others use data from annual reports, which might mean that the results are not properly comparable. Measuring CSR is not straightforward, as data on it is often not concrete data and relies on normative judgements of what is considered ‘socially responsible’. All measurements of CSR have some limitations (Turker, 2009), because CSR encompasses multiple dimensions. A general consensus seems that there are three main CSR dimensions, which are *community relations*, *employee relations*, and *environment* (Waddock & Graves (1997), Brammer et al. (2006), Nelling & Webb (2009)). However, other studies

include many more. The different ways that papers define CSR for research purposes are summarized in Appendix 1. The conclusion of this literature research on measuring CSR is that there is no clear guideline on what CSR is, and how it should be measured for empirical research. Many authors differ in the factors of CSR they use for their research. This is beyond the scope of this paper. However, it might be an interesting topic for future research.

Even though many studies differed in the way that CSR was measured, and it can be reasonably be expected that this influences the results, this literature review did not find any significant conclusions on this effect. Studies with more comprehensive measures of CSR were not more likely to find different results than studies with CSR measures that were more one dimensional.

### *CSR, Firm Performance and the Economic Perspective*

Freedman & Jaggi (1988) studied US data from 1973 and 1974 (the first mandated pollution disclosures were introduced in 1973 in the US) to assess the effect of corporate disclosures on economic performance using accounting measures such as return on assets (ROA) and return on equity (ROE). They did not find an association between economic performance and pollution disclosures at first, however when controlling for type of industry, they found that those firms that had the best economic performance also had the most extensive corporate disclosures on pollution, and they also found that this effect was stronger for larger firms, and not significant for small firms. This is evidence in favor of the virtuous circle proposition discussed, but as the data matched the introduction of the social disclosure mandate, the authors suggested further research was necessary.

The economic perspective theory also proposed that firms can avoid value destruction by taking social costs into account. This was confirmed in the empirical research by McGuire et al. (1988). Their research found that high sustainability firms were both significantly less risky (lower leverage ( $p < 0.01$ )), and performed significantly better financially (higher ROA ( $p < 0.01$ )), compared to low sustainability firms. Lastly, they found that prior financial performance was indeed a predictor of CSR, and thus the causal direction of the 'virtuous cycle' remained a question. Neu et al. (1998) also found a significant ( $p < 0.05$ ) positive association between profitability and social disclosures for Canadian firms in the 1980s. Both of these papers are thus seen as evidence in favor of proposition 1.

Waddock & Graves (1997) also looked at ROA, ROE and leverage (debt to equity ratio) when comparing the financial performance of firms with CSR, and made an intra-industry comparison possible by having a large sample ( $N=469$ ) comprising of US S&P500 firms from different industries from the years 1989-1991. They used a value weighted measure of corporate social performance (CSP) based on firm disclosures and external information sources, and analyzed this with regards to measures of financial performance.

ROA was found to be strongly positively related (correlation = 0.18,  $p < 0.001$ ) to CSP, and the same link was found for ROE, yet less significant ( $p < 0.10$ ). These results support the proposition that financial performance leads to improved CSP ("CSR as a luxury good"). In addition, the paper used a statistical model with an introduced time lag of 1 year for financial performance, and found empirical evidence in favor of the proposition that financial performance (measured in ROA, ROE, and leverage) CSP or CSR

improves financial performance ( $p < 0.01$ ). The paper by Waddock & Graves thus supports both the directions of causation discussed in the 'virtuous circle' hypothesis. The authors conclude by stating that causation thus runs in two directions, better firm performance may lead to improved CSP, and improved CSP may lead to a better financial performance, *ceteris paribus*, which is in favor of proposition 1. However, this study has some limitations, while the sample size was fairly large; the time horizon of this study was very short.

Eccles, Ioannou and Serafeim (2012) found that high sustainability firms outperformed low sustainability firms in the long run by looking at purely accounting measures (ROA, ROE). These high sustainability firms thus have a higher ratio of net income to their total assets and equity, compared to their low sustainability counterparts. This is evidence both in favor of the CSR as a luxury good argument and CSR leading to an improved financial performance argument discussed in the 'virtuous circle' theory of CSR, and confirms the reasoning behind proposition 1.

However, the authors claim that the luxury good argument has no merit in their research, as this argument would mean that the high sustainability firms would drop their number of CSR policies during times of financial crisis. The authors found that this was not the case with the firms in their high sustainability portfolio, therefore strengthening the case in favor of the theory that CSR improves a firm's financial performance. This is thus visible in ROA and ROE when comparing with low sustainability firms.

