

Master's thesis

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The Value of Tactical and Strategic CSR during Crises of Trust: Evidence from the Great Recession



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Executive summary

In 2017, Lins, Servaes and Tamayo found that firms' level of CSR activities affected firm performance during the 2008, 2009 financial crisis positively. In this master's thesis, I aim to analyze the relationship on a more nuanced level differentiating between the effects of strategic CSR (activities with long-term stakeholder focus, large resource commitments and significant structural adjustments) and tactical CSR (transactional activities with short-term stakeholder focus and relatively few organizational resources). Taking the specifics of each kind of CSR into account, I theorize on the mechanisms underlying a potential outperformance and argue that both contribute to firm performance during crises of trust like the Great Recession. Furthermore, I argue that strategic CSR activities contribute more to firm performance than do tactical initiatives.

Before conducting the empirical analysis, I point out that Lins et al.'s (2017) proxy for CSR activities is flawed. In their measure, they combine ratings on CSR items which lack convergent validity. Using a more valid proxy of firms' CSR activities, I find no significant relationship between CSR, strategic CSR, or tactical CSR and firm performance during the period of interest in my main analysis. Constructing yet another, and arguably more objective proxy for firms' tactical CSR activities, I find in a robustness test evidence that TCSR affected stock performance during the recession positively. As data for constructing this proxy was available for only a small sub-sample that is significantly different from the rest of the sample, I cannot infer from the robustness test the overall relationship between TCSR and firm performance during the Great Recession.

Given the different results from main analysis and robustness test, the research question cannot be answered conclusively with the data available. However, my study makes important contributions to research on the relationship between CSR and profitability. Besides finding evidence for a non-negative relationship between TCSR, SCSR and firm performance in my main analysis and evidence for an outperformance stemming from TCSR in a robustness test, I show that the results of Lins et al. (2017) are not as valid and robust as they had suggested. Not only do I point out that their measure of CSR is flawed, I also show that their main results are sensitive to the time period analyzed and that the positive relationship they found between CSR and operating performance may be explained with industry effects. Furthermore, a theoretical in-depth analysis on the relationship between CSR, SCSR, and TCSR and firm performance during crises of trust has not been performed before by researchers.

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1. Introduction

1.1 Background

“We start 2009 in the midst of a crisis unlike any we have seen in our lifetime [...] This crisis did not happen solely by some accident of history or normal turn of the business cycle [...] We arrived at this point due to an era of profound irresponsibility that stretched from corporate boardrooms to the halls of power in Washington, D.C. For years, too many Wall Street executives made imprudent and dangerous decisions, seeking profits with too little regard for risk, too little regulatory scrutiny, and too little accountability. [...] The result has been a devastating loss of trust and confidence in our economy, our financial markets and our government.” (Obama, 2009)

In his “Speech on the Economy” in January 2009, Barack Obama not only describes the severity of the crisis, but also tries to explain *why* the crisis hit the United States as hard as it did. Interestingly, he points out that the crisis was not a more or less expected turn of the business cycle and argues that eroded trust was one of the main drivers. A look at the facts supports that claim: with all its negative effects, the Great Recession, lasting from December 2007 to June 2009, was the worst economic crisis since world war two. According to the Bureau of Economic Analysis (2010), the gross domestic product of the USA contracted by approximately 2.9% and about 8.7 million jobs were lost, while the unemployment rate climbed from 5.0% in December 2007 to 9.5% by June 2009 (U.S. Bureau of Labor statistics, 2012). In addition to the economic crisis, and in line with Barack Obama’s (2009) analysis, society as a whole experienced a shock in trust towards business, financial actors, and institutions. Edelman (2009) reported that only 38% of the respondents trusted business in the end of 2008, down from 58% in 2007.

The magnitude of the crisis called for a close examination of, among others, the underlying drivers of the recession and firm characteristics that affected the likelihood of being more or less affected by the crisis. Popular theories like Schumpeter’s view of recessions (Aghion and Howitt, 1990) proved to be inaccurate for explaining the survival and death of companies and factors regarded as neglectable for competitive outcomes like financial resources became decisive factors (Knudsen, 2011). This suggest that conventional theories not only failed to predict competitive outcomes but also are grounded on assumptions that need to be relaxed for the Great Recession. A thorough analysis of factors affecting firm performance and the underlying mechanisms is necessary. Only this analysis will allow scholars to predict outcomes of similar future crises and managers to prepare for those times.

One of the factors that has been identified is firms' level of corporate social responsibility (henceforth "CSR") activities, which Lins et al. (2017) relate to a shock of trust. Lower trust in societies impairs the functionality of financial markets by raising transaction costs and shakes up the relationship between companies and its stakeholders (Putnam et al., 1994). On the individual firm level, building up trust through CSR activities may be one way to mitigate the impact that the simultaneous occurrence of an economic crisis and a shock of trust has on performance. Lins et al.'s (2017) findings indicate that the level of CSR activities prior to the crises affected firm performance during the crises positively and might thus be regarded as an insurance policy for periods of low trust. High-CSR companies outperformed low-CSR on the stock market by 4-7% and a one standard deviation increase of CSR was associated with 2.86% higher raw returns.

However, I think it is important to analyze the relationship between CSR and performance on a more detailed level. Using aggregated data on CSR activities and treating all components of CSR equally is likely to underestimate the impact of certain categories of CSR and to overestimates others. I take a more fine-grained approach and differentiate between two kinds of CSR: strategic and tactical CSR. Strategic CSR (henceforth "SCSR") comprises activities with long-term stakeholder focus, large resource commitments and significant structural adjustments. Tactical CSR (henceforth "TCSR") comprises transactional activities with short-term stakeholder focus and relatively few organizational resources (Bansal et al., 2015). The distinction between those two kinds of CSR is relatively new and their respective impact on performance has not yet been evaluated.

1.2 Research Question

What is the relationship between firms' level of tactical and strategic CSR and firm performance during the Great Recession?

1.3 Structure

In order to answer the research question, this thesis is organized in eight chapters: following the introduction (chapter 1), I present in "Literature Review" (chapter 2) relevant research and theories on the topic of CSR in general and on the relationship between CSR and firm performance in specific, putting an emphasis on the concepts of fairness and reciprocity. Furthermore, I outline the distinction between tactical and strategic CSR. Based on the findings of the literature review, I, then, theorize on the relationship between CSR and firm performance during crises of trust in "Model and hypothesis" (chapter 3). Chapter 4 presents the methodology of the thesis at hand, before the composition of the sample and the calculation of variables is outline in "Data" (chapter 5). All hypotheses developed are tested empirically and

the results presented in “Data Analysis” (chapter 6). Chapter 7 presents concluding remarks before I discuss the limitations of the study and outline future research recommendations (chapter 8).

2. Literature Review

2.1 CSR

It is important to first define what business activity represents CSR activity. In order to be useful for my analysis, the definition of CSR activities must allow to distinguish between CSR and usual business activity that is intended to benefit no one but the owners of the company. When doing that, I restrict myself to a positive definition of CSR since a normative discussion contributes little to this master’s thesis.

In the following, I present several popular definitions of CSR and explain which one I am going to use for the thesis. To begin with the probably most controversial but also most cited definition, Friedman (1970) claimed:

“There is one and only one social responsibility of business — to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.” (Friedman 1970)

According to Friedman, activities called socially responsible, like philanthropy, are usually not intended to improve firm performance and destroy shareholder value. Instead, he suspects that managers allocate resources to stakeholders that they personally perceive as worthy to support, thereby reducing profits. Friedman defines this as irresponsible behavior. Managers are employed by the owners whose desire it is to make as much money as possible while obeying the law and acting in concordance with some basic ethical norms. Friedman regards activities performed to further a common good but not to increase profits as beyond those ethical norms which is why companies should refrain from investing in them. Activities that are designed to improve competitiveness and simultaneously contribute to society/ improve firm’s environmental performance are, in his opinion, not more responsible than any other business activity and hence should not be labeled differently. Firms’ social responsibility is to increase its profits (Friedman, 1970).

While one might argue that a firm has responsibilities beyond shareholder maximization, this definition is anything but helpful in answering the research question since Friedman (1970) implies that any business activity that contributes to profitability is socially responsible. The

distinction between CSR activity and usual business activity, however, is fundamental for my analysis. Another popular definition is provided by Carroll (1979):

“The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time” (Carroll, 1979)

Carroll disagrees clearly with Friedman (1970) and argues that CSR goes beyond economic, legal and basic ethical considerations. The ethical dimension of Carroll’s (1979) view adds the consideration of stakeholder’s concerns and needs to the responsibility of business. The company ought to act fairly, to do what is “right” and not harm. The discretionary expectations go even beyond that and acknowledge that a business may contribute to society to an extent that surpasses societies and stakeholder’s moral expectations and does not contribute to profits. According to Carroll (1979), managers need to take into consideration all four dimensions: economic, legal, ethical and discretionary responsibilities. A weakness of his concept is that it does not allow to clearly distinguish between socially responsible and socially irresponsible behavior, which he acknowledges himself. There are tensions that often make it impossible to address all four dimensions to a satisfying degree.

Therefore, fully responsible behavior in line with his reasoning is relatively rare and difficult to identify. Davis (1973) provides the first popular definition which makes a clear distinction between usual business activity and CSR:

“...it (CSR) refers to the firm's consideration of, and response to, issues beyond the narrow economic, technical, and legal requirements of the firm. It is a firm's acceptance of a social obligation beyond the requirements of the law” (Davis, 1973)

As such, CSR begins where the narrow self-interest und legal obligation of firms ends. Only if the activity addresses social/environmental issues in a way that is not required by law or profit-maximization, an activity may be regarded as CSR. This definition is useful as it represents a distinction between CSR and usual business activity. However, it does not clearly state whether activities that are crucial for a company’s economic success, but simultaneously improve its social/environmental performance may be regarded as CSR activity as well. Davis’ focus is rather on the normative core of CSR (What is firms’ social responsibility?) than on the positive definition required for this master’s thesis (Which activity represents CSR activity?). McWilliams’ and Siegel’s (2001) definition, in contrast, includes profit-maximizing activities and is a workable positive definition. They define CSR activities as:

“actions that appear to further some social good, beyond the interests of the firm and that which is required by law.” (McWilliams and Siegel, 2001)

CSR activities are, according to Mc Williams and Siegel, all activities designed in a way that benefit stakeholders (“*further some common good*”). At the same time, they may or may not contribute to companies’ bottom line. For the master’s thesis at hand, using this definition makes sense for two reasons. First, it makes identifying CSR activities - all activities that benefit stakeholders - relatively easy. Second, this definition is in line with business activity classified as CSR by my main sources Lins et al. (2017) and Bansal et al. (2015) and represents the current understanding of the topic CSR. The business world regularly mentions issues covered by this definition like climate change, gender equality and biodiversity as fields their businesses want to be active in (see for example Polman, 2017). Clearly, those activities are usually not core activities but improve stakeholder welfare.

[2.2 The link between CSR and performance: theory](#)

Many scholars have theorized on the relationship between investments in CSR and firm profitability, arguing for either a positive (e.g. Fassin 1995; Harrison et al., 2010; Jones, 1995; Tang et al., 2012), neutral (e.g. McWilliams and Siegel, 2001) or negative relationship (e.g. Friedman, 1970). In the following sections, I focus on two theories, the instrumental stakeholder theory (Jones, 1995) which explains why CSR activities may result in competitive advantage and the theory of the firm (McWilliams and Siegel, 2001) which predicts a neutral relationship between CSR and profitability. Both theories are grounded on stakeholder theory (Freeman, 1984). In addition, I complement these theories with contributions from other authors who argue for a competitive advantage resulting from investments in stakeholders and/or CSR.

[2.2.1 Stakeholder Management and Theory of the Firm](#)

Before I elaborate on the specifics of McWilliams and Siegel theory of the firm (2001), it is important to explain the stakeholder theory established by Freeman (1984). Freeman argued that the firm ought to respond to the needs of multiple stakeholders, “any group or individual who can affect or is affected by the achievement of the organization’s objectives” (Freeman, 1984 p. 46). Furthermore, he suggests that managers must formulate and implement processes which satisfy not only shareholders but all and only those groups who have a stake in the business. This view was new insofar that prior to Freeman’s (1984) book, strategic literature suggested to respond only to demands of shareholders and of stakeholders with legitimate claims, who exhibit friendly behavior. The main focus has been on creating value for shareholders. As a consequence, CSR with its stakeholder-orientation has often been regarded as manifestation of an agency problem and conflict between shareholders and top management (e.g. Friedman, 1970).

McWilliams and Siegel (2001) apply stakeholder theory to explain firms' level of CSR. They conclude that there is a profit maximizing level of CSR for each firm that depends on stakeholder demands, firm- and industry characteristics. Assuming that the market is in equilibrium and that no entry barriers exist, they hypothesize that the level of CSR is a function of a firm's size, level of diversification, research and development intensity, advertising, government sales, consumer income, labor market conditions, and stage in the industry life cycle. They argue that a publicly held firm needs to respond to various stakeholder demands in order to maximize profits. Some of those demands are CSR related, for example customer demand for jewelry from non-conflict regions. The firm, in turn, invests in CSR up to the point when the cost of providing more CSR equals the benefit from the provision. In addition, McWilliams and Siegel regard firm characteristics as important determinants of the level of CSR supplied by the companies. They associate the size of companies with economies and scale and scope in the provision of CSR which results in larger and diversified firms delivering more CSR. Furthermore, industry characteristics play an important role, since CSR may, for instance, be used as a mean to differentiate the company's products from competitors' offering.

As the provision of CSR satisfies stakeholder demands, McWilliams and Siegel (2001) argue that CSR companies enjoy higher revenues. However, without the presence of entry barriers, companies will not be able to generate abnormal profits from CSR since competitors can instantly match their offering and the benefit from CSR will always equal its cost. Assuming that no entry barriers exist, McWilliams and Siegel predict a neutral relationship between CSR and profitability.

[2.2.2 Instrumental Stakeholder Theory](#)

While McWilliams and Siegel's reasoning makes intuitively sense given their assumptions, the assumptions significantly lower the validity of their analysis. In the constantly changing real world, markets are not in a perfect equilibrium as assumed by McWilliams and Siegel, but rather exhibit a tendency towards equilibrium (Jacobson, 1992; Hatwick, 1979). Furthermore, barriers to imitation or substitution exist for probably all asset classes, even for financial resources which for long have been regarded as having little to no potential for being a source of competitive advantage (e.g. Campello et al., 2010; Fresard, 2010). The assumptions that there are no barriers to imitation or substitution for CSR, hence, needs to be questioned. McWilliam's and Siegel's (2001) theory certainly is useful and may well explain a significant part of the variance of CSR levels among firms, but their conclusion on the relationship between CSR and profitability must be viewed with caution. The instrumental stakeholder theory by Jones (1995) does not make those assumptions and reaches a different conclusion.

Jones (1995) argues that firms not only should respond to stakeholder demands but may also gain competitive advantage from doing so. By investing in stakeholders, they may initiate and maintain stakeholder relationships based on mutual trust. To describe the nature of relationships, Jones (1995) uses the metaphor of contracts as introduced by Eisenhardt (1989). Eisenhardt (1989) assumes that the top management contracts with stakeholders since top managers “*a) contract with all other stakeholders either directly or indirectly through their agents and b) have strategic position*” (Herman 1981). The contract may be very specific and formal like for example the relationship with bond holders or relatively vague and informal like the relationship with the community the company operates in. The latter kind of contract is of intangible nature and not enforceable through law because no document to that contract exists.

In the moment a contract is not fully specified, it opens room for opportunism which may result in additional costs when one party successfully exploits the other party or when one party spends resources to reduce opportunism. Since costs are involved, companies who contract more efficiently, enjoy reduced costs from opportunism and outperform companies that contract less efficiently, which is why Jones (1995) regards the ability to contract efficiently as source of competitive advantage.

He also argues that companies may contract more efficiently if they 1) are known to be trustworthy and 2) are able to identify trustworthy counterparts. Trust refers to “the mutual confidence that no party to an exchange will exploit another’s vulnerabilities” (Barney and Hansen, 1994). Mutual confidence leads to the belief that the contract will be honored and that trusting behavior will not be met with opportunism. If the believe is strong enough, trustworthiness eliminates the need to constantly evaluate the counterparties hidden motives as honoring the contract becomes a norm in the relationship and trumps narrow self-interest. Jones (1995) argues that a company’s trustworthiness, assuming that it is able to identify trustworthy counterparts, may reduce or eliminate agency problems, transaction costs and team production problems.

According to Jones, trustworthiness may be observable through two mechanisms: directly from interactions and indirectly from the reputation for being trustworthy. Some policies and decisions, which may be CSR activities, are easily observable for stakeholders who are affected. For example, the decision to lower work safety standards shows a fragile commitment towards affected employees, which renders the relation to this stakeholder group. Other actions may not be directly observable, but Jones argues that the incentive and reward systems in companies, be they formal or informal, reflect top managements moral and that their ethical behavior will be

adopted at lower levels. Ruiz et al. (2011) supports this view and finds evidence for a “trickle-down-effect” of top management’s ethics.

As stakeholders interact frequently with either the top management or their agents, for example employees, and know about the firm reputation, Jones (1995) concludes that they will be able to evaluate firms’ trustworthiness to a satisfying degree. Very trustworthy companies, he added, are preferred partners in situations that open room for opportunism. By partnering with trustworthy counterparts on the basis of mutual trust and cooperation instead of costly mechanisms to combat opportunism, those firms partner more efficiently and thus less costly, which represents a source of competitive advantage.

2.2.3 Barriers to imitation of CSR initiatives

A weakness of Jones (1995) theory on instrumental stakeholder management is that he does not regard trustworthiness as a source of competitive advantage but does not apply Barney’s resource-based view (1991) thoroughly. According to Barney, a resource is a source of competitive advantage if the resource is valuable, rare among competitors, imperfectly and/or costly to substitute or imitate, and if there are routines in place to extract the value. Regarding barriers to imitation or substitution, Jones (1995) only claims that firms’ morality cannot be faked and that consistent trustworthy behavior is required. Implicitly, this means that the trustworthiness is path-dependent – That the firms’ past behavior limits its set of options to choose from. The reputation for being trustworthy must be earned through consistent behavior over time and may be severely harmed by opportunistic behavior. It takes time and consistent behavior before potential partners expect not to be expropriated.

In contrast to Jones (1995), Harrison et al. (2010) explicitly explain which barriers to imitation may exist. They apply the resource-based view to investments in stakeholder relationships and conclude that the relationships resulting from these investments may be sources of competitive advantage as two barriers to imitation exist: causal ambiguity and path-dependence. I elaborate on the barriers to imitation after laying out the advantages Harrison et al. (2010) expect firms to enjoy from allocating more resources and decision-making power to stakeholders than would be required to ensure their “willful participation”.

Central to Harrison et al. (2010) reasoning is that the generous behavior, and the belief that the firm will consistently act towards stakeholders, triggers reciprocity, the norm to reward friendly behavior and to punish unfriendly behavior. They argue that, once a relationship based on trust and shared norms like reciprocity is established, stakeholders reveal sensitive or private information to the company or to other stakeholders in a trusting stakeholder network.

The firm is at the center of the reciprocal stakeholder network and allocates value within the network. According to Harrison et al. (2010), being at the center of the reciprocal network may be a source of competitive advantage due to the barriers to imitation and substitution path dependence and causal ambiguity. Path dependence means that the set of options available to a firm available is limited due to decisions made or events experienced in the past. Only if it has acted sufficiently trustworthy towards them in the past, stakeholders will believe that the firm is not going to exploit them and the firm may benefit from allocating resources to them beyond the level necessary to ensure their willful participation. Furthermore, Harrison et al. (2010) agree with Jones (1995) that consistent behavior factors into firm's reputation for acting trustworthy/opportunistically. Reputation is hence an intimately path dependent asset (Fombrun, 2005; Rindova et al, 2005). The path dependency is also important for reciprocity. Larson (1992) found in an experiment that the first, trusting and non-exploitative move from player A dictated the following move from player B. Fehr (2000) investigated the path dependency further and observed that the first move did not only dictate the next move but *all* following moves. Moreover, Harrison et al. (2010) argue that it is difficult to identify which relationship in the reciprocal stakeholder network has led to a particular benefit (causal ambiguity). This claim is somewhat controversial since CSR activities are often highly transparent. Companies tend to communicate them extensively via CSR reports and other means, hoping to boost their image. This reduces causal ambiguity considerably.

To conclude, Harrison et al. (2010) argue that the benefits from stakeholder relationships depend on the reputation for being trustworthy/past trusting behavior (path dependency) and a complex interplay of different stakeholders, whose input is difficult to determine for outsiders (causal ambiguity). Both barriers to imitation and substitution make CSR initiatives potential sources of competitive advantage according to the resource-based view (Barney, 1991). This refutes the argument of Friedman (1970) as the firm gets resources in return from the investment in stakeholders which may outweigh the resources invested. Harrison et al. (2010) add that prerequisites for reaping positive profits from stakeholder relationships are: a) firms' do not overallocate value to stakeholders, b) can approximately measure the contributions from stakeholders to adjust their allocation, c) are able to utilize the information from stakeholders and d) adopt a long-term stakeholder focus as some benefits accrue only over a longer time-frame.

