

The Impact of Corporate Reputation and Reputation Damaging Events on Financial Performance: Empirical Evidence from the Literature

Nadine Gatzert

Working Paper

Department of Insurance Economics and Risk Management Friedrich-Alexander University Erlangen-Nürnberg (FAU)

Version: September 2015

THE IMPACT OF CORPORATE REPUTATION AND REPUTATION DAMAGING EVENTS ON FINANCIAL PERFORMANCE: EMPIRICAL EVIDENCE FROM THE LITERATURE

Nadine Gatzert*

This version: September 4, 2015

ABSTRACT

Corporate reputation and reputation risk are becoming increasingly relevant for firms, also caused by its relevance for firm value. In this context, this paper provides a comprehensive survey of empirical evidence in the literature regarding the relation between reputation damaging events, corporate reputation, and corporate financial performance, thereby also taking into account stakeholder behavior. The review is also intended to determine to what extent the current literature allows a holistic understanding of these relationships in the sense of the causal chain of events, which is of high relevance when managing reputation and reputation risk. Thus, focus is first laid on empirical evidence regarding the impact of corporate reputation on stakeholder behavior and on financial performance. Next, the event study literature regarding the effect of reputation damaging events on corporate reputation and financial performance is reviewed, and, finally, implications for risk management are discussed along with the need for future research.

Keywords: Corporate reputation; financial performance; reputation risk; reputation risk management; stakeholder behavior

1. Introduction

The protection of a company's reputation is one of the most relevant and difficult tasks for a risk manager. The BP oil spill in the Gulf of Mexico and Toyota's recall of vehicles due to defect concerns are only two examples that show how easy a good reputation can be damaged. In addition, reputation risk is becoming increasingly important for firms especially against the background of the increasing prominence of social media and the internet (Scott and Walsham 2005; Lee et al., 2015), where particularly bad news spread faster. For companies, one main question is thereby whether the level of corporate reputation or reputation damaging events (also referred to as "crisis events") actually has an impact on corporate financial performance, e.g. due to a reduction in revenue caused by an adverse change in stake-

-

Nadine Gatzert is at the Friedrich-Alexander University Erlangen-Nürnberg (FAU), Chair of Insurance Economics and Risk Management, Lange Gasse 20, 90403 Nürnberg, Germany, Tel.: +49 911 5302 884, nadine.gatzert@fau.de.

holder behavior (e.g. higher costs of capital, less motivated employees). Relevant internal and external stakeholder groups typically include customers, suppliers, (potential) employees, investors, and local communities (e.g. Fombrun and van Riel, 1997; Tischer and Hildebrandt, 2014). 2 Reputations can differ among stakeholder groups as a firm can have, e.g., a good reputation among investors but a bad one as an employer (see, e.g., Walker, 2010; Ali et al., 2015). These considerations also play a major role for the success of crisis communication, where multi-stakeholder strategies are typically applied after a reputational crisis event (see Chakravarthy et al., 2014). Risk management thus requires an in-depth understanding of these relationships and interactions between corporate reputation, reputation damaging events and financial consequences, thereby also taking into account the perspective and behavior of a firm's stakeholders. Against this background, the aim of this paper is to gain a better understanding of effective risk management through a comprehensive presentation of empirical evidence regarding these four relationships, which is done based on a systematic literature review. In the analysis, focus is also laid on whether the causation (e.g. stakeholder behavior) is taken into account in the empirical studies to determine to what extent the current literature allows a holistic understanding of the cause and effect of reputation risk in the sense of understanding the causal chain of events. The review is thus not only intended to present the current state of the literature, but also to gain valuable insight into relationships that are of high relevance for risk management and to point out potential future fields of research.

The literature offers a variety of definitions and measurement approaches of corporate reputation with overviews provided in, e.g., Barnett et al. (2006), Walker (2010), Lange et al. (2011), and Clardy (2012). General consensus appears to exist in that reputation is multidimensional, reflecting the aggregate perceptions of a firm's stakeholders on financial and non-financial aspects (Fombrun, 1996, Rindova et al., 2005, 2010), and that it allows potentially significant competitive advantage for firms with higher reputation (Fombrun and Shanley, 1990). Finally, reputation is also considered a strategic intangible asset (Hall, 1992). While there have been several surveys of the empirical literature on corporate reputation and reputa-

-

For instance, in the context of accounting scandals as the relevant reputation damaging event, Chakravarthy et al. (2014) define reputation-related market losses "due to increased uncertainty and diminished expectations among stakeholders about the firm's intent and ability to uphold its commitments. Specifically, reputation capital is devalued due to: (1) expected increases in financing costs imposed by capital providers; (2) expected increases in the costs of transacting with a firm's other stakeholders, including customers, employees, and the geographic communities in which the firm operates; and (3) expected decreases in future cash flows from sources such as lost sales, abandoned projects, and increased litigation," (p. 1330), thereby also referring to Murphy et al. (2009) and Karpoff et al. (2008), among others.

² Chun (2005) identifies different schools of thought in the literature (evaluative, impressional, relational) which exhibit main differences in regard to "which stakeholders are taken as the focal point, rather than their subject area or epistemological base" (p. 93).

Based on a survey among U.K. chief executives, Hall (1992) finds that the most relevant intangible resources and assets for competitive advantage and business success are employee know-how and reputation.

tion risk, they mostly focus on one relationship only, e.g. either the relation between reputation damaging events and financial performance or between corporate reputation and financial effects. De la Fuente Sabate and de Quevedo Puente (2003), for instance, conduct a survey of the early empirical literature on the relation between corporate reputation and financial performance, while Walter (2013) provides a short overview of the impact of reputation damaging events on financial performance with focus on reputation risk. Furthermore, Ali et al. (2015) conduct a meta-analytical review of 101 quantitative studies with focus on the moderating roles of three factors, including stakeholder group, country of study, and reputational measure, which are of relevance for the relation between antecedents of reputation (e.g. financial performance, firm size, firm age, media visibility, corporate social performance, longterm institutional ownership) and its consequences (financial performance, customer trust, customer loyalty, customer commitment). Their quantitative comparison shows that the relation between corporate reputation and its antecedents and consequences depends on the country of the study as well as the reputation measure. In addition, the type of stakeholder group ("top management and analysts", "all others") implies significant differences in the association of corporate reputation with all considered antecedents except for media visibility. Furthermore, the stakeholder group is a significant moderator for the size of the effect of reputation on financial performance.

The aim of this paper is contribute to the literature by taking a different perspective in that explicit focus is laid on empirical evidence regarding four major relationships. This presentation is not only intended to present the current state of knowledge, but it is also intended to provide important insight for reputation risk management (i.e. for identifying, assessing, responding, and monitoring reputation risk), which requires a comprehensive consideration and understanding of these relationships and what is known from the empirical literature to assess and manage reputation risk (in the sense of financial losses for a firm due to stakeholder behavior, for instance, caused by a generally lower level of reputation or a reputation damaging event). While empirical evidence may not always be generalizable, it still provides important insight whether certain reputation damaging events may severely impact financial performance, for instance. In particular, even though few insurance solutions have recently become available to mitigate the effects of reputation damaging events by providing loss control and partial coverage of financial losses as studied in Gatzert et al. (2014), pre-event prevention and an adequate (reputation) risk management including crisis communication strategies are vital to proactively manage reputation risk (see Eccles et al., 2007), where considerations regarding these four relationships play a major role.

The paper is structured as follows. Section 2 presents the methodology of the literature review as well as an overview of the results, which are then discussed in detail in the following sections. In particular, Section 3 focuses on the empirically observed impact of corporate reputa-

tion on stakeholder behavior and on corporate financial performance. In Section 4, focus is laid on the event study literature, and Section 5 summarizes the results and provides an outlook with focus on risk management aspects.

2. METHODOLOGY AND ANALYSIS

2.1 Literature review – methodology and analysis

As described previously, focus is laid on empirical research regarding the following four relationships:

- The impact of corporate reputation
 - o on stakeholder behavior (Section 3.1) and
 - o on corporate financial performance (Section 3.2)
- The impact of reputation damaging (risk) events
 - o on corporate reputation (Section 4.1) and
 - o on corporate financial performance (Section 4.2).

To identify the current state of knowledge regarding empirical evidence in the academic literature, a systematic literature review was conducted. Toward this end, the *Web of Science* database was used as one of the largest databases, which includes a large range of disciplines (see also Walker, 2010, p. 359). All articles in journals with an impact factor greater or equal than 1 were included in the analysis as is done in Lange et al. (2011), whereby impact factors were extracted from the *ISI Web of Knowledge* database and matched with the journals of the *Web of Science* database using their ISSN number. The time span was chosen from 1990 to 2015, as reputation research grew rapidly in the 1990s (see Walker, 2010, p. 360).

Two searches were conducted using keywords in the topic of the article (includes title, keywords, and abstract). The first search included the keywords "corporate reputation" and "firm value" / "market reaction" / "performance", "reputational risk", "reputation risk", reputational loss", "reputational penalty", "reputational penalties", or "reputational damage." To refine the results, only articles in English language were included. This resulted in 267 journal articles, of which 143 appeared in journals with an impact factor greater or equal than 1.4

To extract the relevant data with respect to the four research questions and relations stated above, the corresponding abstracts were scanned by evaluating whether empirical analyses in regard to one of the four relationships were conducted. Excluded were articles without empirical focus or with more specific settings such as ebay auctions or CEO reputation (i.e. without

The same database search with the keyword "reputation" instead of "corporate reputation" led to a total of 2,140 articles before refinement.

focus on corporate reputation), or corporate social responsibility-performance relationships that did not focus on corporate reputation in general. Based on the abstracts of the 143 articles, 33 were identified that empirically address one or more of the four relationships of interest stated above.

To explicitly address the literature on the impact of corporate reputation on stakeholder behavior, a second search was conducted using respective keywords (in the topic of the article).⁵ This resulted in 103 journal articles in English language, of which 55 appeared in journals with an impact factor greater or equal than 1. Based on this resulting list, four additional empirical articles regarding stakeholder behavior (three concerning customer behavior; one regarding investors) were identified in addition to the articles identified in the first search.