An example of implementation of environmental policy is the ISO 14001 certification. This is the most used (over 300.000 organizations worldwide) environmental management standard. Lee et al. (2017) uses data from the NYSE and NASDAQ in addition to the ISO 14001 certification date of firms. This resulted in 331 ISO 14001 certified firms; data was collected from 1996 to 2010. The overall effect of ISO 14001 certification was positive and significant over the long run for nearly all financial metrics (ROA, stock price, and total assets), which supports the first proposition. Their time lagged regression series showed that the results were gradually obtained over time, which provides evidence in the fact that CSR might cause improved financial performance. The only financial indicator that was not found to have changed significantly was cost of goods sold divided by sales.

The virtuous circle theory was introduced by Nelling & Webb in 2009, as discussed in the theoretical framework. This paper included an empirical analysis. Their findings were that when using 'standard' statistical ordinary least squares (OLS) model, past financial performance was significant in explaining CSR. However, when other statistical techniques were used (fixed effects, granger causality models), the results no longer supported this relationship. They found no causality from CSR to financial performance, but weak evidence of causality from financial performance to CSR, which is in favor of the CSR as a luxury good argument. This was the only paper that found evidence against proposition 1.

#### Financial Performance and Shareholder Expectations

Belkaoui & Karpik (1989) did an empirical test on accounting and stock returns of 23 US companies for the year 1973 and base their market model on the period of 1970-1973. They found that the decision to disclose social information was significantly ( $p < 0.05$ ) associated with social performance, and is

explained by the fact that social improvements of a firm are quickly publicly disclosed to cater to the interests of long-term investors, which supports proposition 2. The paper found that economic performance was negatively correlated to social disclosure when not controlling for multicollinearity (meaning two or more predictors are correlated in the regression model), as the measure of economic performance was unstable when leverage was also considered in the model. However, when controlled for this, economic performance was found to be positively correlated with social disclosures, providing evidence in support of the virtuous circle proposition. However, there are some problems with this study. The results are quite old, the sample size is very small ( $n=23$ ), and the time horizon is very short.

The time horizon of shareholders is an important distinction. As corporate social responsibility has been found to be negatively related to a firm's business risk (Spicer, 1978; Husted, 2005), as proposition 2 predicted, CSR can create shareholder value by meeting the expectations of shareholders that are more long term oriented, as they will prefer investing in firms that have a sustainable corporate culture. Investors that are more interest in short term fluctuations might prefer more risky stocks, but investors who seem to optimize financial performance over a longer period of time are interested in investing in high sustainability firms. The study by Husted (2005) therefore provides empirical evidence in favor of the theory that CSR increases a firm's financial performance by meeting shareholder expectations, which becomes especially apparent in the long run.

In the 2012 study by Eccles, Ioannou and Serafeim, the authors compared two portfolios: one featuring *low sustainability* firms, and one featuring *high sustainability* firms, over a period of 18 years (1993-2010). This distinction was made on the basis of data made available by the Thomson Reuters ASSET4 database on US firms. In addition, the researchers interviewed 200 corporate executives to validate the accuracy of the data on CSR. Due to the way they selected their portfolios, both the low and high sustainability portfolios outperformed the market, however, relatively speaking the high sustainability portfolio did better than the low sustainability portfolio (significant  $p < 0.05$ ) in 11 out of 18 years, and better overall, as was seen by looking at the intercept of the four-factor model, which was the monthly average *Jensen's alpha* ( $\alpha$ ). This study thus provided empirical evidence in favor of the second proposition.

Cochran and Wood (1984) saw the sample size and short time horizon problem with other studies already in 1984. Their study differs in that they tried to select a larger sample of US firms over a longer period of time in the 1970s. This paper found a weak link between CSR and firm performance. They concluded that being socially active does not appear to be costly for the investor. Even though this study is quite old, it was done at a time where CSR was still in its infancy; therefore we can expect that shareholders did not place as much value on CSR yet. The paper by Cochran and Wood thus weakly supports proposition 2.

Not every paper found a strong positive relationship between CSR and stock performance. Hamilton et al. (1993) compared the stock performance of US mutual funds and SRI funds between 1981 and 1990 and found no significant difference by measuring Jensen's alpha, and concluded investors lose nothing by investing in social mutual funds, but do not benefit in terms of excess returns. However, in the study



there were only 6 socially responsible mutual in 1981 and 32 in 1990, which might have led to a bias in the results.