Another contribution on potential barriers to substitution and imitation of stakeholder relationships/CSR initiatives comes from Tang et al. (2012). They argue that path dependency, asset mass efficiencies, and time compression diseconomies make CSR initiatives potential

sources of competitive advantage. Like Harrison et al. (2010), they expect that a company's past accumulation of resources constrains the set of options to choose from. For an initiative to be successful, the company needs to already possess certain resources (path dependence). In addition, Tang et al. (2012) suppose that the design and implementation of CSR initiatives requires a certain time-frame to enjoy all benefits and to avoid costs (time compression diseconomies). Cutting the process artificially short would result in higher cost and/or the acquisition of less knowledge/resources. Moving along the learning curve too fast would, hence, be suboptimal and reduce profits.

Asset mass efficiencies relate to the phenomenon that adding a unit to an existing resource stock often results in higher benefits or lower cost than the previous unit. Regarding CSR, successful past CSR initiatives may improve the confidence that future initiatives will be successful and, in turn, reduce internal resistance making the implementation smoother. Based on the three potential barriers to imitation and/or substitution, Tang et al. (2012) suggest that firms engage in CSR in a consistent, related manner and pay attention to the path and pace of their engagement. Only if they act consistently, Tang et al. expect firms to reap benefits from, for example, being trustworthy.

To sum this section up, I briefly summarize the theories on CSR and performance during normal times. All three theories suggesting a positive relationship between CSR and profitability (Harrison et al., 2010; Jones, 1995; Tang et al., 2012) agree on one aspect: they argue that CSR stakeholder management pays off by promoting stakeholder relationships based on trust, which are shielded by the barrier to imitation and substitution path dependence. According to Jones (1995), mutual trust in relationships reduces costs arising from opportunism. Harrison et al. (2010) suggest that stakeholders whose interaction with the company is based on mutual trust and reciprocity may reveal private and sensitive information, which they would not reveal if they expect to be met with opportunism. While Harrison et al. (2010) and Jones (1995) theorize on the overall relationship between CSR/stakeholder management and profitability, Tang et al. (2012) focus on potential barriers to substitution and imitation. They argue that, in addition to path dependence, asset mass efficiencies and time compression diseconomies might be those barriers. Harrison et al. add that causal ambiguity might be an additional barrier to entry. Assuming that no barriers to entry exist and that the market is in equilibrium, McWilliams and Siegel (2001) see no potential for CSR to result in superior performance. They expect firms' level of CSR to be a function of industry structure, firm characteristics, and stakeholder demands.

2.3 CSR and performance: empirical findings

I do not want to base my hypotheses solely on theory and, therefore, present empirical findings 1) on the overall relationship between CSR and firm performance in this section, 2) on the outcomes of CSR initiatives (in section 2.4 and 2.7) and describe the concepts of fairness and reciprocity, two mechanisms that I expect CSR to trigger and to pay off during times of low trust (in section 2.5 and 2.6). The theory was presented first in order to more easily judge which of the empirical results are most relevant from the viewpoint of the theory.

CSR and its overall impact on performance is a hotly debated topic in academics. Even though the vast majority of empirical studies (around 90% according to Friede et al. (2015)) find a non-negative relationship, it is not possible to determine with certainty what the overall relationship between CSR and firm performance is. Results of quantitative analyses range from CSR as a luxury good with negative impact on performance (f.e. Nollet et al., 2015) over a neutral relationship (e.g. Aupperle et al., 1985; McWilliams and Siegel, 2000) to CSR as a source of profits (see f.e. Hillman And Keim, 2001; Peters and Mullen, 2009; Orlitzki et al., 2011; Flammer, 2012; and Flammer, 2015). Clearly, there is no common agreement on the overall relationship. Wang et al. (2008) and Barnett and Salomon (2012) probably demonstrate the inconsistency of empirical analysis best. Wang et al. (2008) find an inverted u-shaped relationship whereas Barnett and Salomon (2012) report a u-shaped relationship. The best explanation for the mixed results is the multitude of methodological approaches chosen by the researchers.

2.4 CSR and stakeholder relationships

The mixed results are not helpful in predicting the relationship between CSR activities and firm performance during crises of trust. To tackle this question, it is of utmost importance to explain the main channels through which CSR activities may have an impact on firm performance. When doing that, I am going to focus on stakeholder relationships, the concept of fairness, and reciprocity, beginning with stakeholder relationships.

No matter whether firms reap benefits from engaging in CSR in the form of profits, most scholars agree that CSR has a trust building effect and that it improves stakeholder-relationships that may or may not be grounded on shared norms like reciprocity (see for example Pelozo and Papania, 2008; Romani et al. (2013); Hansen (2015); Martínez and del Bosque (2013)). Successful CSR initiatives signal an understanding of stakeholder needs, that it is like stakeholders and that stakeholders will not be exploited (Bhattacharya et al., 2004). Furthermore, it signals that the firm is a reliable, fair and trustworthy entity (Farooq et al., 2014), which may establish or strengthen a stakeholder relationship. The word signal, however,

indicates that each initiative is subject to an evaluation by stakeholders which is to some degree subjective. This judgement hinges on various conditions which will be outlined below. The conditions can be stakeholder-specific, initiative-specific, relationship-specific, company-specific, and industry-specific.

Stakeholder-specific conditions: It is important that stakeholders are aware of CSR activities or the company's reputation for being a trustworthy, fair entity. If this is the case, the stakeholder-company identification plays an important role (Lii and Lee, 2012). Stakeholders, who identify with the company and feel that they and the company share certain values, are more likely to evaluate CSR activities positively, which strengthens the relationship, improves stakeholder-company-identification and increases trust. To complicate things further, the effectiveness of an initiative also depends on stakeholders' values and preferences. Vlachos and Bridoux (2016) found that other-orientation and self-orientation are important mediators. Self-oriented individuals value only initiatives that benefit them directly whereas other-oriented individuals reap benefits from activities that are directed at stakeholders that they care about.

Initiative-specific: The perceived fit of initiative and company matters because consumers often suspect companies to have inferior motives (Bhattacharya et al., 2004; Yoon et al., 2006). A high fit signals that companies genuinely care about their stakeholders, understand their needs and have the ability to develop efficient programs for them (Du et al., 2010). In line with this finding is that proactivism increases considerably the likelihood that a CSR campaign improves consumers attitudes towards a company (Becker-Olsen and Hill, 2005). A proactive action signals that the company understands not only stakeholders' needs but also future trends that may have an impact on those stakeholders. One more hint towards the importance of perceived motives is that the perceived genuineness matters (Bhattacharya et al., 2004; Canli). When, however, the motives are ambiguous, perceivers tend to evaluate the action negatively (Fein, 1994).

Company-specific: Depending on past, present and expected future activities, each company has acquired a reputation that influences stakeholders' evaluation of CSR initiatives. The company's reputation results from past interactions with stakeholders (Roberts and Dowling, 2002; Helm, 2007; Puncheva, 2008; Pelozo et al., 2012) and is the sum of all the views and beliefs held about the company in comparison to close competitors. If the company has consistently acted fair towards stakeholders, it is more likely that ambiguous activities are perceived as being fair as well (Fein, 1994). Past behavior is, in fact, the best predictor for future behavior (Conner and Armitage, 1998) and consistency makes the prediction more accurate.

Industry-specific: In order to infer the motives of a company and assess the expected benefit from CSR initiatives, stakeholders do not evaluate activities in a vacuum, but compare them with CSR activities from other players in the same industry. Often, and especially when the motive is ambiguous and/or when there is no clear point of reference like competitors' actions, stakeholders make use of heuristics (Peloza et al., 2012). In those instances, they may refer to a company's reputation, the trust they have in the company, and the reputation of the industry a company is active in. While reputation and the trust a stakeholder holds towards the company are arguably more important for the evaluation, the industry's reputation may be the tipping point for the overall evaluation. Stakeholders are especially suspicious towards certain industries like tobacco (Palazza and Richter, 2005) and therefore tend to expect inferior motives behind CSR initiatives.

Relationship-specific: Every single relationship has a starting point and a unique history that shapes the nature of the relationship. Every interaction between the firm and its stakeholders – and even among stakeholders in the firm network – has the potential to alter the relationship (Rowley, 1997). Trust has been shown to have a strong impact on the quality of company-stakeholder-relationships and acts as the probably most important mediator between CSR and stakeholder behavior (Hansen, 2011; Farooq et al., 2014; Bridoux, 2016; Orlitzki et al., 2003; Saeidi, 2015).

[2.5 CSR and Fairness](#)

In the previous section, I outlined which factors moderate the effect of CSR initiatives on stakeholder relationships. One additional factor is stakeholders' evaluation of fairness. Many scholars argue that the perception of fairness is very important for the evaluation of CSR activities (e.g. Bosse et al., 2008; Harrison et al., 2010; Hansen et al., 1997) and for triggering reciprocity (e.g. Fehr and Gächter, 2000; Hahn, 2015) and I regard the perception as especially important for the effectiveness of CSR activities during crises of trust.

The perception of fairness can be both objective and subjective and is usually evaluated against some kind of reference point (Kahneman et al., 1986; Fehr and Schmidt, 2000). In the case of CSR initiatives, the natural reference points are CSR initiatives from similar companies (Cots, 2011) and past interactions between the firm and its stakeholders. The judgement is relatively objective if the benefit derived from the initiative can be measured in monetary terms and gets more subjective the less tangible the benefit is. Furthermore, not only the outcome of an initiative matters for its evaluation but also the underlying intentions (Falk and Fischbacher, 2000) and procedures (Bosse et al., 2008; Harrison et al., 2010).

Generally, scholars distinguish between three different kinds of fairness: distributional-, intentional-, and procedural fairness (Bies and Moag, 1986). Distributional fairness relates to the fair allocation of benefits; if stakeholders perceive the (often material) value they receive from a CSR initiative as being fair, the initiative is distributionally fair. Intentional fairness relates to the motivation underlying an action. The motivation for putting in place a CSR initiative may be, for example, to garner favor from officials, to distract attention from corporate misbehavior, to co-create value with stakeholders, or to reduce negative externalities, all of which may be evaluated differently from stakeholders. If stakeholders perceive the underlying intention to be appropriate, an action is intentionally fair. Lastly, procedural fairness depends on whether stakeholders feel that the procedures behind the allocation are fair. A stakeholder could, for example, perceive a CSR activity for which the stakeholder has been involved in the design as procedurally fairer than a CSR activity that has been solely designed by the firm. It must be noted, however, that the overall evaluation of fairness depends on all three aspects of fairness and that a lack of fairness in one or two dimensions can be offset by fair aspects in other dimensions.

2.6 CSR and Reciprocity

As mentioned before, perceived fairness may trigger reciprocity - the norm to reward friendly behavior and to punish unfriendly behavior (Gergen, 1969). This broad definition entails that reciprocity occurs between two or more actors that may or may not have a relationship. Furthermore, it may be the norm underlying and stabilizing an established relationship like the firm-stakeholder-relationship.

Reciprocity has been observed in experiments (e.g. Dufwenberg et al., 2001; Fehr and Gächter 1998, 2000; Fehr and Schmidt 2000), in real life settings (Basu 1984; Jones, 2015), across cultures (Costa-Gomes and Zauner, 2001; Hayashi et al., 1999; Henrich et al., 2001) and even among other primates (De Waal, 1991). It can be weak or strong, direct or indirect, and positive or negative. A weak reciprocator only reciprocates if the cost of reciprocating does not exceed the benefit received from the initiator (Trivers, 1971), whereas a strong reciprocator reciprocates even at net cost (Gintis, 2000). Furthermore, reciprocity is direct if the reciprocator has been directly affected by the initiator of the exchange (Gouldner, 1960), whereas indirect reciprocity is performed by a third party towards the initiator (Alexander, 1984). Lastly, negative reciprocity relates to the punishment of unfriendly behavior and positive behavior to the reward of friendly behavior (Gouldner, 1960). Each of those forms of reciprocity and most combinations among them have been observed in experiments and in the real world. Strong negative behavior, however, is a subject open to debate as there is no clear evidence from

outside the laboratory (Berg, 1994, Guola, 2010). Hahn (2015) argues that consumers engaging in boycotts - or at least the initiators of the boycott - express strong negative reciprocity, yet their behavior may also be a form of socially expected behavior that improves their reputation within their peer group and ultimately benefits them.

Interestingly, reciprocal actions and responses do not need to occur at the same time nor do they need to amount to the same value. After one party received a benefit, they feel indebted and obliged to repay the debt at a later point in time. If they would not answer in kind, they would not only risk ending the relationship but also experience the feeling of guilt, both of which enforces a reciprocal answer (Li and Dant, 1997). Moreover, the value exchanged only needs to be fair according to the principles outlined in the previous section and not equal, since one or more of the actors might be less resource-rich or relatively more powerful which often results in a smaller contribution from his/her side (Goulder, 1960). Additionally, the nature of constraints perceived to exist, and the degree and urgency to which one of the parties needs support, influences the value of the benefit and the timing of the exchange. The longer reciprocity is observed, the greater the confidence of each party that their counterpart will try to maintain the reciprocal relationship in the future (Harrison et al., 2010).

Reciprocity is a widespread phenomenon, but not a behavioral norm that motivates every single individual. Fehr and Gächter (1998) found that 40-60% of the population is motivated by reciprocity, which corresponds to the 40-60% of other-oriented individuals in Bogaert's (2008) study. Other-oriented individuals do not only differ from self-oriented actors in that they are inclined to reward fair behavior towards third parties, but they are also more likely to withdraw their support if they suspect the other party to behave unfairly. Generally spoken, they show a behavior that is more consistent with reciprocity. However, expecting reciprocity from stakeholders can backfire: as Fehr and Gächter (2000) point out, companies should be aware that self-interested actors not motivated by reciprocity may act as free riders in stakeholder relationships that are not contractually agreed on. This reasoning is supported by Dentchev (2004), who found that opportunism is a significant threat to CSR activities. Furthermore, a sufficiently high share of selfish actors hinders a reciprocal exchange as reciprocative actors may stop reciprocating in presence of the high share of non-reciprocating individuals. In addition, viable substitutes threaten reciprocative relationships. If substitutes to the reciprocal exchange exist, reciprocity may be cancelled out (Fehr and Gächter, 2000). Despite the challenges in initiating and maintaining a reciprocal exchange, reciprocity is regarded as one of the most important benefits associated with CSR activities (Harrison et al., 2010; Sacconi, 2007)

2.7 Outcomes from CSR initiatives

The direct benefits from CSR activities, namely improved trustworthiness and improved stakeholder relationships which may be based on the norm of reciprocity, are hard to measure but lead to measurable outcomes. First, CSR is a strong determinant of firm reputation. With firm reputation, demand for the company's products increases as consumers have higher confidence in the products of the company and reward CSR activities in line with their values (Becker-Olsen and Hill, 2005). Second, a higher level of CSR is associated with higher confidence in financial information published by the company (Cheng et al., 2011; Lins et al., 2017). Furthermore, CSR mitigates problems associated with adverse selection, moral hazard and opportunism (Maxiano, 2012; Cheng et al., 2011). In the same vein, stakeholders and partners collaborate more closely with trustworthy companies, which may enable them to create relational rents that would otherwise not be created (Bosse et al., 2008). Employees, for example, lower their turnover intentions (Hansen et al., 1997), increase their effort and improve productivity (Korschun, 2003), and feel more attracted towards companies with higher levels of CSR activities (Greening and Turban, 2000).

2.8 CSR and performance during the Great Recession

An interesting time period for examining the outcomes from CSR initiatives - and analyzing the relationship between CSR and firm performance - is the Great Recession. The Great Recession in the U.S. officially lasted from December 2007 to June 2009 (National Bureau of Economic Research, 2010). Many firm characteristics have been found to have had an effect on firm performance during this period, one of which is firms' level of CSR activities before the crisis. Lins et al. (2017) examined the relationship between firms' overall level of CSR and financial performance in the period from August 2008 to March 2009, from the month before Lehman Brothers' bankruptcy until stocks showed first signs of recovery. The Lehman Brothers bankruptcy is likely to have - together with the subsequent bankruptcies of other institutions - caused the sudden decrease of trust found by Edelman (2009). In March 2009, stock markets started to recover and trust in business almost reached its pre-crisis level in late 2009 (Edelman, 2010).

Lins et al. (2017) found evidence indicating that firms with a high level of social capital, as measured by CSR activities prior to the crisis, outperformed their low-CSR counterparts significantly during the crisis of trust. As performance was related to CSR levels not only prior to the crises but also to CSR levels during the crises, this effect is not merely due to a reallocation of funds from ineffective CSR activities to other projects. Lins et al. (2017) also controlled for a large number of potentially confounding factors, which increases the validity

of their results. Furthermore, they found the same relationship between firm performance and CSR levels prior to a crisis of trust for the Enron/Worldcom crisis, 2001-2003. Lins et al. (2017) conclude that CSR becomes more valuable during unexpected periods of low trust.

To gain a more nuanced understanding, Lins et al (2017) also explored the underlying mechanisms of this outperformance during the Great Recession and conclude that there were three channels. Investors provided high-CSR companies with a higher level of debt (investor channel). In addition, the companies benefitted from higher sales per employee (employee channel), higher sales growth and higher gross margins (customer channel). They explain the benefits from employee- and customer-channel with reciprocity. According to Lins et al., stakeholders did “whatever it takes” to help high-CSR companies weather the crisis.

A recent study by Amiraslani et al. (2017) analyzed the effects from the investor channel on a deeper level. For the period of August 2008 to March 2009, they found that high-CSR companies were able to raise more debt on the primary market at lower at issue-bond spreads, better initial credit ratings and for longer maturities. This result was most pronounced for companies that were more likely to engage in asset substitution or to divert cash to shareholders, or put differently: who were more likely to act opportunistically. The latter finding indicates that high CSR companies were viewed as more trustworthy by investors, whereas Lins et al.’s (2017) results suggest that stakeholder – in particular consumers - of high-CSR companies reciprocated and supported those companies in the crisis of trust. Further evidence on the importance of the mediating variable “level of trust” is provided by Ducassy et al. (2015) who found no significant relationship between CSR and performance in France during the Great Recession, where no shock of trust occurred (Edelman, 2009).

Lins et al. (2017) provide clear evidence for a positive relationship between CSR and firm performance during the Great Recession. However, it is important to point out potential weaknesses of their study. First, they define the crisis period as beginning in August 2008 as “*August of 2008 preceded the September 2008 Lehman Brothers bankruptcy*” (Lins et al., 2017, p.10) without adding any additional arguments. Unlike Lins et al., Bansal et al. (2015) argue that the Lehman Brothers bankruptcy and the U.S. Federal Reserve’s bailout of AIG at midnight on September 16 have caused the shock of trust. On September 15th, 2008, “the day that Wall Street collapsed” (SPIEGEL ONLINE, 2009), the stock market plummeted indicating that the Lehman Brothers bankruptcy had implications that reached far beyond their immediate stakeholders. Defining August as beginning of the crisis like Lins et al. (2017) did, seems rather arbitrary. Another potential weakness is that they did not control for industry when analyzing

the relationship between CSR and measures of operational performance. It is unclear why they controlled for industry in their main regressions on the relationship between CSR and stock performance but not when analyzing the effects on operational performance.

Furthermore, and most importantly, the validity of both Lins et al.'s (2017) and Amiraslani et al.'s (2017) results is limited due to a flaw in their measurement of the independent variable CSR. They created a net score for CSR using CSR ratings from MSCI KLD stats. They divided the sum of CSR strengths and CSR concerns by its maximum number for each CSR category and then subtracted the quotient of concerns from the quotient of strengths yielding an overall score for CSR. This approach is flawed because CSR strengths and concerns in the MSCI KLD stats database lack convergent validity (Johnson-Cramer, 2004; Mattingly and Berman, 2006) and using them in conjunction for constructing a measure of CSR fails to provide a valid measure. Strengths and concerns are independent constructs making necessary an examination of the overall relationship between CSR and firm performance during the Great Recession using more valid proxies for CSR.

2.9 Tactical and Strategic CSR

Lins et al (2017) and Amiraslani et al (2017) use aggregate measures of CSR and do not differentiate between different kinds of CSR. From a strategic point of view, it would be valuable to differentiate between different kinds of CSR. One example would be the differentiation between tactical (TCSR) and strategic CSR (SCSR) as suggested by Bansal et al (2015).

As mentioned in the introduction, SCSR comprises activities with long-term stakeholder focus, large resource commitments and significant organizational adjustments (Bansal et al., 2015). An example of SCSR is the design and implementation of worker standards among suppliers that go beyond legal obligations like the Migrant Worker Standard from Patagonia (Patagonia, 2017). Not only have diverse stakeholders been involved in the design of the standard, but the implementation also necessitated a long-term cooperation with NGO's, the government of Bangladesh and other stakeholders. This is a very good example for the diverse links with and among stakeholders that SCSR creates. As a result, there are strong interdependencies between the organization and its surrounding social and natural systems (Bansal et al., 2015) which fosters the sharing of visions, values, information and material resources (Albert et al., 2015).

