DISS. ETH No. 23248

# SUSTAINABILITY AND RISK: THE ROLE OF STAKEHOLDERS

A dissertation submitted to attain the degree of

DOCTOR OF SCIENCES of ETH ZÜRICH
(Dr. sc. ETH Zürich)

presented by:
Julian Kölbel
M.Sc., University of Oxford
*October 19, 1984
Citizen of Germany

Accepted upon recommendation of:
Examiner: Prof. Dr. Volker Hoffmann
Co-examiner: Prof. Dr. Lucas Bretschger

Zurich, 2016

*“Publicity is justly commended as a remedy for social and industrial diseases. Sunlight is said to be the best of disinfectants; electric light the most efficient policeman.”*

*Louis D. Brandeis, 1933, in Other People‘s Money*

# Acknowledgements

The four years during which I worked on this dissertation were a wonderful intellectual journey. I am proud that I have reached my destination, I have learned many things on the way, and I am excited for the future. While the journey does not end here, it is a good opportunity to pause and reflect. As I look back from this point, I see many people who have been with me on this adventure, have guided my footsteps, helped me to overcome obstacles, and eventually brought me here. So I want to acknowledge the enormous support, help, and love that I have received and thank everyone who accompanied me during these four years.

Volker, thank you for giving me the opportunity to be part of SusTec. Thank you for your unflinching support in all important matters of work and life, your invaluable advice, and your kind appreciation and care. You were responsible for setting the overall mood of this journey in so many ways, you basically composed the background music. It is an up-beat and sophisticated sound that I enjoyed from the very first day.

Timo, thank you for advising my research and for guiding me through the academic jungle. Throughout countless conversations, projects, paper drafts, revisions and redrafts, conference trips and more, you never failed to see the forest for the trees, and I learned many things from you. But most of all, I learned that I can rely on you, and that there is only one proper place to discuss matters of importance.

Everyone in the office, thank you for giving me a hand whenever I needed it, and for spicing up this time with inspiration, humor, and enthusiasm. Many of your ideas and comments have shaped this dissertation, and all of you have made my days in one way or another. I never ever had to walk alone, because even after midnight I could be sure that one of you would wander the hallways of J-floor. I am so lucky to be part of this pack, so high five to all of you.

Leo, Philip, Josefine, Cedric, Etienne, and Daniel, thank you for writing your theses with me. With some of you I descended into the very deepest caves and tunnels of scientific analysis, where no one else would dare to follow. Together, we discovered some valuable gemstones deep down there. I hope you look back on our time together as proudly as I do.

Philipp, thank you for being a great friend and research partner. Without RepRisk this thesis would not exist, but more importantly, without you I would never have embarked on it. I also would like to thank the entire RepRisk team for doing a great job, and for letting me hitchhike on your excellent data.

Ryan and Didier, thank you for letting me dive into this area of research very early on. You have sparked my fascination for finance, and it has taken me.

Florian and Tilmann, my buddies, thank you for going to lunch with me every Wednesday. The weekly pick nick with you was never far away and provided essential nourishment.

My dear friends, close and far, thank you for sharing good and bad times with me. Thanks to you, this journey here is just one of many great adventures.

Hanna, Benni, Bea, and Gerhard, thank you for being my family. No journey is thinkable without you, as you taught me how to walk.

And finally, Wafa and Eva, thank you for being with me. Your love is the air I breathe. Your presence is the sun that warms me.

# Table of Contents

# Abstract

The world is facing serious sustainability issues, such as climate change, food crises, and financial system instability. While the innovative capacity of firms is urgently needed to address such challenges, many sustainability issues are also driven by negative impacts of firm activity. Such negative impacts occur most often in situations where markets fail to produce sustainable outcomes and governments are unable or unwilling to act. In these situations, a firm's stakeholders emerge as important actors who can sanction negative impacts. On the one hand, stakeholder sanctions can severely damage a firm's financial performance. On the other hand, not all negative impacts result in meaningful stakeholder sanctions. Therefore, this dissertation adopts a risk management perspective and investigates when and how stakeholders translate a firm's negative impacts on the social and natural environment into firm risk.

This question is addressed in three closely related studies. The first study examines the motivations of stakeholders to take action in response to negative impacts, the second study evaluates the effect of stakeholder criticism in the media on firm risk, and the third study investigates the influence of legal tradition and culture on the translation of negative impacts into firm risk. Empirically, the three studies cover a broad range of negative social and environmental impacts, the mobilizing effect of the media, the role of rating agencies, and the consequences for firm risk, specifically credit risk. All three studies test their theoretical claims quantitatively in econometric panel regressions.

The dissertation offers three major contributions: First, that stakeholders do not necessarily take action against the firms with the highest negative impacts or the ones that are most well-known. The firms with the highest likelihood of being targeted are those that can be criticized for a wide variety of negative impacts, because this allows stakeholders to mobilize the support of a wide variety of constituencies. This expands the literature on stakeholder strategies by showing that not only expectations about effectiveness, but also expectations about mobilization influence the targeting strategy of stakeholders.

Second, stakeholder criticism of a firm's negative impacts in the media leads to a substantial increase of firm risk. The reason is publicity, through which the normally diverging interests within a firm's stakeholder network can suddenly converge and result in potentially severe collective stakeholder sanctions. The existing literature on corporate social responsibility (CSR) has established that by "doing good", firms can mitigate the impact of stakeholder sanctions. This study explains how "doing bad" generates the risk of stakeholder sanctions, which illuminates an important source of firm risk and provides a vital basis for risk management.

Third, the risk mitigating effect of CSR is moderated by a firm's legal and cultural context. The greater the institutional differences between the origin of the rating agency and the origin of the rated firm, the smaller is the risk mitigating effect. Contrary to the increasingly global discourse on CSR, the study highlights that CSR rating agencies interpret and measure CSR in a context specific way. Integrating this insight into the analysis reveals that also the risk mitigating effect of CSR is context dependent.

The overarching implication of these studies is that stakeholders and a free press together are so influential that they are able to tilt the risk profile of large firms. Stakeholders have the power to confront managers with the negative impacts their firms have caused, by translating them into firm risk. For managers, the studies hold three important lessons about how to deal with this risk. First and foremost, managers should focus on getting the basics right by operating in a way that minimizes negative impacts wherever possible as this also avoids media attention to such impacts. Second, also a good operational track record should be combined with precise knowledge of not only stakeholder demands, but also stakeholders' underlying aims, in order to avoid being targeted for reasons other than negative impacts. Third, CSR can complement the risk management strategy, yet the exact content of a CSR policy should be carefully adapted to the local context and stakeholder aims. Taken together, managers should understand when and how their firm's negative impacts on the social and natural environment are translated into firm risk, in order to respond not with off-the-shelve CSR standards, but with a tailored and effective risk management strategy.

# Zusammenfassung

Die Welt ist mit grossen Nachhaltigkeitsproblemen konfrontiert, wie zum Beispiel dem Klimawandel, Nahrungsmittelknappheit, und der Instabilität des Finanzsystems. Die Innovationskraft von Firmen wird dringend benötigt, um diese Probleme zu bewältigen. Zugleich werden jedoch viele Nachhaltigkeitsprobleme durch negative Auswirkungen unternehmerischer Aktivität ausgelöst. Solche negativen Auswirkungen treten vor allem in Situationen auf, in denen Märkte keine nachhaltigen Ergebnisse produzieren, und Regierungen nicht fähig oder willens sind einzugreifen. In diesen Situationen sind Stakeholder wichtige Akteure, die die negativen Auswirkungen einer Firma sanktionieren können. Stakeholder-Sanktionen können das finanzielle Ergebnis einer Firma gefährden. Jedoch längst nicht jede negative Auswirkung einer Firma resultiert in bedeutsamen Stakeholder-Sanktionen. Aus diesem Grund untersucht die vorliegende Dissertation folgende Frage: Unter welchen Umständen und auf welche Art und Weise wandeln Stakeholder die negativen Auswirkungen von Firmen auf ihre soziale und ökologische Umwelt in ein Firmenrisiko um?

Diese Frage wird in drei eng verbundenen Studien behandelt. Die erste Studie analysiert die Beweggründe von Stakeholdern auf negative Auswirkungen von Firmen zu reagieren, die zweite Studie schätzt den Effekt von Stakeholder Kritik in den Medien auf das Firmenrisiko ab, und die dritte Studie untersucht den Einfluss der Rechtstradition und der nationalen Kultur auf die Umwandlung von negativen Auswirkungen in ein Firmenrisiko. Empirisch befassen sich die drei Studien mit einem breiten Spektrum negativer Auswirkungen auf die soziale und ökologische Umwelt, mit der Mobilisationskraft der Medien, mit der Rolle von Ratingagenturen, und mit den Konsequenzen für das Firmenrisiko, insbesondere das Kreditrisiko. Alle drei Studien belegen ihre theoretischen Aussagen quantitativ mit ökonometrischen Panel-Regressionen.

Die Dissertation erbringt drei wesentliche Beiträge: Erstens, gehen Stakeholder nicht notwendigerweise gegen diejenigen Firmen vor, die die stärksten negativen Auswirkungen verursachen oder am bekanntesten sind. Es sind jene Firmen am ehesten gefährdet, bei denen Stakeholder eine breite Vielfalt von negativen Auswirkungen kritisieren können, da dies erlaubt, die Unterstützung einer breiten Vielfalt von Interessensgruppen zu mobilisieren. Dies erweitert die Literatur, die sich mit den Stakeholder-Strategien befasst, um die Einsicht, dass nicht nur die erwartete Effektivität der Aktion, sondern auch die erwartete Mobilisierung als Folge der Aktion bei Stakeholdern die strategische Auswahl eines Zieles beeinflusst.

Zweitens, gelangt Kritik an den negativen Auswirkungen von Firmen in die Medien, zieht dies eine bedeutsame Steigerung des Firmenrisikos nach sich. Der Grund ist, dass die normalerweise

divergierenden Interessen verschiedener Stakeholder im Stakeholdernetzwerk einer Firma durch ein gesteigertes öffentliches Bewusstsein der negativen Auswirkungen einer Firma plötzlich konvergieren können. Auf dieser Grundlage können folgenschwere, kollektive Stakeholder-Sanktionen entstehen. Die bestehende Literatur zum Thema unternehmerische Sozialverantwortlichkeit hat gezeigt, dass verantwortliches Handeln die Wucht solcher Sanktionen mildern kann. Diese Studie fügt hinzu, dass unverantwortliches Handeln das Risiko von Stakeholder-Sanktionen erst entstehen lässt. Dies liefert eine wichtige Grundlage für das Risikomanagement, weil es eine der wesentlichen Ursache des Risikos näher beleuchtet.

Drittens, übt der legale und kulturelle Kontext einer Firma einen Einfluss auf den risikovermindernden Effekt der unternehmerischen Sozialverantwortlichkeit aus. Je grösser die institutionellen Unterschiede zwischen der Herkunft der Firma und der Herkunft der Ratingagentur sind, desto geringer wird der Effekt. Im Gegensatz zum zunehmend globalen Diskurs über unternehmerische Sozialverantwortlichkeit, hebt diese Studie hervor, dass sogar spezialisierte Ratingagenturen die unternehmerische Sozialverantwortlichkeit auf kontext-spezifische Weise interpretieren und messen. Die Studie zeigt, dass durch die Integration dieses Sachverhaltes in die Analyse auch der risikovermindernde Effekt der unternehmerischen Sozialverantwortlichkeit kontext-spezifisch wird.

Die zentrale Aussage dieser Dissertation ist, dass Stakeholder zusammen mit einer freien Presse genügend Einfluss haben, um das Risikoprofil grosser Firmen zu verändern. Stakeholder können Manager mit den negativen Auswirkungen ihrer Firma konfrontieren, indem sie diese Auswirkungen in ein Firmenrisiko umwandeln. Für Manager bieten die Studien drei wichtige Ansätze, um ein solches Risiko zu bewältigen. Erstens sollten Manager sich darauf fokussieren, das Kerngeschäft so zu betreiben, dass negative Auswirkungen konsequent vermieden werden, da so auch Medienberichterstattung über negative Auswirkungen minimiert wird. Zweitens, auch ein guter operativer Leistungsausweis sollte mit einem präzisen Verständnis der Forderungen, und der zugrundeliegenden Ziele von Stakeholdern gekoppelt werden, um nicht trotz guter Leistungen dennoch zur Zielscheibe zu werden. Drittens, unternehmerische Sozialverantwortlichkeit kann diese Risikomanagementstrategie ergänzen, allerdings muss der genaue Inhalt einer solchen unternehmerischen Sozialverantwortlichkeit dem lokalen Kontext und den Bedürfnissen der Stakeholder angepasst sein. In Summe sollten Manager verstehen wann und wie die negativen Auswirkungen ihrer Firmen auf die soziale und ökologische Umwelt in Firmenrisiko umgewandelt werden, um Nachhaltigkeitsproblemen nicht mit vorgefertigten Konzepten, sondern mit einer massgeschneiderten und effektiven Strategie zu begegnen.

# Motivation

Sustainability, from a corporate perspective, is in many ways a matter of risk management. The global risk map of the world economic forum (WEF), for example, has named a range of sustainability-related issues as key risks of our time. These include climate change, water crises, and ecosystem collapse. On the social side, social instability and food crises are highlighted as potent sources of risk that need to be on the radar screens of business leaders (WEF, 2015). Also scientists from various disciplines, studying the conditions and dynamics of the social and natural environment have warned that climate change, biodiversity loss, rising inequality and other trends will have far reaching effects not only on societies, but also on firms (IPCC, 2014; Rockström *et al.*, 2009; Stern, 2007; Whiteman, Hope, and Wadhams, 2013).

In the context of sustainability, firm risk is a key variable of interest for managers, because sustainability issues confront firms with the dynamics of highly complex natural and social systems that extend far beyond the normal market and regulation environment firms are used to operate in. The behavior of these larger systems is very difficult to predict, which leads to uncertainty about a firm's future performance, and even its future existence. The solution, from a managerial forward-looking perspective, is to analyze the sources and extent of uncertainty and to use the tools of risk analysis and management to inform business decisions.

However, while being exposed to sustainability-related risks, the business community also bears responsibility for many of the sustainability issues the world is facing. Taking the example of greenhouse gas emissions and climate change, nearly two thirds of accumulated global greenhouse gas emissions since the beginning of the industrial revolution can be attributed to just 90 firms (Heede, 2014). Firms also contribute to a range of serious sustainability issues through the release of dangerous substances (Schwarzman and Wilson, 2009), overexploitation of natural resources (Jackson *et al.*, 2001), dangerous working conditions and accidents (e.g. He and Song, 2012), marketing of unhealthy products such as sugar and tobacco (Lustig, Schmidt, and Brindis, 2012; Peto *et al.*, 1992), and involvement in corruption (Misangyi, Weaver, and Elms, 2008).

Consequently, firms both cause negative impacts that contribute to sustainability issues, and are exposed to risks as a result of sustainability issues. This two-way relationship immediately suggests a feedback loop where the higher a firm's risk related to a certain sustainability issue, the more the firm would reduce negative impacts that are exacerbating that sustainability issue. However, this feedback loop is not functioning in a straightforward fashion, for two main reasons. First, many negative impacts of firms are externalities, as for example carbon

emissions, meaning that their consequences are not directly borne by those firms that caused the emissions. Second, there is a time lag associated with many sustainability issues, meaning that the consequences lie too far in the future to be considered within the usual management time horizon.

As a result of this "broken feedback loop" most of the risks that the world economic forum has identified for firms are not emanating directly from sustainability issues themselves. Even the relatively direct consequences of overfishing on the fishing industry, for example, are felt with a long delay, and not necessarily by those who engaged in overfishing (Jackson *et al.*, 2001). In most cases, the source of firm risk lies not in the sustainability issue itself, but in societal reactions to the sustainability issue. Consequently, risk management in the context of sustainability should begin with analyzing the dynamics of these societal reactions to sustainability issues.

One typical societal reaction to firms causing sustainability issues is governmental regulation. It can be very effective in reducing negative impacts, yet is naturally confined in its reach to national borders and thus often circumvented by firms that operate internationally. Another common response is the development of superior technological alternatives that have lower negative impacts. Such technological revolutions have the potential to transform industries and terminate firms with negative impacts in the process. However, technological revolutions are not always feasible and usually require a lengthy gestation period.

A third kind of societal response, and the focus of this dissertation, are stakeholder reactions to sustainability issues. Stakeholders are individuals and groups that have some kind of stake in the firm, and who need to cooperate in order for the firm to work. Stakeholder reactions can take many forms, such as complaints, protests, activism, legal prosecution, lobbying and boycotting. Stakeholder reactions are less formal than the other types of societal response, yet they are important because in contrast to governmental regulation, they work across national borders and in contrast to technological change, they can take place instantly. In addition, stakeholder reactions often pave the road for more formal societal responses, such as new government regulation or technological change. Despite stakeholder reactions being informal and preliminary, landmark cases such as the sweatshop campaigns against Nike (Wokutch, 2001) demonstrate that stakeholder reactions can inflict serious damage on firms and often mark the beginning of broader changes to come.

In terms of analysis, firm risk remains at the center of a manager's interest, also when the focus is on stakeholder reactions. Given any sustainability issue, it is difficult to predict, what the stakeholder reaction will be and whether stakeholders will react at all. In hindsight, it is trivial

to chart why stakeholders acted and the consequences a certain stakeholder reaction has had. Yet looking forward, the emergence and forcefulness of stakeholder reactions is highly uncertain. Therefore, keeping with a risk management perspective on sustainability, business strategists should strive to understand how stakeholders will react to their firm's negative impacts and to estimate how possible reactions affect their firm's risk. In order to work towards such an understanding, this dissertation follows the guiding research question: How and when do stakeholders translate a firm's negative impacts on the social and natural environment into firm risk?

# Dissertation Overview

This chapter provides a general overview of the dissertation's content and how its three individual manuscripts relate to each other. In the following, I will present a research framework that contains the key building blocks of the dissertation, indicate where the three dissertation papers can be located within this framework, and demarcate dissertation's scope.

## Research framework

The research framework is shown in Figure 1. It depicts an idealized relationship between the natural and social environment and firms, with stakeholders as the connecting element in the middle. While it represents a causal loop as a whole, the emphasis is on the antecedents of firm risk, therefore it begins on the left with the natural and social environment where negative impacts take place and illustrates how these provoke stakeholder reactions, which in turn create risks for the firm. The loop is closed by the firm's negative impacts on the natural and social environment. The boxes show the three actors in regular type font as well as the key variable of interest characterizing the actors in italics. The arrows indicate the relationships of interest as well as the direction in which one actor affects another.

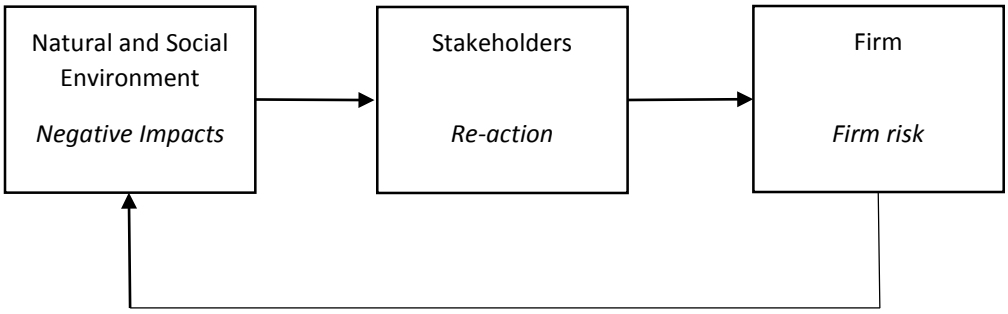



Figure 1: Research Framework

The starting point are negative impacts on the natural and social environment, such as environmental pollution of air, water, and soil on the environmental side, as well as obesity and diabetes, or discriminating wages on the social side. As outlined in the introduction, the emphasis is on negative impacts that are not, or at least not currently regulated by market forces or governmental regulation. These are typically externalities or distributional conflicts that cause debate and controversy among stakeholders (Heal, 2005). It is characteristic that there is controversy about the extent and the relevance of such negative environmental impacts. In the dissertation both actually measured negative impacts, as well as claims about negative impacts are investigated.

The mechanism that is central for this dissertation is the reaction of the firm's stakeholders. Stakeholders are groups and individuals who can affect, or are affected by, the strategic outcomes of a firm (Freeman, 1984). This includes the firm's employees, customers, financiers, and suppliers, as well as local communities, the media, and nongovernmental organizations. Stakeholders who take issue with a firm's negative impacts may re-act, and take action in order to affect the firm. Stakeholders might react, because they are themselves directly and materially affected by the firm's negative impacts, but also because they are morally concerned about them. Stakeholders can then take action in a variety of ways such as denying support and resources to the firm, spreading criticism about the firm in the media, or lobbying the government to take action against the firm. By doing so, stakeholders create the central link between the natural and social environment and the firm.

As the final step, stakeholder reactions create firm risk. They create risk, because from a managerial perspective that looks forward into the future, there is always uncertainty about whether, when, and how stakeholders will react and what the consequences for the firm will be. In order to inform managerial decision-making, this forward looking perspective on firm risk is chosen. Firm risk is defined as the *ex ante* uncertainty of a firm's future cash flows being below expectations (Ruefli, Collins, and Lacugna, 1999) and it is operationalized throughout the dissertation as credit risk.

Taken together, the framework in Figure 1 forms a feedback loop that hinges centrally on the reaction and action of stakeholders, which is the focus of this dissertation.

## Overview of Papers

This dissertation follows the cumulative model and consists of three papers, which are listed in Table 1. This section presents a very basic description of the papers, in order to indicate where they are located within the general research framework. This description is primarily for the benefit of orientation, as the following sections then provide the theoretical background of the dissertation and describe the research objectives and contributions of the individual papers in detail.

Table 1: List of dissertation papers

| # | Title | Authors | Status |
|---|---|---|---|
| 1 | Round up the usual suspects! What motivates activists to criticize corporate misconduct? | Julian Kölbel | Working Paper, targeting *Business & Society* |
| 2 | How media coverage of corporate social irresponsibility increases firm risk | Julian Kölbel, Timo Busch, Leonhardt Jancso | 2nd round of review at the Strategic Management Journal |
| 3 | How risky is your business: The role of institutional context, corporate social responsibility, and rating agencies | Timo Busch, Julian Kölbel | Submitted to the Journal of International Business Studies |

The first paper covers the link between the social and natural environment and stakeholders on the left hand side of the framework. It investigates the motivations of stakeholders to react to firms' negative impacts. The key independent variable is firms' carbon emissions representing negative impacts on the natural environment. The dependent variable is media criticism of carbon emissions, representing stakeholder reactions. The paper examines the strategic aims of activists and makes predictions about firm characteristics that make firms preferred strategic targets for activist criticism. Using a panel regression design, the paper evaluates these

predictions and derives implications for managers on how to avoid criticism. It has currently the status of a working paper, targeting the journal Business & Society as an outlet.

The second paper starts where the first paper left off by focusing on stakeholder reactions and investigating their effect on firm risk, covering the right hand side of the framework. The paper develops theory about the mechanism through which media coverage of negative impacts increases the potential for collective stakeholder sanctions, increases uncertainty, and thus creates firm risk. The key independent variable is media coverage of negative impacts on the social and natural environment, a variable that is very similar to the outcome variable of paper 1. The outcome variable in paper 2 is firm risk, measured as the spread on firms' 5 year credit default swap. The paper evaluates the data using panel regressions and instrumental variable techniques and demonstrates that media coverage of negative impacts on the social and natural environment has significant and substantial effects on firm risk. The paper is currently in the second round of revision at the Strategic Management Journal.

The third paper takes a broader perspective that covers the entire framework, studying the boundary conditions of the general link between negative impacts on the social and natural environment, stakeholder reactions, and firm risk. It explores the moderating effect of the institutional context on this overall link, in particular, it examines the way in which the notion of CSR is interpreted by rating agencies in different institutional contexts. The key independent variable is a CSR rating from the institutional context of Germany, the outcome variable is firm risk based on credit default swaps, analogous to the outcome variable of the second paper. Also this paper makes use of panel regressions and finds that differences in institutional context moderate the relationship between CSR ratings and firm risk, showing that it is important to consider the local context in future studies of this phenomenon. This paper will be submitted to the Global Strategy Journal.

## Scope of Analysis

The research framework presents stakeholder reactions as the central link between the social and natural environment and the firm. Focusing on one aspect of a problem inevitably requires leaving aside other aspects of it, so while the dissertation will deal with stakeholder reactions in great detail, it is important to note the aspects that remain beyond the scope of analysis. There are two aspects in particular, that are also quite relevant to the relationship that is investigated, yet remain beyond the scope of this dissertation: government policy, and innovation.

Government policy plays a very important role in reducing and avoiding firms' negative

impacts. For market failures such as externalities, there are plenty of policy recommendations based on economic theory. Environmental externalities such as pollution can be internalized easily by creating a market for pollution permits, such as the European Union Emission Trading Scheme. The total level of emissions can then be set by a legislative authority, and given functioning law enforcement, what follows is a cost-efficient adaptation of the industry (Perman *et al.*, 2003).

While government policy is in the long run probably the most important instrument to rectify sustainability issues, it is merely considered as a possible end point of stakeholder action in this dissertation. The reason is that the purpose of this dissertation to generate strategic insights about the stakeholder reaction to negative firm impacts. However, once a sound government policy is in place, the issue becomes one of compliance and internal change management rather than strategic stakeholder management. Only as long as government policy is still debated, it is a relevant issue in the context of stakeholder management. For example, in some cases private voluntary regulation schemes were negotiated between firms and stakeholders in order to halt government regulation (King and Lenox, 2000; Mena and Waeger, 2014). Thus, while government policy as such remains outside the scope of the dissertation, the prospect of government policy still plays an important role.

The second aspect is innovation. Innovation by firms plays a key role in mitigating sustainability issues. The invention and diffusion of novel technology that solves or alleviates sustainability issues is a very important impact that might be expected within the presented research framework. In fact, most sustainability issues cannot realistically be solved without substantial innovative progress. A salient example is the worldwide energy demand, which can currently only be met with an enormous consumption of fossil fuels and their associated greenhouse gas emissions (OECD and IEA, 2015). Thus, innovation by firms is a very important positive impact that firms have on their social and natural environment.

Nevertheless, impacts through innovation are not explored specifically in this dissertation. The reason is that the focus is only on negative impacts of firms on their environment. Thus innovative activity is only considered insofar as it has negative impacts on the natural and social environment. For example, genetically modified organisms are a controversial innovative technology that has sparked considerable stakeholder action against it (Doh and Guay, 2006). However, positive impacts and also potential positive stakeholder reactions to firms' innovative activity remain beyond of the scope of this dissertation.

# Theoretical Background and Positioning

The general aim of this dissertation is to contribute to the literature on risk management strategy in the context of sustainability. The focus is on understanding how the reaction of stakeholders can translate firms' negative impacts into tangible firm risk. Accordingly, the central body of literature for this dissertation is that of stakeholder theory. In addition, I rely on a stream of literature that has built up around the concept of CSR. In the following, I give a brief introduction into these literatures and highlight the niche in which the research of this dissertation aims to contribute.

## Stakeholder theory

Stakeholder theory is about managing firms. The fundamental tenet of stakeholder theory is that a manager must coordinate several stakeholder groups that all need to come together to create value (Freeman, 1984). Stakeholders are understood as groups and individuals who can affect, or are affected by, the strategic outcomes of a firm. Stakeholders can be classified into primary stakeholders, including customers, employees, shareholders, creditors, suppliers, and regulators, defined as those stakeholders without whom the corporations could not survive (Clarkson, 1995). In addition, there are secondary stakeholders, including communities, activists, the media and others who may be very relevant to the firm's success, but are not engaged in regular transactions with the firms and are not required for its continued existence (Clarkson, 1995). All of these stakeholders have some sort of interest in the firm. The principal issue about stakeholder management is that stakeholder interests are diverse, they may be independent of each other, overlapping, or mutually exclusive (Freeman, 1984; Harrison, Bosse, and Phillips, 2010). In negotiating these different interests and finding workable solutions lies the fundamental challenge of stakeholder management.

While stakeholder theory is often presented as a challenge to the doctrine of shareholder value maximization (Jensen and Meckling, 1976), Edward Freeman, the father of stakeholder theory, made clear that he views to two as rather consistent (Phillips, Freeman, and Wicks, 2003). Shareholder value maximization is accepted as an appropriate objective of the firm (Jensen, 2002), yet it is quite inappropriate in telling managers how to achieve this objective (Phillips *et al.*, 2003). While some supporters, and even more so critics of stakeholder theory have seen in it a moral theory of the firm (Laplume, Sonpar, and Litz, 2008), that justifies corporate expenses and investments on moral grounds, the original emphasis of the theory is to explain how firms can better manage the complex world they are facing, in order to perform better. This has been

emphasized by scholars in using the term instrumental stakeholder theory (Boatright, 2002; Donaldson and Preston, 1995; Hillman and Keim, 2001; Jones, 1995). Also this dissertation is in the tradition of instrumental stakeholder theory.

Stakeholder theory has gained a lot of traction within the management field and is by now an influential and mature theory (Laplume *et al.*, 2008). In recent years, it also seems to be moving from a broad debate influenced strongly by business ethics to the core of strategic management (e.g. Bridoux and Stoelhorst, 2014; Bundy, Shropshire, and Buchholtz, 2012; Harrison *et al.*, 2010; Tang *et al.*, 2015). According to a review by Laplume et al. (2008), stakeholder theory can be structured into the five broad themes of (1) debates on the normative underpinnings of stakeholder theory, (2) identification of the relevant and legitimate stakeholders, (3) the impact of stakeholder management practices on firm performance, (4) firm responses to stakeholder pressures, and (5) stakeholder strategies and actions.

The niche where this dissertation contributes is the latter theme of stakeholder strategies and actions. Research into these is motivated by the rationale that insight into the aims and strategies of stakeholders enables firm managers to better anticipate stakeholder interests and manage more proactively for these stakeholders (Laplume *et al.*, 2008). The current literature has identified various stakeholder influence strategies (Frooman, 1999), including the powerful tool of media pressure, which is further analyzed in this dissertation. In parallel, research in this niche has considered the conditions under which stakeholder groups mobilize (Rowley and Moldoveanu, 2003). I focus specifically on the role of the media for stakeholder mobilization.

## Corporate social responsibility

The literature on CSR is an interdisciplinary debate around the question, whether firms have a responsibility to contribute to society's greater good. One of the oldest references in this regard is a dispute about corporate law between the Harvard law professors Adolf A. Berle and E. Merrick Dodd Jr during the 1930's (Macintosh, 1999). The reality at the time was that a great variety of corporate statutes available in different states of the US allowed managers to do almost anything (Macintosh, 1999). In this context, Adolf A. Berle argued that the managers of corporations should be solely accountable to their shareholders. Dodd argued that they should be held accountable by both their shareholders and by society. While both positions have shaped corporate law in the US and elsewhere, the debate has since continued, and over the years it has attracted the interest of legal scholars, economists, ethicists, psychologists, investors, and management scholars. It is an engaging debate, not only because it concerns a central matter of

economic organization of societies, but also because it relates to deeply held values about what people perceive as fair and appropriate (Laplume *et al.*, 2008).

The fundamental positions in this debate are on the one hand that firms should focus on their responsibility to make profits, as this is the best, and in fact the only legitimate way in which they can further social welfare (Friedman, 1970). It rests firmly in economic and normative theories about the organization of capitalist society (Friedman, 1962). On the other hand, there is a position that firms have a moral obligation to foster society's greater good that comprises, but goes beyond their immediate profit motive (Gibson, 2000). This position rests commonly on moral ethics, extended by legal considerations about the rights and responsibilities that a state should grant to corporations (Macintosh, 1999). An interesting recent outgrowth of this latter position are "B-corps", a novel legal form of incorporation that explicitly requires managers to achieve certain social benefits (Johnson, 2012).

A third camp in this debate, which is the one to which this dissertation belongs, suggests a compromise by arguing that firms often have an incentive to contribute to the greater good, even if it appears to be beyond their immediate profit motive at first sight. In essence, this camp recognizes profit as the main goal of business, but seeks to argue that CSR can be subordinated to this goal, that in fact CSR can be helpful to achieve this goal. To the staunch defenders of the two camps above, this compromise remains unacceptable. Genuine capitalists on the one hand argue that if CSR eventually leads to profits, there is no reason to speak of CSR as it cannot be differentiated from business as usual any more (Karnani, 2011). Ethicists, on the other hand, argue that if CSR is justified through the profit motive, then damaging the larger society would be equally justified if it is profitable (Richardson and Cragg, 2010). Nevertheless, while the compromise camp has not resolved the debate in principle, it has succeeded in convincing business practitioners that CSR is something important. As a result, the practice of CSR has been widely institutionalized (Hoffman, 2001), as the majority of large corporations globally report on their CSR performance and it is widely expected that they provide evidence of their contributions to the greater benefit of society (UN Global Compact - Accenture, 2013).

The overarching research question in the compromise camp is: "does it pay to be good?", and there is a vast body of literature investigating this question. Meta analyses of up to 2200 studies conclude that the majority of studies found a positive relationship between CSR and corporate financial performance (Friede, Busch, and Bassen, 2015; Margolis, Elfenbein, and Walsh, 2009; Orlitzky, Schmidt, and Rynes, 2003). However, despite the large number of studies, this

result provides by no means a conclusive answer, as there remain two very important issues unresolved. First, there is no commonly agreed definition of CSR, and thus it is not surprising that different studies have arrived at different results (Aguinis and Glavas, 2012). A literature review on the topic has found 37 definitions of CSR and closely related concepts such as corporate sustainability (Dahlsrud, 2008). Second, the mechanisms underlying the relationship are not sufficiently understood (Peloza, 2009). A relatively small number of studies has so far seriously attempted to theorize and formally test such mechanisms (e.g. Guenster *et al.*, 2010; Servaes, 2013; Surroca, Tribó, and Waddock, 2010).