Bello (2005) used a sample comparing 42 socially responsible funds with 84 conventional funds for the period 1994-2001. The firms were based in the US. He found that the average monthly return of the socially responsible funds was 1.05%, versus 1.02% for the conventional funds. This was found not to be statistically different using a Wilcoxon rank sum test ( $p < 0.05$ ). He also found only one significant positive Jensen's alpha between all of the socially responsible funds, indicating that there were no abnormal returns for the responsible funds. However, he did find that conventional firms significantly ( $p < 0.05$ ) underperformed when looked at the Sharpe ratio, but the effect was not very large. This study suggests that shareholders do not have much to gain by investing in SRI's. However, one could argue that this means that they have nothing to lose either, based on the results of this paper.

Ramasany et al. (2007) used data of 100 companies in the Kuala Lumpur Stock Exchange between 2001 and 2002 to see whether the financial effects of CSR differ in a developing country, as most previous research has been done on US (or developed country) data. While their CSR portfolio slightly outperformed the market portfolio in terms of Sharpe ratio, this was not a statistically significant difference. Notably, they did find a significant positive Jensen's alpha for the CSR portfolio. The results of this paper were not very convincing, but the authors did point out that investors in Malaysia do not value CSR enough to pay a premium for a company. In addition, there were definitely no drawbacks found in investing in financial corporations with high CSR in developing countries, thus socially responsible international investors looking for socially responsible investments in developing countries do not have to incur costs to do so.

Lee et al. (2010) used the CAPM model to analyze data on US mutual and SRI funds. They found that systematic risk ( $\beta$ ) was in fact significantly lower for socially responsible mutual funds, which is in line with the reasoning of Husted (2005) that long term investors might prefer SRI's because they are less risky. However, the Lee et al. study also found that when investment funds put *too many* screens on socially responsible investing, the costs of screening outweigh the benefits. However, overall, CSR screening does not affect mutual fund performance significantly, which agrees with the studies by Ramasany et al. (2007) and Bello (2005) and these three studies thus do not provide any evidence in favor of proposal 2, nor do they disprove it.

This finding by Lee et al. (2010) might also explain why Brammer et al. (2006) found that firms with high CSR measures underperformed. While firms with relatively low or medium amounts of CSR did not significantly differ in performance (measured by alpha), firms with extremely high amounts of CSR significantly slightly underperformed the non-CSR firms. Brammer et al. (2006) thus found that for UK firms between 2003 and 2005, investment in CSR can be value destructive and lower firm financial performance. Problems with this study are that the time horizon is quite short, and the authors only used one set of social performance indicators, whereas other studies considered a broader viewpoint of CSR. Nonetheless, the findings are important as they lead to the question why CSR can lead to negative outcomes in some cases. It seems that CSR can also go too far and destroy shareholder value by trying

to do *too much good*; however, this might be worth it if shareholders are willing to forgo returns and gain other benefits from investing in socially responsible firms.

### Financial Performance and Stakeholder Expectations

Using Dow Jones Sustainability data, Artiach et al. (2010) found that firm size was strongly and significantly related to corporate social performance (CSP). In addition, leading CSP firms were found to be more profitable than conventional firms. However, accounting figures such as leverage were not affected by the amount of CSP in this data set. The implications of this study are that CSP leaders were often the largest firms inside an industry. As larger firms have more stakeholders and attract more attention, it follows that they will put a lot of effort into their sustainability disclosures, to make sure that they fulfill stakeholder expectations and avoid conflict.

McGuire et al. (1988) used data on 98 firms' corporate social responsibility from the magazine *Fortune* about firms from different industries in combination with financial COMPUTSTAT data from 1983-1985. They found a significant positive relationship between social responsibility and ROA ( $p < 0.01$ ), and a significant negative relationship between social responsibility and leverage ( $p < 0.01$ ). The evidence on ROA supports the view that CSR affects financial performance through the effect it has on stakeholders, and the negative relationship with leverage is evidence in favor of the theory that firms with good stakeholder relationships (and contracts) have lower debt than other firms.