Tactical CSR comprises transactional activities with short-term stakeholder focus and relatively few organizational resources (Bansal et al., 2015). Philanthropy is the most widespread form of TCSR, be it monetary donations or donation of products. It is often tailored towards improving

stakeholder relations in the short-term and can be quickly executed and easily reversed. This allows for a great flexibility and fast responsiveness to changing stakeholder needs but may also be used to remedy negative business image (Chen et al, 2008).

Lii and Lee (2012) found evidence indicating that philanthropy improves company-customer attitude and brand attitude which, however, varied with the company's general CSR reputation. Pearce and Doh (2005) also put an emphasis on the potential to improve corporate reputation through transactional activities within little time. Furthermore, they made a distinction similar to Bansal et al. (2015) relating to two different approaches towards stakeholder management: a transactional approach which corresponds to TCSR, and a relational approach which is similar to SCSR. They agree with Bansal et al. (2015) in that SCSR/relational stakeholder management practices lead to more stable stakeholder relationships and constitute long-term commitments. They regard transactional relationships to be of rather limited use when it comes to initiating resource exchanges and agree with Hollender and Fenichell (2004), O'Reilly (2004), Porter (2002) and Pedersen and Lydersen (2006) who argue that CSR should be a strategic pillar of firms' activities rather than an "add-on".

[2.10 Other factors affecting performance during recessions](#)

In order to examine the relationship between SCSR, TCSR and firm performance, it is important to control for factors that may affect the dependent variable.

There is a large body of research on pre-recession characteristics that affect firm performance during recessions. High pre-recession operating profits make firms less vulnerable to recessions (e.g. Chen and Roberts, 2001; Baily et al., 1992; Bellone and Quéré, 2008; Carreira and Teixeira, 2011) which makes intuitively sense and is in line with Schumpeter's (1939, 1942) view of recession as a cleansing mechanism. Profits indicate the possession of competitive advantage which is likely to benefit a company during the recession as well. As a main characteristic of the recession was the constrained access to finance, firms with larger cash holdings performed better than their counterparts with less cash (Lins et al., 2015). A higher pre-recession debt ratio makes firms more vulnerable to the effects of recessions (Geroski and Gregg, 1993) as a higher level of debts limits firms' ability to manage financial distress. Furthermore, high pre-recession growth (Geroski and Gregg, 1996, 1997), firm size (Geroski and Gregg, 1996, 1997; Gertler and Gilchrist, 1994; Lang and Nakamura, 1995), share of durable goods, industry concentration, export intensity and level of vertical product differentiation are important determinants of performance in times of recessions (Knudsen, 2011). Firms experiencing a high growth are likely to invest heavily and to increase their

production capacity, which may have a disastrous impact on firm performance once demand collapses in times of recession. Firm size works in a different way; reacting to sudden changes in demand is more challenging for large companies as their structures and routines are less flexible than the structures of smaller firms and, as a result, they often perform worse. The share of durable goods is a determinant of performance since consumers tend to consume durable goods, which are often expensive, rather outside recessions when they have more disposable income.

3. Model and Hypotheses

3.1 The general link between CSR and firm performance

Unfortunately, no theory has yet been established to predict the relationship between CSR and firm performance during crises of trust. A theory on the relationship between CSR and firm performance during crises of trust must be based on more general theories on the relationship between CSR and firm performance. This makes necessary to first explain which relationship I expect between CSR and firm performance during normal times before applying those mechanism to crises of trust and, finally, differentiating between the effect of TCSR and SCSR.

In the following, I am going to first describe which general relationship I expect between firms' level of CSR (H1) and firm performance before explaining which effect a shock of trust has on the relationship (H2). Both of those relationships have already been examined empirically, so the main contribution of this thesis will be the analysis of the different effects of SCSR and TCSR, which leads to five additional hypotheses (H3-H7). For each of the three parts I have developed separate models which build on each other.

3.1.1 Theoretical background

To begin with the relationship between CSR and firm performance during normal times, I ground my reasoning on the theory of the firm and stakeholder theory. I acknowledge that firms' level of CSR is partially a response to industry structure and stakeholder demands as McWilliams and Siegel (2001) suppose. However, I disagree in that there is a single level of CSR and resources allocated to stakeholders that a firm may choose. I argue that the level of CSR is a strategic decision from firms that determines the level of cooperation and trust in the firm-stakeholder relationship. For different levels of cooperation firms need to invest different levels of CSR and there are likely some levels for which the benefit for the firm equals or exceeds the cost. I further assume that markets exhibit a tendency towards equilibrium which makes it possible that firms invest sub-optimally in CSR but do not get severely punished by

the market. Furthermore, I expect managers to have different beliefs about the future which, again, leads to different levels of CSR. Firms' level of CSR depends, hence, not only on industry structure and stakeholder demands but also reflects managers different beliefs about the future and the strategically desired level of trust and cooperation in the firm-stakeholder relationship. This allows for different levels of CSR of similar firms in the same industry which may or may not result in positive profits.

The assumption that the gains derived from CSR may exceed the cost of implementing them is in line with Harrison et al.'s (2010) reasoning who suppose that firms may gain competitive advantage from allocating more resources and decision-making power to stakeholders than would be necessary to ensure their willful participation. As a response to the initiatives, stakeholders allocate more resources to the firm than they would in absence of CSR activities. The resource exchange initiated is not entirely based on formal contracts, but also on mutual trust. The mutual trust in the stakeholder-firm relationship allows for more trusting behavior assuming that a firm is able to identify trustworthy stakeholders and that the stakeholders infer from firm's level of CSR its trustworthiness. I argue that the trusting behavior is observable for other stakeholders and accumulates in firms' reputation for being trustworthy. The trust may be either observable through stakeholders' behavior towards the company, the way they report about interactions with the company and may be reflected in CSR ratings.

While CSR initiatives certainly have benefits for companies, they usually entail costs as well. The net contribution of the initiatives depends on cost and benefits, but, in the long run, also on the substitutability/imitability of them. I argue that path dependency (Harrison et al., 2010, Tang et al., 2012) and time compression diseconomies (Tang et al., 2012) work as barriers to imitation and substitution.

For an initiative to be successful, the company needs to already possess certain resources (path dependency). In the case of CSR, this relates mainly to a certain reputation for being trustworthy which translates into a more positive evaluation of initiatives and, in turn, to a more favorable response from stakeholders. Furthermore, it may be the case that some relationships have to be installed in advance to successfully implement a given CSR initiative. In that case, there is a first-mover advantage for related CSR activities. In addition, Tang et al. (2012) suppose that the design and implementation of CSR initiatives requires a certain time-frame to enjoy all benefits and to avoid costs (time compression diseconomies). Cutting the process artificially short would result in higher cost and/or the acquisition of less knowledge/resources. Moving along the learning curve too fast would, hence, be suboptimal and reduce profits. However, as

both barriers path dependence and time compression diseconomies entail a time-dimension, the competitive advantage from CSR activities is only of temporary nature and will be eroded over time.

Other barriers to imitation mentioned in the literature review are asset mass efficiencies and causal ambiguity. While those barriers may actually reduce the substitutability and/or imitability of resources, their effect is most likely smaller than those of path dependence and time compression diseconomies. The transparency around CSR initiatives reduces causal ambiguity massively, which makes other authors doubt causal ambiguity of CSR initiatives (e.g. McWilliams et al., 2005; McWilliams and Siegel, 2001). Asset mass efficiencies, on the other hand, relate to the resources and capabilities a firm already possesses and the CSR activities it has pursued in the past. As such, it is a concept that I regard as only little different to path dependence. Due to the limited scope of the master's thesis, I do not mention it as additional barrier to imitation and substitution. For the sake of simplicity, I assume that causal ambiguity and asset mass efficiencies do not constitute barriers to imitation and substitution, but focus on path dependency and time compression diseconomies.

To conclude, I expect firms' level of CSR to be associated with stakeholder trust and to factor into the reputation for being trustworthy. As a response to CSR initiatives, stakeholders reciprocate and allocate resources to the company. Path dependence and time compression diseconomies work as barriers to imitation which make CSR initiatives temporary sources of competitive advantage. Given these mechanisms and assuming that firms on average do not overallocate value to stakeholders, that cost from opportunism do not outweigh the benefits from these initiatives, and that firms have routines in place to utilize the resources provided by stakeholders, firms will benefit from CSR. Hence, I expect that firms' level of CSR has a positive effect on firm performance outside crises of trust. However, assuming that the market correctly assesses the value of CSR initiatives I expect the outperformance to be limited on the operational level as the value of CSR initiatives should be reflected in the stock price.¹ The corresponding hypothesis that needs to be rejected to refuse this claim is:

H1: Firms' level of CSR prior to the crisis does not have a significant positive effect on stock performance outside crises of trust.

¹ Due to the limited scope of the thesis and reasons explained in chapter 6.3, I test empirically the effect of CSR on stock performance but not on operational performance outside crises of trust.

3.1.2 Empirical findings on the relationship between CSR and firm performance

As stated in chapter 2.3, I do not want to base my analysis solely on theoretical work but complement theories with empirical findings on the outcomes from CSR initiatives. Researchers have found several factors that moderate the effect of CSR initiatives on stakeholder relationships. I include those in model 1 on the general relationship between CSR and firm performance (figure 1). The moderating variables are stakeholders' "CSR awareness [of the stakeholder]", "industry [the company operates in]", "fit [between the company and the initiative]", "proactivism [of the initiative]", and "other/self-orientation [of the stakeholder]" (see chapter 2.4), and stakeholders' "evaluation of fairness [of the initiative]" (see chapter 2.5).

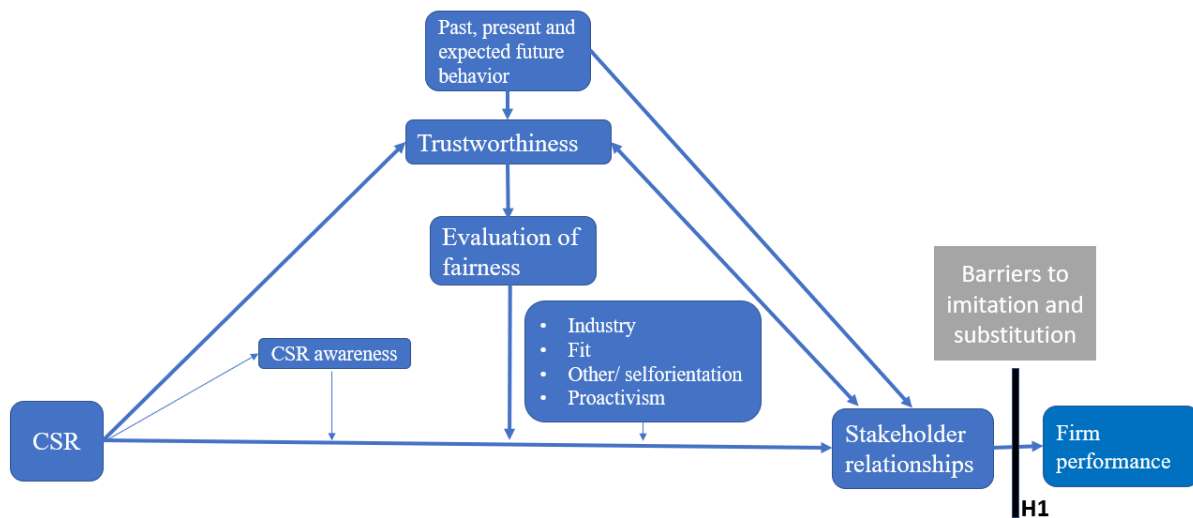


Figure 1: Model 1: Model on the general relationship between CSR and firm performance

In the model, "[firm's level of] CSR" is the independent variable through which firms have an impact on the mediating variables "[firm's] Trustworthiness" and "Stakeholder relationships" with the latter affecting the dependent variable "Firm performance". On the operational level, firms may reap positive profits from engaging in CSR as barriers to imitation and substitution exist (H1). [Firm's] trustworthiness relates both to the firm's general reputation for being trustworthy which varies only little among stakeholders, and to stakeholder trust which is relationship-specific.

Noteworthy, "[firms'] trustworthiness" is at the same time a mediating variable as it is affected by firms' CSR activities and affects stakeholder relationships, and a moderating variable as it moderates the effect of CSR activities on stakeholder relationships indirectly. Moreover, the relationship between [firms'] trustworthiness and stakeholder relationships is not one-directional. An important assumption for this thesis is that other stakeholders may infer from the interaction of other stakeholders with the firm the trust that those stakeholders hold against the firm; stakeholder trust accumulates into firms' reputation for being trustworthy, hence stakeholder relationships affect [firms'] trustworthiness.

3.2 CSR and firm performance during crises of trust

For my analysis, I need to modify model 1 removing factors that are less important for the relationship between CSR and firm performance during a crisis of trust. In model 2, the shock of trust affects firms' trustworthiness and is moderated by firms' level of CSR prior to the crisis. To show that stakeholder relationships do not only depend on firms' level of CSR prior to the crisis and the severity of the shock of trust, I keep the moderating variable "past, present and expected future behavior". Of the moderating variables I mentioned in the previous section, I include "[stakeholders'] evaluation of fairness" in my model, since I expect a potential reevaluation of CSR initiatives during crises of trust. I assume that all other moderating variables remain unchanged or are not significantly affected by a shock of trust, which makes them unimportant for my analysis. I leave out in my model "CSR awareness [of the stakeholder]", "industry [the company operates in]", "perceived fit [between the company and the initiative]", "perceived proactivism [of the initiative]", and "other/self-orientation [of the stakeholder]". There is little reason to believe that one of those factors is affected by a shock of trust. The resulting model is:

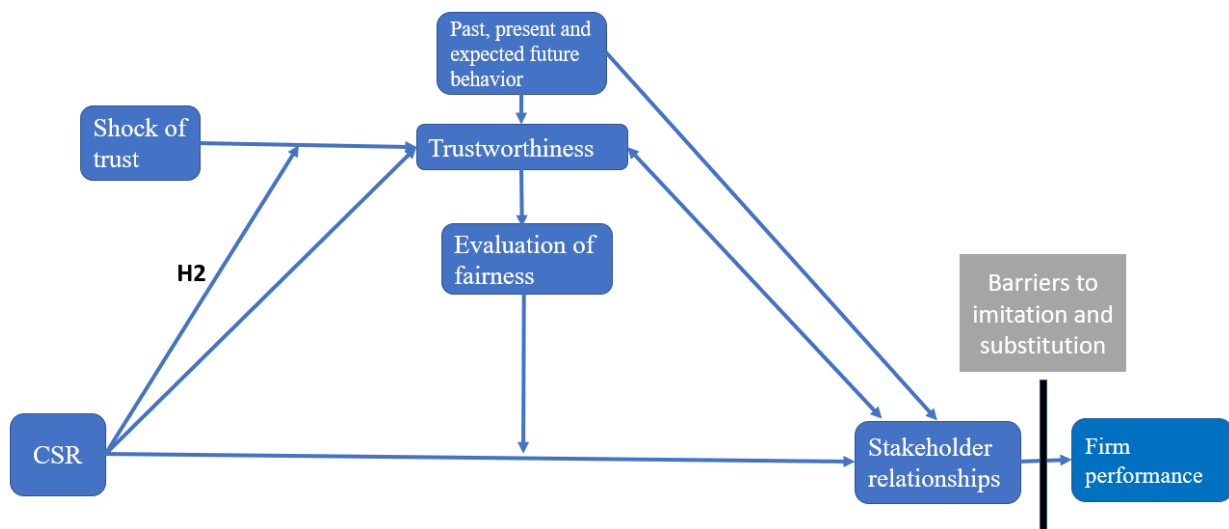


Figure 2: Model 2: Model the relationship between CSR and firm performance during crises of trust

I argue that CSR becomes more valuable during a crisis of trust for three reasons: Its potential to build up and maintain trust in the firm-stakeholder relationship, its reciprocity-promoting properties and the existence of barriers of imitation and substitution, which make a successful imitation or substitution during the crisis difficult. I elaborate on each factor in the following.

Trust building and maintaining properties: The shock of trust has a strong impact on the trust that stakeholders hold against firms and vice versa which, in turn, affects the relationship and the commitment of both entities. I argue that if, due to a shock of trust, the trust towards the company falls below a certain threshold, stakeholders in a given relationship reduce their

commitment or even terminate the relationship and switch to a more trustworthy competitor. In that case, usual business activities alone do not suffice to maintain the trust stakeholders hold against companies. The terms of usual business activity are acceptable for participating stakeholders without improving their welfare in a way that signals a strong commitment towards them, but may ensure their willful participation during normal times.

A higher level of CSR activities prior to the crisis, however, may still act as credible commitment towards stakeholders and mitigates the effect of a shock of trust. As explained in the previous section on the relationship between CSR and firm performance during normal times, CSR promotes trust in the firm-stakeholder relationship which is observable for other stakeholders and accumulates in firms' reputation for being trustworthy. Stakeholders may infer from the reputation that the company does not exploit its stakeholders - even in times of low trust - and that collaborating with the firm will be more beneficial than with companies with lower levels of CSR activities. If trust is sufficiently high, a firm maintains its trusting relationships with stakeholders during times of trust, which I expect to pay off in two ways: reduced cost of opportunism and benefits from their maintained commitment. As such, a company's level of CSR acts as a moderator variable that moderates the effect of a shock of trust has on stakeholder trust, firm's reputation for being trustworthy, and, in turn, stakeholder relationships and the benefits firm reap from these relationships.

Reciprocity: Of special interest are stakeholder relationships based on the norm of reciprocity. As explained in the literature review, CSR activities are likely to initiate reciprocal exchanges with stakeholders. If stakeholders perceive the benefit derived as fair and observe consistency, they may start reciprocating. After several trustful interactions, reciprocity may become a norm in the relationship. This entails that each actor is inclined to support the partner in times of crises, even though he/she might not immediately receive a benefit in return. The Great Recession constitutes such a crisis for companies. Demand for their products declined, they were more likely to be financially constrained and the general uncertainty in their competitive environment increased suddenly, all of which makes them relatively more reliant on support from stakeholders. As a response, reciprocating stakeholders support companies they perceive as worthy to support and with which they have already established a relationship based on the norm of reciprocity. In addition, some stakeholders might start supporting companies they have not supported before, since they deem them relatively worthier of support than before the crisis.

Barriers to imitation and substitution: The degree to which a firm benefits from higher trustworthiness, built up and maintained through CSR activities, depends on the time it takes

for competitors to imitate or substitute those initiatives. Firms face significant problems when imitating/substituting CSR initiatives after an unexpected shock of trust occurred. This can be explained with the suddenness of the shock: during normal times I expect changes in optimal levels of CSR to happen relatively slow. Thus, firms' have a sufficient amount of time to observe competitors' CSR activities and to imitate and substitute successful ones. The shock of trust, in contrast, represents a sudden change in optimal levels of CSR. Reacting promptly raising CSR levels considerably could be perceived as reactive by stakeholders, lowering its potential to be evaluated positively (Becker-Olsen and Hill, 2005). The perceived reactivity of CSR initiatives and the damaged reputation both factor into the barrier to imitation or substitution path dependence: reputation is inherently path dependent and the timing of a CSR initiative/ the decision not to engage in a certain CSR activity prior to the crisis limited their options during the Great Recession. On a further note, time compression diseconomies make a too quick implementation of CSR initiatives costly and less effective. CSR activities often take a long period of time from ideation to implementation and even longer until they yield results. Reacting to an unexpected crisis of trust by launching CSR initiatives is therefore likely to be limited to activities that can be quickly executed but are probably not optimal in building up trust.

All three above mentioned benefits, namely reciprocity, reduced opportunism, and maintained commitment from stakeholders, are results of the trust and relationship-building nature of CSR activities. I argue that, shielded by barriers to imitation and substitution, CSR becomes relatively more important when an unexpected shock of trust occurs. The hypothesis that needs to be rejected to support this claim is:

H2: Firms' level of CSR prior to the crisis does not become more valuable during crises of trust.

[3.3 SCSR, TCSR and firm performance during crises of trust](#)

H2 has already been examined by Lins et al. (2017). However, I pointed out that their measure for CSR was flawed and identified potential weaknesses of their study. More specifically, I want to check whether their results hold for the time period of low trust as defined by me and – in the case of operational performance – when controlling for industry.

Beside checking the robustness of Lins et al.'s results, this master's thesis aims to dig deeper by differentiating between strategic and tactical CSR. I expect an outperformance based on CSR initiatives to depend on three pillars: 1) their potential to build up and maintain trust, 2) their imitability/substitutability and 3) their potential to trigger reciprocity. The imitability relates to the degree to which the success of the initiatives is path dependent and how significant time

compression diseconomies are. Their potential to build up and maintain trust depends on how stakeholders evaluate the initiative. The two main properties for this evaluation I expect are perceived fairness and perceived commitment towards stakeholders.