Two recent developments in response to these shortcomings have created the niche in which this dissertation aims to contribute. First, several scholars have noted that it is necessary to get rid of a universal definition of CSR (Okoye, 2009; Scherer and Palazzo, 2007). Instead, it is suggested to understand CSR as an "essentially contested concept" that is only defined in rough terms and is renegotiated whenever it comes up. This dissertation makes a point of separating opinions about CSR by different parties, especially the firm's opinion from third party opinions. In addition, this dissertation examines the relevance of the institutional context, in order to examine structural influences on this negotiation process. Second, a strand of the "does it pay to be good" literature has branched off to focus explicitly on firm risk as the outcome variable (Bouslah, Kryzanowski, and M'Zali, 2013; El Ghoul *et al.*, 2011; Godfrey, Merrill, and Hansen, 2009; Godfrey, 2005; Goss and Roberts, 2011; Henisz, Dorobantu, and Nartey, 2013; Koh, Qian, and Wang, 2013; Sharfman and Fernando, 2008). This strand of the literature is attractive because it has so far amassed very consistent and robust findings in support of a negative CSR – Risk relationship. This dissertation is closely oriented towards this strand of the literature.

# Research Objectives

This chapter develops the specific research questions and objectives of the individual papers. For each paper, I first explain how it flows from the general theoretical background. Second, I identify the research gap that the paper is addressing and based on that I motivate the specific objective.

## What motivates activists to criticize corporate misconduct?

In the first paper, I investigate the link between a firm's negative impacts and stakeholder reactions to those. Negative impact is conceptualized as "corporate misconduct" in this paper (Greve, Palmer, and Pozner, 2010). Corporate misconduct includes any impact that is seen as a

transgression of moral norms or as damaging the public interest. In terms of stakeholders, I focus on NGO activists as a special kind of stakeholder. Within the stakeholder theory framework, such activists would be classified as secondary stakeholders, meaning that they do not engage in direct regular economic transactions with the firm, which gives them relatively little power over the firm (Clarkson, 1995). In terms of stakeholder reaction I focus on the stakeholder strategy of "naming and shaming", where activists attempt to pressure firms by exposing whatever they consider to be corporate misconduct to the public (Baron and Diermeier, 2007; Frooman, 1999).

The starting point for this paper is the observation that even though corporate misconduct is often criticized in the media, the occurrence of such criticism varies even if the underlying act of misconduct is the same (Barnett, 2014; Hoffman and Ocasio, 2001). An important source of media criticism of misconduct are activists (Frooman, 1999), so understanding when activists choose to launch media criticism could help explain the variation. The strategic rationale by which activists target a firm has been formally modeled in the literature on private politics (Baron and Diermeier, 2007; Lenox and Eesley, 2009). The models are built on the assumption that activists choose those targets where the chance of affecting change are greatest. Yet, this assumption can be challenged. Literature on social movements suggests that the main concern of activists is mobilizing resources (Rowley and Moldoveanu, 2003).

A number of previous papers have addressed the question: "Which firms are targeted with activist criticism for corporate misconduct?" I revisit this question, but with an emphasis on the underlying aims of activism. The objective is to integrate insights about the aims of activism from the literature on media and communications, private politics, and social movements, into the strategic considerations that guide activist's targeting strategy. This is intended to help to explain, why some firms are criticized for misconduct in the media more than others.

## Does media coverage of corporate social irresponsibility increase firm risk?

In the second paper, I study the mechanism by which stakeholder action creates firm risk. It is a direct continuation of Paper 1, both conceptually and empirically. Conceptually, because it addresses the effect of stakeholder actions on firm risk and thus continues the causal chain suggested in the general research framework towards firm risk. Empirically, because it is focused on media criticism of firm action and uses the dependent variable of Paper 1 as the key independent variable. Paper 2 is firmly positioned in the literature that has studied the CSR – risk relationship (e.g. Godfrey *et al.*, 2009; Henisz *et al.*, 2013; Koh *et al.*, 2013). It also draws

on the stakeholder literature that looks at stakeholder influence strategies and the mechanisms by which they affect firm performance (Frooman, 1999; e.g. Vasi and King, 2012).

The paper identifies a gap in the current understanding of how CSR is related to firm risk. While the findings in support of this relationship are very strong (Chava, 2014; El Ghoul *et al.*, 2011; Koh *et al.*, 2013), the theoretical explanation seems incomplete. This explanation is the so-called "insurance hypothesis", put forward originally by Godfrey (2005). It claims that good CSR performance creates moral capital with stakeholders, which then acts as an insurance when a negative event occurs. What is missing from the current understanding is how negative events themselves create risk so that the insurance can unfold its potential. This gap is to some extent a result of the data that is used in the empirical studies, which mixes positive information that is provided by the firm itself with negative information that is provided by the media into one aggregate measure. This is not only inconsistent with the original formulation of the theory behind the "insurance hypothesis" (Godfrey, 2005), but has also been highlighted to lead to measurement problems (Lange and Washburn, 2012; Strike, Gao, and Bansal, 2006).

The objective of this paper is to explain how corporate social irresponsibility (CSI), the opposite of CSR, leads to firm risk. This focus on the negative side is a key innovation vis-a-vis the prior literature, and allows a focus on the emergence rather than insurance of risk. The paper also aims to trace information flows more precisely than prior literature, recognizing that the media, rather than CSR ratings, is the dominant source through which stakeholders receive information about firms (Barnett, 2014). In connection with that, the theoretical development builds on negativity bias, a well-established psychological bias that leads individuals and by extension also newspapers to grant more attention to negative than to positive news (Lange and Washburn, 2012). Thus, the research question of this paper is: "How does media coverage of CSI lead to firm risk?"

## Does the institutional context moderate the CSR – risk relationship?

The third paper takes a more high-level look at the entire process that is indicated in the research framework. Unlike the previous papers, it does not differentiate explicitly between negative impacts and the reaction of stakeholders to these negative impacts. Instead, it focuses on broader social structures that influence the entire process. Like paper 2, it is also positioned within the CSR – Risk literature, yet unlike paper 2, it relies on a CSR rating that provides an aggregate score as the independent variable. This rating, however, is not taken at face value. Instead, the paper accepts CSR as an essentially contested concept (Okoye, 2009), and examines how

cultural differences moderate the interpretation of this concept.

The gap for paper 3 is based on an empirical shortcoming of the extant literature. While there is very strong and consistent evidence for the CSR – risk relationship (Chava, 2014; El Ghoul *et al.*, 2011; Koh *et al.*, 2013), nearly all studies have relied on the same rating agency to conduct their analysis. This rating agency is called Kinder, Lydenberg, and Domini (KLD) and provides ratings only for US American companies. Thus, the findings are based on one specific operationalization of the essentially contested concept of CSR, and furthermore confined to one specific national context.

The objective of this paper is to study the influence of the institutional context on the CSR risk relationship. To this end, I rely on institutional theory, a more sociological school of thought in management that has evolved to describe the effects of broader social structures on business, such as legal, moral and cognitive traditions (Scott, 2008). Specifically, I rely on institutional legitimacy (Suchman, 1995) and argue that CSR is related to risk because it informs the firm's investors about the legitimacy that a firm enjoys for the way in which it treats its social and natural environment. Against this backdrop, I introduce the problem that rating agencies come up with very specific operational definitions of CSR, and that these definitions are informed by the institutional context from which they emerge. In other words, the same company will receive a different rating from a US American and a German rating agency. Given that CSR definitions are context specific, the legitimacy that CSR ratings signal to investors is context specific, and thus differences in institutional context may interfere in the CSR – Risk relationship. This leads to the research question of paper 3: "How do differences in institutional context moderate the relationship between CSR and firm risk?"

# Methods and Data

## Methods

All three dissertation papers adopt a quantitative research design and make use of panel regressions. As the details of the methods are described in each paper, this section provides a general introduction into the statistics of panel regression. Specifically, I will explain the properties of panel data, highlight the key advantages and challenges of the method.

The defining characteristic of panel data is that **n** units are observed over **t** time periods. A typical example is a sample of firms that is observed every year. This type of microeconomic panel is also found in each of the three papers. The number of units varies between 160 firms

in the first, 539 in the second, and 238 in the third paper. The time periods are years in the first paper, whereas the second and third paper make quarterly observations. This difference is due to the frequency that the empirical data allows: The emissions data in paper 1 is only available in yearly aggregates, whereas the accounting data, which is the limiting factor in the other two papers, is available every quarter.

Panel regressions have proliferated in the social sciences as larger and more consistent data sets became available. The key advantage of panel regression over cross-sectional regressions, i.e. observation of only one time period, is the possibility to control for constant unobservables (Cameron and Trivedi, 2005). Unobservables are variables that influence the relationship under scrutiny, but are not measurable or for any other reason not included in the model. For example, working culture is a variable that may influence many things in a firm, including its performance. Yet, a firm's culture is very difficult to measure. Assuming that such a working culture variable is constant, a panel regression can exclude this variable's influence from the model without information whether the actual working culture is good or bad.

Technically, there are two ways in which this can be done: fixed effects and random effects. In microeconomic panels of firms almost always the fixed effects approach is appropriate. The choice between the two is based on theoretical considerations, but there is also a statistical test for it. The theoretical consideration is whether this constant unobservable is related with the other independent variables that are included in the model. If it is likely to be related, the fixed effects estimator is appropriate, if it is unrelated, the random effects estimator is appropriate. Considering again the example of a firm's working culture, it is very likely that one would choose fixed effects, given that working culture may be related to the firm's size, age, performance, industry and potentially other characteristics. Alternatively, the so-called Hausman test (Cameron and Trivedi, 2005) can be used to determine the choice statistically. All papers in this dissertation make use of fixed effects of some form.

**The fixed effects estimator**

The fixed effects estimator, also called within estimator, subtracts the mean within each unit from the data. In other words, for every unit, only the fluctuations around the mean remain in the data. It is quite intuitive that through this operation, any variables that are constant across the unit's observations will become zero and drop out of the model. In addition, any constant influence that such a variable could have had on any of the other variables, including the dependent variable, is removed. It is also possible to apply the fixed effects estimator to time periods, in this case any period specific shocks that that are constant across all units will be removed. Furthermore, it is possible to apply a two-way fixed effects framework, a rather

restrictive approach, where both types of unobservables, unit specific and constant across periods as well as period specific and constant across units, are removed. The fixed effects framework is equivalent with inserting a dummy variable for every unit, else called the least square dummy variable approach LSDV (Cameron and Trivedi, 2005).

A true fixed effect estimator applies to every individual unit in the panel, which has the highlighted advantages, but also comes at a cost. All information about the levels of variables is deleted, only information about changes is retained. When the relationship under scrutiny is in fact driven by levels, the fixed effects estimator can obscure this. A typical problem is, when variables of theoretical interest are relatively stationary over time. This problem arises, for example, for the CSR ratings that are used in paper 3: for any particular firm, the ratings hardly change from quarter to quarter. As a compromise between robustness and information content, firm effects can also be applied at a higher aggregate level than the individual unit, for example at the industry level. If such an approach is chosen, industry specific constant unobservables are removed. However company specific constant unobservables within industries remain. Paper 1 and 3 make use of this compromise, which is also a common approach among the studies that this dissertation builds on (e.g. Chava, 2014; El Ghoul *et al.*, 2011; Koh *et al.*, 2013).

**Statistical Inference**

Statistical inference refers to the deduction of generalizable properties of an underlying distribution through analysis of a sample of data. There are two issues that regularly occur when conducting panel regressions that can compromise statistical inference and need to be addressed carefully. The first issue refers to endogeneity and the estimation of regression coefficients, the second issue refers to the estimation of standard errors.

*Endogeneity*

Endogeneity is an issue that leads to biased estimates of regression coefficients. In other words, the results are spurious and lead to wrong conclusions about the underlying data. Endogeneity arises from one of two sources. Either a variable is missing from the model that has a causal effect on both an independent and the dependent variable. This is also referred to as omitted variable bias or simultaneity bias. Or, the dependent variable itself has a causal effect on any of the independent variables. This usually referred to as reverse causality. Both sources result in the same endogeneity problem and the obtained regression coefficients are biased.

There are a number of ways to address this problem, I will here only mention the two that are applied within this dissertation. Reverse causality is addressed by including a lagged dependent

variable in the control variables. The intuition is that the dependent variable was at the same time an omitted variable from the vector of independent variables. If reverse causality is the source of endogeneity, this is an elegant and effective method to address the issue and ensure unbiased estimation, provided a set of additional assumptions about autocorrelation and time series stationarity hold (Keele and Kelly, 2006).

Simultaneity is addressed with an instrumental variable estimation. An instrument is an additional variable that is correlated with the endogenous independent variable, but does not causally affect the dependent variable in any other way except through the independent variable (Cameron and Trivedi, 2005). If such an instrument can be found, it can be used to discard the part of the variance in the endogenous variable that is not correlated with the instrument. The non-correlated part of the variance is the part that is potentially endogenous, if the instrument is indeed exogenous. This is done in a first stage regression of the endogenous variable on all other independent variables plus the instrument. The predicted value for the endogenous variable from the first stage regression are then inserted into the regression model instead of the original variable. Following this procedure, the endogeneiety bias can be removed (Cameron and Trivedi, 2005).

*Robust standard errors*

Standard errors provide the basis for confidence intervals and judgments of significance. Significance is commonly used as a criterion that decides whether a hypothesis will be accepted or rejected. A significance level of 5%, for instance, means that there is a 5% probability to observe the data that is studied if the null hypothesis was true. The smaller this probability is, the more confident one can be in accepting the stated hypothesis over the null hypothesis.

Standard errors are calculated based on the model's residuals. Residuals are the errors that remain between the model prediction and the observed data. For correct statistical inference, these errors need to be independent and identically distributed (i.i.d.). If this is the case, standard errors are estimated correctly. If this is not the case, special procedures for estimating standard errors are needed. The two problems that commonly occur in panel regressions are heteroscedasticity and autocorrelation of residuals (Petersen, 2009). The presence of these problems can be detected with the Breusch Pagan Test and the Durbin Watson test respectively (Cameron and Trivedi, 2005). There are a number of differently specified standard errors that are robust towards the presence of these issues. Most common are White's standard errors (White, 1980). In addition, if the residuals are correlated with some sort of cluster in the data, that is for example the residuals in one industry are larger than in another, calculating standard

errors within these clusters is the recommended approach (Cameron, Gelbach, and Miller, 2011; Thompson, 2011). All papers of this dissertation base their statistical inference on robust standard errors.

## Data and Implementation

This chapter presents an overview of the data and outlines the empirical implementation of the analysis in each of the three papers. Table 2 provides an overview of the different data sources and indicates in which paper they are used. Since there is substantial overlap of data between the papers, it is most convenient to position the data along the three categories of the general research framework, namely negative impacts, stakeholder reactions, and firm risk. For the category negative impacts on the social and natural environment, I use firm's greenhouse gas emissions, reported against the greenhouse gas protocol for corporates (WBCSD and WRI, 2004). Greenhouse gas emissions are used as the main independent variable in paper 1. For the category of stakeholder reactions I use media accounts of stakeholder criticism, which are obtained from the data provider RepRisk. This data is used as the outcome variable in paper 1 where the criticism is focused exclusively on carbon emissions. In paper 2, the same data is used as an independent variable, albeit with a broader scope of criticism, pertaining to a wide range of environmental and social impacts. Next, I use CSR ratings provided by the rating agency OEKOM, which cover both a firms impacts on the social and natural environment as well as stakeholder reactions. This data is used as an independent variable in paper 3. Also in paper 3, I use cultural distance as a moderating variable to inform the contextual interpretation of the CSR ratings. Finally, for the category firm risk, I use the spread on credit default swaps (CDS), which is a precise measure of credit risk based on standardized and globally traded derivatives. This data is used as the outcome variable in both paper 2 and paper 3. Finally, a number of firm specific control variables such as firm size and a range of typical accounting figures are used in all three papers.

In terms of empirical implementation, all three papers conduct a panel regression with slight methodological variations. Paper 1 employs greenhouse gas emission levels as the independent variable, and counts of media criticism specifically of greenhouse gas emissions as the outcome variable. Since the outcome variable has a count data distribution, the model is estimated using a negative binomial approach, which is appropriate for this type of data. Fixed effects are applied at the level of countries, industries, and years. In order to safeguard against endogeneity, the lagged outcome variable, i.e. the count of media criticism of the previous year, is included as an additional independent variable. The analysis shows that the proposed stakeholder motivations and corresponding firm characteristics contribute to a firm's level of media criticism.

Table 2: Overview of Data Sources

| Framework position | Description | Provider | Used in |
|---|---|---|---|
| Negative Impacts | GHG Emissions per company and year. The emissions include scope 1 and 2 emissions as specified in the corporate GHG protocol (WBCSD and WRI, 2004). | Asset4 | Paper 1 |
| Stakeholder reaction | News articles that report stakeholder criticism of firms for a range of environmental, social, and governance issues. The data contains articles from printed newspapers as well as online publications and NGO blogs. | RepRisk | Paper 1, Paper 2 |
| Negative impacts & stakeholder reaction | CSR rating agency based in Germany. Provides comprehensive CSR ratings that consider over 100 indicators in the social and environmental domain. | OEKOM | Paper 3 |
| Stakeholder reaction | Cultural Distance according to Hofstede (2010). Cultural distance is based on the differences in several cultural dimensions that have been elicited through global surveys. | http://geert-hofstede.com/ | Paper 3 |
| Firm risk | Credit default swap spreads. In principle, this is the cost of insuring against the company's default, based on the price of the most recent trade of a CDS contract. | Thomson Reuters | Paper 2, Paper 3 |
| | Control variables, mainly from balance sheets and income statements, such as total assets, market value, leverage, location, and sales. | Thomson Reuters | Paper 1, Paper 2, Paper 3 |

Paper 2 uses counts of media criticism as an independent variable and CDS spreads representing firm risk as the outcome variable. Since the count variable is an independent variable here, and given that no assumptions are needed about the distribution of independent variables, the normal ordinary least square approach is used. Fixed effects are applied at the level of firm and quarter. In order to safeguard against endogeneiety, an instrumental variable is created based on stakeholder blog entries. The rationale is that these blogs do not affect firm risk directly, but do feed stories to the regular media, which then affects firm risk. The analysis shows that media criticism increases firm risk substantially.

Paper 3 employs CSR ratings as an independent variable and CDS spreads as the outcome variable. The estimation follows the ordinary least squares approach, which fixed effects at the level of countries, industries, and quarters. No specific provisions are made against endogeneiety, given that this study is a replication of prior findings with respect to the overall

causal link. However, there is a moderating variable, namely the cultural distance between the rating agency and the rated firm. The analysis shows that the replication is successful and that the moderating variable exerts a significant effect, implying that local context matters for the relationship between CSR ratings and risk.

# Findings and Contributions

## Activists target firms that can be incriminated from many angles

The first paper tests hypotheses about firm attributes that attract activist criticism for corporate misconduct in the media. I consider three different theoretical perspectives on activists, examine the underlying aim of activism in each perspective, to then derive certain firm attributes that are likely to attract activism. From a watchdog perspective (Besiou, Hunter, and Wassenhove, 2013; Deephouse and Heugens, 2009), I derive that the level of misconduct attracts activist criticism, because the aim of watchdog activists is transparency about misconduct. From a change agent perspective (Baron and Diermeier, 2007; Lenox and Eesley, 2009), I derive that the potential to reduce misconduct attracts activist criticism, because the aim of change agent activists is to curb corporate misconduct. Finally, from a social movement perspective (King, 2008; Rowley and Moldoveanu, 2003), I derive that the variety of misconduct attracts activist criticism, because the aim of social movement activists is to appeal to a variety of constituencies in order to mobilize resources.

The empirical tests support all three perspectives, activist criticism is attracted by a firm's level of misconduct, the potential to reduce it, as well as its variety of misconduct. The variety of misconduct, however, has the highest explanatory power of all three firm attributes. This suggests that while all three perspectives explain something about activist strategy, the social movement perspective seems to offer the most important explanation.

With these findings, I make two contributions to the literature. First, I bring a wider perspective on activism to bear on the question of "Which firms are targeted for misconduct by activists, and why?" So far, the analysis of this question has been limited to the change agent perspective (Baron and Diermeier, 2007; Lenox and Eesley, 2009). Second, I highlight that activist strategy is guided from two sides, on the one hand by considerations about the effectiveness of activism, on the other hand by considerations about the resource mobilization potential of activism. This dual aim is a novel insight for the literature on activist movements (Hond and Bakker, 2007; King, 2008; Mena and Waeger, 2014), and also for the wider field of stakeholder influence strategy (Frooman, 1999; Sharma and Henriques, 2005).

## Media coverage of corporate social irresponsibility leads to firm risk

The second paper develops hypotheses around the process through which stakeholders generate firm risk. The core consideration is also one of mobilization: as long as stakeholder demands are divergent, they do not represent a tangible risk to the firm. However, when several stakeholder groups coordinate their interests and cooperate to exert pressure, the risk becomes material, given that reputation loss, boycotts and sales decline as well as government intervention become a possibility. The most important mechanism that facilitates such coordination is publicity of a firm's negative impacts, conceptualized as CSI coverage in this paper. Combining the effects of publicity with stakeholder mobilization, I hypothesize that media attention to CSI increases firm risk. In addition, I hypothesize that the reach of the reporting medium moderates this relationship, with high reach publications such as the Financial Times having a greater effect than less prominent media sources. Finally, I hypothesize that the severity of CSI coverage also strengthens the effect.

The analysis supports the first two hypothesis about the effects of CSI coverage and media reach, the latter hypothesis about the effect of severity is rejected. This shows that CSI coverage and the associated stakeholder sanctions exert a substantial effect on firm risk. Given that negative impacts and other confounding factors are controlled for, this finding is a strong indication that it is indeed the stakeholder reaction that leads to firm risk, rather than a firm's negative impacts as such. Furthermore, it shows that the media's information diffusion is instrumental to this mechanism. The result is also of economic significance, given that the median firm in the sample would incur additional credit servicing costs of USD 900'000 per year for every additional criticizing news article above the firm's average count of criticizing articles.

This paper contributes to both the CSR – Risk literature as well as to the stakeholder literature. Regarding the CSR – Risk literature, the central contribution is that next to the risk mitigating effect of CSR, there is an important risk generating effect of CSI. While many studies have mixed these two concepts, this study provides a strong theoretical argument why mixing the concepts is conceptually flawed, and also demonstrates that the effect of CSI coverage is a very relevant one. Regarding the stakeholder literature, this study highlights that turning to the media is not only a typical strategy for secondary stakeholders (Frooman, 1999), but that the media also serves as a catalyst for collective stakeholder action. This is because the media, and not the firm's CSR reports are the primary source of information about the firm (Barnett, 2014). While for the most part, stakeholders in a stakeholder network pursue uncoordinated and divergent

interests (Harrison *et al.*, 2010; Rowley, 1997), publicity of CSI can impose a coordination of stakeholder networks that can then credibly threaten firm's future cash flows and influence firm risk.

## National culture moderates the CSR – Risk relationship.

The third paper develops hypotheses explaining how the institutional context moderates the CSR - risk relationship that has been so firmly established in the literature so far (Chava, 2014; Godfrey *et al.*, 2009; Koh *et al.*, 2013). It begins with a replication of the fundamental relationship in an international context, given that so far almost all the empirical evidence is confined to US American firms. Next, I theorize that rating agencies need to do a great deal of interpretation, in order to establish an operational definition of CSR that can serve as the basis for their ratings. I argue that the institutional context plays an important and so far neglected role in this interpretation. As a result of this, the legitimacy signal that CSR ratings provide is tied to a particular institutional context. From this, I derive that the risk-reducing effect of CSR ratings should fade as the institutional context of the firm diverges from the institutional context of the rating. Specifically, I predict that differences in legal system and national culture moderate the CSR – risk relationship.

The results of the analysis show that the CSR risk relationship holds also in an international sample. The moderating effect of the legal system (European civil law versus Anglo-American case law) is not found to be significant. However, cultural differences (Hofstede *et al.*, 2010) have a moderating effect. The greater the cultural distance between the home country of the rating agency and the home country of the rated firm, the lesser the effect of the CSR rating on firm risk.

This paper contributes in two central ways to the CSR literature. First, it extends the empirical basis of the literature to an international setting. This allows to introduce variance of institutional contexts into the analysis and I am able to demonstrate the relevance of institutional context to the CSR – risk relationship. With that, I provide empirical support to recent theoretical propositions (Campbell, 2007), and enrich the understanding of the central relationship in the CSR – risk literature. Second, it tackles the fundamental problem that the definition of CSR is too unclear to build useful theory upon it, an issue that has been raised as early as 1985 (Ullman, 1985). Instead of using a CSR ratings as a measure for a universally defined CSR construct, I integrate the CSR rating process into the theoretical model. Acknowledging that a CSR rating is only one possible definition of CSR that is shaped by institutional pressures, does justice to the nature of CSR being an "essentially contested

concept" (Okoye, 2009). At the same time, it allows more informed theorizing about what a firm's CSR rating means and under which conditions it reduces firm risk.

# Conclusions

## Key contributions

The general contribution of this dissertation is to reveal important but so far neglected processes that will hopefully change the course of the debate about CSR, stakeholders, and firm risk. By studying the motivations of activists, the emergence of stakeholder risks through media attention, and the influence of culture on the definitions and effects of CSR, this dissertation uncovers that the question "does it pay to be good?" is far too simply stated for the complex processes that lie beneath it. Also the suggestion to study "when does it pay to be good?" (King and Lenox, 2001) is not yet very helpful, because it remains unclear what is meant with "good", or alternatively "green", "responsible", "sustainable" and so on. This dissertation shows that there is a continuous debate about the proper relationship of a firm with its social and natural environment, and that firm risk is not affected by some standardized level of goodness or some objectively measured negative impact, but rather by concrete actions of stakeholders that are unique responses to a particular firm's activities and behavior. By addressing the question: "How and when do stakeholders translate a firm's negative impacts into firm risk?" I reveal underlying stakeholder strategies, the effectiveness of media attention to negative impacts, and the interpretative contingencies that come with cultural differences as a few of potentially many more interesting processes that make up and shape the complex relationship between firms and their social and natural environment. I list the specific contributions of the individual papers, which illuminate these processes below.

First, I expand the understanding of activist strategies, who represent one key stakeholder group that actively shapes the firm-environment relationship. Activists provide for an important link between negative impacts and the firm, as they adopt and fight against such impacts. So far, the literature assumed that the main concern of activists is to achieve change (Baron and Diermeier, 2007; Lenox and Eesley, 2009). I show that the decision which firm is targeted with activist criticism is to an important extent guided by concerns about resource mobilization, rather than considerations about achieving change. This brings insights from social movement theory (King, 2008; Rowley and Moldoveanu, 2003) into the analysis of stakeholder strategy. The insight that activist strategy is guided by two, not necessarily consistent aims, effectiveness and mobilization, holds rich potential for future theorizing on activist strategy.

Second, I demonstrate the effect of media coverage of CSI on firm risk. I highlight that stakeholder networks, which are usually characterized through uncorrelated and divergent interests of different stakeholder groups (Bridoux and Stoelhorst, 2014; Harrison *et al.*, 2010; Rowley, 1997) can become coordinated through media coverage of CSI. This coordination provides the basis for powerful, collective stakeholder sanctions, which materially threaten a firm's future cash flows and thus firm risk. Based on this theoretical development, I show that media coverage of CSI increases firm risk substantially. I bolster this claim by also showing that this effect is moderated through the reach of the media source that reports CSI. The wider the reach, the more stakeholders become informed, and the stronger is the effect. This contributes to the literature, which has so far focused on mitigating the risk of stakeholder sanctions (Godfrey *et al.*, 2009; Godfrey, 2005; Koh *et al.*, 2013) with a novel understanding of the process that generates stakeholder risk. It serves as an improved basis to devise and evaluate stakeholder risk management strategy.

Third, I integrate the context-specific interpretation of CSR into the theoretical understanding of the CSR – risk relationship. I extend the empirical base of prior literature to an international setting, confirming the validity of the CSR – risk relationship in an international sample of firms. In addition, I challenge the use of CSR ratings as measures of a generally accepted definition of CSR. Instead, I argue that CSR ratings represent one specific, but context dependent interpretation of the essentially contested concept of CSR. As a result, the legitimacy that CSR ratings signal to investors is tied to a specific institutional context and fades out with increasing institutional distance to this original context. I demonstrate that cultural distance moderates the relationship between a CSR rating and firm risk. This finding connects recent calls for a more contextual definition of CSR (Okoye, 2009; Scherer and Palazzo, 2007) with the empirical debate on the risk mitigating properties of CSR (Godfrey *et al.*, 2009; Godfrey, 2005; Koh *et al.*, 2013).

## Practical implications

The dissertation has a number of valuable practical implications for business strategists, in particular with regards to effective stakeholder risk management. In a nutshell, I recommend managers to make an effort to understand exactly what stakeholder want to achieve, to take a proactive risk management, rather than a reactive crisis management approach to negative publicity, and to carefully think through the implications of universal standards for CSR.

The first implication that matters for managers is that activists may target a firm with media criticism for several reasons, driven by several underlying aims. Understanding these reasons

and aims is vital for managers, in order to appropriately react to such criticism, or even to proactively prevent it. The first paper of this dissertation shows that a very important aim of activists is mobilizing resources. As a consequence of this aim, firms may be chosen as a target because they can be blamed for a wide variety of misconduct. Firms with this property represent a suitable culprit to a wide variety of constituencies, and therefore a useful target for activists to mobilize resources from this wide pool of constituencies. If this is the case, activists may take little notice of substantial improvements that the firm has made, or is willing to make. Managers, who take activist demands at face value may focus on improving performance measures and yet risk being revisited with activist criticism, because improved performance was not the ultimate aim of activists. Managers, who understand the underlying aims of activists can respond in much smarter ways. For instance, if mobilizing resources is the predominant aim, managers may partner with activists and provide resources themselves. Such arrangements have emerged numerous times over the past decade, for instance between Coca Cola and the WWF. Alternatively, managers could steer the issue in such a way that the headline that activists desire for mobilization purposes is one that highlights achievements of the firm rather than one that presents the firm as a culprit.

The second implication for managers is that CSR and firm risk are related, but that media coverage of CSI is the fundamental driver of risk, and that CSR programs are only one possible strategic response to mitigate that risk. Managers must be aware that many more people read the news about what their firm has done wrong than there are people who read the firm's CSR report to understand what the firm is doing right. Of course, a good CSR report is important in the event of a crisis, since at least diligent newspaper editors will rely on them to gain a balanced understanding before jumping to conclusions. Nevertheless, due to a pervasive negativity bias, managers are fighting an uphill battle when countering bad news. What's more, good CSR performance is not always an effective insurance, because the media is eager to pick on the "sin of saints". The media fallout from BP's massive oil spill in 2010 was probably intensified by the fact that BP had presented itself as a particularly responsible oil company in the years before. Volkswagen is experiencing a similar effect these days. The public disappointment about the car manufacturer's fraudulent emission figures is intensified by Volkswagen's prior reputation as a producer of environmentally friendly cars. Thus, the key recommendation is that ensuring accident-free execution of daily operations and effectively minimizing or abandoning negative impacts should be the primary risk management strategy, because it directly reduces the source of risk. Furthermore, managers should target their CSR programs specifically towards those stakeholder groups that are keen to criticize the firm and consider staying out of certain high risk business areas where one can hardly operate without attracting media criticism.

The third implication is that there may be friction between risk management and adopting a universal approach to CSR. This applies equally to rating agencies and international businesses. The finding that culture moderates the relationship between CSR and risk, and the underlying explanation that culture informs the context-specific interpretation of what CSR means, highlights that managers and rating specialists have to reflect carefully what they mean with CSR. This reflection is fundamentally a debate about cultural relativism and it quickly leads to some tough questions. For example, should a firm stick to the same strict environmental standards that apply in its home country when this compromises the firm's ability to create jobs in a foreign location, where unemployment is considered a much more relevant issue than environmental degradation? In reverse, should a firm adapt its stance on the promotion of women to senior positions in institutional contexts where women leaders are thought of as illegitimate? The study shows that the right thing from a risk management perspective is to adapt. Whether that can be aligned with the firm's ethical standards is an important debate to have before developing a CSR concept. Similarly, rating agencies need to ask themselves, whether they want to provide an assessment of risk mitigating legitimacy, or an assessment of some morally informed definition of what CSR should stand for.

## Limitations

In addition to specific limitations which are addressed in detail in each of the papers, I would like to highlight the issue of generalizability as an overarching limitation. In all three papers, the statistical analysis is implemented in a certain empirical context. The selection of this context is guided by the theoretical developments that are intended. The aim is to derive knowledge that applies beyond the specific context at hand and thus attains theoretical standing. In the following, I offer some reflections about the extent to which the findings can be applied to alternative contexts.

The second paper relies on a very general context: CSI is operationalized as virtually anything that firms are criticized for in the media. The scope covers all the environmental, social, and governance issues that are highlighted as relevant by a host of international organizations such as the World Bank, the International Labor Association, the OECD, and the United Nations. Due to this broad operationalization, the research case represents most of the reality I want to derive theoretical insight about. Thus, in terms of the theoretical variable CSI coverage, the results of paper 2 are of general nature, and therefore also generalizable. Nevertheless, the sample is limited to very large firms, because the measure for the dependent variable, CDS spread, is only available for very large firms. Thus, one would need to exercise caution before extending the results to smaller firms. It would be possible to do this by studying the interest

on bank loans, which are observable also for smaller firms. In fact, a related study has done so for the CSR – risk relationship and even specifically for CSI and arrived at similar results (Goss and Roberts, 2011). This provides some reassurance that the results can be generalized also to smaller firms.