In addition, selected articles on corporate reputation were included from journals that are not listed in the Web of Science database but that are frequently cited (see also Lange et al. 2011; Walker, 2010) or that contain relevant articles in this field. Journals that were systematically reviewed in addition to the Web of Science search included the European Journal of Marketing, the European Management Journal (both with an impact factor greater than 1) as well as the specialty journal Corporate Reputation Review (for the latter, see also Lange et al. (2011, p. 155) and Walker (2010, p. 359)). Relevant articles were identified based on the general keyword search for "reputation" in the topic of the article (1990 to 2015) and information regarding the citation counts of the respective articles were extracted based on the Google Scholar database (see Walker (2010) for a test of the validity of this database). 6 Of the 13 articles with topic "reputation" in the European Management Journal, 3 empirically study the impact of corporate reputation on stakeholder behavior and performance, while one article in the European Journal of Marketing (out of 14) focused on the reputation-performance link. With respect to the 543 articles in the *Corporate Reputation Review*, only the most heavily cited ones were included (with an average of 10 cites per year, resulting in 47 articles), which resulted in three additional empirical papers.

In a last step, the review was supplemented by selected additional empirical and theoretical articles that were included based on a narrative approach, e.g. where keywords were not met. This was especially the case for reputation damaging events, which are highly special in their

Keywords with stakeholder focus included "corporate reputation" and "customer loyalty" / "willingness to pay" / "purchase intention" / "trust" / "customer satisfaction" / "supplier" / "contracting" / "financing" / "contract" / "contractual" / "employee" / "recruitment" / "employees" / "applicant" / "job pursuit" / "financing" / "capital market" / "investor".

As in Walker (2010) and Lange et al. (2011), *Business & Society* was included in the review, but the search using the keyword "reputation" in the topic for the time period 1990 to 2015 lead to 11 articles without focus on empirical studies regarding one of the four relationships.

denomination and hardly allowed a generalized search with standardized keywords. This resulted in 19 additional articles.

Based on the identified empirical articles, the objective of the following analysis is to study to what extent the current state of the literature allows a holistic perspective regarding the interaction between corporate reputation, reputation damaging events, financial performance, whereby "holistic" refers to the causal chain of events, i.e. taking into account stakeholder behavior (or other moderating effects, which have been empirically observed) when studying the respective relationships. Toward this end, the content of the identified articles was thus analyzed by first extracting relevant information, including whether or not the articles provide significant empirical evidence with respect to the respective relationship, and if yes in which direction (e.g. does corporate reputation have a significant positive impact on financial performance). Further extracted information included the measure of reputation (e.g. Fortune ranking), the performance measure used, the underlying data sample (e.g. country, year, data base), key findings, and (except for Section 3.1 which directly focuses on the impact of corporate reputation on stakeholder behavior) whether the causation was taken into account (e.g. a change in stakeholder behavior or other moderating factors).

2.2 The interaction between corporate reputation, reputation damaging events, and corporate financial performance: Overview of empirical evidence from the literature

The results of the literature review are graphically displayed in Figure 1. Empirical results from the literature regarding the four relationships are displayed in the four boxes with dashed lines and the respective empirical findings are presented in more detail in the following sections. Regarding a conceptualization of reputation risk in an insurance and risk management context along with exposures, reputation damaging perils and hazards, we further refer to Gatzert et al. (2014).

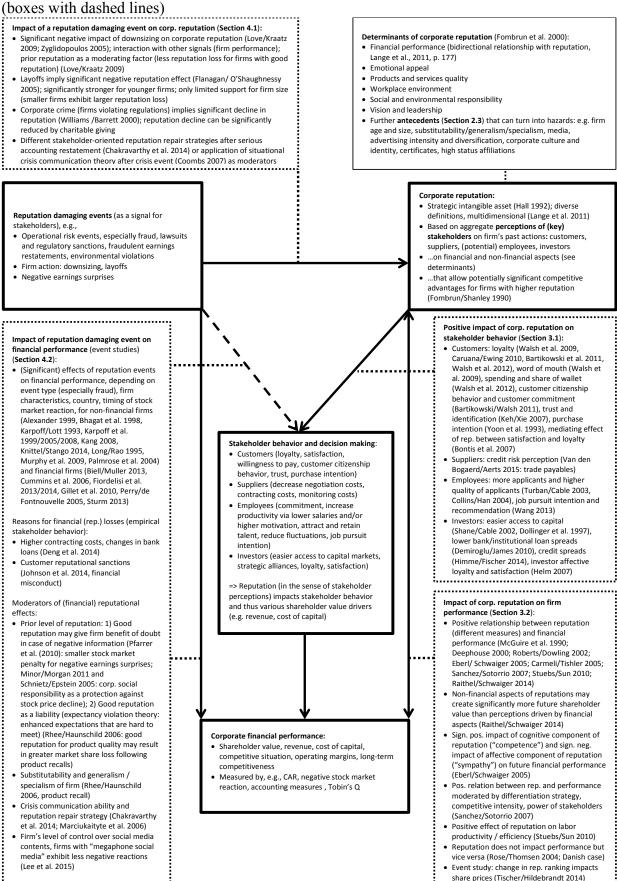
First, the two boxes with dashed lines on the right side of Figure 1 exhibit an overview of empirical studies with focus on the effect of corporate reputation on stakeholder behavior (upper box) and on firm performance (lower box). In particular, an actual change in stakeholder behavior could cause a negative effect on cash flows and thus in turn negatively impact financial performance measures. From Figure 1 it can be seen that the empirical literature on stakeholder behavior identified from the literature review mainly focuses on the customer perspective (10 out of 19 articles), some focus on investors (5 out of 19), while empirical research regarding other stakeholder groups like suppliers and employees appears to be rather scarce, which may be explained by the high relevance of customers for the business model of most firms (see also Walsh et al., 2009). With respect to the impact of corporate reputation on financial performance, there is a larger body of literature, whereby most papers find a (signif-

icant) positive relationship. In this context, only Stuebs and Sun (2010) study labor productivity and labor efficiency, thus explicitly accounting for the cause of the performance effect in terms of stakeholder behavior (namely employees), and Sanchez and Sotorrio (2007) study several moderators, whereas the other articles generally focus on the direct relationship without explicitly taking into account the causal chain of events.

While there has been some research based on event studies regarding the impact of reputation damaging events on corporate reputation in general (upper left box with dashed lines), focus was specifically laid on layoffs and downsizing as well as reputation repair strategies. Finally, the lower left box with dashed lines in Figure 1 emphasizes that the empirical literature regarding the impact of reputation damaging events on financial performance does account for various moderators or factors (e.g. event type, firm characteristics, country, crisis communication strategy, social media control, prior level of reputation), but typically does not take into account the causal chain of events in the sense of a potential adverse change in stakeholder perceptions (via reputation and thus potentially their behavior), such that the actual cause of the financial reputational loss may not be entirely clear. Two exceptions are the studies by Johnson et al. (2014) and Deng et al. (2014), which explicitly study the cause of the financial reputational loss after a reputation damaging event with focus on empirical stakeholder behavior. Especially for risk management, the consideration of the causal chain of events is vital for risk response measures, i.e. to take into account to what extent the respective event impacts the perceptions of specific (or all) groups of stakeholders of a firm, to what extent this would imply a reduction in corporate reputation, and in what way this impacts a company's cash flows.

In this context, the impact of reputation damaging events on stakeholder perceptions (and behavior) could also be moderated by further determinants and antecedents of reputation (see also upper right box in Figure 1), whereby antecedents may also turn into hazards in case they are not adequately taken into account, making it more likely that firms fail to meet expectations (Gatzert et al., 2014). Antecedents and risk drivers in general are thus also of high relevance for risk management, but will not be in the focus of the present study.

Figure 1: The interaction between corporate reputation, reputation damaging events, stakeholder behavior, and corporate financial performance: Evidence from the empirical literature (boxes with dashed lines)



3. THE IMPACT OF CORPORATE REPUTATION ON STAKEHOLDER BEHAVIOR AND ON CORPORATE FINANCIAL PERFORMANCE

Most empirical literature dealing with the impact of (the level of) corporate reputation on financial performance directly examines the impact of reputation on various financial measures, thereby implicitly assuming (or explicitly arguing) that the financial consequences arise from changes in stakeholder behavior (see also Figure 1: corporate reputation -> stakeholder behavior -> corporate financial performance). Therefore, in what follows we first present current empirical knowledge of the impact of corporate reputation on stakeholder behavior and, second, on financial performance.

3.1 The impact of corporate reputation on stakeholder behavior and decision making

As described before, the impact of corporate reputation on stakeholder behavior and decisions making is highly relevant for understanding the ultimate impact of corporate reputation on a firm's financial performance. As laid out in the introduction, relevant stakeholder groups typically include customers, investors, suppliers / contractors, and (potential) employees.

Reputations generally serve as a signal for *customers* in regard to the quality of a firm's products or services, which customers may otherwise not be able to fully observe or evaluate, and which can allow firms to charge higher (premium) prices (Klein and Leffler, 1981; Shapiro, 1983). For instance, Walsh et al. (2009) apply Walsh and Beatty (2007)'s customer-based reputation construct⁷ for a survey among 2,000 randomly selected customers of a German energy supply firm and find that reputation positively impacts customer loyalty and word of mouth behavior. Using an online survey with 1,105 participants in three countries (France, U.K., U.S.) for two service categories (retailing, fast-food restaurants), Bartikowski et al. (2011) also observe that customer-based reputation has a positive impact on affective loyalty (respondents' feelings about their relationship with the firm) and on intentional loyalty (intention to do business with the firm), whereby the former effect is stronger with significant results only for France and the U.K. The relationship is further moderated by national culture (i.e. different levels of uncertainty avoidance, seeking to diminish ambiguities and avoid unpredictable situations) with significant differences only between France and the U.S. and not between France and the U.K. In addition, the business relationship age interacts with culture. Using the same customer-based reputation concept, Bartikowski and Walsh (2011) focus on the relationship between firm reputation and customer citizenship behavior with respect to helping other customers and the firm. Based on a paper-and-pencil questionnaire for a French

-

This measure includes the six determinants of reputation by Fombrun et al. (2000), but with explicit focus on the customers' perspective, thereby distinguishing between "competence" (cognitive component) and "likeability" (affective component).

sample of 583 service customers in three service categories (banking, retailing, fast-food restaurants), they find a significant positive effect of a good reputation on *customer citizenship* behavior as well as *customer commitment* and *loyalty*, thus emphasizing the relevance of reputation-building activities. This is similarly found by Cretu and Brodie (2007) with respect to *customer loyalty* in the context of three large shampoo manufacturers (multinational firms, 80% market share) and hair saloons as their customers. In addition, Walsh et al. (2012) observe a positive direct impact of customer-based reputation on non-monetary (*loyalty intentions, customer feedback*) and monetary (*spending, share of wallet*) consequences (also through commitment to the service brand), which is greater in a higher service context risk (retail banking, telecommunication) as compared to lower-risk service categories (retailing, fast food). Their French sample consists of 783 regular customers of the considered service categories, which were invited to an online survey. In the internet context, Caruana and Ewing (2010) use a sample of 1,857 customers of two online firms based on an online survey and also find that corporate reputation positively affects *online loyalty*.