An interesting study within the stakeholder perspective was that of Neu et al. (1998). They analyzed Canadian data from 1982-1991 to see how external influences affect CSR disclosures in annual report and included financial metrics in their research. Stakeholder concerns were measured by profitability of firms, and profitability was significantly ( $p < 0.01$ ) associated with increased levels of environmental disclosures during unprofitable years. This is more likely due to shareholder demands than other stakeholders such as creditors. Another stakeholder influence was found by empirical evidence that social criticisms and governmental pressures were also linked to an increase in CSR disclosures. This is in agreement with the theory that firms increase their CSR disclosures to please stakeholders. The theory that governmental pressures lead to an increase in environmental disclosures was also confirmed by Walden and Schwartz (1997).

Roberts (1992) empirically analyzed the financial performance link with the stakeholder perspective in particular. His sample consists of 130 major US companies ( $n=130$ ) and he used COMPUSTAT financial statement data from 1980-1984. The significance of the model showed that indeed stakeholder theory is a good foundation for empirical research into CSR. More importantly, the results have shown that current periods of social disclosure significantly relate to previous period measures of performance. In addition, the significant ( $p < 0.10$ ) negative relationship between systematic risk ( $\beta$ ) and corporate disclosure is evidence that corporations with good social disclosures enjoy a lower stock beta, which could be seen as evidence of the theory that stakeholders deem the corporation to be less risky. Roberts' multiple regression model did not consider leverage, and thus multicollinearity was not found to be an issue in the data. However, the time horizon of 4 years is still relatively short.

In their empirical study comparing corporate performance of 180 US Companies for 18 years, Eccles, Ioannou and Serafeim (2012), find that high sustainability companies significantly outperform their low sustainability counterparts over the long term, in stock market *and* accounting performance, as we have seen in this literature review. The authors directly link stakeholder engagement to this increased financial performance, which supports the theory on the stakeholder perspective. They base this superior stakeholder engagement on the company's ability to create long-term relationships with the key stakeholders. By integrating social and environmental issues in their strategy, companies will be more efficient at contracting. Indeed, high sustainability companies were found to be more likely to identify issues that stakeholders find important and are important for the firm's long term performance. This is in line with what Waddock & Graves concluded in 1997 by linking increased CSP to improved relations with key stakeholders.

The study discussed earlier by Lee et al. (2017) showed that markets already reacted to firm preparations to a corporate culture of sustainability, sending a positive signal to the market. While this is evidence in favor of the stakeholder/shareholder theory, this signal in turn was found to often lead to an overreaction in terms of stock price, leading to an abnormally negative performance in stock price in the subsequent year. In the long run, though firm performance as a whole increased after the implementation of ISO 14001 certification, the market value of firms stayed similar for 4 years. It might thus take a longer time for the market to properly evaluate a firm after it implements CSR.

#### *Economic Performance and CSR Disclosures*

One of the first studies on CSR and economic firm performance was that of Spicer (1978). He found evidence in favor of the proposition that CSR disclosures were relevant to investors for assessing systematic risk. However, Freedman and Jaggi (1988) found that this correlation was a significant negative correlation between economic performance and pollution disclosures for data from 1973. Their conclusion was that social disclosure can be used to communicate with stakeholder, and was found to be especially important in firms with a decreased financial performance as an explanation *why* their firm underperformed. More generally, disclosure of social responsibility information should reflect the firm's efforts towards the goal of sustainability.

The empirical study by Walden & Schwartz (1997) found more evidence for the link between social performance and social reporting. Their study found evidence that corporations are hesitant in reporting environmental information that substantially affects future earnings and cash flows. This could be seen as evidence in favor of stakeholder theory, as upsetting the stakeholders would negatively affect the financial performance of the company. This also helps explain why corporations with a good track record of corporate social performance voluntarily disclose as much information about their CSR as possible.

Richardson & Welker (2001) tested the relationship between financial and social disclosure and the cost of equity capital (cost of equity can be seen as the rate a firm pays to its shareholders, higher cost of equity means that a firm is deemed more risky, and thus deserves a higher rate of return). Canadian data from 1990, 1991 and 1992 was used for the empirical analysis. The results were surprising: increased financial disclosures led to a lower cost of capital, but increased social disclosures lead to a

*higher* cost of capital. However, this study did not take into account whether or not these were *positive* or *negative* CSR disclosures, so there was no clear conclusion. The authors also suggest that, even if increased social disclosures led to a higher cost of equity, which hurts shareholders, such disclosures might benefit stakeholders in other ways.