The first and the third paper rely on research contexts that are more specific and represent a smaller part of the theoretical space that they address. For paper 1, the issue of greenhouse gas emissions was chosen as a representative issue for activist criticism. Yet, there are many other issues that attract activist criticism, which may have different characteristics and result in different dynamics. Similarly, paper 3 chooses a German rating agency to test propositions about the influence of the institutional context on the CSI – risk relationship. However, there may be something unique about this rating agency that is not related with the German institutional context, yet has influenced the findings. While both research contexts are carefully chosen, it cannot be excluded that these choices had an influence on the results. Thus, generalizing the results of paper 1 and 3 to other contexts requires careful consideration of the key differences between the studied contexts and other contexts in which the findings are intended to be applied.

## Further research opportunities

The findings presented in this dissertation open up a range of avenues for future research. I would like to briefly highlight those that I find most promising. First, a both a deeper and wider investigation of stakeholder aims and the resulting strategies, second an examination of the interaction between CSR and CSI, and third a review of the understanding of CSR in different cultures.

The finding that activists are driven both by aims about effectiveness as well as mobilization warrants deeper investigation. The existence of such a dual objective may lead to interesting strategic implications that have remained unexplored within the scope of this dissertation and also in the wider literature. In addition, activists are not the only stakeholders whose underlying aims and strategies are not fully understood. Most research in management is conducted from the firm perspective and stakeholders are characterized in terms of what they want from the firm. However, this firm centered perspective, as proved to be the case with activists, may not be suitable to get a full view of what drives stakeholder action and strategy. This may also have direct practical relevance. When firms conduct stakeholder engagements, the dominant question is usually one of “what do you think about what we do?” Whereas the more informative question may be “What do you want to achieve and how could this be aligned with

what we want to achieve?”

The finding that CSI is the fundamental driver of stakeholder risk, while CSR is one potential insurance mechanism against is an important step to bring forward the practice of stakeholder risk management. However, the question how the two interact specifically remains to be answered. How much CSI can be proactively prevented with operational excellence, and in which cases is insurance through CSR the only viable risk management strategy? Which kinds of CSR are effective in insuring which kinds of CSI? And in which situations is the insurance potential of CSR reversed, as suggested by the examples of BP and Volkswagen? It seems that there is a threshold, above which the insurance turns into a liability. These questions deserve addressing in future studies.

The finding that culture informs the interpretation of CSR and the conditions under which CSR ratings signal legitimacy calls for a refined understanding of this culturally informed interpretation. Which parameters are open to interpretation, and how are they adapted to cultural contexts? The question seems particularly salient when considering the meaning of CSR in emerging countries, where poverty, unemployment, public health and violence may be the dominant public concerns as opposed to the developed world, where the natural environment may be more prominent on the public agenda. In addition, the relevance of CSR may be heightened in emerging economies, given that the state is less effective in protecting the social and natural environment from negative impacts. A comparative study of the meanings of CSR is various cultures would unearth points of debate and introduce a great level of complexity, but would at the same time demonstrate that a “universal” meaning of CSR is an empty illusion.

## Outlook to the appendix

The purpose of this chapter was to provide the reader with a general overview of the questions, theories, and methods employed in this dissertation, and to give a taste of the findings and contributions that have been produced. The original papers that represent the main body of the dissertation are included in the appendix in the following order:

Paper 1:

Round up the usual suspects! What motivates activists to criticize corporate misconduct?

Paper 2:

How media coverage of corporate social irresponsibility increases firm risk?

Paper 3:

How risky is your business: The role of institutional context, corporate social responsibility, and rating agencies.

# References


Aguinis H, Glavas A. 2012. What we know and don't know about corporate social responsibility: a review and research agenda. Journal of Management 38(4): 932–968.

Barnett ML. 2014. Why stakeholders ignore firm misconduct: a cognitive view. Journal of Management 40(3): 676–702.

Baron DP, Diermeier D. 2007. Strategic activism and nonmarket strategy. Journal of Economics & Management Strategy 16(3): 599–634.

Besiou M, Hunter ML, Wassenhove LN. 2013. A web of watchdogs: stakeholder media networks and agenda-setting in response to corporate initiatives. Journal of Business Ethics 118(4): 709–729.

Boatright JR. 2002. Contractors as stakeholders: reconciling stakeholder theory with the nexus-of-contracts firm. Journal of Banking & Finance 26(9): 1837–1852.

Bouslah K, Kryzanowski L, M'Zali B. 2013. The impact of the dimensions of social performance on firm risk. Journal of Banking & Finance 37(4): 1258–1273.

Bridoux F, Stoelhorst JW. 2014. Microfoundations of stakeholder theory: managing stakeholders with heterogeneous motives. Strategic Management Journal 35(1): 107–125.

Bundy J, Shropshire C, Buchholtz AK. 2012. Strategic cognition and issue salience: toward an explanation of firm responsiveness to stakeholder concerns. Academy of Management Review 38(3): 352–376.

Cameron AC, Gelbach JB, Miller DL. 2011. Robust inference with multiway clustering. Journal of Business & Economic Statistics 29(2): 238–249.

Cameron AC, Trivedi KP. 2005. Microeconometrics: Methods and Applications. Cambridge University Press: New York.

Campbell JL. 2007. Why would corporations behave in socially responsible ways? an institutional theory of corporate social responsibility. Academy of Management Review 32(3): 946–967.

Chava S. 2014. Environmental externalities and cost of capital. Management Science 60(9): 2223–2247.

Clarkson MBE. 1995. A stakeholder framework for analyzing and evaluating corporate social performance. Academy of Management Review 20(1): 92.

Dahlsrud A. 2008. How corporate social responsibility is defined: an analysis of 37 definitions. Corporate Social Responsibility and Environmental Management 15: 1–13.

Deephouse DL, Heugens PP. 2009. Linking social issues to organizational impact: the role of infomediaries and the infomediary process. Journal of Business Ethics 86(4): 541–553.

Doh JP, Guay TR. 2006. Corporate social responsibility, public policy, and ngo activism in europe and the united states: an institutional-stakeholder perspective. Journal of Management Studies 43(1): 47–73.

Donaldson T, Preston LE. 1995. The stakeholder theory of the corporation: concepts, evidence, and implications. The Academy of Management Review 20(1): 65–91.

Freeman ER. 1984. Strategic Management: A Stakeholder Approach. Pitman Publishing:

Marshfield, MA.

Friede G, Busch T, Bassen A. 2015. Esg and financial performance: aggregated evidence from more than 2000 empirical studies. Journal of Sustainable Finance & Investment (Forthcoming).

Friedman M. 1962. Capitalism and Freedom. University of Chicago Press: Chicago.

Friedman M. 1970, September 13. The social responsibility of business is to increase its profits. Time Magazine.

Frooman J. 1999. Stakeholder influence strategies. The Academy of Management Review 24(2): 191–205.

El Ghoul S, Guedhami O, Kwok CCY, Mishra DR. 2011. Does corporate social responsibility affect the cost of capital? Journal of Banking & Finance 35(9): 2388–2406.

Gibson K. 2000. The moral basis of stakeholder theory. Journal of Business Ethics 26(3): 245–257.

Godfrey PC. 2005. The relationship between corporate philanthropy and shareholder wealth: a risk management perspective. Academy of Management Review 30(4): 777–798.

Godfrey PC, Merrill CB, Hansen JMJM. 2009. The relationship between corporate social responsibility and shareholder value: an empirical test of the risk management hypothesis. Strategic Management Journal 30(4): 425–445.

Goss A, Roberts GS. 2011. The impact of corporate social responsibility on the cost of bank loans. Journal of Banking & Finance 35(7): 1794–1810.

Greve HR, Palmer D, Pozner J. 2010. Organizations gone wild: the causes, processes, and consequences of organizational misconduct. The Academy of Management Annals 4(1): 53–107.

Guenster N, Bauer R, Derwall J, Koedijk K. 2010. The economic value of corporate eco-efficiency. European Financial Management 17(4): 679–704.

Harrison JS, Bosse DA, Phillips RA. 2010. Managing for stakeholders, stakeholder utility functions, and competitive advantage. Strategic Management Journal 31(1): 58–74.

He X, Song L. 2012. Status and future tasks of coal mining safety in china. Safety Science. Elsevier Ltd 50(4): 894–898.

Heal G. 2005. Corporate social responsibility: an economic and financial framework. The Geneva Papers on Risk and Insurance Issues and Practice 30(3): 387–409.

Heede R. 2014. Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010. Climatic Change 122(1-2): 229–241.

Henisz WJ, Dorobantu S, Nartey LJ. 2013. Spinning gold: the financial returns to stakeholder engagement. Strategic Management Journal 35(12): 1727–1748.

Hillman AJ, Keim GD. 2001. Shareholder value, stakeholder management, and social issues: what's the bottom line? Strategic Management Journal 22(2): 125–139.

Hoffman AJ. 2001. From Heresy to Dogma. Stanford University Press.

Hoffman AJ, Ocasio W. 2001. Not all events are attended equally: toward a middle-range theory of industry attention to external events. Organization Science 12(4): 414–434.

Hofstede G, Hofstede J, Minkov M. 2010. Culture and Organizations: Software of the Mind, 3rd ed. McGraw-Hill: Maidenhead.

Hond F Den, Bakker FGA De. 2007. Ideologically motivated activism: how activist groups influence corporate social change activities. Academy of Management Review 32(3): 901–924.

IPCC. 2014. Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

Jackson JB et al. 2001. Historical overfishing and the recent collapse of coastal ecosystems. Science (New York, N.Y.) 293(5530): 629–37.

Jensen MC. 2002. Value maximization, stakeholder theory, and the corporate objective function. Business Ethics Quarterly 12(2): 235–256.

Jensen MC, Meckling WH. 1976. Theory of the firm: managerial behavior, agency costs and ownership structure. Journal of Financial Economics 3(4): 305–360.

Johnson L. 2012. Pluralism in corporate form: corporate law and benefit corps. Regent University Law Review 25(2): 269–298.

Jones TM. 1995. Instrumental stakeholder theory: a synthesis of ethics and economics. Academy of Management Review 20(2): 404–437.

Karnani A. 2011. Csr stuck in a logical trap. California Management Review 53(2): 105–111.

Keele L, Kelly NJ. 2006. Dynamic models for dynamic theories: the ins and outs of lagged dependent variables. Political Analysis 14(2): 186–205.

King A, Lenox MJ. 2000. Industry self-regulation without sanctions: the chemical industry's responsible care program. Academy of Management Journal 43(4): 698–716.

King A, Lenox MJ. 2001. Does it really pay to be green ? an empirical study of firm environmental and financial performance. Journal of Industrial Ecology 5(1): 105–116.

King B. 2008. A social movement perspective of stakeholder collective action and influence. Business & Society 47(1): 21–49.

Koh P-S, Qian C, Wang H. 2013. Firm litigation and the insurance value. Strategic Management Journal 35(10): 1464–1482.

Lange D, Washburn NT. 2012. Understanding attributions of corporate social irresponsibility. Academy of Management Review 37(2): 300–326.

Laplume AO, Sonpar K, Litz RA. 2008. Stakeholder theory: reviewing a theory that moves us. Journal of Management 34(6): 1152–1189.

Lenox M, Eesley C. 2009. Private environmental activism and the selection and response of firm targets. Journal of Economics & Management Strategy 18(1): 45–73.

Lustig RH, Schmidt L a., Brindis CD. 2012. Public health: the toxic truth about sugar. Nature 482(7383): 27–29.

Macintosh JCC. 1999. The issues, effects and consequences of the berle–dodd debate, 1931–1932. Accounting, Organizations and Society 24(2): 139–153.

Margolis JD, Elfenbein HA, Walsh JP. 2009. Does it pay to be good ... and does it matter? a meta-analysis of the relationship between corporate social and financial performance. SSRN eLibrary : 1–68. Available at: http://ssrn.com/abstract=1866371.

Mena S, Waeger D. 2014. Activism for corporate responsibility: conceptualizing private regulation opportunity structures. Journal of Management Studies 51(7): 1091–1117.

Misangyi VF, Weaver GR, Elms H. 2008. Ending corruption: the interplay among institutional logics, resources, and institutional entrepreneurs. Academy of Management Review 33(3): 750–770.

OECD, IEA. 2015. Energy and climate change - World Energy Outlook Special Report. World Energy Outlook Special Report.

Okoye A. 2009. Theorising corporate social responsibility as an essentially contested concept: is a definition necessary? Journal of Business Ethics 89(4): 613–627.

Orlitzky M, Schmidt FL, Rynes SL. 2003. Corporate social and financial performance: a meta-analysis. Organization Studies 24(3): 403–441.

Peloza J. 2009. The challenge of measuring financial impacts from investments in corporate social performance. Journal of Management 35(6): 1518–1541.

Perman R, Ma Y, McGilvray J, Common M. 2003. Natural Resource and Environmental Economics. Longman.

Petersen MA. 2009. Estimating standard errors in finance panel data sets: comparing approaches. Review of Financial Studies 22(1): 435–480.

Peto R, Lopez a. D, Boreham J, Thun M, Heath C. 1992. Mortality from tobacco in developed countries: indirect estimation from national vital statistics. Lancet 339(8804): 1268–1278.

Phillips R, Freeman R, Wicks A. 2003. What stakeholder theory is not. Business Ethics Quarterly (4): 479–502.

Richardson BJ, Cragg W. 2010. Being virtuous and prosperous: {sri's} conflicting goals. Journal of Business Ethics.

Rockström J et al. 2009. A safe operating space for humanity. Nature 461(7263): 472–475.

Rowley TI. 1997. Moving beyond dyadic ties: a network theory of stakeholder influences. Academy of Management Review 22(4): 887–910.

Rowley TJ, Moldoveanu M. 2003. When will stakeholder groups act? an interest- and identity-based model of stakeholder group mobilization. The Academy of Management Review 28(2): 204–219.

Ruefli TW, Collins JM, Lacugna JR. 1999. Risk measures in strategic management research: auld lang seyne? Strategic Management Journal 20(2): 167–194.

Scherer AG, Palazzo G. 2007. Toward a political conception of corporate responsibility: business and society seen from a habermasian perspective. Academy of Management Review 32(4): 1096–1120.

Schwarzman M, Wilson M. 2009. New science for chemicals policy. Science 326(5956): 18–19.

Scott RW. 2008. Institutions and Organizations. Sage: Thousand Oaks, CA.

Servaes H. 2013. The impact of corporate social responsibility on firm value : the role of customer awareness. Management Science 1909: 1–17.

Sharfman MP, Fernando CS. 2008. Environmental risk management and the cost of capital. Strategic Management Journal 29(6): 569–592.

Sharma S, Henriques I. 2005. Stakeholder influences on sustainability practices in the canadian forest products industry. Strategic Management Journal 26(2): 159–180.

Stern N. 2007. The Economics of Climate Change. Cambridge University Press.

Strike VM, Gao J, Bansal P. 2006. Being good while being bad: social responsibility and the international diversification of us firms. Journal of International Business Studies 37(6): 850–862.

Suchman MC. 1995. Managing legitimacy: strategic and institutional approaches. Academy of Management Review 20(3): 571–610.

Surroca J, Tribó JA, Waddock SA. 2010. Corporate responsibility and financial performance: the role of intangible resources. Strategic Management Journal 31(5): 463–490.

Tang Y, Qian C, Chen G, Shen R. 2015. How ceo hubris affects corporate social (ir)responsibility. Strategic Management Journal 36(9): 1338–1357.

Thompson SB. 2011. Simple formulas for standard errors that cluster by both firm and time. Journal of Financial Economics. 99(1): 1–10.

Ullman A. 1985. Data in search of a theory: a critical examination of the relationships among social performance, social disclosure and economic performance of us firms. Academy of Management Review 10(3): 540–557.

UN Global Compact - Accenture. 2013. The un global compact-accenture ceo study on sustainability 2013. Available at: www.accenture.com/ungcstudy.

Vasi IB, King BG. 2012. Social movements, risk perceptions, and economic outcomes: the effect of primary and secondary stakeholder activism on firms' perceived environmental risk and financial performance. American Sociological Review 77(4): 573–596.

WBCSD, WRI. 2004. Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. Available at: http://www.ghgprotocol.org/standards/corporate-standard.

WEF. 2015. Global Risks 2015. Available at: http://www3.weforum.org/docs/WEF_Global_Risks_2015_Report15.pdf.

White H. 1980. A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. Econometrica 48(4): 817–838.

Whiteman G, Hope C, Wadhams P. 2013. Vast costs of arctic change. Nature 499(7459): 401–3.

Wokutch RE. 2001. Nike and its critics: beginning a dialogue. Organization Environment 14(2): 207–237.

# Appendix

# Paper 1: Round up the usual suspects! What motivates activists to criticize corporate misconduct?

Julian Kölbel
Department of Management, Technology, and Economics D-MTEC
ETH Zurich
Weinbergstrasse 56/58, 8092 Zürich
koelbelj@ethz.ch

## Abstract

Building on the observation that not all corporate misconduct is criticized equally, this article investigates the motivations of activists to criticize corporate misconduct in the media. I review three different perspectives on activism that are found in the literature, namely a watchdog, a change agent, and a social movement perspective. For each perspective, I elaborate on the underlying aims of activism, and derive firm attributes that indicate a strategic opportunity to reach this aim. I find that firms with high levels of misconduct, high potential to reduce misconduct, and a wide variety of different sorts of misconduct have each higher chances of being targeted by activists. The variety of misconduct and the related strategic aim of mobilizing resources turns out to be the most important explanatory factor. This advances the literature on activist movements and strategies by showing that not only expectations about the impact of activism, but also concerns about resource mobilization influence activist strategy.

## Introduction

The media exerts an important influence on the social approval of business. In particular with regards to corporate misconduct, the media exerts a powerful control function, because publicity of a firm's harmful effects on society may trigger disciplining sanctions (Greve, Palmer, and Pozner, 2010; Tang and Tang, 2013). There is a rich literature in support of this control function, documenting that media criticism of misconduct tarnishes a firm's reputation (Lamin and Zaheer, 2012; Zavyalova, Pfarrer, and Shapiro, 2012), erodes firm value (Flammer, 2012; Karpoff, Lee, and Martin, 2008; Krüger, 2015) and increases firm risk (Bansal and Clelland, 2004; Kölbel and Busch, 2013). An important source of criticism in the media is activists, who target firms for their misconduct in public (Baron and Diermeier, 2007; Deephouse and Heugens, 2009; Frooman, 1999).

However, activist criticism of corporate misconduct is known to be relatively unsystematic (Barnett, 2014; Hoffman and Ocasio, 2001). The question which companies are targeted by activists has been debated most explicitly in the literature on private politics (Baron and Diermeier, 2007; Baron, 2001; Briscoe, Chin, and Hambrick, 2014; Lenox and Eesley, 2009; Mena and Waeger, 2014). The underlying assumption in this literature is that activists are predominantly concerned with the effectiveness of their activism. However, the literature on social movements suggests that mobilizing support is perhaps the more central concern of activist organizations (King, 2008; Rowley and Moldoveanu, 2003). This suggests, that the strategic choice of target companies may be guided by a wider set of considerations than has been debated in the literature so far.

In this study, I contrast three different perspectives on activism to investigate which firms are criticized by activists for misconduct, and why. I consider watchdogs who monitor and expose corporate misconduct (Besiou, Hunter, and Wassenhove, 2013; Deephouse and Heugens, 2009; Hunter *et al.*, 2013), change agents that aim to curb corporate misconduct (Briscoe *et al.*, 2014; Lenox and Eesley, 2009; Mena and Waeger, 2014), and social movements that mobilize resources with the struggle against corporate misconduct (King, 2008; Rowley and Moldoveanu, 2003). From each perspective, I derive firm attributes that motivate activists to target a firm with criticism of misconduct. I evaluate the significance and importance of these firm attributes, while controlling for the objective level of corporate misconduct.

I find that all three perspectives help to explain activist-driven media coverage of corporate misconduct, yet the social movement perspective is the most important one. I find that beyond a firm's level of misconduct and its potential to reduce misconduct, the firm's exposure to a variety of different sorts of misconduct beyond the focal one plays a central role. I theorize that activists target "usual suspects", that engage in various categories of misconduct, because this variety of misconduct helps activists to appeal to and mobilize a broader variety of supporters. Similar to previous studies in this field (Lenox and Eesley, 2009), the analysis is implemented in the context of greenhouse gas (GHG) emissions as a form of corporate misconduct, and the findings are based on a sample of 160 GHG intensive companies during 2007-2014.

The findings of this study contribute to the literature on private politics and social movements. I extend the literature on the private politics of activism (Baron and Diermeier, 2007; Briscoe *et al.*, 2014; Lenox and Eesley, 2009) by bringing a wider set of perspectives on activists into the analysis of activist targeting strategies. Specifically, I highlight that targeting decisions are driven by considerations not only about impact, but also about mobilizing support. I show that

this concern about mobilization expands the set of rationales with which activists choose their targets. I also contribute to the social movement literature by elaborating on the strategic implications of the mobilization problem (King, 2008; Rowley and Moldoveanu, 2003), suggesting that pursuing "lost causes" (Hond and Bakker, 2007) is not necessarily a matter of ideology, but may as well be a matter of attracting resources.

# Theory and Hypotheses

The media has important effects on the social approval of business, such as a firm's reputation (Deephouse, 2000; Fombrun and Shanley, 1990) and its legitimacy (Bansal and Clelland, 2004; Pollock and Rindova, 2003). In principle, the media collects, selects, verifies and distributes information to the public (Dyck, Volchkova, and Zingales, 2008). The significance of the media lies in the fact that the majority of people has no firsthand experience of what firms are doing, how they are operating, and who is running them. Instead, people receive such information to an overwhelming degree through various forms of media, such as television and newspapers (Deephouse, 2000), and increasingly through social media in the internet (Besiou *et al.*, 2013). I define the media in a wide sense as any outlet that is publicly available and diffuses information beyond direct personal relationships, including both the traditional mass media, web-based media, as well as any kind of social media.

In particular regarding misconduct, the media is highly relevant for businesses (Greve *et al.*, 2010). I define corporate misconduct (as well as the shorthand "misconduct") as firm actions that touch the public interest either materially, or in a moral sense by violating widely held ethical norms. It includes negative externalities such as environmental pollution, illegal behavior such as breaches of labor legislation, and immoral behavior such as corruption or discrimination. The media has generally an incentive to report on corporate misconduct (Dyck, Moss, and Zingales, 2013), because anything touching the public interest is relevant to media consumers, and also because negative headlines have high marketability (Soroka, 2008). Several studies have shown that media coverage of corporate misconduct has tangible financial consequences for firms (e.g. Karpoff *et al.*, 2008; Kölbel and Busch, 2013; Krüger, 2015).

Activists are aware of the power of publicity and use it strategically to contest corporate misconduct. I define activists as groups of secondary stakeholders whose main stated goal is to achieve some sort of change in the world, and who are engaged in activities that take aim at corporate misconduct (cf. Hond and Bakker, 2007; King, 2008). The differentiating criterion for secondary stakeholders as opposed to primary stakeholders is that the former do not regularly engage in economic transactions with the focal firm and therefore have no means to

directly exert power (Clarkson, 1995). Thus, I do not include government bodies, customers, or employees under this definition, as these would be primary stakeholders who can exert substantial power even without the help of publicity. Typical examples of activists under this definition are non-governmental organizations (NGOs) who fight for various social and environmental causes, such as Amnesty International, Greenpeace, but also religious organizations such as the Church of England or specialized research institutions such as the Union of Concerned Scientists.

Thus, activists, with the help of the media, exert an important control on misconduct. One might say that in the "court of public opinion" activists bring charges, the media conducts hearings, and the public serves as the jury. This mechanism can be very effective in punishing corporate misconduct (Core, Guay, and Larcker, 2008; Dyck, Morse, and Zingales, 2010; Dyck *et al.*, 2008; Karpoff *et al.*, 2008; Saha and Mohr, 2013). However, the "court of public opinion" is not very reliable in prosecuting misconduct. Activists criticize misconduct in public only very selectively (Barnett, 2014; Hoffman and Ocasio, 2001). As a result, some firms regularly engage in misconduct and stay below the radar of public attention, while some firms are attacked by activists in the media at the slightest suspicion (Barnett, 2014). This begs the question, which firms are criticized by activists for misconduct in the media, and why?

Prior literature on this question has identified three relevant firm attributes that attract activist criticism: The firm's level of misconduct, the firm's vulnerability, and the firm's visibility. The firm's level of misconduct naturally attracts activist criticism, which could take the form of emissions (Lenox and Eesley, 2009) or poor practices regarding communities and employees (Rehbein, Waddock, and Graves, 2004). Second, vulnerable firms seem to be a preferred target, such as firms that have invested a lot into their brand and reputation (Lenox and Eesley, 2009). Finally, visible firms that are large (Rehbein, Waddock, and Graves, 2004) and have direct client contact (Barnett, 2014) are generally more exposed to activist criticism in the media. Visibility influences the newsworthiness of any piece of information about a firm, because highly visible firms are easily recognized and thus news about visible firms is more meaningful to the general public (Bowen, 2000; Rindova *et al.*, 2005).

Yet, even accounting for these factors, there is a surprising amount of corporate misconduct that seems to be ignored by activists (Barnett, 2014). Thus, the firm attributes identified by the existing literature may not yet capture the full range of factors that influence activists' decision to target a certain firm. The literature so far also remains limited, because it has examined the choices that activists have made without engaging in a discussion about the aims that activists

hope to fulfill by making these choices. The aim of activists is not clearly specified in the studies that examine activist targeting strategies (Lenox and Eesley, 2009; Rehbein, Waddock,and Graves, 2004) but implicitly assumed to be about fighting corporate misconduct, or bringing justice to those that engage in corporate misconduct. Yet, there are a number of studies highlight that the aims of activists can be quite diverse. For instance, there is a distinction between radical and reformative activists (Hond and Bakker, 2007). Radical activists are driven by ideology and do not mind to pursue "lost causes", while reformative activists are driven by pragmatic considerations and pursue only targets when they perceive a reasonable chance of succeeding.

The underlying aim of activists is likely to be the key to fully understand the variation of activist criticism in response to corporate misconduct. This is because activists have limited resources to achieve their aims and must strategically choose which firms to target (Barnett, 2014). Publicly criticizing firms for misconduct, also referred to as "naming and shaming" is one of the most powerful tools that activists have at their disposal (Baron and Diermeier, 2007; Frooman, 1999). However, launching criticism in the media requires time and resources such as collecting information, preparing documents and materials, and circulating the information to the most promising outlets. Therefore, activists must strategically prioritize and choose their targets. The decisive criterion in this decision is whether the chosen target is helpful in achieving the underlying aim of activism.

The aims of activism have been explored in prior literature from various perspectives. While these perspectives are not mutually exclusive, they are sufficiently different to lead to different expectations about the rationale by which activists target certain companies. In the following, I offer three different theoretical perspectives on activists, elaborate on the underlying aims of activism, and derive firm attributes that indicate a strategic opportunity to reach this aim. I label these the watchdog perspective (Besiou *et al.*, 2013; Deephouse and Heugens, 2009; Hunter *et al.*, 2013), the change agent perspective (Baron and Diermeier, 2007; Briscoe *et al.*, 2014; Lenox and Eesley, 2009; Mena and Waeger, 2014), and the social movement perspective (King, 2008; Rowley and Moldoveanu, 2003).

## Activists as watchdogs

The first perspective, which is rooted in the literature on media and communications, presents activists as watchdogs (Bednar, 2012; Besiou *et al.*, 2013; Deephouse and Heugens, 2009; Hunter *et al.*, 2013). Activists are presented as "infomediaries" (Deephouse and Heugens, 2009), who do not only observe the behavior of a focal firm, but also communicate their observations and voice their concerns to the public. One cornerstone of this perspective is that

the internet has given activists radically novel means of communication (Besiou *et al.*, 2013; Hunter *et al.*, 2013). While activists used to depend on news editors to voice their opinion to the public, they can now create horizontal publicity through blogs, twitter, Facebook, YouTube and all the other open communication platforms the internet has to offer. The watchdog perspective sees activists as part of a large system of infomediaries who exchange information in an open and pluralistic media network (Deephouse and Heugens, 2009).

The aim of watchdog activists is to raise awareness of corporate misconduct and to place it on the public agenda (Besiou *et al.*, 2013). For example, watchdog activists document the grievances caused by misconduct, often in a remote location, and make this information publicly available. Or, they produce comparable figures of the extent of misconduct, which are then often released prior to political events such as international summits. The rationale is that supplying such information will draw public attention to the issue, and that the political and social institutions will then take action to deal with the issue (Tang and Tang, 2013). Typical examples of watchdog activists are organizations, who create rankings of misconduct, such as a list of the 100 worst polluters by the Political Economy Research Institute, or the public eye award for the most egregious misconduct, which is annually awarded by the Swiss NGO Erklärung von Bern during the World Economic Forum. Thus, watchdogs criticize corporate misconduct in public in order to make it transparent, to place it on the public agenda, and to stimulate the political debate about it.

Based on this aim, I expect watchdog activists to focus on those firms with the highest absolute level of misconduct. Even if the worst offender cannot be identified with certainty, watchdog activists at least focus on examples where it is evident that the level of misconduct is very high. There are two reasons to expect that the targeting rationale of watchdog activists is driven by a firm's level of misconduct. First, in terms of catching public attention, it is most straightforward to focus on extremes, because extremes are naturally newsworthy. Top Ten lists, for example, are an evergreen of the news industry, especially online. Second, given that watchdogs want to place their issue on the agenda, they have to demonstrate that their issue is more important than other competing issues. The larger a problem can be presented, the better the chance that it will be discussed. To do this, it is reasonable to criticize those firms that engage in misconduct at the greatest level and cause the most widespread consequences. Thus, based on the watchdog perspective, I hypothesize:

*H1: Firms with higher levels of corporate misconduct are exposed to more activist criticism.*

## Activists as change agents

The second perspective, which stems mostly from the political economy literature, presents activists as change agents (Baron and Diermeier, 2007; Briscoe *et al.*, 2014; Lenox and Eesley, 2009; Mena and Waeger, 2014). Activists are presented as rational agents pursuing an agenda of curbing corporate misconduct. They engage in "private politics" meaning that they take it upon themselves to pressure and coerce firms to adapt their behavior according to the activist aims (Baron and Diermeier, 2007). As a result, change agents are more opportunistic than watchdogs. They look for and respond to opportunities that provide a situation in which they can have a direct and strong impact on a corporate target (Briscoe *et al.*, 2014; Mena and Waeger, 2014). For change agents, publicity is less of an aim in itself, but rather a strategic tool to coerce corporate targets.

The central aim of change agents is to achieve change, in the sense of curbing corporate misconduct (Lenox and Eesley, 2009). Therefore, criticism from change agents is usually connected to a clear demand for improvement. The rationale of a change agent is to forcefully demand improvement from a target which is likely to respond with change of behavior. A typical example for this are NGO campaigns against specific projects, such as Greenpeace's protest against Shell's plans to produce oil in the Arctic. In this case, the activist knows that the project is still in the planning phase, and that the firm could pursue other options as an alternative. Another example is the struggle of Lesbian, Bisexual, Gay, and Transgender (LBGT) groups to achieve equal rights at US workplaces. Watchdogs would typically name and shame those workplaces with the poorest record. Change agents, however, focus on firms where they know that the CEO is likely to be on their side already (Briscoe *et al.*, 2014), in the hope of effectively reforming the corporate culture.

With effective change being the central aim, I expect change agent activists to prioritize firms with the highest level of improvement potential. These targets are attractive for change agents, because they offer activists the best chances of success in achieving the intended impact. Pressuring a firm which has no or very little potential to improve is not rewarding, even if the absolute level of misconduct is high. Thus, change agents are likely to target firms whose level of misconduct is high compared to their economic output and their industry peers. It is a strong reason to expect that a company has potential to reduce misconduct, if other firms in the same industry manage to operate with a lower relative level of misconduct. Change agents therefore are likely to criticize firms that are laggards compared to their industry benchmark and appear to have large potential to reduce their level of misconduct. Thus, from a change agent perspective, I hypothesize:

*H2: Firms with higher potential to reduce corporate misconduct are exposed to more activist criticism.*

## Activists as social movements

The third perspective is rooted in the sociology of social movements and accordingly presents activists as social movements (King, 2008; Rowley and Moldoveanu, 2003). The key distinction of this perspective is that activists are not primarily characterized in terms of what they aim to achieve with their activism, but rather in terms of how they organize as a group. In particular, the problem of mobilizing support is brought to the fore. Activism, from a social movement perspective, is fundamentally about convincing a critical amount of people to participate in a collective action scheme (King, 2008). In order to operate, activists must mobilize resources such as members, funding, and volunteers. The prior two perspectives assume that activist strategy is driven by the outcomes of activism, public awareness and effective change. The social movement perspective also recognizes these aims, but holds that activist strategy is driven to an important extent by considerations about sustaining and growing the activist organization itself (Rowley and Moldoveanu, 2003).

Thus, the core strategic aim of activists from a social movement perspective is to mobilize resources. This means that at the center of activist strategy may not be the effective advancement of interest, but rather the concern about mobilizing and sustaining a viable support base. While concrete achievements are certainly helpful in mobilizing resources, the advancement of a common interest is usually not sufficient to spark and sustain social movements (Rowley and Moldoveanu, 2003). Instead, it is argued, that social movements thrive on a collective identity among its members and supporters (Rowley and Moldoveanu, 2003). Thus, social movement activists need to attract supporters that share the same beliefs and are willing to contribute to the struggle against a common enemy.