Furthermore, based on responses from 351 customers of three B2B service firms in China, Keh and Xie (2007) show that corporate reputation also positively impacts *customer trust* and *customer identification*. A company's reputation (and offering information) has also been shown to have an impact on customers' *purchase intention* by Yoon et al. (1993) based on 577 responses of current and potential buyers of business insurance services (profiles of respondents were representative for U.S. businesses) using 10 reputation attributes for various insurance programs, which were to be evaluated by the respondents.

Using studies on brand equity and reputation of key corporations based on internet interviews of consumers in the U.S., U.K., and Japan, Page and Fearn (2005) show that for customers, especially a good reputation in regard to business practices including perceived fairness towards customers as well as corporate success and leadership are most relevant (more than public responsibility). In addition, based on a customer survey of a North American Bank in 2003, Bontis et al. (2007) find that reputation can *mediate* the relation between *customer satisfaction* and *customer loyalty* as well as *recommendation*, emphasizing the relevance of this relationship for a firm's profitability.

Reputations can thus positively impact customer behavior. In this context, Homburg et al. (2005) further show that customer satisfaction has a strong positive impact on their willingness to pay, which in turn is highly relevant for profitability.

Reputation can also impact the behavior of *suppliers* and contractors or business partners in that transaction costs for negotiations, contracting, and enforcing may be reduced in case of a good reputation as monitoring costs for counterparties are lower (see Rose and Thomsen,

2004; Raithel and Schwaiger, 2014; and references therein, for theoretical arguments). Furthermore, Van den Bogaerd and Aerts (2015) find empirical evidence for a positive effect of media reputation on the *credit risk perception* of suppliers of 181 listed U.K. firms (period from 2001 to 2005), implying that more reputable firms can have advantages in regard to their short-term financing when using trade credits (instead of having to pay for the goods directly upon delivery). In particular, a significant positive relation between a firm's media reputation and the level of trade account payables as well as number of days the firm receives trade credit is found.

A good reputation as an *employer* can help firms to attract a higher number and a higher quality of applicants as shown by Turban and Cable (2003) in the context of a field study with students and employers and by Collins and Han (2004) (among other findings) using data from 99 organizations recruiting college students (see also Gatewood et al., 1993, with focus on corporate image and Turban and Greening, 1997, with focus on corporate social performance, which is shown to positively impact a firm's reputation and employer attractiveness). Wang (2013) further observes a positive relation between corporate reputation and *job pursuit intention* as well as *recommendation* based on 606 graduating MBA students in Taiwan, who completed questionnaires at two points in time to observe the formation of job pursuit intention. A good reputation may also contribute to reduce fluctuations and to increase efficiency in terms of salaries and motivation (see Raithel and Schwaiger, 2014; Williams and Barrett, 2000, and references therein for theoretical arguments).

In addition, access to capital and to *investors* as well as strategic alliances may be easier for firms with a good corporate reputation (see Rhee and Valdez, 2009 for theoretical arguments in the context of reputation repair; Shane and Cable, 2002, using a fieldwork based on ventures and venture financing decisions; Dollinger et al. 1997, using an experimental design). In particular, Demiroglu and James (2010) observe that more reputable private equity groups pay lower bank and institutional loan spreads with longer loan maturities and a higher portion of institutional loans in case of public-to-private leveraged buyouts (180 observations, 1997-2007). Studying 344 firms listed in the Fortune AMAC ranking from 1991 to 2006, Himme and Fischer (2014) further show that corporate reputation is negatively associated with credit spreads (thus implying lower spreads) and that it amplifies the negative effect of customer satisfaction on credit spreads. They also find partial support that corporate reputation has the strongest negative effect on credit spreads compared with brand value and customer satisfaction. Furthermore, based on 657 standardized questionnaires of German investors of a publicly traded firm, Helm (2007) finds that, among other loyalty effects, corporate reputation (as perceived by the investors) positively impacts investor affective loyalty and investor satisfaction. More stable investor relations may in turn positively affect firm performance through less volatile stock prices or reduced investor relation costs, for instance.

We further refer to Tischer and Hildebrandt (2014, pp. 1009-1010) for a general overview of selected theoretical and empirical literature regarding mediating drivers of (future) cash flows due to corporate reputation impacting the behavior of different stakeholders. Finally, as already mentioned in the introduction, based on a meta-analytical review, Ali et al. (2015) emphasize that the relation between corporate reputation and its antecedents and consequences generally depends on the country of the study as well as the type of stakeholder group (whereby they distinguish between "top management and analysts" and "all others"), and that ultimately the stakeholder group was a significant moderator for the size of the effect of financial performance (as a consequence of reputation).

Overall, the empirical literature has thus demonstrated that corporate reputation does have an impact on various stakeholder groups, which is generally assumed to impact a firm's financial performance by means of revenues and costs of capital, for instance. However, empirical analyses are mostly focused on customers, whereby studies regarding the impact of corporate reputation on actual consumer behavior (e.g., in regard to the willingness to pay) appear to be still scarce, while other stakeholder groups have not been studied extensively so far. One explanation for the strong focus on customers is their high relevance for firms (see also Walsh et al., 2009), as companies strongly depend on selling their products in order to create revenue, thus impacting performance.

3.2 The impact of corporate reputation on corporate financial performance

Given these (positive) effects of reputation on stakeholder behavior, a positive impact of reputation on a firm's financial performance is typically expected. As the benefits of reputation may not be immediately reflected in a firm's revenues and thus its stock price or other financial measures, analyses of the impact of reputation on firm performance are typically conducted over a longer time period instead of only one point in time. Table 1 (see Table A.1 in the Appendix for a more comprehensive presentation) provides an overview of empirical findings in selected articles regarding the impact of reputation on financial performance, whereby all papers take into account several consecutive years except for Eberl and Schwaiger (2005), Carmeli and Tishler (2005), and Sanchez and Sotorrio (2007).

 Table 1: Selected empirical evidence on the relation of the level of corporate reputation and

corporate financial performance (see also Table A.1 in the Appendix)

Article	Reputation measure and sample	Causation / stakeholder consideration	Impact of corp. rep. on performance
McGuire et al. (1990)	Fortune ranking131 U.S. firms, 1977-1981	-	+
Deephouse (2000)	 Media reputation based on content analysis of newspaper archives 121 U.S. commercial banks, 1988- 1992 	-	+
Roberts and Dowling (2002)	Fortune ranking1984-1998 (300 firms in reduced sample)	-	+
Rose and Thomsen (2004)	 Image ratings for leading Danish companies, questionnaire for Danish business managers 62 Danish firms, Copenhagen stock exchange, 1996-2001 	-	0
Eberl and Schwaiger (2005)	 Reputation: distinguish cognitive and affective component, telephone survey among general public German firms, DAX30 stock index 	-	+/-
Carmeli and Tishler (2005)	 Reputation: Perceived organizational reputation, questionnaire answered by CEOs of firms (self-assessment) 86 Kibbutz-owned industrial enterprises in Israel 	- Relation between product/services quality and reputation mediated by customer satisfaction	+
Sanchez and Sotorrio (2007)	 Reputation: Spanish MERCO index 88 of the most reputable firms in Spain, 2004 	- Statistically positive (but small) moderating effect of differentiation strategy, competitive intensity, power of stakeholders	+
Stuebs and Sun (2010)	Fortune ranking112 U.S. firm-year observations, 2006-2008	 Reputation is <i>positively</i> associated with labor efficiency (due to a positive association between reputation and labor productivity) No association between reputation and labor costs 	+
Raithel and Schwaiger (2014)	 Reputation: distinguish cognitive and affective component, telephone survey among general public German firms, DAX30 stock index, 2005-2011 among general public 	-	+

Table 1 shows that the considered empirical studies regarding the effect of reputation on firm performance are based on different concepts and measures of reputation and use data from different countries, namely the Fortune ranking for U.S. firms in McGuire et al. (1990), Roberts and Dowling (2002), and Stuebs and Sun (2010), media reputation based on a newspaper

_

However, these rankings come with limitations, as they tend to overweight financial aspects (Rhee and Valdez, 2009), are highly correlated with financial performance and generally exhibit a high correlation among the items included in the survey (Fombrun and Shanley, 1990, Fryxell and Wang, 1994, Deephouse, 2000). Furthermore, the Fortune survey addresses only a limited set of stakeholders (investors, capital markets), while others are not included, and only focuses on large U.S. companies (Fombrun, 1996, Deephouse, 2000).

content analysis for U.S. firms (in Minneapolis-St. Paul) in Deephouse (2000), image ratings by Danish business managers for Danish firms by Rose and Thomas (2004), the Spanish reputation index MERCO by Sanchez and Sotorrio (2007), and by using the reputation concept by Schwaiger (2004), which distinguishes the cognitive ("competence") and affective ("sympathy") components of reputation⁹ based on a representative sample (telephone survey) in Germany for one year (Eberl and Schwaiger, 2005) and several years in a row (Raithel and Schwaiger, 2014). Furthermore, Carmeli and Tishler (2005) conduct a survey among CEOs who are asked for the perceived reputation of their firm using the Fortune ranking determinants. In addition, financial performance is measured differently using various accounting measures, return on assets (ROA), Tobin's Q, net income or a four-factor benchmark model, or based on the surveyed CEOs' own assessment of their firm's performance.

Furthermore, most considered empirical articles find a positive relationship between reputation (or specific components of reputation; depending on the measurement approach) and financial performance, except for Rose and Thomsen (2004), who do not find evidence that reputation impacts financial performance (but the opposite direction) (see right column in Table A.1). In addition, Eberl and Schwaiger (2005) find that while "competence", the cognitive component of reputation corrected for past financial performance, has a significant positive impact on future performance measured as the net income after tax and depreciation, "sympathy" as the affective component of reputation (also corrected for past financial performance) has a significant negative impact.