The distinction between SCSR and TCSR necessitates modifications to model 2. In the following model which differentiates between SCSR and TCSR, the different effect of the two kinds of CSR activities can be seen:

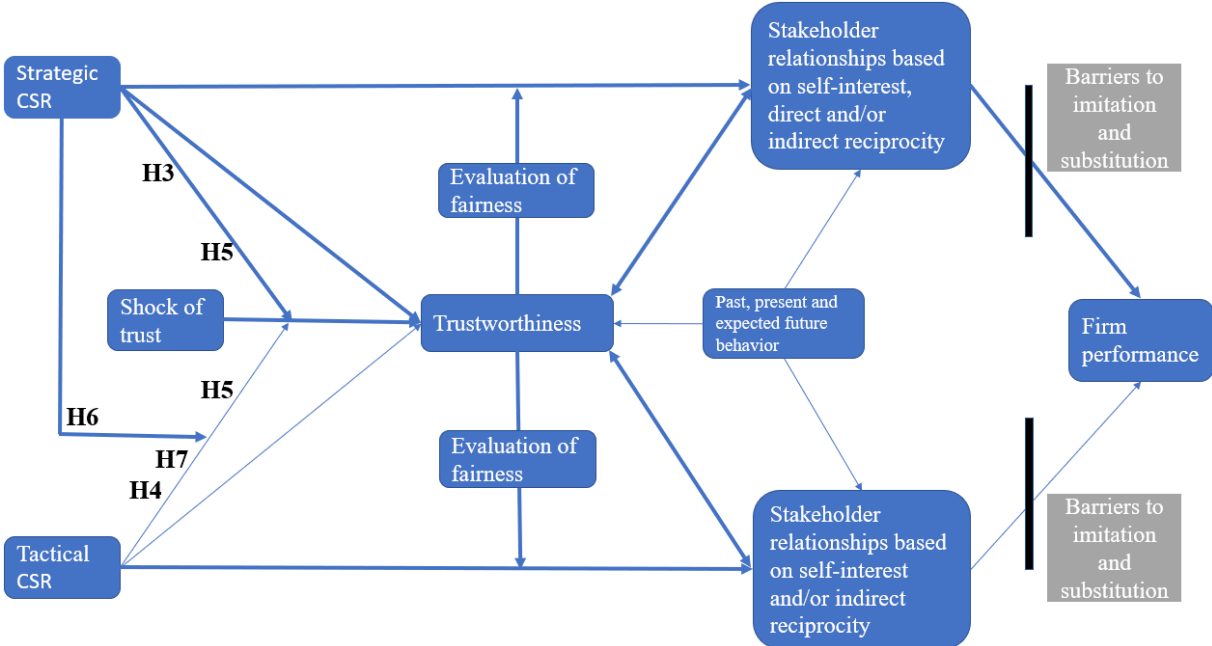


Figure 3: Model 3: Model on the relationship between SCSR/TCSR and firm performance during crisis of trust

A main difference between TCSR and SCSR is stakeholders’ ability to reciprocate. SCSR creates diverse linkages with and among stakeholders through which stakeholders may reciprocate directly, whereas TCSR activities are one-directional in nature. Stakeholders can only reciprocate indirectly or initiate a resource exchange based on self-interest. Furthermore, I expect SCSR to moderate the effect that firm’s level of TCSR has (H6) and SCSR to have a more significant impact on firm performance as indicated by the thickness of the arrows (H5). H3 and H4 relate to the expected relationship between SCSR (H3), TCSR (H4) and firm performance, whereas H7 predicts a marginally increasing effect of TCSR on firm performance.

3.3.1 Strategic CSR and firm performance during crises of trust

Before comparing the effects of SCSR and TCSR, I lay out which relationship I expect between each kind of CSR and firm performance during a crisis of trust. I expect SCSR, activities with long-term stakeholder focus, large resource commitments and significant organizational adjustments (Bansal et al., 2015), to have a positive impact on performance during a crisis of trust. I do that for the following reasons, all of which relate to the three above mentioned pillars

a) barriers to imitation and substitution, b) fairness promoting and trust building/maintaining properties, and c) their potential to trigger reciprocity.

Barriers to imitation: SCSR often involves firm's idiosyncratic resources and necessitates significant, complex organizational changes (Bansal et al., 2015). The notion of firm's idiosyncratic resources alone indicates that the activities are difficult for competitors to imitate. As long as competitors do not possess similar resources, they are not able to imitate the SCSR activity or to develop a substitute (path dependency). Furthermore, even if they are in possession of those resources, they need to be organized in complex ways which necessitates a thorough understanding of the mechanisms through which the activities work. A relatively large number of members from the organization and stakeholders need to align their efforts and collaborate efficiently. The high level of cooperation and complexity necessary for the design and implementation of SCSR activities makes it difficult and time-consuming for competitors to imitate or substitute the activity, especially in times of an exogenous shock like the shock of trust in 2008. Many SCSR initiatives would simply take too much time to design and implement as a response to the shock of trust. They would likely take longer than the shock of trust before their effect becomes measurable. If companies try to implement the SCSR activities quicker, they would risk to forego some benefits that can only be enjoyed from a slower implementation (time compression diseconomies).

The complex organizational changes, however, may also be a source of competitive disadvantage during an unexpected crisis. Stakeholder preferences are likely to change as a response to the lower trust. Firms SCSR activities are fixed in the short term and require substantial time and effort to adjust to the new stakeholder demands. Nevertheless, I do not expect the relative inflexibility to impact performance sufficiently negative to make up for the barriers to imitation and the trust-building nature of SCSR initiatives. If SCSR becomes unable to meet stakeholder's immediate needs, it may still have established routines through which firms communicate to stakeholders credibly why they cannot meet their demands and how they plan to meet them in future. This may ease the stakeholders' anger and maintain trust in the relationship.

Barriers to imitation (2): Furthermore, SCSR initiatives represent credible commitments towards stakeholders. They often necessitate complex changes in organizational routines. Once embedded in organizational routines, they may become core activities that the company is unlikely to withdraw even during times of crisis when resources become especially scarce. Withdrawing them would not only lead to costs for reorganization but also harm firm's

reputation for being trustworthy. Moreover, the organizational changes required to implement SCSR initiatives constitute barriers to exit as they are costly to resolve. Stopping SCSR initiatives often necessitates organizational changes that not only cause cost in themselves but also distract managerial attention. In addition, the cost of implementation represents sunk costs which the company would have to pay if it were to reinstall a SCSR initiative that had been reversed. If the company expects SCSR activities to cause losses in the short term (for example due to temporarily changed stakeholder preferences) but to contribute to profits in the long term, the initiative would be kept. Both the barrier to exit and the sunk-cost-argument make stakeholders believe that the company will maintain the initiative and keep providing benefits to them over an extended time.

Fairness and Trust: SCSR has the potential to build and maintain trust for two reasons. First, SCSR has the potential to trigger all three dimensions of fairness: distributional, intentional and procedural fairness. Distributional fairness is triggered as resources and decision-making power is allocated to stakeholders. Often, SCSR initiatives are designed in collaboration with stakeholders and necessitate a continuous exchange with them (see, for example Patagonia, 2017). The involvement of stakeholders signals that their opinion is valued, that their voice is heard and that their opinion is important to the company. This is likely to be interpreted as procedurally fair. Moreover, the exchange of opinions and views shows that the company is genuinely interested in the stakeholders and in understanding and addressing their needs. Stakeholders may interpret this as intentionally fair. Since both intentional and procedural fairness are important for the establishment of a reciprocating relationship (Brockner, 2006), SCSR is likely to trigger reciprocal behavior from stakeholders and, hence, to contribute to firm performance in periods of low trust.

Reciprocity: Second, SCSR creates diverse linkages with and among stakeholders (Bansal et al., 2015) through which stakeholders may reciprocate directly. The structural organizational changes, that SCSR necessitates, facilitate a trustful exchange of resources and information, some of which would not be exchanged without those linkages. If Nestlé, for example, were to stop providing farmers with coffee plantlets and shade-providing trees through their AAA Sustainable Quality Program (Nestlé, 2018), Nestlé would risk losing reliable sources of high-quality coffee crucial for the success of their Nespresso-coffee. In addition, they would not get valuable feedback from farmers about the strengths and weaknesses of the AAA Sustainable Quality Program and, as a result, would not be able to improve the program. The farmers, who benefit from the program through yielding coffee beans of superior quality and quantity and

from being trained in sustainable agricultural practices, would likely suffer from the discontinuation as well.

To conclude, SCSR initiatives promote stakeholder trust and the creation of stakeholder relationships based on reciprocity. By maintaining trust, SCSR moderates the effect of a shock of trust on firm performance. In addition, SCSR initiatives are difficult to imitate or substitute within the short time frame of the Great Recession. I, therefore, expect strategic CSR to have a more positive impact on firm performance during the period of low trust. The hypothesis that needs to be rejected to support this claim is:

H3: Firms' level of strategic CSR prior to a crisis of trust does not have a more positive effect on firm performance during the period of low trust than outside the crisis of low trust.

3.3.2 Tactical CSR and firm performance during crises of trust

Tactical CSR, transactional activities with short-term stakeholder focus and relatively few organizational resources (Bansal et al., 2015), is not only fundamentally different from SCSR but also has different mechanism through which I expect it to have an impact on performance during crises of trust. I regard TCSR to be trust building only to a limited degree and barriers to imitation to be relatively low. However, this only applies to low levels of TCSR as I explain in the section for H6 after laying out mechanisms through which TCSR may have a positive impact on firm performance during crises of trust.

Fairness: Purely transactional activities are often associated with greenwashing during normal times and I expect stakeholders to be especially suspicious towards such activities during a crisis of trust, since TCSR has relatively little potential to be evaluated as intentionally fair. In addition, it is one-directional and stakeholders have little decision-making power, which makes a positive evaluation of procedural fairness less likely. Regarding fairness norms, distributional fairness is the main component influencing the evaluation of fairness.

Trust building and maintaining properties: Furthermore, TCSR activities only have a short-term stakeholder focus and are easy to withdraw which makes them fragile commitments towards stakeholders. Stakeholders may expect that the firm will stop benefitting them opportunistically once it becomes more profitable to cater other stakeholders/to invest in other assets. Nevertheless, its stakeholder focus sets TCSR apart from usual business activities and may, hence, keep trust in the stakeholder-firm relationship to a higher degree than usual business activity.

Reciprocity: The lack of intentional and procedural fairness, both of which are important for triggering reciprocity, limits its potential to promote reciprocity. The stakeholder relationships created and maintained by TCSR may be based on indirect reciprocity as stakeholders other than the beneficiaries may reward the company for its effort. Direct reciprocity is, due to the one-directionality of TCSR, impossible. Moreover, TCSR may enhance firm reputation which may, for several reasons, appeal to selfish stakeholders and build up stakeholder relationships based on self-interest. A good example for support triggered by TCSR from self-interested actors is the purchase of goods from companies who have a reputation earned through TCSR activities, if the reputation is well known to and honored by the peers of the buyer. The buyer does not buy the good because he/she values the CSR aspect of the good but rather the opinion his/her peers have on the firm's reputation.

Barriers to imitation: Just like the evaluation of SCSR, the evaluation of TCSR is likely to be influenced by firms' reputation for being trustworthy and, hence, path dependent to some degree. Raising the level of TCSR considerably as response to the shock of trust is likely to cause suspicion, which is why I regard firms' level of TCSR to be upwardly fixed to some degree. Time compression diseconomies, on the other hand, are of little importance as TCSR does not necessitate complex organizational changes and are easy to understand and implement.

Other characteristics: The main advantage of TCSR during unexpected crises is that it offers firms a great deal of flexibility regarding their CSR activities. First, as it involves only few organizational resources, TCSR can be quickly executed and may as quickly be withdrawn. An unexpected shock of trust coupled with an economic crisis leads to a sudden change in stakeholder preferences, which makes this flexibility valuable. Companies can shift their resources for TCSR activities quickly towards its most valuable use and thus secure temporal competitive advantages. Second, transactional activities are highly visible and easy to communicate which makes it possible to reap benefits from these activities within relatively short time. Once a transaction has been made or when TCSR is about to be executed, the company and the beneficiary may announce it via various communication channels and, hence, reach a large audience. As a transactional activity is also easy to understand, stakeholders hearing about the transaction will evaluate the initiative within short time and adjust their behavior.

To conclude, TCSR has valuable trust building properties that factor into firms' reputation for being trustworthy. Furthermore, the flexibility of TCSR allows to secure temporal competitive

advantages. Hence, I expect tactical CSR to have a more positive impact on firm performance during a crisis of trust. The hypothesis that needs to be rejected to support this claim is:

H4: Firms' level of tactical CSR does not have a more positive effect on firm performance during the period of low trust than outside the crisis of low trust.

3.4 Comparing the effects of Strategic and Tactical CSR

While both types of CSR may have a positive impact on performance, I expect their respective effect to differ significantly in strength. I explain the different impact with their trust building and maintaining properties, their potential to trigger perceptions of fairness and reciprocity and the barriers to imitation and substitution.

Trust building and maintaining properties: First, the long-term stakeholder focus and significant organizational adjustments make SCSR activities more credible and genuine commitments, which contributes more to the creation of trust than TCSR activities. TCSR activities can be quickly and easily withdrawn, which makes them relatively fragile commitments and no core activities. SCSR, in contrast, is usually a long-term move that may become a core activity. Both the fragileness of TCSR and the long-termism of SCSR are characteristics observable for stakeholders. Stakeholders also observe that SCSR activities involve more company-specific resources and are costly to reverse. This indicates that the company puts significant effort into the initiative and that it genuinely cares about its stakeholders. TCSR, on the other, hand is often interpreted as less genuine and sometimes as greenwashing (Yoon et al., 2006).

Fairness and Reciprocity: Stakeholders may reevaluate aspects of fairness when their general attitude towards business changes like, for example, during the Great Recession. I argue that the reevaluation of intentional justice is more likely to turn negative for TCSR activities as they signal genuineness less credibly than SCSR. In addition, SCSR initiatives necessitate a constant communication and cooperation with stakeholders. These processes are more likely to have a positive effect on the evaluation of procedural and intentional fairness than the transactional, one-directional nature of TCSR.

Both intentional and procedural justice are important for the overall evaluation of fairness and for the creation and stabilization of reciprocal relationships (Brockner, 2006). As explained in section 2.6, reciprocal relationships are important factors for competitive outcomes during times of crisis. To conclude the first argument, I posit that SCSR is more likely to create trust

and to maintain that trust during a period of low trust. In addition, the SCSR creates more stable reciprocal relationships that weather a reevaluation.

Moreover, SCSR is more embedded within the organization and creates interdependencies between the company and its stakeholders. Those interdependencies facilitate a sharing of norms, values, information and resources among the company and their stakeholders (Albert et al., 2015). Through established routines resources may be exchanged directly. TCSR creates those routines only in one direction, from the company towards beneficiaries that are not interlinked. Direct reciprocity from stakeholders is thus not possible and cooperation among stakeholders not promoted.

Barriers to imitation and substitution: Furthermore, it is more difficult to substitute or imitate SCSR initiatives. TCSR initiatives with their transactional nature involve only few company-specific resources making them relatively easy and quick to imitate. One barrier to imitation and substitution, though, may be path dependency. A sudden increase in TCSR will, as explained in the section for H4, often be interpreted with caution and might even backfire if stakeholders perceive it as greenwashing (Chen et al., 2008). The imitation or substitution of SCSR initiatives, on the other hand, is time-consuming, costly and difficult through the barriers of path dependency and time compression diseconomies, which make successful imitation within short time periods unlikely. The trust-creating and -maintaining SCSR initiatives are hence potential sources of competitive advantage that erode slower than the temporal competitive advantage stemming from TCSR. Only at high levels TCSR is difficult to imitate.

Other factors: TCSR also offers some advantages over SCSR. TCSR activities can be quickly adjusted and offer more flexibility in reacting to changes in stakeholder preferences. If a TCSR initiative turns into a negative factor for competitive outcomes, it can be quickly stopped and the resources may be allocated towards more profitable activities. SCSR, on the other hand, is costly to reverse and “stickier” than TCSR. As explained before, the stickiness can work in both ways and make SCSR initiatives both sources of competitive advantage and competitive disadvantage.

I expect the advantages of SCSR, more specifically its barriers to imitation, the higher likelihood to initiate and maintain trusting relationships, and its reciprocation-triggering properties to outweigh its disadvantages compared to TCSR. Hence, I expect SCSR to have a stronger positive effect on firm performance than TCSR during the crisis of trust. The corresponding hypothesis that needs to be rejected to support this claim is:

H5: Firms' level of strategic CSR prior to the crisis of trust did not have a stronger positive effect on firm performance during the crisis than firms' level of tactical CSR.

3.5 The moderating effect of Strategic CSR

Furthermore, I argue that the effect of firm's level of TCSR depends on firm's level of SCSR. As I laid out in the previous paragraphs, TCSR in itself has relatively little capacity for building and maintaining trust in the stakeholder-firm relationship. If it fails to build up trust and is interpreted as greenwashing rather than a genuine commitment towards stakeholders, TCSR may even impact performance negatively.

The careful reader might note that the negative effect may be the result of a reevaluation. TCSR previously perceived as genuine commitments may be interpreted as not genuine if the trust in the company has suffered sufficiently. I believe that a sufficiently high level of SCSR activities may counteract this mechanism because of its trust-maintaining nature. Some TCSR activities that would have been evaluated negatively at low SCSR levels, are interpreted positively when SCSR-levels are higher, since stakeholders believe in the company's commitment towards stakeholders. In that case, the flexibility of TCSR may become an important determinant of competitive outcomes. At higher levels of SCSR, the firm is free to respond to changed stakeholder needs without being suspected to have inferior motives but perceived as acting in the interest of stakeholders. Stakeholders will likely interpret the discontinuation of some TCSR activities and the reallocation to other initiatives as meaningful. Higher levels of SCSR, hence, act as moderator variable for the relationship between TCSR activities and firm performance during times of low trust. The corresponding hypothesis that needs to be rejected in order to support the claim is:

H6: Firms' level of Strategic CSR prior to the crisis does not positively moderate the effect of tactical CSR on performance during crises of trust.

3.6 The non-linear relationship between TCSR and firm performance

Lastly, I argue that the relationship between TCSR and firm performance is not linear. More specifically, I argue that, once a certain threshold of TCSR activities is exceeded, TCSR has a great potential to maintain trust in the stakeholder-company relationship, to improve companies' reputation, and to build up stakeholder relationships. Large investments in TCSR are likely to be interpreted as genuine commitments whereas small investments may be perceived as window-dressing. The reasoning behind that is straightforward: Companies who consistently donate a significant share of their profits/revenue are likely to be perceived as caring about the case they donate for. If the sum, however, is rather small, stakeholders may

think that the company would allocate more resources towards philanthropic activities if they cared genuinely. Particularly high levels of TCSR activities, hence, are not only perceived as distributionally fair, but also as intentionally fair, which translates into more stable stakeholder relationships and is more likely to trigger indirect reciprocity. I expect a threshold between too low levels for promoting stakeholder trust and sufficiently high levels of TCSR to exist beyond which TCSR is trust building.

Furthermore, I argue that the benefits from more stable relationships and reciprocity are potential sources of competitive advantage; sudden increases may be interpreted with caution as only time may show that the commitment is genuine. During a crisis of trust, increases in TCSR are especially likely to be interpreted as driven by inferior motives, since a certain trust is required for a positive (re-)evaluation. Thus, the benefits are shielded by the barrier to imitation and substitution path dependency.

To conclude, I expect firms' level of TCSR to have marginally increasing effects on firm performance during the Great Recession. The corresponding hypothesis that needs to be rejected in order to support this claim is:

H7: Tactical CSR does not have a marginally increasing effect on firm performance during the crisis of trust.

4. Methodology

This chapter outlines the methodological approach, including an explanation of the research approach, research design, time horizon, research strategy, and the choice of statistical analysis techniques.

4.1 Research approach

There are two main research approaches: inductive and deductive reasoning (Saunders et al., 2012). The deductive approach begins with formulating a theory before data is collected and analyzed. Inductive reasoning, in contrast, involves the development of theory based on data that has been collected previously. My thesis is grounded on deductive reasoning. There already exists some theory and empirical findings based on which I designed a model and formulated hypotheses about the more specific relationship between TCSR and SCSR and firm performance during crises of trust.

4.2 Research design

There exist three basic research designs: explanatory, exploratory, and descriptive research designs. If the researcher faces a poorly understood phenomenon, he/she may carry out an exploratory research in order to clarify the understanding of the problem. Descriptive researches are conducted to “portray an accurate profile of persons, events or situations” (Robson 2002; 59) and may be part of an exploratory research. Both descriptive and exploratory researches are often forerunners of explanatory researches which examine causal relationships between variables. The research approach of this thesis requires an explanatory research design. In this thesis I examine the relationship between the independent variables “firms’ level of TCSR prior to the crisis” and “firms’ level of SCSR prior to the crisis” and the dependent variable “firm performance”. Thus, I try to establish a causal relationship between the variables, which is explanatory.

4.3 Time horizon

The research may either be cross-sectional, hence present a relationship at a given point in time, longitudinal, tracking a phenomenon over time, or combine both cross-sectional and longitudinal data in panel analyses. In order to answer my research question, firm performance during the crisis needs to be associated with levels of CSR prior to the crisis. Running regression models using cross-sectional data suffices to analyze the relationship as I am not interested in the relationship between CSR and firm performance outside this specific time period.