Eccles et al. (2012) found that high sustainability firms place more emphasis on meeting their stakeholder's expectations, as they were more likely to incorporate social and environmental information in their firm disclosures (32.4% vs.10.8%). Corporations exhibiting stronger economic performance in previous periods as measured by growth in return on equity (ROE) were in addition found to be more likely to have high levels of social disclosure in the current period (Roberts, 1992).

Jones et al. (2007) found abnormal negative stock returns for Australian firms who used more corporate social disclosures than average. However, these results were often not statistically significant, so no conclusions could be drawn. Jones et al. did find a significant positive relationship between other financial metrics and social disclosures, especially accounting measures, the authors suggest this means that the high sustainability firms are more conservatively valued compared to other firms. This paper also supports the theory that bigger firms are more likely to have more sustainability disclosures, as they have more stakeholders who are dependent on correct information.

Importantly, CSR can sometimes be disclosed even beyond the annual reports, meaning the description provided by annual reports on social information might be incomplete (Zeghal & Ahmed, 1990). This is important information for investors looking to make socially responsible investments. In addition, it can explain why many studies had a lot of problems to create a good measure of CSR in their data analysis, and should be taken into account for further research. Walden & Schwartz expand upon this point and reason that non-financial information is especially likely to be incomplete in annual reports, as managers have more control over the disclosure of non-financial information.

## Discussion and Conclusion

### Discussion

Four propositions were introduced in the literature review; the results of the literature review will be now discussed and a conclusion will be made. After that, limitations of this literature review will be discussed. The results of the literature review are also summarized in a table in Appendix 1.

*Proposition 1: A corporate culture of sustainability has a positive effect on firm financial performance because incorporating social costs into private firm costs can avoid social conflicts*

The first proposition was more related to economic and social cost theory than financial accounting theory, which is why many papers in this literature review had no data available on this topic. Nonetheless, of the papers that did have information about avoiding social conflicts, the only paper that found contradictory evidence to this proposition was that of Nelling & Webb (2009). The interesting result of the paper by Nelling & Webb was that they found evidence in favor of proposition 1 at first using traditional statistic (ordinary least squares) methodology, however, when they adjusted their statistical methods to more complicated models, they found evidence against proposition 1. This is an interesting contradiction that needs more attention in future literature about CSR.

The other papers that were found to have evidence in favor of proposition 1 in the sense that the firms were less risky, and performed better by analyzing both financial and accounting measures. While one could argue that social costs are not easily measured and therefore the results might not fully justify explaining the theory behind proposition 1, this paper still argues that the empirical evidence from the literature is evidence in favor of proposition 1. This is justified because measures of risk were found to decrease as firms increased their CSR expenditures and disclosures, which this literature review believes is evidence of avoiding social conflicts.

As in statistical methodology, this literature review argues that proposition 1 *cannot be rejected*. However, there was no strong justification for this conclusion, as social cost data was difficult to obtain. Further research into economic and social cost theory can hopefully provide stronger evidence in favor of this proposition in the future.

*Proposition 2: A corporate culture of sustainability has a positive effect on firm financial performance by meeting shareholder expectations and reducing shareholder uncertainty*

This proposition was the one that most papers had data on, as the literature review explicitly chose papers with a financial accounting perspective. As expected from previous research, results were mixed, from slightly positive (7 papers), to neutral (6 papers), and negative in 4 papers.

The general consensus seems that investors are not likely to significantly lose money by investing in socially responsible companies or mutual funds, and might even slightly outperform non-CSR investors. However, there was no strong evidence in either direction. In the case that there was found to be evidence that went against proposition 2, this was argued to be the case as firms might have overdone it, and went too far in their CSR expenditures.

Results in studies seemed to arise due to the difference in time horizon of the data studies. Studies with short horizons seemed to more often find no link, or a negative link, between CSR and firm performance. Whereas studies with a longer horizon, especially the study by Eccles et al. (2012), seem to find more strong evidence in favor of proposition 2. Lee et al. (2017) showed that markets might overreact to changes in CSR policy, which means that the market needs a longer period of time to properly value the firm in question. Therefore, studies with a longer time horizon might be more likely to positively link CSR to financial performance.

This literature review argues that CSR is more likely to meet expectations of those shareholders that have a long-term focus. For this reason, we justify that proposition 2 cannot be rejected. For further research it might be interesting to find a more concrete measure of investor time horizon and to see whether or not this is linked with increased/decreased socially responsible investments.