Putting concern about mobilization at the center of activist strategy introduces a different rationale for the choice of target companies. It is illustrative to study the example of “Shell Hell Day”, a protest day organized by the student chapter of the human rights organization Amnesty International at the University of Cambridge on February 2nd, 2010 (Lichnova, 2010). The protest criticized Shell’s operations in Nigeria for disregarding human rights and also for the widespread environmental pollution of the Niger delta. Shell’s Nigerian operations have indeed a very poor track record (UNEP, 2011). However, there would have been alternative targets with similar visibility, and equally controversial human rights issues, for example the oil company Chevron, or the UK-based mining giant Rio Tinto (Business and Human Rights Resource Center, 2015).

The reported statements of the event organizers do not claim that Shell is the worst offender of its kind nor that Shell is in a position to effectively ameliorate the human rights situation. What is highlighted, though, is that Shell's Nigerian operations can be criticized on many different fronts: for human rights, for gas flaring and carbon emission, for oil pollution, for the impairment of public health, and for extracting profits from a poor country (Lichnova, 2010). Thus, from a strategic point of view, targeting Shell allowed the organizers to appeal not only to human rights activists, which is their core constituency, but also to environmentalists and globalization critics. In other words, Shell was a target that various constituencies accept as a corporate culprit. Thus, targeting Shell allowed the organizers to mobilize a large number of people who could identify with the struggle against this particular firm.

In addition, one might suspect that targeting Shell's Nigerian operations had the advantage that blame in one category could be reinforced with blame from another category. Shell's alleged complicity in human rights violations is based on testimonials and relatively difficult to prove (Business and Human Rights Resource Center, 2015). Shell's environmental pollution in the Niger delta, however, is well-documented in photographs and scientific assessments, so that blame in the environmental category is hard to deny (UNEP, 2011). Thus, in targeting Shell, the activists were able to invoke environmental misconduct to also problematize Shell's human rights misconduct. Thus, in addition to mobilizing a broader variety of constituency, Shell's misconduct in several categories allowed an apparent blameworthiness to spill over from one to another category of misconduct.

What is true for the student protest day is likely to hold for more professional activists as well, perhaps even more as they have to sustain fixed expenses such as salaries and offices and are dependent on a constant flow of resources from supporters. When engaging in anti-corporate activism, it is important to pick a target that appears worthy of being challenged by a large base of supporters. From a social movement perspective, the key strategic aim in the targeting decision is mobilization potential. It follows that the more constituencies agree that the target company is doing wrong and that it feels right to take action against it, the larger is the pool of supporters that activists can draw upon.

Thus, the variety of misconduct is an important strategic consideration in terms of attracting a large pool of supporters for three reasons. First, the variety of misconduct potentially attracts the support of a variety of constituencies, expanding the pool of supporters. Second, attracting a variety of constituencies is helpful to convince existing and future supporters that they are part of a massive movement and that many others will support the struggle against this firm as

well. This eases the collective action problem that social movements face (King, 2008). Third, the variety of misconduct across categories can make up for a lack of evidence in a specific category of misconduct. A firm that can be incriminated from various angles is more easily framed as a culprit. Thus, in order to maximize mobilization potential of a target, I expect that activists prefer targets that offer a wide variety of misconduct:

*H3: Firms with a greater variety of corporate misconduct are exposed to more activist criticism.*

# Methodology

The research case chosen for this study is activist criticism of GHG emissions. The example of GHG emissions has been chosen in prior studies (Lenox and Eesley, 2009) to study corporate misconduct and activist strategy and offers a favorable setting for three reasons. First, GHG emissions are arguably one of the most relevant environmental externalities, and are a much debated issue in the media. As a result, there is plenty of activism focusing on GHG emissions. Second, GHG emissions are objectively measureable and publically disclosed by a large sample of companies. There are also established reporting guidelines that ensure that the reported figures are consistent and comparable (WBCSD and WRI, 2004). This allows me to measure the level of misconduct objectively. Finally, GHG emissions are a well-defined category of misconduct that allows a precise identification of criticism directed towards it and a separation of criticism directed at other categories. It is for instance possible to determine whether a given instance of activist criticism was directed at GHG emissions, or some other environmental issue, such as toxic pollution or human rights. Together, the research case of GHG emissions is a highly relevant example of corporate misconduct, and it is also suited to conduct a precise analysis that can identify the mechanisms at play.

The sample includes firms from six industries with high GHG emission, namely oil & gas, utilities, chemicals, metals, cement, and capital goods. The sample is based on the MSCI world index, a financial index that consisted of 1636 firms globally at the end of year 2014. In order to construct a sample of high GHG emission industries, I rely on the scope of the European Union Emission Trading Scheme (EU ETS)[1]. Specifically, I used the MSCI sub-industry classification and selected those sub-industries that operate facilities that would be regulated under EU ETS. I used sub-industries in order to obtain groups of firms that are relatively homogenous in terms of their activities related to GHG emissions. I then combined some sub-

[1] http://ec.europa.eu/clima/policies/ets/index_en.htm

industries into larger groups, where appropriate. I combined electric, gas, and multi-utilities into one utility group. Oil & gas and chemicals contain only fully integrated companies that operate either refineries or large chemical processing units. Metals contains only companies that are active in metal smelting and capital goods only firms that produce heavy industry goods. Cement is used as is and contains only cement producers. The paper and glass industries, which also fall under the scope of EU ETS, were excluded due to an insufficient number of available firms. This resulted in a sample of 160 firms in six industries, which I observe during the period of 2007-2014. From this sample, only very few observations are missing, yielding an almost balanced panel data set.

## Activist Criticism

The dependent variable for activist criticism in the media is labeled *Criticism*. It is a count of news items that express activist criticism of a particular firm's GHG emissions. To capture the different reach of different media outlets, this count is weighted by the reach of the reporting source. *Criticism* is based on data provided by the Swiss company RepRisk AG, a business intelligence provider specializing in dynamic environmental, social, and governance risk analytics and metrics.

RepRisk systematically screens a broad range of media sources such as all major print media, online news sites, NGO homepages and newsletters, governmental agencies, blogs and social media in 15 languages on a daily basis. RepRisk employs a systematic search scope of 28 issues, which are organized in five categories: environmental footprint, community relations, employee relations, corporate governance, and general issues. This scope was defined based on international standards, such as the Universal Declaration of Human Rights, the UN Global Compact Principles, the Conventions of the International Labor Organization (ILO), the World Bank Environmental, Health, and Safety Guidelines, the UN Convention Against Corruption, and the OECD Guidelines for Multinational Enterprises.

RepRisk ensures systematic collection of this data with a strictly rules-based methodology which proceeds in two major steps. In the first step, over 80,000 publicly available sources are screened with search algorithms for news items in which a specific firm is criticized for one of the issues within the search scope. In the second step, the news item is analyzed in detail by trained analysts, who record the metadata, such as the firm being criticized, the organizations who uttered criticism, and the issues for which the firm was criticized. If the same news story appears in multiple sources, the story is registered only once from the most influential source. Exceptions to this rule are, when there is novel a development in the story, the story reappears

in a more influential source, or the same story reappears after six weeks. RepRisk has collected this data consistently according to this methodology during the entire sampling period of this study.

Furthermore, RepRisk provides for each registered news item an assessment of the reach of the reporting source. This source reach can take one of three values, and is based on the source's circulation numbers and international range. Reach 3 includes the most widely circulated news outlets with a strong international presence, namely the Financial Times, the Wall Street Journal, the South China Morning Post, the New York Times, the BBC, CNN international, Forbes, the International Herald Tribune, the Economist, and Fortune magazine. Reach 2 includes print media of national or regional importance with a circulation of at least 150k as well as the main websites of the largest international NGOs, such as Greenpeace or Amnesty International. Reach 1 includes local newspapers, and smaller NGO blogs with a circulation of less than 150k.

RepRisk collects these data as a professional service for investors and banks, where it is used as a risk analysis tool. The consistency and reliability of the data is one of the company's most highly valued business principles, as RepRisk must be in a position to justify every database entry vis-a-vis its clients, who can easily monitor RepRisk's research quality by comparing it with the original media sources for sample firms. RepRisk has been able to win and keep the trust of high profile institutions, indicating that the reliability of RepRisk's data collection process is of high quality.

I used the RepRisk database to extract those news items that identified a specific activist criticizing a specific company, specifically for GHG emissions. Technically *Criticism* is a count of news items referring to the Reprisk issue "Global Pollution and Climate Change"[2], where every counted article is multiplied by the reach of the reporting source. In other words, an article in the Financial Times counts three times more than an article in a local newspaper. Articles where the newspaper itself, or governmental bodies criticize companies for GHG emissions are not part of this count. Overall, a total of 1008 individual news items were identified in this way for the sample and during the observation period.

## Independent variables

*Misconduct* represents a firm's total GHG emissions per year in millions of metric tons. *Misconduct* measured according to the corporate standard of the GHG protocol (WBCSD and

[2] While this technically includes also emissions other than carbon dioxide, I manually removed the few news items that referred to ozone or other forms of airborne pollution.

WRI, 2004). I use the total of scope 1 and scope 2 GHG emissions, as disclosed by the sample companies. This includes all direct emissions of production, as well as indirect emissions from the consumption of purchased electricity, heat, or steam. The data was accessed via Thomson Reuters' Asset4 database. In order to maintain the sample size, estimated emissions were used for 118 firm-years, representing just over 10% of the total data. These estimates are provided by Asset4 following a patented and publicly available estimation procedure[3].

*Potential*, meaning the potential to reduce GHG emissions, is computed in two steps. First, a company's GHG emissions intensity is computed (Hoffmann and Busch, 2008). This is done by dividing the annual GHG emissions by the company's sales. Sales is chosen as a normalizing business metric, as I am interested in the company's potential to reduce GHG emissions of existing operations while delivering the same good or service, rather than optimizing profitability with respect to GHG emissions. The sales figures are also downloaded from Thomson Reuters and are based on consolidated financial statements. In a second step, the industry averages of carbon intensity are computed, to provide a benchmark. Each individual company's carbon intensity is then divided by the industry benchmark. This yields a measure indicating by what factor the focal firm is lagging or leading the industry benchmark in terms of carbon intensity.

*Variety* is measured based on RepRisk data. I make use of the fact that beyond "Global pollution and Climate Change", there are 27 other issues for which RepRisk collects data using the identical methodology. *Variety* is computed as the number of unique issues for which the focal company is criticized at least once in a given year. Criticism pertaining to "Global pollution and climate change" is omitted from this measure, in order to focus only on other, additional categories of misconduct that the focal company is criticized for. The emphasis here is not on the overall extent of this general criticism. The emphasis is on its *variety*, meaning that two firms with an equal number of critical news items in total could have very different *variety*, depending on how the news items are distributed across different issues.

## Control variables

I included six control variables in the model. Previous studies on activism have shown that firm size is an important driver of activism (Lenox and Eesley, 2009; Rehbein *et al.*, 2004). Firm size is included in the model as the variable *log.assets*, representing the natural logarithm of a firm's total assets. In addition to size, a number of other variables are likely to attract activism, because they influence the visibility of a firm. These include a measure of market leadership,

[3] http://www.google.com/patents/US8321234

*sector.rank*, measured as the rank of firm size per industry. Furthermore, a dummy variable, *brand.dummy*, indicating whether the company owns a brand that is among the world's 500 most valuable brands as reported in the publicly available brand directory, created by the specialist consultancy brand finance[4]. And *B2C.dummy*, another dummy variable, indicating whether the company has direct customer contact through any of its direct subsidiaries. I created this variable through direct inspection of the firm's operating structure on the firm's homepage. When any branch of the business could be identified as having direct customer contact, the variable is set to 1, otherwise 0.

I also included *news.constant*, a direct measure of a firm's general level of visibility through criticism in the media. This variable is constructed by taking the yearly average number of entries in the RepRisk database per company which are published in newspapers (not in NGO blogs) and contain articles containing activist criticism, but also general reporting on negative events and lawsuits. This is done for the full scope of 27 issues, excluding "Global Pollution and Climate Change". Finally, I included *ESG.rating*, the equal-weighted environmental, social, and governance score from the research provider Asset4, in order to control for a firm's overall level of performance with regards to environmental, social and governance issues. This is also warranted by a recent working paper which suggested that the media criticizes in particular those companies that have a high scores in such ratings (Luo, Meier, and Oberholzer-Gee, 2012).

## Statistical approach

Descriptive statistics are presented in tables 1 to 3. Table 1 presents the distributions of all variables in the model, and Table 2 reports their correlations. Some correlations have high values, which is not uncommon for panel data, however this is no cause for concern as the issue of multicollinearity is mitigated through the inclusion of fixed effects (Cameron and Trivedi, 2005). Retrospective analysis of variance inflation factors confirmed that multicollinearity does not compromise the statistical findings. Table 3 provides an overview of the data set, providing averages of key variables by industries and years.

The dependent variable is a count measure, accordingly I construct a statistical model for count data. I implement a negative binomial model, given that *Criticism* contains a large number of zeros and exhibits overdispersion. As can be seen in Table 2, the mean of *Criticism* greatly exceeds the median. Negative binomial models are estimated in a maximum likelihood framework and are the model of choice in this situation (Cameron and Trivedi, 2005). The data

[4] http://brandirectory.com/league_tables/table/global-500-2015

furthermore has a panel structure. In order to account for constant unobservables and cross-sectional shocks, I include industry and year dummies. In addition, I include country dummies, in order to account for the unobserved heterogeneity that may be due to different nationality of the sample firms. For example, the existence of carbon regulation, such as the EU ETS varies across countries and could potentially affect the results. Such country level differences are removed by country fixed effects.

One final concern is reverse causality, given that firms may react to activist criticism and change their behavior. The presence of reverse causality would bias statistical inference. In order to avoid this potential bias, I included a one year lagged dependent variable in the control vector, *Criticism (t-1).* Including a lagged dependent variable is a common and valid statistical approach in panels where reverse causality is suspected to be an issue (Keele and Kelly, 2006). An additional requirement for this approach is that the dependent variable is stationary. This requirement is met, as the presence of a unit root in *Criticism* was rejected in a Phillips-Perron Test. I assess the significance of coefficients based on heteroskedasticity robust standard errors à la White (Zeileis, Kleiber, and Jackman, 2008). All estimations are conducted in the statistical programming language R (R Core Team, 2015).

# Results

Table 4 presents the statistical model, which is built up successively. All regression models have *Criticism* as the dependent variable. The first model in Table 4 presents only the control variables. *log.assets, sector.rank,* the lagged dependent variable *Criticism (t-1)* and *news.constant* are significant and their coefficients have all have the expected positive sign. The dummies *brand.dummy* and *B2C.dummy* are not significant, and also not *ESG.rating.* The reason is that the effect of these variables is dominated by the more direct measures of media visibility, namely *news.constant* and also by the lagged dependent variable *Criticism (t-1).* Once these are removed, the baseline expectation that large, visible firms are preferred targets of activist criticism is confirmed. This is in line with the findings of prior literature (Lenox and Eesley, 2009; Rehbein *et al.*, 2004).

Models 2, 3, and 4 in Table 4 each introduce one of the three theoretical independent variables. All three, *Misconduct*, *Potential*, and *Variety* are highly significant. Also jointly, in model 5, all three variables are significant. Thus, all three hypotheses are supported. High levels of corporate misconduct, large potential to reduce misconduct, and a wide variety of misconduct are all firm attributes that attract activist criticism. Each of these variables is significant both individually and jointly with the other two. This indicates that each variable adds a unique contribution to the probability of a firm being targeted with activist criticism.

In addition to statistical significance, all three variables have meaningful effect sizes and improve the explanatory power of the model. I report D-squared[5], the deviance explained, an equivalent to R-squared for models that are estimated using a maximum likelihood approach instead of the classical least squares approach (Weisberg, 1980). This measure indicates that the baseline model explains 61% of the deviance, including *Misconduct* and *Potential* raises the value each by one percentage point, and the inclusion of *Variety* raises the value by 6 percentage points to 67%. The full model attains a D-squared value of 69%. That indicates that *Variety* is the most meaningful firm attribute to explain the amount of activist criticism.

I performed a number of robustness checks to safeguard against spurious findings due to misspecification or sampling issues. Specifically, I included industry effects at the original 11 sub-industry level instead of the six industry groups that I created and that can be seen in Table 3. Additionally, I excluded the five most extreme outliers, in order to check whether the results were driven by a few exceptional cases. Moreover, as some countries are represented with only one firm, I removed the country effects and instead inserted a variable measuring the public awareness of climate change within the firm's home country. I also evaluated the sensitivity of the results on some details of the variable specification. For instance, I re-estimated the model using only reported emission figures and omitting any estimated emission figures. I also repeated the analysis with a count of news items that is not weighted by reach, to be sure that the findings cannot be attributed to the specific weighting scheme that was chosen. In neither of these alternative specifications did the statistical conclusions change.

# Discussion

This study addresses the question: "Which firms are criticized by activists for corporate misconduct in the media, and why?" I approach this question from three different perspectives on activism, a watchdog, a change agent, and a social movement perspective. The findings show that all three perspectives provide valid and complementary explanations why activists target some firms over other firms with criticism in the media. Specifically, I show that the level of misconduct, the potential to reduce misconduct, and the variety of misconduct attract activist criticism. However, inspection of the effect sizes shows that the variety of misconduct, which is rooted in the social movement perspective is most helpful for understanding the targeting strategies of activists.

[5] There are a number of alternative measures to report the goodness of fit of maximum likelihood models (The Akaike Information Criterion, McFadden's Pseudo R-squared, Cragg and Uhler's pseudo r-squared). The conclusion that all three variables are meaningful, and *Variety* clearly more than the other two remains the same for any of these alternative measures.

My key contribution is to highlight the distinctiveness of underlying aims of activism and to bring this to bear on strategic rationale by which activists choose their target. In particular, I introduce a social movement perspective into the private politics domain, where activist targeting strategies have so far been considered most explicitly, however mainly from the change agent perspective (Lenox and Eesley, 2009; Mena and Waeger, 2014; Rehbein *et al.*, 2004). I expand the scope of analysis, by bringing to bear the insight from social movement theory that activists are strongly concerned with mobilizing support. I argue that this concern is a factor that influences the decision which firm to target, and I show that as a result activists target firms that offer a wide variety of corporate misconduct. So far, it has not been evident that such "usual suspects" are particularly prone to activist criticism, because the focus has remained on one focal issue and the activist's ability to affect change. However, considering social movements' central concern of mobilization, I am able to explain why activists target these "usual suspects" more than other firms. This finding charts new territory in the strategy space of activists and offers considerable scope to extend models of activist strategies in the private politics literature.

The study also advances the discussion of activism as a social phenomenon. Recent studies have tended to divide activists in a continuum of reformative and radical groups (e.g. Hond and Bakker, 2007; Mena and Waeger, 2014), acknowledging that media criticism is a strategy that is employed by both groups (Hond and Bakker, 2007). These studies suggest that reformative activists are rational change agents that look for opportunities to have impact (Mena and Waeger, 2014), whereas radical activists criticize firms as a matter of principle and pursue "lost causes", driven by ideology (Hond and Bakker, 2007). However, both radical and reformative activists must be concerned, at least to some extent, with mobilizing support and resources. This study suggests, that when considering the mobilizing challenges of activists, the distinction between radical and reformative deserves reconsideration. A "lost cause", such as a target company that is very unlikely to change, could be part of the strategic plan of a reformative activist, if it aids mobilization. Thus, this study suggests, that the ideologically motivated radical-reformative continuum is too narrowly focused on outcomes and that examining the mobilization strategies of activists would reveal that pursuing "lost causes" is not necessarily indicative of ideology based activism.

An interesting avenue for future research would be to study the resource mobilization of activists in more detail, and to contrast it with the outcomes of activism. For instance it would be interesting to see, whether watchdog, change agents and social movement type activists rely

on different sources of funding. A related point of enquiry is, whether member-funded activist groups strategize differently than activist groups that also rely on corporate funding. Considering the mobilization strategy in tandem with the target selection strategy would certainly drive forward the understanding of activist strategy in general.

Another area of future research is to integrate the three types of activists that I present into a holistic framework, together with other frameworks such as the radical-reformative continuum (Hond and Bakker, 2007). While in this article, the activist types are idealized in order to sharpen the theoretical differences between them, real activists may act in ways that are consistent with one or more of these types. In particular, it would be interesting to study how activists may combine the strategic rationales in their decision, or rely more heavily on one over the other under specific circumstances.

I acknowledge a number of limitations. The research case in this study was chosen for good reasons and has been selected before (Lenox and Eesley, 2009). However, one special characteristic of GHG emissions is that the emissions themselves as well as their consequences are for the most part invisible. Thus, in terms of newsworthiness, GHG emissions may be exposed to different dynamics than, for example, toxic spills that have visible consequences such as deceased fish. A possible remedy to this limitation would be to repeat this research design with an alternative issue, for example excessive executive compensation or labor conditions. Secondly, this study is focused exclusively on “naming and shaming” as an activist strategy. Other studies have observed that activists have also other tools at their disposal, for example shareholder resolutions (Rehbein *et al.*, 2004). Potentially, a more complete view of activist strategic tools would reveal additional insights. Nevertheless, media tactics are commonly seen as one of the most powerful and frequently used strategic tools of activists (Baron and Diermeier, 2007). Thus, while this study is limited to a certain part of the larger phenomenon of activism, it covers a substantial and relevant part of it.

With these limitations in mind, the study also offers two important practical implications. First, coming back to the court of public opinion, knowledge of activist aims and strategies helps to explain why criticism of misconduct is seemingly non-systematic. To avoid being blamed in public, firms should know the activists who are monitoring them, and also understand what they are aiming for. Based on that, effective measures to reduce the risk of public criticism can be devised. Second, the findings of this study suggest that minimizing any activity that could be perceived as corporate misconduct, and performing against the industry benchmark are useful measures. Most effective, but likely most difficult to achieve, is to reduce the variety of

misconduct. Managers should be aware that every new constituency that is negatively affected by their firm's activities may have a multiplying effect on activist criticism. I carefully suggest that establishing a very good relationship with selected stakeholder groups may be more effective in reducing the level of activist criticism than establishing mediocre relationships with all stakeholder groups. However, additional investigation is warranted to validate this recommendation.

# Conclusion

In this article, I investigate the drivers of activist criticism. I look at the underlying aims of activists to explain the amount of activist criticism that a company attracts for a given level of misconduct. I examine the motivations of activists to target certain companies from three complementary perspectives. Framing activists as watchdogs, I show that firms with high levels of misconduct attract activist criticism. Framing activists as change agents, I show that firms with large potential for reducing misconduct are targeted with activist criticism. Finally, framing activists as social movements, I show that the variety of misconduct substantially increases the amount activist criticism, even within specific categories of misconduct. The findings reveal that the social movement perspective is particularly important to understand activism in response to corporate misconduct. This suggests that the concern about mobilizing members and resources is an important factor that influences the rationale of activists to target certain firms. Looking ahead, this article provides evidence that integrating strategic considerations about resource mobilization with expectations about impact of activism is important to understand activists and their decision to target corporate misconduct with public criticism.

# References


Bansal P, Clelland I. 2004. Talking trash: legitimacy, impression management, and unsystematic risk in the context of the natural environment. *The Academy of Management Journal* **47**(1): 93–103.

Barnett ML. 2014. Why stakeholders ignore firm misconduct: a cognitive view. *Journal of Management* **40**(3): 676–702.

Baron DP. 2001. Private politics, corporate social responsibility, and integrated strategy. *Journal of Economics & Management Strategy* **10**(1): 7–45.

Baron DP, Diermeier D. 2007. Strategic activism and nonmarket strategy. *Journal of Economics & Management Strategy* **16**(3): 599–634.

Bednar MK. 2012. Watchdog or lapdog? A behavioral view of the media as a corporate governance mechanism. *Academy of Management Journal* **55**(1): 131–150.

Besiou M, Hunter ML, Wassenhove LN. 2013. A web of watchdogs: stakeholder media networks and agenda-setting in response to corporate initiatives. *Journal of Business Ethics* **118**(4): 709–729.

Bowen FE. 2000. Environmental visibility: a trigger of green organizational response? *Business Strategy and the Environment* **9**(2): 92–107.

Briscoe F, Chin MK, Hambrick DC. 2014. CEO ideology as an element of the corporate opportunity structure for social activists. *Academy of Management Journal* **57**(6): 1786–1809.

Cameron AC, Trivedi KP. 2005. *Microeconometrics: Methods and Applications*. Cambridge University Press: New York.

Clarkson MBE. 1995. A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review* **20**(1): 92.

Core JE, Guay W, Larcker DF. 2008. The power of the pen and executive compensation. *Journal of Financial Economics* **88**(1): 1–25.

Deephouse DL. 2000. Media reputation as a strategic resource: an integration of mass communication and resource-based theories. *Journal of Management* **26**(6): 1091–1112.

Deephouse DL, Heugens PP. 2009. Linking social issues to organizational impact: the role of infomediaries and the infomediary process. *Journal of Business Ethics* **86**(4): 541–553.

Dyck A, Morse A, Zingales L. 2010. Who blows the whistle on corporate fraud? *Journal of Finance* **65**(6): 2213–2254.

Dyck A, Moss D, Zingales L. 2013. Media vs. special interest. *Journal of Law and Economics*, NBER **56**(3): 521–553.

Dyck A, Volchkova N, Zingales L. 2008. The corporate governance role of the media: evidence from russia. *Journal of Finance* **63**(3): 1093–1135.

Flammer C. 2012. Corporate social responsibility and shareholder reaction: the environmental awareness of investors. *Academy of Management Journal* **56**(3): 758–781.

Fombrun C, Shanley M. 1990. What's in a name? Reputation building and corporate strategy. *Academy of Management Journal* **33**(2): 233–258.

Frooman J. 1999. Stakeholder influence strategies. *The Academy of Management Review* **24**(2): 191–205.

Greve HR, Palmer D, Pozner J. 2010. Organizations gone wild: the causes, processes, and consequences of organizational misconduct. *The Academy of Management Annals* **4**(1): 53–107.

Hoffman AJ, Ocasio W. 2001. Not all events are attended equally: toward a middle-range theory of industry attention to external events. *Organization Science* **12**(4): 414–434.

Hoffmann VH, Busch T. 2008. Corporate carbon performance indicators: carbon intensity, dependency, exposure, and risk. *Journal of Industrial Ecology* **12**(4): 505–520.

Hond F Den, Bakker FGA De. 2007. Ideologically motivated activism: how activist groups influence corporate social change activities. *Academy of Management Review* **32**(3): 901–924.

Hunter ML, Wassenhove LN Van, Besiou M, Halderen M van. 2013. The agenda-setting power of stakeholder media. *California Management Review* **56**(1): 24–49.

Karpoff JM, Lee DS, Martin GS. 2008. The cost to firms of cooking the books. *Journal of Financial and Quantitative Analysis* **43**(03): 581.

Keele L, Kelly NJ. 2006. Dynamic models for dynamic theories: the ins and outs of lagged dependent variables. *Political Analysis* **14**(2): 186–205.

King B. 2008. A social movement perspective of stakeholder collective action and influence. *Business & Society* **47**(1): 21–49.

Kölbel JF, Busch T. 2013. *The effect of bad news on credit risk: a media based view of the pricing of corporate social responsibility*. DSF Policy Paper Series. Available at: http://www.dsf.nl/assets/cms/File/Research/DSF Policy Paper No 40 The effect of bad news on credit risk_November 2013(1).pdf.

Krüger P. 2015. Corporate goodness and shareholder wealth. *Journal of Financial Economics*. Elsevier **115**(2): 304–329.

Lamin A, Zaheer S. 2012. Wall street vs. main street: firm strategies for defending legitimacy and their impact on different stakeholders. *Organization Science* **23**(1): 47–66.

Lenox M, Eesley C. 2009. Private environmental activism and the selection and response of firm targets. *Journal of Economics & Management Strategy* **18**(1): 45–73.

Lichnova J. 2010. CU amnesty will take to the streets in 'Shell hell day'. *Varsity* : 1–2. Available at: http://www.varsity.co.uk/news/1905.

Luo J, Meier S, Oberholzer-Gee F. 2012. No news is good news: CSR strategy and newspaper coverage of negative firm events. Available at: http://www.hbs.edu/faculty/Publication Files/12-091_6d3f52ce-ab93-4cc6-82cd-e4fc7624c3b6.pdf.

Mena S, Waeger D. 2014. Activism for corporate responsibility: conceptualizing private regulation opportunity structures. *Journal of Management Studies* **51**(7): 1091–1117.

Pollock TG, Rindova VP. 2003. Media legitimation effects in the market for initial public offerings. *Academy of Management Journal* **46**(5): 631–642.

R Core Team. 2015. R: a language and environment for statistical computing. R Foundation for Statistical Computing: Vienna, Austria. Available at: http://www.r-project.org/ [1 August 2015].

Rehbein K, Waddock SA, Graves SB. 2004. Understanding shareholder activism: which

corporations are targeted? *Business & Society* **43**(3): 239–267.

Rindova V, Williamson I, Petkova AP, Sever JM. 2005. Being good or being known: an empirical examination of the dimensions, antecedents, and consequences of organizational reputation. *Academy of Management Journal* **48**(6): 1033–1049.

Rowley TJ, Moldoveanu M. 2003. When will stakeholder groups act? An interest- and identity-based model of stakeholder group mobilization. *The Academy of Management Review* **28**(2): 204–219.

Saha S, Mohr RD. 2013. Media attention and the toxics release inventory. *Ecological Economics*. **93**(3): 284–291.

Soroka SN. 2008. Good news and bad news: asymmetric responses to economic information. *The Journal of Politics* **68**(02): 372–385.

Tang Z, Tang J. 2013. Can the media discipline chinese firms' pollution behaviors? The mediating effects of the public and government. *Journal of Management (Forthcoming)*.

UNEP. 2011. *Environmental Assessment of Ogoniland*. Nairobi.

WBCSD, WRI. 2004. *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*. Available at: http://www.ghgprotocol.org/standards/corporate-standard.

Weisberg S. 1980. *Applied Linear Regression.* Wiley: New York.

Zavyalova A, Pfarrer MD, Shapiro DL. 2012. Managing the message: the effects of firm action and industry spillover on media coverage following wrongdoing. *Academy of Management Journal* **55**(5): 1079–1102.

Zeileis A, Kleiber C, Jackman S. 2008. Regression models for count data in R. *Journal of Statistical Software* **27**(8): 1–25.