In regard to financial performance, one thereby has to take into account that the causal relationship with reputation is bidirectional (see, e.g., Lange et al., 2011, pp. 177, 180). Fombrun and Shanley (1990), for instance, observe a reverse causality as a higher performance in the past leads to a good corporate reputation, which in turn enhances the firm's likelihood of performing well in the future. This bidirectional relationship has also been studied in McGuire et al. (1990), Roberts and Dowling (2002) and Rose and Thomsen (2004), for instance.

In terms of implications, most articles conclude in their discussions that firms should clearly distinguish between their stakeholders and between the respective components of reputation

In addition, publicly available third-party rankings may influence its construction, which is why data should be used that is not publicly available, e.g. based on representative surveys (Lange et al., 2011).

Schwaiger (2004) finds that "competence" is positively impacted by performance items, which is opposite to the effect on "sympathy". In contrast, responsibility items were found to have a positive impact on "sympathy" and a negative impact on "competence". In general, when making use of determinants of reputation to measure reputation, the question arises how financial and non-financial aspects of reputation should be weighted (Rindova et al., 2005). For instance, financial signals are potentially more relevant for capital markets and investors, while non-financials would be more important for customers and employees, and potentially discounted more heavily by investors (Raithel and Schwaiger, 2014).

that may impact different stakeholders in different ways, e.g. also focusing on non-financial aspects of reputation, which according to Roberts and Dowling (2002) and Raithel and Schwaiger (2014) may even have a stronger positive impact on financial performance than financial aspects.

However, in terms of the causal chain of events (including stakeholder considerations and moderators), only three of the identified articles take these aspects into account in their empirical studies. For instance, Sanchez and Sotorrio (2007) observe that the positive relation between corporate reputation and financial performance is moderated by differentiation strategy, competitive intensity, and power of stakeholders, whereby the effect on value creation is rather small in the short term (only studying one year). Furthermore, as pointed out by Carmeli and Tishler (2005), determinants of reputation such as high quality products/services do not necessarily ensure a positive impact on reputation (being possibly rejected by customers after their market introduction) and thus on financial performance, and that customer satisfaction should be taken into account when making such assessments. Finally, focusing on labor efficiency, the results of Stuebs and Sun (2010) emphasize that positive performance effects can be generated by attracting good employees with a higher labor productivity and efficiency, thus explicitly taking into account the cause of the financial effect in terms of stakeholder behavior.

Apart from the empirical studies exhibited in Table 1, which directly focus on the impact of the level of reputation on financial performance, several further studies are noticeable. With respect to the impact of reputation gaps (from different stakeholders) on firm performance, Davies et al. (2010) find that larger reputation gaps between employees and customers may contribute to enhancing future revenues (measured by sales growth) if it is the employees' perception of a firm's reputation that is (considerably) higher than the customers' perceptions, thus showing that the reputation gap does not necessarily need to have a negative impact on firm performance. Their study included 56 business units from nine service organizations (B2B and B2C), where 4,307 interviews with employees and customers were conducted from which reputation was derived. A different approach with respect to the impact of corporate reputation on shareholder value is taken in Tischer and Hildebrandt (2014), who conduct an event study on abnormal returns after the announcement of reputation rankings, i.e. taking a short-term perspective instead of studying the impact of reputation on share prices over time and by explicitly considering the change in reputation. This approach is also intended to solve the problem of causation typically present in the event study literature. Their results show that the announcement of significant changes of reputation (measured by the company reputation ranking in the German Manager Magazin; 1998 to 2008, biyearly) impact share prices accordingly in a significant way, from which the authors conclude that investors indeed use these

information to adjust their assessment of the firm, thus impacting share prices, whereby excess returns are not generated in the long run.

A survey of further previous empirical articles on the relationship between corporate reputation and financial performance before 2001 is provided in de la Fuente Sabate and de Quevedo Puente (2003), for instance, who also explicitly include studies regarding the opposite causal effect. Furthermore, with specific focus on internet firms, Kotha et al. (2001) find evidence for a positive impact of three *reputation building mechanisms* on firm performance (market value and sales growth) by considering the Top-50 publicly traded pure internet firms according to a list by "Internet World" for the period from 1992 to 1998. In addition, regarding an analysis of the impact of corporate reputation on *firm risk*, we refer to Delgado-García et al. (2013) and the references therein. Using Spanish stock price data of 96 firms from 2001 to 2007, one of their main findings is that reputable firms (listed in the Spanish MERCO index) exhibit a lower unsystematic and total risk, but a higher systematic risk, whereby these effects are moderated by firm size, which weakens the impact.

4. THE IMPACT OF REPUTATION DAMAGING EVENTS ON CORPORATE REPUTATION AND CORPORATE FINANCIAL PERFORMANCE

In contrast to the literature in the previous section which generally considers the impact of corporate reputation on firm performance as observed over a certain period of time, we next focus on the event study literature dealing with reputation damaging events and their impact on reputation and on a firm's financial performance. We thereby place special emphasis on the financial sector due to the high relevance of reputation and trust (see, e.g., Fiordelisi et al., 2014).

4.1 The impact of reputation damaging events on corporate reputation

There are only a few empirical studies that we are aware of that actually deal with the impact of certain reputation damaging events (downsizing, layoffs, corporate crime) on corporate reputation and thus stakeholder perceptions (see Figure 1, upper left box with dashed lines). In regard to downsizing, Love and Kraatz (2009), for instance, find strong negative effects of downsizing on a firm's reputation as measured by the Fortune AMAC ranking from 1985 to 1994. The authors thereby also point out the potentially conflicting signals for the firm's stakeholders due to the fact that downsizing would generally be considered as positive for shareholders, but negative for employees (opportunism of the firm), for instance. They also find that the negative effect of downsizing on reputation is significantly moderated by other factors, including firm performance (e.g. changes in analysts' earnings forecasts, stock market reaction, and downsizing's overall prevalence). In addition, prior reputation serves as a mod-

erating factor, as reputation damages after firm downsizing are smaller for firms with a good reputation. Zyglidopoulos (2005) similarly focuses on the impact of employment downsizing (significant workforce reduction) on corporate reputation, using data of firms that were listed in the Fortune ranking in 1988 and 1991. Using financial performance and employment count data from the AMAC database, downsizing was defined as a more than 5% reduction in employee counts as compared to the respective years before (1987, 1990), leading to 145 downsizings. Empirical analyses showed that downsizing was significantly negatively correlated with reputation, whereby downsizing (as a result of a layoff) exhibited a stronger negative impact than downscoping (due to a sale of a division).

Flanagan and O'Shaughnessy (2005) find that *layoffs* on average imply a strong negative reputation effect, which is significantly more pronounced for younger firms compared to older firms and limited support is found for organizational size, i.e. that larger smaller firms show a larger decline in reputation. Their empirical analysis is also based on the Fortune AMAC ranking from 1996 to 1998 using 347 firms. Williams and Barrett (2000) study the effect of *corporate crime* by considering firms violating regulations, and find a significant decline in corporate reputation, which can be significantly reduced by charitable giving. The analysis is based on 184 firms listed on Fortune 500 from 1991 to 1994 where corporate reputation is measured using the Fortune ranking in 1995, i.e. at the end of the sample period.

Thus, these empirical studies emphasize that different types of reputation damaging events can have a significant (negative) impact on corporate reputation, which should also impact the stakeholders' behavior and thus have an effect on a firm's financial performance (depending on certain moderating factors as well as a firm's crisis communication response), which will be the focus in the next subsection.

In addition, moderating factors (e.g. prior reputation as shown by Love and Kraatz (2009)) as well as crisis communication strategies including reputation building and repair measures to mitigate long-term damages of reputation (Chakravarthy et al., 2014, Coombs, 2007) can play a major role for reducing the extent of the reputation damage, which is also of high relevance for risk management considerations.

4.2 The impact of reputation damaging events on corporate financial performance

We next survey the event study literature on reputation damaging events and their impact on a firm's financial performance. A (financial) reputation loss is thereby typically defined in the empirical literature as the cumulative abnormal return for a given event window, i.e. the (stock) market value loss that exceeds the original loss caused by the event, which generally

reflects revised expectations of investors in regard to future cash flows (Cummins et al., 2006).

Findings in the event study literature

An overview of empirical evidence regarding financial reputational losses resulting from operational risk events ¹⁰ in the financial sector based on large industry samples is provided in Table A.2 in the Appendix. The findings emphasize that operational risk events and especially fraud events can imply significant financial (reputational) losses (Perry and de Fontnouvelle, 2005; Fiordelisi et al., 2014) and that the market value response depends on the type of firm (larger for insurers than for banks, for instance, see Cummins et al., 2006), firm characteristics (Sturm, 2013), the sequence of events triggering the reputational effects (Gillet et al., 2010), and the timing of the stock market reaction (Biell and Muller, 2013). In general, the empirical results also emphasize that reputation risk, in the sense of financial losses after a reputation damaging event, is a risk of risks, which typically arises from other underlying risks and especially operational loss events (see also Gatzert et al., 2014). However, the overview in Table A.2 also shows that while financial losses that exceed the original operational loss are typically attributed to reputational damages, reputation itself is not measured, nor is a change in stakeholder behavior empirically observed.

Event studies regarding the non-financial sector especially provide evidence regarding (significant) negative market impacts following various fraudulent events, including (fraudulent) earnings restatements studied by Palmrose et al. (2004), criminal fraud charges by Karpoff and Lott (1993), military defense procurement fraud in Karpoff et al. (1999), environmental violations (Karpoff et al., 2005), financial misrepresentation (Karpoff et al., 2008), financial reporting fraud along with spillover effects due to interlocking directors (Kang, 2008), and allegations of different illegal activities (e.g. fraud, bribery) in Alexander (1999) and Murphy et al. (2009). In Murphy et al. (2009), for instance, the authors find a negative impact of allegations on reported earnings and firm value, as well as higher stock return volatilities.

Further events that have been studied in the non-financial literature include legal disputes (Bhagat et al., 1998) and unethical business behavior (Long and Rao, 1995). In addition, regarding the impact of layoffs on firm performance, Flanagan and O'Shaughnessy (2005) (see also previous subsection) point out that the results in the empirical / event study literature are

The Basel II Committee defines operational risk "as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputational risk" (Basel Committee, 2004, p. 137). Operational risk can be categorized in the following event types: 1) internal fraud, 2) external fraud, 3) employment practices & workplace safety, 4) clients, products & business practices, 5) damage to physical assets, 6) business disruption & system failures, 7) execution, delivery & process management.

not unanimous, ranging from increases in firm performance to no significant changes, whereby the majority of the cited papers observes a decline in the financial performances following a layoff, implying that the deterioration in corporate reputation (see previous subsection) and the associated financial losses (higher organizational costs, lower employee motivation) may exceed potential advantages. Furthermore, based on an event study in the context of the Tiger Woods scandal (i.e. considering one single event), Knittel and Stango (2014) observe a considerable loss in market value of the sponsors after the crisis event, while competitors without substantial celebrity endorsements exhibited a gain, thus illustrating a (positive) spillover effect, whereby the performance of competitors generally depended on their level of celebrity endorsement. Based on their findings, the authors suggest that firms should consider celebrity endorsements as a risky investment, especially if the endorsement is related to a co-investment in a new product or brand.