*Proposition 3: A corporate culture of sustainability has a positive effect on firm financial performance by meeting stakeholder expectations*

The stakeholder perspective is an interesting one for the topic of CSR, and after looking at the results of the literature review, might provide the strongest case for CSR. With the exception of one paper that found a negative result, and a few papers that had no data on stakeholder theory, 12 papers found evidence in favor of proposition 3. This makes sense, as CSR expenditures more often affect the larger group of stakeholders than just the shareholders. For this reason, proposition 3 could not be rejected.

Corporations that are most successful at improving their relationships with key stakeholders, especially in the long run, were found to benefit from this financially (Waddock & Graves, 1997, Eccles et al. (2012)). The arguments from proposition 2 also hold for proposition 3, as shareholders make up a large proportion of the total group of stakeholders, with the addition that some studies that found negative effects for shareholders, still found that stakeholders did in fact benefit from CSR.

The only study that found a negative relationship between CSR and stakeholder expectations was the one by Brammer et al. (2006). Interestingly, this study found that only those firms with excessive levels of CSR underperformed other firms. In future research, this methodology of categorizing CSR from low to high might find similar results. However, the study by Brammer et al. had a short time horizon, which might bias the conclusions, as was explained in the discussion of proposition 2.

*Proposition 4: Better economic performance in previous periods leads to an increase in a firm's disclosure of CSR activities*

Almost all studies that had data on firm disclosures and financial performance found a positive link between previous economic performance and CSR disclosures now. Several papers found that especially firm size affected the amount and quality of CSR disclosures. This makes sense, as the larger the firm is, the more stakeholders there are who are interested in how a corporation performs in the field of CSR.

The only study that found evidence against proposition 3 was that of Freedman & Jaggi (1988), they argued that firms that performed badly financially would increase CSR disclosures to give a reason as to

why they did not perform well. However, only data from 1973 and 1974 was used, and this coincided with changes in legislature surrounding CSR disclosures.

As almost all other papers linked previous economic performance to increases in firm disclosure of CSR activities, this literature review finds strong evidence in favor of this hypothesis. Proposition 4 can thus not be rejected.

## Conclusion

This study reviewed literature in the field of CSR and financial performance, and tried to find out what the effect of a corporate culture of sustainability is on a firm's financial performance. By doing so, it will be more clear to accounting professionals, managers, and investors what the effects are of firms that choose to become more sustainable. Most importantly, the study found that there are no negative effects to be expected from investing in socially responsible funds. This key takeaway might be of importance for financial investors that want to invest in socially responsible funds with less risk, and for accounting professionals that want to know whether or not incorporating CSR into a firm's model has any negative implications for financial performance.

The research was done by creating a theoretical framework that distinguished multiple perspectives as to how firm financial performance might be affected by said corporate culture of sustainability. These were then further worked out as propositions. What followed was a literature review of 20 scientific papers within this field. These papers were analyzed and compared to each other within the theoretical framework that was laid out.

This paper started with the main research question:

**"What is the effect of a corporate culture of sustainability on a firm's financial performance?"**

As the propositions that followed from the theoretical framework could not be rejected, this literature review argues that a corporate culture of sustainability affects a firm's financial performance through three different aspects. Firstly, a corporate culture of sustainability that incorporates social costs with their accounting costs can protect a company from destroying value through social conflicts. Secondly, when shareholders place value on socially responsible behavior by firms, firms can benefit from this by implementing CSR into their corporate culture and increasing financial performance through meeting shareholder expectations. Thirdly, by creating long term relationships with key stakeholders, and by avoiding conflicts with said stakeholders, firms can both create value and avoid value destruction.

While the effect of CSR on firm performance seemed mostly positive in the literature review, it should be pointed out that many papers found no conclusions, or only very weak positive evidence. The key takeaway from this literature review should be that CSR most probably does not have a significant negative effect on firm financial performance, and might benefit the financial performance in some cases. Further research should try to analyze exactly in which situations CSR does so.

The causal direction of the 'virtuous cycle' of CSR and financial performance remains unclear and should be paid more attention in future research. While companies that "do well" were found to be more likely to "do good", the evidence is not clear yet whether or not "doing good" **causes** a company to "do well".