Table 1: Distributions

| | min | max | mean | median | sd | var |
|---|---|---|---|---|---|---|
| Criticism | 0 | 44 | 1.46 | 0 | 3.75 | 14.09 |
| log.assets | 13.58 | 20.50 | 17.11 | 17.16 | 1.14 | 1.29 |
| sector.rank | 1 | 32 | 6.72 | 4 | 6.36 | 40.48 |
| brand.dummy | 0 | 1 | 0.24 | 0 | 0.43 | 0.18 |
| B2C.dummy | 0 | 1 | 0.58 | 1 | 0.49 | 0.24 |
| ESG.Rating | 3.63 | 97.08 | 75.48 | 87.41 | 23.76 | 564.76 |
| Criticism (t-1) | 0 | 44 | 1.22 | 0 | 3.41 | 11.62 |
| news.constant | 0 | 117.50 | 8.21 | 2 | 16.80 | 282.10 |
| Misconduct | 0.06 | 223 | 27.86 | 12.80 | 37.27 | 1389.35 |
| Potential | 0 | 8.67 | 0.98 | 0.69 | 1 | 1.01 |
| Variety | 0 | 24 | 5.44 | 4 | 5.70 | 32.54 |

Table 2: Correlation Matrix

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Criticism | 1 | | | | | | | | | | |
| 2 | log.assets | 0.46 | 1 | | | | | | | | | |
| 3 | sector.rank | 0.33 | 0.58 | 1 | | | | | | | | |
| 4 | brand.dummy | 0.26 | 0.48 | 0.15 | 1 | | | | | | | |
| 5 | B2C.dummy | 0.14 | 0.27 | 0.45 | -0.04 | 1 | | | | | | |
| 6 | ESG.Rating | 0.30 | 0.37 | 0.18 | 0.18 | 0.10 | 1 | | | | | |
| 7 | Criticism (t-1) | 0.53 | 0.44 | 0.31 | 0.27 | 0.15 | 0.28 | 1 | | | | |
| 8 | news.constant | 0.57 | 0.67 | 0.33 | 0.38 | 0.09 | 0.48 | 0.54 | 1 | | | |
| 9 | Misconduct | 0.44 | 0.64 | 0.57 | 0.22 | 0.23 | 0.15 | 0.40 | 0.40 | 1 | | |
| 10 | Potential | 0.17 | 0.11 | -0.11 | 0.03 | -0.08 | -0.02 | 0.13 | 0.05 | 0.50 | 1 | |
| 11 | Variety | 0.65 | 0.60 | 0.30 | 0.36 | 0.08 | 0.46 | 0.54 | 0.84 | 0.36 | 0.04 | 1.00 |

Table 3: Panel Overview

| Industry | Obs. | Assets | CO2 | News | CO2.Intensity | Variety |
|---|---|---|---|---|---|---|
| Utilities | 438 | 47.70 | 38.57 | 1.39 | 2820 | 4.16 |
| Metals | 165 | 41.53 | 27.56 | 1.05 | 478 | 6.13 |
| Cement | 77 | 18.56 | 28.73 | 0.21 | 798 | 3.12 |
| Oil & Gas | 205 | 78.22 | 23.68 | 3.27 | 1093 | 7.62 |
| Chemicals | 80 | 25.28 | 10.81 | 0.55 | 531 | 5.91 |
| Capital Goods | 96 | 90.12 | 1.91 | 0.40 | 17 | 6.86 |
| Year | Obs. | Assets | CO2 | News | CO2.Intensity | Variety |
| 2008 | 153 | 45.64 | 30.24 | 1.86 | 1567 | 4.25 |
| 2009 | 157 | 48.77 | 27.33 | 1.32 | 1577 | 3.94 |
| 2010 | 158 | 51.88 | 27.94 | 0.80 | 1570 | 4.89 |
| 2011 | 160 | 54.76 | 27.31 | 1.62 | 1564 | 5.72 |
| 2012 | 159 | 55.35 | 27.41 | 1.04 | 1570 | 5.73 |
| 2013 | 155 | 55.60 | 27.69 | 1.30 | 1568 | 6.18 |
| 2014 | 119 | 57.69 | 26.93 | 2.56 | 1392 | 7.94 |
| TOTAL | 1061 | 52.67 | 27.86 | 1.46 | 1549 | 5.44 |

Table 4: Regressions on *Criticism*

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| (Intercept) | $-9.96^{***}$ | $-7.02^{***}$ | $-9.86^{***}$ | $-4.23^{*}$ | $-2.85$ |
| | (1.55) | (1.55) | (1.61) | (1.68) | (1.81) |
| log.assets | $0.47^{***}$ | $0.31^{***}$ | $0.44^{***}$ | 0.04 | $-0.05$ |
| | (0.10) | (0.10) | (0.10) | (0.10) | (0.11) |
| sector.rank | $0.03^{*}$ | 0.02 | $0.04^{***}$ | 0.02 | $0.02^{*}$ |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| brand.dummy | $-0.04$ | $-0.14$ | $-0.10$ | $-0.07$ | $-0.14$ |
| | (0.26) | (0.25) | (0.25) | (0.24) | (0.23) |
| B2C.dummy | $-0.09$ | $-0.06$ | $-0.17$ | 0.15 | 0.13 |
| | (0.23) | (0.23) | (0.23) | (0.24) | (0.23) |
| ESG.Rating | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Criticism (t-1) | $0.07^{***}$ | $0.03^{***}$ | $0.06^{***}$ | $0.05^{***}$ | $0.03^{*}$ |
| | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| news.constant | $0.02^{***}$ | $0.02^{***}$ | $0.02^{***}$ | $-0.01$ | $-0.01$ |
| | (0.00) | (0.00) | (0.00) | (0.01) | (0.01) |
| Misconduct | | $0.01^{***}$ | | | $0.01^{***}$ |
| | | (0.00) | | | (0.00) |
| Potential | | | $0.29^{***}$ | | $0.22^{***}$ |
| | | | (0.05) | | (0.05) |
| Variety | | | | $0.21^{***}$ | $0.20^{***}$ |
| | | | | (0.02) | (0.02) |
| Industry | *yes* | *yes* | *yes* | *yes* | *yes* |
| Year | *yes* | *yes* | *yes* | *yes* | *yes* |
| Country | *yes* | *yes* | *yes* | *yes* | *yes* |
| AIC | 2400.05 | 2365.59 | 2374.35 | 2272.31 | 2231.09 |
| Log Likelihood | $-1157.03$ | $-1138.79$ | $-1143.17$ | $-1092.16$ | $-1069.54$ |
| D-squared | 0.61 | 0.62 | 0.62 | 0.67 | 0.69 |
| Num. obs. | 1061 | 1061 | 1061 | 1061 | 1061 |

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

# Paper 2: How media coverage of corporate social irresponsibility increases firm risk

Julian Kölbel*, Timo Busch**, Leonhardt Jancso*
*ETH Zurich, Department of Management, Technology, and Economics
Weinbergstrasse 56, 8092 Zuerich, Switzerland
** University of Hamburg, School of Business, Economics and Social Science,
Von-Melle-Park 9, 20146 Hamburg, Germany

## Abstract

This article investigates the effect of corporate social irresponsibility (CSI) on firm risk. We suggest that media coverage of CSI generates firm risk by coordinating attention within stakeholder networks, providing the basis for collective stakeholder sanctions. Using an international panel of 539 firms during 2008–2013, we find that firms receiving higher levels of CSI coverage in the media face significantly higher firm risk. Furthermore, we find that the reach of the outlet that reports CSI moderates this relationship. We confirm these results with several robustness checks and an instrumental variable estimation. Understanding how irresponsible behavior generates firm risk advances the literature on stakeholder theory and suggests novel strategic approaches to risk management.

## Introduction

A recent stream of literature has explored the strategic value of corporate social responsibility (CSR) in the context of risk management. Drawing on instrumental stakeholder theory (Donaldson and Preston, 1995; Jones, 1995), the central proposition is that CSR offers insurance-like protection for assets that depend on stable and trustful stakeholder relations (Godfrey, Merrill, and Hansen, 2009; Godfrey, 2005). CSR earns the goodwill of stakeholders, which decreases the impact of stakeholder sanctions in response to negative events, thus reducing firm risk. The insurance analogy offers an elegant explanation for how CSR affects financial performance, and empirical tests of it consistently show that CSR has a risk-mitigating effect (Cheng, Ioannou, and Serafeim, 2014; Henisz, Dorobantu, and Nartey, 2013; Koh, Qian, and Wang, 2013; Sharfman and Fernando, 2008).

Yet, from a broader risk-management perspective, the insurance hypothesis lacks an important theoretical counterpart. Strategic risk management entails two steps: first understanding the process that generates risk, and second choosing an appropriate response strategy (Andersen

and Bettis, 2014; Mikes and Kaplan, 2015; Miller, 1992). The insurance hypothesis informs the second step by demonstrating that CSR reduces the impact of stakeholder sanctions. Yet it falls short of the first step, because it does not explain how stakeholder sanctions initially emerge. The root of this shortcoming is that many studies do not differentiate CSR from its negative counterpart, corporate social irresponsibility (CSI). However, CSI is not only a distinct theoretical construct (Strike, Gao, and Bansal, 2006), but also the trigger for stakeholder reactions at the cognitive level (Barnett, 2012; Lange and Washburn, 2012). In addition, empirical studies that distinguish between the two constructs reveal that CSI exacerbates risk more strongly than CSR reduces it (Chava, 2014; Goss and Roberts, 2011; Oikonomou and Pavelin, 2014). This suggests that the insurance hypothesis should be extended with an explanation of how firm risk emerges from CSI.

This article investigates the mechanism through which CSI generates firm risk. We emphasize that while firms self-disclose data on their CSR strategy and performance—e.g. in annual reports—information on CSI is published daily by the media. Building on insights about the attribution of CSI at the individual level (Barnett, 2012; Lange and Washburn, 2012), we develop theory on how media coverage of CSI creates firm risk at the stakeholder-network level. Interests within stakeholder networks are usually divergent (Bridoux and Stoelhorst, 2014; Bundy, Shropshire, and Buchholtz, 2012; Harrison, Bosse, and Phillips, 2010), but CSI coverage leads to agenda-setting, causing the interests of multiple stakeholders to converge on one particular CSI issue at one particular point in time. This coordinating force of the media creates the conditions for collective stakeholder sanctions, such as boycotts, protests, lawsuits, and tighter regulation, that can have a material impact on corporate financial performance (Frooman, 1999; Henisz *et al.*, 2013; Rowley, 1997). We hypothesize that it is through this mechanism that CSI coverage increases firm risk.

Our results are based on quarterly observations of an international sample of 539 firms between 2008 and 2013. We measure CSI coverage with a dataset provided by RepRisk, which contains over 100,000 news articles reporting firm-specific CSI in the environmental, social, labor, and governance domains. We find that CSI coverage in the media has a positive and significant effect on firm risk. In addition, we confirm the expectation that the reach of the media outlet moderates this relationship: CSI coverage in leading newspapers has a greater effect on firm risk than CSI coverage in minor newspapers. At the same time, we find that the effect of self-disclosed CSR data on firm risk remains insignificant. We perform several robustness checks as well as an instrumental variable regression to consolidate our findings.

This article makes two central contributions. First, we complement established theory about the insurance effect of CSR (Godfrey *et al.*, 2009; Godfrey, 2005; Koh *et al.*, 2013) with novel theory about the risk-generating effect of CSI. In distinguishing the risk-generating mechanism of CSI coverage from CSR as a response strategy, we provide an important theoretical basis to formulate risk-management strategy in the context of stakeholder theory. Clarifying this mechanism suggests a range of additional response strategies beyond investing in CSR as insurance. For example, systematically avoiding negative impacts in order to minimize potential targets for CSI coverage, proactively engaging in dialog with stakeholder groups likely to provoke CSI coverage, and strategically divesting controversial areas of business activity. Second, this study takes the literature on CSI attribution from the individual cognitive level (Barnett, 2012; Lange and Washburn, 2012) to the stakeholder-network level. Building on the cognitive process through which individual stakeholders decide to sanction a firm, this study explains how agenda-setting in stakeholder networks leads to collective stakeholder sanctions. We demonstrate that this agenda-setting effect is moderated by the reach of the media outlet providing CSI coverage.

# Literature Review

There is a longstanding debate about firms' responsibilities towards society (Bowen, 1953; Carroll, 1979), in particular focusing on the relationship between CSR and corporate financial performance. Research on this theme attempts to establish how social norms, markets, and institutions work individually or together in a complex process such that responsible firm behavior converges with profitable firm behavior. Many arguments for a positive relationship between CSR and financial performance are rooted in stakeholder theory (Freeman, 1984). The central argument is that stakeholders are central to a firm's functioning and value creation (Donaldson & Preston 1995; Jones 1995) and that CSR positively affects stakeholder relations. Meta-analyses have concluded that there tends to be a positive relationship between CSR and corporate financial performance (Margolis and Walsh, 2003; Orlitzky, Schmidt, and Rynes, 2003), but the evidence is not unequivocal (Barnett and Solomon, 2012; Brammer and Millington, 2008).

An important turn in the debate about the economic value of CSR was marked by the shift towards focusing on firm risk, rather than financial performance, as the dependent variable (Godfrey, 2005; Sharfman and Fernando, 2008). Firm risk is defined as the *ex-ante* uncertainty about future financial performance falling below expectations (Bettis, 1983; Miller and Reuer, 1996; Ruefli, Collins, and Lacugna, 1999). According to Godfrey's (2005) insurance

hypothesis, CSR creates goodwill amongst a firm's stakeholders, which then acts as an "insurance policy". Contingent on a negative event, e.g. the initiation of a lawsuit, CSR reduces the likelihood of stakeholder sanctions in response. Godfrey *et al*. (2009) test the insurance hypothesis and demonstrate that firms with high levels of CSR experience reduced losses after negative events. Koh *et al*. (2013) extend this finding by showing that CSR mitigates risk *ex ante*, indicating that investors appreciate and value the risk-mitigating potential of CSR even before any negative event. Several additional studies have confirmed that CSR decreases firm risk (Chava, 2014; Cheng *et al.*, 2014; El Ghoul *et al.*, 2011; Goss and Roberts, 2011; Henisz *et al.*, 2013; Lee and Faff, 2009; Oikonomou and Pavelin, 2014; Sharfman and Fernando, 2008). The focus on firm risk has not only made the insurance hypothesis an empirical success, it has also positioned CSR in a tractable strategic management framework, since firm risk is of central concern in corporate strategy (Amit and Wernerfelt, 1990; Andersen and Bettis, 2014; Bettis, 1983; Ruefli *et al.*, 1999). In doing so, the insurance hypothesis has greatly advanced the debate about the economic value of CSR.

However, from a broader risk-management perspective, the insurance hypothesis lacks an important theoretical counterpart. The current focus on CSR as insurance treats the emergence of stakeholder sanctions as a given—but understanding what drives such sanctions in the first place would be crucial to formulating risk-management strategy (Andersen and Bettis, 2014; Mikes and Kaplan, 2015). By analogy, before a homeowner arranges for protection measures, such as fire insurance, they should first examine the potential fire hazards in their home. Insurance is only one of many possible risk-management strategies (Miller, 1992), and a manager may instead choose to prevent risk directly (Mikes and Kaplan, 2015) or strategically shift operations to more favorable environments (Belderbos, Tong, and Wu, 2014). We lack a theoretical understanding of what generates the risk against which CSR can subsequently serve as insurance.

This theoretical gap is partly the result of an unclear distinction between CSR and its negative counterpart, CSI. CSI is defined as the "set of corporate actions that negatively affects an identifiable social stakeholder's legitimate claims" (Strike *et al.*, 2006: 852). Many empirical studies focusing on firm risk have combined CSR and CSI into a single construct, e.g. by combining "strength" and "weakness" scores of the Kinder, Lydenberg, and Domini (KLD) data set into a unitary CSR score. However, such a measure may conflate the initial driver of stakeholder sanctions with its subsequent mitigation measure. Studies that separate the two constructs reveal a striking asymmetry: CSI drives firm risk more powerfully than CSR

mitigates it (Chava, 2014; Goss and Roberts, 2011; Oikonomou and Pavelin, 2014). But although these studies isolate CSI empirically, they do not reflect what is theoretically distinct about CSI, or explain why it contributes to firm risk. Therefore, we focus explicitly on CSI, and explore the mechanism by which it generates firm risk.

# Hypothesis Development

The mechanism we propose can be subdivided into three interacting elements. First, stakeholders attribute CSI to a firm and communicate this to the media. Second, coverage of CSI in the media leads to agenda-setting in the focal firm's stakeholder network, creating the conditions for collective stakeholder sanctions. Third, the possibility of collective stakeholder sanctions increases the uncertainty of future financial performance being below expectations, i.e. firm risk. We define stakeholders as "any group or individual who can affect or is affected by the achievement of the firm's objectives" (Freeman, 1984: 25), with the common amendment that the media is an intermediary between stakeholders rather than a stakeholder in itself (Barnett, 2012). Stakeholder networks describe the entirety of a firm's stakeholders, including not only the firm's links to its stakeholders, but also stakeholders' links to each other (Rowley, 1997).

## Attribution of CSI in the media

The starting point is that CSI is a construct that is attributed to a firm by its stakeholders (Lange and Washburn, 2012). Attribution is a cognitive process in which individuals explore the cause of a negative stimulus and seek to determine who is to blame for it (Shaver, 1985). The attribution process through which stakeholders judge whether a firm has engaged in CSI has been described in detail in the literature (Barnett, 2012; Lange and Washburn, 2012). Attribution is mostly a cognitive process that takes place inside stakeholders' minds. However, when a firm is judged to behave irresponsibly, the final step of the process is to blame the firm (Shaver, 1985). At that point, stakeholders reveal their opinion about the firm, and we build on these revealed attributions of CSI.

The primary channel for stakeholders to blame firms for CSI is the mass media (King and Soule, 2007). In particular, stakeholders who find themselves negatively affected try to blame the firm for CSI in the media, because this is an effective way to exert pressure on the firm's management (Andrews and Caren, 2010; Barnett, 2012; Baron and Diermeier, 2009; King and Soule, 2007). Activists and social movements are the most prominent complainants, however, other stakeholder groups such as employees (Dyck, Morse, and Zingales, 2010), customers

(Lyon and Montgomery, 2013), investors (Dyck, Volchkova, and Zingales, 2008), and governmental agencies (Tang and Tang, 2013) also use the media to denounce firms' CSI.

In contrast, the primary channel for CSR information is a firm's own self-disclosed CSR data. Most large firms document their CSR activities extensively in annual reports and on their web pages. This contrast is due to different incentives that stakeholders, the firm, and the media have for disseminating CSI and CSR information respectively. Stakeholders have a strong incentive to highlight CSI that endangers their own interests (Barnett, 2012; Baron and Diermeier, 2009). Firms, on the other hand, have an incentive to trumpet CSR activities that demonstrate the good character of their organization (Lyon and Maxwell, 2011). However, CSI makes better headlines than CSR, because individuals perceive negative information as more interesting (Rozin and Royzman, 2001) and also more credible (Hilbig, 2009). Correspondingly, the media has a strong negativity bias (Niven, 2001; Soroka, 2008); in a recent study of media coverage of labor conditions in the supply chain of apparel firms, negative articles outnumbered positive articles by six to one (Lamin and Zaheer, 2012). As a result, firms struggle to publicize positive CSR information via the media (Illia *et al.*, 2013) and prefer to use their own channels. Thus, in combination, the incentives of stakeholders, firms, and the media make the media the primary channel for CSI information.

This asymmetric communication of CSI through the media has theoretical implications, which we develop in the following sections. To this end, we define CSI coverage as the number of news articles reporting that a stakeholder is blaming a firm for CSI. In terms of scope, CSI coverage can pertain to ecological issues, community relations, labor relations, or corporate governance. Previous studies on CSI and risk (Chava, 2014; Goss and Roberts, 2011; Oikonomou and Pavelin, 2014) have relied on KLD ratings as their measure of CSI. These ratings include media information, but do not specify whether, when, and where the underlying information was reported. In addition, it is unclear how media information is used in KLD's proprietary rating process (Chatterji, Levine, and Toffel, 2009), making it impossible to draw conclusions about the importance of media coverage specifically. Furthermore, there are examples where KLD ratings do not seem to reflect important media coverage of CSI (Entine, 2003), perhaps because the rating agency has a different opinion from the media, based on its proprietary assessment process. However, such assessments remain private opinions known only to subscribers to the research service. Our interest is exclusively on what the media reports about CSI, because the media directs public attention (Hoffman and Ocasio, 2001; McCombs and Shaw, 1972), and is therefore uniquely positioned to trigger stakeholder sanctions.

## Agenda-setting in stakeholder networks

Stakeholders who believe a firm is engaging in CSI are likely to react with sanctions (Barnett, 2012; Lange and Washburn, 2012) such as withdrawal of trust, non-cooperation, legal prosecution, lobbying, and open confrontation (Baron and Diermeier, 2009; Frooman, 1997). However, for these sanctions to have a meaningful effect, they need to be carried out by a group of stakeholders—ideally, a large group of powerful stakeholders. Thus, stakeholder sanctions are generally collective action endeavors. Apart from very powerful stakeholders such as governments, individual stakeholders may believe that a firm is engaging in CSI, but can hardly sanction it alone.

Stakeholder theory views the firm at the center of a network of stakeholders (Freeman, 1984; Harrison *et al.*, 2010; Rowley, 1997). Normally, the level of coordination within stakeholder networks is low, because different stakeholders have heterogeneous and independent demands (Harrison *et al.*, 2010). On the one hand, the heterogeneity of stakeholder demands is a management challenge that requires prioritization (Bundy *et al.*, 2012; Mitchell, Agle, and Wood, 1997) and balancing strategies (Bridoux and Stoelhorst, 2014; Harrison *et al.*, 2010). On the other hand, this heterogeneity spreads the power of stakeholders over many different issues and leaves the firm in a strong bargaining position *vis-a-vis* individual stakeholders. As a result, the potential for material stakeholder sanctions is low in stakeholder networks with a low level of coordination (Frooman, 1999).

However, CSI coverage exerts a coordinating force on stakeholder networks through agenda-setting. Agenda-setting refers to the effect whereby the media determines which of many issues are currently important in a community (McCombs and Shaw, 1972). The mass media achieves this by informing the majority of community members about the same issues at the same time, focusing the limited attention of individuals on a selection of current issues. Especially in relation to CSI and firm misconduct, the media largely determines which events and issues receive attention (Hoffman and Ocasio, 2001).

Agenda-setting also occurs in stakeholder networks (Carroll, 2010; Tang and Tang, 2013). As in any other community, the mass media simultaneously informs the entire stakeholder network about the same issues. The result is that now all stakeholders exposed to this news go through an attribution process, begin to re-evaluate their relationship to the firm, and potentially decide to sanction (Barnett, 2012). Beyond informing stakeholders individually, CSI coverage also creates a common-knowledge situation, where each stakeholder knows that every other stakeholder has probably received the same information (Adut, 2005). This emboldens those

stakeholders who want to sanction, for they know they are not alone, and prompts those stakeholders who are hesitant to take a stance, for they know that inaction will be noticed and could be interpreted as a sign of complicity (Greve, Palmer, and Pozner, 2010). Thus, CSI coverage coordinates the attention of the firm's stakeholder network and creates the conditions for collective stakeholder sanctions to be enacted.

## Collective sanctions and firm risk

Coordinated stakeholder networks are in a position to exercise much more powerful sanctions than individual stakeholders or stakeholder groups (Frooman, 1999; Rowley, 1997). When different stakeholder groups align their attention and demands on the same issues, stakeholder sanctions become powerful and can inflict substantial financial damage. This is most obvious in a boycott, where an activist group identifies a CSI issue, but has no power to sanction the firm. Only through CSI coverage do the firm's customers get involved, who can then sanction the firm by refusing to buy its products (Frooman, 1999; King and Soule, 2007; Zyglidopoulos, 2002). This principle that stakeholder groups unite following CSI coverage also operates in other constellations. For instance, regulators are often under pressure to sanction a firm when CSI coverage causes a public debate about firm behavior (Tang and Tang, 2013). A particularly salient example is the mining industry, where governments may withdraw concessions in response to stakeholder controversies, once they become prominent in the media (Henisz *et al.*, 2013). Whistleblowers are another example: they expose corporate governance violations in the media, in order to enlist the support of shareholders and the judiciary as sanctioning partners (Dyck *et al.*, 2010).

In all these constellations, agenda-setting coordinates the attention of various stakeholder groups on a specific firm and a specific CSI issue at a particular point in time. Coordinated attention is a necessary condition for collective stakeholder sanctions, and CSI coverage provides it, which is why media coverage of CSI is instrumental for collective stakeholder sanctions.

Nevertheless, CSI media coverage does not directly affect a firm's financial performance. It is a necessary but not sufficient condition for collective stakeholder sanctions: Not all coverage leads to sanctions, and not all sanctions influence financial performance. For example, empirical studies have established that only a small fraction of boycotts eventually affect a firm's sales (Karpoff, Lott, and Wehrly, 2005; King and Soule, 2007). At the same time, however, some successful boycotts have inflicted painful losses (Zyglidopoulos, 2002), so the prospect of a boycott nevertheless represents a serious risk to the firm. Rather than directly

affecting financial performance, CSI coverage increases the *uncertainty* of financial performance in the future. In other words, CSI coverage increases firm risk. Based on this logic, we hypothesize:

*H1: CSI coverage in the media increases firm risk.*

Our theoretical development puts the media's agenda-setting process at the center of the risk generating mechanism. This suggests that the strength of the effect of CSI coverage depends on the extent to which a media outlet can achieve agenda-setting in a stakeholder network. Agenda-setting is a numbers game—the more stakeholders there are within a firm's network who know about a firm's CSI, the higher the level of coordination and the greater the potential for collective sanctions.

Because of its large readership, CSI coverage in the *New York Times* will have a stronger agenda-setting effect than the same coverage in a small local newspaper. News outlets that reach many readers in the general population will also reach many stakeholders in a firm's stakeholder network. However, in the case of multinational firms, the geographic reach of a media outlet is also likely to increase the agenda-setting effect of its CSI coverage. This is because the various stakeholders of a multinational firm are spread out around the world, and different stakeholder groups often reside in different locations. CSI coverage in the *New York Times* has a strong agenda-setting effect in this context too, because it has a highly international readership and can thus reach the members of an international stakeholder network.

Thus, we define the reach of a media outlet as the extent to which its CSI coverage can reach a multinational firm's stakeholder network. The reach of the reporting media outlet is likely to moderate the effect of CSI coverage on firm risk, because it strengthens the agenda-setting effect. The more stakeholders within a stakeholder network are informed about CSI at the same time, the greater the potential for coordinated sanctions. Thus, we hypothesize:

*H2: The greater the reach of the reporting media outlet, the stronger the positive effect of CSI coverage on firm risk.*

Beyond simply being informed, the reaction of a stakeholder network to CSI coverage depends on how the issue is framed in the media. The initial attribution of CSI by a stakeholder provides an explanation why the firm deserves blame and functions as an interpretive frame for others (Benford and Snow, 2000). The key elements of this interpretive frame are the assertions that harm has been done, that a firm caused it, and that it acted irresponsibly in doing so (Lange and Washburn, 2012).

Each of these three elements is open to interpretation. First, it is not necessarily clear what constitutes harm, or how significant it is (Barnett, 2012; Hoffman and Ocasio, 2001; Shaver, 1985). Second, whether a firm actually caused harm is in many cases impossible to establish beyond doubt (Shaver, 1985). Third, the claim that a firm has acted irresponsibly rests on assumptions that the firm had the capacity to act differently (Shaver, 1985). A CSI attribution provides an interpretive frame that asserts each of these three elements to support the conclusion that the firm deserves blame. We propose that the more assertive these three interpretations are, the more severe the attribution of CSI.

In this sense, the media may frame CSI in its coverage as more or less severe. A news editor may defuse a stakeholder's attribution frame by downplaying harm and leaving open the question of whether the firm is culpable and acted irresponsibly. Alternatively, they may adopt and even exaggerate the frame, stating that a firm has directly and recklessly caused significant harm, and deserves blame and punishment.

Individual stakeholders' willingness to sanction a firm is influenced by the frames that the media provides (Barnett, 2012). More severe CSI coverage is likely to increase the probability of individuals deciding to sanction the firm. Given that collective sanctions are the aggregate of individual sanctioning decisions, more severe CSI coverage is also likely to increase the potential for collective sanctions. This suggests that the severity of CSI coverage moderates the effect of CSI coverage on firm risk. Thus:

*H3: The greater the severity of CSI coverage, the stronger the positive effect of CSI coverage on firm risk.*

## Data and Methodology

We tested our hypotheses based on a panel dataset of quarterly firm observations. The tests are based on a sample of listed multinational firms that issue publically traded debt. Screening Thomson Reuters Datastream for such firms resulted in an initial sample of 969 firms. From this initial sample we excluded the financial sector as well as all government owned enterprises, as it is common practice in similar studies (El Ghoul *et al.*, 2011; Oikonomou and Pavelin, 2014): In both cases, there is a concern that the backing of a sovereign state distorts the true level of risk that the firm is exposed to. This resulted in a sample of 539 firms, for all of which we could obtain a measure of firm risk and CSI coverage. The firms are domiciled in 38 different countries and span all economic sectors.

## Firm risk

This study operationalizes firm risk by focusing on credit risk, similar to many studies in this field (Goss and Roberts, 2011; Koh *et al.*, 2013; Sharfman and Fernando, 2008). Credit risk reflects the compensation required by investors to bear the risk that a firm's debt repayments may not be made as promised (Fabozzi, Modigliani, and Jones, 2010). Since debt repayments lie in the future, credit risk is by definition *ex ante*. Also, credit risk is limited to the downside component of risk, because creditors can receive less than expected when a firm's business runs poorly, but not more than expected when it does well (Campbell and Taksler, 2003; Merton, 1974). Thus, credit risk is a valid operationalization of firm risk as an *ex-ante* measure of downside risk (Ruefli *et al.*, 1999).

Credit risk is observable in a large financial market that specializes in assessing corporate credit risk and determines individual companies' costs of debt. Credit risk is traded and priced in credit default swaps (CDSs), which are widely used in the financial literature (O'Kane and Sen, 2005). CDS spreads are popular, because they provide an accurate and timely measure of the market perception of a firm's credit risk that is free of confounding factors such as the economy-wide interest rate or country-specific tax arrangements (Focardi and Fabozzi, 2004). We obtained the time series of CDS spreads for individual firms in our sample from Thomson Reuters.

CDSs are traded derivatives on the underlying credit performance of a specific borrower, and represent in principle an insurance against default (Fabozzi *et al.*, 2010). In the case of a credit event, the seller of a CDS needs to reimburse the buyer for the loss caused by that event. In return for bearing this risk, the buyer pays an annual premium, or a so-called "spread", to the seller. This CDS spread indicates the credit risk associated with all the outstanding debt of the underlying firm.

We chose the five-year CDS because it is the most liquid and, therefore, most accurately priced. For each firm and each quarter we used the quoted CDS spread at the end of the quarter. This ensures that the dependent variable was always measured after the articles counted in CSI coverage have been published. As the distribution of CDS spreads has a heavy right-hand tail, we took the natural logarithm of CDS spreads, which yielded a normally distributed dependent variable.

## CSI coverage

We constructed the measure *CSI coverage* by counting the number of media articles that provide coverage of CSI per firm and per quarter. This measure is based on data provided by

the Swiss company RepRisk AG, a business intelligence provider specializing in dynamic environmental, social, and governance risk analytics and metrics. Using a big data approach, RepRisk systematically screens a broad range of media, stakeholder, and other third-party sources in 15 languages on a daily basis. RepRisk identifies news items that criticize companies for issues such as environmental degradation, human rights abuses and corruption. RepRisk does not assess the truthfulness of accusations and allegations, the data is based only on what the media and external stakeholders report.

The RepRisk search methodology is guided by a scope of 28 pre-defined issues, listed in Table 1. These issues are organized in five categories: environmental footprint, community relations, employee relations, corporate governance, and general issues. The latter are only used in conjunction with an issue from the other categories. This scope was defined in accordance with international standards and norms, including the UN Global Compact Principles, the Universal Declaration of Human Rights, the Conventions of the International Labor Organization (ILO), the UN Convention Against Corruption, the World Bank Environmental, Health, and Safety Guidelines, and the OECD Guidelines for Multinational Enterprises.

RepRisk has strict rules-based processes in place to ensure consistent and systematic data collection. The analysis is done in two steps. First, automated search algorithms screen over 80,000 publically available sources for news items that criticize a specific firm for one of the issues within the scope. Second, trained analysts read and summarize the news item and enter it into the database, linking it to the firm being criticized, the stakeholder who reported criticism, and to the issues to which the criticism pertained. If the same news story appears in multiple sources, the story is taken from the most influential source. Every news story is only entered once into the database, unless there is a development in the story, the story reappears in a more influential source, or the same story appears again after six weeks. During the entire sampling period of this study, the described data has been collected consistently according to this methodology.

Beyond identifying news items, RepRisk provides for each news item an assessment of the reach of the source as well as of the severity of the criticism. *Reach* of CSI coverage describes the potential audience that a given media article could reach, based on the reporting medium's circulation and geographic range. Reach can take one of three values. Reach 3 includes global news outlets with a strong international presence, namely the Financial Times, the Wall Street Journal, the South China Morning Post, the New York Times, the BBC, CNN international, Forbes, the International Herald Tribune, the Economist, and Fortune magazine. Reach 2

includes print media of national or regional importance with a circulation of at least 150k. Reach 1 includes local newspapers, with a circulation of less than 150k.

*Severity* of CSI coverage refers to the harshness of the criticism. All news items collected by RepRisk criticize the focal company to some extent for CSI. However, depending on how the article endorses the opinion of affected stakeholders and frames the actions and intentions of the firm, this criticism is more or less severe. Importantly, the assessment of severity is based exclusively on the text of the article and may even include accusations that are misleading. This is consistent with our focus on the interpretive frames that stakeholders receive when they read the article, rather than on the objective underlying event or situation.

Articles are categorized in three levels of *Severity*, based on three equal-weighted subcategories: the extent of negative consequences, the extent of culpability, and the extent of irresponsibility. These subcategories correspond closely to the factors that affect the attribution of CSI identified by Lange & Washburn (2012). This is furthermore consistent with the foundations of attribution theory, according to which the extent of attributions tends not to resemble a unidimensional Guttman scale, but rather a combination of several interrelated constructs (Shaver, 1985). All three subcategories are defined specifically for each of the 28 issues that guide the scope of CSI coverage. The first subcategory, extent of negative consequences, indicates the amount of suffering or damage that is reported. For the issue "Health and safety", for example, negative consequences for workers are classified into minor injury, major injury, and death. The second subcategory, extent of culpability, indicates the extent to which the negative consequences are linked to the firm's actions and intentions. For the example of "Local pollution", the degree of culpability distinguishes whether negative consequences arose due to an accident, negligence, or systematic malpractice. The third subcategory, extent of irresponsibility, indicates whether the firm could have acted differently by comparing the firm's actions to industry norms that are characteristic of the respective issue. For the example of "Corruption", the amount of money that the firm is reported to have paid out in bribes is compared to the prevailing norms in the market where it operates. Corruption is then classified as being within prevailing norms, at the limit of norms, or in violation of norms. Based on these three equal-weighted subcategories, every news article is assigned one of three levels of severity.

*Reach* and *Severity* are moderators of CSI coverage that are conditional on the observation of CSI coverage (Kraemer *et al.*, 2002). Both strengthen the effect of CSI coverage, but depend on at least one article with CSI coverage appearing during a firm-quarter. Consequently, there

is no corresponding main effect of these variables. The hypothetical reach and severity of articles that do not contain CSI coverage are not defined, and are also not of theoretical interest. We calculated averages for *Reach* and *Severity* within each firm-quarter, corresponding to the count of articles within every firm-quarter. Given that these averages are only defined when there is at least one article per firm-quarter, this led to a number of missing values.

The data collection for *CSI coverage, Reach, and Severity* is undertaken by RepRisk analysts as a professional service for banks and investors, as a risk analysis tool. RepRisk strongly emphasizes the consistency and reliability of its methodology, as the company needs to be able to justify every decision vis-a-vis its clients, who can easily monitor RepRisk's research quality by comparing it with the original media sources. To ensure consistency, the rules for article selection and the assignment of *Reach* and *Severity* are specified in a detailed manual that guides the analysis process at RepRisk. Furthermore, all data base entries are double-checked by a senior analyst, to ensure consistency with this manual. Any controversial cases are escalated to the head of research, to ensure consistency even in the most difficult cases. To assure ourselves of the data quality, we conducted additional, independent searches in news databases and the web for a subset of 10 randomly chosen firms. We were unable to identify any missing stories or questionable categorizations for these firms during the sample period.

## Control variables

The most comprehensive predictor of firm risk is a firm's credit rating. Credit-rating agencies specialize in assessing credit risk and provide an opinion on credit risk based on a widely accepted methodology. We use the Standard & Poor's long-term issuer rating, which is well known and respected in the financial community (Standard & Poor's, 2014). Standard & Poor's methodology considers a wide range of criteria based on research into the factors that drive credit risk. They include, for example, the historical record of creditworthiness, financial health, and the value of readily claimable assets. The credit rating is expressed as an ordinal variable ranging from AAA (extremely low credit risk) to CCC (extremely high credit risk) in 20 increments. In order to facilitate estimations, we transformed the variable into a linear interval scale, but preserved the ordinal scale for robustness checks.