4.4 Research strategy

The unexpected crisis of trust represents a natural experiment without control group as the crisis probably affected all companies in the US during the period of interest and no control group similar to the US companies exists. It is a unique event which limits the external validity of the analysis.

4.5 Time frame

The Great Recession officially lasted from December 2007 to June 2009 (U.S. National Bureau of Economic Research, Inc, 2010). Like Bansal et al. (2013), I define the period of low trust as lasting from September 15th, 2008, to March 31st, 2009; from the Lehman Brothers bankruptcy until stocks showed first signs of recovery. The Lehman Brothers bankruptcy is likely to have – together with the subsequent bankruptcies of other institutions and bailouts like the U.S. Federal Reserve’s bailout of AIG on September 16, 2008 – caused the sudden decrease of trust reported by Edelman (2009) for the year 2008. Prior to that date, it is unlikely that a significant part of the stakeholders has anticipated the extent to which the recession would affect them, society and the overall economy. Interestingly, Lins et al. (2017) defined the crisis period as

lasting from August 2008 to March 2009, only stating that August is the month that preceded the Lehman Brothers bankruptcy and that Lins et al. (2013) used the same time period for their analysis. Given the lack of evidence and convincing arguments for treating August 1st as beginning of the crisis, I define the crisis period as lasting from September 15th, 2008 to March 31st, 2009. In March 2009, stock markets started to recover and trust in business almost reached its pre-crisis level in late 2009 (Edelman, 2010).²

4.6 Choice of statistical analysis techniques

Stata was employed as statistical tool to analyze the data. I selected this software as it has all the applications I need in order to perform the statistical analysis chosen for this study. All regression models presented in chapter 6 are tested running ordinary least squares (OLS) regressions. This allows to test for linear relationships while minimizing the sum of the squares of the differences between the observed dependent variable and those predicted in the linear function.

5. Data

All data I use is secondary data since this data is readily available for a large number of companies which makes it possible to obtain robust results. In the following, I am going to explain which data sources I used and how I computed the variables for my analysis.

5.1 Selection criteria

The number of firms selected for the master's thesis at hand is limited for a number of reasons. First, the shock of trust is limited to only few countries including the US, which is chosen for the analysis. Second, rating the companies' CSR performance is very complex and resource demanding, which is why rating agencies limit their ratings to large companies. For the examination of the relationship, the MSCI KLD stats database was chosen, which provides annual CSR ratings for about 3000 US companies. Third, the theoretical models used in this analysis to predict performance are based on certain assumptions. One of their main assumptions is that companies are subject to somewhat similar competitive pressures. Another goal of the selection is to reduce noise, as well as to make the sampling more comparable to previous work. In order to better facilitate comparison of findings I use similar selection criteria to those that have been used in prior works (Lins et al., 2015, Amiraslani et al. (2017)).

² In robustness tests, I examine whether my results hold for the time periods 01.08.2008-31.03.2009 (to check whether the shock of trust might have occurred earlier) and 15.09.2008-06.03.2009 (To check whether a potential recovery of trust after the stock market started recovering after March 6th affected the results)

Criterion 1: Availability of CSR ratings

To guard against the possibility that firms anticipated the crisis and adjusted their CSR activities accordingly, I construct my measures for SCSR and TCSR using data from year-end 2006. For 2006, KLD rated roughly 3000 US companies including the 1000 largest. Hence, they rated the entire population of large US companies plus a significant number of medium and small cap companies covering approximately 99% of the free float-adjusted market capitalization in the US (MSCI, 2018).

Criterion 2: Availability of financial information

Merging the CSR data with stock data from CRSP and accounting data from Compustat using CUSIP numbers unique for every single company allows to conduct the analysis. However, for some companies, financial information is missing. I excluded all companies for which stock data or accounting data in the period of interest is missing or for which fewer than 12 months of data were available to estimate factor loadings.

Criterion 3: Exposure to similar competitive pressures

Naturally, firms are exposed to competitive pressures that are somewhat unique for each company. During the financial crisis, however, the financial sector enjoyed extensive governmental support making their performance less comparable to the performance of other companies. I, therefore, excluded financial companies from my sample.

In addition, there are several events that may have a significant impact on firm performance. Due to the limited time for finishing the thesis, I could not perform an extensive research identifying a multitude of the events. Nevertheless, during the data analysis I identified 43 companies who were acquired during the period of interest or merged, both of which are major events. I excluded those companies as well. This selection criterion is the only one of my study that Lins et al. (2017) did not apply.

Criterion 4: Market capitalization of at least \$250 million

Small cap companies differ from larger companies in that they tend to have a lower liquidity, higher bid-ask spreads and face more price-pressure, all of which makes them likely to be more severely affected by the Great Recession (Fama and French, 2008). Like Lins et al. (2017), I remove firms with a market capitalization of less than \$250 million.

5.2 Independent variables

To construct the independent variables “Firm’s level of SCSR prior to the crisis” and “Firm’s level of TCSR prior to the crisis” I use the MSCI KLD stats database. The MSCI KLD stats database annually provides social, environmental and governance ratings for a large set of US companies and is widely employed in academics (e.g. Lins et al., 2015; Bansal et al., 2013; Flammer, 2015). Based on data from academic, government, NGO datasets, company disclosure, and other sources, KLD annually rates companies’ strengths and concerns in the following categories: community, environment, diversity, employee relations, human rights, product quality and safety, and corporate governance. Each of those categories is composed of a certain number of subcategories, which represent either potential strengths or concerns. All 80 subcategories are rated on a binary scale where 1 indicates the presence and 0 the absence of the particular strength or concern (MSCI Inc., 2016). For example, a 1 in the environmental subcategory “Water Stress” (environmental concern K) indicates that there are significant controversies related to a firm’s water management system. The water management strategy and targets in conjunction with the actual water use over time, all of which is evaluated relative to peers, may also represent a strength (environmental strength H). To complement the ratings on CSR strengths and concerns, KLD reports if a company is active in controversial industries or not (MSCI Inc., 2016).

Using the MSCI ESG database allows to construct measures for both SCSR and TCSR. Bansal et al. (2015) classified all strengths from the category “community” as TCSR and strengths in the remaining categories as SCSR. This addresses the lack of convergent validity between strengths and concerns found by Mattingly and Berman (2006) that Lins et al. (2017) did not take into account. The lack of convergent validity makes possible two choices for constructing proxies for CSR activities: from CSR strengths or from CSR weaknesses. Bansal et al. (2015) use only CSR strengths for their analysis without specifying why. A closer look at the fundamental differences between CSR strengths and weaknesses reveals that CSR strengths are indeed better indicators for both TCSR and SCSR than concerns:

As Chatterji et al. (2009) and Berliner and Prakash (2014) show in their studies, concerns in the MSCI KLD stats database are likely to be better proxies for actual CSR performance of companies whereas strengths indicate whether firms have management systems, policies, and programs in place to address stakeholder needs. For example, Chatterji et al. (2009) show that environmental concerns are related to actual environmental performance like pollution levels and compliance, whereas indicators for environmental strengths show no such correlation but indicate merely the presence of commitments and policies designed to improve the

environmental performance. Berliner and Prakash (2014) argue that the same applies to the assessment of human right strengths and concerns. It may also hold for other categories and there is some evidence supporting this presumption. For example, the rating of the governance strength “corruption and political stability” is based on the presence of “*programs, guidelines, and clear policies to avoid corrupt business dealings*” (MSCI Inc., 2016, p.117), whereas the corresponding governance concern “bribery and fraud” is based on “*a history of involvement in widespread or egregious instances of bribery, tax evasion, insider trading, accounting irregularities, resistance to improved practices, and criticism by NGOs and/or other third-party observers*” (MSCI Inc., 2016, p.41). I, therefore, assume that all strengths indicate the presence of a commitment towards stakeholders in that domain (via programs, policies, and management systems), whereas concerns measure actual CSR performance in a given domain.

This fundamental difference makes strengths better indicators for both SCSR and TCSR activities than concerns for one simple reason: from the definitions of both kind of CSR activities it follows that they represent commitments towards stakeholders, which is per se neither performance nor impact-related. Strengths from the MSCI KLD stats database, as discussed, represent policies and programs, which qualify as CSR activities. Concerns, on the other hand, do not need to represent commitments towards stakeholders, but measure the performance in certain domains.

According to Bansal et al. (2015), all strengths from the category “community” represent TCSR activities and strengths from the remaining categories classify as SCSR activities. A revision of all subcategories confirms their approach for constructing a measure of TCSR. All subcategories of community strengths, namely generous giving, innovative giving, support for housing, support for education, non-US charitable giving, volunteer programs, and other strength relate to some sort of transaction benefitting stakeholders, whereas all strengths in other domains are based on activities that go beyond a simple transaction. Unlike Bansal et al. (2015) but in accordance with Lins et al.’s (2017) approach, I exclude the categories of “Product Quality and Safety” and “Corporate Governance”. I consider some subcategories of “Product”, such as product quality and innovation, as outside the scope of CSR and firms’ “Corporate Governance” policies are usually not part of a firms’ CSR remit.³ Finally, and like Bansal et al. (2015) and Lins et al. (2017), I do not include CSR categories in my measure for CSR that penalize the participation in controversial industries, since firms cannot do anything to get a better score in those categories but leaving the industry. Furthermore, I control for industry in

³ Since both product quality and good governance practices can be regarded as trust-building and might correlate with CSR, I control for them in a robustness test.

the majority of my tests – including all main regressions -, which makes an exclusion of those companies unnecessary.

For my analyzes, I use CSR data from year-end 2006 like Lins et al. (2015) did. Using the data from 2006 guards against the possibility that firms have anticipated the crisis and adjusted their level of CSR activities accordingly. I have only received CSR data from KLD for the year 2006, but since Lins et al. (2017) showed that the findings remain robust when using CSR data from 2007, I assume that the quality of my research is not impacted negatively by the use of CSR data from 2006.

To conclude, I compute the SCSR score for each firm by summing up the number of strengths identified for each firm reported by MSCI KLD stats in the domains of environment, diversity, employee relations, and human rights, reported for the year 2006. Firm's level of TCSR is computed by summing up the number of community strengths. The maximum value of SCSR is 30 and the maximum value of TCSR is 5.

5.3 Dependent variables

The dependent variables are “stock performance” and “operational performance”. I define stock performance as the raw buy and hold return from the beginning to the end of the period of interest (September 15th, 2008-March 31st, 2009). It is widely accepted that a firm's stock price responds to new information about the firm and its competitive environment making the stock price the probably best indicator for expected firm performance. In order to examine whether the market anticipated a change in performance correctly, I assess the relationship between CSR and firm's actual operational performance, in this case firm's change in operating return on assets from the third quarter 2008 to the crisis quarters fourth quarter 2008 and first quarter 2009.

5.4 Control variables

To ensure the validity of my results, it is of utmost importance to control for the effect of potential confounding variables. I incorporate the following twelve control variables in my analysis: pre-recession-profitability, cash holdings, short-term dept, long-term dept, pre-recession growth, firm size, industry, book-to-market value, and factor loadings derived from the Carhart four factor model.

In section 2.10., I have listed several potential cofounding variables. Of those, I control for pre-recession profitability (measured as return on assets), cash holdings (computed as cash and marketable securities divided by assets), leverage (short-term debt, computed as debt in current liabilities divided by assets, and long-term debt, computed as long-term debt divided by assets),

pre-recession growth (computed as the average increase of assets in a three year period), firm size (computed as natural logarithm of 1 plus the book value of total assets) and industry (by including two-digit industry dummies using Standard Industrial Classification codes (SIC)). In addition, I control for book-to-market value (computed as book value of equity divided by market value of equity) as it may be related to future performance, and factor loadings obtained using Carhart's (1997) four factor model, since all four factors have been found to explain firms' stock performance. Control variables based on firm characteristics are computed year end 2007 or as close as possible for firms that do not have a December fiscal year end, whereas the factor loadings are computed over a 60-month period prior to the crisis.

Before the variables could be computed, I had to correct the data downloaded for errors. As it is entirely possible that the corrected data was still object to error and to limit the impact of outliers, all depended variables and control variables have been winsorized at the 1st and 99th percentile. I did not winsorize the independent variables as the share of 0-values (the lowest values) exceeds 1% for each variable (see appendix 1) and winsorizing, hence, only affects one tail of the distribution. Modifying data in this unsymmetrical fashion would produce biased statistics. All variables are summarized in the table below.

Variables	Description	Source
Dependent variables		
Stock performance	Raw buy-and-hold return in the period September 15 th , 2008, to March 31 st , 2009	CRSP
Operational performance	Change in operating return on assets from the 3 rd quarter of 2008 to crisis period 4 th quarter 2008 to 1 st quarter of 2009	Compustat
Independent variables		
CSR	Sum of CSR strengths in the domains of community, environment, diversity, employee relations, and human rights	MSCI KLD stats
SCSR	Sum of CSR strengths in the domains of environment, diversity, employee relations, and human rights	MSCI KLD stats
TCSR	Sum of CSR strengths in the community domain	MSCI KLD stats
Control variables		
Pre-recession growth	Percentage change of total assets from 2004 to 2006	Compustat
Size	Natural logarithm of 1 plus the book value of total assets	Compustat

Profitability	Net income divided by average assets	Compustat
Short-term dept	Dept in current liabilities divided by assets	Compustat
Long-term dept	Long-term debt divided by assets	Compustat
Industry	Industry dummies using first two digits of firms' Standard Industrial Classification codes (SIC)	Compustat
Book-to-market value	Book value of equity divided by market value of equity	Compustat
Cash holdings	Cash and marketable securities divided by assets	Compustat
Carhart 4 Factor loadings	Computed using the market model over the 60-month period prior to September 2008	Compustat

Table 1: Variable Key

6. Data Analysis

This section presents the data analysis. To test the quality of my data and the robustness of their results, I first replicate Lins et al.'s (2017) main analysis and perform two additional robustness tests. The results of the replication will be presented first, followed by the results of my primary research and of robustness tests.

6.1 Descriptive statistics

The following table provides descriptive statistics for each variable.⁴ CSR data is from year-end 2006 and financial plus accounting data from year-end 2007 or as close to the year-end as possible. The dependent variable “Stock performance” is calculated as the raw buy-and-hold return in the period from September 15th, 2008 to March 31st, 2009. “Operational performance” is calculated as the absolute change of operating return on assets from the third quarter 2008 to the crisis period quarters fourth quarter 2008 and first quarter 2009.⁵

⁴ Excel calculations and Stata code are available from the author upon request for all statistics and regression results presented in this thesis.

⁵ For an overview over the descriptive statistics for regressions utilizing accounting data from year-end 2006 and dependent variables calculated for the period before the crisis, see appendix 3.

Variable	Number of observations	Mean	Standard deviation	Min	Max
Stock market return	1555	-0.38	0.26	-0.91	0.49
Change in op. return on assets	1538	-0.01	0.02	-0.13	0.05
CSR	1555	1.21	2.05	0.00	18.00
SCSR	1555	1.09	1.75	0.00	14.00
TCSR	1555	0.12	0.46	0.00	4.00
FF Beta	1555	0.00	0.72	-1.83	2.26
SMB factor loading	1555	0.09	1.11	-3.32	3.79
HML factor loading	1555	0.74	1.02	-1.91	3.90
MOM factor loading	1555	1.13	0.68	-0.49	3.15
Company growth	1555	0.44	0.81	-0.47	4.85
Company Size	1555	7.27	1.55	4.33	11.39
Profitability	1555	0.04	0.12	-0.54	0.29
Short-term debt	1555	0.03	0.05	0.00	0.28
Long-term debt	1555	0.20	0.21	0.00	1.03
Market-to-book value	1555	5.54	9.20	-3.92	52.65
Cash holdings	1555	0.18	0.21	0.00	0.89

Table 2: Descriptive statistics

After removing companies that did not meet the selection criteria, I obtained 1555 companies for which CSR data and sufficient financial data was available. During the crisis of trust, their stock price declined by 38% on average. This sharp decline and the relatively low maximum stock price gain of 49% showcases the severity of the crisis and is at stark contrast to the performance-indicators prior to the crisis. The companies in the sample grew on average by 44% within the previous two years and enjoyed a return on assets of around 4%. The correlation between the independent variables TCSR and SCSR is moderate, while there is a strong positive correlation between both CSR and TCSR and CSR and SCSR (see appendix 1). The moderate positive correlation between TCSR and SCSR indicates that some firms invest into TCSR and SCSR in a similar fashion.

The mean values for CSR, SCSR and TCSR of 1.21, 1.09 and 0.12 are relatively low given their maximum possible values of 35, 30, and 5 and can be explained with a high share of zero-scores for each of them. 51% of the companies in the sample have a zero-score on CSR, 52% on SCSR, and 92% on TCSR (see appendix 2). This is an interesting finding indicating that CSR is either regarded as relatively unimportant by companies, that they lack managerial expertise in building CSR, that KLD was unable to detect companies' strength in the CSR domain, or that the rating requirements of KLD were particularly strict.

[6.2 Replication of Lins et al.'s \(2017\) main results](#)

Before testing the hypotheses developed in section "Model and hypotheses", I replicated Lins et al.'s (2017) main regressions for two reasons. First, given my limited experience, I was concerned that my data preparation was of insufficient quality. My sample contains only 1555

companies for which I obtained sufficient stock data to calculate factor loadings. Lins et al.'s sample, however, consisted of 1673 companies for the same time period. The different sample size shows that a) I was unable to obtain as much accounting and stock data as Lins et al. and b) that I excluded more companies than Lins et al. (2017). For example, I excluded 47 companies that merged or have been acquired during the period of interest, an exclusion criterion not applied by Lins et al. (2017). Therefore, I was concerned that the different sample size and - composition may have a considerable impact on the results. A successful replication indicates that the data preparation was not flawed and of sufficient quality. This means that the sample selected by me can be worked with. Second, I want to examine in robustness tests whether Lins et al.'s (2017) main results hold for the period of crisis as defined by me and whether industry effects explain the relationship between operating performance and CSR that they found. They controlled for industry in the main regressions on stock performance but not when it comes to operating performance.

As explained in the sections above, there are substantial differences between the analyzes of Lins et al. and mine. To begin with, they define the crisis of trust as beginning in August 2008 and not on September 15th, 2008. Furthermore, their measure of CSR is derived by summing up strengths and concerns of each category and dividing them by their maximum number before subtracting the score of concerns from the score of strengths, whereas I compute the scores for CSR by summing up only strengths. The third difference is that they did not control for pre-recession company growth.

Taking all those differences into account, I ran six regressions. Model (i) explores the relationship between firms' level of CSR prior to the crisis as defined by Lins et al. (2017) and stock performance in the period of 01.08.2008 to 31.03.2009 without control variables. Model (ii) additionally controls for Carhart's four factor loadings and model (iv) for firm characteristics. Introducing industry, Model (iii) is an extension of model (ii) and model (v) an extension of model (iv). Model (vi) features the full set of control variables: firm characteristics, factor loadings and industry. All regressions are similar to those that Lins et al. (2017) ran in their main analysis and will be the standard models I use in my regressions. The results of the regressions are presented in the table below.⁶

⁶ * indicates that a constant is different from zero at a p-value of $p < 0.1$, ** indicates that a constant is different from zero at a p-value of $p < 0.05$ and *** indicates that the constant is different from zero at a p-value of $p < 0.01$. The connotation applies to all regression results presented in this thesis.

CSR and stock performance during crisis 01.08.2008-31.03.2009						
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Constant	-0.387***	-0.3356***	-0.4072**	-0.5653***	-0.5907***	-0.5546***
CSR	0.0787***	0.0581***	0.0641***	0.053***	0.0516***	0.0484**
FF Beta		-0.035***	-0.0127			-0.0105
SMB factor loading		-0.0202***	-0.0141**			-0.0028
HML factor loading		0.0027	0.0023			0.0077
MOM factor loading		-0.0801***	-0.0606***			-0.0586***
Company Size				0.019***	0.0177***	0.0159***
Profitability				0.3365***	0.3665***	0.3658***
Short-term debt				0.0907	-0.1707	-0.1852
Long-term debt				-0.0859**	-0.0772**	-0.0879**
Market-to-book value				0.0004	0.0007	0.0005
Cash holdings				0.1971***	0.1678***	0.164***
Industry dummies	No	No	Yes	No	Yes	Yes
N	1542	1542	1542	1542	1542	1542
Adjusted R-squared	0.0102	0.0555	0.1544	0.0476	0.1738	0.187

Table 3: CSR as defined by Lins et al. (2017) and stock performance during crisis

The coefficient on CSR is significant at $p < 0.05$ for all models and significant at $p < 0.01$ for models (i) to (v), which indicates that there is a positive relationship between their measure of CSR and stock performance during the period of low trust as defined by them. I replicated Lins et al.'s (2017) main results successfully. I do, therefore, assume that my data is of sufficient quality.