This literature review found that the effects of CSR are most likely to be found in the longer term. This makes sense, as a corporate culture of sustainability is more likely to consider a longer time perspective than corporations without such a culture. Investors can thus use the results of this literature review as evidence that socially responsible corporations might be a more sensible long term investment that is less risky than other firms. In addition, if firms wish to attract those shareholders that are more likely to have a longer time horizon of investment, a corporate culture of sustainability might benefit them to attract exactly those shareholders.

*"Does the effect of CSR on performance differ between types of organizations or regions?"*

Interestingly, the study by Ramasany et al. (2007) found that even in developing countries, there was a relatively high interest for CSR by managers. In addition, there were no negative effects of investing in socially responsible firms in a developing country like Malaysia, which is good news for socially responsible investors who seek to invest in developing countries. However, the shareholders in developing countries seemed to have less interest in CSR than in studies done in the developed world, which might explain why CSR does not have as much effect on financial performance. Further research is definitely needed.

Secondly, firms that are in heavily polluting industries might benefit more from CSR expenditures and be more likely to have CSR disclosures, as their stakeholders have more interest in the firms in these industries doing so. However, this literature review did not review any studies that specifically analyzed the effect of CSR per organization type; this might be interesting for future research.

*"How can accounting figures be used to see if a firm has been successful in implementing CSR?"*

One of the key takeaways from this literature review is that accounting figures can show that a firm has been successful *while* incorporating CSR, but they do not necessarily prove that CSR caused this financial performance. The most likely accounting figures that show that a firm has a good corporate culture of sustainability are systematic risk ( $\beta$ ) and cost of equity. This is because firms with CSR are found to be less risky through the reasons stated earlier in this conclusion.

The key takeaway is that if a firm increased its' CSR disclosures and subsequently found a decrease in systematic risk and cost of equity, while at the same time finding no significant negative effects on stock price, and in some cases even positive changes in ROA, ROE, and cost of equity, it can be said that the firm has been successful in implementing CSR within their firm. However, it might take a few years before the stock market accurately values the firm after changes in CSR have been implemented (Lee, Noh, Choi, & Rha, 2017).



Looking further than accounting figures, one could also argue that a firm has been successful in implementing CSR if there were no significant negative financial effects, and the CSR projects that the firm has undergone were successful, and met stakeholder expectations.

## Limitations and further research

Several limitations of this literature review have already been discussed in the course of this paper. Most importantly, Nelling & Webb (2009) introduced the virtuous cycle of CSR. The causal direction in which CSR and financial performance cause each other is still not clear, which could also be researched in further depth in the future.

Another obvious limitation is that many papers in the literature review used different measures of CSR in their empirical research, as can be seen in Appendix 2. This could have biased the results. It would be good if future research could specify an objective list of criteria on which to base CSR results along several dimensions of CSR, which future researchers could base their CSR criteria on to make data more comparable. The framework by Nelling & Webb (2009) based on that of Waddock & Graves (1997) seems like a good starting point. More importantly, a clear definition of CSR that is widely used could be useful for future research to make results between papers more comparable.

The papers reviewed in this study had different years of data and different lengths of the time series that they used. Some papers did not even have a time series regression. This made comparing results to each other more difficult. While it is the expectation of this paper's results that stakeholder expectations towards CSR have increased over time, and CSR caters more towards the long-term investors than the short term investor, more empirical data is necessary to confirm these propositions. It is interesting to see that the study that used the longest and most comprehensive data set found the most evidence in favor of CSR and financial performance (Eccles, Ioannou, & Serafeim, 2012). Some studies used subjective data from executive surveys, and others used purely empirical data, which also led to difficulties in comparing studies, this might have also had an effect on the results of these studies.

Moreover, different papers using different statistical techniques found different results. Overall, OLS regression seemed to be more likely to find positive results in favor of the theory that CSR increases a firm's financial performance. Nelling & Webb found that introducing other methods affected the results. Maybe the data of several studies could be gone over again using the same statistical methods as Nelling & Webb to see if the results would significantly change, or it was just because of the data that Nelling & Webb selected.

Another limitation is that most papers in this literature review analyzed US stock data. In the course of the research, it seemed that many papers which focused on CSR in developing countries were published in less reputable journals. To ensure the quality of this literature review, they were not incorporated into the review, but for one paper (Ramasany, Ting, & Yeung, 2007). The findings of this paper were hopeful, as it seemed that CSR was viewed positively in a developing country such as Malaysia. However,

more research on the effect of CSR on firm performance in different regions over the world would be interesting for further research.