In addition to credit rating, we included control variables that the literature has identified as factors influencing firm risk. First, we included CSR, given that the literature on the insurance hypothesis has shown that CSR has an effect on firm risk (Koh *et al.*, 2013). For our analysis, it was crucial to obtain a CSR measure that was distinct from CSI coverage. Thus, we focused on firms' self-disclosed data regarding their CSR strategy and practices. We obtained this data

from Asset4, a rating that permits access to individual scores, rather than the aggregate rating. CSR as measured by Asset4 has previously been linked to firm risk (Cheng *et al.*, 2014). Asset4 provides 282 individual scores which are all scaled to a comparable format and cover the economic, governance, environmental, and social dimension. Of all 282 scores, we extracted 261 that were based on self-disclosed company data, describing both outcome and process aspects of CSR. We omitted those 21 scores that were based on media data. In order to create the CSR variable, we calculated an average of the 262 self-disclosed scores in every firm-quarter.

Second, we included firm size, as large firms receive more press coverage (Bansal and Clelland, 2004) and have lower firm risk (Tong and Reuer, 2007). Firm size was measured as the market capitalization at the end of each quarter in billion USD. Third, we included quarterly net income, given that a firm's income level could affect its credit risk. Net income was taken from the firm's quarterly earnings report and measured in billion USD at the time of publication, that is, when the market was informed about it. Fourth, we included fixed assets as the value of assets in plant, equipment, and real estate. These types of assets are easily claimable by creditors in case of default. They are also visible, and potentially attract media attention. Fifth, following Sharfman and Fernando (2008), we included total liabilities, since the level of outstanding debt influences credit risk. Fixed assets and total liabilities were taken from firms' quarterly balance sheets and measured in billion USD at the time of publication. Finally, all stationary firm characteristics such as industry affiliation, location of headquarters, and the possession of well-known brands were controlled for with firm fixed effects by our estimation methodology. Also, we assume multinationality, which has been linked to firm risk in previous studies (Belderbos *et al.*, 2014; Reuer and Leiblein, 2000), to be a constant property that is included in firm fixed effects. The reasoning is that all the firms in our sample are very large multinationals, many with a global presence. Even in samples of firms that are on average one order of magnitude smaller than ours, the marginal effect of multinationality on firm risk is already decreasing (Tong and Reuer, 2007). Thus, in our sample, fixed effects are sufficient to account for the high levels of multinationality, while potential changes in multinationality can safely be neglected.

## Estimation methodology

We employed a very conservative panel regression estimation technique, using two-way fixed effects at the firm and quarter level to control for a wide range of firm- and quarter-specific unobservables (Cameron and Trivedi, 2005). Based on the Hausman test, the fixed-effects approach was warranted for our model. Given that the time series of *CSI coverage* exhibits

sufficient variance not only in the cross-section but also for individual firms over time, we could afford to use firm-level fixed effects, providing an extremely tight control of any time-constant firm property. Analogously, we included time fixed effects for every quarter to account for shocks that possibly affected both credit risk and news counts simultaneously.

In order to ensure correct statistical inference, we estimated robust standard errors following the recommendations of Petersen (2009). In deciding how to assign clusters, we followed the advice of Cameron *et al*. (2011) to use clustering units that are larger than the primary sampling unit, but not yet so large that there would be a concern about having too few clusters. We therefore clustered errors two ways, at the country and the quarter level. We implemented all estimations with the software R (R Core Team, 2015).

# Results

Our sample consists of quarterly observations for 539 firms in 24 quarters between 2008 and 2013, resulting in an unbalanced panel of 9,249 firm-quarter observations. Table 2 reports the Pearson correlations among variables. The highest correlations amongst independent variables are between *Firm size*, *Net income*, *Fixed assets* and *Liabilities*, as well as between *CSI coverage* and *Stakeholder CSI*. Almost all correlations are significant at the 5 percent level, which is due to the panel data structure and indicates the presence of strong company- and quarter-specific effects. However, multicollinearity is typically not a concern in fixed-effects estimation (Cameron and Trivedi, 2005), and a subsequent examination of variance inflation factors confirmed this expectation.

Panel A in Table 3 gives an overview of the distributions of all variables. The dependent variable *Firm risk* has a small difference between mean and median, indicating a symmetric distribution. The media coverage variables exhibit typical count-data characteristics, with no negative values and a high standard deviation in comparison to the mean due to a high proportion of zeroes in the distribution. However, this is not of concern, as the ordinary least square approach makes no assumptions about the distribution of independent variables (Cameron and Trivedi, 2005). Panel B in Table 3 provides the distribution of observations across sectors as defined by the general industry classification standard (GICS). All sectors (excluding financial services) were represented in the sample, ensuring that economy-wide effects could be discovered with this dataset. Panel C provides the equivalent overview across quarters.

The first set of results is presented in Table 4. The first column reports the baseline model, including only the control variables. All control variables have coefficients pointing in the expected direction; however, only *Credit rating, Firm size*, and *Net income* are significant. The fraction of explained variance is very high, at 88 percent. The second column reports the identical model with the addition of the independent variable: *CSI coverage*. The coefficient is positive and significant (0.0067; $p<0.01$), supporting Hypothesis 1 that CSI media coverage increases firm risk.

The third column of Table 4 adds *Reach*, which also has a positive and significant coefficient (0.0436; $p<0.05$). The main effect of *CSI coverage* also remains significant in this model. This supports Hypothesis 2, stating that reach moderates the effect of CSI coverage on firm risk. Since *Reach* is only defined in cases where there is at least one article per quarter, the total number of observations is lower in this model specification. The fourth column presents *Severity* as an additional variable. The coefficient for this variable is not significant, so Hypothesis 3—severity moderates the effect of CSI coverage on firm risk—is not supported.

## Supplementary analyses

We performed several supplementary analyses to test the robustness of the results. First, our study period includes the financial crisis of 2008, which had a major impact on credit risk and may also have influenced media coverage. While time fixed effects should absorb such shocks, we additionally excluded the year 2008 as a robustness check. Second, we repeated our calculations using an ordinal scale for credit ratings to address potential loss of precision in rescaling this variable. Neither robustness check influenced the results in any meaningful way.

We also explored why CSR does not have a significant effect on firm risk, given that a string of previous studies has identified such an effect. One important difference in our empirical approach is the use of firm-level fixed effects. Most studies on CSR using KLD or Asset4 data employ only industry fixed effects, due to the limited variability of these data over time (Chava, 2014; Cheng *et al.*, 2014; Goss and Roberts, 2011; Koh *et al.*, 2013). When we repeat our estimation precisely following the methodology of Cheng *et al.* (2014), who also used Asset4 data, CSR has a negative significant effect on firm risk, in line with previous studies. CSI coverage also remains significant in this less robust specification.

We explored two potential alternative explanations: reverse causality and media selection bias. Reverse causality describes the concern that instead of CSR driving financial performance, strong financial performance may create slack resources, which in turn contribute to CSR

(Surroca, Tribó, and Waddock, 2010; Waddock and Graves, 1997). However, in this study, reverse causality is unlikely for theoretical reasons. First, firm risk is not directly related to the level of slack resources, because slack resources must be earned; they cannot be borrowed (Sharfman *et al.*, 1988). As a result, both low- and high-risk firms may hold slack resources (Surroca *et al.*, 2010). Second, unlike CSR, CSI coverage is not under direct managerial control. While it is possible to increase a firm's positive media coverage through public relations (Bansal and Clelland, 2004), it is much harder to reduce negative coverage by the same method (Westphal and Deephouse, 2011). This is because media outlets compete for stories, and if one outlet foregoes a compelling negative story, this creates opportunities for other outlets. Especially in the era of online communication, it is virtually impossible to suppress negative stories (Besiou, Hunter, and Wassenhove, 2013). In addition, stakeholders' CSI attributions are not only driven by firm actions, but also by considerations about stakeholder identity (Rowley and Moldoveanu, 2003), which is beyond managerial control. Due to these barriers, we are confident that reverse causality between firm risk and CSI coverage is not a substantial concern in our research setting.

Media selection bias might be another area of concern (Earl *et al.*, 2004). For instance, the media might overly focus on the "sins of saints," i.e. when a firm that is well known for CSR is suddenly blamed for CSI. Likewise, the media may dwell on large firms, or firms in decline. If the criteria on which the media selects stories are also related to firm risk, this would raise concerns about endogeneity. By including *CSR*, *Firm size*, and *Net income* as control variables, as well as firm fixed effects, we have taken care to avoid this. Yet the media may still select on additional, unobserved criteria. For example, CEO hubris, defined as a CEO's exaggerated self-confidence and pride, is related to excessive risk-taking (Li and Tang, 2010) and has recently been associated with CSI (Tang *et al.*, 2015). A CEO who is known for talking large is an easy target for the media when it comes to CSI coverage. Thus, a hubristic CEO may attract more CSI coverage, and at the same time increase firm risk.

To address this concern, we performed an instrumental variable regression. We exploited the fact that apart from turning to the media, stakeholders also communicate their CSI attributions through private websites and blogs (Deephouse and Heugens, 2009; Hunter *et al.*, 2013). We constructed the instrument *Stakeholder CSI* as a count variable like *CSI coverage*, but relied exclusively on stakeholder blog posts. Stakeholder blogs are internet sources that provide communication from a stakeholder perspective and have a mission to achieve change in the

world. We based the classification on the "About us" section of the source's website: when it indicated advocacy for a specific cause, we classified the site as a stakeholder outlet. For example, the website www.internationalrivers.org states: "We seek a world where healthy rivers and the rights of local communities are valued and protected." The classification was undertaken independently by two of the authors, with an overlap of 200 randomly chosen sources. The inter-rater agreement was 100 percent. These data were also included in the RepRisk database and collected following the same methodological steps that are applied for media articles.

A valid instrument must be exogenous to the relationship under investigation, yet correlated with the explanatory variable (Cameron and Trivedi, 2005). Our theoretical model predicts that stakeholder attributions of CSI are a source for CSI coverage in the media. Thus, *Stakeholder CSI* and *CSI coverage* are likely to be correlated. At the same time, private CSI claims made in stakeholder blogs are exogenous to the risk-generating mechanism. Only the mass media can achieve the agenda-setting effect in stakeholder networks by broadcasting to diverse stakeholder groups, while stakeholder blogs target special-interest groups and reach a readership that is orders of magnitudes smaller (Farrell and Drezner, 2007). In order to safeguard the exogeneity assumption of this instrument, we do not consider CSI claims by well-known NGOs with international presence such as Greenpeace or the WWF. This ensures that CSI complaints in stakeholder blogs only lead to firm risk if they propagate to the mass media. We generated an additional instrument by lagging *Stakeholder CSI* by one quarter, which allowed us to run diagnostics on the validity of the instruments.

Table 5 presents the results of the instrumental variable regression. The first stage regression in the left column shows that both instruments are highly significant and influence CSI coverage positively, as expected. This shows that CSI claims in stakeholder blogs are indeed correlated with CSI coverage. The Sargan test cannot be rejected, indicating that both instruments are exogenous and affect firm risk exclusively via CSI coverage (Cameron and Trivedi, 2005). The estimate for CSI coverage in the second stage is positive and highly significant. The coefficient estimate is about five times larger than the estimates in the previous models, suggesting that those previous estimates can be seen as a conservative lower bound. The results of the instrumental variable estimation provide reassurance that media selection bias is not driving our results. Taken together, our supplementary analyses rule out outliers, reverse causality, and media selection bias as alternative explanations.

# Discussion

Our study makes two central contributions. First, we extend the theoretical basis of stakeholder risk management. The literature in this field has established that doing good—in the sense of CSR—reduces firm risk by mitigating the impact of stakeholder sanctions (Cheng *et al.*, 2014; Godfrey *et al.*, 2009; Godfrey, 2005; Henisz *et al.*, 2013; Koh *et al.*, 2013). Complementing this literature, we explore how doing bad—in the sense of CSI—generates the risk of stakeholder sanctions. We demonstrate that CSI coverage in the media increases firm risk, arguing that the media's agenda-setting effect in stakeholder networks provides the necessary conditions for collective, and thus material, stakeholder sanctions. Knowledge of this mechanism improves our understanding of the risk that firms have to deal with in the context of stakeholder theory, and suggests that there are important alternative risk-management strategies that focus on risk prevention rather than mitigation. For example, managers could emphasize operational excellence and systematically avoid negative impacts wherever possible, in order not to provide targets for CSI coverage. Furthermore, managers could proactively engage in dialog with stakeholder groups, in order to hear their criticisms behind closed doors and dissuade them from going to the media with CSI attributions. Finally, in the spirit of Durand & Vergne (2015), managers could divest controversial business activities, in order to circumvent CSI coverage pertaining to these activities altogether.

Second, we extend recent theoretical developments about CSI attribution at the individual level (Barnett, 2012; Lange and Washburn, 2012). Building on the cognitive process behind stakeholder sanctions, we highlight that media coverage of CSI is necessary for collective sanctions at the level of stakeholder networks. Our finding that the reach of a media outlet moderates the effect of CSI coverage on firm risk shows that the agenda-setting effect of the media is instrumental in translating individual attributions of blame into collective sanctions. Interestingly, the severity of CSI attributions does not seem to translate into sanctions at the collective level. While research on the attribution of CSI suggests a moderating effect of severity (Lange and Washburn, 2012), our results provide no evidence for that. One potential explanation for this finding is that the individual decision to sanction a firm depends on a sequence of moral and strategic considerations (Barnett, 2012). While severe CSI presumably leads to stronger moral indignation, the decision to sanction may be driven primarily by the strategic rationale that many others will sanction as well. The implication is that severe attributions of CSI do not lead to firm risk, unless they are prominently covered in the media. This is alarming, yet it actually reinforces our claim that media coverage is at the core of the risk-generating mechanism we describe.

Our findings are practically relevant for stakeholder risk management. The marginal effect of one additional article in CSI coverage corresponds to a relative change of 0.67 percent in firm risk, which we have operationalized as credit risk. Based on that, the median firm in our sample would have to pay an additional USD 900'000 per year to service its debt, suggesting that for most firms, managing CSI coverage is likely to be worthwhile.

We recognize a number of possible limitations of our work and suggest avenues for future research to address them. First, the media may not always report CSI objectively, with the effect that some companies might be criticized unfairly, while others get off lightly. We conclude that the media is quite effective in exposing CSI and triggering sanctions, yet we leave to future research the important question of how reliable the media is in uncovering and reporting CSI. In addition, future studies might explore the antecedents of CSI coverage in the media. One very pertinent question is whether self-disclosed CSR data influences the level of subsequent CSI coverage. While some previous studies suggest that CSR would decrease CSI coverage (Godfrey *et al.*, 2009), others suggest that it actually provokes more CSI coverage (Baron and Diermeier, 2009). CSI attributions in stakeholder blogs could be another antecedent of CSI coverage—a relationship that has been proposed by several researchers (Besiou *et al.*, 2013; Deephouse and Heugens, 2009). Our study takes a first step in this direction by indicating that stakeholder blogs influence and even predict CSI coverage.

# References


Adut A. 2005. A theory of scandal: victorians, homosexuality, and the fall of Oscar Wilde. *American Journal of Sociology* **111**(1): 213–248.

Amit R, Wernerfelt B. 1990. Why do firms reduce business risk? *Academy of Management Journal* **33**(3): 520–533.

Andersen TJ, Bettis RA. 2014. Exploring longitudinal risk-return relationships. *Strategic Management Journal*.

Andrews KT, Caren N. 2010. Making the news: movement organizations, media attention, and the public agenda. *American Sociological Review* **75**(6): 841–866.

Bansal P, Clelland I. 2004. Talking trash: legitimacy, impression management, and unsystematic risk in the context of the natural environment. *The Academy of Management Journal* **47**(1): 93–103.

Barnett ML. 2012. Why stakeholders ignore firm misconduct: a cognitive view. *Journal of Management* **40**(3): 676–702.

Barnett ML, Solomon RM. 2012. Does it pay to be really good? Addressing the shape of the relationship between social and financial performance. *Strategic Management Journal* **33**(11): 1304–1320.

Baron DP, Diermeier D. 2009. Strategic activism and nonmarket strategy. *Journal of Economics & Management Strategy* **16**(3): 599–634.

Belderbos R, Tong T, Wu S. 2014. Multinationality and downside risk: the roles of option portfolio and organization. *Strategic Management Journal* **35**(1): 88–106.

Benford RD, Snow DA. 2000. Framing processes and social movements: an overview and assessment. *Annual Review of Sociology* **26**(2000): 611–639.

Besiou M, Hunter ML, Wassenhove LN. 2013. A web of watchdogs: stakeholder media networks and agenda-setting in response to corporate initiatives. *Journal of Business Ethics* **118**(4): 709–729.

Bettis RA. 1983. Modern financial theory, corporate strategy and public policy: three conundrums. *Academy of Management Review* **8**(3): 406–415.

Bowen HR. 1953. *Social Responsibilities of the Businessman*. Harper: New York.

Brammer S, Millington A. 2008. Does it pay to be different? An analysis of the relationship between corporate social and financial performance. *Strategic Management Journal* **29**(12): 1325–1343.

Bridoux F, Stoelhorst JW. 2014. Microfoundations of stakeholder theory: managing stakeholders with heterogeneous motives. *Strategic Management Journal* **35**(1): 107–125.

Bundy J, Shropshire C, Buchholtz AK. 2012. Strategic cognition and issue salience: toward an explanation of firm responsiveness to stakeholder concerns. *Academy of Management Review* **38**(3): 352–376.

Cameron AC, Gelbach JB, Miller DL. 2011. Robust inference with multiway clustering. *Journal of Business & Economic Statistics* **29**(2): 238–249.

Cameron AC, Trivedi KP. 2005. *Microeconometrics: Methods and Applications*. Cambridge University Press: New York.

Campbell JY, Taksler GB. 2003. Equity volatility and corporate bond yields. *Journal of Finance* **58**(6): 2321–2350.

Carroll A. 1979. A three-dimensional conceptual model of corporate performance. *Academy of Management Review* **4**(4): 497–505.

Carroll CE. 2010. *Corporate Reputation and the News Media*. Routledge: New York.

Chatterji AK, Levine DI, Toffel MW. 2009. How well do social ratings actually measure corporate social responsibility? *Journal of Economics & Management Strategy* **18**(1): 125–169.

Chava S. 2014. Environmental externalities and cost of capital. *Management Science* **60**(9): 2223–2247.

Cheng B, Ioannou I, Serafeim G. 2014. Corporate social responsibility and access to finance. *Strategic Management Journal* **35**(1): 1–23.

Deephouse DL, Heugens PP. 2009. Linking social issues to organizational impact: the role of infomediaries and the infomediary process. *Journal of Business Ethics* **86**(4): 541–553.

Donaldson T, Preston LE. 1995. The stakeholder theory of the corporation: concepts, evidence, and implications. *The Academy of Management Review* **20**(1): 65–91.

Durand R, Vergne JP. 2015. Asset divestment as a response to media attacks in stigmatized industries. *Strategic Management Journal* **36**(8): 1205–1223.

Dyck A, Morse A, Zingales L. 2010. Who blows the whistle on corporate fraud? *Journal of Finance* **65**(6): 2213–2254.

Dyck A, Volchkova N, Zingales L. 2008. The corporate governance role of the media: evidence from russia. *Journal of Finance* **63**(3): 1093–1135.

Earl J, Martin A, McCarthy JD, Soule S a. 2004. The use of newspaper data in the study of collective action. *Annual Review of Sociology* **30**(1): 65–80.

Entine J. 2003. The myth of social investing: a critique of its practice and consequences for corporate social performance research. *Organization & Environment* **16**(3): 352–368.

Fabozzi FJ, Modigliani F, Jones FM. 2010. *Foundations of financial markets and institutions*. Pearson: Boston.

Farrell H, Drezner DW. 2007. The power and politics of blogs. *Public Choice* **134**(1-2): 15–30.

Focardi SM, Fabozzi FJ. 2004. *The Mathematics of Financial Modeling and Investment Management*. Wiley: Hoboken, NJ.

Freeman ER. 1984. *Strategic Management: A Stakeholder Approach*. Pitman Publishing: Marshfield, MA.

Frooman J. 1997. Socially irresponsible and illegal behavior and shareholder wealth: a meta-analysis of event studies. *Business & Society* **36**(3): 221–249.

Frooman J. 1999. Stakeholder influence strategies. *The Academy of Management Review* **24**(2): 191–205.

El Ghoul S, Guedhami O, Kwok CCY, Mishra DR. 2011. Does corporate social responsibility affect the cost of capital? *Journal of Banking & Finance* **35**(9): 2388–2406.

Godfrey PC. 2005. The relationship between corporate philanthropy and shareholder wealth:

a risk management perspective. *Academy of Management Review* **30**(4): 777–798.

Godfrey PC, Merrill CB, Hansen JM. 2009. The relationship between corporate social responsibility and shareholder value: an empirical test of the risk management hypothesis. *Strategic Management Journal* **30**(4): 425–445.

Goss A, Roberts GS. 2011. The impact of corporate social responsibility on the cost of bank loans. *Journal of Banking & Finance* **35**(7): 1794–1810.

Greve HR, Palmer D, Pozner J. 2010. Organizations gone wild: the causes, processes, and consequences of organizational misconduct. *The Academy of Management Annals* **4**(1): 53–107.

Harrison JS, Bosse DA, Phillips RA. 2010. Managing for stakeholders, stakeholder utility functions, and competitive advantage. *Strategic Management Journal* **31**(1): 58–74.

Henisz WJ, Dorobantu S, Nartey LJ. 2013. Spinning gold: the financial returns to stakeholder engagement. *Strategic Management Journal* **35**(12): 1727–1748.

Hilbig BE. 2009. Sad, thus true: negativity bias in judgments of truth. *Journal of Experimental Social Psychology* **45**(4): 983–986.

Hoffman AJ, Ocasio W. 2001. Not all events are attended equally: toward a middle-range theory of industry attention to external events. *Organization Science* **12**(4): 414–434.

Hunter ML, Wassenhove LN Van, Besiou M, Halderen M van. 2013. The agenda-setting power of stakeholder media. *California Management Review* **56**(1): 24–49.

Illia L, Zyglidopoulos SC, Romenti S, Rodríguez-cánovas B, Brena V. 2013. Communicating corporate social responsibility to a cynical public. *MIT Sloan Management Review* **54**(3): 14–23.

Jones TM. 1995. Instrumental stakeholder theory: a synthesis of ethics and economics. *Academy of Management Review* **20**(2): 404–437.

Karpoff JM, Lott JR, Wehrly EW. 2005. The reputational penalties for environmental violations: empirical evidence. *Journal of Law & Economics* **48**(2): 653–688.

King BG, Soule SA. 2007. Social movements as extra-institutional entrepreneurs: the effect of protests on stock price returns. *Administrative Science Quarterly* **52**(3): 413–442.

Koh P-S, Qian C, Wang H. 2013. Firm litigation and the insurance value. *Strategic Management Journal* **35**(10): 1464–1482.

Kraemer HC, Wilson GT, Fairburn CG, Agras WS. 2002. Mediators and moderators of treatment effects in randomized clinical trials. *Archives of general psychiatry* **59**(10): 877–883.

Lamin A, Zaheer S. 2012. Wall street vs. main street: firm strategies for defending legitimacy and their impact on different stakeholders. *Organization Science* **23**(1): 47–66.

Lange D, Washburn NT. 2012. Understanding attributions of corporate social irresponsibility. *Academy of Management Review* **37**(2): 300–326.

Lee DD, Faff RW. 2009. Corporate sustainability performance and idiosyncratic risk: a global perspective. *Financial Review* **44**(2): 213–237.

Li J, Tang Y. 2010. CEO hubris and firm risk taking in china: the moderating role of managerial discretion. *Academy of Management Journal* **53**(1): 45–68.

Lyon TP, Maxwell WJ. 2011. Greenwash : corporate environmental disclosure under threat of

audit. *Journal of Economics & Management Strategy* **20**(1): 3–41.

Lyon TP, Montgomery a. W. 2013. Tweetjacked: the impact of social media on corporate greenwash. *Journal of Business Ethics* **118**(4): 747–757.

Margolis JD, Walsh JP. 2003. Misery loves companies: rethinking social initiatives by business. *Administrative Science Quarterly* **48**(2): 268–305.

McCombs M, Shaw D. 1972. The agenda-setting function of mass media. *Public Opinion Quarterly* **36**(2): 176–187.

Merton RC. 1974. On the pricing of corporate debt: the risk structure of interest rates. *Journal of Finance* **29**(2): 449–470.

Mikes A, Kaplan RS. 2015. When one size doesn't fit all: evolving directions in the research and practice of enterprise risk management. *Journal of applied corporate finance* **27**(1): 37–40.

Miller K, Reuer J. 1996. Measuring organizational downside risk. *Strategic Management Journal* **17**(9): 671–691.

Miller KD. 1992. A framework for integrated risk management in international business. *Journal of International Business Studies* **23**(2): 311–331.

Mitchell RK, Agle BR, Wood DJ. 1997. Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. *Academy of Management Review* **22**(4): 853–886.

Niven D. 2001. Bias in the news: partisanship and negativity in media coverage of presidents george bush and bill clinton. *The Harvard International Journal of Press/Politics* **6**(3): 31–46.

O'Kane D, Sen S. 2005. Credit spreads explained. *Journal of Credit Risk* **1**(2): 61–78.

Oikonomou I, Pavelin S. 2014. The effects of corporate social performance on the cost of corporate debt and credit ratings. *The Financial Review* **49**(1): 49–75.

Orlitzky M, Schmidt FL, Rynes SL. 2003. Corporate social and financial performance: a meta-analysis. *Organization Studies* **24**(3): 403–441.

Petersen MA. 2009. Estimating standard errors in finance panel data sets: comparing approaches. *Review of Financial Studies* **22**(1): 435–480.

R Core Team. 2015. R: a language and environment for statistical computing. R Foundation for Statistical Computing: Vienna, Austria. Available at: http://www.r-project.org/ [1 August 2015].

Reuer JJ, Leiblein MJ. 2000. Downside risk implications of multinationality and international joint ventures. *Academy of Management Journal* **43**(2): 203–214.

Rowley TI. 1997. Moving beyond dyadic ties: a network theory of stakeholder influences. *Academy of Management Review* **22**(4): 887–910.

Rowley TJ, Moldoveanu M. 2003. When will stakeholder groups act? An interest- and identity-based model of stakeholder group mobilization. *The Academy of Management Review* **28**(2): 204–219.

Rozin P, Royzman EB. 2001. Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review*.

Ruefli TW, Collins JM, Lacugna JR. 1999. Risk measures in strategic management research:

auld lang seyne? *Strategic Management Journal* **20**(2): 167–194.

Sharfman MP, Fernando CS. 2008. Environmental risk management and the cost of capital. *Strategic Management Journal* **29**(6): 569–592.

Sharfman MP, Wolf G, Chase RB, Tansik DA. 1988. Antecedents of organizational slack. *Academy of Management Journal* **13**(4): 601–614.

Shaver KG. 1985. *The attribution of blame: Causality, responsibility, and blameworthiness*. Springer-Verlag: New York.

Soroka SN. 2008. Good news and bad news: asymmetric responses to economic information. *The Journal of Politics* **68**(02): 372–385.

Standard & Poor's. 2014. Understanding ratings. Available at: http://www.standardandpoors.com/MicrositeHome/en/us/Microsites [4 July 2014].

Strike VM, Gao J, Bansal P. 2006. Being good while being bad: social responsibility and the international diversification of US firms. *Journal of International Business Studies* **37**(6): 850–862.

Surroca J, Tribó JA, Waddock SA. 2010. Corporate responsibility and financial performance: the role of intangible resources. *Strategic Management Journal* **31**(5): 463–490.

Tang Y, Qian C, Chen G, Shen R. 2015. How CEO hubris affects corporate social (ir)responsibility. *Strategic Management Journal* **36**(9): 1338–1357.

Tang Z, Tang J. 2013. Can the media discipline chinese firms' pollution behaviors? The mediating effects of the public and government. *Journal of Management (Forthcoming)*.

Tong TW, Reuer JJ. 2007. Real options in multinational corporations: organizational challenges and risk implications. *Journal of International Business Studies* **38**(2): 215–230.

Waddock SA, Graves SB. 1997. The corporate social performance - financial performance link. *Strategic Management Journal* **18**(4): 303–319.

Westphal JD, Deephouse DL. 2011. Avoiding bad press: interpersonal influence in relations between CEOs and journalists and the consequences for press reporting about firms and their leadership. *Organization Science* **22**(4): 1061–1086.

Zyglidopoulos SC. 2002. The social and environmental responsibilities of multinationals: evidence from the brent spar case. *Journal of Business Ethics* **36**(1-2): 141–151.

Table 1: The scope of considered corporate social irresponsibility issues.

| Category | Issue |
|---|---|
| Environmental Footprint | Global Pollution and Climate Change |
| | Local Pollution |
| | Impacts on Ecosystems and Landscapes |
| | Overuse and Wasting of Resources |
| | Waste Issues |
| | Animal Mistreatment |
| Community Relations | Human Rights Abuses, Corporate Complicity |
| | Impacts on Communities |
| | Local Participation Issues |
| | Social Discrimination |
| Employee Relations | Forced Labor |
| | Child Labor |
| | Freedom of Association and Collective Bargaining |
| | Discrimination in Employment |
| | Health and Safety Issues |
| | Poor Employment Conditions |
| Corporate Governance | Corruption, Bribery, Extortion, Money Laundering |
| | Executive Compensation |
| | Misleading Communication, e.g. Greenwashing |
| | Fraud |
| | Tax Evasion |
| | Anti-competitive practices |
| General | Controversial products and services |
| | Product-related health and environment issues |
| | Violation of international standards |
| | Violation of national legislation |
| | Violation of national standards |
| | Supply Chain |

Table 2: Correlation matrix

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Firm risk | 1 | | | | | | | | | |
| 2 | Credit rating | **0.78** | 1 | | | | | | | | |
| 3 | Firm size | **-0.35** | **-0.50** | 1 | | | | | | | |
| 4 | Net income | **-0.26** | **-0.34** | **0.68** | 1 | | | | | | |
| 5 | Fixed assets | **-0.11** | **-0.28** | **0.64** | **0.48** | 1 | | | | | |
| 6 | Liabilities | **-0.09** | **-0.29** | **0.58** | **0.39** | **0.65** | 1 | | | | |
| 7 | CSI coverage | **-0.11** | **-0.24** | **0.55** | **0.39** | **0.55** | **0.42** | 1 | | | |
| 8 | Stakeholder CSI | **-0.09** | **-0.22** | **0.44** | **0.29** | **0.44** | **0.33** | **0.65** | 1 | | |
| 9 | CSR | **-0.25** | **-0.34** | **0.38** | **0.24** | **0.30** | **0.33** | **0.31** | **0.29** | 1 | |
| 10 | Reach | -0.01 | -0.01 | **0.04** | 0.02 | **-0.05** | 0.01 | 0.00 | **-0.08** | **-0.04** | 1 |
| 11 | Severity | 0.00 | **-0.04** | 0.01 | 0.00 | **0.04** | 0.00 | **0.05** | 0.03 | 0.03 | **-0.07** |

Correlations that are significant at the 5% level are printed in bold face

Table 3: Summary statistics and sample distributions

**Panel A: Summary statistics**

| Variable | min | max | mean | median | sd |
|---|---|---|---|---|---|
| Firm risk | 2.66 | 9.48 | 4.78 | 4.65 | 0.86 |
| Credit rating | 1.00 | 21.00 | 8.45 | 8.00 | 2.78 |
| Firm size | 0.08 | 500.74 | 26.45 | 12.82 | 40.50 |
| Net income | −31.73 | 16.86 | 0.44 | 0.20 | 1.26 |
| Fixed assets | −19.29 | 243.65 | 13.04 | 5.17 | 23.07 |
| Liabilities | 0.40 | 670.32 | 27.30 | 13.17 | 45.93 |
| CSI coverage | 0.00 | 52.00 | 1.07 | 0.00 | 2.82 |
| Stakeholder CSI | 0.00 | 17.00 | 0.44 | 0.00 | 1.20 |
| CSR | 19.63 | 59.96 | 44.42 | 45.23 | 6.75 |
| Reach | 1.00 | 3.00 | 2.01 | 2.00 | 0.48 |
| Severity | 1.00 | 3.00 | 1.32 | 1.10 | 0.40 |

**Panel B: Distribution of observations across sectors**

| GICS Sector | N |
|---|---|
| Industrials | 2163 |
| Consumer staples | 1136 |
| Materials | 1717 |
| Consumer discretionary | 2205 |
| Information technology | 1025 |
| Telecommunication services | 772 |
| Utilities | 1226 |
| Health care | 866 |
| Energy | 1274 |

**Panel C: Distribution of observations across quarters**

| Quarter | N | Quarter | N |
|---|---|---|---|
| 2008 1 | 324 | 2011 1 | 449 |
| 2008 2 | 335 | 2011 2 | 456 |
| 2008 3 | 429 | 2011 3 | 455 |
| 2008 4 | 441 | 2011 4 | 459 |
| 2009 1 | 445 | 2012 1 | 459 |
| 2009 2 | 413 | 2012 2 | 462 |
| 2009 3 | 417 | 2012 3 | 463 |
| 2009 4 | 422 | 2012 4 | 463 |
| 2010 1 | 424 | 2013 1 | 466 |
| 2010 2 | 426 | 2013 2 | 473 |
| 2010 3 | 425 | 2013 3 | 479 |
| 2010 4 | 435 | 2013 4 | 481 |

Table 4: Panel regressions on firm risk

| | Model 1 | Model 2 | Model 3 | Model 4 |
|---|---|---|---|---|
| Credit rating | 0.1988*** | 0.1978*** | 0.2037*** | 0.2042*** |
| | (0.0221) | (0.0219) | (0.0172) | (0.0175) |
| Firm size | −0.0063*** | −0.0063*** | −0.0059*** | −0.0059*** |
| | (0.0006) | (0.0006) | (0.0005) | (0.0005) |
| Fixed assets | −0.0002 | −0.0006 | −0.0013 | −0.0013 |
| | (0.0010) | (0.0010) | (0.0012) | (0.0013) |
| Net income | −0.0266** | −0.0262** | −0.0215* | −0.0216* |
| | (0.0082) | (0.0081) | (0.0103) | (0.0103) |
| Liabilities | 0.0014 | 0.0014 | 0.0023 | 0.0024 |
| | (0.0015) | (0.0015) | (0.0018) | (0.0019) |
| CSR | −0.0017 | −0.0017 | −0.0011 | −0.0014 |
| | (0.0021) | (0.0021) | (0.0042) | (0.0040) |
| CSI coverage | | 0.0067** | 0.0060* | 0.0063** |
| | | (0.0021) | (0.0025) | (0.0024) |
| Reach | | | 0.0436* | |
| | | | (0.0187) | |
| Severity | | | | 0.0026 |
| | | | | (0.0180) |
| Firm effects | *yes* | *yes* | *yes* | *yes* |
| Quarter effects | *yes* | *yes* | *yes* | *yes* |
| $R^2$ | 0.8858 | 0.8859 | 0.9041 | 0.9037 |
| Adj. $R^2$ | 0.8792 | 0.8793 | 0.8896 | 0.8890 |
| Num. obs. | 9249 | 9249 | 3278 | 3278 |

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, based on robust standard errors

Table 5: Instrumental variable regression on firm risk

| | First Stage | Second Stage |
|---|---|---|
| Credit rating | 0.1537* | 0.1929*** |
| | (0.0701) | (0.0219) |
| Firm size | 0.0051 | −0.0065*** |
| | (0.0067) | (0.0006) |
| Fixed assets | 0.0560*** | −0.0025 |
| | (0.0114) | (0.0014) |
| Net income | −0.0505 | −0.0240** |
| | (0.0873) | (0.0078) |
| Liabilities | 0.0038 | 0.0013 |
| | (0.0065) | (0.0015) |
| CSR | −0.0106 | −0.0017 |
| | (0.0106) | (0.0021) |
| Stakeholder CSI | 0.4615*** | |
| | (0.1166) | |
| Stakeholder CSI.lag | 0.2177*** | |
| | (0.0586) | |
| CSI coverage | | 0.0383*** |
| | | (0.0092) |
| Firm effects | *yes* | *yes* |
| Quarter effects | *yes* | *yes* |
| $R^2$ | 0.7611 | 0.8859 |
| Adj. $R^2$ | 0.7473 | 0.8793 |
| Num. obs. | 9231 | 9231 |

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, based on robust standard errors

# Paper 3: How risky is your business? The role of institutional context, corporate social responsibility, and rating agencies

Timo Busch*, Julian Kölbel**
* University of Hamburg, School of Business, Economics and Social Science,
Von-Melle-Park 9, 20146 Hamburg, Germany
**ETH Zurich, Department of Management, Technology, and Economics
Weinbergstrasse 56, 8092 Zuerich, Switzerland

## Abstract

It is increasingly accepted that corporate social responsibility (CSR) is relevant for the legitimacy of companies and mitigates firm risk. At the same time, however, the meaning of CSR varies across different institutional contexts. This study contributes to the international business literature as the first investigation of the CSR-risk relationship that considers the context dependent interpretation of CSR in a cross-national setting. We focus on the role of CSR rating agencies as institutional intermediaries, arguing that ratings incorporate a definition of CSR that is coined and accepted in a certain institutional context. Within this context, CSR ratings signal legitimacy and, thus, affect firm risk. Using a sample of 238 international firms from 17 countries between 2007 and 2012, we confirm that a good CSR rating has a cross-national risk mitigating effect. However, this effect is moderated by institutional differences. Cultural distance between the institutional contexts of the rating agency and the rated company reduces the effect of the CSR rating on firm risk. We conclude that while there is a shared core meaning of CSR, a larger risk mitigating effect results from better alignment with the local institutional context.