To control whether their results hold for the period of crisis as defined by me, I reestimate the models using raw stock returns in the time period 15.09.2008 to 31.03.2009 as dependent variable (see appendix 4). Models (i) to (iii) report a significant positive relationship at $p < 0.05$ between CSR and stock returns. The coefficient on CSR is outside the conventional level of significance for the models (iv) to (vi), which feature firm characteristics. The relationship is significant at $0.05 < p < 0.1$, indicating that Lins et al.'s (2017) results are more sensitive to the time period analyzed than suggested by them.

In their publications, they do also examine the relationship between CSR and different measures of operational performance during the last quarter of 2008 and the first quarter of 2009- operational return on assets (Lins et al., 2015), sales growth, and change in gross margins (Lins et al., 2017)- without controlling for industry. I am interested in whether their results hold when controlling for industry. In order to do so, I reestimated model (i) to (vi) replacing the dependent variable stock return with change in operating return on assets (see appendix 4). The coefficient on CSR is significant at $p < 0.05$ for all regression that do not control for industry but turns insignificant when introducing industry. This shows that the relationship between Lins et al.'s (2017) measure and operational performance is not as clear-cut as they suggest.

It must be noted, however, that Lins et al. (2017) used panel data to examine the relationship between CSR and operational performance. As the main contribution of the thesis at hand is

the examination of the relationship between SCSR, TCSR and firm performance in a different period of time than defined by Lins et al. (2017) and taking into account the limited scope of the thesis, I do not perform a panel analysis controlling for firm- and quarter fixed effects.

6.3 CSR and firm performance outside the crisis of trust

Lins et al.'s (2017) fail to take the issue of missing convergent validity into account makes necessary to test the relationship between CSR activities and firm performance during the Great Recession using a more valid proxy for CSR activities.

Testing hypothesis H1, "*Firms' level of CSR activities prior to the crisis does not have a significant effect on stock performance outside crises of trust*" might be regarded as outside the scope of this thesis. Yet, one main feature of the Great Recession makes testing hypothesis H1 valuable: a shock to the credit supply happened as early as July 2007 (Almeida et al., 2009; Duchin et al., 2010; Paravisini et al., 2014) and persisted until at least March 2009, which is the end of the period of low trust as defined by me. If high CSR companies earned excess returns solely because investors expected them to perform better in times of tightened access to credit but not because the companies were more trustworthy, my statistical analysis could be picking up a credit-effect instead of a trust-effect. To examine this possibility, I run regressions on the relationship between CSR and stock performance from July 2007 to September 15th, 2008, when no shock of trust had occurred. I do not examine the relationship between CSR and operational performance outside crises of trust as I expect an outperformance on the operational level stemming from CSR both during and outside crises, making it difficult to differentiate between the expected outperformance and a potential credit-effect.

To assess the relationship between CSR and stock performance prior to the crisis, I ran 6 models each examining the relationship between firms' level of CSR from year end 2006 and stock returns during the crisis. To ensure a certain degree of comparability and uniformity, the regression models that I use to test hypotheses H2-H7 are similar to the models employed to test H1, which are, in turn, similar to the models that Lins et al. (2017) employed in their research. An important adjustment is that company growth is added as control variable to models (iv) to (vi).

In the following, I presents the findings for testing H1.⁷ As H1 and H2 are relatively less important for answering the research question than H3-H7, I only present the main results of regressions testing H1 and H2 and discuss the findings for H3-H7 more in-depth.

CSR and stock performance prior to the crisis 01.07.2007-15.09.2008	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Constant	-0.2195***	-0.1393***	-0.029	-0.2233***	-0.0601	0.047
CSR	0.0087**	0.0046	0.0073*	0.0035	0.0068	0.0064
FF Beta		-0.0399***	-0.0343***			-0.0324***
SMB factor loading		-0.0386***	-0.0378***			-0.0312***
HML factor loading		-0.004	-0.0037			-0.0078
MOM factor loading		-0.0032	-0.0145			-0.0172
Company growth				-0.0116	-0.0248**	-0.0222*
Company Size				0.0078	0.0009	-0.0055
Profitability				0.1347*	0.2797***	0.2717***
Short-term debt				-0.3688**	-0.3913**	-0.4132**
Long-term debt				-0.1327***	-0.0667	-0.0566
Market-to-book value				0	-0.0002	-0.0004
Cash holdings				-0.0691	-0.1084**	-0.0968*
Industry dummies	No	No	Yes	No	Yes	Yes
N	1568	1568	1568	1568	1568	1568
Adjusted R-squared	0.0023	0.0244	0.1121	0.0135	0.118	0.1293

Table 4: CSR and stock return prior to the crisis

Only model (i) reports a significant positive relationship between CSR and stock performance at the conventional level $p < 0.05$ and model (iii) provides very weak evidence that H1 does not hold (see table 4). In contrast, the three models with the strongest explanatory power, models (iv)-(vi), do not reject H1. The results indicate that firms' level of CSR activities have not had a significant impact on firm performance when the shock to credit supply occurred. This suggests that any observed effects of CSR on firm performance during the crisis of trust can be attributed to the trust building and maintaining nature of CSR.

6.4 CSR and performance during the crisis of trust

The relationship between firm's level of CSR activities prior to the crisis and firm performance during the crisis is explored in the following. The first hypothesis of interest is:

H2: There is no significant relationship between Firms' level of CSR activities prior to the crisis and firm performance during the crisis of trust.

I test this hypothesis running the models (i) to (vi) that have been employed to test H1 and are similar to the models Lins et al. (2017) employed. The similarity to Lins et al.'s (2017) models facilitates the comparison of my results with theirs. In the regressions, the dependent variables are raw buy-and-hold return (table 5) during the crisis period and the change in operating return on assets from prior to the crisis to during the crisis (see appendix 5). Table 5 presents the result

⁷Accounting data for control variables is from year-end 2006 or as close to the year-end as possible. The dependent variable is firms' raw buy-and-hold return in the time period 01.07.2007, the month when the credit crunch begun (Almeida et al., 2009) to 15.09.2008, the onset of the crisis.

of regressions (i) to (vi) on the relationship between firms' level of CSR and stock performance during the Great Recession⁸:

CSR and stock performance during crisis 16.09.2008-31.03.2009	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Constant	-0.3969***	-0.3388***	-0.3773***	-0.5966***	-0.5401***	-0.5387***
CSR	0.0115***	0.0073	0.0058*	0.0022	0.0001	0
FF Beta		-0.0278***	-0.0105			-0.0136
SMB factor loading		-0.027***	-0.0249***			-0.0186**
HML factor loading		-0.0146**	-0.0117*			-0.0052
MOM factor loading		-0.034***	-0.024**			-0.0221**
Company growth				-0.0185**	-0.0104	-0.0092
Company Size				0.0226***	0.0231***	0.0179***
Profitability				0.324***	0.3494***	0.331***
Short-term debt				-0.035	-0.215*	-0.2231*
Long-term debt				-0.0698**	-0.0678*	-0.0641*
Market-to-book value				0.0004	0.0006	0.0005
Cash holdings				0.31***	0.2612***	0.2586***
Industry dummies	No	No	Yes	No	Yes	Yes
N	1555	1555	1555	1555	1555	1555
Adjusted R-squared	0.0074	0.0299	0.1298	0.0680	0.1690	0.1734

Table 5 CSR and stock performance during crisis

The coefficient on CSR is only significant in the basic model (i) suggesting that there is no positive relationship between firms' level of CSR activities and stock performance during the crisis of trust. The results of regressions on the relationship between CSR and change in operating return on assets during the crisis support this claim, finding no significant effect of CSR (appendix 5). To explore the effect of CSR activities prior to the crisis and firm performance on a more detailed level, I ran several additional regressions (see appendix 5). The regressions on sales growth, change of gross margins, and on change in capital raising show no positive relation between CSR and measures of operational performance. No model reports a significant relationship between CSR and sales growth or change in capital raising, whereas models (i) to (iii) report a significant positive relationship between CSR and change in cross margins (see appendix 5). The coefficient turns significantly negative in model (iv) and remains negative, yet not significant, in models (v) and (vi) which makes me conclude that I do not find a significant relationship between CSR and firm performance during the Great Recession. H2 cannot be rejected.

[6.5 SCSR, TCSR and firm performance during the crisis of trust](#)

The previous two sections have examined the relationship between firms' CSR activities in aggregate and firm performance prior to and during the crisis of trust using a more valid proxy for firms CSR activities than Lins et al. (2017). This was necessary to test for a potential credit-

⁸ Firm characteristics were computed using accounting data from year-end 2007 or as close to the year end as possible. Factor loadings have been computed using the market model over a 60 months period preceding the crisis.

effect of CSR and because Lins et al. failed to take into account the lack of convergent validity between strengths and weaknesses when constructing their proxy for firms' CSR activities.

In the following, I examine the relationship between CSR and firm performance on a more detailed level disaggregating CSR into two components, namely tactical and strategic CSR. To do so, I slightly modify model (i) to (vi) from the previous section. Since TCSR and SCSR are moderately correlated (see appendix 2), it is important not to test the relationship between them and firm performance separately but to include both in the regressions. Not testing for both kinds of CSR might theoretically result in biased results as, for example, the effect of SCSR might be ascribed to the effect of TCSR. Assessing the effect of both kind of CSR in one model addresses this concern. Furthermore, I argue that there might be a moderating effect of firms' level of SCSR on the relationship between TCSR and firm performance during a crisis of trust. To account for this possibility and to assess the relationship in greater detail, I add an interaction term to the models. The resulting six models feature the independent variables "firms level of SCSR prior to the crisis", "firms level of TCSR prior to the crisis" and "interaction between SCSR and TCSR", an interaction term that estimates the potential moderating effect of SCSR on the relationship between TCSR and firm performance during the period of crisis. The hypotheses that I test in this section are:

H3: Firms' level of strategic CSR prior to the crisis does not have a more positive effect on firm performance during the time of low trust than outside the crisis of low trust.

H4: Firms' level of tactical CSR prior to the crisis does not have a more positive effect on firm performance during the time of low trust than outside the crisis of low trust.

The regressions report a positive, yet insignificant effect of TCSR on stock performance during the Great Recession (see table 6). The coefficient on SCSR is significant only in model (i) and (ii), both of which have little explanatory power. The results of regression model (iii) to (vi) in table 4 rather suggest that small minus big factor loadings, company size, pre-crisis profitability and cash holdings are important for explaining stock returns during the crisis.

SCSR, TCSR and stock performance during crisis	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Constant	-0.3999***	-0.3423***	-0.3812***	-0.5907***	-0.6026***	-0.5377***
SCSR	0.0135***	0.0088*	0.0135	0.0035	0.0002	0.0001
TCSR	0.0519*	0.0387	0.0519	0.0376	0.0086	0.0066
Interaction SCSR#TCSR	-0.0068*	-0.0052	-0.0068	-0.0053	-0.0011	-0.0009
FF Beta		-0.0273***	-0.0103			-0.0136
SMB factor loading		-0.0262***	-0.0246***			-0.0186**
HML factor loading		-0.0144**	-0.0116*			-0.0052
MOM factor loading		-0.0339***	-0.024**			-0.0221*
Company growth				-0.0183**	-0.0104	-0.0092
Company Size				0.0213***	0.0229***	0.0177***
Profitability				0.3251***	0.3493***	0.331***
Short-term debt				-0.0291	-0.2142*	-0.2225*
Long-term debt				-0.0667*	-0.0671*	-0.0635*
Market-to-book value				0.0004	0.0006	0.0005
Cash holdings				0.3101***	0.2614***	0.2587***
Industry dummies	No	No	Yes	No	Yes	Yes
N	1555	1555	1555	1555	1555	1555
Adjusted R-squared	0.008	0.0298	0.1289	0.0679	0.1680	0.1723
F-value Test SCSR=TCSR	1.76	1.08	0.19	1.45	0.09	0.06

Table 6 SCSR, TCSR and stock performance during crisis

Table 7 presents the estimated effects of SCSR and TCSR on the change in operating return on assets. The regression models report no significant relationship between SCSR, TCSR and the change in operating return on assets. When it comes to the change in operating return on assets during the crisis, adding industry to the models increases the explanatory power of the models considerably – the adjusted R-squared quadruples from model (ii) to model (iii) and increases more than 700% from model (iv) to model (v), which indicates that the operational performance varied considerably between industries and that running a robustness test on Lins et al.'s (2017) results including industry fixed was justified.

SCSR, TCSR and change in operating return on assets during crisis	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Constant	-0.0079***	-0.0055***	0.0048	-0.0084**	-0.0037	-0.0019
SCSR	0.0005	0.0002	-0.0001	0.0005	-0.0004	-0.0004
TCSR	-0.001	-0.0014	-0.0018	-0.0005	-0.0022	-0.0023
Interaction SCSR#TCSR	0	0.0001	0.0002	0	0.0003	0.0003
FF Beta		-0.0013	-0.001			-0.0011
SMB factor loading		-0.001**	-0.0004			-0.0003
HML factor loading		0.0014***	0.0007			0.0006
MOM factor loading		-0.0061***	-0.0011			-0.0006
Company growth				-0.0022***	-0.0006	-0.0004
Company Size				0	0.0011**	0.0011**
Profitability				-0.0169***	-0.0168***	-0.017***
Short-term debt				0.0268**	0.0158	0.016
Long-term debt				0.0057**	0.0024	0.0024
Market-to-book value				0	0	0
Cash holdings				0.0028	-0.0018	-0.0008
Industry dummies	No	No	Yes	No	Yes	Yes
N	1538	1538	1538	1538	1538	1538
Adjusted R-squared	-0.001	0.0373	0.1724	0.0238	0.1836	0.1834
F-value Test SCSR=TCSR	0.36	0.51	0.6	0.17	0.66	0.73

Table 7 SCSR, TCSR and change in operating return on assets during crisis

Furthermore, the results suggest that company size and profitability became more important for operational performance during the crisis of trust compared to prior to the crisis.

As for CSR, I performed additional regressions exploring the relationship between SCSR, TCSR and operational performance in greater detail. The tables in appendix 6 show that I did not find a significant relationship between pre-recession levels of TCSR, SCSR and change in capital raising and sales growth. The relationship between SCSR and change in gross margins is significantly positive for model (i), (ii) and (iv). The results for the remaining models which control for industry, show no such relationship, once again indicating that industry effects are very important to explain operational performance during the crisis.

Overall, the evidence does not support my reasoning suggesting that levels of SCSR and TCSR prior to the crisis of trust became more valuable during the crisis of trust. Hypotheses H3 and H4 cannot be rejected.

[6.6 Comparing the effects of SCSR and TCSR](#)

Based on each regression examining the relationship between SCSR, TCSR and firm performance during the Great Recession, I performed an F-test on whether the coefficients on TCSR and SCSR are equal (see table 6 and 7 and appendix 6). If the null-hypothesis of the test is rejected and the coefficient on SCSR higher than the coefficient on TCSR, my hypothesis H5, “*Firms’ level of strategic CSR prior to the crisis of trust did not have a stronger positive effect on firm performance during the crisis than tactical CSR had*”, must be rejected. The result of the F-test is presented below the result of each regression and shows no significant difference between the coefficients other than for model (v) on the relationship between SCSR, TCSR and sales growth during the crisis (see appendix 6). In this model, the F-test shows that the coefficient on TCSR is significantly larger than the coefficient on SCSR. As most tests report a non-significant difference, I conclude that hypothesis H5 cannot be rejected.

[6.7 The moderating effect of SCSR](#)

Furthermore, I included an interaction term in the regression models that estimated the moderating effect of SCSR on the relationship between TCSR and firm performance. The interaction term is insignificant in all regression suggesting that there was no moderating effect of SCSR on the relationship between TCSR and firm performance (see table 6 and 7, and appendix 6). Hypothesis H6, “*Firms’ level of Strategic CSR prior to the crisis does not moderate the effect tactical CSR had on firm performance during the crisis of trust*”, cannot be rejected.

6.8 The non-linear effect of TCSR

To conclude the previous findings, the regressions on the relationship between firms' level of SCSR, TCSR and firm performance do neither find a significant relation between SCSR, TCSR and firm performance nor do they provide evidence that the effect of SCSR on firm performance is stronger than the effect of TCSR or that SCSR moderates the effect of TCSR on firm performance.

The hypothesis that could not be tested using the models testing H3-H6 is hypothesis H7 (*"Tactical CSR does not have a marginally increasing effect on firm performance during the crisis of trust"*) as I argue for a non-linear relationship and the models only examine a linear relationship. One potential approach towards testing the hypothesis is to create dummy variables for different quantiles of TCSR and then then to employ the dummy variables as independent variables in regressions. As a first step, the companies are assigned to quantiles with quartiles being a popular choice. The sample at hand, however, contains a large number of zero values for TCSR, which affects the validity of a regressions featuring quartiles significantly. The firms would only be assigned to two dummy variables, since more than 75%n of the companies have a zero-score on TCSR (see table 8).

Value of TCSR	Frequency	Percentage	Cumumaltive Percentage
0	1431	92.03	92.03
1	85	5.47	97.49
2	26	1.67	99.16
3	7	0.45	99.61
4	6	0.39	100

Table 8 Values of TCSR

I, therefore, decided to create dummy variables dependent on the firms TCSR score. Including all dummy variables in one regression except for the dummy variable that indicates a TCSR score of zero, allows to compare the effect that having a TSCR score of x has compared to having a score of zero. F-tests are then employed to detect significant differences between the coefficients for the dummy variables. Only if the differences between two preceding values for TCSR increase significantly with the value of TCSR, I can reject hypothesis 6.

Values of TCSR and stock performance during crisis	(i)	(ii)	(iii)	(iv)	(v)	(vi)
TCSR1	0.0131	0.0006	0.0007	0.0001	-0.0071	-0.0087
TCSR2	0.0432	0.0339	0.0102	0.0304	0.0043	0.0022
TCSR3	0.064	0.0574	0.0109	0.019	-0.029	-0.0273
TCSR4	0.014	0.0178	0.0354	0.0323	0.0685	0.0676
SCSR	Yes	Yes	Yes	Yes	Yes	Yes
Factor loadings		Yes	Yes			Yes
Firm characteristics				Yes	Yes	Yes
Industry dummies	No	No	Yes	No	Yes	Yes
N	1555	1555	1555	1555	1555	1555
Adjusted R-squared	0.005	0.0276	0.1275	0.0657	0.1671	0.1715
F-value Test						
TCSR1=TCSR2	0.26	0.33	0.03	0.28	0.04	0.04
F-value Test						
TCSR2=TCSR3	0.03	0.05	0	0.01	0.1	0.08
F-value Test						
TCSR3=TCSR4	0.12	0.07	0.03	0.01	0.51	0.48

Table 9 Values of TCSR and stock performance during crisis

Table 9 shows that, controlling for the effect of SCSR on firm performance, increases in the score of TCSR do not have a significant effect on firm performance. Testing the marginal effect of increasing TCSR by one unit does not reveal a significant effect on any given level of TCSR. The same applies to the relationship between TCSR and changes in operating return on assets during the crisis of trust (see appendix 7). Therefore, I cannot reject hypothesis H7.

6.9 Robustness tests

Surprisingly, the regressions do not show a significant effect of any kind of CSR activities on firm performance during the crisis of trust. In the following, I test the robustness of the results. Due to the limited scope of this masters' thesis, I only test the robustness of hypotheses H2-H6. The four regression models that I use are similar to the regression models (i), (iii), (v) and (vi) from the main analysis presented in tables 4-7 (henceforth "baseline regressions"). Model (i) examines the relationship between the dependent variable and the independent variables of interest. Model (ii) also controls for factor loadings, model (iii) for firm characteristics, and model (iv) features the full set of control variables. Model (ii), (iii) and (iv) all control for industry.

The first robustness tests examine whether the results hold for different times of performance measurement. Including the entire month of March in the crisis period is problematic as the stock market started recovering as early as March 6th and so might have trust towards companies, potentially lowering the stock market gains associated with CSR. In the same vein, the shock of trust may have occurred earlier than September 15th, 2008, as Lins et al. (2017) suggest. The Edelman trust barometer measures trust on an annual basis which does not allow to determine the exact beginning and end of a crisis of trust. If the unexpected decline in trust happened earlier, an increased value of trust building and -maintaining firm properties would

be reflected in the stock price earlier than 15.09.2008. To address these concerns, I ran robustness tests on the relationship between CSR, SCSR, TCSR and firm performance in the time periods 01.08.2008-31.03.2009 and 15.09.2008-06.03.2009 (appendix 8) finding no significant difference to the estimated effects in the baseline regressions.

An additional concern is that firms anticipated the crisis and adjusted their resource stocks accordingly before year-end 2007. Consequently, I reexamined the baseline models controlling for firm characteristics measured year-end 2006 or as close to the year-end as possible (see appendix 9). Again, I do not find a significant effect of CSR, TCSR, SCSR or of the interaction term on firm performance.

Next, I add firms' scores in the domains "Product Quality and Safety" and "Corporate Governance" to the models. Recent studies (Lins et al., 2013; and Nguyen et al., 2015) found that better-governed companies performed better during the Great Recession. Furthermore, firms' policies in the domains product and governance may have trust building properties. If they are correlated with my measures for CSR, SCSR and TCSR, the estimated effect on firm performance may proxy for product and/or governance and my analyzes suffer from an omitted-variable bias. I construct measures for product and governance by summing up the strengths reported by KLD for each domain. Appendix 10 shows that my results are robust to the inclusion of proxies for firms' policies in the domains "Product Quality and Safety" and "Corporate Governance".