Reasons for financial (reputational) losses

The reasons for the observed market value losses reflecting reputational losses described in the literature are manifold. Apart from the impact of reputation damaging events on corporate reputation in general as shown in the previous subsection, there are several theoretical considerations in the event study literature on financial firms that aim to provide explanations regarding financial reputational losses from operational risk events based on stakeholder behavior and expectations due to the negative impact on corporate reputation (see Cummins et al., 2006, Walter, 2007, Sturm, 2013, as well as Section 3.1 for the following considerations), whereby empirical evidence regarding the link between crisis events and stakeholder behavior is still hardly available.

First, the reputation damaging event could impact the *customers*' perception of the firm, thus implying a reduction in future revenues and operating cash flows in case current and future customers choose a competitor. Second, *suppliers* and business partners might adjust their conditions and increase their monitoring efforts, thus implying higher contracting and negotiation costs. Third, a deteriorated reputation may lead *employees* and managers to leave the firm and apply at a competitor or reduce their work motivation. Fourth, *investors* and other market participants may revise their estimates regarding likelihood and impact of operational loss events as well as their assessment of managerial controls in the firm, thus downgrading their estimates regarding future cash flows. In addition, investors may not want to be associated with the firm (lower corporate reputation), thus potentially selling their shares and possibly causing downward stock price pressure. In case of a depletion of internal capital, the firm may even be unable to invest in attractive projects. An operational loss event may further imply additional costs resulting from the event, including compliance and lawsuit costs, regulatory

investigations and sanctions, as well as management reorganization, which may considerably exceed the original operational loss.

There appear to be only few articles in the event study literature, which empirically take into account the explicit cause of the (financial) reputation loss in terms of stakeholder behavior. Based on the literature review (see Section 2.1), two articles with event studies were identified which explicitly include customer behavior and business partners (bank loans). In the context of fraud product markets, Johnson et al. (2014) study 2,645 class action files on corporate financial misconduct including fraudulent events from 1996 to 2009. In contrast to previous literature, they explicitly include "customer reputational sanctions" in their analysis by calculating reputational costs from changes in customer behavior after the fraud event which exceed the direct sanctions by the SEC. In the empirical analysis, focus is laid on large customers that are listed in the COMPUSTAT database (in a supplier-customer relationship, where the customer accounts for more than 10% of annual revenues). Three quantitative measures are used to measure customer reputational sanctions, including the likelihood of breaking up the business relationship, a decrease in the fraud firm's sales dependency on the large customers, and decreases in the customer cost of goods attributed to the fraud firm. Their findings show that customers indeed impose significant sanctions after the crisis event according to all three measures. At the same time, they observe a significant decrease in operating income (significantly related to the customer reputational sanctions measures) and other financial measures of the fraud firms as compared to the control sample, and that the customer sanctions are at least partially responsible for reduced operating performance. 11

Furthermore, based on an event study of shareholder class action lawsuits filed between 1996 and 2006 in the US, Deng et al. (2014) take into account changes in bank loan contracts as one possible channel of reputational losses as "the present value of higher contracting costs or lower sales arising from these renegotiations" (p. 1102). Their findings reveal that the firms subject to shareholder litigation experienced higher interest rate spreads and up-front fees as well as more financial covenants, and that the firm's market value loss after the lawsuit file announcement was positively associated with the increase in future interest (borrowing) costs.

Therefore, while the event study literature typically does not take into account the level of reputation, the analyses in Johnson et al. (2014) as well as Deng et al. (2014) are of high relevance for identifying the reasons for reputational financial losses, whereby focus is laid on the main stakeholder group of (large) customers or business partners such as loan counterparties (bank loan conditions), respectively.

The authors also find that the financial reputational losses derived based on the event study correspond to lost revenues (reflecting a reduced demand), which supports the reliability of the event study approaches.

Factors moderating the impact of reputation damaging events on financial performance

Other literature observed that the impact of reputation damaging events on corporate financial performance can strongly depend on further factors (apart from what is mentioned in Table A.2 regarding the financial industry), such as the level of *prior corporate reputation* (see also Lange et al., 2011, p. 170f). On the one hand, in case of negative information, a good reputation may give firms the benefit of a doubt, implying smaller stock market penalties for negative earnings surprises and higher positive reactions in case of positive surprises (Pfarrer et al., 2010). In this context, Schnietz and Epstein (2005) further observe that a reputation for corporate social responsibility can serve as a protection for firms regarding stock price declines after a reputation damaging crisis event, taking the 1999 Seattle World Trade Organization (WTO) failure regarding labor and environmental standards and 416 Fortune 500 US companies as the relevant event study. Similarly, as Minor and Morgan (2011) show based on a product recall event study for S&P 500 firms from 1991 to 2006, corporate social responsibility (measured based on ratings by KLD, now MSCI) can have a positive impact on abnormal stock returns in that firms "doing good" even exhibit positive abnormal returns on average after the event, whereas firms "doing harm" or "doing good and harm" have negative abnormal returns on average, whereby the latter effect is even stronger.

On the other hand, a good reputation can be a liability according to the expectancy violation theory, where enhanced expectations are hard to meet (Rhee and Haunschild, 2006). In particular, based on product recall data in the U.S. automobile industry from 1975 to 1999, Rhee and Haunschild (2006) show that firms with a higher reputation suffer more severe market penalties after a product recall than firms with a lower reputation. In addition, they find that reputational effects are moderated by *substitutability* and *generalism* or *specialism*, i.e. firms with an equivalent reputation but fewer substitutes or with higher (product) specialism exhibit less negative market reactions. Furthermore, using CEO rankings and firm performance data for the U.S. (i.e. not in the context of reputation damaging events), Wade et al. (2006) show that the announcement of a medal for a CEO implies immediate significant positive abnormal stock market returns for the respective firm, while over time, this effect may be reversed and become negative, suggesting that a good reputation (in terms of certifications) can imply a "burden of celebrity" and higher expectations.

In this context and without focusing on empirical analyses, Scott and Walsham (2005) theoretically describe changing norms, technical advance, and social media as relevant influencing factors that impact reputation (and thus potentially corporate financial performance), while the Tonello (2007) points out that a firm's response and crisis communication ability can reduce the negative impact of reputation damaging events, which also relates to the crisis com-

munication literature mentioned in Section 4.1. These two aspects are also supported by the following empirical analyses.

In regard to the mediating impact of *social media*, based on 177 product recalls from 2008 to 2012, Lee et al. (2015) find that negative reactions to product recall announcements are reduced on average for firms with "megaphone social media" (i.e. "one-to-many communication that bypasses traditional third party information intermediaries"), which also depends on the firm's level of control regarding social media contents. In contrast, the "engagement feature" of social media (i.e. the multi-way communication channel feature as opposed to one-way communication) of Facebook and Twitter may pose a risk of virally enhancing negative sentiments

In the context of reputation repair and crisis communication strategies, Chakravarthy et al. (2014) show based on a sample of 94 US companies from 1997 to 2006 that firms engaging in reputation repair activities after a serious accounting restatement (intentional misreporting) apply a multi-stakeholder strategy that addresses different groups of stakeholders depending on company characteristics. These stakeholder-oriented strategies are further shown to have a positive impact on abnormal market returns of the restating firms announcing these actions as well as on the restating firm's financial reporting credibility (earnings response coefficients). As regards to crisis communication strategies, Coombs (2007) further suggests the use of situational crisis communication theory (SCCT) including guidelines based on evidence-based (empirical) research, emphasizing that the firm's crisis history, the prior level of reputation as well as the type of event along with the framing in the media represent considerable risks for enhancing the reputation threat after a crisis event. Furthermore, Marciukaityte et al. (2006) compare 133 pairs of fraud and non-fraud firms from 1978 to 2001 and find that the former changed their internal control structure by increasing the number of (independent) outside directors on the board's oversight committees and that long-term stock prices were comparable. The authors interpret this result as a positive effect of *improving internal control systems* to rebuild reputation and "reinstate confidence in the company", thus serving as a long-term moderating effect.

5. SUMMARY AND OUTLOOK

The purpose of this article was to examine to what extent the current state of the empirical literature allows obtaining a holistic understanding of interaction effects between corporate reputation, reputation damaging events, and corporate financial performance that also includes stakeholder behavior as one potential relevant cause of financial reputational effects. This was done based on a systematic literature review of empirical evidence regarding four main relationships: the impact of corporate reputation on corporate financial performance and

on stakeholder behavior as well as the impact of reputation damaging events on corporate reputation and on financial performance (see Figure 1 for the identified interactions and empirical evidence). The consideration of empirical evidence from the literature regarding these relationships is vital for reputation risk management, where an in-depth understanding of these interactions is fundamental for identifying, assessing, monitoring, and responding to reputation risks, which include adverse (financial) effects of a lower level of corporate reputation and reputation damaging events, thereby also taking into account stakeholder behavior.

The literature review reveals significant effects for all four considered relationships for various reputation measures and countries. The empirical literature on the impact of the level of corporate reputation on stakeholder behavior and on financial performance emphasizes that the management of reputation requires clearly distinguishing between the respective stakeholder groups as well as between financial and non-financial aspects of reputation. In particular, while non-financial aspects may be potentially more relevant for consumers and employees, for instance, financial aspects may be more important for investors. In addition, the respective components of reputation may have a different impact on financial performance, whereby especially non-financial aspects may play a significant role for enhancing firm performance in the future and should not be underestimated by the management. However, the explicit causation of the empirical relationship between corporate reputation and financial performance is typically not considered, with the exception of Sanchez and Sotorrio (2007), who study the moderating effects of differentiation strategy, competitive intensity, and the power of stakeholders, Stuebs and Sun (2010), who explicitly focus on labor productivity, and a third paper (Carmeli and Tishler, 2005) which partly addresses customer satisfaction as a mediator. The results of the survey thus emphasize that more research is necessary with respect to the relation and linkage between corporate reputation, the perceptions and behavior of different stakeholder groups, as well as the financial consequences (see also Tischer and Hildebrandt, 2014). With respect to the literature on the (direct) impact of corporate reputation on stakeholder behavior, we found that of the 19 identified articles on stakeholder behavior, ten focused on customer behavior, five on investors, three on employees and one on supplier behavior. The strong focus on customer aspects may thereby be explained by the high relevance of this particular stakeholder group for firms.