## Introduction

Over the past decades corporate social responsibility (CSR) has become a popular notion in the business sphere and an important research area in international business studies (Campbell, Eden, & Miller, 2012; Husted & Allen, 2006; Waldman, de Luque, Washburn, & House, 2006). According to a study conducted by United Nations Global Compact and Accenture, 93 percent of

the top one thousand executives from around the world stated that CSR is important for their organization's future success (UN Global Compact - Accenture, 2013). One important reason that firms engage in CSR is to gain and maintain legitimacy (Brammer, Jackson, & Matten, 2012; Campbell, 2007; Chiu & Sharfman, 2011). Legitimacy, according to Institutional Theory, is an important condition for firm survival and, thus, lowers firm risk (Dowling & Pfeffer, 1975; Scott, 2008; Zuckerman, 1999). Empirical studies consistently show that firms with good CSR performance are perceived as less risky by capital markets (Bansal & Clelland, 2004; Chava, 2014; El Ghoul, Guedhami, Kwok, & Mishra, 2011; Sharfman & Fernando, 2008). Still, it is not clear whether these findings can be extended to an international business context.

CSR carries different meanings in different parts of the world as it is shaped by institutional context (Brammer et al., 2012; Campbell, 2007). For example, in the US, funding higher education can be seen as a legitimate form of CSR; however, such funding is frowned upon in many European countries, where education is seen primarily as a responsibility of the state (Matten & Moon, 2008). This raises the question of whether a "one size fits all" approach to CSR will lead to legitimacy and lower risk in a cross-national setting. So far, this question has only been investigated empirically in a US context where studies rely on US-data provided by mainly one rating agency, Kinder, Lydenberg, and Domini (KLD).

Our central thesis is that, while CSR is practiced globally, legitimacy arises from an alignment with the local institutional context. On one hand, CSR is a widely known and applied business principle, and many executives acknowledge that how they address ecological and social issues will affect their future competitiveness (Lubin & Esty, 2010). On the other hand, the interpretation of CSR is structurally influenced by legal systems (Matten & Moon, 2008) and national culture (Kostova & Zaheer, 1999; Scholtens & Dam, 2007). Thus, we argue that there is a globally shared core meaning of CSR; however, its interpretation is shaped by the local institutional context where CSR is interpreted and applied (Brammer et al., 2012; Campbell, 2007).

This study makes two interrelated contributions to the literature. First, we extend the scope of previous research on the effect of CSR on firm risk – measured as cost of capital – to the international business context. Using a panel dataset of firms from 17 countries, we show that there is a globally shared core meaning of CSR that reduces firm risk across institutional contexts. Second, we argue that rating agencies play an important role as institutional intermediaries (Doh, Howton, Howton, & Siegel, 2009) that interpret CSR through the lens of the local institutional

context. Prior work emphasized the notion that CSR is conditioned by the political and cultural context (Campbell, Eden, & Miller, 2012; Doh & Guay, 2006; Husted & Allen, 2006; Matten & Moon, 2008). Drawing on this notion, we expand on the analysis of the institutional intermediary function of rating agencies (Doh et al., 2010) by providing evidence that local institutional context influences their interpretation of CSR. With a focus on the cultural distance between a rating agency's country of origin and a rated firm's country of incorporation, we show that cultural distance reduces the effect of CSR ratings on firm risk.

The remainder of this paper is organized as follows. First, we introduce the main constructs of this study – legitimacy, firm risk, and CSR – and discuss the role of CSR rating agencies in this regard. Second, we derive our hypotheses, after which we explain our empirical research context and methods. Finally, we present the results, draw conclusions, and discuss our findings identifying implications for managers and rating agencies.

# Legitimacy, firm risk, CSR, and rating agencies

## Legitimacy

Legitimacy is one of the key constructs in the study of organizations from the perspective of Institutional Theory (Dacin, Oliver, & Roy, 2007; Dowling & Pfeffer, 1975; Meyer & Rowan, 1977; Scherer & Palazzo, 2007; Scott, 2008). Organizational legitimacy is a "generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995:574). Organizations that satisfy culturally approved criteria and enjoy the support of surrounding institutions have a higher likelihood to survive, sometimes irrespective of their performance and stability in other dimensions (Scott, 2008). Alternately, a lack of legitimacy puts organizations fundamentally at risk. Organizations that lack legitimacy are those who violate widely accepted norms and understandings and discredited by respected authorities, have decreased chances of survival and higher firm risk (Dowling & Pfeffer, 1975; Zuckerman, 1999). Thus, this viewpoint proposes that legitimacy is of central relevance where business success and survival are affected by the degree to which firms conform to expectations and demands in their institutional environment (Meyer & Rowan, 1977; Oliver, 1991; Powell & DiMaggio, 1991; Scott, 2008).

Legitimacy has been broken down in various dimensions or types, depending on factors such as the context in which legitimacy is granted or the judgment processes that leads to legitimacy

(Bitektine, 2011). A typical distinction is the separation of regulative, normative, and cognitive dimensions of legitimacy analogous to the three "pillars" of institutions (Scott, 2008; Suchman, 1995). The regulative dimension refers to the legal context, that is, consistency with explicit legal norms and support of the organizations that shape and uphold these norms (Aldrich & Fiol, 1994). The normative dimension refers to the cultural context, that is, consistency with implicit social norms and the support of social organizations and cultural accounts that uphold these norms such as family or religion (Kostova & Zaheer, 1999).

Legitimacy is not a resource that an organization 'owns,' in the sense of a commodity that could be withdrawn and redeployed elsewhere. Suchman's (1995) definition makes clear that the institutional context is an integral part of any instance of legitimacy. While a "constructed system of norms, values, beliefs, and definitions" (Suchman, 1995: 574) can take many guises, it is obvious that the existence and the observation of legitimacy is contingent on one particular system and is inseparable from it (Deephouse & Suchman, 2008). Thus, a central argument for this study is: legitimacy is a relational construct, which only exists in relation to a specific institutional context.

## Firm Risk

A central prediction of Institutional Theory is that organizational legitimacy is an important condition for firm survival (Deephouse & Suchman, 2008; Dowling & Pfeffer, 1975; Ruef & Scott, 1998). Legitimate organizations experience fewer threats such as lawsuits, adverse regulation, boycotts, and strikes; and, as such, they are less hindered in their business by misunderstanding and ignorance. Conforming to the expectations of external audiences and accreditation bodies garners support and thereby increases the probability of organizational survival (Ruef & Scott, 1998; Rao, 1994). The survival probability of a firm is reflected as default risk in financial markets (Fabozzi & Mann, 2012). Investors reward legitimate firms with a discount, and demand a risk premium from firms that lack legitimacy (Zuckermann, 1999; Hong & Kacperczyk, 2009). Thus, legitimacy reduces firm risk and illegitimacy increases firm risk.

Capital markets' perceptions of firm risk can be most accurately traced in the cost of capital (Chava, 2014; El Ghoul et al., 2011; Verwijmeren & Derwall, 2010). In line with this, we define firm risk as the firm-specific cost of debt capital. Risk measures based on the cost of debt capital are superior to volatility-based measures of firm risk for several reasons. First, they match the strategic management focus on future downside risks (Holmes, Bromiley, Devers, Holcomb, &

McGuire, 2011), second, they represent a direct input to firm competitiveness (Ruefli, Collins, & Lacugna, 1999), and, third, they incorporate long term risks, as corporate debt obligations usually have a payback time of several years (Fabozzi & Mann, 2012).

## Corporate Social Responsibility

We define CSR as a strategic management approach that combines economic, environmental, and social objectives throughout the organization's primary activities and along its value chain. With the notion 'strategic management' we intend to highlight that CSR needs to place emphasis on long-term profitability and value creation (Jensen, 2002; Wang & Bansal, 2012). With these three objectives reflecting the 'triple bottom line' idea (Elkington, 1998), this definition is purposefully broad and inclusive in order to encompass the existing variety of interpretations of CSR (Marrewijk, 2003). Moreover, such a broad definition is also in line with Wood (1991: 399) who argued for a "negotiated definition, built on varying stakeholder perspectives on what the firm should be doing and how it should be doing it."

CSR has been embraced as an important business principle worldwide (UN Global Compact – Accenture, 2013). Building on growing momentum in the corporate world, an entire industry of professional services has developed around CSR. This development reiterates and further consolidates the relevance of CSR for doing business. The Global Reporting Initiative, for example, develops and disseminates reporting guidelines (Global Reporting Initiative, 2013) for voluntary reporting of organizations wishing to make their CSR efforts transparent to the public. Over 6,000 companies worldwide – among these, many leading multinationals – have adopted this reporting framework and regularly publish CSR reports. Some companies have moved even further and integrate CSR aspects into their regular annual report.

One central explanation for why firms practice CSR is that it is a means of gaining and maintaining legitimacy (Brammer et al., 2012; Campbell, 2007; Chiu & Sharfman, 2011). CSR provides an opportunity to cope with socially binding responsibilities (Brammer et al., 2012) that arise from the firm's institutional environment (Campbell, 2007). Increasingly, stakeholders expect firms to adopt strategies for CSR, and research indicates satisfying these expectations results in organizational legitimacy (Chiu & Sharfman, 2011). However, while the cornerstones of CSR are accepted globally, there can be no "one size fits all" approach (Kostova & Zaheer, 1999). Due to variations in local institutional contexts, CSR is interpreted and practiced differently in different places (Campbell, 2007).

## Rating agencies

CSR rating agencies are a key actor when it comes to analyzing and interpreting CSR. The agencies' main objective is to assess firms' CSR performance and provide this information to financial markets. The influence of third party assessments and certifications on legitimacy is well-known and documented in the literature (Deephouse & Suchman, 2008; Rao, 1994; Ruef & Scott, 1998). Doh et al. (2010) discussed the inclusion of a firm in a sustainable investment index as an example of third party legitimation. Being listed in such an index shows that the firm is engaging in CSR activities. Investors interpret this as a signal of legitimacy and adjust their expectations about the firm's risk. In particular, being delisted is found to have a negative effect on stock prices. Doh et al. (2010) concluded that CSR rating agencies are institutional intermediaries that link a firm's CSR efforts to prices observed in financial markets. In this role they overcome a central issue that investors face generally when evaluating companies: they ease information asymmetry.

With regards to information asymmetry, CSR rating agencies are very similar to regular credit rating agencies. The basic problem of information asymmetry is that firms hold superior information about their performance quality but are not rewarded for it because it is a latent quality for investors (Connelly, Certo, Ireland, & Reutzel, 2010; Stiglitz, 1975). A typical example of such a latent quality is creditworthiness. Credit rating agencies overcome information asymmetry through screening and signaling. Screening is a detailed and consistent assessment methodology that is able to differentiate firms in terms of creditworthiness. The result of this screening process is a rating which signals the latent quality of creditworthiness to investors (Riley, 2001). This intermediation reduces information asymmetry so that firms with good creditworthiness can obtain good credit conditions in the market. CSR, like creditworthiness, is a latent quality that is hard to assess for outsiders. Given that there is almost no mandatory disclosure in the area of CSR, information asymmetry is likely to be even more extreme when compared to creditworthiness. Rating agencies request and process data and screen firms regarding their CSR activities using a detailed and consistent methodology. In this way, they signal to investors the latent quality of CSR, very much like credit rating agencies do for creditworthiness. In order to obtain a good CSR rating, a firm must meet the expectations of many different stakeholder groups. A good CSR rating thus signals a firm's legitimacy to important audiences. The purpose of this study is to find out in what ways the institutional context matters for the relevance of CSR ratings for firm risk.

# Hypotheses development

## The general CSR-risk relation

The rationale that legitimacy reduces firm risk has been applied in the CSR-literature (Bansal & Clelland, 2004; Chiu & Sharfman, 2011; Doh et al., 2010). Given CSR is a means of gaining and maintaining legitimacy, it should follow that firms with a better CSR performance experience lower firm risk. Similar arguments have been made by stakeholder theorists, arguing that CSR leads to support from a wide range of stakeholders and thereby reduces firm risk (Godfrey, 2005). A number of studies have provided consistent empirical evidence for this CSR-risk hypothesis. An early meta-analysis concluded that there is a clear negative correlation between various measures of CSR and firm risk (Orlitzky & Benjamin, 2001). Bansal & Clelland (2004) have shown that good corporate environmental performance is associated with lower firm risk.

More recent CSR studies have focused on the cost of capital as a measure of firm risk. The underlying logic of these studies is that a good CSR rating sends a legitimacy signal to investors, leading to lower risk, because it assures the investor that the company is adhering to good and accepted practices and policies in the realm of CSR (Doh et al., 2009; Goss & Roberts, 2011). Sharfman & Fernando (2008) found that good CSR performance is correlated with a reduced weighted average cost of capital. There is consistent evidence that the implementation of CSR measures is related to a reduction in the cost of equity capital (Chava, 2014; El Ghoul et al., 2011; Koh, Qian, & Wang, 2014), as well as firm risk (Chava, 2014; Goss & Roberts, 2011; Oikonomou & Pavelin, 2014). These studies on CSR and the cost of capital suggest that, indeed, the survival chances of firms implementing CSR strategies are improved.

However, the effect of CSR on the cost of capital has been evaluated exclusively in the US context. With the majority of studies relying on ratings from KLD in order to measure CSR; KLD is based in the US and their data only covers US companies. From an international business perspective, the relationship between legitimacy, firm risk, and CSR might not be as straightforward as it seems from a single country perspective. Thus, we present our first hypothesis as a baseline hypothesis that extends prior findings to an international business context:

*H1: A better CSR rating is associated with lower firm risk.*

## Institutional context and CSR ratings

The CSR-risk relation in an international business context reveals an important caveat in our current understanding. More and more scholars acknowledge that variation exists in the interpretation of what CSR means and what it should include. There have been repeated efforts to provide more specific definitions (Carroll, 1999), but with 37 definitions in academic literature (Dahlsrud, 2008), neither academics nor practitioners have agreed on one generally accepted definition. In response, scholars argue that CSR is interpreted differently in different contexts (Scherer, Palazzo, & Seidl, 2013). Thus, it appears obvious that CSR interpretations vary between international research settings given local institutional contexts differ (Campbell, 2007; Doh & Guay, 2006; Matten & Moon, 2008). Yet, empirical studies on the CSR-risk relation have thus far eschewed the role of varying CSR interpretations.

The geographic variability of CSR definitions is brought into sharp focus by CSR rating agencies, who need to craft operational definitions of CSR that are precise enough to serve as a basis for quantitative screening. A rating methodology requires a set of indicators and a specification of their relative importance, referred to as scope and weighting (Sadowski, Whitaker, & Buckingham, 2010). By specifying the rating methodology, the rather vague notion of CSR is interpreted in a specific way, so that an explicit, operational definition emerges. This implies, however, that a specific CSR interpretation is embedded in each rating methodology. For example, the US-based KLD rating includes social and environmental aspects in its scope (KLD Research & Analytics, 2003). In a typical KLD rating, the environmental domain is represented with a weight of less than 20%. The German rating agency, OEKOM, in contrast, gives the environmental domain a weight of 50%. Thus, the established CSR definitions which are embedded in ratings differ substantially from each other and, inevitably, result in different performance assessments (Delmas & Blass, 2010; Delmas, Etzion, & Nairn-Birch, 2013).

In crafting an operational CSR definition, rating agencies embed views and expectations that relate to CSR from their institutional context in which they operate. As the interpretation is shaped by the institutional context, rating agencies from different institutional contexts perform different screenings. We argue that this context-dependent definition of CSR moderates the CSR-risk relationship. The more ratings diverge across institutional contexts, the less they will signal legitimacy in institutional contexts outside of their own. Yet, the legitimacy signal is what prompts investors to lower their risk expectations. Thus, differences in the institutional context of the rated

firm and the rating agency are likely to moderate the effect of CSR ratings on firm risk. We focus on two important dimensions of the institutional context: a country's *legal system* and *cultural distance*.

## Legal system as moderator

The form of legal system is a prominent feature of the institutional context and a common differentiator in international business studies (e.g., Ioannou & Serafeim, 2012; Young & Makhija, 2014). There is a stream of finance literature scrutinizing differences in corporate structure and governance between countries in the common law tradition and countries in the civil law tradition (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998). Examining CSR along similar lines, Matten & Moon (2008) described how the interpretation of CSR differs significantly between the Anglo-Saxon and continental European contexts. They argued that differences in regulation constrain the extent which firms have discretion to practice CSR. This argumentation is empirically supported by Liang and Renneboog (2014), who find that firms from a civil law background show enhanced CSR practices when compared to firms operating within an English common law context to. We argue that a rating agency that evolved from a common law background may apply different screenings than one from a civil law background. The signal fit is reduced when a firm operating in a common law background is rated according to a civil law definition of CSR. Thus, we posit that the legal system moderates the effect of a CSR rating on firm risk.

*H2: The form of legal system moderates the effect of CSR ratings on firm risk. Specifically, the effect is weaker, when the firm is based in a country that has a different legal system than the country of origin of the rating agency.*

## Cultural distance as moderator

Next to the legal system, national culture is likely to influence the definition of CSR in different geographies. National culture is not only of relevance for understanding national business systems (e.g., Witt & Redding, 2009; Leung et al., 2005), it is a further important aspect that may influence the CSR interpretation (e.g., Ioannou & Serafeim, 2012; Waldman et al., 2006). In fact, given that CSR often concerns programs and activities that are beyond those required by law (McWilliams & Siegel, 2001), the cultural context may be an important determinant of what is considered to be legitimate in a specific institutional context. The cultural context – defined as "a set of shared

understandings and available strategies for action'' (Hall & Soskice, 2001: 13) –refers to norms that are valid even though they are not formally stated or enforced. Culture in management science refers to common experiences and shared meanings that are fairly stable within a cultural community, but vary across cultural communities (Tsui, Nifadkar, & Ou, 2007). We expect that the national cultural context influences the interpretation of CSR (Scholtens & Dam, 2007).

Related arguments can be found in the liability of foreignness (LOF) literature. This literature describes the difficulties foreign affiliates of multinational enterprises face in host countries (e.g., Mezias, 2002; Zaheer, 1995). Campbell, Eden, and Miller (2012) empirically investigate the role of CSR activities for conferring legitimacy when LOF is positively related to the distance between home and foreign countries. One of their main arguments is that with greater cultural distance the variations in firms' CSR activities and stakeholder interpretations will increase. This logic is in line with Kang and Kim (2010), who show that cultural differences can be a source for information asymmetry for foreign investors. We, therefore, hypothesize a moderating effect of cultural distance.

*H3: Cultural distance moderates the effect of CSR ratings on firm risk. Specifically, the effect is weaker when the firm is based in a country with a greater cultural distance to the country of origin of the rating agency.*

# Data and Methodology

Our sample consists of large international firms from a diverse geographical background. For the independent variable we use CSR ratings from OEKOM research AG (henceforth OEKOM), a CSR rating agency based in Germany. Since its foundation in 1993, OEKOM has offered CSR ratings to investors. Data on firm risk and financial control variables from quarterly reports are obtained via Bloomberg. Our sample consists of 238 publicly traded corporations that publish quarterly results, have tradable debt outstanding, and have received a rating by OEKOM. The sample represents all major industrial sectors and 17 countries. Tables 1 and 2 provide an overview of the sample across countries and sectors.

## OEKOM Ratings

OEKOM ratings provide information for investors with over EUR 600bn assets. While OEKOM is similar to KLD in terms of the basic service provided, OEKOM covers an international universe of firms, which enables studies across different countries. OEKOM utilizes a total of 95 indicators

on 22 themes equally distributed over the social and the environmental domain. The social domain includes the subfields of *Staff and Suppliers, Society and Product Responsibility, and Corporate Governance* and *Business Ethics* and the environmental domain contains the subfields of *Environmental Management, Products and Services*, and *Eco-efficiency*. The indicators are both qualitative and quantitative, and consider both management processes and outcomes. The indicators are aggregated into a single continuous rating score, which can take any value between one (lowest grade) and four (highest grade) in decimal increments. OEKOM assesses all companies against the same CSR definition, regardless of geographic origin. The rating methodology is adapted to fit specific industries, but it is not adapted for a company's geographic origin. Thus, OEKOM assesses all companies of the same industry against the same universal definition of CSR. OEKOM ratings are revised on a quarterly basis. A complete description of the indicators and the rating methodology is available in detail online (ARISTA, 2012).

OEKOM is deeply embedded in the institutional context of Germany. OEKOM pioneered CSR ratings in Germany and was among the early services of this kind worldwide. OEKOM's offices have remained in Munich since its foundation and almost all of OEKOM's 64 employees are located in Munich. The vast majority of OEKOM's employees speak German, most are born in Germany and have received primary and higher education in Germany. Furthermore, the founders are German and the advisory board is comprised of native Germans. The rating methodology is based on a scientific approach, the Frankfurt-Hohenheimer guideline for the ethical assessment of corporations, developed by three German professors (Hoffmann, Ott, & Scherhorn, 1997).

## Firm Risk

We measure firm risk in terms of the firm specific cost of capital, similar to many other studies in this field (Chava, 2014; Goss & Roberts, 2011; Koh et al., 2014; Sharfman & Fernando, 2008). Specifically, we use the spreads on credit default swaps (CDS) as a measure of firm risk, because it gives a direct measure of firm risk that does not have to be separated from the underlying risk free rate (Fabozzi & Mann, 2012). A CDS is a derivative that is linked to a borrower's outstanding debt, and represents in principle an insurance against default. CDSs are internationally standardized financial assets that are completely independent of a firm's location and tax status (Fabozzi & Mann, 2012). CDS spreads, thus, represent an internationally comparable measure of firm risk. CDS spreads are a popular measure in financial studies, because they offer an accurate and timely measure of credit risk (O'Kane & Sen, 2005). CDS are traded on a large and liquid

financial market place, which ensures efficient pricing. We chose the five year CDS, because it is the most common and most liquid derivative on the market. For each firm, we observe the last quoted CDS spread within a quarter as our measure of firm risk. The spread is expressed in basis points (1/10000), comparable to the level of interest paid on a loan. Given that the distribution of CDS spreads is skewed, we take the natural logarithm, which yields a dependent variable with a normal distribution.

## Institutional Context

We compare the institutional contexts of a firm's country of incorporation and the home country of the rating agency. In our study the rating agency is located in Germany, hence the institutional context of Germany forms the reference point to which other countries are compared. For the comparison we refer to the variables legal system and cultural distance.

*Legal system* is measured as a binary variable. The legal system of Germany is in the tradition of civil law, which is also practiced in most other countries of continental Europe (CIA, 2013). The division between civil law and common law countries is an established measure of international institutional comparison (La Porta et al., 1998). Most of the world's national legal systems, and all of those included in our sample, can be categorized into either the civil or the common law tradition. Following the classification applied in the Central Intelligence Agency's World Fact Book (CIA, 2013), a binary variable is assigned to each country, which takes the value of zero if the legal system is in the civil law tradition and a value of one if it is in the common law tradition.

*Cultural distance* has been widely applied in international business studies. However, Shenkar (2001; 2012) as well as others question the validity of this construct and discuss several theoretical and methodological shortcomings when measuring cultural distance. Since our research setting is not focused on the interaction between specific actors, most of this critique is not relevant. We critically reflect on the remaining limitations in the discussion section. Like legal systems, Hofstede's (2010) measures of cultural distance are also established and can be used for international institutional comparison (Tsui et al., 2007). Hofstede et al. (2010) identified six cultural value-dimensions, which show and quantify differences between national cultures. The dimensions are power distance, uncertainty avoidance, individualism, masculinity, long-term orientation, and indulgence versus restraint. These dimensions were measured using large-scale national surveys and are reported as normalized national averages ranging from 1 to 100 (Hofstede, Hofstede, & Minkov, 2010). Following the method of Kogut and Singh (1988), the relative distance across these six dimensions is calculated against the baseline of Germany. The resulting

continuous variable is assigned to each country, representing the relative cultural distance of a firm's country of incorporation to the home country of the rating agency.

## Control Variables

Our model closely follows the empirical approach of Chava (2014). First, we control for firm size because large firms generally experience lower firm risk. Firm size is measured as the natural logarithm of total assets. Second, leverage – measured as the ratio of total liabilities to total assets – indicates the relative amount of debt a firm has on its balance sheet. Leverage increases firm risk; with high leverage it becomes increasingly uncertain whether the firm can fulfill all of its debt obligations. Third, return on assets (ROA), defined as net operating income normalized by total assets, indicates profitability of the firm and is a risk mitigating factor in the sense that the firm is able to generate revenue on its existing assets to repay debt obligations. Fourth, in contrast to Chava (2014), we do not include the modified z-score as an indicator of financial distress. Instead, we include Interest Coverage as a measure of financial distress (Goss & Roberts, 2011; Oikonomou & Pavelin, 2014) and define it as the ratio of net operating income to annual interest payments. Finally, we include fixed assets, defined as the ratio of plant, equipment and real estate to total assets. The rationale is that fixed assets reduce credit risk because in the event of default, creditors can most easily claim these kinds of assets to recover their investments. All independent variables are lagged at least one month in order to allow the information to be incorporated into firm risk.

## Empirical Analysis

Our empirical approach includes fixed effects at the industry and quarter level, to control for industry specific conditions and cross-sectional shocks. Given that our study makes use of an international sample, we also include fixed effects at the country level, in order to control for country specific constants. We confirm that this two-way fixed effects model is appropriate by means of a Hausman test (Cameron & Trivedi, 2005). We estimate robust standard errors, as tests for heteroscedasticity of residuals indicate that clustered standard errors are advisable (Petersen, 2009; Thompson, 2011). Like Chava (2014), we cluster standard errors at the firm level to safeguard robust statistical inference. Related studies in the US context (Chava, 2014; El Ghoul et al., 2011; Goss & Roberts, 2011; Koh et al., 2014) have addressed concerns around endogeneiety and reverse causality and firmly established that there is a causal effect of CSR reducing firm risk.

# Results

Our sample is an unbalanced panel of quarterly observations of 238 firms between 2007 and 2012, resulting in 4470 firm-quarter observations. Tables 1 and 2 give an overview of the dataset. Table 1 provides the number of firms, the cultural distance, and the type of legal system per country. Table 2 gives an impression how the firms are distributed across different sectors, as well as averages of the key variables per sectors. Table 3 shows the distributions of all continuous variables. Outliers in the first and 99th percentile have been winsorized, i.e. they have been recoded with the value of the adjacent percentile. Table 4 shows the correlation matrix for all continuous variables in the regression.

Model 1, shown in Table 5, demonstrates a baseline model with only the control variables. Most of the control variables are highly significant and point in the expected direction: Leverage increases firm risk, Firm Size, ROA, and Fixed Assets reduce firm risk. Interest Coverage seems to have a negligible effect on firm risk, a result that is not uncommon for accounting measures of financial distress (Goss & Roberts, 2011). The adjusted R-squared is solid with 73 per cent of variance explained, indicating that the control vector captures a large part of the variance. In addition to the baseline model, Model 2 includes the OEKOM rating as an explanatory variable. The coefficient for OEKOM is negative (-0.26) and highly significant ($p>0.01$), indicating that firms with a good (high) OEKOM rating have lower firm risk. Thus, Hypothesis 1 is supported: A better CSR rating is associated with lower firm risk.

Models 3 and 4 test for the moderating influence of the legal system on the relationship between CSR and firm risk. Model 3 includes the main effect of the variable legal system. The coefficient of legal system is not significant. The main effect of OEKOM remains significant also in the presence of the legal system variable. Model 4 shows the interaction effect between legal system and OEKOM. The coefficient of the interaction term is not significant at the five per cent level. Therefore, Hypothesis 2 cannot be supported.

Models 5 and 6 test for the moderating influence of cultural distance. Model 5 presents the main effect of cultural distance, which is not significant, indicating that firm risk is not directly related to cultural distance. Model 6 presents the interaction term, which is positive (0.39) and significant ($p<0.05$). This result indicates that increasing cultural distance diminishes the effect of OEKOM ratings on firm risk. Thus, we find support for Hypothesis 3: The effect of CSR ratings on firm risk is weaker when the firm is based in a country with a greater cultural distance to the country of origin of the rating agency.

This moderation effect is further illustrated in Figure 1, which shows the influence of cultural distance on the relationship between OEKOM rating and firm risk. The graph is generated by predicting the dependent variable based on the cultural interaction model for several levels of cultural distance. The independent variables besides OEKOM rating and cultural distance are kept constant at representative values. Figure 1 clearly shows how the negative relationship between OEKOM rating and firm risk fade with increasing cultural distance. For a cultural distance of zero, i.e. for German firms, the relationship between OEKOM rating and firm risk is negative. For firms in Norway, which has a cultural distance of 1.50, the relationship is still negative, but less steep. For firms with a cultural distance above a value of two, such Australia with 2.10 or Sweden with 2.78, the relationship is even slightly positive.

# Discussion

This study is the first attempt to address the effect of CSR on the cost of capital in an international research design, while recognizing the contextual nature of CSR interpretations. The first contribution of this study is to highlight that a good CSR rating has a risk-reducing effect in an international research setting. This finding extends the results of previous studies that were limited to KLD ratings and the US context (Chava, 2014; El Ghoul et al., 2011; Oikonomou & Pavelin, 2014; Sharfman & Fernando, 2008). By utilizing an alternative rating, applied to an international sample, we are able to demonstrate that a good CSR performance reduces firm risk, and that this claim does not only hold for the US. The evidence of this risk reducing effect in an international context supports arguments that there is a globally shared core meaning of CSR (Husted & Allen, 2006). This shared meaning is the common denominator when it comes to which CSR practices are viewed as legitimate across institutional contexts. Despite abundant CSR definitions (Dahlsrud, 2008; Marrewijk, 2003) and the many different CSR rating approaches that result (Sadowski et al., 2010), there seems to be a globally shared notion of what is expected of firms in terms of CSR.