The results are in stark contrast to Lins et al.'s (2017) findings. To make the findings of my thesis more comparable, I check whether controlling for growth had an effect on my results. In order to do so, I run regressions excluding the variable that Lins et al.'s regression models did not feature. The robustness check yields results similar to those reported for the baseline regressions (appendix 11). The adjusted R-squared decreases slightly indicating that controlling for pre-recession growth increases the explanatory power of the models, even though most regressions estimate an insignificant effect of firm growth on firm performance.

Before I proceed with robustness tests on the specific effects of SCSR and TCSR, I assess whether removing micro-cap firms from my sample affected the results. Those companies have been removed as they typically have low liquidity, which might impact firm performance during the crisis and outweigh other factors (Ibbotson et al., 2013). I find that the coefficients for CSR, TCSR and SCSR (appendix 12) remain insignificant in the models (ii) to (iv), all of which have a considerably higher explanatory power than model (i). The results are, hence, not sensitive to the inclusion of micro-cap companies.

Furthermore, I investigate the robustness of the specific effects of SCSR and TCSR in three robustness tests. The first robustness test relates to the expected marginally increasing effect of TCSR on firm performance during the crisis. As the number of firms is relatively low for each score of TCSR – as low as 26 for the score of two, 7 for the score of three, and 6 for the score of four –, combining consecutive values of TCSR makes identifying a significant difference between the effect of increasing scores of TCSR more likely. Therefore, I reestimated the regressions combining different values in one dummy variable (see appendix 14). The regressions do not report a significant difference in the relationships between any combination of TCSR values, hence, the results are robust to the choice of values of TCSR chosen for the analysis.

In addition, I address two potential weaknesses of the MSCI KLD stats database, which are both related to the binary rating scheme. The first potential weakness of the KLD ratings has been pointed out by Bansal et al. (2015) who argue that the high share of zero ratings indicates that KLD was unable to uncover the CSR activity of some companies and that zero values may in some instances represent missing ratings rather than zero. Consequently, I reexamined the relationship between CSR, SCSR, and TCSR excluding companies without positive rating on any given CSR strength. The results remain unaffected (see appendix 15).

The second potential weakness relates to the binary rating scheme of KLD. Binary rating schemes can result in a high proportion of zero-scores and skewed distributions with little variation, which applies to the proxy for TCSR in my sample and potentially affects both the internal and external validity of my results. To validate my findings, I use data on philanthropic donations from Asset4 to construct an alternative measure of TCSR. Asset4 annually reports the actual figure of corporate philanthropic giving which allows to construct a much more fine-grained and objective proxy for firm's level of TCSR (computed as total philanthropic giving divided by average assets, reported year-end 2006, and winsorized at the 2nd and 98th percentile). Proxying TCSR with the measure for donation intensity, I find no relationship between TCSR and change in operating return on assets (see appendix 16) but a positive effect on stock performance during the crisis that is significant at $p < 0.05$ for all models (see table 10).

Donations intensity and stock returns in crisis period 15.09.2008- 31.03.2009	(i)	(ii)	(iii)	(iv)
TCSR	11.2894**	17.2415**	15.2557**	17.847**
SCSR	-0.0001	0.0156	0.014	0.0146
Interaction	-0.4764	-1.8384	-1.7261	-2.03
Factor loadings		Yes		Yes
Firm characteristics			Yes	Yes
Industry		Yes	Yes	Yes
N	73	73	73	73
Adjusted R-squared	0.0201	0.2896	0.4407	0.4227

Table 10 TCSR measured as donation intensity and stock returns during crisis

In terms of economic significance, a one standard deviation increase in TCSR is associated with 5.89% (model (i)) to 9.28% (model (iv)) higher stock returns. The results of this robustness test, however, should to be interpreted with caution as the 73 companies for which data on philanthropic giving was available differ considerably from the rest of the sample; On average, their stock price declined less during the crisis (27% versus 38%), their level of SCSR prior to the crisis was considerably higher (4.79 versus 1.12), they grew slower (29% versus 44%) and had relatively little cash holdings (9% versus 18%) (see appendix 17). Since my main regressions found cash holdings to be strongly associated with higher stock returns and since a tightened access to credits was one of the main features of the Great Recession, I suspected those companies with relatively low levels of cash to relocate funds from CSR to other investment opportunities – And that the coefficient on TCSR picks up a credit-effect. To account for this possibility, I controlled for the relative change of TCSR levels from 2006 to 2008 (see table 11). If firms benefitted mainly from relocating TCSR funds to other activities, the coefficient on the change in TCSR levels should be significantly negative and the reported effect of TCSR insignificant.

Donations intensity and stock returns in crisis period, including change in donations	(i)	(ii)	(iii)	(iv)
TCSR	10.8647	20.6624***	14.1537*	19.1561**
Relative change of TCSR	-0.013	0.0149	-0.0402	-0.0406
SCSR	-0.0029	0.0176*	0.01269	0.0125
Interaction	-1.3257	-3.3367**	-2.7442*	-2.3979**
Factor loadings		Yes		Yes
Firm characteristics			Yes	Yes
Industry		Yes	Yes	Yes
N	68	68	68	68
Adjusted R-squared	0.0316	0.2494	0.4212	0.4592

Table 11 TCSR measured as donations intensity, change in TCSR, and stock performance during crisis

Controlling for the change in donation intensity, the coefficient on TCSR is significant at conventional levels in model (ii) and (iv) which is the model with the highest explanatory power, and model (iii) provides very weak evidence for a positive relationship between TCSR and stock performance during the Great Recession. In addition, the results suggest that the

relative change in TCSR, on average 9.04% (see appendix 17), does not affect firm performance. I, therefore, conclude that the effect found in table 10 is in fact CSR related and does not pick up a credit-effect. Interestingly, the interaction term between SCSR and TCSR is significantly negative in models (ii) and (iv), which suggests that SCSR, contrary to my expectation, has a negative moderating effect on the relationship between TCSR and stock performance.

7. Conclusion

The main research question of the thesis at hand has been:

What is the relationship between firms' level of tactical and strategic CSR and firm performance during the Great Recession?

To answer this question, I ran several regressions examining the relationship between firms' level of CSR, SCSR and TCSR activities and firm performance during the Great Recession. In addition, I tested for a moderating effect of SCSR on the relation between TCSR and firm performance, whether the effect of SCSR and TCSR on performance differed in strength, and whether the effect of TCSR on performance increased marginally. The theories covered, for example instrumental stakeholder theory (Jones, 1995; Harrison et al., 2010) and absorptive capacity theory (Tang et al., 2012), suggest that CSR leads to positive profits during normal times. Taking the specifics of each kind of CSR into account, I theorized on the mechanisms underlying a potential outperformance and argued that both SCSR and TCSR contributed to firm performance during crises of trust like the Great Recession. Furthermore, I argued that strategic CSR activities contribute more to firm performance than do tactical initiatives.

In sharp contrast to my expectations and also to studies conducted by Lins et al. (2017) and Amiraslani et al. (2017), I found no significant outperformance stemming from CSR, SCSR, or TCSR levels prior to the crisis in my main analysis. In addition, the results indicate that there was no moderating effect of SCSR or marginally increasing effect of TCSR on firm performance during the Great Recession. Moreover, the results are robust to the inclusion of micro-stocks, the exclusion of firms without positive rating on any CSR strength, the exclusion of growth as control variable, hold for different time periods, and remain unaffected when controlling for performance in additional potential trust maintaining domains of the MSCI KLD stats database. One of the robustness tests, however, yields different results. Using firms' annual donations to construct an alternative, arguably more objective proxy for TCSR activities, I find evidence that TCSR affected stock performance during the recession positively and that

strategic CSR moderated the relationship between TCSR and firm performance negatively. In terms of economic significance, a one standard deviation increase in TCSR was associated with 5-9% higher stock returns. Unfortunately, I was only able to obtain data on philanthropic donations for 73 companies that were significantly different from the rest of the sample, limiting the external validity of these sub-results.

I explain the different results of Lins et al.'s study (2017), my main analysis and the robustness test with the use of different proxies for firms' CSR activities. As stated before, Lins et al.'s measure was flawed as they failed to take the missing convergent validity between MSCI KLD's ratings on CSR strengths and weaknesses into account. In my main analysis I constructed proxies for CSR using only ratings on CSR strengths, addressing the lack of convergent validity. Finally, I used data on firms' total philanthropic donations to construct an alternative measure for firms' TCSR activities in a robustness test. The fact that all three measures lead to different results illustrates that constructing a valid, reliable and accurate measure for firms' CSR activities is the main obstacle for examining the relationship between CSR and performance.

Given the contradicting results from Lins et al.'s study, my main analysis and the robustness test, the research question cannot be answered conclusively with the data available. However, my study makes important contributions to research on the relationship between CSR and profitability. Besides finding evidence for a non-negative relationship between TCSR, SCSR and firm performance in my main analysis and evidence for an outperformance stemming from TCSR in a robustness test, I show that the results of Lins et al. (2017) are not as valid and robust as they had suggested. Not only do I point out that their measure of CSR is flawed, I also show that their main results are sensitive to the time period analyzed and that the positive relationship they found between CSR and operating performance may be explained with industry effects. Furthermore, a theoretical in-depth analysis on the relationship between CSR, SCSR, and TCSR and firm performance during crises of trust has not been performed before by researchers. Further analyses might shed more light onto the relationship between SCSR, TCSR and firm performance during crises of trust.

8. Limitations and Suggestions for Future Research

My analysis has several limitations that need to be acknowledged. First, my regression might suffer from an omitted variable bias. In the natural firm environment, there are various factors that might alter the effect CSR initiatives have on performance. It is crucial to identify and

control for as many of these spurious effects as possible. For two potentially confounding variables that I have identified, namely vertical differentiation and durable goods share (Knudsen, 2011), I could not construct a proxy as no data on those variables is available. This problem, however, is not specific to my analysis but also encountered by other researchers (e.g. Lins et al., 2017, Flammer 2015). To address this issue, scholars could in future studies distribute surveys to companies of interest when a shock of trust hits.

The lack of data on potential confounding variables is accompanied by a lack of accuracy of the data on trust published by Edelman. Edelman measures trust on an annual basis, which does not allow to determine the exact beginning and the end of the crisis of trust. My definition of the crisis of trust rests on the assumption that the Lehman Brothers bankruptcy caused a shock of trust and that rising stock prices in March 2009 indicate that trust in business recovered. I addressed this concern by checking for the robustness of the results for two time periods, yet the actual period of low trust might still differ from the ones that I analyzed. In future studies, surveys could be distributed to stakeholders to examine whether the shock of trust has indeed occurred and to examine which kind of stakeholders have lower trust towards the company after the shock hit.

Furthermore, my study can only be generalized to a limited degree. The analysis is limited to large- and medium-sized companies in the US during only one crisis of trust. My results have a limited validity for small companies, in countries or societies that are vastly different from the US, and for other crisis of trust. Furthermore, the way CSR is implemented is likely to change in the future as the field of CSR is still maturing. Bansal et al. (2015) for example found that firms changed their investments strategy for CSR initiatives significantly during the Great Recession. It may be that in the future both kinds of CSR will be implemented in ways that alters the relationship between TCSR, SCSR and performance. Scholars ought to take this into account when conducting their research.

The largest concern for reliability is the CSR data that I used. While financial and stock data is generally regarded as highly reliable, the CSR data that I used might be inaccurate. There is no universally agreed upon way of evaluating firms' CSR activities, so rating these activities involves a certain degree of subjectivity. In addition, firms are not obliged to report on CSR activities and no binding guidelines on how companies ought to report on their activities exist. Both the lack of uniformity in CSR reports and the subjectivity of the ratings limit the reliability of CSR ratings and my measure of CSR activities is likely to be an imprecise proxy for firms' level of CSR activities. The fact that 92% of the companies in my sample received a zero-rating

on all five dimensions of TCSR, even though most companies make donations of some sort, shows that a) the binary rating scheme of KLD is unable to report subtle differences in CSR activities and b) indicates that KLD might not have obtained all information that they need in order to rate firms' CSR activities. I addressed the limitations of the binary rating scheme by constructing an alternative measure for TCSR using data on firms' annual donations. Firms' philanthropic giving is arguably the most objective proxy for TCSR activities, yet the data was only available for 73 companies that differed significantly from the rest of the sample.

This leaves room for future research using more valid constructs of firms' TCSR and SCSR activities. CSR ratings are nowadays more nuanced, allowing to assess CSR activities more accurately. KLD, for example, rates companies on a scale of AAA-CCC (MSCI ESG Research LCC, 2018) and Thomson Reuters uses letter grades of D- to A+ (Thomson Reuters, 2019), both of which are more likely to detect the strength of CSR programs than MSCI in 2006. When a new crisis of trust occurs, examining the relationship between TCSR, SCSR and firm performance using KLD's or Thomson Reuter's databases is a promising avenue.

A further weakness relates to an underlying assumption of both Lins et al.'s study (2017) and my thesis. We assume that the rating criteria of KLD and stakeholders' evaluation criteria are similar to a sufficient degree. In fact, stakeholders' evaluation of CSR activities depends on several moderating variables as I have elaborated on in chapters 2.4 and 2.5. It is highly unlikely that a binary rating scheme reports the same results as the complex stakeholder-, relationship-, industry-, and company-specific evaluation of CSR activities by stakeholders. Therefore, it would be valuable to examine to which degree KLD's CSR rating reflects the perceptions that stakeholders have about firms' CSR activities.

Furthermore, my analysis limited to performance during the relatively short time-frame of the crisis. A related question is whether SCSR and TCSR affected shareholder value and firm performance in the long-run. It might be that the effect of SCSR and TCSR on firm performance lagged as, for example, the higher trustworthiness allowed firms to sign long-term deals at preferable terms during the crisis. To examine this question, one could regress long-run measures of firm performance (e.g., return on assets, net profit margin, etc.) after the crisis on proxies for SCSR and TCSR. In the same vain, it would be interesting to analyze whether SCSR and TCSR contributed to organizational resilience during the times of crisis, measured for example as time to recovery and severity of loss. Exploring the effect of SCSR and TCSR on severity of loss would also address a potential survivorship bias of my analysis that did not include firms delisted during the crisis period.

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Appendices

Appendix 1: Correlation matrix

*CSR from year-end 2006, stock returns from the period 16.09.2008-31.03.2009, accounting data from year-end 2007, Carhart four factor loading plus momentum factor loading computed over the 60 months period before 16.09.2008, change in operating returns by comparing operating return on asset in period Q4 2008- Q1 2009 and operating return on assets in Q3 2007

	Stock return	Op. Return	CSR	SCSR	TCSR	FFBeta	SMB factor	HML factor	MOM factor	Growth	Size	Profitability	S/T dept	L/T dept	MB value	
Stock return																
Change in operating return	0.2287															
CSR	0.0894	0.02														
SCSR	0.0868	0.03	0.98													
TCSR	0.0683	0.00	0.72	0.58												
FFBeta	-0.0925	-0.18	-0.06	-0.06	-0.03											
SMB factor	-0.0858	0.02	-0.06	-0.07	-0.02	0.27										
HML factor	-0.0721	0.02	-0.19	-0.18	-0.15	-0.30	-0.05									
MOM factor	-0.0773	-0.07	-0.04	-0.04	-0.04	0.21	0.04	-0.17								
Company growth	-0.0309	-0.10	-0.11	-0.12	-0.06	0.11	-0.06	0.01	0.14							
Size	0.0548	0.00	0.52	0.51	0.39	0.00	-0.01	-0.38	-0.07	-0.09						
Profitability	0.1103	-0.12	0.10	0.10	0.07	0.06	-0.02	-0.18	-0.05	0.05	0.24					
Short-term dept	-0.0124	0.08	0.11	0.11	0.10	-0.09	-0.02	-0.05	-0.04	-0.10	0.18	-0.02				
Long-term dept	-0.1197	0.06	-0.04	-0.04	-0.04	-0.08	0.10	-0.06	0.00	-0.01	0.21	-0.14	0.03			
Market-to-book	-0.0011	0.04	-0.03	-0.03	-0.02	-0.06	-0.04	0.10	0.04	-0.03	-0.24	-0.26	-0.03	0.00		
Cash holdings	0.1541	0.02	-0.08	-0.07	-0.07	-0.05	-0.16	0.20	0.15	0.11	-0.45	-0.30	-0.12	-0.30		0.20

Appendix 2: Values of CSR, SCSR, TCSR and their frequencies

Value	CSR		TCSR		SCSR	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
0	799	51.38	1431	92.03	810	52.09
1	364	23.41	85	5.47	369	23.73
2	161	10.35	26	1.67	167	10.74
3	84	5.4	7	0.45	77	4.95
4	39	2.51	6	0.39	41	2.64
5	31	1.99	0	0	34	2.19
6	30	1.93	0	0	25	1.61
7	10	0.64	0	0	11	0.71
8	11	0.71	0	0	9	0.58
9	10	0.64	0	0	4	0.26
10	4	0.26	0	0	2	0.13
11	4	0.26	0	0	4	0.26
12	2	0.13	0	0	1	0.06
13	1	0.06	0	0	0	0
14	2	0.13	0	0	1	0.06
15	1	0.06	0	0	0	0
16	1	0.06	0	0	0	0
18	1	0.06	0	0	0	0

Appendix 3: Descriptive statistics

*CSR from year-end 2006, stock returns from the period 01.07.2007-15.09.2008, accounting data from year-end 2006, Beta, idensynchratic risk, Fama-French three factor loading plus momentum factor loading computed over the 60 months period before 01.07.2007

Variable	Number of observations	Mean	Standard deviation	Min	Max
Stock return	1568	-0.21	0.33	-0.87	0.86
Change in op. return on assets	1553	0.01	0.02	-0.09	0.07
CSR	1568	1.20	2.04	0.00	18.00
SCSR	1568	1.08	1.74	0.00	14.00
TCSR	1568	0.12	0.46	0.00	4.00
FF Beta	1568	-0.09	0.85	-2.92	3.02
SMB factor loading	1568	0.14	1.36	-4.42	4.10
HML factor loading	1568	0.88	1.15	-1.94	4.81
MOM factor loading	1568	0.94	4.58	-66.99	14.74
Company growth	1568	0.40	0.72	-0.47	4.02
Company Size	1568	7.15	1.57	4.12	11.54
Profitability	1568	0.04	0.13	-0.59	0.31
Short-term debt	1568	0.02	0.05	0.00	0.29
Long-term debt	1568	0.19	0.19	0.00	0.99
Market-to-book value	1568	5.17	10.32	-3.31	16.46
Cash holdings	1568	0.19	0.22	0.00	0.87

Appendix 4: Robustness tests for Lins et al.'s (2017) study

CSR as defined by Lins et al. (2017) and stock returns in time period 15.09.2008-31.03.2009

	(i)	(ii)	(iii)	(iv)	(v)	(vi)
CSR	0.0637***	0.0466***	0.0428**	0.0337*	0.033*	0.0296*
Factor loadings		Yes	Yes			Yes
Firm characteristics				Yes	Yes	Yes
Industry			Yes		Yes	Yes
N	1555	1555	1555	1555	1555	1555

Adjusted R-squared	0.0078	0.0313	0.1314	0.07	0.171	0.175
CSR as defined by Lins et al. (2917) and change in operating return on assets during crisis						
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
CSR	0.0045***	0.0035**	0.0008	0.0045***	0.0004	0.0004
Factor loadings		Yes	Yes			Yes
Firm characteristics				Yes	Yes	Yes
Industry			Yes		Yes	Yes
N	1538	1538	1538	1538	1538	1538
Adjusted R-squared	0.0057	0.042	0.1733	0.0307	0.1835	0.1832

Appendix 5: CSR and operational performance during crisis

CSR and change in operating return on assets from Q32008 to Q42008-Q12009						
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Constant	-0.0078***	-0.0055***	0.0047	-0.0084**	-0.0035	-0.0017
CSR	0.0003	0.0001	0	0.0002	-0.0004	-0.0004
FF Beta		-0.0013	-0.001			-0.0011
SMB factor loading		-0.001*	-0.0004			-0.0003
HML factor loading		0.0014***	0.0007			0.0006
MOM factor loading		-0.0061***	-0.0011			-0.0006
Company growth				-0.0022***	-0.0006	-0.0004
Company Size				0	0.001**	0.001**
Profitability				-0.0169***	-0.0168***	-0.017***
Short-term debt				0.0265**	0.0161	0.0163
Long-term debt				0.0058**	0.0026	0.0026
Market-to-book value				0	0	0
Cash holdings				0.0029	-0.0017	-0.0007
Industry dummies	No	No	Yes	No	Yes	Yes
N	1538	1538	1538	1538	1538	1538
Adjusted R-squared	-0.0001	0.0381	0.1732	0.0248	0.1842	0.184