With respect to the other two relationships, the review shows that the impact of reputation damaging events on corporate financial performance strongly depends on the type of event, with fraudulent or criminal events typically being identified as causing the most severe financial (reputational) losses. Further impact factors include the type of industry, firm characteristics, and the country, for instance. Only two articles were identified which empirically take into account the causal chain of events by explicitly including customer behavior (Johnson et al. 2014) and business partners (bank loans) (Deng et al., 2014). In addition, only few articles

study the impact of risk response measures such as crisis communication strategies or a firm's social media abilities. Thus, more empirical research would be helpful to gain more insight regarding the effectiveness of mitigation measures (ex-ante and ex-post the event), the impact of moderating factors, as well as the effect of reputation damaging events on stakeholder behavior in order to identify the actual causes of the financial losses and to implement respective risk management strategies.

Coming back to the objectives of the paper, the findings also emphasize that more research is needed to better understand the link and impact of stakeholder behavior, as only few papers have been identified in the review with this focus. In addition, while being highly relevant, these four relationships only represent specific components to be considered within a holistic and active enterprise risk management framework, which should not only be aimed at reacting but proactively managing reputation risk (see also Eccles et al., 2007). And while insurance solutions are partially available for reputation risk and financial reputational losses, they do not aim to replace an adequate risk management including prevention and reputation repair programs.

As a major outcome, the paper does not only provide a comprehensive overview of the current state of empirical evidence regarding these four aspects and points out potential future fields of research, but it also strongly supports the necessity of a comprehensive reputation risk management in two main ways. First, the level of reputation should be closely monitored, as the systematic review has shown across almost all considered empirical papers (except one) that a higher level of reputation implies an increase in performance (using various measures, including labor efficiency) and that reputation can strongly impact stakeholder behavior, thus contributing to explaining the cause of the financial effect, which is typically not taken into account in the former studies. Second, firms should place more emphasis on identifying potential reputation risks and invest in mitigation measures to reduce the likelihood of reputation damaging events in the first place, if possible (e.g. by implementing adequate control measures), because their financial impact can be severe. This was a consistent result in all event studies across various industries, depending on the event type but consistently observed in case of fraud. And, since preventing the underlying events may not always be possible, a sound stakeholder-oriented crisis communication strategy should be in place as an important post-event mitigation measure.

REFERENCES

- Alexander, C. (1999): On the Nature of the Reputational Penalty for Corporate Crime: Evidence. *Journal of Law and Economics*, 42(1): 489-526.
- Ali, R., Lynch, R., Melewar, T. C., Jin, Z. (2015): The Moderating Influences on the Relationship of Corporate Reputation with its Antecedents and Consequences: A Meta-analytic Review. *Journal of Business Research*, 68(5): 1105-1117.
- Barnett, M. L., Jermier, J. M., Lafferty, B. A. (2006): Corporate Reputation: The Definitional Landscape. *Corporate Reputation Review*, 9(1): 26-38.
- Bartikowski, B., Walsh, G. (2011): Investigating Mediators between Corporate Reputation and Customer Citizenship Behaviors. *Journal of Business Research*, 64(1): 39-44.
- Bartikowski, B., Walsh, G., Beatty, S. E. (2011): Culture and Age as Moderators in the Corporate Reputation and Loyalty Relationship. *Journal of Business Research*, 64(9): 966-972.
- Basel Committee (2004): International Convergence of Capital Measurement and Capital Standards. Basel, Switzerland, http://www.bis.org/publ/bcbs107.pdf, accessed: 05/06/2014.
- Bhagat, S., Bizjak, J., Coles, J. (1998): The Shareholder Wealth Implications of Corporate Lawsuits. *Financial Management*, 27(4): 5-27.
- Biell, L., Muller, A. (2013): Sudden Crash or Long Torture: The Timing of Market Reactions to Operational Loss Events. *Journal of Banking & Finance*, 37(7): 2628-2638.
- Bontis, N., Booker, L. D., Serenko, A. (2007): The Mediating Effect of Organizational Reputation on Customer Loyalty and Service Recommendation in the Banking Industry. *Management Decision*, 45(9): 1426-1445.
- Carmeli, A., Tishler, A. (2005): Perceived Organizational Reputation and Organizational Performance: An Empirical Investigation of Industrial Enterprises, *Corporate Reputation Review*, 8(1): 13-30.
- Caruana, A., Ewing, M. T. (2010): How Corporate Reputation, Quality, and Value Influence Online Loyalty. *Journal of Business Research*, 63(9-10): 1103-1110.
- Chakravarthy, J., deHaan, E., Rajgopal, S. (2014): Reputation Repair After a Serious Restatement. *The Accounting Review*, 89 (4): 1329-1363.
- Chartered Institute of Management Accountants (2007): Corporate Reputation Perspectives of Measuring and Managing a Principal Risk. http://www.cimaglobal.com, accessed: 03/28/2014.
- Chun, R. (2005): Corporate Reputation: Meaning and Measurement. *International Journal of Management Reviews*, 7(2): 91-109.
- Clardy, A. (2012): Organizational Reputation: Issues in Conceptualization and Measurement. *Corporate Reputation Review*, 15(4): 285-303.
- Collins, C. J., Han, J. (2004): Exploring Applicant Pool Quantity and Quality: The Effects of Early Recruitment Practice Strategies, Corporate Advertising, and Firm Reputation. *Personnel Psychology*, 57(3): 685-717.
- Tonello, M. (2007): Reputation Risk A Corporate Governance Perspective. Research Report R-1412-07-WG, www.conference-board.org, accessed: 04/10/2014.

- Coombs, W. T. (2007): Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory. *Corporate Reputation Review*, 10(3): 163-176.
- Cretu, A. E., Brodie, R. J. (2007): The Influence of Brand Image and Company Reputation where Manufacturers Market to Small Firms: A Customer Value Perspective. *Industrial Marketing Management*, 36(2): 230-240.
- Cummins, J. D., Lewis, C. M., Wei, R. (2006): The Market Value Impact of Operational Loss Events for US Banks and Insurers. *Journal of Banking & Finance*, 30(10): 2605-2634.
- Davies, G., Chun, R., Kamins, M. A. (2010): Reputation Gaps and the Performance of Service Organizations. *Strategic Management Journal*, 31(5): 530-546.
- Deephouse, D. (2000): Media Reputation As a Strategic Resource: An Integration of Mass Communication and Resource-Based Theories. *Journal of Management*, 26(6): 1091-1112.
- De la Fuente Sabate, J. M., de Quevedo Puente, E. (2003): Empirical Analysis of the Relationship Between Corporate Reputation and Financial Performance: A Survey of the Literature. *Corporate Reputation Review*, 6(2): 161-177.
- Delgado-García, J. B., de Quevedo-Puente, E., Díez-Esteban, J. M. (2013): The Impact of Corporate Reputation on Firm Risk: A Panel Data Analysis of Spanish Quoted Firms. *British Journal of Management*, 24(1): 1-20.
- Demiroglu, C., James, C. M. (2010): The Role of Private Equity Group Reputation in LBO Financing. *Journal of Financial Economics*, 96(2): 306-330.
- Deng, S., Willis, R. H., Xu, L. (2014): Shareholder Litigation, Reputational Loss, and Bank Loan Contracting. *Journal of Financial and Quantitative Analysis*, 49(4): 1101-1132.
- Dollinger, M. J., Golden, P. A., Saxton, T. (1997): The Effect of Reputation on the Decision to Joint Venture. *Strategic Management Journal*, 18(2): 127-140.
- Eberl, M., Schwaiger, M. (2005): Corporate Reputation: Disentangling the Effects on Financial Performance. *European Journal of Marketing*, 39(7/8): 838-854.
- Eccles, R. G., Newquist, S. C., Schatz, R. (2007): Reputation and its Risks. *Harvard Business Review*, 85(2): 104-114.
- Fiordelisi, F., Soana, M.-G., Schwizer, P. (2013): The Determinants of Reputational Risk in the Banking Sector. *Journal of Banking & Finance*, 37(5): 1359-1371.
- Fiordelisi F., Soana, M.-G., Schwizer, P. (2014): Reputational Losses and Operational Risk in Banking. *European Journal of Finance*, 20(2): 105-124.
- Flanagan, D. J., O'Shaughnessy, K. C. (2005): The Effect of Layoffs on Firm Reputation. *Journal of Management*, 31: 445-463.
- Fombrun, C. J., Shanley, M. (1990): What's in a Name? Reputation Building and Corporate Strategy. *Academy of Management Journal*, 33(2): 233-258.
- Fombrun, C. J. (1996): Reputation: Realizing Value from the Corporate Image, Harvard Business School Press, Boston, MA.