Lastly, the economic perspective discussed in the theoretical framework was hard to research. Social costs are difficult to measure. Future research could try to find ways in which social costs can be reliably measured, so the effects of CSR on firm performance through the economic perspective (avoiding value destruction through social conflicts) can be properly analyzed. However, as avoiding value destruction is a very difficult concept to properly evaluate in actual monetary terms; this might be very difficult to do.

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## Appendix

### Appendix 1: Table Summarizing Results of Literature Review

Paper	Economic Perspective (Proposition 1)	Shareholder Perspective (Proposition 2)	Stakeholder Perspective (Proposition 3)	CSR Disclosures (Proposition 4)
Artiach et al. (2010)	+	=	+	+
Belkaoui & Karpik (1989)	No data	+	+	+
Bello (2005)	No data	=	=	No data
Brammer et al. (2006)	No data	-	-	No data
Cochran & Wood (1984)	+	+	=	No data
Eccles et al. (2012)	+	+	+	+
Freedman & Jaggi (1988)	+	No data	+	-
Hamilton et al. (1993)	No data	=	=	No data
Jones et al. (2007)	+	-	+	+
Lee et al. (2010)	No data	=	=	No data
Lee et al. (2017)	+	=	=	No data
McGuire et al. (1988)	+	+	+	No data
Nelling & Webb (2009)	-	-	=	+
Neu et al. (1998)	+	+	+	+
Ramasany et al. (2007)	No data	=	=	No data
Richardson & Welker (2001)	No data	-	+	+
Roberts (1992)	No data	+	+	+
Spicer (1978)	No data	+	+	+
Waddock & Graves (1997)	+	No data	+	+
Walden & Schwartz (1997)	No data	No data	+	+

*"+" = Evidence in favor of proposition, "=" = No effect, "-" = Evidence against proposition*

## Appendix 2: Table Describing How CSR Was Measured Per Study

Paper	How was CSR measured
Artiach et al. (2010)	Dummy for being a member of Dow Jones Sustainability World Index
Belkaoui & Karpik (1989)	The number of social responsibility programmes on a scale from 0-13, and a survey ranking corporations on CSP by executives
Bello (2005)	Morningstar database identifying mutual funds that are socially responsible US stock funds
Brammer et al. (2006)	Data from Ethical Investment Research Service (EIRIS), CSR is measured against objective criteria; data analyzed is data available to investors. Distinction between community, environment, and employee performance.
Cochran & Wood (1984)	Combined list using reputation indices and content analyses, then ranked CSR 1=best, 2= honorable mention, 3=worst compared to industry averages
Eccles et al. (2012)	Thomson Reuters database on adoption/non-adoption of CSR policies, matched sample firms with high and low sustainability, in combination with data from annual & sustainability reports, and 200 interviews with executives
Freedman & Jaggi (1988)	Firms in highly polluting industries annual statements were analyzed, then a weighting scheme was used based on perceived importance of different CSR aspects
Hamilton et al. (1993)	Mutual funds identified by their managers as SRI's
Jones et al. (2007)	Top 100 countries on ASX, then compared annual and sustainability reports and 'scored' companies based on guidelines from the Global Reporting Initiative.
Lee et al. (2010)	Data from social investment forum to classify SRI funds
Lee et al. (2017)	ISO 14001 certification as measure of CSR
McGuire et al. (1988)	Fortune executive survey on social performance
Nelling & Webb (2009)	Weighted average of several aspects of CSR from a database (employee relations, product, community relations, environment, treatment of women and minorities, nuclear power, military contracts) based on Waddock & Graves (1997)
Neu et al. (1998)	Number of words on environment and other CSR topics in annual reports.
Ramasany et al. (2007)	'Disclosure approach' – emphasis of CSR in annual reports of 100 top firms on Malaysian stock exchange, number of words on CSR topics in annual reports
Richardson & Welker (2001)	Data on quality and quantity of CSR reporting in annual reports based on 10 categories of social responsibility
Roberts (1992)	Data from Council on Economic Priorities (CEP) focusing on Fortune 500 companies' social responsibility trends
Spicer (1978)	Pollution control data to develop a pollution index for each company in the sample
Waddock & Graves (1997)	Index of CSP based on eight corporate social performance attributes rated consistently across S&P 500 by an independent rating agency
Walden & Schwartz (1997)	Changes in environmental disclosures subsequent to the 1989 Exxon Valdez oil spill