CSR and sales growth during crisis						
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
CSR	-0.0017	-0.0031	-0.0019	0.0004	0.0015	0.0014
Factor loading		Yes	Yes			Yes
Firm characteristics				Yes	Yes	Yes
Industry dummies			Yes		Yes	Yes
N	1527	1527	1527	1527	1527	1527
Adjusted R-squared	-0.0004	0.0042	0.0712	0.0292	0.099	0.0998

CSR and CSR and change in gross margins during crisis						
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
CSR	0.0243***	0.022***	0.0174**	0.0266***	0.0097	0.0097
Factor loading		Yes	Yes			Yes
Firm characteristics				Yes	Yes	Yes
Industry dummies	No	No	Yes	No	Yes	Yes
N	1528	1528	1528	1528	1528	1528
Adjusted R-squared	0.0057	0.0217	0.1212	0.0112	0.1236	0.1219

CSR and change in capital raising during crisis						
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
CSR	0.0008	0.0011	0.0013	-0.0013	-0.0007	-0.0007
Factor loadings		Yes	Yes			Yes

Firm characteristics				Yes	Yes	Yes
Industry dummies			Yes		Yes	Yes
N	1537	1537	1537	1537	1537	1537
Adjusted R-squared	-0.0002	-0.0008	0.0182	0.0298	0.0454	0.0464

Appendix 6: SCSR, TCSR and operational performance during crisis

SCSR, TCSR and sales growth during crisis	(i)	(ii)	(iii)	(iv)	(v)	(vi)
SCSR	-0.0007	-0.0062	-0.0051	-0.0022	-0.0013	-0.0016
TCSR	-0.0059	0.0358	0.0197	0.0547**	0.035	0.0337
Interaction SCSR#TCSR	0.0077	-0.003	-0.0007	-0.005	-0.0023	-0.0021
4 factors		Yes	Yes			Yes
Firm characteristics				Yes	Yes	Yes
Industry dummies	No	No	Yes	No	Yes	Yes
N	1537	1527	1527	1527	1527	1527
Adjusted R-squared	0.0464	0.0045	0.0707	0.0301	0.099	0.0998
F-value Test SCSR=TCSR	2.71	2.59	0.81	4.31**	1.77	1.67

SCSR, TCSR and sales growth during crisis	(i)	(ii)	(iii)	(iv)	(v)	(vi)
SCSR	0.0276**	0.0252**	0.0151	0.0312**	0.007	0.007
TCSR	0.0326	0.0333	0.0509	0.0541	0.0363	0.0361
Interaction SCSR#TCSR	-0.0034	-0.0036	-0.0028	-0.0064	-0.0016	-0.0016
4 factors		Yes	Yes			Yes
Firm characteristics				Yes	Yes	Yes
Industry dummies	No	No	Yes	No	Yes	Yes
N	1528	1528	1528	1528	1528	1528
Adjusted R-squared	0.0045	0.0205	0.1202	0.0102	0.1225	0.1208
F-value Test SCSR=TCSR	0.01	0.01	0.28	0.11	0.18	0.18

SCSR, TCSR and change in capital rising during crisis	(i)	(ii)	(iii)	(iv)	(v)	(vi)
SCSR	0.0006	0.0009	0.0013	-0.0016	-0.0006	-0.0006
TCSR	0.0058	0.0068	0.0066	-0.0019	0	0.0005
Interaction SCSR#TCSR	-0.0005	-0.0007	-0.0007	0.0002	-0.0001	-0.0002
4 factors		Yes	Yes			Yes
Firm characteristics				Yes	Yes	Yes
Industry dummies	No	No	Yes	No	Yes	Yes
N	1537	1537	1537	1537	1537	1537
Adjusted R-squared	-0.0013	-0.0018	0.0171	0.0285	0.0441	0.0451
F-value Test SCSR=TCSR	0.4	0.49	0.38	0	0.01	0.02

Appendix 7: Values of TCSR and change in operating return on assets during crisis

TCSR values of 1, 2, 3, 4 and change in operating return on assets during crisis	(i)	(ii)	(iii)	(iv)
TCSR1	-0.0007	-0.0016	-0.0021	-0.0022
TCSR2	-0.0029	-0.0015	-0.0022	-0.0022
TCSR3	-0.0046	-0.0035	-0.0029	-0.0032
TCSR4	0.001	0.0051	0.0036	0.0032
SCSR	Yes	Yes	Yes	Yes
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1538	1538	1538	1538
Adjusted R-squared	-0.002	0.1716	0.1716	0.1826
F-value Test TCSR1=TCSR2	0.21	0	0	0
F-value Test TCSR2=TCSR3	0.04	0.06	0.01	0.02
F-value Test TCSR3=TCSR4	0.22	0.61	0.35	0.34

Appendix 8: Robustness time periods

SCSR, TCSR and stock performance in time period 15.09.2008-06.03.2009	(i)	(ii)	(iii)	(iv)
SCSR	0.0135***	0.0071	0.001	0.0008
TCSR	0.0529**	0.0222	0.0137	0.0113
Interaction SCSR#TCSR	-0.0071**	-0.003	-0.0019	-0.0015
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1555	1555	1555	1555
Adjusted R-squared	0.0098	0.1806	0.1911	0.1980
F-value Test SCSR=TCSR	2.26	0.36	0.26	0.18

CSR and stock performance in time period 15.09.2008-06.03.2009	(i)	(ii)	(iii)	(iv)
CSR	0.0112***	0.0058**	0.0007	0.0005
4 factors	Yes	Yes	Yes	Yes
Firm characteristics		Yes		Yes
Industry dummies			Yes	Yes
N	1555	1555	1555	1555
Adjusted R-squared	0.0086	0.1461	0.1920	0.1990

SCSR, TCSR and stock returns in time period 01.08.2008-31.03.2009	(i)	(ii)	(iii)	(iv)
SCSR	0.0146***	0.009*	0.0013	0.0014
TCSR	0.0666**	0.0409	0.026	0.025
Interaction SCSR#TCSR	-0.0074*	-0.0042	-0.002	-0.0021
4 factors	Yes	Yes		
Firm characteristics	Yes		Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes
N	1542	1542	1542	1542
Adjusted R-squared	0.0103	0.1513	0.1707	0.1838
F-value Test SCSR=TCSR	2.74*	1.12	0.68	0.63

CSR and stock returns in time period 01.08.2008-31.03.2009	(i)	(ii)	(iii)	(iv)
CSR	0.014***	0.009***	0.0027	0.0025
4 factors	Yes	Yes	Yes	Yes
Firm characteristics		Yes		Yes
Industry dummies			Yes	Yes
N	1542	1542	1542	1542
Adjusted R-squared	0.0094	0.1517	0.1714	0.1845

Appendix 9: Robustness firm characteristics from year-end 2006

SCSR, TCSR and stock returns during crisis	(i)	(ii)	SCSR, TCSR and change in operating return on assets during crisis	(i)	(ii)
SCSR	0.0008	0.0004	SCSR	-0.0004	-0.0003
TCSR	0.0116	0.0085	TCSR	-0.0015	-0.0015
Interaction SCSR#TCSR	-0.0017	-0.0013	Interaction SCSR#TCSR	0.0002	0.0002
4 factors		Yes	4 factors		Yes
Firm characteristics	Yes	Yes	Firm characteristics	Yes	Yes
Industry dummies	Yes	Yes	Industry dummies	Yes	Yes
N	1564	1564	N	1547	1547
Adjusted R-squared	0.1540	0.1617	Adjusted R-squared	0.1857	0.1874
F-value Test SCSR=TCSR	0.15	0.08	F-value Test SCSR=TCSR	0.25	0.3

CSR and stock returns during crisis	(i)	(ii)	CSR and change in operating return on assets during crisis	(i)	(ii)
CSR	0.0003	0	CSR	-0.0003	-0.0003
4 factors		Yes	4 factors		Yes
Firm characteristics	Yes	Yes	Firm characteristics	Yes	Yes
Industry dummies	Yes	Yes	Industry dummies	Yes	Yes
N	1564	1564	N	1547	1547
Adjusted R-squared	0.1550	0.1628	Adjusted R-squared	0.1866	0.1883

Appendix 10: Robustness domains product and governance

SCSR, TCSR and stock performance during crisis	(i)	(ii)	(iii)	(iv)
SCSR	0.0151***	0.007	0.0001	0
TCSR	0.0525*	0.0194	0.0086	0.0066
Interaction SCSR#TCSR	-0.0069*	-0.0027	-0.0012	-0.0009
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies			Yes	Yes
N	1555	1555	1555	1555
Adjusted R-squared	0.0081	0.1278	0.1669	0.1712
F-value Test SCSR=TCSR	1.67	0.2	0.1	0.06

SCSR, TCSR and change in operating return on assets during crisis	(i)	(ii)	(iii)	(iv)
SCSR	0.0005	-0.0001	-0.0005	-0.0005
TCSR	-0.0009	-0.0018	-0.0023	-0.0023
Interaction SCSR#TCSR	0	0.0003	0.0003	0.0003
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies			Yes	Yes
N	1538	1538	1538	1538
Adjusted R-squared	-0.0023	0.1714	0.1827	0.1824
F-value Test SCSR=TCSR	0.35	0.6	0.67	0.71

CSR and stock returns during crisis	(i)	(ii)	(iii)	(iv)
CSR	0.013***	0.0058*	-0.0001	-0.0001
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies			Yes	Yes
N	1555	1555	1555	1555
Adjusted R-squared	0.0075	0.1287	0.1680	0.1723

CSR and change in operating return on assets during crisis	(i)	(ii)	(iii)	(iv)
CSR	0.0003	0	-0.0004	-0.0004
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies			Yes	Yes
N	1538	1538	1538	1538
Adjusted R-squared	-0.0013	0.1721	0.1834	0.1831

Appendix 11: Robustness exclusion of growth

SCSR, TCSR and stock return during crisis	(i)	(ii)	SCSR, TCSR and change in operating return on assets during crisis	(i)	(ii)
SCSR	0.0007	0.0005	SCSR	-0.0004	-0.0004
TCSR	0.0087	0.0066	TCSR	-0.0022	-0.0023
Interaction SCSR#TCSR	-0.0012	-0.0009	Interaction SCSR#TCSR	0.0003	0.0003
4 factors		Yes	4 factors		Yes
Firm characteristics		Yes	Firm characteristics		Yes
Industry dummies	Yes	Yes	Industry dummies	Yes	Yes
N	1555		N	1538	
Adjusted R-squared	0.1676	0.1721	Adjusted R-squared	0.1838	0.1837
F-value Test SCSR=TCSR	0.08	0.05	F-value Test SCSR=TCSR	0.68	0.75

CSR and stock returns during crisis	(i)	(ii)	CSR and change in operating return on assets during crisis	(i)	(ii)
CSR	0.0004	0.0003	CSR	-0.0003	-0.0004
4 factors		Yes	4 factors		Yes
Firm characteristics		Yes	Firm characteristics		Yes
Industry dummies	Yes	Yes	Industry dummies	Yes	Yes
N	1555	1555	N	1538	
Adjusted R-squared	0.1686	0.1732	Adjusted R-squared	0.1844	0.1843

Appendix 12: Robustness inclusion of micro stocks

SCSR, TCSR and stock return during crisis	(i)	(ii)	(iii)	(iv)
SCSR	0.0129***	0.0059	0.0004	0.0002
TCSR	0.0511*	0.0161	0.0095	0.007
Interaction SCSR#TCSR	-0.0066	-0.0022	-0.001	-0.0007
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1708	1708	1708	1708
Adjusted R-squared	0.0068	0.1200	0.1590	0.1657
F-value Test SCSR=TCSR	1.71	0.13	0.11	0.06

SCSR, TCSR and change in operating return on assets during crisis	(i)	(ii)	(iii)	(iv)
SCSR	0.0002	-0.0002	-0.0004	-0.0004
TCSR	-0.0007	-0.0016	-0.0016	-0.0018

Interaction SCSR#TCSR	0.0001	0.0002	0.0002	0.0002
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1690		1690	1690
Adjusted R-squared	-0.0015	0.1705	0.1792	0.1817
F-value Test SCSR=TCSR	0.17	0.37	0.2700	0.3500

CSR and stock returns during crisis				
	(i)	(ii)	(iii)	(iv)
CSR	0.0112***	0.0049	0.0006	0.0004
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1708	1708	1708	1708
Adjusted R-squared	0.0064	0.1209	0.1600	0.1667

CSR and change in operating return on assets during crisis				
	(i)	(ii)	(iii)	(iv)
CSR	0.0002	-0.0002	-0.0003	-0.0004
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1690		1690	1690
Adjusted R-squared	-0.0004	0.1712	0	0

Appendix 13: Robustness excluding interaction term

SCSR, TCSR and stock returns during crisis				
	(i)	(ii)	(iii)	(iv)
SCSR	0.0108**	0.0059	-0.0004	-0.0004
TCSR	0.0147	0.005	0.0023	0.0017
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1555	1555	1555	1555
Adjusted R-squared	0.0068	0.1292	0.1685	0.1728

SCSR, TCSR and change in operating returns during crisis, without interaction term				
	(i)	(iv)	(vi)	(vii)
TCSR	0.0005	0	-0.0003	-0.0003
SCSR	-0.0008	-0.0004	-0.0007	-0.0007
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1538	1538	1538	1538
Adjusted R-squared	-0.0003	0.1726	0.1837	0.1835
F-value Test: TCSR=SCSR	0.59	0.08	0.05	0.08

Appendix 14: Robustness values of TCSR and firm performance

Non-zero values of TCSR and stock performance during crisis	(i)	(ii)	(iii)	(iv)
TCSR1234	0.021	0.0035	-0.0045	-0.006
SCSR	Yes	Yes	Yes	Yes
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1555	1555	1555	1555
Adjusted R-squared	0.0067	0.1292	0.1685	0.1729

TCSR values of 1, >1 and stock performance during crisis	(i)	(ii)	(iii)	(iv)
TCSR1	0.0136	0	-0.008	-0.0097
TCSR234	0.0433	0	0.0064	0.0051
SCSR	Yes	Yes	Yes	Yes
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1555	1555	1555	1555
Adjusted R-squared	0.0062	0.1287	0.1680	0.1724
F-value Test TCSR1=TCSR234	0.33	0.07	0.09	0.09

TCSR values of 1, 2, >2 and stock performance during crisis	(i)	(ii)	(iii)	(iv)
TCSR1	0.0136	0.0006	-0.0078	-0.0094
TCSR2	0.0438	0.01	0.0032	0.0012
TCSR34	0.0421	0.0217	0.014	0.0145
SCSR	Yes	Yes	Yes	Yes
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1555	1555	1555	1555
Adjusted R-squared	0.0056	0.1281	0.1674	0.1718
F-value Test TCSR1=TCSR2	0.26	0.03	0.00	0.00
F-value Test TCSR2=TCSR34	0.00	0.02	0.00	0.00

Non-zero values of TCSR and change in operating performance during crisis	(i)	(ii)	(iii)	(iv)
TCSR1234	-0.0013	-0.0015	-0.002	-0.0021
SCSR	Yes	Yes	Yes	Yes
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1538	1538	1538	1538
Adjusted R-squared	-0.0004	0.1728	0.1840	0.1838

TCSR values of 1, >1 and change in operating performance during crisis	(i)	(ii)	(iii)	(iv)
TCSR1	-0.0008	-0.0017	-0.0021	-0.0023
TCSR234	-0.0027	-0.001	-0.0016	-0.0017
SCSR	Yes	Yes	Yes	Yes
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1538	1538	1538	1538
Adjusted R-squared	-0.0009	0.1723	0.1835	0.1833
F-value Test TCSR1=TCSR234	0.22	0.03	0.00	0.02

TCSR values of 1, 2, >2 and change in operating performance during crisis	(i)	(ii)	(iii)	(iv)
TCSR1	-0.0007	-0.0016	-0.0021	-0.0022
TCSR2	-0.003	-0.0016	-0.0022	-0.0022
TCSR34	-0.0022	0.0003	-0.0001	-0.0004
SCSR	Yes	Yes	Yes	Yes
4 factors		Yes		Yes
Firm characteristics			Yes	Yes
Industry dummies		Yes	Yes	Yes
N	1538	1538	1538	1538
Adjusted R-squared	-0.0015	0.1718	0.183	0.1828
TCSR1	-0.0007	-0.0016	-0.0021	-0.0022
TCSR2	-0.003	-0.0016	-0.0022	-0.0022

Appendix 15: Robustness excluding firms with zero-rating on CSR

SCSR, TCSR and stock returns during crisis	(i)	(ii)	(iii)	(iv)
SCSR	0.0045	0.0173	-0.0009	-0.0021
TCSR	0.0406	0.0038	-0.0057	-0.0055
Interaction	-0.0036	0	0	0
Factor loadings		Yes		Yes
Firm characteristics			Yes	Yes
Industry		Yes	Yes	Yes
N	756	756	756	756
Adjusted R-squared	0.0011	0.1296	0.2004	0.2007
F-value Test SCSR=TCSR	1.66	0.23	0.03	0.02

SCSR, TCSR and change in operating return on assets during crisis	(i)	(ii)	(iii)	(iv)
SCSR	0.0002	-0.0004	-0.0003	-0.0004
TCSR	-0.0013	-0.0002	-0.0005	-0.0003
Interaction	0.0001	0	0.0001	0
Factor loadings		Yes		Yes
Firm characteristics			Yes	Yes
Industry		Yes	Yes	Yes
N	748	748	748	748
Adjusted R-squared	-0.0033	0.232	0.2581	0.2596
F-value Test SCSR=TCSR	0.45	0.01	0.01	0

CSR and stock returns during crisis	(i)	(ii)	(iii)	(iv)
CSR	0.0058	0.0044	-0.0033	-0.0031
Factor loadings		Yes		Yes
Firm characteristics			Yes	Yes
Industry		Yes	Yes	Yes
N	756	756	756	756
Adjusted R-squared	0.0016	0.1319	0.2024	0.2028

CSR and change in operating return on assets during crisis	(i)	(ii)	(iii)	(iv)
CSR	0.0001	-0.0001	-0.0002	-0.0002
Factor loadings		Yes		Yes
Firm characteristics			Yes	Yes
Industry		Yes	Yes	Yes
N	748	748	748	748

Adjusted R-squared	-0.0013	0.234	0.2602	0.2617
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Appendix 16: Robustness annual donations as proxy for TCSR

Donations intensity and change in operating return on assets during crisis	(i)	(ii)	(iii)	(iv)
TCSR	-0.0133	0.765	1.2876	1.2651
SCSR	0.0015	0.0003	0.0007	-0.0013
Interaction	0.0637	0.0214	-0.1458	-0.1019
Factor loadings		Yes		Yes
Firm characteristics			Yes	Yes
Industry		Yes	Yes	Yes
N	72	72	72	72
Adjusted R-squared	0.0019	0.2149	0.2937	0.327

Donations intensity and stock returns in crisis period, including change in donations	(i)	(ii)	(iii)	(iv)
TCSR	10.3571	19.7981***	10.4354	13.58
Change of TCSR	-0.0567	0.018	-0.0473	-0.0352
SCSR	-0.0045	0.0109	0.0131	0.0139
Interaction	-1.3555	-2.9362*	-2.0443	-2.2753
Factor loadings		Yes		Yes
Firm characteristics			Yes	Yes
Industry		Yes	Yes	Yes
N	66	66	66	66
Adjusted R-squared	0.0403	0.2834	0.4358	0.4592

Appendix 17: Descriptive Statistics of Companies reporting donations vs sample from main regression

(Value from main analysis/value from robustness test)

Variable	Number of observations	Mean	Standard deviation	Min	Max
Stock return	73/1555	-0.38/-0.27	0.26/0.20	-0.91/0.64	0.49/0.49
Change in op. return on assets	72/1538	-0.01/-0.01	0.02/0.03	-0.13/-0.13	0.05/0.02
SCSR	73/1555	1.21/4.79	2.05/3.22	0.00/0.00	18/14
TCSR	73	0.32%	0.52%	0.01%	2.29%
Change in donations Intensity	68	9.04%	57.38%	-77.37%	226%
FF Beta	73/1555	0.00/0.92	0.72/0.47	-1.83/0.05	2.26/2.21
SMB factor loading	73/1555	0.09/0.06	1.11/0.85	-3.32/-1.34	3.79/3.47
HML factor loading	73/1555	0.74/-0.16	1.02/0.62	-1.91/-2.41	3.90/1.19
MOM factor loading	73/1555	1.13/0.00	0.68/0.53	-0.49/-1.17	3.15/1.62
Company growth	73/1555	0.44/0.29	0.81/0.60	-0.47/-0.16	4.85/4.95
Company Size	73/1555	7.27/9.96	1.55/1.12	4.33/6.13	11.39/11.39
Profitability	73/1555	0.04/0.08	0.12/0.07	-0.54/-0.27	0.29/0.29
Short-term debt	73/1555	0.03/0.05	0.05/0.05	0.00/0.00	0.28/0.25
Long-term debt	73/1555	0.20/0.20	0.21/0.13	0.00/0.00	1.03/0.77
Market-to-book value	73/1555	5.54/3.60	9.20/6.25	-3.92/0.05	52.65/42.93
Cash holdings	73/1555	0.18/0.09	0.21/0.10	0.00/0.02	0.89/0.43