- Fombrun, C. J., van Riel, C. (1997): The Reputational Landscape: A Convergence of Research and Practice. *Corporate Reputation Review*, 1(1 and 2): 1-16.
- Fryxell, G. E., Wang, J. (1994): The Fortune Corporate 'Reputation' Index: Reputation For What? *Journal of Management*, 20(1): 1-14.
- Gatewood, R. D., Gowan, M. A., Lautenschlager, G. J. (1993): Corporate Image, Recruitment Image, and Initial Job Choice Decisions. *Academy of Management Journal*, 36: 414-427.
- Gatzert, N., Schmit, J., Kolb, A. (2014): Assessing the Risks of Insuring Reputation Risk. *Journal of Risk and Insurance* (forthcoming).
- Gillet, R, Hübner, G., Plunus, S. (2010): Operational Risk and Reputation in the Financial Industry. *Journal of Banking & Finance*, 34(1): 224-235.
- Goins, S., Gruca, T. S. (2008): Understanding Competitive and Contagion Effects of Layoff Announcements. *Corporate Reputation Review*, 11(1): 12-34.
- Graham, M. E., Bansal, P. (2007): Consumers' Willingness to Pay for Corporate Reputation: The Context of Airline Companies. *Corporate Reputation Review*, 10(3): 189-200.
- Hall, R. (1992): The Strategic Analysis of Intangible Resources. *Strategic Management Journal*, 13: 135-144.
- Helm, S. (2007): The Role of Corporate Reputation in Determining Investor Satisfaction and Loyalty. *Corporate Reputation Review*, 10: 22–37
- Himme, A., Fischer, M. (2014): Drivers of the Cost of Capital: The Joint Role of Non-Financial Metrics. *International Journal of Research in Marketing*, 31(2): 224-238.
- Homburg, C., Koschate, N., Hoyer, W. (2005): Do Satisfied Customers Really Pay More? A Study of the Relationship Between Customer Satisfaction and Willingness to Pay, *Journal of Marketing*, 69(2): 84-96.
- Johnson, W. C., Xie, W., Yi, S. (2014): Corporate Fraud and the Value of Reputations in the Product Market. *Journal of Corporate Finance*, 25: 16-39.
- Kang, E. (2008): Director Interlocks and Spillover Effects of Reputational Penalties from Financial Reporting Fraud. *Academy of Management Journal*, 51(3): 537-555.
- Karpoff, J. M., Lee, D. S., Martin, G. S. (2008): The Cost to Firms of Cooking the Books. *Journal of Financial and Quantitative Analysis*, 43(3): 581-611.
- Karpoff, J., Lee, D., Vendrzyk, V. (1999): Defense Procurement Fraud, Penalties, and Contractor Influence. *Journal of Political Economy*, 107(4): 809-842.
- Karpoff, J., Lott, J. (1993): The Reputational Penalty Firms Bear from Committing Criminal Fraud. *Journal of Law and Economics*, 36(2): 757-802.
- Karpoff, J., Lott, J., Wehrly, E. (2005): The Reputational Penalties for Environmental Violations: Empirical Evidence. *Journal of Law and Economics*, 48(2): 653-675.
- Keh, H. T., Xie, Y. (2007): Corporate Reputation and Customer Behavior Intentions: The Roles of Trust, Identification and Commitment. *Industrial Marketing Management*, 38(7): 732-742.
- Klein, B., Leffler, K. B. (1981): The Roles of Market Forces in Assuring Contractual Performance. *Journal of Political Economy*, 89(4): 615-641.

- Knittel, C. R., Stango, V. (2014): Celebrity Endorsements, Firm Value, and Reputation Risk: Evidence from the Tiger Woods Scandal. *Management Science*, 60(1): 21-37.
- Kotha, S., Rajgopal, S., Rindova, V. (2001): Reputation Building and Performance: An Empirical Analysis of the Top-50 Pure Internet Firms. *European Management Journal*, 19(6): 571-586.
- Lange, D., Lee, P. M., Dai, Y. (2011): Organizational Reputation: A Review. *Journal of Management*, 37(1): 153-184.
- Lee, L. F., Hutton, A. P., Shu, S. (2015): The Role of Social Media in the Capital Market: Evidence from Consumer Product Recalls. *Journal of Accounting Research*, 53(2): 367-404.
- Long, D., Rao, S. (1995): The Wealth Effects of Unethical Business Behavior. *Journal of Economics and Finance*, 19(2): 65-73.
- Love, E. G., Kraatz, M. (2009): Character, Conformity, or the Bottom Line? How and Why Downsizing Affected Corporate Reputation. *Academy of Management Journal*, 52(2): 314-335.
- Marciukaityte, D., Szewczyk, S. H., Uzun, H., Varma, R. (2006): Governance and Performance Changes after Accusations of Corporate Fraud. *Financial Analysts Journal*, 62(3): 32-41.
- McGuire, J. B., Schneeweis, T., Branch, B. (1990): Perceptions of Firm Quality: A Cause or Result of Firm Performance. *Journal of Management*, 16(1): 167-180.
- Minor, D., Morgan, J. (2011): CSR as Reputation Insurance: Primum Non Nocere. *California Management Review*, 53(3): 40-59.
- Murphy, D., Shrieves, R., Tibbs, S. (2009): Understanding the Penalties Associated with Corporate Misconduct: An Empirical Examination of Earnings and Risk. *Journal of Financial and Quantitative Analysis*, 44(1): 55-83.
- Page, G., Fearn, H. (2005): Corporate Reputation: What Do Consumers Really Care About? *Journal of Advertising Research*, 45(3): 305-313.
- Palmrose, Z., Richardson, V., Scholz, S. (2004): Determinants of Market Reactions to Restatement Announcements. *Journal of Accounting and Economics*, 37: 59-89.
- Perry, J., de Fontnouvelle, P. (2005): Measuring Reputational Risk: The Market Reaction to Operational Loss Announcements. Working Paper, Federal Reserve Bank of Boston, Boston, MA.
- Pfarrer, M. D., Pollock, T. G., Rindova, V. P. (2010): A Tale of Two Assets: The Effects of Firm Reputation and Celebrity on Earnings Surprises and Investors' Reactions. *Academy of Management Journal*, 53: 1131-1152.
- Raithel, S., Schwaiger, M. (2014): The Effects of Corporate Reputation Perceptions of the General Public on Shareholder Value. *Strategic Management Journal* (forthcoming).
- 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: 29-44.
- Rhee, M., Haunschild, P. (2006): The Liability of Good Reputation: A Study of Product Recalls in the U.S. Automobile Industry. *Organization Science*, 17(1): 101-117.
- Rhee, M., Valdez, M. (2009): Contextual Factors Surrounding Reputation Damage with Potential Implications for Reputation Repair. *Academy of Management Review*, 34(1): 146-168.

- Rindova, V., Williamson, I., Petkova, A., Sever, J. (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.
- Rindova, V., Williamson, I., Petkova, A. (2010): Reputation as an Intangible Asset: Reflections on Theory and Methods in Two Empirical Studies of Business School Reputations. *Journal of Management*, 36(3): 610-619.
- Roberts, P., Dowling, G. R. (2002): Corporate Reputation and Sustained Superior Financial Performance. *Strategic Management Journal*, 20: 691-710.
- Rose, C., Thomsen, S. (2004): The Impact of Corporate Reputation on Performance: Some Danish Evidence. *European Management Journal*, 22: 201-210.
- Sanchez, J. L. F., Sotorrio, L. L. (2007): The Creation of Value through Corporate Reputation. *Journal of Business Ethics*, 76(3): 335-346.
- Schnietz, K. E., Epstein, M. J. (2005): Exploring the Financial Value of a Reputation for Corporate Social Responsibility During a Crisis. *Corporate Reputation Review*, 7: 327-345.
- Schwaiger, M. (2004): Components and Parameters of Corporate Reputation An Empirical Study. *Schmalenbach Business Review*, 56: 46-71.
- Scott, S., Walsham, G. (2005): Reconceptualizing and Managing Reputation Risk in the Knowledge Economy: Toward Reputable Action. *Organization Science*, 16(3): 308-322.
- Shane, S., Cable, D. (2002): Network Ties, Reputation, and the Financing of New Ventures. *Management Science*, 48: 364-381.
- Shapiro, C. (1983): Premiums for High Quality Products as Returns to Reputations. *Quarterly Journal of Economics*, 98(4): 659-679.
- Stuebs, M., Sun, L. (2010): Business Reputation and Labor Efficiency, Productivity, and Cost. *Journal of Business Ethics*, 96(2): 265-283.
- Sturm, P. (2013): Operational and Reputational Risk in the European Banking Industry: The Market Reaction to Operational Risk Events. *Journal of Economic Behavior & Organization*, 85: 191-206.
- Tischer, S., Hildebrandt, L. (2014): Linking Corporate Reputation and Shareholder Value Using the Publication of Reputation Rankings. *Journal of Business Research*, 67: 1007-1017.
- Turban, D. B., Cable, D. M. (2003): Firm Reputation and Applicant Pool Characteristics. *Journal of Organizational Behavior*, 24: 733-751.
- Turban, D. B., Greening, D. W. (1997): Corporate Social Performance and Organizational Attractiveness to Prospective Employees. *Academy of Management Journal*, 40: 658-673.
- Van den Bogaerd, M., Aerts, W. (2015): Does media reputation affect properties of accounts payable? *European Management Journal*, 33(1): 19-29.
- Wade, J. B., Porac, J. F., Pollock, T. G., Graffin, S. D. (2006): The Burden of Celebrity: The Impact of CEO Certification Contests on CEO Pay and Performance. *Academy of Management Journal*, 49: 643-660.
- Walker, K. (2010): A Systematic Review of the Corporate Reputation Literature: Definition, Measurement, and Theory. *Corporate Reputation Review*, 12(4): 357-387.

- Walsh, G., Beatty, S. E. (2007): Customer-Based Corporate Reputation of a Service Firm: Scale Development and Validation. *Journal of the Academy of Marketing Science*, 35(1): 127-143.
- Walsh, G., Bartikowski, B., Beatty, S. E. (2012): Impact of Customer-Based Corporate Reputation on Non-monetary and Monetary Outcomes. *British Journal of Management*, 25: 166-185.
- Walsh, G., Mitchell, V.-W., Jackson, P. R., Beatty, S. E. (2009): Examining the Antecedents and Consequences of Corporate Reputation: A Customer Perspective. *British Journal of Management*, 20: 187-203.
- Walter, I. (2007): Reputational Risk and Conflicts of Interest in Banking and Finance: The Evidence So Far. *Journal of Financial Transformation*, 21: 39-54.
- Walter, I. (2013): The Value of Reputational Capital and Risk in Banking and Finance. *International Journal of Banking, Accounting and Finance*, 5(1/2): 205-219.
- Wang, R.-T. (2013): Modeling Corporate Social Performance and Job Pursuit Intention: Mediating Mechanisms of Corporate Reputation and Job Advancement Prospects. *Journal of Business Ethics*, 117(3): 569-582.
- Williams, R. J., Barrett, J. D. (2000): Corporate Philanthropy, Criminal Activity, and Firm Reputation: Is there a Link? *Journal of Business Ethics*, 26: 341-350.
- Yoon, E., Guffey, H. J., Kijewski, V. (1993): The Effects of Information and Company Reputation on Intentions to Buy a Business Service. *Journal of Business Research*, 27(3): 215-228.
- Zyglidopoulos, S. C. (2005): The Impact of Downsizing on Corporate Reputation. *British Journal of Management*, 16(3): 253-259.