The second contribution of the study is to demonstrate the moderating influence of the institutional context on the link between CSR and firm risk. We show that cultural distance between the country of origin of a rating agency and the country where the rated firm is incorporated reduces the effect of a CSR rating on firm risk. This indicates that a CSR definition which leads to legitimacy in one culture does not necessarily lead to legitimacy in another culture. The result confirms theoretical work that CSR is shaped by its institutional context (Brammer et al., 2012; Campbell, 2007; Matten & Moon, 2008). We extend this contextual view by linking it to the institutional intermediary

function of rating agencies. We argue that rating agencies are embedded in their institutional context and this is reflected when they craft an operational definition of CSR. The results of this study suggest that CSR ratings are indeed responsive to their local institutional context. Extending the work of Doh et al. (2010), we show that rating agencies are intermediaries not only between firms and investors, but additionally between CSR and a specific institutional context. When rating agencies define CSR, they reveal what is legitimate in their institutional context. By highlighting the relative validity of one specific CSR definition, this study identifies an example where institutional intermediaries develop legitimating assessment categories, a process which is little understood (Deephouse & Suchman, 2008).

While we find empirical evidence for the moderating effect of cultural distance, we cannot find similar effect when comparing legal systems. Thus, we conclude that cultural norms seem to be more influential than legal norms in shaping the definition and relevance of CSR. Of course, the non-significant result for the moderating influence of legal system does not prove that the effect is inexistent, but it suggests that the different understanding of CSR between countries identified in prior literature (Doh & Guay, 2006; Matten & Moon, 2008) may be driven by more variegated cultural differences rather than a binary opposition of legal systems.

Our findings suggest that the CSR literature to date has underestimated the contextual nature of CSR. Efforts towards providing one general definition of CSR or related constructs have not been very successful (Marrewijk, 2003). This study has shown that CSR definitions – at least as operationalized by CSR rating agencies – are contextual. As a consequence, future studies should consider to what extent the underlying measure of CSR is contextual and whether it fits the context under investigation. In international business studies, the importance of using a contextual measure should be noted. Instead of holding all firms to the same standard, it may be useful to measure and rate CSR differently in different contexts.

In order to conceptualize the relationship between the globally shared core meaning and specific interpretations of CSR, we suggest understanding the term CSR as an ideograph. An ideograph is a rhetorical term that is consistent with a variety of value systems when stated in abstract terms, but is interpreted in different ways in different contexts (McGee, 1980). CSR as an abstract rhetoric is universally accepted because it refers to a few fundamental principles that are widely shared and non-controversial. However, when the principles are interpreted to form an operational definition, CSR is shaped and refined by institutional context.

Several limitations remain that should be kept in mind when interpreting the results of this study. First, our results are based on one particular rating from one institutional context. The results could be strengthened by replicating them on the basis of another rating from another context, for example with Vigeo ratings from France. Second, our sample is limited to firms that exceed a minimum of CSR performance since OEKOM does not rate firms that fail a pre-screening for a minimal level of performance. It is likely, that the results would be even more pronounced when the full spectrum of CSR performance was included. Third, we acknowledge that large corporations often have a strong international presence. They are exposed to and operate in a number of different cultural contexts, which of course requires adjustments in practices. Nevertheless, the context that is most crucial for firm survival and thus our measure of firm risk is likely to remain the context of the country of incorporation, which is used in this study. Finally, we construct the variable cultural distance in order to measure the differences in national culture compared to Germany. Shenkar (2001; 2012) as well as Berry et al. (2010) have raised important concerns that question the validity of this construct. Most of the theoretical and methodological shortcomings apply to situations where interactions between specific actors are investigated e.g., headquarter-subsidiary relations. In our research setting, we do not focus on such interactions. Instead, we investigate how cultural distance can explain the aggregated financial market's perception of whether a CSR rating is a reliable legitimacy signal. Thus, the illusion of symmetry, causality, and discordance (Shenkar, 2001) can be neglected. Similarly, concerns about deducing individual behavior from population-level data do not apply in our study. However, at least two critiques cannot be eradicated. First, our measure of cultural distance reflects a single point in time. This stability can be questioned, since different cultures are likely to change over time. Second, our measure of cultural distance is also subject to the assumption of linearity. With a greater distance we expect a higher moderating effect. In fact, there might be certain cultural thresholds that change the dynamic of this relationship.

Beyond these remaining questions, the study also opens up new avenues for future research. This study suggests that when legitimacy is channel through CSR it relates to firm risk. Evidence for this relationship could be further strengthened in a mediation model. If it were possible to obtain a direct measure of legitimacy, future research could test whether legitimacy indeed mediates the relationship between CSR and firm risk. Furthermore, this study has revealed that CSR rating agencies are responsive to their institutional context. Future research could study the process when rating agencies define CSR in more depth in order to better understand the interaction of the institutional context and legitimating agents.

The results of this study hold practical implications for managers as well as rating agencies. While adhering to CSR as a business principle can reduce firm risk, managers should note that their CSR practices may have different meanings in different parts of the world. Pursuing a CSR strategy in line with the expectations and requirements of a specific institutional context will contribute to gaining and maintaining legitimacy and lowering firm risk. For other institutional contexts, this effect is diluted. Rating agencies themselves may consider varying their assessment methodology by country when they offer ratings with global coverage. This may sound counter-intuitive, but since the CSR definitions are context-dependent, it would be appropriate to adapt the assessment standard in order to measure the same concept in different cultural contexts.

# Conclusion

Institutional Theory highlights the role of legitimacy for organizational survival. Several studies have investigated the relevance of CSR in this regard. The findings of this study add an important refinement to our knowledge of the relationship between legitimacy, firm risk, and CSR. On the one hand, this study extends the findings of prior literature by broadening the scope of analysis to an international business context. We find clear evidence that CSR reduces firm risk independently of institutional context. On the other hand, the study points towards the limits of the generality of this relationship. The key argument is that CSR definitions are context-specific. Rating agencies interpret CSR in different ways depending on the local institutional context they are embedded in. This, in turn, influences the risk-mitigating effect of CSR. Cultural distance between the institutional contexts of the rating agency and the rated company reduces the effect of a CSR rating on firm risk. This finding supports the argument that legitimacy – as perceived and understood in the local institutional context – is the channel through which CSR reduces firm risk.

# References


Aldrich, H. E., & Fiol, C. M. 1994. Fools rush in? The institutional context of industry creation. *Academy of Management Review*, 19(4): 645-670.

ARISTA. 2012. Transparency matrix arista tm 3.0. Accessed on 17 October 2014, http://www.aristastandard.org/content/the_standard_arista_tm_30.html.

Bansal, P., & Clelland, I. 2004. Talking trash: Legitimacy, impression management, and unsystematic risk in the context of the natural environment. *The Academy of Management Journal*, 47(1): 93–103.

Berry, H., Guillén, M. F., & Zhou, N. 2010. An institutional approach to cross-national distance. *Journal of International Business Studies*, 41(9): 1460–1480.

Bitektine, A. 2011. Toward a theory of social judgments of organizations: The case of legitimacy, reputation, and status. *Academy of Management Review*, 36(1): 151–179.

Brammer, S., Jackson, G., & Matten, D. 2012. Corporate social responsibility and institutional theory: New perspectives on private governance. *Socio-Economic Review*, 10(1): 3–28.

Busch, T., & Hoffmann, V. H. 2011. How hot is your bottom line? Linking carbon and financial performance. *Business & Society*, 50(2): 233–265.

Cameron, A. C., & Trivedi, P. K. 2005. *Microeconometrics: Methods and applications*. New York: Cambridge University Press.

Campbell, J. L. 2007. Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3): 946–967.

Campbell, J. T., Eden, L., & Miller, S. R. 2012. Multinationals and corporate social responsibility in host countries: Does distance matter? *Journal of International Business Studies*, 43(1): 84–106.

Carroll, A. 1999. Corporate social responsibility - Evolution of a definitional construct. *Business & Society*, 38(3): 268–295.

Chava, S. 2014. Environmental externalities and cost of capital. *Management Science*, 60(9): 2223 – 2247.

Chiu, S.-C., & Sharfman, M. P. 2011. Legitimacy, visibility, and the antecedents of corporate social performance: An investigation of the instrumental perspective. *Journal of Management*, 37(6): 1558–1585.

CIA. 2013. *The world factbook 2013-14*. Washington DC: Central Intelligence Agency.

Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. 2011. Signaling theory: A review and assessment. *Journal of Management*, 37(1): 39–67.

Dacin, M. T., Oliver, C., & Roy, J.-P. 2007. The legitimacy of strategic alliances: An institutional perspective. *Strategic Management Journal*, 28(2): 169–187.

Dahlsrud, A. 2008. How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1): 1–13.

Deephouse, D. L., & Suchman, M. 2008. Legitimacy in organizational institutionalism. In R.

Greenwood, C. Oliver, R. Suddaby, & K. Sahlin (Eds), *The sage handbook of organizational stitutionalism*: 47-77. London: Sage.

Delmas, M., & Blass, V. D. 2010. Measuring corporate environmental performance: The trade-offs of sustainability ratings. *Business Strategy and the Environment*, 19(4): 245–260.

Delmas, M., Etzion, D., & Nairn-Birch, N. 2013. Triangulating environmental performance: What do corporate social responsibility ratings really capture? *The Academy of Management Perspectives*, 27(3): 255–267.

Doh, J. P., & Guay, T. R. 2006. Corporate social responsibility, public policy, and NGO activism in Europe and the United States: An institutional-stakeholder perspective. *Journal of Management Studies*, 43(1): 47–73.

Doh, J. P., Howton, S. D., Howton, S. W., & Siegel, D. S. 2010. Does the market respond to an endorsement of social responsibility? The role of institutions, information, and legitimacy. *Journal of Management*, 36(6): 1461–1485.

Dowling, J., & Pfeffer, J. 1975. Organizational legitimacy: Social values and organizational behavior. *The Pacific Sociological Review*, 18(1): 122–136.

El Ghoul, S., Guedhami, O., Kwok, C. C. Y., & Mishra, D. R. 2011. Does corporate social responsibility affect the cost of capital? *Journal of Banking & Finance*, 35(9): 2388–2406.

Elkington, J. 1997. Cannibals with forks: The triple bottom line of 21st century business. Oxford: Capstone Publishing.

Fabozzi, F. J., & Mann, S. V. 2012. *The handbook of fixed income securities*. New York: McGraw-Hill.

Global Reporting Initiative. 2013. *G4 reporting guidelines*. Accessed on 23 September 2015, http://www.globalreporting.org.

Godfrey, P. C. 2005. The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. *Academy of Management Review*, 30(4): 777–798.

Goss, A., & Roberts, G. S. 2011. The impact of corporate social responsibility on the cost of bank loans. *Journal of Banking & Finance*, 35(7): 1794–1810.

Hall, P. A., & Soskice, D. 2001. An introduction to varieties of capitalism. In P. A. Hall & D. Soskice (Eds), *Varieties of capitalism: The institutional foundations of comparative advantage*: 1–68. Oxford, UK: Oxford University Press.

Hoffmann, J., Ott, K., & Scherhorn, G. 1997. *Ethische Kriterien für die Bewertung von Unternehmen: Frankfurt-Hohenheimer Leitfaden*. Frankfurt am Main: IKO - Verlag für interkulturelle Kommunikation.

Hofstede, G., Hofstede, G. J., & Minkov, M. 2010. *Culture and organizations: Software of the mind* (3rd ed.). London: McGraw-Hill.

Holmes, R. M., Bromiley, P., Devers, C. E., Holcomb, T. R., & McGuire, J. B. 2011. Management theory applications of prospect theory: Accomplishments, challenges, and opportunities. *Journal of Management*, 37(4): 1069–1107.

Hong, H., & Kacperczyk, M. 2009. The price of sin: The effects of social norms on markets.

*Journal of Financial Economics*, 93(1): 15–36.

Husted, B. W, & Allen, D. B. 2006. Corporate social responsibility in the multinational enterprise: strategic and institutional approaches. *Journal of International Business Studies*, 37(6): 838–849.

Ioannou, I., & Serafeim, G. 2012. What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43(9): 834–864.

Jensen, M. C. 2002. Value maximization, stakeholder theory, and the corporate objective function. *Business Ethics Quarterly*, 12(2): 235–256.

Kang, J.-K., & Kim, J.-M. 2010. Do foreign investors exhibit a corporate governance disadvantage? An information asymmetry perspective. *Journal of International Business Studies*, 41(8): 1415–1438.

KLD Research & Analytics. 2003. KLD ratings data: Inclusive social rating criteria.

Kogut, B., & Singh, H. 1988. The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19(3): 411–432.

Koh, P.-S., Qian, C., & Wang, H. 2014. Firm litigation risk and the insurance value of corporate social performance. *Strategic Management Journal*, 35(10): 1464–1482.

Kostova, T., & Zaheer, S. 1999. Organizational legitimacy under conditions of complexity : The case of the multinational enterprise. *Academy of Management Review*, 24(1): 64–81.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. 1998. Law and finance. *Journal of Political Economy*, 106(6): 1113–1155.

Leung, K, Bhagat, R. S., Buchan, N. R., Erez, M, & Gibson, C. B. 2005. Culture and international business: Recent advances and their implications for future research. *Journal of International Business Studies*, 36(4): 357–378.

Liang, H., & Renneboog, L. 2014. Finance and society: on the foundations of corporate social responsibility. *CentER Discussion Paper*, Vol. 2014-069.

Lubin, B. D. A., & Esty, D. C. 2010. The sustainability imperative. *Harvard Business Review*, 88(5): 42–50.

Matten, D., & Moon, J. 2008. “Implicit” and “explicit” CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2): 404–424.

McGee, M. C. 1980. The “ideograph”: A link between rhetoric and ideology. *Quarterly Journal of Speech*, 66(1): 1–16.

McWilliams, A., & Siegel, D. 2001. Corporate social responsibility: A theory of the firm perspective. *The Academy of Management Review*, 26(1): 117–127.

Meyer, J. W., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2): 340–363.

Mezias, J. 2002. Identifying liabilities of foreignness and strategies to minimize their effects: The case of labor lawsuit judgments in the United States. *Strategic Management Journal*, 23(3): 229–244.

Norman, W., & MacDonald, C. 2004. Getting to the bottom of “triple bottom line.” *Business*

*Ethics Quarterly*, 14(2): 243–262.

O'Kane, D., & Sen, S. 2005. Credit spreads explained. *Journal of Credit Risk*, 1(2): 61–78.

Oikonomou, I., Brook, C., & Pavelin, S. 2014. The effects of corporate social performance on the cost of corporate debt and credit ratings. *The Financial Review*, 49(1): 49–75.

Oliver, C. 1991. Strategic responses to institutional processes. *Academy of Management Review*, 16(1): 145–179.

Orlitzky, M., & Benjamin, J. D. 2001. Corporate social performance and firm risk: A meta-analytical review. *Business & Society*, 40(4): 369–396.

Petersen, M. A. 2009. Estimating standard errors in finance panel data sets: Comparing approaches. *Review of Financial Studies*, 22: 435–480.

Powell, W. W., & DiMaggio, P. J. 1991. *The new institutionalism in organizational analysis*. Chicago: The University of Chicaco Press.

Rao, H. 1994. The social construction of reputation: Certification contests, legitimation, and the survival of organizations in the American automobile industry: 1895–1912. *Strategic Management Journal*, 15(S1): 29–44.

Riley, J. G. 2001. Silver signals: Twenty-five years of screening and signaling. *Journal of Economic Literature*, 39(2): 432–478.

Ruef, M., & Scott, W. R. 1998. A multidimensional model of organizational legitimacy: Hospital survival in changing institutional environments. *Administrative Science Quarterly*, 43(4): 877–904.

Ruefli, T. W., Collins, J. M., & Lacugna, J. R. 1999. Risk measures in strategic management research: Auld lang seyne? *Strategic Management Journal*, 20(2): 167–194.

Sadowski, M., Whitaker, K., & Buckingham, F. 2010. *Rate the raters phase two: Taking inventory of the ratings universe*. London: SustainAbility.

Scherer, A. G., & Palazzo, G. 2007. Toward a political conception of corporate responsibility: Business and society seen from a Habermasian perspective. *Academy of Management Review*, 32(4): 1096–1120.

Scherer, A. G., Palazzo, G., & Seidl, D. 2013. Managing legitimacy in complex and heterogeneous environments: Sustainable development in a globalized world. *Journal of Management Studies*, 50(2): 259–284.

Scholtens, B., & Dam, L. 2007. Cultural values and international differences in business ethics. *Journal of Business Ethics*, 75(3): 273–284.

Scott, R. W. 2008. *Institutions and organizations*. Thousand Oaks, CA: Sage.

Sharfman, M. P., & Fernando, C. S. 2008. Environmental risk management and the cost of capital. *Strategic Management Journal*, 29(6): 569–592.

Shenkar, O. 2001. Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies*, 32(3): 519-535.

Shenkar, O. 2012. Beyond cultural distance: Switching to a friction lens in the study of cultural differences. *Journal of International Business Studies*, 43(1): 12–17.

Standard & Poor's. 2014. Understanding ratings. Accessed on 23 September 2015, http://www.standardandpoors.com/MicrositeHome/en/us/Microsites.

Stiglitz, J. E. 1975. The theory of "screening," education, and the distribution of income. *The American Economic Review*, 65(3): 283–300.

Suchman, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3): 571–610.

Sufi, A. 2009. The real effects of debt certification: Evidence from the introduction of bank loan ratings. *The Review of Financial Studies*, 22(4): 1659–1691.

Thompson, S. B. 2011. Simple formulas for standard errors that cluster by both firm and time. *Journal of Financial Economics*, 99(1): 1–10.

Tsui, A. S., Nifadkar, S. S., & Ou, A. Y. 2007. Cross-national, cross-cultural organizational behavior research: Advances, gaps, and recommendations. *Journal of Management*, 33(3): 426–478.

UN Global Compact - Accenture. 2013. The UN global compact-accenture CEO study on sustainability 2013 Accessed on 2 March 2014,http://www.accenture.com/ungcstudy.

Van Marrewijk, M. 2003. Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics*, 44(2): 95–105.

Verwijmeren, P., & Derwall, J. 2010. Employee well-being, firm leverage, and bankruptcy risk. *Journal of Banking & Finance*, 34(5): 956–964.

Waldman, D. A., de Luque, M. S., Washburn, N., House, R. J., et al. 2006. Cultural and leadership predictors of corporate social responsibility values of top management: A GLOBE study of 15 countries. *Journal of International Business Studies*, 37(6): 823–837.

Wang, T., & Bansal, P. 2012. Social responsibility in new ventures: Profiting from a long-term orientation. *Strategic Management Journal*, 33(10): 1135–1153.

Witt, M. A., & Redding, G. 2009. Culture, meaning, and institutions: Executive rationale in Germany and Japan. *Journal of International Business Studies*, 40(5): 859–885.

Wood, D. J. 1991. Social issues in management: Theory and research in corporate social performance. *Journal of Management*, 17(2): 383–406.

Young, S. L., & Makhija, V. M. 2014. Firms' corporate social responsibility behavior: An integration of institutional and profit maximization approaches. *Journal of International Business Studies*, 45(6): 670–698.

Zaheer, S. 1995. Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2): 341–363.

Zuckerman, E. W. 1999. The categorical imperative: Securities analysts and the illegitimacy discount. *American Journal of Sociology*, 104(5): 1398–1438.

Table 1: Country Overview

| Country | No. of firms | Cultural distance | Legal system |
|---|---|---|---|
| Germany | 19 | 0.00 | Civil law |
| Italy | 5 | 0.43 | Civil law |
| Switzerland | 5 | 0.53 | Civil law |
| Japan | 7 | 0.90 | Civil law |
| Austria | 1 | 1.02 | Civil law |
| Spain | 4 | 1.10 | Civil law |
| Belgium | 2 | 1.13 | Civil law |
| France | 27 | 1.15 | Civil law |
| Finland | 1 | 1.27 | Civil law |
| United Kingdom | 32 | 1.42 | Common law |
| Canada | 9 | 1.43 | Common law |
| Norway | 2 | 1.50 | Civil law |
| Poland | 2 | 1.67 | Civil law |
| United States | 109 | 1.88 | Common law |
| Korea | 5 | 1.90 | Civil law |
| Australia | 5 | 2.10 | Common law |
| Sweden | 3 | 2.78 | Civil law |

Table 2: Sector Overview

| Sector | No. of firms | Mean OEKOM | Mean firm risk |
|---|---|---|---|
| Consumer, Cyclical | 40 | 2.19 | 4.66 |
| Basic Materials | 19 | 2.31 | 4.45 |
| Technology | 10 | 2.58 | 4.40 |
| Communications | 30 | 2.20 | 4.52 |
| Industrial | 40 | 2.25 | 4.28 |
| Utilities | 27 | 2.30 | 4.25 |
| Consumer, Non-cyclical | 55 | 2.20 | 4.07 |
| Energy | 17 | 2.20 | 4.15 |

Table 3: Distributions

| | min | max | mean | median | sd |
|---|---|---|---|---|---|
| Firm Risk | 1.76 | 7.58 | 4.34 | 4.33 | 0.94 |
| OEKOM | 1.12 | 3.37 | 2.24 | 2.26 | 0.34 |
| Firm size | 7.58 | 13.64 | 10.52 | 10.48 | 0.97 |
| Leverage | 0.17 | 1.22 | 0.64 | 0.64 | 0.15 |
| ROA | -0.47 | 0.34 | 0.06 | 0.05 | 0.06 |
| Fixed Assets | 0.00 | 0.93 | 0.34 | 0.29 | 0.23 |
| Interest Coverage | -79.10 | 609.65 | 13.20 | 6.49 | 31.60 |
| Cultural Distance | 0.00 | 2.78 | 1.43 | 1.43 | 0.59 |

Table 4: Correlation Matrix

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Firm risk | 1.00 | | | | | | | |
| 2 | OEKOM | 0.07 | 1.00 | | | | | | |
| 4 | Firm size | -0.17 | 0.13 | 1.00 | | | | | |
| 3 | Leverage | 0.23 | 0.07 | -0.06 | 1.00 | | | | |
| 5 | ROA | -0.41 | -0.00 | -0.33 | -0.04 | 1.00 | | | |
| 6 | Fixed assets | -0.08 | 0.04 | -0.15 | -0.01 | 0.01 | 1.00 | | |
| 7 | Interest coverage | -0.15 | -0.04 | -0.26 | 0.05 | 0.25 | 0.01 | 1.00 | |
| 8 | Cultural distance | -0.12 | -0.11 | -0.17 | -0.12 | 0.24 | 0.09 | 0.13 | 1.00 |

Table 5: Regressions on firm risk

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|---|---|---|---|---|---|---|
| Firm size | $-0.26^{***}$ | $-0.25^{***}$ | $-0.25^{***}$ | $-0.25^{***}$ | $-0.25^{***}$ | $-0.24^{***}$ |
| | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) |
| Leverage | $1.03^{***}$ | $1.05^{***}$ | $1.05^{***}$ | $1.02^{***}$ | $1.05^{***}$ | $0.99^{***}$ |
| | (0.28) | (0.28) | (0.28) | (0.27) | (0.28) | (0.26) |
| ROA | $-4.09^{***}$ | $-4.04^{***}$ | $-4.04^{***}$ | $-4.05^{***}$ | $-4.04^{***}$ | $-4.03^{***}$ |
| | (0.54) | (0.51) | (0.51) | (0.51) | (0.51) | (0.51) |
| Fixed assets | $-0.55^{**}$ | $-0.56^{**}$ | $-0.56^{**}$ | $-0.56^{**}$ | $-0.56^{**}$ | $-0.53^{**}$ |
| | (0.20) | (0.20) | (0.20) | (0.20) | (0.20) | (0.20) |
| Interest coverage | $-0.00$ | $-0.00$ | $-0.00$ | $-0.00$ | $-0.00$ | $-0.00$ |
| | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| OEKOM | | $-0.26^{**}$ | $-0.26^{**}$ | $-0.21^{*}$ | $-0.26^{**}$ | $-0.80^{**}$ |
| | | (0.10) | (0.10) | (0.10) | (0.10) | (0.26) |
| Civil law | | | 0.10 | 0.40 | | |
| | | | (0.16) | (0.56) | | |
| OEKOM:Civil law | | | | $-0.13$ | | |
| | | | | (0.22) | | |
| Cultural distance | | | | | $-0.06$ | $-0.94^{*}$ |
| | | | | | (0.10) | (0.38) |
| OEKOM:Cult.dist. | | | | | | $0.39^{*}$ |
| | | | | | | (0.16) |
| Industry effects | *yes* | *yes* | *yes* | *yes* | *yes* | *yes* |
| Country effects | *yes* | *yes* | *yes* | *yes* | *yes* | *yes* |
| Quarter effects | *yes* | *yes* | *yes* | *yes* | *yes* | *yes* |
| Adj. $R^2$ | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.74 |
| N | 4470 | 4470 | 4470 | 4470 | 4470 | 4470 |

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, based robust standard errors, clustered at the firm level, shown in parentheses

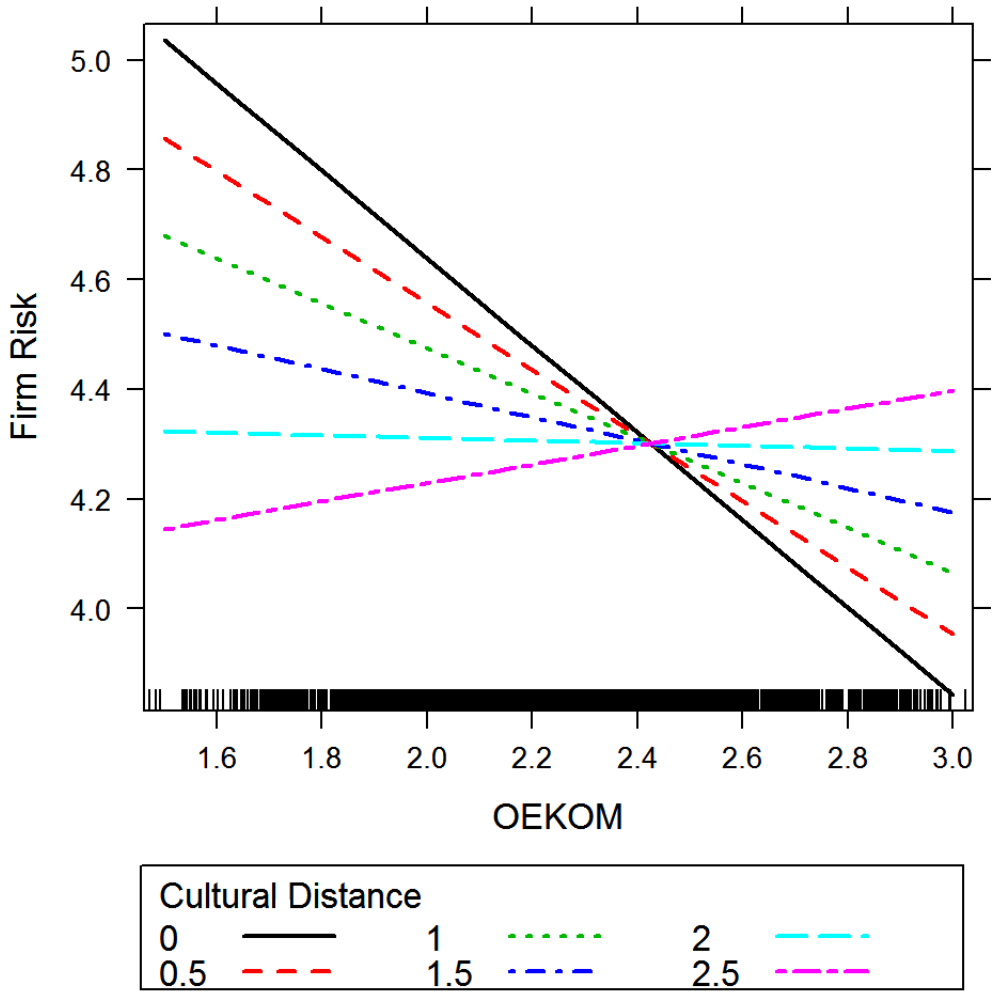


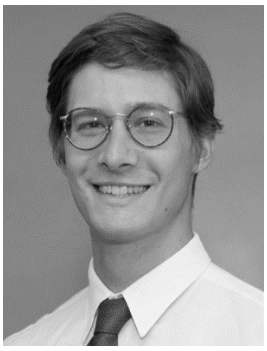

Figure 1: Plot showing the differential effect of OEKOM ratings with increasing cultural distance to Germany. The effect is strongest in a German cultural context as shown by the black line for zero cultural distance. With increasing cultural distance, the effect becomes weaker until the line is horizontal, and even positive for the most extreme values of cultural distance.

Kügeliloostr. 39

CH-8046 Zürich

TEL: 0041 76 419 73 06

koelbelj@ethz.ch



# Curriculum Vita
## Julian Kölbel

*19. Oct. 1984, Tübingen, Germany

## Research Interests:

Corporate Sustainability, Strategy, Credit Risk, Media, Natural Resources Management

## Education

ETH Zurich, PhD in Management *(since Nov. 2011)*

- 4th year PhD candidate, expected defense January 15, 2016
- Dissertation topic: Sustainability and Risk: The role of Stakeholders
- Supervisors: Prof. Volker Hoffmann, Co-supervisor: Prof. Timo Busch

University of Oxford, M.Sc. in Water Science, Policy and Management *(Oct. 2009-Sep. 2010)*

- Graduated with first class honors, grade point average: 76 (of 100)
- Dissertation Topic: Valuation of urban natural water resources
- Prize for the Best Master Thesis, and Best Overall Student Award

ETH Zurich, B.Sc. Environmental Sciences *(Oct. 2005-Sep. 2008)*

- Grade point average: 5.24 (of max. 6)
- Specializations: environmental economics and aquatic systems

## Awards & Grants

- CHF 60k teaching grant from ETH's teaching development fund Innovedum for the project "critical thinking in corporate sustainability for business impact" *(Apr. 8, 2015)*
- CHF 125k research grant from Swiss Commission on Innovation and Technology for the project "Interpreting Global Change for Investors" *(KTI Nr. 13853.1, granted on Jan. 30, 2012)*
- EUR 2500 for the Best Student Paper Award, UNPRI Academic Conference, Paris, *Nov. 12-14, 2013.*

## Academic Publications

- Kölbel, J.F., Jancso, L.M., Busch, T. (2014). How media coverage of social irresponsibility increases firm risk. Resubmitted to Strategic Management Journal.
- Busch, T., Kölbel J.F. (2015). How risky is your business? The role of Corporate Sustainability, Rating Agencies, and Institutional Context. Submitted to the Journal of International Business Studies.

## Working Papers

- Kölbel, J.F. (2015). Round up the usual suspects! What motivates activists to criticize corporate misconduct? Working Paper to be submitted to the Journal Business & Society.
- **Kölbel, J.F. (2015).** Exploring strategy for common pool resources: How do corporations manage water risks?

## Other Publications

- Kölbel, J.F., Schuster, S. (2013). What stakeholders expect of global banks – an international review. Report for Credit Suisse.
- Kölbel, J.F., Paetzold, F., Busch, T. (2012). Global Change Research Process. Investment Strategy Document for Vontobel as part of CTI project.
- The Value of Urban River Bathing. (2011). Summary Report for the German Association of Water Utilities. Based on MSc Thesis.

## Teaching Experience

- Responsible for redesigning the lecture "Corporate Sustainability"
  Developed a novel teaching concept that fosters interactive learning and critical thinking in a lecture with 180 students
- Lead Faculty for seminar on Sustainability and Financial Markets
  *(Spring Term 2012 and 2013)*
- Supervision of three Master Theses and three Master of Advanced Study theses

## Conferences & Presentations

- Nobel Prize Laureate Meeting in economics, Lindau, Germany, August 19-23, 2014. Participation as a young scientist.
- Academy of Management Annual Meeting, Philadelphia, USA, Aug. 1-5, 2014. "How Media Visibility of Stakeholder Concerns increases Firm Risk"
- UNPRI Academic Conference, Paris, Nov. 12-14, 2013. "The effect of negative CSR news on corporate bond spreads: Is there a moderating effect of the Atlantic?"
- Academy of Management Annual Meeting, Orlando, USA, Aug. 9-13, 2013. "Stakeholder pressure and credit risk"

- UNPRI Academic Conference, Sigtuna, Sweden, *Nov. 11-13, 2011.* "Greenwashing – a telltale of corporate governance?"

## Work Experience

Vontobel Asset Management, Zurich, Switzerland *(Jun. 2010 - Jun. 2014)*

- Internal Auditor (3 month full-time after that part-time)
- Developed and monitored the quality of in-house sustainability analysis

Applied Research Institute of Jerusalem, Bethlehem, West Bank *(Oct. 2008 – May 2009)*

- Located and surveyed 100 ancient rock cisterns for rainwater harvesting
- Published a report estimating their archaeological and current potential

RepRisk AG, Zurich, Switzerland *(Jan. 2006- Jun. 2007)*

- News analyst
- Wrote and tested sophisticated search algorithms on Factiva news services.

## Peer Review Activities

- Reviewer for European Management Journal
- Reviewer for Academy of Management Annual Meeting, ONE Division

## Languages

- German (mother tongue)
- English (highly proficient)
- French (fluent)
- Arabic (intermediate)
- Latin (intermediate)