APPENDIX

Table A.1: Selected empirical evidence on the relation of the level of corporate reputation and corporate financial performance (see also Table 1)

Article	Sample and reputation measure	Some key findings
McGuire et al. (1990)	 Fortune ranking for 131 U.S. firms, 1977-1981 Use the 8 Fortune survey attributes to distinguish between overall quality (average, overall index) and managerial quality (e.g. innovativeness, ability to retain personnel, wise use of assets) 	 Causal relationship difficult to establish But: Positive relationship (high correlation) between perceived overall quality and financial performance (various accounting and market measures) Relation is stronger for prior performance, little correlation between perceived firm quality and future performance (authors argue: consistent with market efficiency, as only unexpected information (e.g. regarding profits) would imply abnormal returns, see also event study literature in Table 2) Perceived management quality has generally lower predictive power than overall index on quality Prior financial performance, especially accounting measures ROA and debt/asset ratio, impacts reputation; growth in sales and operating income not significantly related (authors argue: market-based measures less subject to manipulation than accounting measures, therefore more important in regard to perceptions as measured by Fortune ranking; asset/debt structure cannot be easily changed despite being accounting measures)
Deephouse (2000)	 Media reputation based on content analysis of newspaper archives 121 commercial banks in metropolitan area of Minneapolis-St. Paul, Minnesota, U.S., from 1988 through 1992 (competitive market) 	 Media reputation increases performance (relative ROA: difference between bank's ROA and average ROA of all banks) and is a predictor of ROA (increase in pseudo R² by 0.02) Implication: Evidence that media reputation is a strategic resource, implying competitive advantage; managers should focus on "cultivating positive evaluations by the media" by means of actual actions (not only sophisticated public relations)
Roberts and Dowling (2002)	 Fortune ranking, 1984-1998 (300 firms in reduced sample) Reputation decomposed into component predicted by "past performance" and "left over" (residual reputation) 	 Positive relationship between both components of reputation (predicted by past performance and "left over") and profit persistence (above-average profits over time; good reputation at one point in time implies persisting positive profits over time) Approx. 85% of the variance of the reputation measure is not explained by prior profits but by the "left over" Implication: firms should not only focus on signals based on past financial performance, but instead other signals and actions that have a direct effect on reputation and thus on profit persistence (p. 1090)
Rose and Thomsen (2004)	 62 firms listed on the Copenhagen stock exchange, 1996-2001 Reputation: image ratings for leading Danish companies based on questionnaire sent to Danish business managers by Danish business periodical (Børsens Nyhedsmagasin / Berlingske Nyhedsmagasin) 	 No evidence that reputation impacts financial performance (market value/book value of equity; Tobin's Q) Evidence that financial performance impacts reputation Implication: results indicate that "strong image will result if management is able to increase performance"; management should particularly focus on reputation if it impacts profitability and growth and then allocate resources accordingly (customer vs. investor relations)

Eberl and Schwaiger (2005) Carmeli and Tishler (2005)	 German firms listed on the DAX30 stock index (30 largest firms without banks and insurers since total sales not available) Telephone survey in Jan. 2003 among general public (random sample of 1,021 persons, aggregate measure of reputation) Reputation: distinguish cognitive ("competence") and affective ("likeability") component based on Schwaiger (2004) using 6 items total; decompose both components into two parts (one due to past financial performance and a "reputational residual" not explained by past performance) 86 Kibbutz-owned industrial enterprises in Israel (year n.a.) Reputation: "Perceived organizational reputation" of the firm based on a questionnaire answered by the CEOs of the respective firm (self-assessment); reputation index based on the Fortune survey methodology 	 Financial performance measured as net income after tax and depreciation (before minority interests); draw conclusions regarding absolute profits (not profitability) Results show that sympathy (affective component; corrected for past financial performance) has a significant negative impact on future financial performance Competence (cognitive component corrected for past performance) has a significant positive impact on future performance Implication: Past performance is not sufficient to explain reputation or achieve a good reputation; focus on firm's "competence" in communicating with stakeholders is vital in reputation management Financial performance: based on survey where CEOs ranked their firm's performance relative to competitors based on a 5-point scale Significant positive impact of reputation on growth and on accumulation of customers' order goods (using path analysis) Impact of reputation on financial performance (profitability) is mediated by firm's growth and market share (Further finding: relation between product/services)
Sanchez and Sotorrio (2007)	- Reputation: as a measure of social performance, based on the Spanish MERCO index (similar to Fortune ranking)	 (Further finding: relation between product/services quality and reputation is mediated by customer satisfaction) Financial performance: economic return, gross operating margin, economic return differential, margin differential, Significant <i>positive impact</i> of reputation on financial
Stuebs and	88 of the most reputable firms (according to MERCO) in Spain for 2004 - 112 U.S. Fortune ranking firm-	performance measures (non-linear relationship, decreasing scale returns) - Statistically positive (but small) <i>moderating effect</i> of differentiation strategy, competitive intensity, power of stakeholders - Reputation is <i>positively</i> associated with labor
Sun (2010)	year observations from 2006- 2008, matched with sample of firms not in Fortune ranking	efficiency (due to a positive association between reputation and labor productivity) - No association between reputation and labor costs
Raithel and Schwaiger (2014)	 German firms listed on the DAX30 stock index (30 largest firms) 13 consecutive telephone surveys in Dec. 2005 and every June/Dec. from 2006-2011 among general public (random representative samples of 1,251-2,465 persons, aggregate measure of reputation) Reputation: see Eberl and Schwaiger (2005), distinguish "competence" and "likeability"; 90-93% of variation in reputation explained by non-financial part 	 Financial performance: use a four-factor benchmark model to study stock returns for reputation-sorted portfolios (also relative to DAX index) Superior reputation perception increase future shareholder value (SHV) Non-financial aspects of reputation may create significantly more SHV in the future than perceptions driven by financial aspects Implication: Focus on financial aspects may underestimate high relevance of non-financial aspects; should be taken into account in reputation building activities, especially when targeting customers and employees (e.g. in regard to product and service quality, workplace environment, social responsibility)

Table A.2: Empirical evidence from the event study literature on reputational market value losses resulting from operational risk events in the financial sector

Authors	Data	Sk events in the financial sector
Perry and de Fontnouvell e (2005)	operational loss events of publicly listed financial firms between 1974 and 2004 from the databases Algo OpData and OpVantage FIRST	 Some key findings Internal fraud events have a considerable impact (market values fall twice the size of the operational loss percentage) Externally-caused losses have no significant reputational impact Market value declines by more than 6 times the announced internal fraud loss for a firm with strong shareholder rights (based on point estimates; using a corporate governance index)
Cummins et al. (2006)	403 operational loss events suffered by U.S. banks and 89 operational loss events suffered by U.S. insurers exceeding \$10 million between 1978 and 2003 from the OpVar database	 Operational losses lead to significant negative stock market reactions exceeding the announced loss size Market value response is <i>larger for insurers than for banks on average</i>, even though operational losses are comparable in mean and median Market value losses due to op. loss events are proportionately larger for firms with higher Tobin's Q ratios (i.e. <i>strong growth opportunities</i>: firms may have to give up attractive projects)
Gillet et al. (2010)	154 operational loss events in U.S. and European (49 out of 154) financial institutions from 1990 to 2004 greater than \$10 million from the OpVantage FIRST database; "Clients, Products and Business Practices" represents 72% of the sample	 Focus on sequence of events triggering reputational effects: first press cutting date, date of explicit recognition by company, and settlement date (impact of gradual release of information on market reaction towards reputation) Significant negative CAR for the first press cutting date, negative CAR for the date of recognition (not significant) and significant positive CAR for settlement date (for two event windows; explained by tax reasons due to excess op. loss provision prior to settlement) Reputation damage due to fraud events is significantly worse than other events Negative impact proportionally larger when loss amount represents larger share in company's net profit
Fiordelisi et al. (2013)	215 operational losses greater than \$1 million between 2003 and 2008 from U.S. and European banks from the Algo OpData database; probability of reputational damage after operational loss estimated by order logit and proportional odds models	 Probability of reputational damage is influenced by bank risks, profits, size, capital invested, the level of intangibles and business area of operational loss Probability of a reputational damage increases as profits and size increase Probability of a reputational damage decreases for a higher level of equity capital invested and intangible assets Results are robust with respect to bank nationality, size of operational loss and bank size as well as various time periods

Biell and Muller (2013)	279 operational loss events from European firms in the financial services industry exceeding \$1 million settled between December 1974 and May 2009 from the Algo OpData Quantitative database	 Focus on <i>timing of stock market reactions</i> to discovery of op. loss events: examine event window that includes most part of stock markets' responses to loss events (window start: length of time before or after discovery date that markets take to start to react; length of event window: duration of reaction) Median length of event window lies below 25 days: markets react rather quickly but not instantaneously Market reactions are shorter if they start around discovery date; risk of stronger market response if market reaction only starts a few months after discovery Strong positive correlation between magnitude of markets' overreactions and duration of market reaction: "Long torture seems to damage institutions' market value far more than sudden shocks" (p. 2638) Market reactions are comparatively earlier (later) but longer (shorter) in bull (bear) markets Market reaction is strongest for losses in the <i>investment banking</i> sector Market reactions following an <i>internal fraud event</i> are stronger, earlier and much more rapid / shorter than other types (median window start 18 days after discovery date; median length 14 days) Market reaction is longer and more intense the more severe the corresponding <i>downgrading</i>; but: market reaction is later for higher
Sturm (2013)	136 operational loss events from European financial institutions exceeding €0.1 million between 2000 and 2009 from the database of the Association of German Public Sector Banks	 Significant negative stock price reaction to first press announcement of operational loss and negative reaction to settlement announcement (loss amount is known) Significant negative CAR also after accounting for the nominal loss amount after first press announcement and settlement date: indicate reputational damage to firm No evidence that reputational losses differ depending on event type But: Reputational damages influenced by firm characteristics: firms with high ratio of liabilities to total assets suffer more severe reputation damage from operational losses than companies with more equity; firm size and value-growth characteristics generally have no effect on reputational damage
Fiordelisi et al. (2014)	430 operational loss events of European and U.S. banks exceeding \$1 million between 1994 and 2008, from the Algo OpData database	 Announcement of "pure" operational losses (as opposed to lawsuits and regulatory sanctions) cause significant reputational losses depending on the event window Reputational damages differ among event types; <i>fraud types</i> produce the highest reputational losses (external fraud largest reputational losses followed by slightly lower losses from internal frauds), but other event types also generate substantial reputational losses; reputational losses because of "clients, products and business practices" have limited size Reputational losses caused by <i>small and large operational losses</i> are similar; large reputational losses can be forecasted by investors (event window (-20, -1) produces most statically significant result) Reputational losses are <i>higher in Europe</i> than in North America